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# Appendix A1. Florida Waterbody Identification Numbers (WBIDs) by EPA Nutrient Watershed Region (NWR)

Appendix A1 contains a list of Florida waterbody identification numbers (WBIDs) organized by EPA's Nutrient Watershed Region (NWR). This list is based on FDEP's WBID map located at FDEP's GIS site (http://www.dep.state.fl.us/gis/datadir.htm, accessed March 2010). The list is being provided in electronic form on CD. For a copy of the CD, please contact EPA's docket office. The docket identification number is EPA-HQ-OW-2009-0596.

The Office of Water (OW) Docket Center is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The OW Docket Center telephone number is 202-566-1744 and the Docket address is OW Docket, EPA West, Room 3334, 1301 Constitution Ave., NW, Washington, DC 20004.

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# Appendix A2. FDEP's Process for Assessing Data Usability

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# Process for Assessing Data Usability

DEP-EA 001/07

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**Environmental Assessment Section**

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# Process for Assessing Data Usability
## DEP-EA 001/07

1. **Introduction** - The intent of this document is to outline the process to be used by the Department when evaluating Data Quality Indicators (DQI) and determining the usability of analytical data.

1.1. **The Data Assessment Process** - Determining if data are usable for a particular purpose is a complex task, requiring a reasonable and balanced evaluation of many factors. The procedural components of the usability assessment must be performed by auditors with sufficient scientific expertise in environmental data verification and validation, and include, but are not limited to: Understanding the purpose for auditing the data (project or program data quality objectives provide the context for the audit);

- Identifying the set of data to be audited, the types of analytes or parameters in the data set and the reported values (e.g., concentration) for the analytical results for all components;
- Determining the relationship between each analytical result, the associated decision or action level (e.g., water quality standard or clean up target) and the laboratory's quantitation limit;
- Evaluating the documented calibration, quality control and other supporting data against designated Data Quality Indicators;
- Establishing the pattern, frequency, and magnitude of any failures or other deficiencies associated with the results;
- Determining the extent to which the audited data set fulfills the Data Quality Objectives of the project or Program;
- Evaluating corroborative data (e.g., performance tests, data from other laboratories);
- Providing usability recommendations to the Program data users.

1.2. **Evaluating Data Quality Indicator Failures** - Exceeding the acceptance criteria for one or more Data Quality Indicators does not necessarily mean the data are unusable. The factors mentioned in 1.1 above must be systematically evaluated before a usability decision can be made

1.2.1. The purpose for which the analytical data were collected can vary widely, and may include such diverse activities as: initial screening or scoping studies, permit compliance monitoring, assessing waters for Total Maximum Daily Load development or determining whether a permitted waste facility has met "clean closure" site contamination assessment requirements.

1.2.2. A Data Quality Indicator failure that is acceptable for a screening study may not be acceptable for declaring a site free from contamination.

1.2.3. In practical terms, it is not possible in this document to discuss each potential scenario that might be associated with a data usability recommendation for a particular purpose. Therefore, the factors affecting this decision (outlined in 1.1 and 1.2, above) and the thought process applied to the data usability assessment are addressed by the general principles and examples listed below.

2. **Data Quality Indicators (DQI)** - The following Data Quality Indicators (Sections 3.0 – 16) are targets used in the context of assessing data usability. Depending on a given situation, not all DQIs are applicable to the specific assessment project.

| |
|---|
| *Example: To be considered usable, a data submittal to DEP consisting only of high sample concentrations (with no values near the PQL) need not be associated with records demonstrating evaluation or verification of the PQL.* |

2.1. The application of DQIs to sample results presumes the random occurrence of non-routine criteria failures to be an expected fact associated with all analyses. The frequency of DQI failures are considered as part of the overall data usability assessment in order to determine those instances where routine or systematic failures indicate a significant data usability problem.

2.2. Use of DQIs with Other Published Criteria - Except as discussed otherwise in this document, sample results are evaluated for usability based on the procedural requirements and performance criteria established by the reported analytical methods, applicable project data quality objectives, applicable regulations, applicable NELAC Quality Systems standards and applicable DEP SOPs for field and laboratory activities (DEP-SOP-001/01 and DEP-SOP-002/01).

2.3. Use of Records to Assess Data Usability - As applicable to the data usability assessment process, any record associated with a reported sample result or set of sample results may be audited, per 62-160.240 & .340, FAC. Both original ("raw") and reduced or summarized versions of data records are inspected in order to determine acceptance of the procedures and performance criteria that are used to generate and evaluate the sample data and associated quality control activities.

2.4. The presence or absence of critical, archival records that support the sample results is considered when determining whether sufficient documentation is available to assess the usability of the data.

3. **Laboratory Control Sample or Spike (LCS)** –In order of preference, LCS data are evaluated rather than matrix spike data (MS), if both types of data are generated for the associated sample preparation batch. However, the MS data are also used to evaluate the recoveries of the analytes for the parent sample and may affect the usability of the parent sample result.

**3.1. General Requirements**

3.1.1. An LCS result is linked or associated with all applicable reported sample results for the same preparation batch or analytical sequence of 20 samples or less.

3.1.2. The LCS contains all of the analytes of interest for the method or project, or the mix of analytes in the LCS is rotated at a routine frequency as suggested in the NELAC Quality Systems standard in Appendix D.

3.1.3. If a preparation step (such as digestion or extraction) is required for the analysis method, the LCS is prepared identically with and at the same time as the associated samples in the preparation batch.

3.1.4. The LCS is analyzed or reanalyzed within a verified calibration bracket (analytical sequence see Section 8.2.2 for the definition).



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3.1.5. All reanalyses are documented with a valid explanation of the systematic error that prompted the reanalyses.

3.1.6. The concentration of the LCS is analyzed to be within the calibration range for the instrument as established by the concentrations of the standards used for the initial calibration and continuing calibration verifications.

3.1.7. Where applicable, the LCS is prepared at the method-specified concentration or at a concentration appropriate for the project data quality objective.

3.2. **Evaluation of LCS Recovery** - Where applicable, the control limits for the LCS are established by the laboratory for a specified matrix at ± 3X the standard deviation of the mean recovery of the cumulative LCS analyses at a specified concentration. Alternatively, the recovery control limits are established by linear regression for a range of concentrations using cumulative recovery data. The mean recovery is calculated or regression analysis is applied after outliers are eliminated from the recovery data set using any appropriate statistical test for outliers and after outliers due to known systematic errors are also censored from the data set. The mean recovery is recalculated or linear regression is reanalyzed if trend monitoring of individual LCS recoveries indicates that a systematic bias has developed and corrective action is needed.

3.2.1. Alternatively, control limits are established by the laboratory using other technically justifiable and scientifically sound procedures in accordance with project data quality objectives.

3.2.2. Where applicable, criteria established by rule, reported method or project data quality objectives are used to evaluate the LCS recoveries.

3.2.3. If no other criteria are applicable, the following control limits are used to evaluate the LCS recoveries:

80% - 120% (water) for Nitrate, Nitrite, Nitrate + Nitrite, Ammonium, TKN, Total Phosphorus, Orthophosphate

85% - 115% (water) for Metals

Laboratory Control Limits for:

All Organic analytes for the LCS in any matrix

All other analytes amenable to spiking for the LCS in water

All analytes amenable to spiking for the LCS in non-aqueous matrices

3.2.4. When applicable, sample results reported with failed LCS recoveries are documented with a valid explanation of the systematic error that occurred.

3.2.5. Analytes or methods technically not amenable to spiking for recovery determinations are not evaluated.

4. **Matrix Spikes (MS)** - Method-specified criteria are used to evaluate the MS, where applicable. If no LCS data is available for the sample preparation batch or analytical sequence being evaluated, the MS data is used to evaluate method control for all of the associated samples in the batch or sequence.

**4.1. General Requirements**

4.1.1. The MS contains all of the analytes of interest for the method or project, or the mix of analytes in the MS is rotated at a routine frequency as suggested in the NELAC Quality Systems standard in Appendix D.

4.1.2. If a preparation step (such as digestion or extraction) is required for the analysis method, the MS is prepared identically with and at the same time as the associated samples in the preparation batch.

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4.1.3. The MS is analyzed or reanalyzed within a verified calibration bracket (analytical sequence).

4.1.4. All reanalyses are documented with a valid explanation of the systematic error that prompted the reanalyses.

4.1.5. The concentration of the MS is analyzed to be within the calibration range for the instrument as established by the concentrations of the standards used for the initial calibration and continuing calibration verifications.

4.1.6. Where applicable, the MS is spiked at the method-specified concentration or at a concentration appropriate for the project data quality objective.

### 4.2. Evaluation of MS Recovery

4.2.1. The MS spike concentration is compared with the un-spiked, parent-sample concentration. The suitability of the spike concentration is evaluated on a case-by-case basis according to method specifications or project data quality objectives.

4.2.2. MS recovery data is evaluated if specified by applicable data quality objectives, but the recovery of the MS is only associated with the parent sample, unless no LCS is associated with the preparation batch or analytical sequence of 20 samples or less. In this case, the MS recovery is associated with all of the samples in the preparation batch or analytical sequence of 20 samples or less for evaluation of sample data usability.

4.2.3. Where applicable, the control limits for the MS are established by the laboratory for a specified matrix at ± 3X the standard deviation of the mean recovery of the cumulative MS analyses for the associated matrix at a specified concentration. Alternatively, the recovery control limits are established by linear regression for a range of concentrations for the associated matrix using cumulative recovery data. The mean recovery is calculated or regression analysis is applied after outliers are eliminated from the recovery data set using any appropriate statistical test for outliers and after outliers due to known systematic errors are also censored from the data set. The mean recovery is recalculated or linear regression is reanalyzed if trend monitoring of individual MS recoveries indicates that a systematic bias has developed and corrective action is needed.

4.2.4. Alternatively, control limits are established by the laboratory using other technically justifiable and scientifically sound procedures in accordance with project data quality objectives.

4.2.5. If the MS is used to evaluate all associated batch samples, the applicable LCS criteria are used to evaluate the MS recovery.

4.2.6. Where applicable, criteria established by rule, reported method or project data quality objectives are used to evaluate the MS recoveries.

4.2.7. If no other criteria are applicable, the following control limits are used to evaluate the MS recoveries:

80% - 120% (water) for Nitrate, Nitrite, Nitrate + Nitrite, Ammonium, TKN, Total Phosphorus, Orthophosphate

70% - 130% (water) for Metals

Laboratory Control Limits

- All Organic analytes at any concentration
- All other analytes amenable to spiking at any concentration
- All analytes in non-aqueous matrices

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4.2.8. When applicable, sample results reported with failed MS recoveries are documented with a valid explanation of the systematic error that occurred.

4.2.9. Analytes or methods technically not amenable to spiking for recovery determinations are not evaluated.

5. **Surrogate Spikes** - Surrogate spikes are evaluated according to method-specified requirements and the NELAC Quality Systems standards (Chapter 5 and Appendix D).

5.1. The concentration of the surrogate spike is analyzed to be within the initial calibration range established for the instrument.

5.2. When applicable, sample results reported with failed surrogate spike recoveries are documented with a valid explanation of the systematic error that occurred.

5.3. Analytes or methods technically not amenable to spiking for recovery determinations are not evaluated.

6. **LCS Duplicates or Replicates (LCSD) and Matrix Spike Duplicates (MSD)** - In order of preference, LCSD data are evaluated rather than MSD data, if both types of data are generated for the associated samples. However, the MSD data are also used to evaluate the precision of the analytes for the parent sample and may affect the usability of the parent sample result.

**6.1. General Requirements**

6.1.1. When applicable, replicate rather than duplicate LCS/MS data are evaluated for precision control.

6.1.2. An LCSD/MSD result is linked or associated with all applicable reported sample results for the same preparation batch or analytical sequence of 20 samples or less.

6.1.3. The LCSD/MSD contains all of the analytes of interest for the method or project, or the mix of analytes in the LCSD is rotated at a routine frequency as suggested in the NELAC Quality Systems standard in Appendix D.

6.1.4. If a preparation step (such as digestion or extraction) is required for the analysis method, the LCSD/MSD is prepared identically with and at the same time as the associated samples in the preparation batch.

6.1.5. The LCSD/MSD is analyzed or reanalyzed within a verified calibration bracket (analytical sequence).

6.1.6. All reanalyses are documented with a valid explanation of the systematic error that prompted the reanalyses.

6.1.7. The concentration of the LCSD/MSD is analyzed to be within the calibration range for the instrument as established by the concentrations of the standards used for the initial calibration and continuing calibration verifications.

6.1.8. Where applicable to the evaluation, the MSD spike concentration is compared with the un-spiked, parent-sample concentration. The suitability of the spike concentration is evaluated on a case-by-case basis according to method specifications or project data quality objectives.

**6.2. Evaluation of Duplicates**

6.2.1. Where applicable, the control limits for the LCSD/MSD are established by the laboratory for a specified matrix at ≤3X the standard deviation of the mean precision (absolute or relative) of the cumulative LCSD analyses for the associated matrix at a specified concentration. Alternatively, the precision control limits are established by linear regression for a range of concentrations for the associated matrix using cumulative precision data. The mean precision is calculated or regression analysis is applied after outliers are eliminated from the precision data set using any appropriate



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6.2.2. Alternatively, control limits are established by the laboratory using other technically justifiable and scientifically sound procedures in accordance with project data quality objectives.

6.2.3. Where applicable, criteria established by rule, reported method or project data quality objectives are used to evaluate the LCSD/MSD precision.

6.2.4. If no other criteria are applicable, precision data for the LCSD/MSD are evaluated using the laboratory control limits, with a target precision of ≤20% RPD or RSD for water samples and ≤40% RPD or RSD for non-aqueous and solid-matrix samples.

6.2.5. When applicable, sample results reported with failed LCSD/MSD precision are documented with a valid explanation of the systematic error that occurred.

6.2.6. Analytes or methods technically not amenable to precision determinations are not evaluated.

## 7. Sample Duplicates (SD)

### 7.1. General Requirements

7.1.1. Sample matrix duplicates are evaluated for the analytes present in the sample if no LCSD/MSD data is available or if required by the method or project data quality objectives.

7.1.2. When applicable, replicate rather than duplicate sample data are evaluated for precision control.

7.1.3. If a preparation step (such as digestion or extraction) is required for the analysis method, the SD is prepared identically with and at the same time as the associated samples in the preparation batch.

7.1.4. If no LCSD/MSD is available for evaluation, an SD result is linked or associated with all applicable reported sample results for the same preparation batch or analytical sequence of 20 samples or less.

7.1.5. The SD is analyzed or reanalyzed within a verified calibration bracket (analytical sequence).

7.1.6. All reanalyses are documented with a valid explanation of the systematic error that prompted the reanalyses.

7.1.7. The concentration of the SD is analyzed to be within the calibration range for the instrument as established by the concentrations of the standards used for the initial calibration and continuing calibration verifications.

### 7.2. Evaluation of Sample Duplicates

7.2.1. Where applicable, the control limits for the SD are established by the laboratory for a specified matrix at ≤3X the standard deviation of the mean precision (absolute or relative) of the cumulative SD analyses for the associated matrix at a specified concentration. Alternatively, the precision control limits are established by linear regression for a range of concentrations for the associated matrix using cumulative precision data. The mean precision is calculated or regression analysis is applied after outliers are eliminated from the precision data set using any appropriate statistical test for outliers and after outliers due to known systematic errors are also censored from the data set. The mean precision is recalculated or linear regression is reanalyzed if trend



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7.2.2. Alternatively, control limits are established by the laboratory using other technically justifiable and scientifically sound procedures in accordance with project data quality objectives.

7.2.3. Where applicable, criteria established by rule, reported method or project data quality objectives are used to evaluate the SD precision.

7.2.4. If no other criteria are applicable, precision data for the SD are evaluated using the laboratory control limits, with a target precision of ≤20% RPD or RSD for water samples and ≤40% RPD or RSD for non-aqueous and solid-matrix samples.

7.2.5. When applicable, sample results reported with failed SD precision are documented with a valid explanation of the systematic error that occurred.

7.2.6. Analytes or methods technically not amenable to precision determinations are not evaluated.

8. **Calibrations -** Except as discussed elsewhere in this document, all calibrations are evaluated according to method-specified requirements and applicable NELAC Quality Systems standards.

**8.1. Initial Calibration**

8.1.1. The number of standard concentrations specified by the method or project data quality objectives is used to perform the initial calibration of the instrument or technique.

8.1.2. Where applicable, the concentration values specified by the method or project data quality objectives are used to perform the initial calibration of the instrument or technique.

8.1.3. If not specified by the method or project objectives and when applicable to the analytical technology, at least two standard concentrations and a blank are used for a linear calibration curve.

8.1.4. The acceptance of the initial calibration is evaluated using the method-specified criteria or the criteria specified by the project data quality objectives.

8.1.5. If not specified by the method or project data quality objectives and when applicable to the analytical technology:

- The correlation coefficient for a regression is ≥0.995 when applied to the linear calibration curve.
- Higher-order calibration curve regressions have a coefficient of determination of ≥0.99, using 6 calibration points for a second order curve and 7 calibration points for a third order curve. The calibration points used for the curve include a result for the calibration blank.

8.1.6. Where applicable, the initial calibration range is extended by an accepted calibration verification.

8.1.7. Unless allowed by the method or project data quality objectives, applicable sample results whose analyzed concentrations fall outside of the calibration range established by the standard concentrations used for the initial calibration (excluding the calibration blank) and calibration verifications are not usable without further evaluation or qualification.

**8.2. Calibration Verification (CV)**

8.2.1. At least one verification standard is from a second source as indicated in the applicable NELAC Quality Systems standard for initial calibrations.



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8.2.2. An acceptable calibration verification is analyzed at the beginning and end of the analytical batch (verified calibration bracket) or as otherwise required by the applicable NELAC Quality Systems standard for continuing calibration verifications.

8.2.3. The analytical batch is determined as defined by the applicable NELAC Quality Systems standard.

8.2.4. As applicable or when specified by rule or project data quality objectives, the calibration verification standard is analyzed at the method-specified frequency.

8.2.5. As applicable or when specified by rule or project data quality objectives, the calibration verification result is evaluated using the method-specified criteria.

8.2.6. In the absence of acceptance criteria specified by rule, project data quality objectives or method, and where applicable, the control limits for the CV are established by the laboratory for a specified matrix at ± 3X the standard deviation of the mean recovery of the cumulative CV analyses at a specified concentration. For this purpose, recovery is defined as the percent of expected concentration analyzed for the CV standard. The mean recovery is calculated after outliers are eliminated from the recovery data set using any appropriate statistical test for outliers and after outliers due to known systematic errors are also censored from the data set. The mean recovery is recalculated if trend monitoring of individual CV recoveries indicates that a systematic bias has developed and corrective action is needed.

8.2.7. Alternatively, control limits are established by the laboratory using other technically justifiable and scientifically sound procedures in accordance with project data quality objectives.

8.2.8. If a continuing calibration verification did not meet the acceptance criterion, but is immediately reanalyzed with acceptable results, the samples analyzed before the failed verification result are valid, provided that the verification previous to the failed verification and following the reanalyzed verification are also acceptable and comprise a verified calibration bracket or analytical batch.

8.2.9. Sample results that are not analyzed within a verified analytical batch or calibration bracket are reanalyzed or qualified as estimated values.

8.2.10. Alternatively, for purposes of assessing the usability of the sample data where verifications have failed and where the reported sample values are relevant to the regulatory action level, compliance limit or other project data quality objective, the failed continuing calibration verifications are evaluated for potential high or low bias according to the applicable NELAC Quality Systems standards for calibration verifications.

9. **Method Blanks or Other Analytical Blanks -** All method blanks and other types of analytical blanks use to control analytical contamination are evaluated for the presence of the analytes of interest for the project or method.

9.1. A blank result is linked or associated with all applicable reported sample results for the same preparation batch or analytical sequence of 20 samples or less.

9.2. If a preparation step (such as digestion or extraction) is required for the analysis method, at least one blank is prepared identically with and at the same time as the associated samples in the preparation batch.

9.3. The blank is analyzed or reanalyzed within a verified calibration bracket (analytical sequence).

9.4. All reanalyses are documented with a valid explanation of the systematic error that prompted the reanalyses.



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9.5. Unless specified otherwise by rule, an applicable analytical method or project data quality objectives, it is expected that the concentration of analytes detected in the blank (above the reported MDL) will be less than 10% of the concentration in the individual samples of the associated preparation batch or analytical sequence (for the affected analytes).

9.6. Where samples are diluted for analysis, the evaluation of the blank results is considered with respect to the dilution factors associated with the samples.

9.7. BOD method blanks are evaluated against the method criterion.

9.8. No colonies are reported in bacteriological method blanks.

10. **Field Quality Control Blanks (Trip Blanks, Field Blanks or Equipment Blanks)** - Field QC Blanks associated with the samples for a specific sampling event are evaluated for contamination as indicated by the presence of the analytes of interest for the project or method.

10.1. If a preparation step (such as digestion or extraction) is required for the analysis method, the blank is prepared identically as the associated samples in the preparation batch.

10.2. The blank is analyzed or reanalyzed within a verified calibration bracket (analytical sequence).

10.3. Unless specified otherwise by rule, an applicable analytical method or project data quality objectives, it is expected that the concentration of analytes detected in the blank (above the reported MDL) will be less than 10% of the concentration in the associated field sample (for the affected analytes).

10.4. Where samples are diluted for analysis, the evaluation of the blank results is considered with respect to the dilution factors associated with the samples.

11. **Holding Times** - Holding times as specified in the tables in FS 1000 of the DEP SOPs are met.

11.1. For those analytes where there is no separate holding time specified for the extract, digestate or other processed sample, the holding period ends when the sample processing begins.

11.2. Holding times that are specified in “hours” are met if the sample processing (e.g., extraction, digestion, filtration, etc) or analysis, as applicable, begins within the last hour of the specified holding time, accounting for the time zone in which the sample was collected.

> *Example: For a sample with a 24-hour holding time that was collected at 14:15 on May 20, 2007, the sample is within holding time if the sample is processed before 15:15 on May 21, 2007.*

11.3. Holding times that are specified in “days” are met if the sample processing begins before 24:00 on the final day, accounting for the time zone in which the sample was collected.

11.4. Clarifications

11.4.1. For microbiology, the holding time is evaluated as the duration between the sample collection date and time and the date and time of the placement of the processed sample into or on the applicable growth medium.

11.4.2. For BOD or CBOD, the holding time is evaluated as the duration between the sample collection date and time and the date and time of the initial DO measurement for the test.

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11.4.3. For toxicity testing, the holding time is evaluated as the duration between the sample collection date and time and the date and time of introduction of the last individual test organism into a test sample.

12. **Quality Control Check Samples** – The following criteria are used to evaluate specific quality control check samples for the indicated test.

### 12.1. BOD Analyses

12.1.1. For each preparation batch of 20 samples or less, glucose-glutamic acid (GGA) samples are analyzed to obtain values within the method-specified acceptance control limits.

12.1.2. Alternatively, per approved revisions to SM 5210 B, other compounds are used to control the method, when applicable to a specific wastewater effluent.

12.1.3. In order of preference, replicate check sample data are evaluated rather than sample replicate data, if both types of data are generated for the associated samples.

12.1.4. Precision data for the replicate check sample analyses are evaluated using the laboratory control limits, with a target precision of ≤20% RPD or RSD expected.

12.1.5. Where applicable, the control limits for the replicate check sample analyses are established by the laboratory at ≤3X the standard deviation of the mean precision (absolute or relative) of the cumulative check sample analyses. The mean precision is calculated after outliers are eliminated from the precision data set using any appropriate statistical test for outliers and after outliers due to known systematic errors are also censored from the data set. The mean precision is recalculated if trend monitoring of individual check sample results indicates that a systematic error has occurred and corrective action is needed.

12.1.6. Alternatively, control limits are established by the laboratory using other technically justifiable and scientifically sound procedures in accordance with project data quality objectives.

12.1.7. When applicable, sample results reported with failed check sample precision are documented with a valid explanation of the systematic error that occurred.

### 12.2. Chlorophyll Analyses

12.2.1. For each preparation batch of 20 samples or less, or at least once every three months, a chlorophyll extract solution in acetone is analyzed to evaluate recovery at the concentration for the extract.

12.2.2. A vendor-assayed source of chlorophyll is used to prepare the check sample extract.

12.2.3. The concentration of the check sample extract is such that when extrapolated to the volume of a nominal whole-water concentration, the extract appropriately represents the estimated reporting limit for the whole water sample.

12.2.4. The check-sample results at the extract concentration are evaluated using control limits established by the laboratory.

12.2.5. The control limits for the extract check-sample solution are established by the laboratory at ± 3X the standard deviation of the mean result of the cumulative check-sample analyses expressed as a percentage of the expected value of the check-sample concentration. The mean result is calculated after outliers are eliminated from the check-sample data set using any appropriate statistical test for outliers and after outliers due to known systematic errors are also censored from the data set. The mean result is recalculated if trend monitoring of individual check-sample results indicates that a systematic bias has developed and corrective action is needed.



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12.2.6. Alternatively, control limits are established by the laboratory using other technically justifiable and scientifically sound procedures in accordance with project data quality objectives.

12.3. **Matrix-Specific Evaluation for Known or Suspected Interferences** - An example of typical interferences of concern to DEP is the analyses for trace metal concentrations in seawater.

12.3.1. When applicable to the project data quality objectives and when technically feasible, known or suspected interferences in the matrix specific to the project analytes and samples are evaluated using quality control (QC) samples of known matrix composition and analyte concentration.

12.3.2. The QC sample result is linked or associated with all applicable reported field sample results for the same preparation batch or analytical sequence of 20 samples or less.

12.3.3. The composition of the matrix for the QC sample is controlled for the analytes and interferences of interest and closely matches or approximates the matrix of the associated field samples.

12.3.4. A naturally derived or artificially formulated matrix is used to prepare the QC sample.

12.3.5. The QC sample is prepared by the analyzing laboratory using a second source standard for the analyte of interest. The second-source standard is selected as indicated in the NELAC Quality Systems standard for initial calibrations.

12.3.6. Alternatively, the QC sample is obtained from an external source such as a commercial vendor of QC-check samples or Standard Reference Materials.

12.3.7. Where applicable, the QC sample is prepared at the method-specified concentration or at a concentration selected according to project data quality objectives.

12.3.8. Where applicable, the concentration of the QC sample is evaluated against any data quality objectives for minimum quantitation level applicable to the data use and does not exceed 2X the minimum quantitation level.

12.3.9. If a preparation step (such as digestion or extraction) is required for the analysis method, the QC sample is prepared identically with and at the same time as the associated samples in the preparation batch.

12.3.10. The QC sample is analyzed or reanalyzed within a verified calibration bracket (analytical sequence).

12.3.11. All reanalyses are documented with a valid explanation of the systematic error that prompted the reanalyses.

12.3.12. The concentration of the QC sample is analyzed to be within the calibration range for the instrument as established by the concentrations of the standards used for the initial calibration and continuing calibration verifications.

12.3.13. As applicable, the recovery for the QC sample is evaluated using method-specified criteria, vendor-specified criteria, or control limits established by the laboratory.

12.3.14. Where applicable, the control limits for the QC sample are established by the laboratory for a specified matrix at ± 3X the standard deviation of the mean recovery of the cumulative QC sample analyses at a specified concentration. Alternatively, the recovery control limits are established by linear regression for a range of concentrations using cumulative recovery data. The mean recovery is calculated or regression analysis is applied after outliers are eliminated from the recovery data set using any appropriate statistical test for outliers and after outliers due to known systematic errors are also

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censored from the data set. The mean recovery is recalculated or linear regression is reanalyzed if trend monitoring of individual QC sample recoveries indicates that a systematic bias has developed and corrective action is needed.

12.3.15. Alternatively, control limits are established by the laboratory using other technically justifiable and scientifically sound procedures in accordance with project data quality objectives.

12.3.16. When applicable, sample results reported with failed QC sample recoveries are documented with a valid explanation of the systematic error that occurred.

**13. Sample Preservation Checks**

13.1. The field records demonstrate positive indication that the samples are properly preserved (including thermal preservation).

13.2. The laboratory records demonstrate that proper thermal preservation was checked upon receipt at the laboratory, per the instructions in the NELAC Quality Systems standards.

13.3. The laboratory records demonstrate that samples that have been collected on the same day and hand-delivered are received at the laboratory in ice if the temperature check fails the applicable rule or method requirement.

13.4. The laboratory records demonstrate positive indication that the samples are checked for proper chemical preservation prior to or during sample preparation or analysis.

**14. Evaluation of the Reported MDL**

14.1. If no analyte is detected in the evaluated sample, the assessment of sample data usability includes establishing that the laboratory determined, evaluated and verified the reported MDL for the analyte according to the requirements in the applicable NELAC Quality Systems standards, regulatory requirement or reported method.

14.2. The MDL determination, evaluation and verification are considered when establishing the usability of the sample data where the reported MDL is relevant to the regulatory action level, compliance limit or other project data quality objective.

14.3. For the purposes of data usability evaluation, the DEP-defined MDL is equivalent to the NELAC-defined LOD.

**15. Evaluation of the Reported PQL**

15.1. If the concentration of the evaluated sample is below the concentration value of the reported PQL or is below the concentration value of the lowest initial calibration standard or continuing calibration verification standard associated with the sample, the assessment of sample data usability includes establishing that the laboratory determined, evaluated and verified the reported PQL for the analyte according to the requirements in the applicable NELAC Quality Systems standards.

15.2. The PQL determination, evaluation and verification are considered when establishing the usability of the sample data where the reported PQL is relevant to the regulatory action level, compliance limit or other project data quality objective.

15.3. For the purposes of data usability evaluation, the DEP-defined PQL is equivalent to the NELAC-defined LOQ.

**16. Evaluation of Reversals (Parts vs. Whole Comparison)**

16.1. Where applicable, sample results are evaluated to determine if the sum of reported parts or fractions for the associated sample analyte results exceed 120% of the corresponding reported or calculated whole.

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16.2. Evaluation of reversals with respect to sample data usability is assessed on a case-by-case basis with more extensive validation of the specifically affected analyses conducted as needed.

*Examples of reversals include the following:*

| Parameter Part | Parameter Whole |
|---|---|
| Total ammonia | TKN |
| Orthophosphate | Total phosphorus |
| Nitrate | Measured Total nitrite/nitrate |
| Nitrite | Measured Total nitrite/nitrate |
| Sum of nitrite and nitrate | Measured Total nitrite/nitrate |
| Sum of nitrite, nitrate and TKN | Measured Total nitrogen |
| Sum of measured total nitrite/nitrate and TKN | Measured Total nitrogen |
| Filtered sample results (e.g., dissolved metals) | Unfiltered sample results (e.g., total metals) |
| Methyl mercury | Total mercury |
| DOC | TOC |

17. **General Principles of Data Quality Assessment** - The following principles will be used when evaluating sample data for data usability determinations using specified Data Quality Indicators. The guidelines discussed in this section are only applicable if specific data quality assessment directives have not been provided in any other Department Rule or reporting format. The examples given below are illustrative and simplistic in nature.

17.1. Supporting data that fail the target acceptance criteria for specific Data Quality Indicators will be evaluated against the affected sample result and the magnitude of the failure.

*Examples:*

*A wastewater effluent, with a nitrate discharge permit level of 10 mg/L, was analyzed by a laboratory and found to have a nitrate concentration of 0.26 mg/L. For the recovery of the Laboratory Control Sample (LCS), the laboratory has established acceptance criteria of 80 – 120%. For this particular batch of samples, recovery for the LCS was 78%, and the laboratory properly qualified the result with a "J". Because the actual nitrate value was significantly lower than the permit limit, and the quality control failure was relatively minor, this result is judged to be usable.*

*A Class I waterbody was sampled for benzene to determine if concentrations complied with the water quality standard of 1.18 ug/L. A benzene analysis was performed with initial calibration standards ranging from 1 ug/L to 200 ug/L. All QC checks associated with this analysis were within the calibration range and within acceptance criteria. One of the project samples had a benzene concentration of 210 ug/L. The sample was qualified by the laboratory with a "J" and an explanation provided that the result exceeded the high level calibration standard. Because of the absolute magnitude of the*



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*sample result (exceeding the water quality standard by nearly 209 ug/L), and the fact that it exceeded the high level standard by only 5%, the data is usable for the project.*

*A wastewater effluent sample, which was collected to determine compliance with a 10 ug/L arsenic permit limit, was found to have 9.5 ug/L of arsenic. While the Laboratory Control Sample acceptance criteria previously established by the laboratory was 75 – 125%, the LCS recovery associated with this sample was only 65%. These data are unusable to demonstrate compliance, due to the close proximity of the sample to the action level, and the low LCS recovery (well outside of the targeted acceptance criteria).*

17.2. The magnitude of the sample result is considered when evaluating the consequences of the failed or absent Data Quality Indicators.

*Examples:*

*An Everglades surface water sample, analyzed for compliance with a 10 ug/L total phosphorus criterion, was found to contain 21 ug/l of total phosphorus. The sample was properly preserved, but due to a laboratory mistake, the original sample had to be re-analyzed. The second analysis produced a total phosphorus result of 17 ug/L, but now the holding time was exceeded by 1 week. The value was qualified by the laboratory with a "Q" for exceeding the holding time. Despite a reduction in the phosphorus concentration that could have been associated with exceeding the holding time, the analytical result still exceeded the action level, and the datum is usable.*

*For a waste facility study, benzene was found in groundwater at a concentration of 5.7 ug/L. However, the reported method detection limit (MDL) for this particular benzene analysis was 1 ug/L, with a practical quantitation limit (PQL) of 4 ug/L. The Rule 62-777 FAC guidance document for routinely achievable PQLs indicates the target PQL for benzene is 1 ug/L. In this case, despite the elevated detection limit (indicating use of a less sensitive method), the sample result was above the reported PQL, and this result is usable.*

*A surface water sample was analyzed by membrane filtration for fecal coliform, to determine if the 800 Colonies/100 mL water quality standard was exceeded. The analytical result was calculated to be 1,200 Colonies/100 mL. Method blanks were run simultaneously with the surface water samples by filtering 100 mL of sterilized dilution water, which resulted in the presence of 2 – 5 target colonies in the blank samples. The laboratory did not use "V" (analyte detected in blank) to qualify the result. This result is usable despite the failure of the lab to properly qualify the samples, the high magnitude of the result exceedance, compared with the minor contamination in the blanks.*

*Biochemical Oxygen Demand analysis conducted on a surface water sample yielded a result of 5.5 mg/L. Dissolved oxygen depletion in the associated method blank was 0.3 mg/L, exceeding method criteria by 0.1 mg/L. The results were properly qualified with "V". The data is usable based on the magnitude of the exceedance compared with the quality control failure.*

17.3. The evaluation of laboratory performance or the determination of usability for a data set will be based on a preponderance of Data Quality Indicator failures pointing to specific, systematic problems with the laboratory operation or the data set.

*Examples:*



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*The analytical data generated by a County surface water monitoring program were being audited to determine if the data could support Impaired Waters Rule listing decisions for the Total Maximum Daily Load (TMDL) program. Fifteen chlorophyll a samples, which had been analyzed over a five year period, were evaluated. Twice in this five year period, due to laboratory oversights, the 48 hour hold time for filtration was not met. Records demonstrated that the 48 hour hold time was the laboratory's target and that a quality system for meeting this objective was evident. Upon reviewing additional chlorophyll a quality control records, it was determined these holding time exceedances were isolated instances and that the 5 year period of data is usable.*

*Upon auditing a laboratory's quality control information associated with data submitted to the TMDL program, it was discovered that the majority of samples were analyzed beyond the accepted holding time, and that none of these results were qualified with "Q". When the laboratory manager was asked about the discrepancy, they indicated that the qualifiers were purposely suppressed so that the TMDL program would use all the data. Because these admissions indicated that the entire quality system was compromised, the data were deemed not usable.*

17.4. Project management goals are taken into consideration when making data usability assessments. Specific Data Quality Objectives are established for certain analytical activities within a project, and these objectives will be evaluated when making a usability statement.

*Examples:*

*A cleanup goal established for a waste remediation site stated that all analytical work must be sensitive enough to meet the Cleanup Target Levels (CTL) in Rule 62 – 777 FAC. During the project, a previously unknown area of contamination was discovered, and the Project Manager ordered some grab samples to delineate the aerial extent and magnitude of the newly found contamination. The lab used a method with a higher PQL (that did not meet the original cleanup objectives) but use of this method allowed a rapid turn-around time, enabling an effective adaptive management approach to better address the newly discovered contamination. These data are usable based on this set of objectives (delineating the new area of concern).*

*Four monitoring wells were sampled for trichloroethane (TCE) at a groundwater remediation site previously known to have TCE concentrations ranging from 20-30 ug/L. During this particular sampling, TCE measured at the four wells was found to be below 1 ug/L, and there were no laboratory quality control failures of any kind. However, sampling records indicated that large volumes of groundwater were purged with a centrifugal pump in a short time period, and that dissolved oxygen levels in the wells exceed 7 mg/L. Because the evidence indicates that improper sampling occurred, resulting in excessive aeration and de-gassing of volatile compounds, these data were determined to be unusable.*

## 18. Procedure for Data Usability Determinations

18.1. Data auditors will review and evaluate the following information:

- The purpose for auditing the data;
- The reported values of the analytical results;



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- The relationship between each analytical result and an associated decision or action level;
- The documented calibration, quality control and other supporting data compared with designated Data Quality Indicators in 62-160, F.A.C. or other specified Data Quality Objectives;
- The pattern, frequency, and magnitude of any failures or other deficiencies associated with the results;
- The extent to which the audited data set fulfills the Data Quality Objectives of the project or Program.

18.2. Based on the evaluation, the auditors will determine how the data can be used by the relevant Department programs.

## 19. Summary of the Data Usability Assessment Process

Based on the above inputs, the auditor will extrapolate audit findings to determine the overall performance of a laboratory for a period of record, and determine the usability of the data in question for a Department purpose. Usability assessments will evaluate the Data Quality Indicator results for the subject data set relative to DEP program or project objectives, and the follow the principles characterized in this guidance document to draw an "overall conclusion" concerning the usability of the data set. This conclusion will address individual samples or will express a "general assessment" based on examination of a representative sample set over a pre-determined time period, depending on the project objectives and the sample set being evaluated. This assessment will include, where applicable, the evaluation of data trends relative to laboratory corrective actions or laboratory events (e.g., laboratory instituted NELAC standards in November of 2004). The resulting usability determination would be characterized over certain segments of the audited period. Recommendations concerning usability of the data will be communicated with appropriate Department staff.

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# Appendix A3. Data Supporting EPA's Reference Approach for Deriving Numeric Nutrient Criteria for Florida Streams

Appendix A3 contains the data EPA used to derive numeric nutrient criteria for Florida streams. It is being provided in electronic form on CD. A copy of the CD can be obtained by contacting EPA's docket office. The docket identification number is EPA-HQ-OW-2009-0596.

The Office of Water (OW) Docket Center is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The OW Docket Center telephone number is 202-566-1744 and the Docket address is OW Docket, EPA West, Room 3334, 1301 Constitution Ave., NW, Washington, DC 20004.

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# Appendix A4. FDEP's Method for Calculating a Corridor-based Landscape Development Intensity Index (LDI)

LDI method for Streams
February 2008
FDEP

In your view have the following layers to start with:

- Site point coverage
- FL NHD (24K)
  - Lines
  - Polygons (waterbodies as well as areas)

General guidelines:

The LDI is calculated using the land use within a 100 m buffer around the stream, 10,000m (10 km) upstream from the site.

In order to do this, follow these steps:

1. Start with the site of your choice
2. Draw a circle with a 10,000 m radius using the site as the center point.
3. Select the 24K NHD linework upstream of the site until you reach the circle boundary
   a. If there is not 10,000 m of stream upstream of the point, select the linework upstream of the point until you run out of stream.
4. Create a 100 m buffer around the linework
5. Cut the buffer polygon so that there is no buffer downstream of the site
6. Select the 24K NHD polygons (waterbodies and areas) that are upstream of the site, these represent wide spots in the stream/river.
7. Create 100 m buffer around the polygons
8. Append the buffers from the streamline and the polygons to create one buffer shapefile
9. Dissolve the buffers to eliminate overlap
10. Erase the polygons from the buffers (so that the buffer goes around the wide spots in the streams, wide spots in the streams are not to be included in the buffer)
    a. Water has an LDI score of 1 and can artificially lower the score if the water from the stream is included in the calculation of the LDI for that stream. Water that falls within the 100 m buffer but is not in the streamline can be counted in the calculation.
    b. If the NHD waterbodies remain selected, ArcGIS will only erase the selected polygons
11. Now you are ready to clip the corresponding WMD land use to the buffer.
    a. Always use the most recent land use available
12. Recalculate the area to make sure accurate areas are available ( I always recalculate to Acres)



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13. Bring the shapefile dbase file and LDI_by_LU3.xls into Excel
14. Create pivot table from data
    a. Click data menu
    b. Select "pivot table and pivot chart report"
    c. Click next on the first 2 screens
    d. Click finish on the next screen
    e. Drag and drop "Level 3" landuse codes into "Drop row fields here"
    f. Drag and drop the recalculated area field into "Drop data items here"
15. Copy the columns that the pivot table created
16. Paste Special -> Values
    a. You cannot manipulate data while it is in a pivot table
17. Add your column headings in (Level 3, Acres)
18. Add the following headings: Percent LDI Coefficient, LDI value
19. Calculate the percent by dividing the acres for one Level 3 value by the total acres (calculated by the pivot table)
20. Populate the LDI coefficient field
    a. Click on fx (add function)
    b. Choose VLOOKUP
        i. Lookup value = Level 3 value (ex. 1100)
        ii. Table array = LDI Table (see next page for LDI values for each FLUCC code), highlight Level 3 and LDI columns
        iii. Col_index_number = 2 (the column that the LDI values are stored in)
        iv. Range_lookup = false (so it will only return exact matches)
21. Calculate the LDI value by multiplying the percent by the LDI coefficient
22. Add individual LDI values for total LDI value.
23. Record total LDI value and land use used (year and district)

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LDI Codes for Each FLUCC code

| FLUCC | Description | LDI |
|---|---|---|
| 1000 | Urban and Built-up | 7.39 |
| 1009 | Mobile Home Units Any Density | 6.79 |
| 1100 | Residential, Low Density <Less than two dwelling units per acre> | 6.79 |
| 1110 | Low Density Residential - Fixed Single Family Units | 6.79 |
| 1120 | Low Density Residential - Mobile Home Units | 6.79 |
| 1130 | Low Density Residential - Mixed Units <Fixed and mobile home units> | 6.79 |
| 1140 | Ranchettes - Fixed Single Family Units | 6.79 |
| 1150 | Ranchettes - Mobile Units | 6.79 |
| 1160 | Ranchettes - Mixed Units | 6.79 |
| 1190 | Low Density Under Construction | 6.79 |
| 1200 | Residential, Medium Density <Two - five dwelling units per acre> | 7.59 |
| 1210 | Medium Density Residential - Fixed Single Family Units | 7.59 |
| 1220 | Medium Density Residential - Mobile Home Units | 7.59 |
| 1230 | Medium Density Residential - Mixed Units <Fixed and mobile home units> | 7.59 |
| 1290 | Medium Density Under Construction | 7.59 |
| 1300 | Residential, High Density | 8.66 |
| 1310 | High Density Residential - Fixed Single Family Units <Si or more | 7.99 |
| 1320 | High Density Residential - Mobile Home Units <Si or more | 7.99 |
| 1330 | Multiple Dwelling Units - Low Rise <Two stories or less> | 8.66 |
| 1340 | Multiple Dwelling Units - High Rise <Three stories or more> | 9.19 |
| 1350 | High Density Residential - Mixed Units <Fixed and mobile home units> | 7.99 |
| 1390 | High Density Under Construction | 7.99 |
| 1400 | Commercial and Services | 8.00 |
| 1410 | Retail Sales and Services | 8.00 |
| 1411 | Shopping Center | 9.18 |
| 1420 | Wholesale Sales and Services <excluding warehouses associated with | 8.00 |
| 1423 | JUNK YARD | 9.18 |
| 1424 | FARMERS MARKET | 8.00 |
| 1430 | Professional Services | 8.00 |
| 1440 | Cultural and Entertainment | 8.07 |
| 1443 | OPEN AIR THEATER | 8.07 |
| 1450 | Tourist Services | 8.00 |
| 1452 | MOTEL | 8.00 |
| 1453 | TRAVEL TRAILER PARK | 8.00 |
| 1454 | CAMPGROUND | 4.09 |
| 1460 | Oil and Gas Storage | 8.00 |
| 1470 | Mixed Commercial and Services | 9.42 |
| 1480 | Cemeteries | 4.09 |
| 1490 | Commercial and Services Under Construction | 8.00 |
| 1500 | Industrial | 8.32 |
| 1510 | Food Processing | 8.32 |
| 1513 | SEAFOOD PROCESSING | 8.32 |
| 1514 | MEAT PACKING FACILITY | 8.32 |
| 1515 | POULTRY AND/OR EGG PROCESSING | 8.32 |
| 1516 | GRAIN AND LEGUME PROCESSING | 8.32 |



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| FLUCC | Description | LDI |
|---|---|---|
| 1520 | Timber Processing | 8.32 |
| 1521 | SAWMILL | 8.32 |
| 1522 | PLYWOOD AND VENEER MILL | 8.32 |
| 1523 | PULP AND PAPER MILL | 8.32 |
| 1526 | LOG HOME PREFABRICATION | 8.32 |
| 1527 | WOODYARD | 8.32 |
| 1530 | Mineral Processing | 8.32 |
| 1532 | PHOSPHATE PROCESSING | 8.32 |
| 1533 | LIMEROCK PROCESSING | 8.32 |
| 1535 | HEAVY MINERALS PROCESSING | 8.32 |
| 1540 | Oil and Gas Processing | 8.32 |
| 1544 | LIQUIFIED GASES | 8.32 |
| 1545 | ASPHALT PLANT | 8.32 |
| 1550 | Other Light Industrial | 8.32 |
| 1551 | BOAT BUILDING AND REPAIR | 8.32 |
| 1552 | ELECTRONICS | 8.32 |
| 1554 | AIRCRAFT BUILDING AND REPAIR | 8.32 |
| 1556 | MOBILE HOME MANUFACTURER | 8.32 |
| 1560 | Other Heavy Industrial | 8.32 |
| 1561 | Ship Building and Repair | 8.32 |
| 1562 | Prestressed Concrete Plants | 8.32 |
| 1564 | CEMENT PLANT | 8.32 |
| 1565 | PLASTIC PIPE PLANT | 8.32 |
| 1570 | Chemical Processing Plants | 8.32 |
| 1580 | ??? | 8.32 |
| 1590 | Industrial Under Construction | 8.32 |
| 1600 | Extractive | 8.32 |
| 1610 | Strip Mines | 8.32 |
| 1611 | Clays | 8.32 |
| 1612 | Peat | 8.32 |
| 1613 | HEAVY MINERAL MINE | 8.32 |
| 1614 | PHOSPHATE MINE | 8.32 |
| 1620 | Sand and Gravel Pits | 8.32 |
| 1630 | Rock Quarries | 8.32 |
| 1631 | LIMEROCK QUARRY | 8.32 |
| 1632 | DOLOMITE QUARRY | 8.32 |
| 1633 | PHOSPHATE | 8.32 |
| 1640 | Oil and Gas Fields | 8.32 |
| 1650 | Reclaimed Land | 8.32 |
| 1660 | Holding Ponds | 8.32 |
| 1670 | Inactive Strip Mines/Rock Quarries or holding ponds | 8.32 |
| 1700 | Institutional | 8.07 |
| 1710 | Educational Facilities | 8.07 |
| 1720 | Religious | 8.07 |
| 1730 | Military | 8.07 |
| 1736 | NATIONAL GUARD INSTALLATION | 8.07 |
| 1740 | Medical and Health Care | 8.07 |



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| FLUCC | Description | LDI |
|---|---|---|
| 1741 | HOSPITIAL | 8.07 |
| 1742 | NURSING HOME | 8.07 |
| 1750 | Governmental | 8.07 |
| 1756 | MAINTENANCE YARD | 8.07 |
| 1760 | Correctional Facilities | 8.07 |
| 1761 | STATE PRISON | 8.07 |
| 1765 | MUNICIPAL PRISON | 8.07 |
| 1770 | Other Institutional Facilities | 8.07 |
| 1780 | Commercial Child Care | 8.07 |
| 1790 | Institutional Under Construction | 8.07 |
| 1800 | Recreational | 4.09 |
| 1810 | Swimming Beach | 4.09 |
| 1820 | Golf Courses | 6.92 |
| 1830 | Race Tracks | 6.92 |
| 1831 | AUTOMOBILE RACING TRACK | 6.92 |
| 1832 | HORSE RACING TRACK | 6.92 |
| 1833 | DOG RACING TRACK | 6.92 |
| 1840 | Marinas and Fish Camps | 6.92 |
| 1850 | Parks and Zoos | 4.09 |
| 1851 | CITY PARK | 4.09 |
| 1852 | ZOO | 6.92 |
| 1860 | Community Recreational Facilities | 4.09 |
| 1870 | Stadiums | 6.92 |
| 1880 | Historical Sites | 8.07 |
| 1890 | Under Construction or Other Recreational Facilities | 4.09 |
| 1900 | Open Land | 1.85 |
| 1910 | Undeveloped Urban Land | 1.85 |
| 1920 | Inactive Development Land | 1.85 |
| 1923 | INACTIVE DEVELOPMENT LAND NONFORESTED | 1.85 |
| 1924 | INACTIVE DEVELOPMENT LAND FORESTED | 1.85 |
| 1930 | Urban Land in Transition Without Positive Indicators of Intended Activity | 1.85 |
| 1940 | Other Open Land | 1.85 |
| 2000 | Agriculture | 3.88 |
| 2100 | Pastures and Fields | 3.51 |
| 2110 | Improved Pastures | 3.51 |
| 2120 | Unimproved Pastures | 2.06 |
| 2130 | Woodland Pastures | 2.06 |
| 2140 | Row Crops | 4.63 |
| 2141 | Potatoes and Cabbage | 4.63 |
| 2150 | Field Crops | 4.63 |
| 2156 | Field Crops - Sugar Cane | 4.63 |
| 2160 | Mixed Crops | 4.63 |
| 2200 | Tree Crops | 4.06 |
| 2210 | Citrus Groves | 4.06 |
| 2220 | Fruit Orchards | 4.06 |
| 2221 | PEACHES | 4.06 |
| 2224 | BLUEBERRIES | 4.06 |



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| FLUCC | Description | LDI |
|---|---|---|
| 2230 | Other Groves | 4.06 |
| 2231 | PECANS | 4.06 |
| 2240 | Abandoned Tree Crops | 4.06 |
| 2300 | Feeding Operations | 5.15 |
| 2310 | Cattle Feeding Operations | 5.15 |
| 2320 | Poultry Feeding Operations | 5.15 |
| 2330 | Swine Feeding Operations | 5.15 |
| 2400 | Nurseries and Vineyards | 4.06 |
| 2410 | Tree Nurseries | 4.06 |
| 2420 | Sod Farms | 4.06 |
| 2430 | Ornamental Nurseries | 4.06 |
| 2431 | Shade Ferns | 4.06 |
| 2432 | Hammonck Ferns | 4.06 |
| 2440 | Vineyards | 4.06 |
| 2450 | Floriculture | 4.06 |
| 2460 | Timber Nursery | 4.06 |
| 2500 | Specialty Farms | 4.06 |
| 2510 | Horse Farms | 5.15 |
| 2520 | Dairies | 5.15 |
| 2530 | Kennels | 5.15 |
| 2540 | Aquaculture | 5.15 |
| 2550 | Tropical Fish Farms | 5.15 |
| 2590 | Other Specialty Farms | 5.15 |
| 2600 | Other Open Lands | 2.06 |
| 2610 | Fallow Cropland | 2.06 |
| 2620 | Old Field | 2.06 |
| 3000 | Rangeland | 2.06 |
| 3100 | Herbaceous | 2.06 |
| 3200 | Shrub and Brushland | 2.06 |
| 3210 | Palmetto Prairies | 2.06 |
| 3220 | Coastal Scrub | 2.06 |
| 3290 | Other Shrubs and Brush | 2.06 |
| 3300 | Mixed Rangeland | 2.06 |
| 4000 | Upland Forests | 1.00 |
| 4100 | Upland Coniferous Forests | 1.00 |
| 4110 | Pine Flatwoods or Mesic Flatwoods | 1.00 |
| 4119 | Pine Flatwoods - Melaleuca Infested | 1.00 |
| 4120 | Longleaf Pine-Xeric Oak or Longleaf Sandhill | 1.00 |
| 4130 | Sand Pine or Sand Pine Scrub | 1.00 |
| 4140 | Pine - Mesic Oak | 1.00 |
| 4190 | Hunting Plantation Woodlands | 1.58 |
| 4200 | Upland Hardwood Forests | 1.00 |
| 4210 | Oak Sandhill | 1.00 |
| 4220 | Brazilian Pepper | 1.00 |
| 4230 | Oak - Pine - Hickory | 1.00 |
| 4240 | Melaleuca | 1.00 |
| 4250 | Temperate Hardwood | 1.00 |



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| FLUCC | Description | LDI |
|---|---|---|
| 4260 | Tropical Hardwoods | 1.00 |
| 4270 | Live Oak | 1.00 |
| 4280 | Cabbage Palm | 1.00 |
| 4290 | Wax Myrtle - Willow | 1.00 |
| 4300 | Upland Hardwood Forests Continued | 1.00 |
| 4310 | Beech - Magnolia | 1.00 |
| 4320 | Oak Scrub | 1.00 |
| 4330 | Western Everglades Hardwoods | 1.00 |
| 4340 | Hardwood - Conifer Mixed | 1.00 |
| 4350 | Dead Trees | 1.00 |
| 4370 | Australian Pine | 1.00 |
| 4380 | Mixed Hardwoods | 1.00 |
| 4390 | Maritime Hammock | 1.00 |
| 4400 | Tree Plantations | 1.58 |
| 4410 | Pine Plantations | 1.58 |
| 4420 | Hardwood Plantations | 1.58 |
| 4430 | Forest Regeneration | 1.58 |
| 4440 | Experimental Tree Plots | 1.58 |
| 4450 | Seed Tree Plantations | 1.58 |
| 5000 | Water | 1.00 |
| 5100 | Streams and Waterways | 1.00 |
| 5200 | Lakes | 1.00 |
| 5210 | Lakes Larger Than 500 Acres (202 Hectares) | 1.00 |
| 5220 | Lakes Larger Than 100 Acres (40 Hectares), but Less Than 500 Acres | 1.00 |
| 5230 | Lakes Larger Than 10 Acres (4 Hectares), but Less Than 100 Acres | 1.00 |
| 5240 | Lakes Less Than 10 Acres (4 hectares) Which are Dominant Features | 1.00 |
| 5300 | Reservoirs | 4.09 |
| 5310 | Reservoirs Larger Than 500 Acres (202 Hectares) | 4.09 |
| 5320 | Reservoirs Larger Than 100 Acres (40 Hectares), but Less Than 500 Acres | 4.09 |
| 5330 | Reservoirs Larger Than 10 Acres (4 Hectares), but Less Than 100 Acres | 4.09 |
| 5340 | Reservoirs less than 10 Acres (4 Hectares) which are dominant features | 4.09 |
| 5400 | Bays and Estuaries | 1.00 |
| 5410 | Embayments Opening Directly into the Gulf of Mexico or the Atlantic Ocean | 1.00 |
| 5420 | Embayments Not Opening Directly into the Gulf of Mexico or the Atlantic Ocean | 1.00 |
| 5500 | Major Springs | 1.00 |
| 5600 | Slough Waters | 1.00 |
| 6000 | Wetlands | 1.00 |
| 6100 | Wetland Hardwood Forests | 1.00 |
| 6110 | Bay Swamps | 1.00 |
| 6120 | Mangrove Swamps | 1.00 |
| 6130 | Gum Swamps | 1.00 |
| 6140 | Shrub Swamps | 1.00 |
| 6150 | Bottomland Hardwood Forest | 1.00 |
| 6160 | Inland Ponds and Sloughs | 1.00 |
| 6170 | Mixed Wetland Hardwoods | 1.00 |
| 6171 | Mixed Wetland Hardwoods - Willows | 1.00 |
| 6172 | Mixed Wetland Hardwoods - Mixed Shrubs | 1.00 |



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| FLUCC | Description | LDI |
|---|---|---|
| 6180 | Cabbage Palm Savanna | 1.00 |
| 6200 | Wetland Coniferous Forests | 1.00 |
| 6210 | Cypress | 1.00 |
| 6218 | Cypress - Melaleuca Infested | 1.00 |
| 6219 | Cypress - with Wet Prairies | 1.00 |
| 6220 | Wet Flatwoods | 1.00 |
| 6230 | Atlantic White Cedar | 1.00 |
| 6240 | Cypress - Pine - Cabbage Palm | 1.00 |
| 6300 | R Wetland Mixed Forest | 1.00 |
| 6310 | Hydric Hammock | 1.00 |
| 6320 | Tidal Swamp | 1.00 |
| 6400 | Vegetated Non-forested Wetlands | 1.00 |
| 6410 | Freshwater Marshes | 1.00 |
| 6411 | Freshwater Marshes - Sawgrass | 1.00 |
| 6412 | Freshwater Marshes - Cattail | 1.00 |
| 6420 | Salt marshes | 1.00 |
| 6430 | Wet Prairies | 1.00 |
| 6439 | Wet Prairies - with Pine | 1.00 |
| 6440 | Emergent Aquatic Vegetation | 1.00 |
| 6450 | Submergent Aquatic Vegetation | 1.00 |
| 6451 | Hydrilla | 1.00 |
| 6460 | Mixed Scrub-Shrub Wetland | 1.00 |
| 6500 | Non-vegetated | 1.00 |
| 6510 | Salt Barrens | 1.00 |
| 6520 | Intertidal Areas | 1.00 |
| 6530 | Inland Shores/Ephemeral Ponds | 1.00 |
| 6540 | Oyster Bars | 1.00 |
| 6600 | Cut over Wetlands | 1.58 |
| 6900 | Wetland Scrub Scrub | 1.00 |
| 7000 | Barren Land | 1.00 |
| 7100 | Beaches | 1.00 |
| 7200 | Sand Other Than Beaches | 1.00 |
| 7300 | Eposed Rock | 1.00 |
| 7310 | Eposed Rock with Marsh Grasses | 1.00 |
| 7400 | Disturbed Lands | 4.09 |
| 7410 | Rural Land in Transition Without Positive Indicators of Intended Activity | 4.09 |
| 7420 | Borrow Areas | 4.09 |
| 7430 | Spoil Areas | 4.09 |
| 7440 | Fill Areas | 4.09 |
| 7450 | Burned Areas | 1.00 |
| 7500 | Riverine Sandbars | 1.00 |
| 8000 | Transportation, Communication and Utilities | 8.05 |
| 8100 | Transportation | 7.81 |
| 8110 | Airports | 8.28 |
| 8111 | Commercial Airport | 8.28 |
| 8112 | GENERAL AVIATION | 8.28 |
| 8113 | PRIVATE AIRPORT | 8.28 |



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| FLUCC | Description | LDI |
|---|---|---|
| 8120 | Railroads | 7.81 |
| 8130 | Bus and Truck Terminals | 8.28 |
| 8132 | BUS TERMINAL | 8.28 |
| 8133 | TRUCK TERMINAL | 8.28 |
| 8140 | Roads and Highways | 8.28 |
| 8141 | LIMITED ACCESS HIGHWAY (INTERSTATE) | 8.28 |
| 8142 | DIVIDED HIGHWAY (FEDERAL-STATE) | 8.28 |
| 8143 | TWO LANE HIGHWAY | 7.81 |
| 8147 | TRANSPORTATION CORRIDOR | 7.81 |
| 8150 | Port Facilities | 8.28 |
| 8160 | Canals and Locks | 8.28 |
| 8170 | Oil, Water, or Gas Long Distance Transmission Line | 8.28 |
| 8180 | Auto Parking Facilities (Highway Rest Areas) | 8.28 |
| 8190 | Transportation Facilities Under Construction | 8.28 |
| 8191 | Highways | 8.28 |
| 8192 | Railroads | 8.28 |
| 8200 | Communications | 8.32 |
| 8210 | Transmission Towers | 8.32 |
| 8220 | Communication Facilities | 8.32 |
| 8290 | Communication Facilities Under Construction | 8.32 |
| 8300 | Utilities | 8.32 |
| 8310 | Electrical Power Facilities | 10.00 |
| 8311 | THERMAL (COAL-FIRED) ELECTRICAL POWER GENERATING PLANT | 10.00 |
| 8315 | ELECTRICAL POWER SUBSTATION | 10.00 |
| 8320 | Electrical Power Transmission Lines | 1.85 |
| 8330 | Water Supply Plants | 8.32 |
| 8340 | Sewage Treatment | 8.32 |
| 8350 | Solid Waste Disposal | 8.32 |
| 8390 | Utilities Under Construction | 8.32 |
| 9000 | Special Classifications | 1.00 |
| 9100 | Vegetative | 1.00 |
| 9110 | Sea Grass | 1.00 |

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# Appendix A5. FDEP's Stream Benchmark Summaries.

Cross-references:

## FDEP's Stream Benchmark Summaries

*Appendix B-17: FDEP's Stream Benchmark Summaries*. U.S. EPA. 2010. *Technical Support Document for U.S. EPA's Proposed Rule for Numeric Nutrient Criteria for Florida's Inland Surface Fresh Waters*. *Water Quality Standards for the State of Florida's Lakes and Flowing Waters. Proposed Rule. January 14, 2010*. EPA-HQ-OW-2009-0596, FRL-9105-1.

*Appendix 7-A*. U.S. EPA. 2009. Proposed Methods and Approaches for Developing Numeric Nutrient Criteria for Florida's Inland Waters. United States Environmental Protection Agency, Office of Water, Office of Science and Technology, Health and Ecological Criteria Division, Washington, DC.

And,

## FDEP's Site Information and Taxa Lists for Stream Benchmark Site Samples

*Appendix B-15: FDEP's Site Information and Taxa Lists for Stream Benchmark Site Samples*, U.S. EPA. 2010. *Technical Support Document for U.S. EPA's Proposed Rule for Numeric Nutrient Criteria for Florida's Inland Surface Fresh Waters*. *Water Quality Standards for the State of Florida's Lakes and Flowing Waters. Proposed Rule. January 14, 2010*. EPA-HQ-OW-2009-0596, FRL-9105-1.

*Appendix 3-D*. USEPA. 2009. Proposed Methods and Approaches for Developing Numeric Nutrient Criteria for Florida's Inland Waters. United States Environmental Protection Agency, Office of Water, Office of Science and Technology, Health and Ecological Criteria Division, Washington, DC.

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# FDEP's Stream Benchmark Summaries

(Appendix 7-A from USEPA. 2009. *Proposed Methods and Approaches for Developing Numeric Nutrient Criteria for Florida's Inland Waters*. United States Environmental Protection Agency, Office of Water, Office of Science and Technology, Health and Ecological Criteria Division, Washington, DC.)

## BONE VALLEY NUTRIENT REGION

**Nutrient Benchmark Site Summary**

# Deer Prairie Creek

**STORET Station 27051558216422**

### Land Use

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.57, suggesting benign human influences in the watershed. During the site visit, aerial photographs were examined and direct observations confirmed that the majority of the watershed land use was forest/natural, with small areas of agriculture and residential land use observed beyond an extensive forested riparian buffer zone. The majority of the watershed lies within conservation lands. There are no point source discharges upstream of the site.

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DOQQ 2004 aerial photograph of Deer Prairie Creek (Station 27051558216422) showing watershed vicinity and land use.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of Deer Prairie Creek (Station 27051558216422) showing close-up of sampling site.

Photograph of Deer Prairie Creek



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**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 117 |
| Hydrologic Score | 2 |
| LDI Score | 1.57 |
| SCI Score | 74 A |
| Total Phosphorus Geometric Mean (mg/L) | 0.285 |
| Total Nitrogen Geometric Mean (mg/L) | 1.14 |

The habitat assessment scored in the high end of the "Suboptimal" range due to the low water levels. The Stream Condition Index scored in the "Exceptional" category, indicating an unusually diverse assemblage of sensitive invertebrates, fully supporting the Class III designation.

**Periphyton Community Composition**

| Algal Community Stricture | % Composition |
|---|---|
| % Bacillariophyta | 89.00 |
| % Chlorophycota | 0.33 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 10.67 |
| Number of Taxa | 51 |

Minimal periphyton growth was observed at the site, which would allow for optimal substrate use by benthic invertebrate and fish communities. Of the 51 algal taxa observed, the majority of the periphyton community was composed of diatoms. No problematic filamentous algal growth was found.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal and macroinvertebrate communities) at Deer Prairie Creek. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota which demonstrate full support of the most sensitive designated use (propagation and maintenance of a healthy, well-balanced population of fish and wildlife).



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**Nutrient Benchmark Site Summary**

# East Fork Manatee River

**STORET Station 273116508208152**

## Land Use

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 2.22, suggesting relatively benign human influences in the watershed. During the site visit, aerial photographs were examined and direct observations confirmed that the majority of the watershed land use was forest/natural, with field/pasture located beyond a riparian buffer zone. Although there is phosphate mining in the area, no phosphate process water is discharged to the East fork of the Manatee River. The site is located within protected conservation lands.

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DOQQ 2004 aerial photograph of East Fork Manatee River (Station 273116508208152) showing watershed vicinity and land use.

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DOQQ 2004 aerial photograph of East Fork Manatee River (Station 273116508208152) showing close-up of sampling site.

Photograph of East Fork Manatee River



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**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 128 |
| Hydrologic Score | 2 |
| LDI Score | 2.22 |
| SCI Score | 71 A |
| Total Phosphorus Geometric Mean (mg/L) | 0.417 |
| Total Nitrogen Geometric Mean (mg/L) | 1.04 |

The habitat assessment scored in the "Optimal" range, and the Stream Condition Index scored in the "Exceptional" category, indicating an unusually diverse assemblage of sensitive invertebrates, definitively supporting the Class III designation.

**Periphyton Community Composition**

| Algal Community Stricture | % Composition |
|---|---|
| % Bacillariophyta | 76.00 |
| % Chlorophycota | 0.33 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 23.67 |
| Number of Taxa | 57 |

Of the 57 algal taxa observed, the majority of the periphyton community was composed of diatoms. Algal growth was very sparse throughout the stream, and no nuisance algal growth was found.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal and macroinvertebrate communities) at East Fork Manatee River. Based on our analyses, the Department concluded that the site was influenced only by low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota which demonstrate full support of the most sensitive designated use (propagation and maintenance of a healthy, well-balanced population of fish and wildlife).



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## BONE VALLEY NUTRIENT REGION

**Nutrient Benchmark Site Summary**

# Manatee River @ SR 64

**STORET Station 24010002**

### Land Use

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.46, suggesting benign human influences in the watershed. During the site visit, aerial photographs were examined and direct observations confirmed that the majority of the watershed land use was forest/natural, with some field/pasture beyond an extensive riparian buffer zone. There are no point source discharges upstream of the site.

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DOQQ 2004 aerial photograph of Manatee River at SR 64 (Station 24010002) showing watershed vicinity and land use.

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DOQQ 2004 aerial photograph of Manatee River at SR 64 (Station 24010002) showing close-up of sampling site.

Photograph of Manatee River at SR 64



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**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 109 |
| Hydrologic Score | 2 |
| LDI Score | 1.46 |
| SCI Score | 64 A |
| Total Phosphorus Geometric Mean (mg/L) | 0.560 |
| Total Nitrogen Geometric Mean (mg/L) | 0.67 |

The habitat assessment scored in the "Suboptimal" range, mostly due to limited in-stream substrate diversity and availability. Despite this, the Stream Condition Index scored in the "Healthy" category, indicating a diverse assemblage of sensitive invertebrates, fully supporting the Class III designation.

**Periphyton Community Composition**

| Algal Community Stricture | % Composition |
|---|---|
| % Bacillariophyta | 90.00 |
| % Chlorophycota | 0 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 9.33 |
| Number of Taxa | 34 |

Of the 34 algal taxa observed, the majority of the periphyton community was composed of diatoms. This site has been a DEP reference stream for 17 years, and local DEP biologists have sampled this site many times during that period. However, during the December, 17, 2008 sampling event, a significant amount of filamentous algal growth was observed. Peggy Morgan (personal communication) stated that while these types of blooms are common in the region during low water events, algal growth is routinely sparse at this location. There have been no additional adverse human activities or changes in watershed land use during the past 17 year period, therefore it is likely that this type of algal growth is an infrequent natural condition, and that the magnitude, frequency and duration of the growth events are limited, as evidenced by the healthy invertebrate community. Ms. Morgan returned to this area of the Manatee River on March 2, 2009, and reported that the algae observed in December was significantly reduced, and that algal coverage had returned to typical (low coverage) levels. This suggests that even in minimally disturbed streams with naturally elevated phosphorus levels, sporadic algal growth occurs, however the magnitude, frequency and duration of the growth events are limited.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal and macroinvertebrate communities) at Manatee River at SR 64. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that it maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota which demonstrate full support of the most sensitive designated use (propagation and maintenance of a healthy, well-balanced population of fish and wildlife).



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## NORTH CENTRAL NUTRIENT REGION

**Nutrient Benchmark Site Summary**

# Alapaha River @ CR 150

**STORET Station 21010008**

### Land Use

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.81, suggesting benign human influences in the watershed. Before and during the site visit, aerial photographs were examined to assess the watershed land use. Direct observations during the site visit confirmed that the watershed land use was predominately forest/natural, with some agricultural activities occurring beyond an extensive riparian buffer zone. There are no point source discharges upstream of the site.

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DOQQ 2004 aerial photograph of the Alapaha River (Station 21020008) showing watershed vicinity and land use

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of the Alapaha River at CR 150 showing close-up of sampling site

Photograph of the Alapaha River at CR 150

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**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 138 |
| Hydrologic Score | 1 |
| LDI Score | 1.81 |
| SCI Score | 59 A |
| Total Phosphorus Geometric Mean (mg/L) | 0.309 |
| Total Nitrogen Geometric Mean (mg/L) | 2.07 |

The Habitat Assessment score was in the "Optimal" range. The SCI scored in the "Healthy" range, indicating a diverse community of aquatic invertebrates, and demonstrating that this stream is meeting its Class III designated use.

**Periphyton Community Composition**

| Algal Community Structure | % Composition |
|---|---|
| % Bacillariophyta | 83.44 |
| % Chlorophycota | 2.92 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 13.31 |
| Number of Taxa | 62 |

Minimal to moderate periphyton growth was observed at this site, and there were no nuisance filamentous algae. Of the 62 algal taxa observed, the majority of the periphyton community was composed of diatoms.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and macroinvertebrate and algal communities) at the Alapaha River at CR 150. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota demonstrated to be fully supportive of the designated use (healthy, well balanced populations of aquatic organisms).



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## NORTH CENTRAL NUTRIENT REGION

**Nutrient Benchmark Site Summary**

# Suwannee River @ White Springs, FL (US 41)

**STORET Station 21010040 / SUW040C1**

### Land Use

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.27, suggesting benign human influences in the watershed. Before the site visit, aerial photographs were examined to assess the watershed land use. Direct observations during the site visit confirmed that the majority of the watershed land use was forest/natural with silviculture beyond an extensive forested riparian buffer zone. The majority of the water emanates from the Okeefenokee National Wildlife Refuge. There are no point source discharges upstream of the site.

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DOQQ 2004 aerial photograph of the Suwannee River @ US 41 showing watershed vicinity and land use.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of the Suwannee River @ US 41 showing close-up of sampling site.

Photograph of the Suwannee River at US Hwy 41

**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 145 |
| Hydrologic Score | 2 |
| LDI Score | 1.27 |
| SCI Score | 69 A |
| Total Phosphorus Geometric Mean (mg/L) | 0.154 |
| Total Nitrogen Geometric Mean (mg/L) | 1.24 |

The Habitat Assessment score was in the "Optimal" range. The SCI score was in the "Exceptional" category, exhibiting a diverse assemblage of sensitive aquatic invertebrates and indicating the site is definitively meeting the Class III designated use.

**Periphyton Community Composition**

| Algal Community Structure | % Composition |
|---|---|
| % Bacillariophyta | 54.43 |
| % Chlorophycota | 8.20 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 37.38 |
| Number of Taxa | 66 |

Very little periphyton was observed at this site, and there was no nuisance algal growth. Of the 66 algal taxa observed, the majority of the periphyton community was composed of diatoms.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal and macroinvertebrate communities) at the Suwannee River at US Highway 41. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota demonstrated to be fully supportive of the designated use (healthy, well balanced populations of aquatic organisms).



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## NORTH CENTRAL NUTRIENT REGION

**Nutrient Benchmark Site Summary**

# Deep Creek @ US 441

**STORET Station DEP010C1**

**Land Use**

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.34, suggesting benign human influences in the watershed. Before and during the site visit, aerial photographs were examined to assess the watershed land use. Direct observations during the site visit confirmed that the majority of the watershed land use was forest/natural with some minimal silviculture. There are no point source discharges upstream of the site.

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DOQQ 2004 aerial photograph of Deep Creek @ US 441 (Station DEP010C1) showing watershed vicinity and land use.

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DOQQ 2004 aerial photograph of Deep Creek @ US 441 (Station DEP010C1) showing close-up of sampling site.

Photograph of Deep Creek @ US 441



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**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 97 |
| Hydrologic Score | 3 |
| LDI Score | 1.34 |
| SCI Score | 80 A |
| Total Phosphorus Geometric Mean (mg/L) | 0.112 |
| Total Nitrogen Geometric Mean (mg/L) | 1.04 |

The Habitat Assessment score was in the "Suboptimal" range, predominantly due to low water velocity (drought conditions) and the presence of naturally eroding sandy banks. The SCI score was in the "Exceptional" category, exhibiting an unusually diverse assemblage of sensitive invertebrates and indicating the site is definitely meeting its Class III designated use.

**Periphyton Community Composition**

| Algal Community Structure | % Composition |
|---|---|
| % Bacillariophyta | 93.33 |
| % Chlorophycota | 0.33 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 6.33 |
| Number of Taxa | 58 |

Very little periphyton was observed at the site, which would allow optimal substrate use by macroinvertebrates. No nuisance algal growth was found. Of the 58 algal taxa observed, the majority of the periphyton community was composed of diatoms.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal and macroinvertebrate communities) at Deep Creek @ US 441. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota which demonstrate full support of the most sensitive designated use (propagation and maintenance of a healthy, well-balanced population of fish and wildlife).



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## NORTH CENTRAL NUTRIENT REGION

**Nutrient Benchmark Site Summary**

# Falling Creek @ C-131

**STORET Station FAL020C1**

### Land Use

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.36, suggesting benign human influences in the watershed. Before and during the site visit, aerial photographs were examined to assess the watershed land use. Direct observations during the site visit confirmed that the majority of the watershed land use was forest/natural with some silviculture and field/pasture located beyond an extensive forested riparian buffer zone. There are no point source discharges upstream of the site.

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DOQQ 2004 aerial photograph of Falling Creek @ C-131 (Station FAL020C1) showing watershed vicinity and land use.

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DOQQ 2004 aerial photograph of Falling Creek @ C-131 (Station FAL020C1) showing close-up of sampling site.

Photograph of Falling Creek @ C-131



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**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 142 |
| Hydrologic Score | 3 |
| LDI Score | 1.36 |
| SCI Score | 55 A |
| Total Phosphorus Geometric Mean (mg/L) | 0.236 |
| Total Nitrogen Geometric Mean (mg/L) | 1.22 |

The Habitat Assessment score was in the "Optimal" range with 142 points. The SCI score (55) was in the "Healthy" category, exhibiting a diverse assemblage of sensitive invertebrates and indicating the site is meeting its Class III designated use.

**Periphyton Community Composition**

| Algal Community Structure | % Composition |
|---|---|
| % Bacillariophyta | 98.33 |
| % Chlorophycota | 1.33 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 0.33 |
| Number of Taxa | 48 |

Very little periphyton was observed at the site, which would allow optimal substrate use by macroinvertebrates. No nuisance algal growth was found. Of the 48 algal taxa observed, the majority of the periphyton community was composed of diatoms.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal and macroinvertebrate communities) at Falling Creek @ C-131. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota which demonstrate full support of the most sensitive designated use (propagation and maintenance of a healthy, well-balanced population of fish and wildlife).



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## NORTH CENTRAL NUTRIENT REGION

**Nutrient Benchmark Site Summary**

# Little Creek @ US 441

**STORET Station 21010033**

**Land Use**

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.18, suggesting benign human influences in the watershed. Before and during the site visit, aerial photographs were examined to assess the watershed land use. Direct observations during the site visit confirmed that the majority of the watershed land use was forest/natural with some silviculture. There are no point source discharges upstream of the site.

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DOQQ 2004 aerial photograph of Little Creek @ US 441 (Station 21010033) showing watershed vicinity and land use.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of Little Creek @ US 441 (Station 21010033) showing close-up of sampling site.

Photograph of Little Creek @ US 441

**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 127 |
| Hydrologic Score | 1 |
| LDI Score | 1.18 |
| SCI Score | 89 A |
| Total Phosphorus Geometric Mean (mg/L) | 0.373 |
| Total Nitrogen Geometric Mean (mg/L) | 0.72 |

The Habitat Assessment score was in the "Optimal" range. The SCI score was in the "Exceptional" category, indicating an exceedingly diverse assemblage of sensitive macroinvertebrates, and demonstrating that the site is clearly meeting its designated use.

**Periphyton Community Composition**

| Algal Community Structure | % Composition |
|---|---|
| % Bacillariophyta | 89.00 |
| % Chlorophycota | 0.33 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 10.67 |
| Number of Taxa | 53 |

Very little periphyton was observed at the site, which would allow optimal substrate use by macroinvertebrates. No nuisance algal growth was found. Of the 53 algal taxa observed, the majority of the periphyton community was composed of diatoms.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and macroinvertebrate and algal communities) at Little Creek @ US 441. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota which demonstrate full support of the most sensitive designated use (propagation and maintenance of a healthy, well-balanced population of fish and wildlife).



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## NORTH CENTRAL NUTRIENT REGION

**Nutrient Benchmark Site Summary**

# New River @ SR 18

**STORET Station 21030049**

### Land Use

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.28, suggesting benign human influences in the watershed. Before and during the site visit, aerial photographs were examined to assess the watershed land use. Direct observations during the site visit confirmed that the majority of the watershed land use was forest/natural with some silviculture and pasture located beyond a forested buffer zone. There are no point source discharges upstream of the site.

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DOQQ 2004 aerial photograph of New River @ SR 18 (Station 21030049) showing watershed vicinity and land use.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of New River @ SR 18 (Station 21030049) showing close-up of sampling site.

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**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 130 |
| Hydrologic Score | 2 |
| LDI Score | 1.28 |
| SCI Score | 76 |
| Total Phosphorus Geometric Mean (mg/L) | 0.229 |
| Total Nitrogen Geometric Mean (mg/L) | 1.04 |

The Habitat Assessment score was in the "Optimal" range. The SCI score was in the "Exceptional" category, indicating an unusually diverse community of macroinvertebrates, and demonstrating that the water body is definitively meeting its designated use.

**Periphyton Community Composition**

| Algal Community Structure | % Composition |
|---|---|
| % Bacillariophyta | 75.62 |
| % Chlorophycota | 0.50 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 23.88 |
| Number of Taxa | 72 |

Very little periphyton was observed at the site, which would allow optimal substrate use by macroinvertebrates. No nuisance algal growth was found. Of the 72 algal taxa observed, the majority of the periphyton community was composed of diatoms.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal communities) at New River @ SR 18. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota which demonstrate full support of the most sensitive designated use (propagation and maintenance of a healthy, well-balanced population of fish and wildlife).



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## NORTH CENTRAL NUTRIENT REGION

**Nutrient Benchmark Site Summary**

# Olustee Creek @ SR 100

**STORET Station UNI234LV**

**Land Use**

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.32, suggesting benign human influences in the watershed. Before and during the site visit, aerial photographs were examined to assess the watershed land use. Direct observations during the site visit confirmed that the majority of the watershed land use was forest/natural with some silviculture and pasture located well beyond a forested buffer zone. There are no point source discharges upstream of the site.

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DOQQ 2004 aerial photograph of Olustee Creek @ SR 100 (Station UNI234LV) showing watershed vicinity and land use.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of Olustee Creek @ SR 100 (Station UNI234LV) showing close-up of sampling site.

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**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 118 |
| Hydrologic Score | 2 |
| LDI Score | 1.32 |
| SCI Score | 44 A |
| Total Phosphorus Geometric Mean (mg/L) | 0.119 |
| Total Nitrogen Geometric Mean (mg/L) | 2.05 |

The Habitat Assessment score was in the high end of the "Suboptimal" range, predominantly due to low water velocity. The SCI score was in the "Healthy" category, indicating a diverse community of sensitive invertebrates, and demonstrating that the water body is meeting its designated use.

**Periphyton Community Composition**

| Algal Community Structure | % Composition |
|---|---|
| % Bacillariophyta | 95.77 |
| % Chlorophycota | 2.82 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 1.41 |
| Number of Taxa | 57 |

Very little periphyton was observed at the site, which would allow optimal substrate use by macroinvertebrates. No nuisance algal growth was found. Of the 57 algal taxa observed, the majority of the periphyton community was composed of diatoms.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and macroinvertebrate and algal communities) at Olustee Creek @ SR 100. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota which demonstrate full support of the most sensitive designated use (propagation and maintenance of a healthy, well-balanced population of fish and wildlife).



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## NORTH CENTRAL NUTRIENT REGION

**Nutrient Benchmark Site Summary**

# Sampson River @ SW 106 Ave

**STORET Station 3598-B**

**Land Use**

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.68, suggesting benign human influences in the watershed. Before and during the site visit, aerial photographs were examined to assess the watershed land use. Direct observations during the site visit confirmed that the majority of the watershed land use was forest/natural with some silvicultural activities and pasture beyond a forested riparian buffer zone. There are no point source discharges upstream of the site.

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DOQQ 2004 aerial photograph of Sampson River @ SW 106 Ave (Station 3598-B) showing watershed vicinity and land use.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of Sampson River @ SW 106 Ave (Station 3598-B) showing close-up of sampling site.

Photograph of Sampson River @ SW 106 Ave



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**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 131 |
| Hydrologic Score | 4 |
| LDI Score | 1.68 |
| SCI Score | 65 A |
| Total Phosphorus Geometric Mean (mg/L) | 0.342 |
| Total Nitrogen Geometric Mean (mg/L) | 0.68 |

The Habitat Assessment score was in the "Optimal" range. The hydrologic score was somewhat elevated due to presence of a control structure at outlet of Lake Sampson, however, local residents indicated that this structure had not been operational for at least 6 months, meaning the contemporaneous biological community had recovered from any potential hydrologic modification. The SCI score was in the "Healthy" category, exhibiting a diverse assemblage of sensitive invertebrates and indicating the site is meeting the Class III designated use.

**Periphyton Community Composition**

| Algal Community Structure | % Composition |
|---|---|
| % Bacillariophyta | 58.33 |
| % Chlorophycota | 1.33 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 40.33 |
| Number of Taxa | 63 |

Minimal periphyton was observed at the site, which would allow optimal substrate use by macroinvertebrates. No nuisance algal growth was found. Of the 63 algal taxa observed, the majority of the periphyton community was composed of diatoms, with a large proportion of blue-green algae.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal and macroinvertebrate communities) at Sampson River @ SW 106 Ave. Based on our analyses, the Department concluded that the site was influenced only by low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota which demonstrate full support of the most sensitive designated use (propagation and maintenance of a healthy, well-balanced population of fish and wildlife).



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## NORTH CENTRAL NUTRIENT REGION

**Nutrient Benchmark Site Summary**

# Santa Fe River @ Worthington Springs

**STORET Station SFR030C1**

**Land Use**

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.88, suggesting benign human influences in the watershed. Before and during the site visit, aerial photographs were examined to assess the watershed land use. Direct observations during the site visit confirmed that the majority of the watershed land use was forest/natural with some silvicultural activities and pasture beyond an extensive forested riparian buffer zone. There are no point source discharges upstream of the site.

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DOQQ 2004 aerial photograph of Santa Fe River @ Worthington Springs (Station SFR030C1) showing watershed vicinity and land use.

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DOQQ 2004 aerial photograph of Santa Fe River @ Worthington Springs (Station SFR030C1) showing close-up of sampling site.

Photograph of Santa Fe River @ Worthington Springs



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**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 132 |
| Hydrologic Score | 2 |
| LDI Score | 1.88 |
| SCI Score | 64 A |
| Total Phosphorus Geometric Mean (mg/L) | 0.235 |
| Total Nitrogen Geometric Mean (mg/L) | 1.15 |

The Habitat Assessment score was in the "Optimal" range. The SCI score was in the "Healthy" category, exhibiting a diverse assemblage of sensitive invertebrates and indicating the site is meeting the Class III designated use.

**Periphyton Community Composition**

| Algal Community Structure | % Composition |
|---|---|
| % Bacillariophyta | 61.33 |
| % Chlorophycota | 3.00 |
| % Euglenophycota | 0.33 |
| % Cyanophycota | 35.33 |
| Number of Taxa | 64 |

Very little periphyton was observed at the site, which would allow optimal substrate use by macroinvertebrates. No nuisance algal growth was found. Of the 64 algal taxa observed, the majority of the periphyton community was composed of diatoms, with a large proportion of blue-green algae.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal and macroinvertebrate communities) at Santa Fe River @ Worthington Springs. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota which demonstrate full support of the most sensitive designated use (propagation and maintenance of a healthy, well-balanced population of fish and wildlife).



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## NORTH CENTRAL NUTRIENT REGION

**Nutrient Benchmark Site Summary**

# Suwannee River @ CR 6

**STORET Station 3535**

### Land Use

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.22, suggesting benign human influences in the watershed. Before the site visit, aerial photographs were examined to assess the watershed land use. Direct observations during the site visit confirmed that the majority of the watershed land use was forest/natural with some silvicultural activities and pasture beyond an extensive forested riparian buffer zone. The vast majority of the basin lies within the Okeefenokee National Wildlife Refuge, an area of pristine water quality conditions. There are no point source discharges upstream of the site.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of the Suwannee River @CR 6 (Station 3535) showing watershed vicinity and land use

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of the Suwannee River @ CR 6 (Station 3535) showing close-up of sampling site

Photograph of the Suwannee River @ CR 6



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**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 115 |
| Hydrologic Score | 1 |
| LDI Score | 1.22 |
| SCI Score | 52 A |
| Total Phosphorus Geometric Mean (mg/L) | 0.078 |
| Total Nitrogen Geometric Mean (mg/L) | 1.34 |

The Habitat Assessment score was in high end of the "Suboptimal" range. The SCI was not conducted due to a limited amount of habitat in very shallow water. Water levels had recently increased, and the habitat was not inundated for a sufficient period to comply with the Standard Operating Procedure. However, this site was sampled for SCI on 10/10/2006 and 12/12/2007 and received a 53 and 51, respectively, both in the "Healthy" SCI category.

**Periphyton Community Composition**

| Algal Community Structure | % Composition |
|---|---|
| % Bacillariophyta | 91.48 |
| % Chlorophycota | 6.89 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 1.64 |
| Number of Taxa | 45 |

Extensive periphyton growth was observed at this site, which is thought to be a natural phenomenon associated with the limerock substrate and very low water conditions. Of the 45 algal taxa observed, the majority of the periphyton community was composed of diatoms.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal communities) at the Suwannee River at CR 6. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that the algal growth observed was a natural phenomenon. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota which suggest support of the most sensitive designated use (propagation and maintenance of a healthy, well-balanced population of fish and wildlife).



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## NORTH CENTRAL NUTRIENT REGION

**Nutrient Benchmark Site Summary**

# Swift Creek @ CR 239

**STORET Station 21030088**

**Land Use**

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.26, suggesting benign human influences in the watershed. Before and during the site visit, aerial photographs were examined to assess the watershed land use. Direct observations during the site visit confirmed that the majority of the watershed land use was forest/natural with silvicultural activities beyond a forested buffer zone. There are no point source discharges upstream of the site.

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DOQQ 2004 aerial photograph of Swift Creek @ CR 239 (Station 21030088) showing watershed vicinity and land use.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of Swift Creek @ CR 239 (Station 21030088) showing close-up of sampling site.

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**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 105 |
| Hydrologic Score | 2 |
| LDI Score | 1.26 |
| SCI Score | NA |
| Total Phosphorus Geometric Mean (mg/L) | 0.083 |
| Total Nitrogen Geometric Mean (mg/L) | 2.06 |

The Habitat Assessment score was in the "Suboptimal" range. There was no water flow at the time of sampling, therefore the SCI was not conducted, according to the SCI Standard Operating Procedure.

**Periphyton Community Composition**

| Algal Community Structure | % Composition |
|---|---|
| % Bacillariophyta | 99.67 |
| % Chlorophycota | 0.33 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 0 |
| Number of Taxa | 32 |

Very little periphyton was observed at the site, which would allow optimal substrate use by macroinvertebrates. No nuisance algal growth was found. Of the 32 algal taxa observed, the majority of the periphyton community was composed of diatoms.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal communities) at Swift Creek @ CR 239. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that no adverse algal or aquatic plant issues were present. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota which suggest support of the most sensitive designated use (propagation and maintenance of a healthy, well-balanced population of fish and wildlife).



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## NORTH CENTRAL NUTRIENT REGION

**Nutrient Benchmark Site Summary**

# Robinson Branch @ C-246

**STORET Station ROB01C1**

### Land Use

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.36, suggesting benign human influences in the watershed. Before and during the site visit, aerial photographs were examined to assess the watershed land use. Direct observations during the site visit confirmed that the majority of the watershed land use was forest/natural with some silvicultural activities and unimproved pasture beyond a forested riparian buffer zone. There are no point source discharges upstream of the site.

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DOQQ 2004 aerial photograph of Robinson Branch @ C-246 (Station ROB01C1) showing watershed vicinity and land use.

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DOQQ 2004 aerial photograph of Robinson Branch @ C-246 (Station ROB01C1) showing close-up of sampling site.

Photograph of Robinson Branch @ C-246



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**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 128 |
| Hydrologic Score | 2 |
| LDI Score | 1.36 |
| SCI Score | 81 A |
| Total Phosphorus Geometric Mean (mg/L) | 0.158 |
| Total Nitrogen Geometric Mean (mg/L) | 0.95 |

The Habitat Assessment score was in the "Optimal" range. The SCI score was in the "Exceptional" category, exhibiting an unusually diverse assemblage of sensitive invertebrates and indicating the site is definitively meeting the Class III designated use.

**Periphyton Community Composition**

| Algal Community Structure | % Composition |
|---|---|
| % Bacillariophyta | 97.33 |
| % Chlorophycota | 0.33 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 2.33 |
| Number of Taxa | 58 |

Very little periphyton was observed at the site, which would allow optimal substrate use by macroinvertebrates. No nuisance algal growth was found. Of the 58 algal taxa observed, the majority of the periphyton community was composed of diatoms.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal and macroinvertebrate communities) at Robinson Branch @ C-246. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota which demonstrate full support of the most sensitive designated use (propagation and maintenance of a healthy, well-balanced population of fish and wildlife).



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## NORTHEAST NUTRIENT REGION

**Nutrient Benchmark Site Summary**

# Alligator Creek @ US 301 & SR115

**STORET Station 19020052**

### Land Use

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.74, suggesting benign human influences in the watershed. Before and during the site visit, aerial photographs were examined to assess the watershed land use. Direct observations during the site visit confirmed that the majority of the watershed land use was forest/natural with some silviculture and unimproved pasture generally beyond a 100 m forested riparian zone. There are no point source discharges upstream of the site.

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DOQQ 2004 aerial photograph of Alligator Creek @ US 301 & SR 115 (Station 19020052) showing watershed vicinity and land use.

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DOQQ 2004 aerial photograph of Alligator Creek @ US 301 & SR 115 (Station 19020052) showing close-up of sampling site.

Photograph of Alligator Creek @ US 301 & SR 115



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**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 137 |
| Hydrologic Score | 2 |
| LDI Score | 1.74 |
| SCI Score | 63 A |
| Total Phosphorus Geometric Mean (mg/L) | 0.190 |
| Total Nitrogen Geometric Mean (mg/L) | 1.12 |

The Habitat Assessment score was in the "Optimal" range. The SCI score was in the "Healthy" category, exhibiting a diverse assemblage of sensitive invertebrates and indicating the site is meeting the Class III designated use.

**Periphyton Community Composition**

| Algal Community Structure | % Composition |
|---|---|
| % Bacillariophyta | 83.02 |
| % Chlorophycota | 1.89 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 15.09 |
| Number of Taxa | 64 |

Very little periphyton was observed at the site, which would allow optimal substrate use by macroinvertebrates. No nuisance algal growth was found. Of the 64 algal taxa observed, the majority of the periphyton community was composed of diatoms.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal and macroinvertebrate communities) at Alligator Creek @ US 301 & SR 115. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota which demonstrate full support of the most sensitive designated use (propagation and maintenance of a healthy, well-balanced population of fish and wildlife).



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**Nutrient Benchmark Site Summary**

# Ates Creek @ CR 315

**STORET Station CLA243LV**

## Land Use

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.18, suggesting benign human influences in the watershed. Before and during the site visit, aerial photographs were examined to assess the watershed land use. Direct observations during the site visit confirmed that the majority of the watershed land use was forest/natural with some silviculture. There are no point source discharges upstream of the site.

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DOQQ 2004 aerial photograph of Ates Creek @ CR 315 (Station CLA243LV) showing watershed vicinity and land use.

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DOQQ 2004 aerial photograph of Ates Creek @ CR 315 (Station CLA243LV) showing close-up of sampling site.

Photograph of Ates Creek @ CR 315



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**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 144 |
| Hydrologic Score | 2 |
| LDI Score | 1.18 |
| SCI Score | 91 A |
| Total Phosphorus Geometric Mean (mg/L) | 0.198 |
| Total Nitrogen Geometric Mean (mg/L) | 0.71 |

The Habitat Assessment score was in the "Optimal" range. The SCI score was in the "Exceptional" category, exhibiting an exceedingly diverse assemblage of sensitive invertebrates and indicating the site is clearly meeting the Class III designated use.

**Periphyton Community Composition**

| Algal Community Structure | % Composition |
|---|---|
| % Bacillariophyta | 98.00 |
| % Chlorophycota | 1.00 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 0.33 |
| Number of Taxa | 41 |

Very little periphyton was observed at the site, which would allow optimal substrate use by macroinvertebrates. No nuisance algal growth was found. Of the 41 algal taxa observed, the majority of the periphyton community was composed of diatoms.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal and macroinvertebrate communities) at Ates Creek @ CR 315. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota which demonstrate full support of the most sensitive designated use (propagation and maintenance of a healthy, well-balanced population of fish and wildlife).



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## NORTHEAST NUTRIENT REGION

**Nutrient Benchmark Site Summary**

# Black Creek @ SR 16

**STORET Station CLA254LR**

### Land Use

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.21, suggesting benign human influences in the watershed. Before and during the site visit, aerial photographs were examined to assess the watershed land use. Direct observations during the site visit confirmed that the majority of the watershed land use was forest/natural with some silviculture. There are no point source discharges upstream of the site.

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DOQQ 2004 aerial photograph of Black Creek @ SR 16 (Station CLA254LR) showing watershed vicinity and land use.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of Black Creek @ SR 16 (Station CLA254LR) showing close-up of sampling site.

Photograph of Black Creek @ SR 16

**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 133 |
| Hydrologic Score | 2 |
| LDI Score | 1.21 |
| SCI Score | 91 A |
| Total Phosphorus Geometric Mean (mg/L) | 0.116 |
| Total Nitrogen Geometric Mean (mg/L) | 0.55 |

The Habitat Assessment score was in the "Optimal" range. The SCI score was in the "Exceptional" category, exhibiting an unusually diverse assemblage of sensitive invertebrates and indicating the site is clearly meeting its Class III designated use.

**Periphyton Community Composition**

| Algal Community Structure | % Composition |
|---|---|
| % Bacillariophyta | 94.67 |
| % Chlorophycota | 1.33 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 4.00 |
| Number of Taxa | 54 |

Very little periphyton was observed at the site, which would allow optimal substrate use by macroinvertebrates. No nuisance algal growth was found. Of the 54 algal taxa observed, the majority of the periphyton community was composed of diatoms.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal and macroinvertebrate communities) at Black Creek @ SR 16. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota which demonstrate full support of the most sensitive designated use (propagation and maintenance of a healthy, well-balanced population of fish and wildlife).



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## NORTHEAST NUTRIENT REGION

**Nutrient Benchmark Site Summary**

# Greens Creek @ CR 315

**STORET Station GC315**

### Land Use

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.33, suggesting benign human influences in the watershed. Before and during the site visit, aerial photographs were examined to assess the watershed land use. Direct observations during the site visit confirmed that the majority of the watershed land use was forest/natural with some silviculture. There are no point source discharges upstream of the site.

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DOQQ 2004 aerial photograph of Greens Creek @ CR 315 (Station GC315) showing watershed vicinity and land use.

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DOQQ 2004 aerial photograph of Greens Creek @ CR 315 (Station GC315) showing close-up of sampling site.

Photograph of Greens Creek @ CR 315

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**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 114 |
| Hydrologic Score | 2 |
| LDI Score | 1.33 |
| SCI Score | NA |
| Total Phosphorus Geometric Mean (mg/L) | 0.020 |
| Total Nitrogen Geometric Mean (mg/L) | 0.57 |

The Habitat Assessment score was in the high "Suboptimal" range, mostly because of the lack of water velocity. Stream Condition Index sampling was not performed at the time of sampling due to the stagnant water conditions. An adjacent station was sampled for SCI in 2005 and 2006, and both times scored in the "Healthy" category based on SCI_2007 thresholds. This suggests that the site is meeting its Class III designated use.

**Periphyton Community Composition**

| Algal Community Structure | % Composition |
|---|---|
| % Bacillariophyta | 98.05 |
| % Chlorophycota | 0.65 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 1.30 |
| Number of Taxa | 42 |

Very little periphyton was observed at the site, which would allow optimal substrate use by macroinvertebrates. No nuisance algal growth was found. Of the 42 algal taxa observed, the majority of the periphyton community was composed of diatoms.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal communities) at Greens Creek @ CR 315. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors with no algae related issues. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with plants and algae which suggest support of the most sensitive designated use (propagation and maintenance of a healthy, well-balanced population of fish and wildlife).



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**Nutrient Benchmark Site Summary**

# Little St. Marys River@ CR 121 A

**STORET Station 19010046**

**Land Use**

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.18, suggesting benign human influences in the watershed. Before and during the site visit, aerial photographs were examined to assess the watershed land use. Direct observations during the site visit confirmed that the majority of the watershed land use was forest/natural with silvicultural activities beyond a forested riparian zone. There are no point source discharges upstream of the site.

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DOQQ 2004 aerial photograph of Little St. Marys River @ CR 121 A (Station 19010046) showing watershed vicinity and land use.

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DOQQ 2004 aerial photograph of Little St. Marys River @ CR 121 A (Station 19010046) showing close-up of sampling site.

Photograph of Little St. Marys River @ CR 121 A



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**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 117 |
| Hydrologic Score | 2 |
| LDI Score | 1.18 |
| SCI Score | NA |
| Total Phosphorus Geometric Mean (mg/L) | 0.048 |
| Total Nitrogen Geometric Mean (mg/L) | 1.15 |

The Habitat Assessment score was in the high end of the "Suboptimal" category, predominantly sue to low water velocity. Due to the swamp-like nature of this system, SCI sampling was not appropriate and was not conducted.

**Periphyton Community Composition**

| Algal Community Structure | % Composition |
|---|---|
| % Bacillariophyta | 61.64 |
| % Chlorophycota | 5.90 |
| % Euglenophycota | 1.97 |
| % Cyanophycota | 29.84 |
| Number of Taxa | 75 |

Very little periphyton was observed at the site, which would allow optimal substrate use by macroinvertebrates. No nuisance algal growth was found. Of the 75 algal taxa observed, the majority of the periphyton community was composed of diatoms.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal communities) at Little St. Marys River @ CR 121 A. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota which demonstrate full support of the most sensitive designated use (propagation and maintenance of a healthy, well-balanced population of fish and wildlife).



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## NORTHEAST NUTRIENT REGION

**Nutrient Benchmark Site Summary**

# Middle Prong St. Marys River @ CR 125

**STORET Station 19010041**

### Land Use

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.16, suggesting benign human influences in the watershed. Before and during the site visit, aerial photographs were examined to assess the watershed land use. Direct observations during the site visit confirmed that the majority of the watershed land use was forest/natural with some silviculture and pasture located beyond a 100 m forested buffer. There are no point source discharges upstream of the site.

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DOQQ 2004 aerial photograph of Middle Prong St. Marys @ CR 125 (Station 19010041) showing watershed vicinity and land use.

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DOQQ 2004 aerial photograph of Middle Prong St. Marys @ CR 125 (Station 19010041) showing close-up of sampling site.

Photograph of Middle Prong St. Marys @ CR 125

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**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 137 |
| Hydrologic Score | 2 |
| LDI Score | 1.16 |
| SCI Score | 78 A |
| Total Phosphorus Geometric Mean (mg/L) | 0.029 |
| Total Nitrogen Geometric Mean (mg/L) | 1.10 |

The Habitat Assessment score was in the "Optimal" range. Despite the naturally low dissolved oxygen measured during sampling (2.7 mg/L) the SCI score was in the "Exceptional" category, exhibiting an unusually diverse assemblage of sensitive invertebrates and indicating the site is clearly meeting its Class III designated use.

**Periphyton Community Composition**

| Algal Community Structure | % Composition |
|---|---|
| % Bacillariophyta | 81.40 |
| % Chlorophycota | 1.33 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 17.28 |
| Number of Taxa | 55 |

Very little periphyton was observed at the site, which would allow optimal substrate use by macroinvertebrates. No nuisance algal growth was found. Of the 55 algal taxa observed, the majority of the periphyton community was composed of diatoms.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal and macroinvertebrate communities) at Middle Prong St. Marys @ CR 125. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota which demonstrate full support of the most sensitive designated use (propagation and maintenance of a healthy, well-balanced population of fish and wildlife).



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**Nutrient Benchmark Site Summary**

# Middle Prong St. Marys River @ CR 127

**STORET Station MPS**

## Land Use

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.34, suggesting benign human influences in the watershed. Before and during the site visit, aerial photographs were examined to assess the watershed land use. Direct observations during the site visit confirmed that the majority of the watershed land use was forest/natural with some silviculture. There are no point source discharges upstream of the site.

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DOQQ 2004 aerial photograph of Middle Prong St. Marys @ CR 127 (Station MPS) showing watershed vicinity and land use.

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DOQQ 2004 aerial photograph of Middle Prong St. Marys @ CR 127 (Station MPS) showing close-up of sampling site.

Photograph of Middle Prong St. Marys @ CR 127



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**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 131 |
| Hydrologic Score | 2 |
| LDI Score | 1.34 |
| SCI Score | 71 A |
| Total Phosphorus Geometric Mean (mg/L) | 1.09 |
| Total Nitrogen Geometric Mean (mg/L) | 0.026 |

The Habitat Assessment score was in the "Optimal" range. The SCI score was in the "Exceptional" category, exhibiting an unusually diverse assemblage of sensitive invertebrates and indicating the site is certainly meeting its Class III designated use.

**Periphyton Community Composition**

| Algal Community Structure | % Composition |
|---|---|
| % Bacillariophyta | 97.33 |
| % Chlorophycota | 0.67 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 2.00 |
| Number of Taxa | 42 |

Very little periphyton was observed at the site, which would allow optimal substrate use by macroinvertebrates. No nuisance algal growth was found. Of the 42 algal taxa observed, the majority of the periphyton community was composed of diatoms.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal and macroinvertebrate communities) at Middle Prong St. Marys @ CR 127. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota which demonstrate full support of the most sensitive designated use (propagation and maintenance of a healthy, well-balanced population of fish and wildlife).



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**Nutrient Benchmark Site Summary**

# North Fork Black Creek @ Jennings Landing

**STORET Station 14264**

**Land Use**

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.62, suggesting benign human influences in the watershed. Before and during the site visit, aerial photographs were examined to assess the watershed land use. Direct observations during the site visit confirmed that the majority of the watershed land use was forest/natural with some silviculture and pasture located beyond an extensive forested riparian buffer zone. There are no point source discharges upstream of the site.

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DOQQ 2004 aerial photograph of North Fork Black Creek @ Jennings Landing (Station 14264) showing watershed vicinity and land use.

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DOQQ 2004 aerial photograph of North Fork Black Creek @ Jennings Landing (Station 14264) showing close-up of sampling site.

Photograph of North Fork Black Creek @ Jennings Landing



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**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 137 |
| Hydrologic Score | 2 |
| LDI Score | 1.62 |
| SCI Score | 73 A |
| Total Phosphorus Geometric Mean (mg/L) | 0.038 |
| Total Nitrogen Geometric Mean (mg/L) | 0.51 |

The Habitat Assessment score was in the "Optimal" range. The SCI score was in the "Exceptional" category, exhibiting an unusually diverse assemblage of sensitive invertebrates and indicating the site is definitively meeting the Class III designated use.

**Periphyton Community Composition**

| Algal Community Structure | % Composition |
|---|---|
| % Bacillariophyta | 69.33 |
| % Chlorophycota | 1.33 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 29.33 |
| Number of Taxa | 48 |

Very little periphyton was observed at the site, which would allow optimal substrate use by macroinvertebrates. No nuisance algal growth was found. Of the 48 algal taxa observed, the majority of the periphyton community was composed of diatoms.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal and macroinvertebrate communities) at North Fork Black Creek @ Jennings Landing. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota which demonstrate full support of the most sensitive designated use (propagation and maintenance of a healthy, well-balanced population of fish and wildlife).



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## NORTHEAST NUTRIENT REGION

**Nutrient Benchmark Site Summary**

# Peters Creek @ CR 315 A

**STORET Station CLA246GS**

### Land Use

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.21, suggesting benign human influences in the watershed. Before and during the site visit, aerial photographs were examined to assess the watershed land use. Direct observations during the site visit confirmed that the majority of the watershed land use was forest/natural with some silviculture and pasture located beyond a forested riparian buffer zone. There are no point source discharges upstream of the site.

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DOQQ 2004 aerial photograph of Peters Creek @ CR315A (Station CLA246GS) showing watershed vicinity and land use.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of Peters Creek @ CR315A (Station CLA246GS) showing close-up of sampling site.

Photograph of Peters Creek @ CR315A

**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 148 |
| Hydrologic Score | 2 |
| LDI Score | 1.21 |
| SCI Score | 73 A |
| Total Phosphorus Geometric Mean (mg/L) | 0.019 |
| Total Nitrogen Geometric Mean (mg/L) | 0.40 |

The Habitat Assessment score was in the "Optimal" range. The SCI score was in the "Exceptional" category, exhibiting a diverse assemblage of sensitive invertebrates and indicating the site is definitively meeting the Class III designated use.

**Periphyton Community Composition**

| Algal Community Structure | % Composition |
|---|---|
| % Bacillariophyta | 94.00 |
| % Chlorophycota | 2.67 |
| % Euglenophycota | 0.67 |
| % Cyanophycota | 2.67 |
| Number of Taxa | 64 |

Very little periphyton was observed at the site, which would allow optimal substrate use by macroinvertebrates. No nuisance algal growth was found. Of the 64 algal taxa observed, the majority of the periphyton community was composed of diatoms.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal and macroinvertebrate communities) at Peters Creek @ CR 315 A. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota which demonstrate full support of the most sensitive designated use (propagation and maintenance of a healthy, well-balanced population of fish and wildlife).



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**Nutrient Benchmark Site Summary**

# South Fork Black Creek @ SR 21

**STORET Station 20030481**

## Land Use

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.35, suggesting benign human influences in the watershed. Before and during the site visit, aerial photographs were examined to assess the watershed land use. Direct observations during the site visit confirmed that the majority of the watershed land use was forest/natural with some silvicultural activities beyond an extensive forested riparian buffer zone. There are no point source discharges upstream of the site.

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DOQQ 2004 aerial photograph of South Fork Black Creek @ SR 21 (Station 20030481) showing watershed vicinity and land use.

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DOQQ 2004 aerial photograph of South Fork Black Creek @ SR 21 (Station 20030481) showing close-up of sampling site.

Photograph of South Fork Black Creek @ SR 21



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**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 144 |
| Hydrologic Score | 1 |
| LDI Score | 1.35 |
| SCI Score | 83 A |
| Total Phosphorus Geometric Mean (mg/L) | 0.093 |
| Total Nitrogen Geometric Mean (mg/L) | 0.50 |

The Habitat Assessment score was in the "Optimal" range. The SCI score was in the "Exceptional" category, exhibiting an exceedingly diverse assemblage of sensitive invertebrates and indicating the site is definitively meeting its Class III designated use.

**Periphyton Community Composition**

| Algal Community Structure | % Composition |
|---|---|
| % Bacillariophyta | 72.61 |
| % Chlorophycota | 0.99 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 26.40 |
| Number of Taxa | 67 |

Very little periphyton was observed at the site, which would allow optimal substrate use by macroinvertebrates. No nuisance algal growth was found. Of the 67 algal taxa observed, the majority of the periphyton community was composed of diatoms.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal and macroinvertebrate communities) at South Fork Black Creek @ SR 21. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota which demonstrate full support of the most sensitive designated use (propagation and maintenance of a healthy, well-balanced population of fish and wildlife).



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**Nutrient Benchmark Site Summary**

# St. Marys River @ SR 2

**STORET Station 19010006**

## Land Use

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.09, suggesting benign human influences in the watershed. Before and during the site visit, aerial photographs were examined to assess the watershed land use. Direct observations during the site visit confirmed that the majority of the watershed land use was forest/natural with some silvicultural activities and unimproved pasture beyond an extensive forested riparian buffer zone. There are no point source discharges upstream of the site.

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DOQQ 2004 aerial photograph of St. Marys at SR 2 (Station 19010006) showing watershed vicinity and land use.

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DOQQ 2004 aerial photograph of St. Marys at SR 2 (Station 19010006) showing close-up of sampling site.

Photograph of St. Marys at SR 2



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**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 124 |
| Hydrologic Score | 1 |
| LDI Score | 1.09 |
| SCI Score | 100 A |
| Total Phosphorus Geometric Mean (mg/L) | 0.017 |
| Total Nitrogen Geometric Mean (mg/L) | 1.27 |

The Habitat Assessment score was in the "Optimal" range. The SCI score was in the "Exceptional" category, indicating an exceedingly diverse community of sensitive invertebrates, and demonstrating that the site is definitively meeting its Class III designated use.

**Periphyton Community Composition**

| Algal Community Structure | % Composition |
|---|---|
| % Bacillariophyta | 93.33 |
| % Chlorophycota | 4.00 |
| % Euglenophycota | 0.33 |
| % Cyanophycota | 2.33 |
| Number of Taxa | 54 |

No nuisance algal growth was found. Of the 54 algal taxa observed, the majority of the periphyton community was composed of diatoms.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal and macroinvertebrate communities) at St. Marys River at SR 2. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota which demonstrate full support of the most sensitive designated use (propagation and maintenance of a healthy, well-balanced population of fish and wildlife).



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## NORTHEAST NUTRIENT REGION

**Nutrient Benchmark Site Summary**

# St. Marys River @ Tompkins Landing

**STORET Station 19010077**

### Land Use

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.22, suggesting benign human influences in the watershed. Before and during the site visit, aerial photographs were examined to assess the watershed land use. Direct observations during the site visit confirmed that the majority of the watershed land use was forest/natural with some silvicultural activities and pasture beyond an extensive forested riparian buffer zone. There are no point source discharges upstream of the site.

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DOQQ 2004 aerial photograph of St. Marys at Tompkins Landing (Station 19010077) showing watershed vicinity and land use.

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DOQQ 2004 aerial photograph of St. Marys at Tompkins Landing (Station 19010077) showing close-up of sampling site.

Photograph of St. Marys at Tompkins Landing

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**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 114 |
| Hydrologic Score | 2 |
| LDI Score | 1.22 |
| SCI Score | NA |
| Total Phosphorus Geometric Mean (mg/L) | 0.043 |
| Total Nitrogen Geometric Mean (mg/L) | 0.87 |

The Habitat Assessment score was in the high end of the "Suboptimal" range (mostly due to limited substrate availability associated with low water conditions). Since very little habitat was submerged due to the unrepresentative low water level, SCI sampling was determined to be inappropriate (according to the Standard Operating Procedure) and was not conducted.

**Periphyton Community Composition**

| Algal Community Structure | % Composition |
|---|---|
| % Bacillariophyta | 75.50 |
| % Chlorophycota | 8.94 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 15.56 |
| Number of Taxa | 73 |

No visual evidence of algal growth or adverse aquatic growth was observed at this site. Of the 73 algal taxa found, the majority of the periphyton community was composed of diatoms.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal communities) at St. Marys River at Tompkins Landing. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that no adverse algal or aquatic plant issues were present. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota which suggest support of the most sensitive designated use (propagation and maintenance of a healthy, well-balanced population of fish and wildlife).



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## PANHANDLE NUTRIENT REGION

**Nutrient Benchmark Site Summary**

# Aucilla River @ Highway 90

**STORET Station 22040004**

### Land Use

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.06, suggesting benign human influences in the watershed. Before and during the site visit, aerial photographs were examined to assess the watershed land use. Direct observations during the site visit confirmed that the majority of the watershed land use was forest/natural with some field/pasture located well beyond the extensive riparian buffer zone. There are no point source discharges upstream of the site.

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DOQQ 2004 aerial photograph of the Aucilla River (Station 22040004) showing watershed vicinity and land use.

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DOQQ 2004 aerial photograph of the Aucilla River (Station 22040004) showing close-up of sampling site.

Photograph of the Aucilla River at Highway 90

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**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 126 |
| Hydrologic Score | 2 |
| LDI Score | 1.06 |
| SCI Score | 61 A |
| Total Phosphorus Geometric Mean (mg/L) | 0.090 |
| Total Nitrogen Geometric Mean (mg/L) | 3.10 |

The Habitat Assessment score was in the "Optimal" range. The SCI score was in the "Healthy" category, exhibiting a diverse assemblage of sensitive invertebrates and indicating the site is clearly meeting the Class III designated use.

**Periphyton Community Composition**

| Algal Community Structure | % Composition |
|---|---|
| % Bacillariophyta | 96.67 |
| % Chlorophycota | 1.33 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 2.00 |
| Number of Taxa | 30 |

Very little periphyton was observed at the site, which would allow optimal substrate use by macroinvertebrates. No nuisance algal growth was found. Of the 30 algal taxa observed, the majority of the periphyton community was composed of diatoms.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal and macroinvertebrate communities) at the Aucilla River at Highway 90. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota demonstrated to be fully supportive of the designated use (healthy, well balanced populations of aquatic organisms).



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## PANHANDLE NUTRIENT REGION

**Nutrient Benchmark Site Summary**

# Blackwater River @ Highway 4 NW of Baker

**STORET Station 3545**

### Land Use

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.04, suggesting benign human influences in the watershed. Before and during the site visit, aerial photographs were examined to assess the watershed land use. Direct observations during the site visit confirmed that the majority of the watershed land use was forest/natural with some silviculture. There are no point source discharges upstream of the site.

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DOQQ 2004 aerial photograph of the Blackwater River (Station 21FLGW_3545) showing watershed vicinity and land use.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of the Blackwater River (Station 21FLGW_3545) showing close-up of sampling site.

Photograph of the Blackwater River (Station 21FLGW_3545)



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**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 128 |
| Hydrologic Score | 1 |
| LDI Score | 1.04 |
| SCI Score | 70 A |
| Total Phosphorus Geometric Mean (mg/L) | 0.009 |
| Total Nitrogen Geometric Mean (mg/L) | 0.40 |

The Habitat Assessment score was in the "Optimal" range. The SCI score was in the "Exceptional" category, exhibiting a diverse assemblage of sensitive invertebrates and indicating the site is definitively meeting the Class III designated use.

**Periphyton Community Composition**

| Algal Community Structure | % Composition |
|---|---|
| % Bacillariophyta | 88.45 |
| % Chlorophycota | 2.31 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 2.31 |
| % Euglenophycota | 0.33 |
| Number of Taxa | 39 |

Very little periphyton was observed at this site, and there was no nuisance algal growth. Of the 39 algal taxa observed, the majority of the periphyton community was composed of diatoms.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal and macroinvertebrate communities) at the Blackwater River at Highway 4 NW of Baker. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota demonstrated to be fully supportive of the designated use (healthy, well balanced populations of aquatic organisms).



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**Nutrient Benchmark Site Summary**

# Econfina Creek @ Scott Road

**STORET Station 32030023**

## Land Use

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.57, suggesting benign human influences in the watershed. Before the site visit, aerial photographs were examined to assess the watershed land use. Direct observations during the site visit confirmed that the majority of the watershed land use was forest/natural with silvicultural activities beyond the extensive riparian buffer zone. There are no point source discharges upstream of the site.

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DOQQ 2004 aerial photograph of Econfina Creek (Station 32030023) showing watershed vicinity and land use.

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DOQQ 2004 aerial photograph of Econfina Creek (Station 32030023) showing close-up of sampling site.

Photograph of Econfina Creek at Scott Rd.

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**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 130 |
| Hydrologic Score | 1 |
| LDI Score | 1.57 |
| SCI Score | 81 A |
| Total Phosphorus Geometric Mean (mg/L) | 0.010 |
| Total Nitrogen Geometric Mean (mg/L) | 0.26 |

The Habitat Assessment score was in the "Optimal" range. The SCI score was in the "Exceptional" category, exhibiting a diverse assemblage of sensitive invertebrates and indicating the site is definitively meeting the Class III designated use.

**Periphyton Community Composition**

| Algal Community Structure | % Composition |
|---|---|
| % Bacillariophyta | 89.70 |
| % Chlorophycota | 5.65 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 3.65 |
| % Euglenophycota | 1.00 |
| Number of Taxa | 48 |

Minimal periphyton growth was observed at this site, which would allow for optimal substrate use by macroinvertebrates. There was no nuisance algal growth. Of the 48 algal taxa observed, the majority of the periphyton community was composed of diatoms.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal and macroinvertebrate communities) at Econfina Creek at Scott Road. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota demonstrated to be fully supportive of the designated use (healthy, well balanced populations of aquatic organisms).



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## PANHANDLE NUTRIENT REGION

**Nutrient Benchmark Site Summary**

# Econfina River @ Highway 98

**STORET Station TAY170LR**

### Land Use

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.14, suggesting benign human influences in the watershed. Before and during the site visit, aerial photographs were examined to assess the watershed land use. Direct observations during the site visit confirmed that the majority of the watershed land use was forest/natural with some silviculture beyond an extensive riparian buffer zone. There are no point source discharges upstream of the site.

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DOQQ 2004 aerial photograph of the Econfina River (Station TAY170LR) showing watershed vicinity and land use.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of the Econfina River (Station TAY170LR) showing close-up of sampling site.

Photograph of the Econfina River at Hwy 98



US EPA ARCHIVE DOCUMENT

**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 99 |
| Hydrologic Score | 1 |
| LDI Score | 1.14 |
| SCI Score | 41A |
| Total Phosphorus Geometric Mean (mg/L) | 0.066 |
| Total Nitrogen Geometric Mean (mg/L) | 1.21 |

The Habitat Assessment score was in the "Suboptimal" range due mostly to low water velocity (<0.05 m/s) and limited availability of wetted habitat, making natural drought the most influential stressor during the most recent site visit. Prior to this event, the two most recent SCI samples for this site, which were collected during normal water levels on 2/23/06 and 8/2/05, scored 40 and 42, respectively. Both of these score were in the "Healthy" category, and the average of these scores is shown in the table. From 1996 to 1998, a total of 18 SCIs were performed at a site located approximately 3000 m above Highway 98 as part of a study to evaluate the effectiveness of forestry best management practices. All 18 of these SCIs scored in the category referred to as "excellent" in that version of the index, indicating that this site has a long demonstrated history of healthy biota.

**Periphyton Community Composition**

| Algal Community Structure | % Composition |
|---|---|
| % Bacillariophyta | 86.67 |
| % Chlorophycota | 7.0 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 6.33 |
| Number of Taxa | 36 |

Filamentous algal growth was observed on the shallow, rocky substrate in the first 20 m of the site, but very little periphyton was observed in the rest of the stretch. This patch of filamentous algae was likely favored by the low water conditions. Of the 36 algal taxa observed, the majority of the periphyton community was composed of diatoms.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal and macroinvertebrate communities) at the Econfina River at Hwy 98. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota demonstrated to be fully supportive of the designated use (healthy, well balanced populations of aquatic organisms).



US EPA ARCHIVE DOCUMENT

## PANHANDLE NUTRIENT REGION

**Nutrient Benchmark Site Summary**

# Escambia River @ Highway 4

**STORET Station 3549**

**Land Use**

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.27, suggesting benign human influences in the watershed. Before and during the site visit, aerial photographs were examined to assess the watershed land use. Direct observations during the site visit confirmed that the majority of the watershed land use was forest/natural with some silviculture and field/pasture beyond an extensive riparian buffer zone. There are no point source discharges upstream of the site.

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DOQQ 2004 aerial photograph of the Escambia River (Station 21FLGW_3549) showing watershed vicinity and land use.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of the Escambia River (Station 21FLGW_3549) showing close-up of sampling site. An extensive forested buffer is present on both sides of the river.

Photograph of the Escambia River (Station 21FLGW_3549)

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**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 120 |
| Hydrologic Score | 2 |
| LDI Score | 1.27 |
| SCI Score | 51 A |
| Total Phosphorus Geometric Mean (mg/L) | 0.041 |
| Total Nitrogen Geometric Mean (mg/L) | 0.55 |

The Habitat Assessment score was in the "Optimal" range, although substrate availability was somewhat limited due to the overall large size of the river. The SCI score was in the "Healthy" category, exhibiting a diverse assemblage of sensitive invertebrates and indicating the site is clearly meeting the Class III designated use.

**Periphyton Community Composition**

| Algal Community Structure | % Composition |
|---|---|
| % Bacillariophyta | 84.72 |
| % Chlorophycota | 5.98 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 9.30 |
| Number of Taxa | 43 |

Very little periphyton was observed at this site, and there was no nuisance algal growth. Of the 43 algal taxa observed, the majority of the periphyton community was composed of diatoms.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal and macroinvertebrate communities) at the Escambia River at Highway 4. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota demonstrated to be fully supportive of the designated use (healthy, well balanced populations of aquatic organisms).



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## PANHANDLE NUTRIENT REGION

**Nutrient Benchmark Site Summary**

# Escambia River @ Highway 184

**STORET Station 33020007 / 3541**

**Land Use**

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.18, suggesting benign human influences in the watershed. Before and during the site visit, aerial photographs were examined to assess the watershed land use. Direct observations during the site visit confirmed that the majority of the watershed land use was forest/natural with some silviculture and agricultural activities well beyond an extensive riparian buffer zone. There are no point source discharges upstream of the site.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of the Escambia River @ 184 showing watershed vicinity and land use.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of the Escambia River @ 184 showing close-up of sampling site. An extensive forested buffer is present on both sides of the river.

Photograph of the Escambia River at Highway 184 (Station 21FLGW_3541)

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**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 115 |
| Hydrologic Score | 2 |
| LDI Score | 1.18 |
| SCI Score | NA |
| Total Phosphorus Geometric Mean (mg/L) | 0.035 |
| Total Nitrogen Geometric Mean (mg/L) | 0.53 |

The Habitat Assessment score was in the high end of the "Suboptimal" range, predominantly due to lack of water velocity and limited substrate availability, related to the overall large size of the system. SCI sampling was not conducted because of the "lake-like" conditions present, and lack of water velocity in areas where accessible habitats were located, in accordance with the Standard Operating Procedures.

**Periphyton Community Composition**

| Algal Community Structure | % Composition |
|---|---|
| % Bacillariophyta | 83.72 |
| % Chlorophycota | 1.66 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 14.62 |
| Number of Taxa | 52 |

Minimal periphyton growth was observed at this site, which would allow for optimal substrate use by benthic invertebrate and fish communities. Of the 52 algal taxa observed, the majority of the periphyton community was composed of diatoms.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, algal community, and local land use) at the Escambia River at Highway 184. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that no adverse algal or aquatic plant issues were present. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota which suggest support of the most sensitive designated use (propagation and maintenance of a healthy, well-balanced population of fish and wildlife).



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## PANHANDLE NUTRIENT REGION

**Nutrient Benchmark Site Summary**

# Mule Creek @ SR 12

**STORET Station LIB104LV**

### Land Use

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.31, suggesting benign human influences in the watershed. Before the site visit, aerial photographs were examined to assess the watershed land use. Direct observations during the site visit confirmed that the watershed land use was predominately forest/natural with some silviculture. There are no point source discharges upstream of the site.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of Mule Creek (Station LIB104LV) showing watershed vicinity and land use

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of the Mule Creek (Station LIB104LV) showing close-up of sampling site

Photograph of Mule Creek

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**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 132 |
| Hydrologic Score | 2 |
| LDI Score | 1.31 |
| SCI Score | 67 A |
| Total Phosphorus Geometric Mean (mg/L) | 0.033 |
| Total Nitrogen Geometric Mean (mg/L) | 0.50 |

The Habitat Assessment score was in the "Optimal" range. The SCI scored in the "Exceptional" category, therefore Mule Creek hosts a diverse community of sensitive aquatic macroinvertebrates.

**Periphyton Community Composition**

| Algal Community Structure | % Composition |
|---|---|
| % Bacillariophyta | 99.0 |
| % Chlorophycota | 0 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 1.0 |
| Number of Taxa | 22 |

Minimal periphyton growth was observed at the site, which would allow for optimal substrate use by benthic invertebrate and fish communities. Of the 22 algal taxa observed, the majority of the periphyton community was composed of diatoms. No problematic filamentous algal growth was found.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal and macroinvertebrate communities) at Mule Creek. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota demonstrated to be fully supportive of the designated use (healthy, well balanced populations of aquatic organisms).



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## PANHANDLE NUTRIENT REGION

**Nutrient Benchmark Site Summary**

# Quincy Creek above 267

**STORET Station 22020093**

### Land Use

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.34, suggesting benign human influences in the watershed. Direct observations during the site visit confirmed that the majority of the watershed land use was forest/natural with silviculture, agriculture, and field/pasture located beyond an adequate riparian buffer zone. There are no direct point source discharges upstream of the site.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of Quincy Creek (Station 22020093) showing watershed vicinity and land use

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of Quincy Creek near 267 (Station 22020093) showing close-up of sampling site

Photograph of Quincy Creek upstream of 267



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**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 122 |
| Hydrologic Score | 3 |
| LDI Score | 1.34 |
| SCI Score | 57 A |
| Total Phosphorus Geometric Mean (mg/L) | 0.110 |
| Total Nitrogen Geometric Mean (mg/L) | 0.58 |

The Habitat Assessment score was in the "Optimal" range. Extensive deposits of "pipe clay" (Attapulgite) were noted throughout the stream, a natural geologic feature which would be expected to contribute total phosphorus to the water. The Stream Condition Index scored in the "Healthy" category, indicating a diverse assemblage of macroinvertebrates, and demonstrating that the site is meeting its Class III designated use.

**Periphyton Community Composition**

| Algal Community Stricture | % Composition |
|---|---|
| % Bacillariophyta | 93.0 |
| % Chlorophycota | 2.0 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 5.0 |
| Number of Taxa | 53 |

Minimal periphyton growth was observed at the site, which would allow for optimal substrate use by benthic invertebrate and fish communities. Of the 53 algal taxa observed, the majority of the periphyton community was composed of diatoms. No problematic filamentous algal growth was found.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal and macroinvertebrate communities) at Quincy Creek, upstream of 267. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota demonstrated to be fully supportive of the designated use (healthy, well balanced populations of aquatic organisms).



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## PANHANDLE NUTRIENT REGION

**Nutrient Benchmark Site Summary**

# Sopchoppy River

**STORET Station WAK158LR**

### Land Use

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.13, suggesting benign human influences in the watershed. Before the site visit, aerial photographs were examined to assess the watershed land use. Direct observations during the site visit confirmed that the majority of the watershed land use was forest/natural, with some limited silviculture beyond an extensive riparian buffer zone. The watershed lies within the Apalachicola National Forest. There are no point source discharges upstream of the site.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of the Sopchoppy River (Station WAK158LR) showing watershed vicinity and land use.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of the Sopchoppy River (Station WAK158LR) showing close-up of sampling site. An extensive riparian forested buffer is present on both sides of the system.

Photograph of the Sopchoppy River (Station WAK158LR)



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**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 128 |
| Hydrologic Score | 1 |
| LDI Score | 1.13 |
| SCI Score | 64 A |
| Total Phosphorus Geometric Mean (mg/L) | 0.026 |
| Total Nitrogen Geometric Mean (mg/L) | 0.60 |

The Habitat Assessment score was in the "Optimal" range. The SCI score was in the "Healthy" category, indicating that the site contains a diverse assemblage of sensitive invertebrates and is meeting its Class III designated use.

**Periphyton Community Composition**

| Algal Community Structure | % Composition |
|---|---|
| % Bacillariophyta | 73.05 |
| % Chlorophycota | 4.55 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 22.40 |
| Number of Taxa | 54 |

While a small amount of filamentous algae was found, the majority of the site had minimal periphyton growth. Of the 54 algal taxa observed, the majority of the periphyton community was composed of diatoms.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal and macroinvertebrate communities) at the Sopchoppy River. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota demonstrated to be fully supportive of the designated use (healthy, well balanced populations of aquatic organisms).



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## PANHANDLE NUTRIENT REGION

**Nutrient Benchmark Site Summary**

# St. Marks River

**STORET Station WAK168LR**

### Land Use

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.40, suggesting benign human influences in the watershed. Before the site visit, aerial photographs were examined to assess the watershed land use. Direct observations during the site visit confirmed that the watershed land use was predominately forest/natural with some silviculture beyond a forested riparian buffer zone. There are no point source discharges upstream of the site.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of the Saint Marks River (Station WAK168LR) showing watershed vicinity and land use

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of the Saint Marks River (Station WAK168LR) showing close-up of sampling site

Photograph of the Saint Marks River



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**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 155 |
| Hydrologic Score | 2 |
| LDI Score | 1.40 |
| SCI Score | 45 A |
| Total Phosphorus Geometric Mean (mg/L) | 0.040 |
| Total Nitrogen Geometric Mean (mg/L) | 0.25 |

The Habitat Assessment score was in the "Optimal" range. The SCI scored in the "Healthy" category, which indicates a diverse assemblage of aquatic invertebrates, and demonstrated that the stream is meeting its Class III designated use.

**Periphyton Community Composition**

| Algal Community Structure | % Composition |
|---|---|
| % Bacillariophyta | 91.36 |
| % Chlorophycota | 0.66 |
| % Cryptophycophyta | 1.00 |
| % Cyanophycota | 6.98 |
| Number of Taxa | 43 |

Nuisance algal growth was not an issue at this site, although moderate periphyton growth was observed in isolated areas of the sampling reach, thought to be a natural condition. There was no habitat smothering (this element scored in the optimal range). Of the 43 algal taxa observed, the majority of the periphyton community was composed of diatoms.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal and aquatic invertebrate communities) at the Saint Marks River. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota demonstrated to be fully supportive of the designated use (healthy, well balanced populations of aquatic organisms).



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## PANHANDLE NUTRIENT REGION

**Nutrient Benchmark Site Summary**

# Swamp Creek at SR 159

**STORET Station S232**

### Land Use

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.51, suggesting benign human influences in the watershed. During the site visit, aerial photographs were examined and direct observations confirmed that the majority of the watershed land use was forest/natural, with minimal areas of silviculture and field/pasture located beyond an extensive forested riparian buffer zone. There are no point source discharges upstream of the site.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of Swamp Creek @ SR 159 (Station S232) showing watershed vicinity and land use

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of Swamp Creek @ SR 159 (Station S232) showing close-up of sampling site

Photograph of Swamp Creek at SR 159

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**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 112 |
| Hydrologic Score | 2 |
| LDI Score | 1.51 |
| SCI Score | 49 A |
| Total Phosphorus Geometric Mean (mg/L) | 0.170 |
| Total Nitrogen Geometric Mean (mg/L) | 0.75 |

The Habitat Assessment score was in the high end of the "Suboptimal" range. The Stream Condition Index scored in the "Healthy" category, indicating a diverse assemblage of macroinvertebrates, and demonstrating that the site is meeting its Class III designated use.

**Periphyton Community Composition**

| Algal Community Stricture | % Composition |
|---|---|
| % Bacillariophyta | 67.43 |
| % Chlorophycota | 5.92 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 25.99 |
| % Euglenophycota | 0.66 |
| Number of Taxa | 65 |

Minimal periphyton growth was observed at the site, which would allow for optimal substrate use by benthic invertebrate and fish communities. Of the 65 algal taxa observed, the majority of the periphyton community was composed of diatoms. No problematic filamentous algal growth was found.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal and macroinvertebrate communities) at Swamp Creek at SR 159. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota demonstrated to be fully supportive of the designated use (healthy, well balanced populations of aquatic organisms).



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## PANHANDLE NUTRIENT REGION

**Nutrient Benchmark Site Summary**

# Telogia Creek @ CR 1641

**STORET Station NUTREF001**

### Land Use

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.24, suggesting benign human influences in the watershed. Before the site visit, aerial photographs were examined to assess the watershed land use. Direct observations during the site visit confirmed that the majority of the watershed land use was forest/natural with some silviculture beyond an extensive forested riparian buffer zone. There are no point source discharges upstream of the site.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of Telogia Creek (Station NUTREF001) showing watershed vicinity and land use.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of Telogia Creek (Station NUTREF001) showing close-up of sampling site.

Photograph of Telogia Creek at CR 1641



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**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 131 |
| Hydrologic Score | 1 |
| LDI Score | 1.24 |
| SCI Score | 78 A |
| Total Phosphorus Geometric Mean (mg/L) | 0.067 |
| Total Nitrogen Geometric Mean (mg/L) | 0.47 |

The Habitat Assessment score was in the "Optimal" range. The SCI score was in the "Exceptional" category, indicating an unusually diverse assemblage of sensitive aquatic invertebrates, definitively supporting the Class III designation.

**Periphyton Community Composition**

| Algal Community Structure | % Composition |
|---|---|
| % Bacillariophyta | 85.0 |
| % Chlorophycota | 0.33 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 14.67 |
| Number of Taxa | 40 |

Very little periphyton was observed at the site, which would allow optimal substrate use by macroinvertebrates. No nuisance algal growth was found. Of the 40 algal taxa observed, the majority of the periphyton community was composed of diatoms.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal and macroinvertebrate communities) at Telogia Creek at CR 1641. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota demonstrated to be fully supportive of the designated use (healthy, well balanced populations of aquatic organisms).



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## PANHANDLE NUTRIENT REGION

**Nutrient Reference Site Summary**

# Wacissa River near Big Blue Spring

**STORET Station 22040009**

### Land Use

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.03, suggesting benign human influences in the watershed. Before the site visit, aerial photographs were examined to assess the watershed land use. Direct observations during the site visit confirmed that the majority of the watershed land use was forest/natural with silvicultural activities beyond and extensive forested riparian buffer zone. There are no point source discharges upstream of the site.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of the Wacissa River (Station 22040009) showing watershed vicinity and land use.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of the Wacissa River (Station 22040009) showing close-up of sampling site.

Photograph of the Wacissa River near the headwaters.

**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 138 |
| Hydrologic Score | 1 |
| LDI Score | 1.03 |
| SCI Score | 40 A |
| Total Phosphorus Geometric Mean (mg/L) | 0.046 |
| Total Nitrogen Geometric Mean (mg/L) | 0.29 |

The Habitat Assessment score was in the high end of the "Suboptimal" range. The SCI score was in the "Healthy" category, exhibiting a diverse assemblage of sensitive invertebrates and indicating the site is clearly meeting the Class III designated use.

**Periphyton Community Composition**

| Algal Community Structure | % Composition |
|---|---|
| % Bacillariophyta | 85.43 |
| % Chlorophycota | 2.65 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 11.92 |
| Number of Taxa | 50 |

There was a minimal amount of periphyton at this site, with no nuisance algal growth. Of the 50 algal taxa observed, the majority of the periphyton community was composed of diatoms.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal and macroinvertebrate communities) at the Wacissa River near Big Blue Spring. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota demonstrated to be fully supportive of the designated use (healthy, well balanced populations of aquatic organisms).



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## PANHANDLE NUTRIENT REGION

**Nutrient Benchmark Site Summary**

# Yellow River at Highway 2

**STORET Station 3546**

### Land Use

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.24, suggesting benign human influences in the watershed. Before the site visit, aerial photographs were examined to assess the watershed land use. Direct observations during the site visit confirmed that the majority of the watershed land use was forest/natural with some silviculture beyond an extensive forested riparian buffer zone. There are no point source discharges upstream of the site.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of the Yellow River at Hwy 2 (Station 21FLGW_ 3546) showing watershed vicinity and land use.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of the Yellow River (Station 21FLGW_ 3546) showing close-up of sampling site. An extensive riparian forested buffer is present on both sides of the system.

Photograph of the Yellow River near Hwy 2

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**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 137 |
| Hydrologic Score | 1 |
| LDI Score | 1.24 |
| SCI Score | 79 A |
| Total Phosphorus Geometric Mean (mg/L) | 0.024 |
| Total Nitrogen Geometric Mean (mg/L) | 0.40 |

The Habitat Assessment score was in the "Optimal" range. The SCI score was in the "Exceptional" category, exhibiting a diverse assemblage of sensitive invertebrates and indicating the site is definitively meeting the Class III designated use.

**Periphyton Community Composition**

| Algal Community Structure | % Composition |
|---|---|
| % Bacillariophyta | 90.07 |
| % Chlorophycota | 1.99 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 7.95 |
| Number of Taxa | 50 |

Very little periphyton was observed at this site, and there was no nuisance algal growth. Of the 50 algal taxa observed, the majority of the periphyton community was composed of diatoms.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal and macroinvertebrate communities) at the Yellow River at Highway 2. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota demonstrated to be fully supportive of the designated use (healthy, well balanced populations of aquatic organisms).



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## PANHANDLE NUTRIENT REGION

**Nutrient Benchmark Site Summary**

# Yon Creek @ SR 12

**STORET Station GAD106GS**

### Land Use

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.26, suggesting benign human influences in the watershed. Before the site visit, aerial photographs were examined to assess the watershed land use. Direct observations during the site visit confirmed that the majority of the watershed land use was forest/natural with some silviculture and field/pasture located beyond an extensive forested riparian buffer zone. There are no known point source discharges upstream of the site.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of Yon Creek (Station GAD106GS) showing watershed vicinity and land use.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of Yon Creek (Station GAD106GS) showing close-up of sampling site.

Photograph of Yon Creek @ SR 12



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**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 137 |
| Hydrologic Score | 2 |
| LDI Score | 1.26 |
| SCI Score | 81 A |
| Total Phosphorus Geometric Mean (mg/L) | 0.083 |
| Total Nitrogen Geometric Mean (mg/L) | 0.86 |

The Habitat Assessment score was in the "Optimal" range. The SCI score was in the "Exceptional" category, indicating an unusually diverse community of sensitive aquatic invertebrates, and demonstrating that the stream is definitively meeting its Class III designated use.

**Periphyton Community Composition**

| Algal Community Structure | % Composition |
|---|---|
| % Bacillariophyta | 98.00 |
| % Chlorophycota | 0 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 2.00 |
| Number of Taxa | 23 |

Minimal periphyton growth was observed at this site, which would allow for optimal substrate use by macroinvertebrates. There was no nuisance algal growth. Of the 23 algal taxa observed, the majority of the periphyton community was composed of diatoms.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal and macroinvertebrate communities) at Yon Creek @ SR 12. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota demonstrated to be fully supportive of the designated use (healthy, well balanced populations of aquatic organisms).



US EPA ARCHIVE DOCUMENT

*PENINSULA NUTRIENT REGION*

**Nutrient Benchmark Site Summary**

# Bee Branch

**STORET Station 28020299FTM**

**Land Use**

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.64, suggesting benign human influences in the watershed. During the site visit, aerial photographs were examined and direct observations confirmed that the majority of the watershed land use was forest/natural, with small areas of citrus and field/pasture observed beyond the forested buffer zone. There are no point source discharges upstream of the site.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of Bee Branch (Station 28020299FTM) showing watershed vicinity and land use. The headwaters drain an area dominated by pine flatwoods, prairie, and wetlands.

Image Removed Due to Copyright.
DOQQ 2004 aerial l photograph of Bee Branch (Station 28020299FTM) showing close-up of sampling site. An extensive forested riparian zone was evident of both sides of the system.

Photographs of Bee Branch (Station 28020299FTM).

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**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 147 |
| Hydrologic Score | 3 |
| LDI Score | 1.64 |
| SCI Score | 49 A |
| Total Phosphorus Geometric Mean (mg/L) | 0.080 |
| Total Nitrogen Geometric Mean (mg/L) | 1.13 |

The habitat assessment scored in the "Optimal" range. The Stream Condition Index scored in the "Healthy" category, exhibiting a diverse assemblage of sensitive invertebrates and indicating the site is clearly meeting the Class III designated use.

**Periphyton Community Composition**

| Algal Community Stricture | % Composition |
|---|---|
| % Bacillariophyta | 91.33 |
| % Chlorophycota | 2.67 |
| % Euglenophycota | 0.67 |
| % Cyanophycota | 4.67 |
| Number of Taxa | 60 |

Minimal periphyton growth was observed at the site, which would allow for optimal substrate use by benthic invertebrate and fish communities. Of the 60 algal taxa observed, the majority of the periphyton community was composed of diatoms. No problematic filamentous algal growth was found.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal community) at Bee Branch. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota which demonstrate full support of the most sensitive designated use (propagation and maintenance of a healthy, well-balanced population of fish and wildlife).



US EPA ARCHIVE DOCUMENT

*PENINSULA NUTRIENT REGION*

**Nutrient Reference Site Summary**

# Blackwater Creek at State Road 44A

**STORET Station ALT_BWC44 (20010455)**

**Land Use**

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.09, suggesting benign human influences in the watershed. During the site visit, aerial photographs were examined and direct observations confirmed that the majority of the watershed land use was forest/natural, with small areas of silviculture, and field/pasture observed beyond an extensive forested riparian buffer zone. There are no point source discharges upstream of the site.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of Blackwater Creek at State Road 44A (Station BWC44 or 20010455) showing watershed vicinity and land use. The system originates in Lake Norris, an undeveloped lake surrounded by wetland.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of Blackwater Creek at State Road 44A (Station BWC44 or 20010455) showing close-up of sampling site. An extensive forested riparian zone was evident on both sides of the system.

Photographs of Blackwater Creek at State Road 44A

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**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 125 |
| Hydrologic Score | 2 |
| LDI Score | 1.09 |
| SCI Score | 77 A |
| Total Phosphorus Geometric Mean (mg/L) | 0.050 |
| Total Nitrogen Geometric Mean (mg/L) | 1.60 |

The habitat assessment scored in the "Optimal" range, and the Stream Condition Index scored in the "Exceptional" category, indicating an unusually diverse assemblage of sensitive invertebrates, definitively supporting the Class III designation.

**Periphyton Community Composition**

| Algal Community Stricture | % Composition |
|---|---|
| % Bacillariophyta | 93.0 |
| % Chlorophycota | 0 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 7.0 |
| Number of Taxa | 45 |

Minimal periphyton growth was observed at the site, which would allow for optimal substrate use by benthic invertebrate and fish communities. Of the 45 algal taxa observed, the majority of the periphyton community was composed of diatoms. No problematic filamentous algal growth was found.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (hydrology, habitat assessment, local land use, algal and macroinvertebrate communities) at Blackwater Creek at State Road 44A. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota which demonstrate full support of the most sensitive designated use (propagation and maintenance of a healthy, well-balanced population of fish and wildlife).



US EPA ARCHIVE DOCUMENT

*PENINSULA NUTRIENT REGION*

**Nutrient Benchmark Site Summary**

# Blackwater Creek upstream of Carter Prop Bridge

**STORET Station BWCCPB / 20010536**

**Land Use**

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.31, suggesting benign human influences in the watershed. During the site visit, aerial photographs were examined and direct observations confirmed that the majority of the watershed land use was forest/natural, with small areas of silviculture, and field/pasture observed beyond an extensive forested riparian buffer zone. There are no point source discharges upstream of the site.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of Blackwater Creek upstream of Carter Prop Bridge (Station BWCCPB) showing watershed vicinity and land use. The system originates in Lake Norris, an undeveloped lake surrounding by wetland.

Image Removed Due to Copyright.
DOQQ aerial photograph of Blackwater Creek upstream of Carter Prop Bridge (Station BWCCPB) showing close-up of sampling site. An extensive forested riparian zone was evident of both sides of the system.

Photographs of Blackwater Creek upstream of Carter Prop Bridge

US EPA ARCHIVE DOCUMENT

**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 130 |
| Hydrologic Score | 2 |
| LDI Score | 1.31 |
| Total Phosphorus Geometric Mean (mg/L) | 0.054 |
| Total Nitrogen Geometric Mean (mg/L) | 1.28 |

The habitat assessment scored in the "Optimal" range. High water caused by recent rains made Stream Condition Index sampling inappropriate according to DEP standard operating procedures. Results from a Biorecon that was performed 2/7/2007 demonstrated that this site scored in the "healthy" range, indicating that the Class III designation is being fully supported.

**Periphyton Community Composition**

| Algal Community Stricture | % Composition |
|---|---|
| % Bacillariophyta | 72.43 |
| % Chlorophycota | 15.28 |
| % Cryptophycophyta | 0.33 |
| % Cyanophycota | 7.31 |
| % Euglenophycota | 2.99 |
| Number of Taxa | 72 |

Very little periphyton was observed at the site, which would allow optimal substrate use by macroinvertebrates. No nuisance algal growth was found. Of the 72 algal taxa observed, the majority of the periphyton community was composed of diatoms.
.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (hydrology, local land use, and algal communities) at Blackwater Creek, upstream of Carter Prop Bridge. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota which demonstrate full support of the most sensitive designated use (propagation and maintenance of a healthy, well-balanced population of fish and wildlife).



US EPA ARCHIVE DOCUMENT

*PENINSULA NUTRIENT REGION*

**Nutrient Benchmark Site Summary**

# Cow Creek @ CR 138

**STORET Station 21030086**

## Land Use

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.61, suggesting benign human influences in the watershed. Before and during the site visit, aerial photographs were examined and direct observations confirmed that the majority of the watershed land use was forest/natural with some silvicultural activities and field/pasture beyond an extensive forested riparian buffer zone. There are no point source discharges upstream of the site.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of Cow Creek @ CR 138 showing watershed vicinity and land use

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of Cow Creek @ CR 138 showing close-up of sampling site

Photograph of Cow Creek near CR 138



US EPA ARCHIVE DOCUMENT

**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 134 |
| Hydrologic Score | 2 |
| LDI Score | 1.61 |
| SCI Score | NA |
| Total Phosphorus Geometric Mean (mg/L) | 0.114 |
| Total Nitrogen Geometric Mean (mg/L) | 0.39 |

The Habitat Assessment score was in the "Optimal" range. Stream Condition Index sampling was not performed at this site due to the low water level and the possibility of recent desiccation, in accordance with the Standard Operating Procedure.

**Periphyton Community Composition**

| Algal Community Stricture | % Composition |
|---|---|
| % Bacillariophyta | 72.61 |
| % Chlorophycota | 1.32 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 25.74 |
| Number of Taxa | 64 |

Minimal periphyton growth was observed at the site, which would allow for optimal substrate use by benthic invertebrate and fish communities. Of the 64 algal taxa observed, the majority of the periphyton community was composed of diatoms. No problematic filamentous algal growth was found.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal communities) at Cow Creek @ CR 138. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that no adverse algal or aquatic plant issues were present. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota which suggest support of the most sensitive designated use (propagation and maintenance of a healthy, well-balanced population of fish and wildlife).



US EPA ARCHIVE DOCUMENT

*PENINSULA NUTRIENT REGION*

**Nutrient Benchmark Site Summary**

# Cypress Branch above 78

**STORET Station 28020239 / GLA630GS**

**Land Use**

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.21 suggesting benign human influences in the watershed. During the site visit, aerial photographs were examined and direct observations confirmed that the majority of the watershed land use was forest/natural, with areas of citrus and field/pasture observed beyond an extensive forested riparian buffer zone. There are no point source discharges upstream of the site.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of Cypress Branch (Station GLA630GS) showing watershed vicinity and land use. The stream originates in an area of prairie, flatwoods, and swamp.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of Cypress Branch (Station GLA630GS) showing close-up of sampling site. An extensive riparian forested zone is generally present on both sides of the system throughout the watershed, with a minimum of a 75-100 m buffer.

Photograph of Cypress Branch (Station GLA630GS).

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**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 134 |
| Hydrologic Score | 2 |
| LDI Score | 1.21 |
| SCI Score | 63 A |
| Total Phosphorus Geometric Mean (mg/L) | 0.131 |
| Total Nitrogen Geometric Mean (mg/L) | 1.97 |

The habitat assessment scored in the "Optimal" range, and the Stream Condition Index scored in the "Healthy" category, indicating a diverse assemblage of sensitive invertebrates, and fully supporting the Class III designation.

**Periphyton Community Composition**

| Algal Community Stricture | % Composition |
|---|---|
| % Bacillariophyta | 91.33 |
| % Chlorophycota | 0 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 8.67 |
| Number of Taxa | 48 |

Very little periphyton was observed at the site, which would allow optimal substrate use by macroinvertebrates. No nuisance algal growth was found. Of the 48 algal taxa observed, the majority of the periphyton community was composed of diatoms.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, and local land use) at Cypress Branch. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota which demonstrate full support of the most sensitive designated use (propagation and maintenance of a healthy, well-balanced population of fish and wildlife).



US EPA ARCHIVE DOCUMENT

*PENINSULA NUTRIENT REGION*

**Nutrient Benchmark Site Summary**

# Econlockhatchee River at Snowhill Road

**STORET Station ECH**

## Land Use

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.14, suggesting benign human influences in the watershed. During the site visit, aerial photographs were examined and direct observations confirmed that the majority of the watershed land use was forest/natural, with small areas of silviculture, and field/pasture observed beyond the forested buffer zone.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of Econlockhatchee River at Snowhill Road (Station ECH) showing watershed vicinity and land use. The system originates in the Econlockhatchee River Swamp, an extensive wetland area.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of Econlockhatchee River at Snowhill Road (Station ECH) showing close-up of sampling site. An extensive forested riparian zone was evident of both sides of the system.

Photographs of Econlockhatchee River at Snowhill Road



US EPA ARCHIVE DOCUMENT

**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 106 |
| Hydrologic Score | 2 |
| LDI Score | 1.14 |
| SCI Score | 52 A |
| Total Phosphorus Geometric Mean (mg/L) | 0.098 |
| Total Nitrogen Geometric Mean (mg/L) | 0.93 |

The habitat assessment score of 106 placed this site in the high "Suboptimal" range. The Stream Condition Index score of 52 was in the "Healthy" category, exhibiting a diverse assemblage of sensitive invertebrates and indicating the site is clearly meeting the Class III designated use.

**Periphyton Community Composition**

| Algal Community Structure | % Composition |
|---|---|
| % Bacillariophyta | 90.31 |
| % Chlorophycota | 1.38 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 8.3 |
| Number of Taxa | 53 |

Minimal periphyton growth was observed at the site, which would allow for optimal substrate use by benthic invertebrate and fish communities. Of the 53 algal taxa observed, the majority of the periphyton community was composed of diatoms. No problematic filamentous algal growth was found.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal and macroinvertebrate communities) at Econlockhatchee River at Snowhill Road. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota which demonstrate full support of the most sensitive designated use (propagation and maintenance of a healthy, well-balanced population of fish and wildlife).



US EPA ARCHIVE DOCUMENT

*PENINSULA NUTRIENT REGION*

**Nutrient Benchmark Site Summary**

# Little Orange Creek

**STORET Station PUT308GS**

**Land Use**

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 2.01, suggesting benign human influences in the watershed. During the site visit, aerial photographs were examined and direct observations confirmed that the majority of the watershed land use was forest/natural, with small areas of silviculture and field/pasture observed beyond an extensive forested riparian buffer zone. There are no point source discharges upstream of the site.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of Little Orange Creek (Station PUT308GS) showing watershed vicinity and land use. The stream originates from Little Orange Lake, an undeveloped system surrounded by forest and swamp.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of Little Orange Creek (Station PUT308GS) showing close-up of sampling site. An extensive riparian forested buffer is generally present on both sides of the system throughout the watershed, with one small clear-cut area approaching within 75 m of the stream.

Photograph of Little Orange Creek

US EPA ARCHIVE DOCUMENT

**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 131 |
| Hydrologic Score | 2 |
| LDI Score | 2.01 |
| SCI Score | 75 A |
| Total Phosphorus Geometric Mean (mg/L) | 0.201 |
| Total Nitrogen Geometric Mean (mg/L) | 1.13 |

The habitat assessment scored in the "Optimal" range, and the Stream Condition Index scored in the "Exceptional" category, indicating an unusually diverse assemblage of sensitive invertebrates, definitively supporting the Class III designated use. This is one of the few peninsular sites where Plecopterans (stoneflies, known to be extremely sensitive to stress) are routinely found.

**Periphyton Community Composition**

| Algal Community Stricture | % Composition |
|---|---|
| % Bacillariophyta | 86.6 |
| % Chlorophycota | 5.7 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 7.4 |
| Number of Taxa | 48 |

Minimal periphyton growth was observed at the site, which would allow for optimal substrate use by benthic invertebrate and fish communities. Of the 48 algal taxa observed, the majority of the periphyton community was composed of diatoms. No problematic filamentous algal growth was found.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal and macroinvertebrate communities) at Little Orange Creek. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota which demonstrate full support of the most sensitive designated use (propagation and maintenance of a healthy, well-balanced population of fish and wildlife).



US EPA ARCHIVE DOCUMENT

*PENINSULA NUTRIENT REGION*

**Nutrient Benchmark Site Summary**

# Little Orange Creek below Cabbage Creek

**STORET Station LOCBCC**

## Land Use

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.54, suggesting benign human influences in the watershed. During the site visit, aerial photographs were examined and direct observations confirmed that the majority of the watershed land use was forest/natural, with small areas of silviculture, and field/pasture observed beyond an extensive forested riparian buffer zone. There are no point source discharges upstream of the site.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of Little Orange Creek below Cabbage Creek (Station LOCBCC) showing watershed vicinity and land use. Little Orange Creek originates from Little Orange Lake, a completely undeveloped system surrounded by forest, and associated wetlands.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of Little Orange Creek below Cabbage Creek (Station LOCBCC) showing close-up of sampling site. An extensive riparian forested wetland buffer is present on both sides of the system.

Photographs of Little Orange Creek below Cabbage Creek



US EPA ARCHIVE DOCUMENT

**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 132 |
| Hydrologic Score | 2 |
| LDI Score | 1.54 |
| SCI Score | 89 A |
| Total Phosphorus Geometric Mean (mg/L) | 0.067 |
| Total Nitrogen Geometric Mean (mg/L) | 0.70 |

The habitat assessment scored in the "Optimal" range, and the Stream Condition Index scored in the "Exceptional" category, indicating an unusually diverse assemblage of sensitive invertebrates, definitively supporting the Class III designation.

**Periphyton Community Composition**

| Algal Community Stricture | % Composition |
|---|---|
| % Bacillariophyta | 84.52 |
| % Chlorophycota | 5.16 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 10.32 |
| Number of Taxa | 54 |

Minimal periphyton growth was observed at the site, which would allow for optimal substrate use by benthic invertebrate and fish communities. Of the 54 algal taxa observed, the majority of the periphyton community was composed of diatoms. No problematic filamentous algal growth was found.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal and macroinvertebrate communities) at Little Orange Creek below Cabbage Creek. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota which demonstrate full support of the most sensitive designated use (propagation and maintenance of a healthy, well-balanced population of fish and wildlife).



US EPA ARCHIVE DOCUMENT

**Nutrient Benchmark Site Summary**

# Moses Creek at US 1

**STORET Station 27010050**

## Land Use

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.24, suggesting benign human influences in the watershed. During the site visit, aerial photographs were examined and direct observations confirmed that the majority of the watershed land use was forest/natural, with small areas of silviculture, and field/pasture observed beyond the forested buffer zone. There are no point source discharges upstream of the site.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of Moses Creek at US 1 (Station 27010050) showing watershed vicinity and land use.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of Moses Creek at US 1 (Station 27010050) showing close-up of sampling site. Moses Creek originates in an area of pine flatwoods and swamp. An extensive riparian forested buffer is present on both sides of the system.

Photograph of Moses Creek at US 1



US EPA ARCHIVE DOCUMENT

**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 138 |
| Hydrologic Score | 1 |
| LDI Score | 1.24 |
| SCI Score | 60 A |
| Total Phosphorus Geometric Mean (mg/L) | 0.081 |
| Total Nitrogen Geometric Mean (mg/L) | 1.03 |

The habitat assessment scored in the "Optimal" range. The Stream Condition Index score of 60 was in the "Healthy" category, exhibiting a diverse assemblage of sensitive invertebrates and indicating the site is meeting the Class III designated use.

**Periphyton Community Composition**

| Algal Community Stricture | % Composition |
|---|---|
| % Bacillariophyta | 14.33 |
| % Chlorophycota | 1.33 |
| % Euglenophycota | 1.67 |
| % Cyanophycota | 81.67 |
| Number of Taxa | 71 |

Minimal periphyton growth was observed at the site, which would allow for optimal substrate use by benthic invertebrate and fish communities. Of the 71algal taxa observed, including 66 diatom taxa, the majority of the periphyton community was composed of blue-green algae. No problematic filamentous algal growth was found.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, and local land use) at Moses Creek at US 1. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota which demonstrate full support of the most sensitive designated use (propagation and maintenance of a healthy, well-balanced population of fish and wildlife).



US EPA ARCHIVE DOCUMENT

*PENINSULA NUTRIENT REGION*

**Nutrient Benchmark Site Summary**

# Orange Creek Upstream of Highway 21

**STORET Station 21202**

**Land Use**

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.7, suggesting benign human influences in the watershed. During the site visit, aerial photographs were examined and direct observations confirmed that the majority of the watershed land use was forest/natural, with small areas of silviculture and field/pasture observed beyond a forested riparian buffer zone. There are no point source discharges upstream of the site.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of Orange Creek upstream of Highway 21 (Station 21202) showing watershed vicinity and land use. The stream originates from Orange Lake, an Outstanding Florida Water.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of Orange Creek upstream of HWY 21 (Station 21202) showing close-up of sampling site. An extensive riparian forested wetland buffer is present on both sides of the system.

Photograph of Orange Creek upstream of Highway 21

US EPA ARCHIVE DOCUMENT

**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 121 |
| Hydrologic Score | 3 |
| LDI Score | 1.74 |
| SCI Score | 74 A |
| Total Phosphorus Geometric Mean (mg/L) | 0.125 |
| Total Nitrogen Geometric Mean (mg/L) | 1.43 |

The habitat assessment scored in the "Optimal" range, and the Stream Condition Index scored in the "Exceptional" category, indicating an unusually diverse assemblage of sensitive invertebrates. This is one of the few peninsular sites where Plecopterans (stoneflies, known to be extremely sensitive to stress) are routinely found.

**Periphyton Community Composition**

| Algal Community Stricture | % Composition |
|---|---|
| % Bacillariophyta | 90.38 |
| % Chlorophycota | 1.37 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 8.25 |
| Number of Taxa | 51 |

Minimal periphyton growth was observed at the site, which would allow for optimal substrate use by benthic invertebrate and fish communities. Of the 51 algal taxa observed, the majority of the periphyton community was composed of diatoms. No problematic filamentous algal growth was found.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal and macroinvertebrate communities) at Orange Creek, upstream of Highway 21. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota which demonstrate full support of the most sensitive designated use (propagation and maintenance of a healthy, well-balanced population of fish and wildlife).



US EPA ARCHIVE DOCUMENT

*PENINSULA NUTRIENT REGION*

**Nutrient Benchmark Site Summary**

# St. Johns River near DeLand

**STORET Station 2236000**

**Land Use**

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.68, suggesting benign human influences in the watershed. During the site visit, aerial photographs were examined and direct observations confirmed that the majority of the watershed land use was forest/natural, with small areas of silviculture, and field/pasture observed beyond the forested buffer zone.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of St. John's River near DeLand (Station 2236000) showing watershed vicinity and land use. The system originates from Blue Cypress Lake, a completely undeveloped system surrounding by forest and wetlands.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of St. John's River near DeLand (Station 2236000) showing close-up of sampling site. An extensive riparian forested wetland buffer is present on both sides of the system.

Photographs of St. John's River near DeLand



US EPA ARCHIVE DOCUMENT

**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 128 |
| Hydrologic Score | 4 |
| LDI Score | 1.68 |
| SCI Score | NA |
| Total Phosphorus Geometric Mean (mg/L) | 0.078 |
| Total Nitrogen Geometric Mean (mg/L) | 1.39 |

The habitat assessment scored in the "Optimal" range. This system is characterized by very low flow, therefore Stream Condition Index sampling was inappropriate according to DEP standard operating procedures. Aquatic vegetation present was typical of sluggish, open systems and there were no nuisance plant issues.

**Periphyton Community Composition**

| Algal Community Stricture | % Composition |
|---|---|
| % Bacillariophyta | 88.2 |
| % Chlorophycota | 2.4 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 9.5 |
| Number of Taxa | 53 |

Minimal periphyton growth was observed at the site, which would allow for optimal substrate use by benthic invertebrate and fish communities. Of the 53 algal taxa observed, the majority of the periphyton community was composed of diatoms. No problematic filamentous algal growth was found.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal communities) at the St. Johns River near Deland. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and based upon observations during the site visit, that no adverse algal or aquatic plant issues were present. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota which suggest support of the most sensitive designated use (propagation and maintenance of a healthy, well-balanced population of fish and wildlife).



US EPA ARCHIVE DOCUMENT

*PENINSULA NUTRIENT REGION*

**Nutrient Benchmark Site Summary**

# Steinhatchee River @ Canal Road

**STORET Station 22050083 / STN020C1**

**Land Use**

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.11, suggesting benign human influences in the watershed. Before the site visit, aerial photographs were examined to assess the watershed land use. Direct observations during the site visit confirmed that the majority of the watershed land use was forest/natural with silviculture beyond an extensive forested riparian buffer zone. There are no point source discharges upstream of the site.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of the Steinhatchee River (Station 22050083) showing watershed vicinity and land use.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of Steinhatchee River (Station 22050083) showing close-up of sampling site.

Photograph of Steinhatchee River at Canal Road

US EPA ARCHIVE DOCUMENT

**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 151 |
| Hydrologic Score | 2 |
| LDI Score | 1.11 |
| SCI Score | 41 A |
| Total Phosphorus Geometric Mean (mg/L) | 0.087 |
| Total Nitrogen Geometric Mean (mg/L) | 0.94 |

The Habitat Assessment score was in the "Optimal" range. The SCI score was in the "Healthy" category, exhibiting a diverse assemblage of sensitive invertebrates and indicating the site is meeting the Class III designated use.

**Periphyton Community Composition**

| Algal Community Structure | % Composition |
|---|---|
| % Bacillariophyta | 60.13 |
| % Chlorophycota | 3.65 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 36.21 |
| Number of Taxa | 54 |

This site had an isolated area of *Rhizoclonium* sp. mats, where the canopy was open and the water was shallow over rocky substrate. Throughout the majority of the site, only small to moderate amounts of algae were present, and this did not affect the inhabitability of the substrates by invertebrates. Of the 54 algal taxa observed, the majority of the periphyton community was composed of diatoms.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal and macroinvertebrate communities) at the Steinhatchee River at Canal Rd. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota demonstrated to be fully supportive of the designated use (healthy, well balanced populations of aquatic organisms).



US EPA ARCHIVE DOCUMENT

*PENINSULA NUTRIENT REGION*

**Nutrient Benchmark Site Summary**

# Steven's Branch off CR 204

**STORET Station 27010070**

## Land Use

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.29, suggesting benign human influences in the watershed. During the site visit, aerial photographs were examined and direct observations confirmed that the majority of the watershed land use was forest/natural, with small areas of silviculture, and field/pasture observed beyond an extensive forested riparian buffer zone. There are no point source discharges upstream of the site.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of Steven's Branch off CR 204 (Station 27010070) showing watershed vicinity and land use. Steven's Branch originates in an area of pine flatwoods, wetlands and prairie.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of Steven's Branch off CR 204 (Station 27010070) showing close-up of sampling site. An extensive riparian forested buffer is present on both sides of the system.

Photographs of Steven's Branch off CR 204 (Station 27010070)



US EPA ARCHIVE DOCUMENT

**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 128 |
| Hydrologic Score | 3 |
| LDI Score | 1.29 |
| SCI Score | 76 A |
| Total Phosphorus Geometric Mean (mg/L) | 0.120 |
| Total Nitrogen Geometric Mean (mg/L) | 1.09 |

The habitat assessment scored in the "Optimal" range, and the Stream Condition Index scored in the "Exceptional" category, indicating an unusually diverse assemblage of sensitive invertebrates, definitively supporting the Class III designation.

**Periphyton Community Composition**

| Algal Community Stricture | % Composition |
|---|---|
| % Bacillariophyta | 75.14 |
| % Chlorophycota | 3.39 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 21.47 |
| Number of Taxa | 66 |

Minimal periphyton growth was observed at the site, which would allow for optimal substrate use by benthic invertebrate and fish communities. Of the 66 algal taxa observed, the majority of the periphyton community was composed of diatoms. No problematic filamentous algal growth was found.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal and macroinvertebrate communities) at Steven's Branch off CR 204. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota which demonstrate full support of the most sensitive designated use (propagation and maintenance of a healthy, well-balanced population of fish and wildlife).



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## *PENINSULA NUTRIENT REGION*

**Nutrient Benchmark Site Summary**

# Tosohatchee Creek @ WMA

**STORET Station ORA331LV**

### Land Use

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.50, suggesting benign human influences in the watershed. During the site visit, aerial photographs were examined and direct observations confirmed that the majority of the watershed land use was forest/natural, with small areas of silviculture and field/pasture observed beyond an extensive forested riparian buffer zone. There are no point source discharges upstream of the site.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of Tosohatchee Creek (Station ORA331LV) showing watershed vicinity and land use. The stream originates in a swampy area adjacent to Tosohatchee Creek State Preserve.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of Tosohatchee Creek (Station ORA331LV) showing close-up of sampling site. An extensive riparian forested wetland buffer is present on both sides of the system.

Photograph of Tosohatchee Creek (Station ORA331LV).

**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 116 |
| Hydrologic Score | 1 |
| LDI Score | 1.50 |
| SCI Score | NA |
| Total Phosphorus Geometric Mean (mg/L) | 0.034 |
| Total Nitrogen Geometric Mean (mg/L) | 0.77 |

The habitat assessment scored in the high "Suboptimal" range, with water velocity being the lowest scoring parameter. The site was deemed inappropriate for SCI sampling due to the swamp-like nature of the system and lack of water flow. Vegetation present was typical of minimally disturbed swamp systems.

**Periphyton Community Composition**

| Algal Community Stricture | % Composition |
|---|---|
| % Bacillariophyta | 89.00 |
| % Chlorophycota | 0.33 |
| % Euglenophycota | 0.33 |
| % Cyanophycota | 10.33 |
| Number of Taxa | 56 |

Of the 56 algal taxa identified, the majority of the periphyton community was composed of diatoms. No problematic filamentous algae were observed.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, algal community, and local land use) at Tosohatchee Creek. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that no adverse algal or aquatic plant issues were present. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota which suggest support of the most sensitive designated use (propagation and maintenance of a healthy, well-balanced population of fish and wildlife).



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*PENINSULA NUTRIENT REGION*

**Nutrient Benchmark Site Summary**

# Waccasassa River above SR 24

**STORET Station LEV502GS**

**Land Use**

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.23, suggesting benign human influences in the watershed. During the site visit, aerial photographs were examined and direct observations confirmed that the majority of the watershed land use was forest/natural, with small areas of silviculture, and field/pasture observed beyond the forested riparian buffer zone. There are no point source discharges upstream of the site.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of the Waccasassa River (Station LEV502GS) showing watershed vicinity and land use. The Wacasassa River originates in an area of hardwood swamp known as Devils Hammock.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of the Waccasassa River (Station LEV502GS) showing close-up of sampling site. Although there was some encroachment from a clear cut area near the site, extensive riparian forested wetland buffer is present on both sides for the majority of the system. Note that the forested buffer still exceeded approximately 75 m at minimum, and was generally several hundred m wide.

Photographs of the Waccasassa River



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**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 138 |
| Hydrologic Score | 1 |
| LDI Score | 1.23 |
| SCI Score | 69 A |
| Total Phosphorus Geometric Mean (mg/L) | 0.065 |
| Total Nitrogen Geometric Mean (mg/L) | 0.63 |

The habitat assessment scored in the high "Optimal" range, and the Stream Condition Index scored in the "Exceptional" category, indicating an unusually diverse assemblage of sensitive invertebrates, definitively supporting the Class III designation.

**Periphyton Community Composition**

| Algal Community Stricture | % Composition |
|---|---|
| % Bacillariophyta | 84.24 |
| % Chlorophycota | 0.32 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 15.43 |
| Number of Taxa | 46 |

Minimal periphyton growth was observed at the site, which would allow for optimal substrate use by benthic invertebrate and fish communities. Of the 46 algal taxa observed, the majority of the periphyton community was composed of diatoms. Although some filamentous algal growth was found in a few small areas, it did not affect habitat suitability, as evidenced by the very good SCI score.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal and macroinvertebrate communities) at the Waccasassa River. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota demonstrated to be fully supportive of the designated use (healthy, well balanced populations of aquatic organisms).



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*PENINSULA NUTRIENT REGION*

**Nutrient Benchmark Site Summary**

# Withlacoochee River at SR 471

**STORET Station WITHLACOORVR1**

## Land Use

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.45, suggesting benign human influences in the watershed. During the site visit, aerial photographs were examined and direct observations confirmed that the majority of the watershed land use was forest/natural, with small areas of silviculture and field/pasture observed beyond an extensive forested riparian buffer zone. There are no point source discharges upstream of the site.

Image Removed Due to Copyright.
Aerial photograph of Withlacoochee River at SR 471 (Station WITHLACOORVR1) showing watershed vicinity and land use. The Withlacoochee River originates in the Green Swamp, an extensive wetland with considerable areas in public ownership.

Image Removed Due to Copyright.
Aerial photograph of Withlacoochee River at SR 471 (Station WITHLACOORVR1) showing close-up of sampling site. An extensive riparian forested wetland buffer is present on both sides of the system.

Photograph of Withlacoochee River at SR 471 (Station WITHLACOORVR1).

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**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 119 |
| Hydrologic Score | 2 |
| LDI Score | 1.45 |
| SCI Score | 46 A |
| Total Phosphorus Geometric Mean (mg/L) | 0.080 |
| Total Nitrogen Geometric Mean (mg/L) | 1.68 |

The habitat assessment scored in the high "suboptimal" range due to no water velocity. The Stream Condition Index was not performed during this site visit due to low water levels and minimal stream velocity. However, sites both upstream (station 33449) and downstream (station 34401) of the sampling location and within the same WBID received "healthy" SCI designations in 2007, (51 A and 40 A, respectively) indicating that the water quality is fully supporting the Class III designated use. These scores were averaged for the above table.

**Periphyton Community Composition**

| Algal Community Stricture | % Composition |
|---|---|
| % Bacillariophyta | 85.95 |
| % Chlorophycota | 1.3 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 12.1 |
| % Euglenophycota | 0.7 |
| Number of Taxa | 61 |

Minimal periphyton growth was observed at the site, which would allow for optimal substrate use by benthic invertebrate and fish communities. Of the 61 algal taxa observed, the majority of the periphyton community was composed of diatoms. No problematic filamentous algal growth was found.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal and macroinvertebrate communities) Withlacoochee River at SR 471. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota demonstrated to be fully supportive of the designated use (healthy, well balanced populations of aquatic organisms).

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## *PENINSULA NUTRIENT REGION*

**Nutrient Benchmark Site Summary**

# Withlacoochee River at Stokes Ferry

**STORET Station 3513**

### Land Use

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.82, suggesting benign human influences in the watershed. During the site visit, aerial photographs were examined and direct observations confirmed that the majority of the watershed land use was forest/natural, with small areas of silviculture, field/pasture, and residential uses observed beyond a forested riparian buffer zone. There are no point source discharges upstream of the site.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of Withlacoochee River at Stokes Ferry (Station 3513) showing watershed vicinity and land use. The Withlacoochee River originates in the Green Swamp, a very large wetland with considerable areas in public ownership.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of Withlacoochee River at Stokes Ferry (Station 3513) showing close-up of sampling site. An extensive riparian forested wetland buffer is present on both sides of the system.

Photographs of the Withlacoochee River at Stokes Ferry

**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 153 |
| Hydrologic Score | 4 |
| LDI Score | 1.82 |
| SCI Score | 68 A |
| Total Phosphorus Geometric Mean (mg/L) | 0.043 |
| Total Nitrogen Geometric Mean (mg/L) | 0.86 |

The habitat assessment scored in the high "Optimal" range, and the Stream Condition Index scored in the "Exceptional" category, indicating an unusually diverse assemblage of sensitive invertebrates, definitively supporting the Class III designated use.

**Periphyton Community Composition**

| Algal Community Stricture | % Composition |
|---|---|
| % Bacillariophyta | 90.24 |
| % Chlorophycota | 0.7 |
| % Cryptophycophyta | 0 |
| % Cyanophycota | 9.06 |
| Number of Taxa | 40 |

Moderate periphyton growth was observed at the site; however, substrate availability for benthic invertebrates was not problematic, as evidenced by the "exceptional" SCI score. Of the 40 algal taxa observed, the majority of the periphyton community was composed of diatoms. No problematic filamentous algal growth was found, despite the relatively open, sunny conditions characteristic of the site.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology, local land use, and algal and macroinvertebrate communities) at Withlacoochee River at Stokes Ferry. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that it clearly maintained healthy biological assemblages. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota demonstrated to be fully supportive of the designated use (healthy, well balanced populations of aquatic organisms).



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*PENINSULA NUTRIENT REGION*

**Nutrient Benchmark Site Summary**

# Withlacoochee River at Trails End

**STORET Station FL0052000087500**

## Land Use

This station was considered to be a candidate reference site based on the Landscape Development Intensity Index score of 1.34, suggesting benign human influences in the watershed. During the site visit, aerial photographs were examined and direct observations confirmed that the majority of the watershed land use was forest/natural, with small areas of silviculture, field/pasture, and residential uses observed beyond the forested buffer zone. There are no point source discharges upstream of the site.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of Withlacoochee River at Trails End (Station FL0052000087500) showing watershed vicinity and land use. The Withlacoochee River originates in the Green Swamp, a very large wetland with considerable areas in public ownership.

Image Removed Due to Copyright.
DOQQ 2004 aerial photograph of Withlacoochee River at Trails End (Station FL0052000087500) showing close-up of sampling site. An extensive riparian forested wetland buffer is present on both sides of the system.

Photographs of Withlacoochee River at Trails End

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**Habitat, Biological and Water Quality Data**

| Parameter | Value |
|---|---|
| Habitat Assessment | 118 |
| Hydrologic Score | 2 |
| LDI Score | 1.34 |
| SCI Score | NA |
| Total Phosphorus Geometric Mean (mg/L) | 0.059 |
| Total Nitrogen Geometric Mean (mg/L) | 1.01 |

The habitat assessment scored in the high "Suboptimal" range. The SCI was not performed due to the morphology of the system in this area (lake-like), which when coupled with low water levels, resulted in the system having no perceptible water velocity. Typical aquatic plants observed at the site included *Taxodium distichum, Hydrocotyle* sp.*, Panicum hemitomon, Myriophyllum heterophyllum,* and *Polygonum* sp., indicating healthy conditions.

Qualitative Periphyton Sampling was not performed at this site, however minimal periphyton growth was observed, which would allow for optimal substrate use by benthic invertebrate and fish communities. No problematic filamentous algal growth was found, despite the relatively open, sunny conditions characteristic of the site.

**Overall Reference Site Conclusion:**

Experienced FDEP scientists conducted a series of observations and measurements (habitat assessment, hydrology and local land use) at Withlacoochee River at Trails End. Based on our analyses, the Department concluded that the site was influenced only by very low levels of anthropogenic stressors and that no adverse algal or aquatic plant issues were present. Thus, not only are the nutrient concentrations reflective of minimally disturbed conditions, they are associated with biota which suggest support of the most sensitive designated use (propagation and maintenance of a healthy, well-balanced population of fish and wildlife).

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# FDEP's Site Information and Taxa Lists for Stream Benchmark Site Samples

(Appendix 3-D from USEPA. 2009. *Proposed Methods and Approaches for Developing Numeric Nutrient Criteria for Florida's Inland Waters*. United States Environmental Protection Agency, Office of Water, Office of Science and Technology, Health and Ecological Criteria Division, Washington, DC.)

If you have a disability and are unable to read this spreadsheet, please contact Eric Shaw at Eric.Shaw@dep.state.fl.us, and you will be provided with an accessible version.

SCI2004 taxa lists are presented by sample.

SCI2007 taxa lists are presented by replicate.

Both taxa matrices are collapsed using collapsing rules in FDEP SOP LT7000, and metrics and indices are calculated on collapsed taxa lists.

SCI2004 metrics and final scores are calculated and presented by sample.

SCI2007 metrics are calculated and presented by replicate. The final score is calculated and presented as an average for the two replicates.

Three periphyton samples were analyzed by older methodology where the number of diatom **valves** identified on the fixed slide was equal to 2x the number of diatom **frustules** counted in the wet material. For data entry, wet ID and diatom ID were combined. Diatom valve counts from the fixed slide were divided by two (to represent a frustule) and entered with the wet ID's. The only exception is that a valve count of 1 was entered as a frustule count of 1. These three periphyton samples had to be retrieved separately for taxa lists and are presented in *Peri Data Wet & Diatom Combined* .
Metrics for these three periphyton samples are slightly different in that dominants, number of taxa, etc. are based on the sample as a whole and not separately for diatoms vs. soft algae (wet ID).

All other periphyton samples in this file were analyzed by the current method were the number of diatom valves identified on the fixed slide is 500 +/- regardless of the number of diatom frustules counted in the wet ID. Diatom data is entered separately from wet ID data, and metrics are calculated on each data set (i.e. DominantDiatomOnlyPct, DominantWetAlgaeOnlyPct, etc.). Taxa lists are also retrieved and presented separately.



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| As Calculated / STORET station -> | LEV502GS | LEV502GS | PUT308GS | PUT308GS | 3513 | 3513 |
|---|---|---|---|---|---|---|
| Sample date -> | 2/21/2007 | 2/21/2007 | 2/26/2007 | 2/26/2007 | 2/20/2007 | 2/20/2007 |
| | 57322/36904/ | 57322/36904/ | 57431/36987/ | 57431/36987/ | 57324/36989/ | 57324/36989/ |
| Taxon Name / SampleID/BenthID -> | Rep 1 | Rep 2 | Rep 1 | Rep 2 | Rep 1 | Rep 2 |
| Ablabesmyia mallochi | - | - | - | - | - | 1 |
| Ablabesmyia rhamphe grp. | - | - | - | - | - | - |
| Acentrella | - | - | - | - | 3 | 7 |
| Acentrella parvula | - | - | - | - | - | - |
| Acerpenna pygmaea | - | 2 | 1 | - | - | - |
| Acroneuria | - | - | - | - | - | - |
| Acroneuria abnormis | - | - | - | - | - | - |
| Acroneuria lycorias | - | - | - | - | - | - |
| Agnetina annulipes | - | - | - | - | - | - |
| Allonais inaequalis | - | - | - | - | - | - |
| Amnicola | - | - | - | - | - | - |
| Amphipoda | - | - | - | - | - | - |
| Ancylidae | - | - | - | - | 3 | - |
| Ancyronyx variegatus | - | - | - | - | - | - |
| Anisocentropus pyraloides | - | - | - | - | - | - |
| Apedilum | - | - | - | - | - | - |
| Argia | - | - | - | 1 | - | 2 |
| Argia fumipennis | - | - | - | - | - | - |
| Argia tibialis | 1 | 4 | - | - | - | - |
| Arrenurus | - | - | - | - | - | - |
| Asioplax | - | - | - | - | - | - |
| Atherix | - | - | - | - | - | - |
| Atractides | 1 | - | 1 | 1 | - | - |
| Atrichopogon | - | - | - | - | - | - |
| Aulodrilus pigueti | - | - | - | - | - | - |
| Baetidae | - | - | - | - | - | - |
| Baetis intercalaris | 6 | - | - | - | - | - |
| Baetisca becki | - | - | - | - | - | - |
| Baetisca rogersi | - | - | - | - | - | - |
| Beardius | - | - | - | - | - | - |
| Berosus | - | - | - | - | - | - |
| Bivalvia | - | - | - | - | - | - |
| Boyeria vinosa | 1 | 2 | - | 1 | - | - |
| Brachycentrus chelatus | - | - | - | - | - | - |
| Brachycentrus numerosus | - | - | - | - | - | - |
| Branchiobdellidae | - | - | - | - | - | - |
| Bratislavia unidentata | - | - | - | - | - | - |
| Brillia | - | - | - | - | - | - |
| Caecidotea | - | - | - | - | - | - |
| Caenis | - | - | - | - | - | - |
| Caenis diminuta | 2 | - | - | - | - | - |
| Caenis eglinensis | - | - | - | - | - | - |
| Caenis hilaris | - | - | - | - | - | - |
| Callibaetis | - | - | - | - | - | - |
| Callibaetis floridanus | - | - | - | - | - | - |
| Calopterygidae | - | - | - | - | - | - |
| Calopteryx | - | - | - | 1 | - | - |
| Cambaridae | - | - | - | - | - | 1 |
| Campeloma | - | - | - | - | - | - |
| Cecidomyiidae | - | - | - | - | - | - |



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| As Calculated / STORET station -> | LEV502GS | LEV502GS | PUT308GS | PUT308GS | 3513 | 3513 |
|---|---|---|---|---|---|---|
| Sample date -> | 2/21/2007 | 2/21/2007 | 2/26/2007 | 2/26/2007 | 2/20/2007 | 2/20/2007 |
| Taxon Name / SampleID/BenthID -> | 57322/36904/ Rep 1 | 57322/36904/ Rep 2 | 57431/36987/ Rep 1 | 57431/36987/ Rep 2 | 57324/36989/ Rep 1 | 57324/36989/ Rep 2 |
| Celina | - | - | - | - | - | - |
| Centroptilum triangulifer | - | - | - | - | - | - |
| Ceraclea | - | - | - | - | - | - |
| Ceratopogonidae | - | - | - | - | 1 | 2 |
| Cernotina | - | - | - | - | - | - |
| Chauliodes | - | - | - | - | - | - |
| Cheumatopsyche | 3 | 4 | 31 | 29 | - | - |
| Chimarra | - | - | - | 1 | - | - |
| Chironomus | - | - | - | - | - | - |
| Choroterpes basalis | - | - | - | - | - | - |
| Chrysomelidae | - | - | - | - | - | - |
| Cladotanytarsus | - | - | - | - | - | - |
| Cladotanytarsus cf. daviesi | - | - | - | - | 4 | 4 |
| Cladotanytarsus sp. d epler | - | - | - | - | - | 1 |
| Cladotanytarsus sp. f epler | - | - | - | - | - | - |
| Cladotanytarsus viridiventris | - | - | - | - | - | - |
| Clathrosperchon | - | - | - | 1 | - | - |
| Climacia areolaris | - | - | - | - | - | - |
| Clinotanypus | - | - | - | - | - | - |
| Coenagrionidae | - | - | - | - | - | - |
| Corbicula fluminea | - | 1 | - | - | 6 | 1 |
| Corydalidae | - | - | - | - | - | - |
| Corydalus cornutus | - | - | - | - | - | - |
| Corynoneura | - | - | - | - | - | - |
| Crangonyx | - | - | - | - | - | - |
| Cricotopus | - | - | - | - | - | - |
| Cricotopus bicinctus | - | - | - | - | 3 | - |
| Cricotopus or orthocladius | - | - | - | - | 1 | 2 |
| Cryptochironomus | - | - | - | - | - | 1 |
| Cryptotendipes | - | - | - | - | - | 1 |
| Curculionidae | - | - | - | - | - | - |
| Cyrnellus fraternus | - | - | - | - | - | - |
| Dasyhelea | - | - | - | - | - | - |
| Dero | - | - | - | - | - | - |
| Dero digitata complex | - | - | - | - | - | - |
| Dero flabelliger | - | - | - | - | - | - |
| Dero furcata | - | - | - | - | - | - |
| Dero pectinata | - | - | - | - | - | - |
| Desmopachria | - | - | - | - | - | - |
| Desserobdella phalera | - | - | - | - | - | - |
| Dicrotendipes | - | - | - | - | - | - |
| Dicrotendipes modestus | - | - | - | - | - | - |
| Dicrotendipes neomodestus | - | - | - | - | 13 | 7 |
| Dicrotendipes simpsoni | - | - | - | - | - | - |
| Dicrotendipes sp. a epler | - | - | - | - | - | - |
| Dineutus | - | - | - | - | - | - |
| Diplectrona | - | - | - | - | - | - |
| Djalmabatista pulcher | - | - | - | - | - | - |
| Dryopidae | - | - | - | - | - | - |
| Dubiraphia vittata | - | 1 | - | - | 1 | - |



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| As Calculated / STORET station -> | LEV502GS | LEV502GS | PUT308GS | PUT308GS | 3513 | 3513 |
|---|---|---|---|---|---|---|
| Sample date -> | 2/21/2007 | 2/21/2007 | 2/26/2007 | 2/26/2007 | 2/20/2007 | 2/20/2007 |
| | 57322/36904/ | 57322/36904/ | 57431/36987/ | 57431/36987/ | 57324/36989/ | 57324/36989/ |
| Taxon Name / SampleID/BenthID -> | Rep 1 | Rep 2 | Rep 1 | Rep 2 | Rep 1 | Rep 2 |
| Dytiscidae | - | - | - | - | - | - |
| Eclipidrilus | - | - | - | - | - | - |
| Eclipidrilus palustris | - | - | - | - | - | - |
| Ectopria | - | - | - | - | - | - |
| Ectopria thoracica | - | - | - | - | - | - |
| Einfeldia sp. a epler | - | - | - | - | - | - |
| Elimia | - | - | - | - | - | - |
| Elmidae | - | - | - | - | - | - |
| Enallagma | - | - | 2 | - | - | - |
| Enallagma coecum | - | - | - | - | - | - |
| Enchytraeidae | 1 | - | - | - | - | - |
| Endotribelos hesperium | - | - | - | - | - | - |
| Enochrus | - | - | - | - | - | - |
| Epicordulia princeps regina | - | - | - | - | - | - |
| Eurylophella doris | - | - | - | - | - | - |
| Ferrissia | 3 | - | - | - | - | - |
| Gastropoda | - | - | - | - | - | - |
| Geayia | - | - | - | - | - | - |
| Gerridae | - | - | - | - | - | - |
| Glossiphoniidae | - | - | - | - | - | - |
| Goeldichironomus | - | - | - | - | - | - |
| Goeldichironomus cf. natans | - | - | - | - | - | - |
| Goeldichironomus holoprasinus | - | - | - | - | - | - |
| Gomphidae | - | - | - | - | - | - |
| Gomphus | 1 | 1 | - | - | - | - |
| Gonielmis dietrichi | - | - | - | - | - | - |
| Gyrinidae | - | - | - | - | - | - |
| Gyrinus | - | - | - | - | - | - |
| Haemonais waldvogeli | - | - | - | - | - | - |
| Hagenius brevistylus | - | - | - | - | - | - |
| Haitia | - | - | 1 | - | - | - |
| Hayesomyia senata | - | - | - | - | - | - |
| Helichus | - | - | - | - | - | - |
| Helichus lithophilus | - | - | - | - | - | - |
| Helobdella stagnalis | - | - | - | - | - | 3 |
| Helobdella triserialis | - | - | - | - | - | - |
| Hemerodromia | 1 | - | - | - | - | - |
| Heptageniidae | - | - | - | - | - | - |
| Hetaerina | 1 | 3 | - | - | - | - |
| Hetaerina titia | - | - | - | - | - | - |
| Hexagenia | - | - | - | - | - | - |
| Hexatoma | - | - | - | - | - | - |
| Hirudinea | - | - | - | - | - | - |
| Hyalella azteca | - | - | - | - | 3 | 6 |
| Hydraena | - | - | - | - | - | - |
| Hydrobiidae | - | - | - | - | 2 | - |
| Hydrodroma | - | - | - | - | - | - |
| Hydrometra | - | - | - | - | - | - |
| Hydrophilidae | - | - | - | - | - | - |
| Hydropsyche | - | - | 5 | - | 6 | 1 |



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| As Calculated / STORET station -> | LEV502GS | LEV502GS | PUT308GS | PUT308GS | 3513 | 3513 |
|---|---|---|---|---|---|---|
| Sample date -> | 2/21/2007 | 2/21/2007 | 2/26/2007 | 2/26/2007 | 2/20/2007 | 2/20/2007 |
| Taxon Name / SampleID/BenthID -> | 57322/36904/ Rep 1 | 57322/36904/ Rep 2 | 57431/36987/ Rep 1 | 57431/36987/ Rep 2 | 57324/36989/ Rep 1 | 57324/36989/ Rep 2 |
| Hydropsyche incommoda | - | - | - | - | - | - |
| Hydropsyche mississippiensis | - | - | - | - | - | - |
| Hydroptila | - | - | - | - | 13 | 8 |
| Hydrovatus | - | - | - | - | - | - |
| Hygrobates | - | - | 1 | - | - | - |
| Ischnura | - | - | - | - | - | - |
| Isonychia | - | - | - | - | - | - |
| Kiefferulus | - | - | - | - | - | - |
| Koenikea | - | - | - | - | - | - |
| Krendowskia | - | - | - | - | - | - |
| Labrundinia | - | - | - | - | - | - |
| Labrundinia becki | - | - | - | - | - | - |
| Labrundinia johannseni | - | - | - | - | - | - |
| Labrundinia pilosella | - | 1 | - | - | - | - |
| Labrundinia sp. 3 nr. virescens | - | - | - | - | - | - |
| Laccophilus | - | - | - | - | - | - |
| Laevapex | - | 2 | - | - | - | - |
| Larsia | - | - | - | - | - | - |
| Larsia decolorata | - | - | - | - | - | - |
| Lauterborniella agrayloides | - | - | - | - | - | - |
| Lebertia | - | - | - | - | 1 | 1 |
| Lepidoptera | - | - | - | - | - | - |
| Lepidostoma | - | - | - | - | - | - |
| Leptophlebiidae | - | - | - | - | 1 | - |
| Leuctra | - | - | - | - | - | - |
| Libellulidae | - | - | - | - | - | - |
| Limnesia | - | - | - | - | - | - |
| Limnodrilus hoffmeisteri | - | - | - | - | - | 3 |
| Lioporeus | - | - | - | - | - | - |
| Lirceus | 15 | 14 | - | - | - | - |
| Lopescladius | - | - | - | - | - | - |
| Lumbriculus variegatus | - | - | - | - | - | - |
| Lymnaeidae | - | - | - | - | 1 | - |
| Lype diversa | - | - | - | - | - | - |
| Maccaffertium | - | - | - | - | - | - |
| Maccaffertium exiguum | 8 | 6 | - | - | 1 | - |
| Maccaffertium smithae | 5 | 9 | 5 | 4 | - | - |
| Macromia | 1 | - | - | - | - | - |
| Macromia illinoiensis georgina | - | - | - | - | - | - |
| Macronychus glabratus | 3 | 2 | 1 | 2 | - | 1 |
| Macrostemum carolina | - | - | - | - | - | - |
| Mayatrichia ayama | - | - | - | - | 2 | - |
| Megistocera | - | - | - | - | - | - |
| Mesonoterus | - | - | - | - | - | - |
| Mesovelia | - | - | - | - | - | - |
| Micrasema | - | - | - | - | - | - |
| Microcylloepus pusillus | 4 | 9 | 13 | 25 | - | - |
| Micromenetus | 6 | 2 | - | - | - | - |
| Micromenetus dilatatus avus | - | - | - | - | - | - |
| Micropsectra | - | - | - | - | - | - |



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| As Calculated / STORET station -> | LEV502GS | LEV502GS | PUT308GS | PUT308GS | 3513 | 3513 |
|---|---|---|---|---|---|---|
| Sample date -> | 2/21/2007 | 2/21/2007 | 2/26/2007 | 2/26/2007 | 2/20/2007 | 2/20/2007 |
| Taxon Name / SampleID/BenthID -> | 57322/36904/ Rep 1 | 57322/36904/ Rep 2 | 57431/36987/ Rep 1 | 57431/36987/ Rep 2 | 57324/36989/ Rep 1 | 57324/36989/ Rep 2 |
| Microtendipes | - | - | - | - | - | - |
| Microtendipes pedellus grp. | - | - | - | - | - | - |
| Microtendipes rydalensis grp. | - | - | - | - | - | - |
| Microvelia | - | - | - | - | - | - |
| Mideopsis | - | - | 1 | - | - | - |
| Momonia | - | - | - | - | - | - |
| Monopelopia | - | - | - | - | - | - |
| Mooreobdella | - | - | - | - | - | - |
| Naididae | - | - | - | - | - | - |
| Nais communis complex | - | - | - | - | - | - |
| Nais(animal) | - | - | - | - | - | - |
| Nanocladius | - | - | - | - | 1 | - |
| Nectopsyche | - | - | - | - | - | - |
| Nectopsyche exquisita | - | 2 | - | - | - | 1 |
| Nectopsyche pavida | - | - | - | - | - | - |
| Neoephemera | - | - | - | - | - | - |
| Neoperla | - | - | - | - | - | - |
| Neoplasta | - | - | - | - | - | - |
| Neoplea | - | - | - | - | - | - |
| Neoporus | - | - | - | - | - | - |
| Neotrichia | - | - | 2 | 2 | 3 | 1 |
| Neureclipsis | 1 | - | - | - | - | - |
| Neureclipsis crepuscularis | - | - | - | - | - | - |
| Neurocordulia | - | - | - | - | - | - |
| Neurocordulia alabamensis | - | - | - | 1 | - | - |
| Nigronia | - | - | - | - | - | - |
| Nigronia serricornis | - | - | - | - | - | - |
| Nilotanypus americanus | - | - | - | - | - | - |
| Nilotanypus fimbriatus | - | - | - | - | - | - |
| Nilothauma | - | - | - | - | - | - |
| Notomicrus nanulus | - | - | - | - | - | - |
| Nyctiophylax | - | - | - | - | - | - |
| Oecetis | - | - | - | - | 2 | - |
| Oecetis avara | - | - | - | - | - | - |
| Oecetis cinerascens | - | 2 | - | - | - | - |
| Oecetis georgia | - | - | - | 3 | - | - |
| Oecetis sphyra/morsei | - | - | - | - | - | - |
| Ora/scirtes | - | - | - | - | - | - |
| Oribatida | - | - | - | - | - | - |
| Ormosia | - | - | - | - | - | - |
| Orthocladius annectens | - | - | 1 | - | - | - |
| Orthotrichia | - | - | - | - | - | - |
| Oxus | - | - | - | - | - | - |
| Oxyethira | - | - | - | - | - | 1 |
| Pachydiplax longipennis | - | - | - | - | - | - |
| Palaemonetes | - | - | - | - | - | 1 |
| Palpomyia/bezzia grp. | - | - | - | - | - | - |
| Parachaetocladius abnobaeus | - | - | - | - | - | - |
| Parachironomus | - | - | - | - | - | - |
| Parachironomus chaetoalus complex | - | - | - | - | - | - |



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| As Calculated / STORET station -> | LEV502GS | LEV502GS | PUT308GS | PUT308GS | 3513 | 3513 |
|---|---|---|---|---|---|---|
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| Taxon Name / SampleID/BenthID -> | 57322/36904/ Rep 1 | 57322/36904/ Rep 2 | 57431/36987/ Rep 1 | 57431/36987/ Rep 2 | 57324/36989/ Rep 1 | 57324/36989/ Rep 2 |
| Parachironomus supparilis | - | - | - | - | - | - |
| Paracladopelma | - | - | - | - | - | - |
| Paracymus | - | - | - | - | - | - |
| Parakiefferiella sp. b epler | - | - | - | - | - | - |
| Parakiefferiella sp. f epler | - | - | - | - | - | 2 |
| Paralauterborniella nigrohalterale | - | - | - | - | - | - |
| Paraleptophlebia volitans | - | - | 3 | 6 | - | - |
| Paramerina | - | - | - | - | - | - |
| Parametriocnemus | - | - | - | - | - | - |
| Paratanytarsus | - | - | - | - | - | - |
| Paratanytarsus dissimilis | - | - | - | - | - | - |
| Paratanytarsus quadratus | - | - | - | - | - | - |
| Paratendipes subaequalis | - | - | - | - | - | - |
| Pelonomus obscurus | - | - | - | - | - | - |
| Peltodytes | - | - | - | - | - | - |
| Peltodytes dietrichi | - | - | - | - | - | - |
| Pentaneura inconspicua | - | - | 1 | - | 1 | 2 |
| Perlesta placida complex | - | - | - | - | - | - |
| Perlinella drymo | - | - | - | - | - | - |
| Phaenopsectra flavipes | - | - | - | - | - | - |
| Phylocentropus | - | - | - | - | - | - |
| Physa | - | - | - | - | - | - |
| Physidae | - | - | - | - | - | - |
| Pilaria | - | - | - | - | - | - |
| Placobdella | - | - | - | - | - | - |
| Planorbella | - | - | - | - | - | - |
| Planorbidae | - | - | - | - | 1 | - |
| Platyhelminthes | 2 | 1 | - | - | - | - |
| Plauditus | - | - | - | - | - | - |
| Plauditus bimaculatus | - | - | - | - | - | - |
| Plecoptera | - | - | - | - | - | - |
| Polycentropodidae | - | - | - | - | - | - |
| Polycentropus | - | 2 | - | - | - | - |
| Polypedilum aviceps | - | - | - | - | - | - |
| Polypedilum fallax | - | - | - | - | - | - |
| Polypedilum flavum | 18 | 9 | 27 | 31 | 10 | 9 |
| Polypedilum halterale grp. | - | - | - | - | - | 1 |
| Polypedilum illinoense grp. | - | - | 1 | - | - | - |
| Polypedilum scalaenum grp. | 1 | - | - | - | 11 | 19 |
| Polypedilum sp. a epler | - | - | - | - | - | - |
| Polypedilum trigonus | - | - | - | - | - | - |
| Polypedilum tritum | - | - | - | - | - | - |
| Potthastia | - | - | - | - | - | - |
| Potthastia longimana | - | - | - | - | - | - |
| Pristina | - | - | - | - | - | - |
| Procambarus | - | - | - | - | - | - |
| Procladius | - | - | - | - | - | - |
| Procloeon | - | - | - | - | - | - |
| Progomphus | - | - | - | - | - | - |
| Progomphus obscurus | - | - | - | - | - | - |



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| As Calculated / STORET station -> | LEV502GS | LEV502GS | PUT308GS | PUT308GS | 3513 | 3513 |
|---|---|---|---|---|---|---|
| Sample date -> | 2/21/2007 | 2/21/2007 | 2/26/2007 | 2/26/2007 | 2/20/2007 | 2/20/2007 |
| Taxon Name / SampleID/BenthID -> | 57322/36904/ Rep 1 | 57322/36904/ Rep 2 | 57431/36987/ Rep 1 | 57431/36987/ Rep 2 | 57324/36989/ Rep 1 | 57324/36989/ Rep 2 |
| Promoresia tardella | - | - | - | - | - | - |
| Prostoma | - | - | - | - | - | - |
| Psectrocladius | - | - | - | - | - | - |
| Pseudochironomus | - | - | - | - | - | - |
| Pseudocloeon | - | 1 | - | - | 1 | - |
| Pseudocloeon ephippiatum | - | - | - | - | - | - |
| Pseudocloeon frondale | - | - | 3 | 3 | - | - |
| Pseudocloeon propinquum | - | - | - | - | - | - |
| Pseudolimnophila | - | - | - | - | - | - |
| Psychodidae | - | - | - | - | - | - |
| Pteronarcys dorsata | - | - | - | - | - | - |
| Pyralidae | - | - | - | - | - | - |
| Rheocricotopus robacki | - | 2 | 7 | 6 | - | 1 |
| Rheotanytarsus | - | - | - | - | - | - |
| Rheotanytarsus exiguus grp. | - | - | 2 | 1 | - | - |
| Rheotanytarsus pellucidus | - | 1 | 3 | 5 | - | - |
| Rhyncholimnochares | - | - | - | - | - | - |
| Robackia claviger | - | - | - | - | - | - |
| Serratella deficiens | - | - | - | - | - | - |
| Sialis | - | - | - | - | - | - |
| Simulium | 68 | 66 | - | - | - | 1 |
| Simulium jonesi | - | - | 24 | 18 | - | - |
| Sisyra | - | - | - | - | - | - |
| Slavina appendiculata | - | - | - | - | - | - |
| Sperchon | - | - | - | - | - | - |
| Sperchonopsis | - | - | - | - | - | - |
| Sperchopsis | - | - | - | - | - | - |
| Sperchopsis tessellatus | - | - | - | - | - | - |
| Sphaeriidae(mollusca) | 2 | 7 | - | - | - | - |
| Spirosperma | - | - | - | - | - | - |
| Staphylinidae | - | - | - | - | - | - |
| Stelechomyia perpulchra | - | - | - | - | - | - |
| Stempellina | - | - | - | - | - | - |
| Stempellinella | - | - | - | - | - | - |
| Stempellinella fimbriata | - | - | - | - | - | - |
| Stempellinella leptocelloides | - | - | - | - | - | - |
| Stenacron | - | 1 | - | - | - | - |
| Stenacron interpunctatum | - | - | - | - | - | - |
| Stenelmis | - | - | 2 | 3 | 8 | 4 |
| Stenochironomus | - | 1 | 1 | - | - | - |
| Stenus | - | - | - | - | - | - |
| Stephensoniana trivandrana | - | - | - | - | - | - |
| Stratiomyidae | - | - | - | - | - | - |
| Sympetrum | - | - | - | - | - | - |
| Tabanidae | - | - | - | - | - | - |
| Taeniopteryx | - | - | - | - | - | - |
| Tanytarsus | - | - | - | - | - | - |
| Tanytarsus sp. a epler | - | - | - | - | 1 | 5 |
| Tanytarsus sp. c epler | - | - | - | - | 5 | 7 |
| Tanytarsus sp. d epler | - | - | 3 | - | - | - |



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| As Calculated / STORET station -> | LEV502GS | LEV502GS | PUT308GS | PUT308GS | 3513 | 3513 |
|---|---|---|---|---|---|---|
| Sample date -> | 2/21/2007 | 2/21/2007 | 2/26/2007 | 2/26/2007 | 2/20/2007 | 2/20/2007 |
| Taxon Name / SampleID/BenthID -> | 57322/36904/ Rep 1 | 57322/36904/ Rep 2 | 57431/36987/ Rep 1 | 57431/36987/ Rep 2 | 57324/36989/ Rep 1 | 57324/36989/ Rep 2 |
| Tanytarsus sp. e epler | - | - | - | - | - | - |
| Tanytarsus sp. f epler | - | - | - | - | - | - |
| Tanytarsus sp. l epler | - | - | 1 | - | - | - |
| Tanytarsus sp. m epler | - | - | 2 | 2 | - | - |
| Tanytarsus sp. n epler | - | - | - | - | - | - |
| Tanytarsus sp. o epler | - | - | - | - | - | - |
| Tanytarsus sp. p epler | - | - | - | - | 2 | 1 |
| Tanytarsus sp. s epler | - | - | - | - | - | - |
| Tanytarsus sp. t epler | - | - | - | - | 1 | - |
| Tanytarsus sp. y epler | - | - | - | - | 3 | 1 |
| Thienemanniella | - | - | - | - | - | - |
| Thienemanniella lobapodema | - | - | - | - | - | - |
| Thienemanniella similis | - | - | - | - | - | - |
| Thienemanniella xena | - | - | - | 1 | 1 | - |
| Thienemannimyia grp. | - | - | 1 | - | - | - |
| Tipula | - | - | - | - | - | - |
| Tipula caloptera | - | - | - | - | - | - |
| Tipulidae | - | - | - | - | - | - |
| Torrenticola | - | - | - | - | - | - |
| Triaenodes | - | 1 | - | 1 | - | - |
| Triaenodes ignitus | - | - | - | - | - | - |
| Triaenodes perna/helo | - | - | - | - | - | - |
| Tribelos | - | - | - | - | - | - |
| Tribelos fuscicornis | - | - | - | - | - | - |
| Tribelos jucundum | - | - | - | - | - | - |
| Tricorythodes albilineatus | - | - | - | - | 31 | 42 |
| Tubificidae | - | - | - | - | 1 | - |
| Tvetenia | - | - | - | - | - | - |
| Tvetenia vitracies | - | - | - | - | - | - |
| Vertigo | - | - | - | - | - | - |
| Viviparus georgianus | - | - | - | - | - | - |
| Xenochironomus xenolabis | - | - | - | 1 | - | - |
| Xestochironomus | 2 | - | - | - | - | - |
| Xylotopus par | - | - | - | - | - | - |
| Zavreliella marmorata | - | - | - | - | - | - |
| Zavrelimyia sp. a epler | - | - | - | - | - | - |

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| As Calculated / STORET station -> | 3545 | 3545 | 21202 | 21202 | 3535 | 3535 |
|---|---|---|---|---|---|---|
| Sample date -> | 3/26/2007 | 3/26/2007 | 3/1/2007 | 3/1/2007 | 10/10/2006 | 10/10/2006 |
| Taxon Name / SampleID/BenthID -> | 59773/38075/ Rep 1 | 59773/38075/ Rep 2 | 60301/38292/ Rep 1 | 60301/38292/ Rep 2 | 60308/38307/ Rep 1 | 60308/38307/ Rep 2 |
| Ablabesmyia mallochi | 1 | 1 | 9 | 4 | 2 | 1 |
| Ablabesmyia rhamphe grp. | 2 | 1 | 1 | - | - | - |
| Acentrella | - | - | - | - | - | - |
| Acentrella parvula | - | - | - | - | - | - |
| Acerpenna pygmaea | - | - | 9 | 10 | - | - |
| Acroneuria | - | - | - | - | - | - |
| Acroneuria abnormis | - | - | - | - | - | - |
| Acroneuria lycorias | - | - | - | - | - | - |
| Agnetina annulipes | - | - | - | - | - | - |
| Allonais inaequalis | - | - | - | - | - | - |
| Amnicola | - | - | - | - | - | - |
| Amphipoda | - | - | - | - | - | - |
| Ancylidae | - | - | - | 1 | - | - |
| Ancyronyx variegatus | - | - | - | 3 | - | - |
| Anisocentropus pyraloides | - | - | - | - | - | - |
| Apedilum | - | - | - | - | - | - |
| Argia | 2 | - | - | - | - | - |
| Argia fumipennis | - | - | 1 | 1 | - | - |
| Argia tibialis | - | - | - | - | - | - |
| Arrenurus | - | - | - | - | - | - |
| Asioplax | - | - | - | - | - | - |
| Atherix | - | - | - | - | - | - |
| Atractides | - | - | - | - | - | - |
| Atrichopogon | - | - | 2 | - | - | 1 |
| Aulodrilus pigueti | - | - | - | - | - | - |
| Baetidae | - | - | - | - | - | - |
| Baetis intercalaris | - | - | - | - | - | - |
| Baetisca becki | 1 | 1 | - | - | - | - |
| Baetisca rogersi | - | - | - | - | - | - |
| Beardius | - | - | - | - | - | - |
| Berosus | - | - | - | - | - | - |
| Bivalvia | - | - | - | - | - | - |
| Boyeria vinosa | - | - | - | - | - | - |
| Brachycentrus chelatus | - | - | - | - | - | - |
| Brachycentrus numerosus | - | - | - | - | - | - |
| Branchiobdellidae | - | - | - | - | - | - |
| Bratislavia unidentata | - | - | - | - | - | - |
| Brillia | - | - | - | - | - | - |
| Caecidotea | - | 1 | 3 | 7 | - | - |
| Caenis | - | - | 1 | - | 4 | - |
| Caenis diminuta | - | - | - | - | - | - |
| Caenis eglinensis | - | - | - | - | - | - |
| Caenis hilaris | - | - | - | - | - | - |
| Callibaetis | - | - | - | - | - | - |
| Callibaetis floridanus | - | - | - | - | - | - |
| Calopterygidae | - | - | - | - | - | - |
| Calopteryx | - | - | - | - | - | - |
| Cambaridae | - | - | - | - | - | - |
| Campeloma | - | - | - | 2 | - | - |
| Cecidomyiidae | - | - | - | - | - | - |



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| As Calculated / STORET station -> | 3545 | 3545 | 21202 | 21202 | 3535 | 3535 |
|---|---|---|---|---|---|---|
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| Taxon Name / SampleID/BenthID -> | 59773/38075/ Rep 1 | 59773/38075/ Rep 2 | 60301/38292/ Rep 1 | 60301/38292/ Rep 2 | 60308/38307/ Rep 1 | 60308/38307/ Rep 2 |
| Celina | - | - | - | - | - | - |
| Centroptilum triangulifer | - | - | - | - | - | - |
| Ceraclea | - | - | - | - | - | - |
| Ceratopogonidae | 11 | 11 | - | - | - | - |
| Cernotina | - | - | - | - | - | - |
| Chauliodes | - | - | - | - | - | - |
| Cheumatopsyche | 1 | - | 9 | 5 | - | - |
| Chimarra | - | 1 | - | - | - | - |
| Chironomus | - | - | - | - | - | - |
| Choroterpes basalis | - | - | - | - | - | - |
| Chrysomelidae | - | - | - | - | - | - |
| Cladotanytarsus | - | - | - | - | 1 | 1 |
| Cladotanytarsus cf. daviesi | - | - | - | - | - | - |
| Cladotanytarsus sp. d epler | - | - | - | - | - | - |
| Cladotanytarsus sp. f epler | - | - | - | - | - | - |
| Cladotanytarsus viridiventris | - | - | - | - | - | - |
| Clathrosperchon | - | - | - | - | - | - |
| Climacia areolaris | - | - | - | - | - | - |
| Clinotanypus | - | - | - | - | - | - |
| Coenagrionidae | - | - | - | - | - | 1 |
| Corbicula fluminea | - | - | 2 | 3 | - | - |
| Corydalidae | - | - | - | - | - | - |
| Corydalus cornutus | - | - | - | - | - | - |
| Corynoneura | - | - | - | - | - | - |
| Crangonyx | - | - | - | - | - | - |
| Cricotopus | 1 | - | - | - | 2 | 1 |
| Cricotopus bicinctus | - | - | 1 | 1 | - | - |
| Cricotopus or orthocladius | - | - | - | - | - | - |
| Cryptochironomus | - | - | - | - | - | - |
| Cryptotendipes | - | - | - | - | - | - |
| Curculionidae | - | - | - | - | - | - |
| Cyrnellus fraternus | - | - | - | - | 2 | 1 |
| Dasyhelea | - | - | - | - | - | - |
| Dero | - | - | - | - | - | - |
| Dero digitata complex | - | - | - | - | - | - |
| Dero flabelliger | - | - | - | - | - | - |
| Dero furcata | - | - | - | - | - | - |
| Dero pectinata | - | - | - | - | - | - |
| Desmopachria | - | - | - | - | - | - |
| Desserobdella phalera | - | - | - | - | - | - |
| Dicrotendipes | - | - | - | - | - | - |
| Dicrotendipes modestus | - | - | - | - | - | - |
| Dicrotendipes neomodestus | - | - | - | - | 33 | 25 |
| Dicrotendipes simpsoni | - | - | - | - | - | - |
| Dicrotendipes sp. a epler | - | - | - | - | - | - |
| Dineutus | - | - | - | - | - | - |
| Diplectrona | - | - | - | - | - | - |
| Djalmabatista pulcher | - | - | 1 | - | - | - |
| Dryopidae | - | - | - | - | - | - |
| Dubiraphia vittata | - | 1 | - | - | - | - |



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| As Calculated / STORET station -> | 3545 | 3545 | 21202 | 21202 | 3535 | 3535 |
|---|---|---|---|---|---|---|
| Sample date -> | 3/26/2007 | 3/26/2007 | 3/1/2007 | 3/1/2007 | 10/10/2006 | 10/10/2006 |
| Taxon Name / SampleID/BenthID -> | 59773/38075/ Rep 1 | 59773/38075/ Rep 2 | 60301/38292/ Rep 1 | 60301/38292/ Rep 2 | 60308/38307/ Rep 1 | 60308/38307/ Rep 2 |
| Dytiscidae | - | - | - | - | - | - |
| Eclipidrilus | - | - | - | - | - | - |
| Eclipidrilus palustris | - | - | - | - | - | - |
| Ectopria | - | - | - | - | - | - |
| Ectopria thoracica | - | - | - | - | - | - |
| Einfeldia sp. a epler | - | - | - | - | - | - |
| Elimia | - | - | - | - | - | - |
| Elmidae | - | - | - | - | - | - |
| Enallagma | - | - | 1 | - | - | - |
| Enallagma coecum | - | - | - | - | - | - |
| Enchytraeidae | - | - | - | - | - | - |
| Endotribelos hesperium | - | - | - | - | - | - |
| Enochrus | - | - | - | - | - | - |
| Epicordulia princeps regina | - | - | - | - | - | - |
| Eurylophella doris | 1 | 3 | 1 | 1 | - | - |
| Ferrissia | - | - | - | - | - | - |
| Gastropoda | - | - | - | - | - | - |
| Geayia | - | - | - | - | - | - |
| Gerridae | - | - | - | - | - | - |
| Glossiphoniidae | - | - | - | - | - | - |
| Goeldichironomus | - | - | - | - | - | - |
| Goeldichironomus cf. natans | - | - | - | - | - | - |
| Goeldichironomus holoprasinus | - | - | - | - | - | - |
| Gomphidae | - | - | - | - | - | - |
| Gomphus | - | - | - | - | - | - |
| Gonielmis dietrichi | 5 | 4 | - | - | - | - |
| Gyrinidae | - | - | - | - | - | - |
| Gyrinus | - | - | - | - | - | - |
| Haemonais waldvogeli | - | - | - | - | - | - |
| Hagenius brevistylus | - | - | - | - | - | - |
| Haitia | - | - | 3 | 2 | - | - |
| Hayesomyia senata | - | - | - | - | - | - |
| Helichus | - | - | - | - | - | - |
| Helichus lithophilus | - | - | - | - | - | - |
| Helobdella stagnalis | - | - | - | - | - | - |
| Helobdella triserialis | - | - | - | - | - | - |
| Hemerodromia | 1 | - | - | - | - | 4 |
| Heptageniidae | - | 1 | - | - | - | - |
| Hetaerina | - | - | - | - | - | - |
| Hetaerina titia | - | - | - | - | - | - |
| Hexagenia | - | - | - | - | - | - |
| Hexatoma | - | - | - | - | - | - |
| Hirudinea | - | - | - | - | - | - |
| Hyalella azteca | - | - | 7 | 3 | - | - |
| Hydraena | - | - | - | - | - | - |
| Hydrobiidae | - | - | 2 | - | - | - |
| Hydrodroma | - | - | - | - | - | - |
| Hydrometra | - | - | - | - | - | - |
| Hydrophilidae | - | - | - | - | - | - |
| Hydropsyche | 4 | 3 | - | - | 3 | 2 |



US EPA ARCHIVE DOCUMENT

| As Calculated / STORET station -> | 3545 | 3545 | 21202 | 21202 | 3535 | 3535 |
|---|---|---|---|---|---|---|
| Sample date -> | 3/26/2007 | 3/26/2007 | 3/1/2007 | 3/1/2007 | 10/10/2006 | 10/10/2006 |
| Taxon Name / SampleID/BenthID -> | 59773/38075/ Rep 1 | 59773/38075/ Rep 2 | 60301/38292/ Rep 1 | 60301/38292/ Rep 2 | 60308/38307/ Rep 1 | 60308/38307/ Rep 2 |
| Hydropsyche incommoda | - | - | - | - | - | - |
| Hydropsyche mississippiensis | - | - | - | - | - | - |
| Hydroptila | 26 | 30 | - | - | 5 | 5 |
| Hydrovatus | - | - | - | - | - | - |
| Hygrobates | - | - | 2 | - | - | - |
| Ischnura | - | - | - | - | - | - |
| Isonychia | - | - | - | - | - | - |
| Kiefferulus | - | - | - | - | - | - |
| Koenikea | - | - | - | - | - | - |
| Krendowskia | - | - | - | - | - | - |
| Labrundinia | - | 1 | - | - | - | - |
| Labrundinia becki | - | - | 3 | - | - | - |
| Labrundinia johannseni | - | - | - | - | - | - |
| Labrundinia pilosella | - | - | - | - | - | - |
| Labrundinia sp. 3 nr. virescens | - | - | - | - | - | - |
| Laccophilus | - | - | - | - | - | - |
| Laevapex | - | - | - | - | - | - |
| Larsia | - | - | - | - | - | - |
| Larsia decolorata | - | - | - | - | - | - |
| Lauterborniella agrayloides | - | - | - | - | - | - |
| Lebertia | 1 | - | - | - | - | - |
| Lepidoptera | - | - | - | - | - | - |
| Lepidostoma | - | - | - | - | - | - |
| Leptophlebiidae | 11 | - | 1 | - | - | - |
| Leuctra | - | - | - | - | - | - |
| Libellulidae | - | - | - | - | - | - |
| Limnesia | - | - | - | - | - | - |
| Limnodrilus hoffmeisteri | - | - | - | - | - | - |
| Lioporeus | - | - | - | - | - | - |
| Lirceus | - | - | - | - | - | - |
| Lopescladius | - | - | - | - | - | - |
| Lumbriculus variegatus | - | - | - | - | - | - |
| Lymnaeidae | - | - | - | - | - | - |
| Lype diversa | - | - | - | - | - | - |
| Maccaffertium | - | - | 3 | - | 1 | - |
| Maccaffertium exiguum | - | - | - | - | - | 2 |
| Maccaffertium smithae | - | - | - | - | - | - |
| Macromia | - | - | - | - | - | - |
| Macromia illinoiensis georgina | - | - | - | - | - | - |
| Macronychus glabratus | - | - | 1 | - | - | - |
| Macrostemum carolina | - | - | - | - | 2 | 3 |
| Mayatrichia ayama | - | - | - | - | - | - |
| Megistocera | - | - | - | 1 | - | - |
| Mesonoterus | - | - | - | - | - | - |
| Mesovelia | - | - | - | - | - | - |
| Micrasema | 1 | 1 | - | - | - | - |
| Microcylloepus pusillus | - | - | 5 | 4 | - | - |
| Micromenetus | - | - | 4 | 14 | - | - |
| Micromenetus dilatatus avus | - | - | - | - | - | - |
| Micropsectra | - | - | - | - | - | - |



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| As Calculated / STORET station -> | 3545 | 3545 | 21202 | 21202 | 3535 | 3535 |
|---|---|---|---|---|---|---|
| Sample date -> | 3/26/2007 | 3/26/2007 | 3/1/2007 | 3/1/2007 | 10/10/2006 | 10/10/2006 |
| Taxon Name / SampleID/BenthID -> | 59773/38075/ Rep 1 | 59773/38075/ Rep 2 | 60301/38292/ Rep 1 | 60301/38292/ Rep 2 | 60308/38307/ Rep 1 | 60308/38307/ Rep 2 |
| Microtendipes | - | - | - | - | - | - |
| Microtendipes pedellus grp. | - | - | - | - | - | - |
| Microtendipes rydalensis grp. | 1 | 1 | - | - | - | - |
| Microvelia | - | - | - | - | - | - |
| Mideopsis | - | - | - | - | - | - |
| Momonia | - | - | - | - | - | - |
| Monopelopia | - | - | - | - | - | - |
| Mooreobdella | - | - | - | - | - | - |
| Naididae | - | - | - | - | - | - |
| Nais communis complex | - | - | - | - | - | - |
| Nais(animal) | - | - | - | - | - | - |
| Nanocladius | - | - | - | - | 1 | - |
| Nectopsyche | - | - | - | - | - | - |
| Nectopsyche exquisita | - | 1 | - | - | - | - |
| Nectopsyche pavida | - | - | - | - | - | - |
| Neoephemera | - | - | - | - | - | - |
| Neoperla | - | - | - | - | - | - |
| Neoplasta | - | - | - | - | - | - |
| Neoplea | - | - | - | - | - | - |
| Neoporus | - | - | - | 1 | - | - |
| Neotrichia | - | - | - | - | - | - |
| Neureclipsis | - | - | - | - | - | - |
| Neureclipsis crepuscularis | - | - | - | - | - | - |
| Neurocordulia | - | - | - | - | - | - |
| Neurocordulia alabamensis | - | - | - | - | - | - |
| Nigronia | - | - | - | - | - | - |
| Nigronia serricornis | - | - | - | - | - | - |
| Nilotanypus americanus | - | - | - | - | - | - |
| Nilotanypus fimbriatus | - | - | - | - | - | - |
| Nilothauma | - | - | - | - | - | 3 |
| Notomicrus nanulus | - | - | - | - | - | - |
| Nyctiophylax | - | - | - | - | - | - |
| Oecetis | - | - | - | - | 1 | - |
| Oecetis avara | - | - | - | - | - | - |
| Oecetis cinerascens | - | - | - | - | - | - |
| Oecetis georgia | - | - | 1 | - | - | - |
| Oecetis sphyra/morsei | - | - | - | - | - | - |
| Ora/scirtes | 1 | - | - | - | - | - |
| Oribatida | - | - | - | - | - | - |
| Ormosia | - | - | - | - | - | - |
| Orthocladius annectens | - | - | - | - | 1 | 1 |
| Orthotrichia | - | - | - | - | - | - |
| Oxus | - | - | - | - | - | - |
| Oxyethira | - | - | 2 | - | - | - |
| Pachydiplax longipennis | - | - | - | - | - | - |
| Palaemonetes | - | - | - | - | - | - |
| Palpomyia/bezzia grp. | - | - | - | - | - | - |
| Parachaetocladius abnobaeus | - | - | - | - | - | - |
| Parachironomus | - | - | - | - | - | - |
| Parachironomus chaetoalus complex | - | - | - | - | - | - |



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| As Calculated / STORET station -> | 3545 | 3545 | 21202 | 21202 | 3535 | 3535 |
|---|---|---|---|---|---|---|
| Sample date -> | 3/26/2007 | 3/26/2007 | 3/1/2007 | 3/1/2007 | 10/10/2006 | 10/10/2006 |
| Taxon Name / SampleID/BenthID -> | 59773/38075/ Rep 1 | 59773/38075/ Rep 2 | 60301/38292/ Rep 1 | 60301/38292/ Rep 2 | 60308/38307/ Rep 1 | 60308/38307/ Rep 2 |
| Parachironomus supparilis | - | - | - | - | - | - |
| Paracladopelma | 1 | - | - | - | - | - |
| Paracymus | - | - | - | - | - | - |
| Parakiefferiella sp. b epler | - | - | - | - | - | - |
| Parakiefferiella sp. f epler | - | - | - | - | - | - |
| Paralauterborniella nigrohalterale | - | - | - | - | - | - |
| Paraleptophlebia volitans | - | - | - | 1 | - | - |
| Paramerina | - | - | - | - | - | - |
| Parametriocnemus | 1 | 1 | - | - | - | - |
| Paratanytarsus | - | - | - | - | - | - |
| Paratanytarsus dissimilis | - | - | - | - | - | - |
| Paratanytarsus quadratus | - | - | - | - | - | - |
| Paratendipes subaequalis | - | - | - | - | - | - |
| Pelonomus obscurus | - | - | - | - | - | - |
| Peltodytes | - | - | - | - | - | - |
| Peltodytes dietrichi | - | - | - | - | - | - |
| Pentaneura inconspicua | - | - | - | - | - | - |
| Perlesta placida complex | - | 2 | - | - | - | - |
| Perlinella drymo | - | - | - | - | - | - |
| Phaenopsectra flavipes | - | - | 1 | - | - | - |
| Phylocentropus | - | - | 1 | - | - | - |
| Physa | - | - | - | - | - | - |
| Physidae | - | - | - | - | - | - |
| Pilaria | - | - | - | - | - | - |
| Placobdella | - | - | - | 1 | - | - |
| Planorbella | - | - | - | - | - | - |
| Planorbidae | - | - | - | - | - | - |
| Platyhelminthes | - | - | 1 | 2 | - | - |
| Plauditus | - | - | - | - | - | - |
| Plauditus bimaculatus | - | - | - | - | - | - |
| Plecoptera | 1 | - | - | - | - | - |
| Polycentropodidae | - | - | - | - | - | - |
| Polycentropus | - | - | - | 1 | - | - |
| Polypedilum aviceps | - | - | - | - | - | - |
| Polypedilum fallax | - | - | - | 4 | - | - |
| Polypedilum flavum | - | - | 21 | 10 | 7 | 1 |
| Polypedilum halterale grp. | - | - | - | - | - | - |
| Polypedilum illinoense grp. | - | - | 10 | 14 | - | - |
| Polypedilum scalaenum grp. | 4 | - | 2 | 3 | - | - |
| Polypedilum sp. a epler | - | - | - | - | - | - |
| Polypedilum trigonus | - | - | - | - | - | - |
| Polypedilum tritum | - | - | - | - | - | - |
| Potthastia | - | - | - | - | - | - |
| Potthastia longimana | - | - | - | - | - | - |
| Pristina | - | - | 1 | 2 | - | - |
| Procambarus | - | - | - | - | - | - |
| Procladius | - | - | 1 | - | - | - |
| Procloeon | - | - | - | - | - | - |
| Progomphus | - | - | - | - | - | - |
| Progomphus obscurus | - | - | - | - | - | - |



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| As Calculated / STORET station -> | 3545 | 3545 | 21202 | 21202 | 3535 | 3535 |
|---|---|---|---|---|---|---|
| Sample date -> | 3/26/2007 | 3/26/2007 | 3/1/2007 | 3/1/2007 | 10/10/2006 | 10/10/2006 |
| Taxon Name / SampleID/BenthID -> | 59773/38075/ Rep 1 | 59773/38075/ Rep 2 | 60301/38292/ Rep 1 | 60301/38292/ Rep 2 | 60308/38307/ Rep 1 | 60308/38307/ Rep 2 |
| Promoresia tardella | - | - | - | - | - | - |
| Prostoma | - | - | - | - | - | - |
| Psectrocladius | - | - | - | - | 6 | 9 |
| Pseudochironomus | 30 | 37 | - | - | - | - |
| Pseudocloeon | 3 | - | 3 | 2 | 3 | 1 |
| Pseudocloeon ephippiatum | - | - | - | - | - | - |
| Pseudocloeon frondale | - | - | - | - | - | - |
| Pseudocloeon propinquum | - | - | - | - | - | - |
| Pseudolimnophila | - | - | - | - | - | - |
| Psychodidae | - | - | - | - | - | - |
| Pteronarcys dorsata | - | - | - | - | - | - |
| Pyralidae | - | - | - | - | - | - |
| Rheocricotopus robacki | - | 1 | 1 | - | - | - |
| Rheotanytarsus | - | - | - | - | - | - |
| Rheotanytarsus exiguus grp. | 1 | - | 2 | 7 | - | - |
| Rheotanytarsus pellucidus | - | - | - | - | - | - |
| Rhyncholimnochares | - | - | - | - | - | - |
| Robackia claviger | - | - | - | - | - | - |
| Serratella deficiens | - | - | - | - | - | - |
| Sialis | - | - | - | - | - | - |
| Simulium | - | - | - | 3 | - | - |
| Simulium jonesi | - | - | - | - | - | - |
| Sisyra | - | - | - | - | - | - |
| Slavina appendiculata | - | - | - | - | - | - |
| Sperchon | - | - | - | - | - | - |
| Sperchonopsis | 4 | 2 | - | - | - | - |
| Sperchopsis | - | - | - | - | - | - |
| Sperchopsis tessellatus | 1 | - | - | - | - | - |
| Sphaeriidae(mollusca) | - | - | 1 | - | - | - |
| Spirosperma | - | - | - | - | - | - |
| Staphylinidae | - | - | - | - | - | - |
| Stelechomyia perpulchra | - | - | - | - | - | - |
| Stempellina | - | - | - | - | - | - |
| Stempellinella | - | - | - | - | - | - |
| Stempellinella fimbriata | - | - | 1 | - | - | - |
| Stempellinella leptocelloides | - | - | - | - | - | - |
| Stenacron | - | - | - | - | - | - |
| Stenacron interpunctatum | - | - | - | - | - | - |
| Stenelmis | 10 | 10 | 5 | 2 | 6 | - |
| Stenochironomus | - | - | - | - | - | - |
| Stenus | - | - | - | - | - | - |
| Stephensoniana trivandrana | - | - | - | - | - | - |
| Stratiomyidae | - | - | - | - | - | - |
| Sympetrum | - | - | - | - | - | - |
| Tabanidae | - | - | - | - | - | - |
| Taeniopteryx | - | - | - | - | - | - |
| Tanytarsus | - | - | - | - | - | - |
| Tanytarsus sp. a epler | - | - | - | 7 | - | - |
| Tanytarsus sp. c epler | - | - | 1 | 1 | - | - |
| Tanytarsus sp. d epler | 4 | 2 | - | - | 9 | 18 |



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| As Calculated / STORET station -> | 3545 | 3545 | 21202 | 21202 | 3535 | 3535 |
|---|---|---|---|---|---|---|
| Sample date -> | 3/26/2007 | 3/26/2007 | 3/1/2007 | 3/1/2007 | 10/10/2006 | 10/10/2006 |
| Taxon Name / SampleID/BenthID -> | 59773/38075/ Rep 1 | 59773/38075/ Rep 2 | 60301/38292/ Rep 1 | 60301/38292/ Rep 2 | 60308/38307/ Rep 1 | 60308/38307/ Rep 2 |
| Tanytarsus sp. e epler | - | - | - | - | - | - |
| Tanytarsus sp. f epler | - | - | - | - | - | - |
| Tanytarsus sp. l epler | 3 | 4 | 2 | - | - | - |
| Tanytarsus sp. m epler | - | - | 15 | 9 | - | - |
| Tanytarsus sp. n epler | - | - | - | - | - | - |
| Tanytarsus sp. o epler | - | - | - | - | - | - |
| Tanytarsus sp. p epler | - | - | 1 | 1 | - | - |
| Tanytarsus sp. s epler | - | - | - | - | - | - |
| Tanytarsus sp. t epler | - | - | - | 1 | - | - |
| Tanytarsus sp. y epler | - | - | - | - | - | - |
| Thienemanniella | - | - | 1 | - | - | - |
| Thienemanniella lobapodema | - | - | - | - | - | - |
| Thienemanniella similis | - | - | - | - | - | - |
| Thienemanniella xena | - | - | - | - | - | - |
| Thienemannimyia grp. | 12 | 17 | 1 | 5 | 17 | 7 |
| Tipula | - | - | - | - | - | - |
| Tipula caloptera | - | - | - | - | - | - |
| Tipulidae | - | - | - | - | - | - |
| Torrenticola | - | - | - | - | - | - |
| Triaenodes | - | - | - | - | - | - |
| Triaenodes ignitus | - | - | - | - | - | - |
| Triaenodes perna/helo | - | - | - | - | - | - |
| Tribelos | - | - | - | - | - | - |
| Tribelos fuscicornis | - | - | - | - | - | - |
| Tribelos jucundum | - | - | - | - | - | - |
| Tricorythodes albilineatus | - | - | - | - | - | - |
| Tubificidae | 2 | 1 | - | - | - | - |
| Tvetenia | - | - | - | - | - | - |
| Tvetenia vitracies | 9 | 6 | - | - | 39 | 54 |
| Vertigo | - | - | - | 2 | - | - |
| Viviparus georgianus | - | - | - | - | - | - |
| Xenochironomus xenolabis | 1 | - | - | 1 | - | - |
| Xestochironomus | - | - | - | - | - | - |
| Xylotopus par | - | - | - | - | - | - |
| Zavreliella marmorata | - | - | - | - | - | - |
| Zavrelimyia sp. a epler | - | - | - | 1 | - | - |

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| As Calculated / STORET station -> | 3546 | 3546 | 24010002 | 24010002 | 3549 | 3549 |
|---|---|---|---|---|---|---|
| Sample date -> | 5/15/2007 | 5/15/2007 | 5/16/2007 | 5/16/2007 | 9/19/2007 | 9/19/2007 |
| Taxon Name / SampleID/BenthID -> | 60639/38485/ Rep 1 | 60639/38485/ Rep 2 | 60751/38544/ Rep 1 | 60751/38544/ Rep 2 | 62733/39186/ Rep 1 | 62733/39186/ Rep 2 |
| Ablabesmyia mallochi | - | - | 2 | - | - | - |
| Ablabesmyia rhamphe grp. | - | - | 1 | - | - | 1 |
| Acentrella | - | - | - | - | - | - |
| Acentrella parvula | - | - | - | - | - | - |
| Acerpenna pygmaea | - | - | - | 2 | - | - |
| Acroneuria | - | - | - | - | - | - |
| Acroneuria abnormis | - | - | - | - | - | - |
| Acroneuria lycorias | - | - | - | - | - | - |
| Agnetina annulipes | - | - | - | - | - | - |
| Allonais inaequalis | - | - | - | - | - | - |
| Amnicola | - | - | - | - | - | - |
| Amphipoda | - | - | - | - | - | - |
| Ancylidae | 1 | - | - | 1 | 4 | 2 |
| Ancyronyx variegatus | - | 1 | - | - | - | - |
| Anisocentropus pyraloides | - | - | - | - | - | - |
| Apedilum | - | - | - | - | - | - |
| Argia | - | - | - | 3 | - | - |
| Argia fumipennis | - | - | - | - | - | - |
| Argia tibialis | - | - | - | - | - | - |
| Arrenurus | - | - | - | - | - | - |
| Asioplax | - | - | - | - | - | - |
| Atherix | - | - | - | - | - | - |
| Atractides | - | - | 1 | - | 1 | - |
| Atrichopogon | - | - | - | - | - | - |
| Aulodrilus pigueti | - | - | - | - | - | - |
| Baetidae | 2 | - | - | - | - | - |
| Baetis intercalaris | - | - | 1 | 2 | - | - |
| Baetisca becki | - | - | - | - | - | - |
| Baetisca rogersi | - | - | - | - | - | - |
| Beardius | - | - | - | - | - | - |
| Berosus | - | - | - | - | - | - |
| Bivalvia | - | - | - | - | - | - |
| Boyeria vinosa | 1 | - | - | - | - | - |
| Brachycentrus chelatus | - | - | - | - | - | - |
| Brachycentrus numerosus | - | - | - | - | - | - |
| Branchiobdellidae | - | - | - | - | - | - |
| Bratislavia unidentata | - | - | - | - | - | - |
| Brillia | - | - | - | - | - | - |
| Caecidotea | - | - | 1 | 4 | - | - |
| Caenis | 8 | 11 | - | - | - | - |
| Caenis diminuta | - | - | - | - | - | - |
| Caenis eglinensis | - | - | - | - | 14 | 26 |
| Caenis hilaris | - | - | - | 1 | - | - |
| Callibaetis | - | - | - | - | - | - |
| Callibaetis floridanus | - | - | - | - | - | - |
| Calopterygidae | - | - | - | - | - | - |
| Calopteryx | - | - | - | - | - | - |
| Cambaridae | - | - | - | - | - | - |
| Campeloma | - | - | - | - | - | - |
| Cecidomyiidae | - | - | - | - | - | - |



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| Taxon Name / SampleID/BenthID -> | 60639/38485/ Rep 1 | 60639/38485/ Rep 2 | 60751/38544/ Rep 1 | 60751/38544/ Rep 2 | 62733/39186/ Rep 1 | 62733/39186/ Rep 2 |
| Celina | - | - | - | - | - | - |
| Centroptilum triangulifer | - | - | - | - | - | - |
| Ceraclea | - | - | - | - | - | - |
| Ceratopogonidae | - | - | - | 1 | 2 | 2 |
| Cernotina | - | - | - | - | - | - |
| Chauliodes | - | - | - | - | - | - |
| Cheumatopsyche | - | - | 12 | 10 | - | - |
| Chimarra | - | - | - | - | 1 | 1 |
| Chironomus | - | - | - | - | - | - |
| Choroterpes basalis | - | - | - | - | - | - |
| Chrysomelidae | - | - | - | - | - | - |
| Cladotanytarsus | - | - | - | - | - | - |
| Cladotanytarsus cf. daviesi | - | - | - | - | 2 | 2 |
| Cladotanytarsus sp. d epler | - | - | - | - | - | - |
| Cladotanytarsus sp. f epler | - | - | - | - | 5 | 3 |
| Cladotanytarsus viridiventris | - | - | - | - | 16 | 10 |
| Clathrosperchon | - | - | - | - | - | - |
| Climacia areolaris | - | - | - | - | - | - |
| Clinotanypus | - | - | - | - | - | - |
| Coenagrionidae | - | - | - | - | - | - |
| Corbicula fluminea | 1 | 1 | 7 | 5 | 1 | 1 |
| Corydalidae | - | - | - | - | - | - |
| Corydalus cornutus | - | - | - | - | 1 | - |
| Corynoneura | - | - | - | 1 | - | - |
| Crangonyx | - | - | - | - | - | - |
| Cricotopus | - | - | - | - | - | - |
| Cricotopus bicinctus | - | - | - | 3 | - | - |
| Cricotopus or orthocladius | 1 | 2 | - | - | 10 | 17 |
| Cryptochironomus | - | - | 1 | - | 2 | - |
| Cryptotendipes | - | - | 1 | - | - | - |
| Curculionidae | - | - | - | - | - | - |
| Cyrnellus fraternus | - | - | - | - | - | - |
| Dasyhelea | - | - | - | - | - | - |
| Dero | - | - | - | 2 | - | - |
| Dero digitata complex | - | - | - | - | - | - |
| Dero flabelliger | - | - | - | - | - | - |
| Dero furcata | - | - | - | - | - | - |
| Dero pectinata | - | - | - | - | - | - |
| Desmopachria | - | - | - | - | - | - |
| Desserobdella phalera | - | - | - | - | - | - |
| Dicrotendipes | - | - | - | - | - | - |
| Dicrotendipes modestus | - | - | - | - | - | - |
| Dicrotendipes neomodestus | - | - | - | - | 25 | 14 |
| Dicrotendipes simpsoni | - | - | - | - | - | - |
| Dicrotendipes sp. a epler | - | - | - | - | - | - |
| Dineutus | - | 1 | - | - | - | - |
| Diplectrona | - | - | - | - | - | - |
| Djalmabatista pulcher | - | - | - | - | - | - |
| Dryopidae | - | - | - | - | - | - |
| Dubiraphia vittata | 2 | 1 | 2 | 3 | - | - |



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|---|---|---|---|---|---|---|
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| Taxon Name / SampleID/BenthID -> | 60639/38485/ Rep 1 | 60639/38485/ Rep 2 | 60751/38544/ Rep 1 | 60751/38544/ Rep 2 | 62733/39186/ Rep 1 | 62733/39186/ Rep 2 |
| Dytiscidae | - | - | - | - | - | - |
| Eclipidrilus | - | - | - | - | - | - |
| Eclipidrilus palustris | - | - | - | - | - | - |
| Ectopria | - | - | - | - | - | - |
| Ectopria thoracica | - | - | - | - | - | - |
| Einfeldia sp. a epler | - | - | - | - | - | - |
| Elimia | 29 | 19 | - | - | - | - |
| Elmidae | - | - | - | - | - | - |
| Enallagma | - | - | - | 5 | - | - |
| Enallagma coecum | - | - | 4 | - | - | - |
| Enchytraeidae | - | - | - | - | - | - |
| Endotribelos hesperium | - | - | - | - | - | - |
| Enochrus | - | - | - | - | - | - |
| Epicordulia princeps regina | - | - | - | - | - | - |
| Eurylophella doris | - | - | - | - | - | - |
| Ferrissia | - | - | - | - | - | - |
| Gastropoda | - | - | - | - | - | - |
| Geayia | - | - | - | - | - | - |
| Gerridae | - | - | - | - | - | - |
| Glossiphoniidae | - | - | - | - | - | - |
| Goeldichironomus | - | - | - | - | - | - |
| Goeldichironomus cf. natans | - | - | - | - | - | - |
| Goeldichironomus holoprasinus | - | - | - | - | - | - |
| Gomphidae | - | - | - | - | - | - |
| Gomphus | - | - | - | - | - | - |
| Gonielmis dietrichi | - | - | - | - | - | - |
| Gyrinidae | - | - | - | - | - | - |
| Gyrinus | - | - | - | - | - | - |
| Haemonais waldvogeli | - | - | - | - | - | - |
| Hagenius brevistylus | - | - | - | - | - | - |
| Haitia | 17 | 14 | - | - | - | - |
| Hayesomyia senata | - | - | - | - | - | - |
| Helichus | - | - | - | - | - | - |
| Helichus lithophilus | - | - | - | - | - | - |
| Helobdella stagnalis | - | - | - | - | - | - |
| Helobdella triserialis | - | - | - | - | - | - |
| Hemerodromia | 2 | - | - | - | - | - |
| Heptageniidae | - | 4 | - | - | - | - |
| Hetaerina | - | - | - | - | - | - |
| Hetaerina titia | - | - | - | - | - | - |
| Hexagenia | - | - | - | - | 1 | - |
| Hexatoma | - | - | - | - | - | - |
| Hirudinea | - | - | - | 1 | - | - |
| Hyalella azteca | 3 | 2 | - | - | - | - |
| Hydraena | - | - | - | - | - | - |
| Hydrobiidae | - | - | - | - | - | - |
| Hydrodroma | - | - | - | - | - | - |
| Hydrometra | - | - | - | - | - | - |
| Hydrophilidae | - | - | - | - | - | - |
| Hydropsyche | - | 4 | 3 | 2 | 11 | 12 |



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| Hydropsyche incommoda | - | - | - | - | - | - |
| Hydropsyche mississippiensis | - | - | - | - | - | - |
| Hydroptila | 4 | 6 | 1 | 2 | 14 | 12 |
| Hydrovatus | - | - | - | - | - | - |
| Hygrobates | - | - | - | 1 | - | - |
| Ischnura | - | - | - | - | - | - |
| Isonychia | - | - | - | - | - | 1 |
| Kiefferulus | - | - | - | - | - | - |
| Koenikea | - | - | - | - | - | - |
| Krendowskia | - | - | - | - | - | - |
| Labrundinia | - | - | - | - | - | - |
| Labrundinia becki | - | - | - | - | - | - |
| Labrundinia johannseni | - | - | - | - | - | - |
| Labrundinia pilosella | - | 1 | - | - | - | - |
| Labrundinia sp. 3 nr. virescens | - | - | - | - | - | - |
| Laccophilus | - | - | - | - | - | - |
| Laevapex | - | - | - | - | - | - |
| Larsia | - | - | - | - | - | - |
| Larsia decolorata | - | - | - | - | - | - |
| Lauterborniella agrayloides | - | - | - | - | - | - |
| Lebertia | - | - | - | 1 | - | - |
| Lepidoptera | - | - | - | - | - | - |
| Lepidostoma | - | - | - | - | - | - |
| Leptophlebiidae | 7 | 6 | - | - | - | - |
| Leuctra | - | - | - | - | - | - |
| Libellulidae | - | - | - | 1 | - | - |
| Limnesia | - | - | - | - | - | - |
| Limnodrilus hoffmeisteri | - | - | - | - | - | - |
| Lioporeus | - | - | - | - | - | - |
| Lirceus | - | - | - | - | - | - |
| Lopescladius | - | - | - | - | - | - |
| Lumbriculus variegatus | - | - | 1 | - | - | - |
| Lymnaeidae | - | - | - | - | - | - |
| Lype diversa | - | - | - | - | - | - |
| Maccaffertium | - | - | 7 | - | - | - |
| Maccaffertium exiguum | - | - | - | 4 | - | - |
| Maccaffertium smithae | - | - | - | - | - | - |
| Macromia | - | - | - | - | - | - |
| Macromia illinoiensis georgina | - | 1 | - | - | - | - |
| Macronychus glabratus | - | 1 | - | - | 2 | 3 |
| Macrostemum carolina | - | - | - | - | - | - |
| Mayatrichia ayama | - | - | - | - | - | - |
| Megistocera | - | - | - | - | - | - |
| Mesonoterus | - | - | - | - | - | - |
| Mesovelia | - | - | - | - | - | - |
| Micrasema | - | - | - | - | - | - |
| Microcylloepus pusillus | 5 | 6 | 11 | 17 | - | 1 |
| Micromenetus | - | - | - | 3 | - | - |
| Micromenetus dilatatus avus | - | - | 1 | - | - | - |
| Micropsectra | 1 | - | - | - | - | - |



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| Microtendipes | - | - | - | - | - | - |
| Microtendipes pedellus grp. | - | - | - | - | - | - |
| Microtendipes rydalensis grp. | 10 | 3 | - | - | - | - |
| Microvelia | - | - | - | - | - | - |
| Mideopsis | - | - | 1 | - | - | - |
| Momonia | - | - | - | - | - | - |
| Monopelopia | - | - | - | - | - | - |
| Mooreobdella | - | - | - | - | - | - |
| Naididae | - | - | - | - | - | - |
| Nais communis complex | - | - | - | - | - | - |
| Nais(animal) | - | - | - | - | - | - |
| Nanocladius | - | - | - | - | - | - |
| Nectopsyche | - | - | - | - | - | - |
| Nectopsyche exquisita | - | - | - | - | - | 1 |
| Nectopsyche pavida | - | - | - | - | - | - |
| Neoephemera | - | - | - | - | - | - |
| Neoperla | - | - | - | - | - | - |
| Neoplasta | - | - | - | - | - | - |
| Neoplea | - | - | - | - | - | - |
| Neoporus | - | - | - | - | - | - |
| Neotrichia | - | - | 3 | 3 | 1 | - |
| Neureclipsis | - | - | - | - | - | - |
| Neureclipsis crepuscularis | - | - | - | - | - | - |
| Neurocordulia | - | - | - | - | - | - |
| Neurocordulia alabamensis | - | - | - | - | - | - |
| Nigronia | - | - | - | - | - | - |
| Nigronia serricornis | - | - | - | - | - | - |
| Nilotanypus americanus | - | - | - | - | - | - |
| Nilotanypus fimbriatus | - | - | - | 1 | - | - |
| Nilothauma | - | - | - | - | - | - |
| Notomicrus nanulus | - | - | - | - | - | - |
| Nyctiophylax | - | - | - | - | - | - |
| Oecetis | 1 | - | - | - | - | - |
| Oecetis avara | - | - | - | - | - | - |
| Oecetis cinerascens | - | - | - | - | - | - |
| Oecetis georgia | - | - | - | - | - | - |
| Oecetis sphyra/morsei | - | - | - | - | 2 | 1 |
| Ora/scirtes | - | - | - | - | - | - |
| Oribatida | - | - | - | - | - | - |
| Ormosia | - | - | - | - | - | - |
| Orthocladius annectens | - | - | - | - | - | - |
| Orthotrichia | - | - | - | - | - | - |
| Oxus | - | - | - | - | - | - |
| Oxyethira | - | - | 1 | - | - | - |
| Pachydiplax longipennis | - | - | - | - | - | - |
| Palaemonetes | - | - | - | - | - | - |
| Palpomyia/bezzia grp. | - | - | - | - | - | - |
| Parachaetocladius abnobaeus | - | - | - | - | - | - |
| Parachironomus | - | - | - | - | - | - |
| Parachironomus chaetoalus complex | - | - | - | - | - | - |



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| Parachironomus supparilis | - | - | - | - | - | - |
| Paracladopelma | - | - | - | - | - | - |
| Paracymus | - | - | - | - | - | - |
| Parakiefferiella sp. b epler | - | - | - | - | - | - |
| Parakiefferiella sp. f epler | - | - | - | - | - | - |
| Paralauterborniella nigrohalterale | - | - | - | - | - | - |
| Paraleptophlebia volitans | - | - | - | - | - | - |
| Paramerina | - | - | - | - | - | - |
| Parametriocnemus | - | - | - | - | - | - |
| Paratanytarsus | 1 | - | - | - | - | - |
| Paratanytarsus dissimilis | - | - | - | - | - | - |
| Paratanytarsus quadratus | - | - | - | - | - | - |
| Paratendipes subaequalis | - | - | - | - | - | - |
| Pelonomus obscurus | - | - | - | - | - | - |
| Peltodytes | - | - | - | - | - | - |
| Peltodytes dietrichi | - | - | - | - | - | - |
| Pentaneura inconspicua | - | - | 1 | - | - | - |
| Perlesta placida complex | - | - | - | - | - | - |
| Perlinella drymo | - | - | - | - | - | - |
| Phaenopsectra flavipes | - | - | - | - | - | - |
| Phylocentropus | - | - | - | - | - | - |
| Physa | - | - | - | - | - | - |
| Physidae | - | - | - | - | - | 1 |
| Pilaria | - | - | - | - | - | - |
| Placobdella | - | - | - | - | - | - |
| Planorbella | - | - | - | - | - | - |
| Planorbidae | - | - | - | - | 1 | - |
| Platyhelminthes | - | - | - | - | - | - |
| Plauditus | - | - | - | - | - | - |
| Plauditus bimaculatus | - | - | - | - | - | - |
| Plecoptera | - | - | - | - | - | - |
| Polycentropodidae | - | 1 | - | 2 | - | - |
| Polycentropus | - | - | - | - | - | - |
| Polypedilum aviceps | - | - | - | - | - | - |
| Polypedilum fallax | - | - | - | 1 | - | - |
| Polypedilum flavum | 2 | - | 12 | 7 | 13 | 15 |
| Polypedilum halterale grp. | - | - | - | - | - | - |
| Polypedilum illinoense grp. | - | - | - | - | 1 | 2 |
| Polypedilum scalaenum grp. | - | - | 1 | 1 | 1 | 3 |
| Polypedilum sp. a epler | - | - | - | - | - | - |
| Polypedilum trigonus | - | - | - | - | - | - |
| Polypedilum tritum | - | - | - | - | - | - |
| Potthastia | - | - | - | - | - | - |
| Potthastia longimana | - | - | - | - | - | - |
| Pristina | - | - | - | - | - | - |
| Procambarus | - | 2 | - | - | - | - |
| Procladius | - | - | - | - | - | - |
| Procloeon | - | - | - | - | 4 | 5 |
| Progomphus | - | - | - | - | - | - |
| Progomphus obscurus | - | - | - | - | - | - |



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| Promoresia tardella | - | - | - | - | - | - |
| Prostoma | - | - | - | 1 | - | - |
| Psectrocladius | - | - | - | - | - | - |
| Pseudochironomus | 2 | 7 | - | - | 1 | - |
| Pseudocloeon | - | 6 | - | - | 2 | 3 |
| Pseudocloeon ephippiatum | - | - | - | - | - | - |
| Pseudocloeon frondale | - | - | - | - | - | - |
| Pseudocloeon propinquum | - | - | 1 | 1 | - | - |
| Pseudolimnophila | - | - | - | - | - | - |
| Psychodidae | - | - | - | - | - | - |
| Pteronarcys dorsata | - | - | - | - | - | - |
| Pyralidae | - | - | - | - | - | - |
| Rheocricotopus robacki | - | - | - | - | - | - |
| Rheotanytarsus | - | - | 36 | 33 | - | - |
| Rheotanytarsus exiguus grp. | 2 | 5 | - | - | - | - |
| Rheotanytarsus pellucidus | - | - | - | - | - | - |
| Rhyncholimnochares | - | - | - | - | - | - |
| Robackia claviger | - | - | - | - | - | - |
| Serratella deficiens | - | - | - | - | - | - |
| Sialis | - | - | - | - | - | - |
| Simulium | - | 1 | - | - | - | - |
| Simulium jonesi | - | - | - | - | - | - |
| Sisyra | - | - | - | - | - | - |
| Slavina appendiculata | - | - | 2 | - | - | - |
| Sperchon | - | - | - | - | - | - |
| Sperchonopsis | - | - | - | - | - | - |
| Sperchopsis | - | - | - | - | - | - |
| Sperchopsis tessellatus | - | - | - | - | - | - |
| Sphaeriidae(mollusca) | - | - | 2 | - | - | - |
| Spirosperma | - | - | - | - | - | - |
| Staphylinidae | - | - | - | - | - | - |
| Stelechomyia perpulchra | - | - | - | - | - | - |
| Stempellina | - | - | - | - | - | - |
| Stempellinella | - | - | - | - | - | - |
| Stempellinella fimbriata | - | - | - | - | - | - |
| Stempellinella leptocelloides | - | - | - | - | - | - |
| Stenacron | 2 | - | - | - | - | - |
| Stenacron interpunctatum | - | - | - | - | - | - |
| Stenelmis | - | - | 4 | 3 | - | 4 |
| Stenochironomus | - | - | - | - | 1 | - |
| Stenus | - | - | - | - | - | - |
| Stephensoniana trivandrana | - | - | - | - | - | - |
| Stratiomyidae | - | - | - | - | - | - |
| Sympetrum | - | - | - | - | - | - |
| Tabanidae | - | - | - | - | - | - |
| Taeniopteryx | - | - | - | - | - | - |
| Tanytarsus | - | - | - | - | - | - |
| Tanytarsus sp. a epler | 1 | - | - | - | - | - |
| Tanytarsus sp. c epler | 1 | 5 | 14 | 20 | - | 2 |
| Tanytarsus sp. d epler | - | - | - | - | - | - |



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| As Calculated / STORET station -> | 3546 | 3546 | 24010002 | 24010002 | 3549 | 3549 |
|---|---|---|---|---|---|---|
| Sample date -> | 5/15/2007 | 5/15/2007 | 5/16/2007 | 5/16/2007 | 9/19/2007 | 9/19/2007 |
| Taxon Name / SampleID/BenthID -> | 60639/38485/ Rep 1 | 60639/38485/ Rep 2 | 60751/38544/ Rep 1 | 60751/38544/ Rep 2 | 62733/39186/ Rep 1 | 62733/39186/ Rep 2 |
| Tanytarsus sp. e epler | - | - | 1 | - | - | - |
| Tanytarsus sp. f epler | - | - | - | - | - | - |
| Tanytarsus sp. l epler | - | 1 | 1 | - | - | - |
| Tanytarsus sp. m epler | 1 | 2 | - | 9 | - | - |
| Tanytarsus sp. n epler | - | - | - | - | - | - |
| Tanytarsus sp. o epler | - | - | - | - | - | - |
| Tanytarsus sp. p epler | - | - | - | - | - | - |
| Tanytarsus sp. s epler | - | - | - | - | - | - |
| Tanytarsus sp. t epler | - | - | 5 | 1 | - | - |
| Tanytarsus sp. y epler | - | - | - | - | - | - |
| Thienemanniella | - | - | - | - | - | - |
| Thienemanniella lobapodema | - | - | - | 1 | - | - |
| Thienemanniella similis | - | - | - | - | 1 | - |
| Thienemanniella xena | - | - | - | - | - | - |
| Thienemannimyia grp. | 1 | 1 | - | - | 1 | 1 |
| Tipula | - | - | - | - | - | - |
| Tipula caloptera | - | - | - | - | - | - |
| Tipulidae | - | - | - | - | - | - |
| Torrenticola | - | - | - | - | - | - |
| Triaenodes | 3 | 1 | - | - | - | - |
| Triaenodes ignitus | - | - | - | - | - | - |
| Triaenodes perna/helo | - | - | - | - | - | - |
| Tribelos | - | - | - | - | - | - |
| Tribelos fuscicornis | - | - | - | - | 1 | - |
| Tribelos jucundum | - | - | 1 | - | - | - |
| Tricorythodes albilineatus | 31 | 27 | - | - | 12 | 11 |
| Tubificidae | - | - | - | - | - | - |
| Tvetenia | - | - | - | - | - | - |
| Tvetenia vitracies | 1 | - | - | - | - | - |
| Vertigo | - | - | - | - | - | - |
| Viviparus georgianus | - | - | - | - | - | - |
| Xenochironomus xenolabis | 1 | - | - | - | - | - |
| Xestochironomus | - | - | - | - | - | - |
| Xylotopus par | - | - | - | - | - | - |
| Zavreliella marmorata | - | - | - | - | - | - |
| Zavrelimyia sp. a epler | - | - | - | - | - | - |

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| As Calculated / STORET station -> | 3513 | 3513 | 3535 | 3535 | LIB104LV | LIB104LV |
|---|---|---|---|---|---|---|
| Sample date -> | 11/7/2007 | 11/7/2007 | 12/12/2007 | 12/12/2007 | 6/10/2008 | 6/10/2008 |
| Taxon Name / SampleID/BenthID -> | 63694/39707/ Rep 1 | 63694/39707/ Rep 2 | 64191/40004/ Rep 1 | 64191/40004/ Rep 2 | 65025/40260/ Rep 1 | 65025/40260/ Rep 2 |
| Ablabesmyia mallochi | 1 | - | - | - | 1 | 1 |
| Ablabesmyia rhamphe grp. | - | - | - | - | - | - |
| Acentrella | - | - | - | - | - | - |
| Acentrella parvula | - | - | - | - | - | - |
| Acerpenna pygmaea | - | - | - | - | 1 | - |
| Acroneuria | - | - | - | - | - | - |
| Acroneuria abnormis | - | - | - | - | - | - |
| Acroneuria lycorias | - | - | - | - | - | - |
| Agnetina annulipes | - | - | - | - | - | - |
| Allonais inaequalis | - | - | - | - | - | - |
| Amnicola | - | - | - | - | - | - |
| Amphipoda | - | - | - | - | - | - |
| Ancylidae | - | - | - | - | - | - |
| Ancyronyx variegatus | - | - | - | - | 1 | 4 |
| Anisocentropus pyraloides | - | - | - | - | - | - |
| Apedilum | - | - | - | - | - | - |
| Argia | - | - | - | - | - | - |
| Argia fumipennis | - | - | - | - | - | - |
| Argia tibialis | - | - | - | - | - | - |
| Arrenurus | 1 | 3 | - | - | - | - |
| Asioplax | - | - | - | - | - | - |
| Atherix | - | - | - | - | - | - |
| Atractides | - | - | - | - | - | - |
| Atrichopogon | - | - | - | - | - | - |
| Aulodrilus pigueti | - | - | - | - | - | - |
| Baetidae | - | - | - | - | - | - |
| Baetis intercalaris | - | - | - | - | - | - |
| Baetisca becki | - | - | - | - | - | - |
| Baetisca rogersi | - | - | - | - | - | - |
| Beardius | 2 | 2 | - | - | - | - |
| Berosus | - | - | - | - | - | - |
| Bivalvia | - | - | - | - | - | - |
| Boyeria vinosa | - | - | - | - | - | - |
| Brachycentrus chelatus | - | - | - | - | - | - |
| Brachycentrus numerosus | - | - | - | - | - | - |
| Branchiobdellidae | - | - | - | - | - | - |
| Bratislavia unidentata | - | - | - | - | - | - |
| Brillia | - | - | - | - | - | - |
| Caecidotea | - | - | - | - | - | - |
| Caenis | 2 | 4 | - | - | - | - |
| Caenis diminuta | - | - | - | - | - | - |
| Caenis eglinensis | - | - | - | - | - | - |
| Caenis hilaris | - | - | - | - | - | - |
| Callibaetis | 4 | 2 | - | - | - | - |
| Callibaetis floridanus | - | - | - | - | - | - |
| Calopterygidae | - | - | - | - | - | - |
| Calopteryx | - | - | - | - | - | - |
| Cambaridae | - | - | - | - | 1 | 5 |
| Campeloma | - | - | - | - | - | - |
| Cecidomyiidae | - | - | - | - | - | - |



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| As Calculated / STORET station -> | 3513 | 3513 | 3535 | 3535 | LIB104LV | LIB104LV |
|---|---|---|---|---|---|---|
| Sample date -> | 11/7/2007 | 11/7/2007 | 12/12/2007 | 12/12/2007 | 6/10/2008 | 6/10/2008 |
| Taxon Name / SampleID/BenthID -> | 63694/39707/ Rep 1 | 63694/39707/ Rep 2 | 64191/40004/ Rep 1 | 64191/40004/ Rep 2 | 65025/40260/ Rep 1 | 65025/40260/ Rep 2 |
| Celina | - | - | - | - | - | - |
| Centroptilum triangulifer | - | - | - | - | - | - |
| Ceraclea | - | - | - | - | - | - |
| Ceratopogonidae | - | - | - | - | - | - |
| Cernotina | - | - | - | - | - | - |
| Chauliodes | - | - | - | - | 1 | - |
| Cheumatopsyche | - | - | - | 7 | 2 | 3 |
| Chimarra | - | - | 4 | 7 | - | - |
| Chironomus | - | - | - | - | - | - |
| Choroterpes basalis | - | - | - | - | - | - |
| Chrysomelidae | - | - | - | - | 1 | - |
| Cladotanytarsus | - | - | - | - | - | - |
| Cladotanytarsus cf. daviesi | 2 | 7 | - | - | - | - |
| Cladotanytarsus sp. d epler | - | - | - | - | - | - |
| Cladotanytarsus sp. f epler | - | - | - | - | - | - |
| Cladotanytarsus viridiventris | - | - | - | - | - | - |
| Clathrosperchon | - | - | - | - | - | - |
| Climacia areolaris | - | - | - | - | - | - |
| Clinotanypus | - | - | - | - | - | - |
| Coenagrionidae | 1 | 3 | - | - | - | - |
| Corbicula fluminea | 1 | - | - | - | - | - |
| Corydalidae | - | - | - | - | - | - |
| Corydalus cornutus | - | - | 1 | - | - | - |
| Corynoneura | - | - | - | - | - | - |
| Crangonyx | - | - | - | - | - | - |
| Cricotopus | - | - | - | - | - | - |
| Cricotopus bicinctus | 1 | 6 | - | - | - | - |
| Cricotopus or orthocladius | 8 | 8 | - | - | - | - |
| Cryptochironomus | - | - | - | - | - | - |
| Cryptotendipes | - | 2 | - | - | - | - |
| Curculionidae | - | - | - | - | - | - |
| Cyrnellus fraternus | - | - | - | - | - | - |
| Dasyhelea | 5 | 6 | - | - | - | - |
| Dero | - | - | - | - | - | - |
| Dero digitata complex | - | - | 1 | - | - | - |
| Dero flabelliger | - | - | - | - | - | - |
| Dero furcata | - | - | - | - | - | - |
| Dero pectinata | - | - | - | - | - | - |
| Desmopachria | - | - | - | - | - | - |
| Desserobdella phalera | - | - | - | - | - | - |
| Dicrotendipes | 1 | 1 | - | - | - | - |
| Dicrotendipes modestus | - | - | - | - | - | - |
| Dicrotendipes neomodestus | - | - | - | - | - | - |
| Dicrotendipes simpsoni | - | - | - | - | - | - |
| Dicrotendipes sp. a epler | - | - | - | - | - | - |
| Dineutus | - | - | - | - | 1 | - |
| Diplectrona | - | - | - | - | - | - |
| Djalmabatista pulcher | - | - | - | - | - | - |
| Dryopidae | - | - | - | - | - | - |
| Dubiraphia vittata | - | - | - | - | - | - |



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| As Calculated / STORET station -> | 3513 | 3513 | 3535 | 3535 | LIB104LV | LIB104LV |
|---|---|---|---|---|---|---|
| Sample date -> | 11/7/2007 | 11/7/2007 | 12/12/2007 | 12/12/2007 | 6/10/2008 | 6/10/2008 |
| | 63694/39707/ | 63694/39707/ | 64191/40004/ | 64191/40004/ | 65025/40260/ | 65025/40260/ |
| Taxon Name / SampleID/BenthID -> | Rep 1 | Rep 2 | Rep 1 | Rep 2 | Rep 1 | Rep 2 |
| Dytiscidae | - | - | - | - | - | - |
| Eclipidrilus | - | - | - | - | - | - |
| Eclipidrilus palustris | - | - | - | - | - | - |
| Ectopria | - | - | - | - | - | - |
| Ectopria thoracica | - | - | - | - | - | - |
| Einfeldia sp. a epler | - | - | - | - | - | - |
| Elimia | - | - | - | - | - | - |
| Elmidae | - | - | 1 | - | - | - |
| Enallagma | - | - | - | - | - | - |
| Enallagma coecum | - | - | - | - | - | - |
| Enchytraeidae | - | - | - | - | 1 | - |
| Endotribelos hesperium | - | - | - | - | - | - |
| Enochrus | - | - | - | - | - | - |
| Epicordulia princeps regina | - | - | - | - | - | - |
| Eurylophella doris | - | - | - | - | - | 1 |
| Ferrissia | - | - | - | - | - | - |
| Gastropoda | - | - | - | - | - | - |
| Geayia | - | - | - | - | - | - |
| Gerridae | - | - | - | - | - | - |
| Glossiphoniidae | 1 | - | - | - | - | - |
| Goeldichironomus | - | - | - | - | - | - |
| Goeldichironomus cf. natans | 1 | - | - | - | - | - |
| Goeldichironomus holoprasinus | - | - | - | - | - | - |
| Gomphidae | - | - | - | - | - | - |
| Gomphus | - | - | - | - | - | - |
| Gonielmis dietrichi | - | - | - | - | 5 | 1 |
| Gyrinidae | - | - | - | - | - | - |
| Gyrinus | - | - | - | - | - | - |
| Haemonais waldvogeli | - | - | - | - | - | - |
| Hagenius brevistylus | - | - | - | - | - | - |
| Haitia | - | - | - | - | - | - |
| Hayesomyia senata | - | - | - | - | - | - |
| Helichus | - | - | - | - | - | - |
| Helichus lithophilus | - | - | - | - | - | - |
| Helobdella stagnalis | - | - | - | - | - | - |
| Helobdella triserialis | - | - | - | - | - | - |
| Hemerodromia | - | - | - | - | - | 3 |
| Heptageniidae | - | - | - | - | 3 | - |
| Hetaerina | - | - | - | - | - | - |
| Hetaerina titia | - | - | - | - | - | - |
| Hexagenia | - | - | - | - | - | - |
| Hexatoma | - | - | - | - | - | - |
| Hirudinea | - | - | - | - | - | - |
| Hyalella azteca | 54 | 34 | - | - | - | - |
| Hydraena | - | - | - | - | - | - |
| Hydrobiidae | 4 | 1 | - | - | - | - |
| Hydrodroma | - | 1 | - | - | 3 | - |
| Hydrometra | - | - | - | - | - | - |
| Hydrophilidae | - | - | - | - | - | - |
| Hydropsyche | - | - | 60 | 31 | 3 | 2 |



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| As Calculated / STORET station -> | 3513 | 3513 | 3535 | 3535 | LIB104LV | LIB104LV |
|---|---|---|---|---|---|---|
| Sample date -> | 11/7/2007 | 11/7/2007 | 12/12/2007 | 12/12/2007 | 6/10/2008 | 6/10/2008 |
| Taxon Name / SampleID/BenthID -> | 63694/39707/ Rep 1 | 63694/39707/ Rep 2 | 64191/40004/ Rep 1 | 64191/40004/ Rep 2 | 65025/40260/ Rep 1 | 65025/40260/ Rep 2 |
| Hydropsyche incommoda | - | - | - | - | - | - |
| Hydropsyche mississippiensis | - | - | - | - | - | - |
| Hydroptila | - | - | - | - | - | - |
| Hydrovatus | - | - | - | - | - | - |
| Hygrobates | - | - | - | - | - | - |
| Ischnura | - | - | - | - | - | - |
| Isonychia | - | - | - | - | - | - |
| Kiefferulus | - | - | - | - | - | - |
| Koenikea | - | - | - | - | - | - |
| Krendowskia | - | - | - | - | - | - |
| Labrundinia | - | - | - | - | - | - |
| Labrundinia becki | - | - | - | - | - | - |
| Labrundinia johannseni | - | - | - | - | - | - |
| Labrundinia pilosella | - | - | - | - | - | - |
| Labrundinia sp. 3 nr. virescens | - | 1 | - | - | - | - |
| Laccophilus | - | - | - | - | - | - |
| Laevapex | - | - | - | - | - | - |
| Larsia | - | - | - | - | - | - |
| Larsia decolorata | 6 | 6 | - | - | - | - |
| Lauterborniella agrayloides | - | - | - | - | - | - |
| Lebertia | - | 1 | - | - | - | - |
| Lepidoptera | - | - | - | - | - | - |
| Lepidostoma | - | - | - | - | - | - |
| Leptophlebiidae | - | - | - | - | 3 | 4 |
| Leuctra | - | - | - | - | 29 | 24 |
| Libellulidae | - | - | - | - | - | - |
| Limnesia | - | - | - | - | 1 | - |
| Limnodrilus hoffmeisteri | - | - | - | - | - | - |
| Lioporeus | - | - | - | - | - | - |
| Lirceus | - | - | - | - | - | - |
| Lopescladius | - | - | - | - | - | - |
| Lumbriculus variegatus | - | - | - | - | - | - |
| Lymnaeidae | - | - | - | - | - | - |
| Lype diversa | - | - | - | - | - | 1 |
| Maccaffertium | - | - | - | - | - | - |
| Maccaffertium exiguum | - | - | - | - | - | - |
| Maccaffertium smithae | - | - | - | - | - | - |
| Macromia | - | - | - | - | - | - |
| Macromia illinoiensis georgina | - | - | - | - | - | - |
| Macronychus glabratus | - | - | - | - | - | - |
| Macrostemum carolina | - | - | 4 | 3 | - | - |
| Mayatrichia ayama | - | - | - | - | - | - |
| Megistocera | - | - | - | - | - | - |
| Mesonoterus | - | - | - | - | - | - |
| Mesovelia | - | - | - | - | - | - |
| Micrasema | - | - | - | - | - | - |
| Microcylloepus pusillus | - | - | - | - | 9 | 14 |
| Micromenetus | - | - | - | - | - | - |
| Micromenetus dilatatus avus | - | - | - | - | - | - |
| Micropsectra | - | - | - | - | - | - |



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| As Calculated / STORET station -> | 3513 | 3513 | 3535 | 3535 | LIB104LV | LIB104LV |
|---|---|---|---|---|---|---|
| Sample date -> | 11/7/2007 | 11/7/2007 | 12/12/2007 | 12/12/2007 | 6/10/2008 | 6/10/2008 |
| Taxon Name / SampleID/BenthID -> | 63694/39707/ Rep 1 | 63694/39707/ Rep 2 | 64191/40004/ Rep 1 | 64191/40004/ Rep 2 | 65025/40260/ Rep 1 | 65025/40260/ Rep 2 |
| Microtendipes | - | - | - | - | - | - |
| Microtendipes pedellus grp. | - | - | - | - | - | - |
| Microtendipes rydalensis grp. | - | - | - | - | - | 1 |
| Microvelia | - | - | - | - | - | - |
| Mideopsis | - | - | - | - | - | - |
| Momonia | - | - | - | - | - | - |
| Monopelopia | - | 1 | - | - | - | - |
| Mooreobdella | - | - | - | - | - | - |
| Naididae | - | - | - | - | - | - |
| Nais communis complex | - | - | - | - | - | - |
| Nais(animal) | - | - | - | - | - | - |
| Nanocladius | 1 | - | - | - | - | - |
| Nectopsyche | - | - | - | - | - | - |
| Nectopsyche exquisita | - | - | - | - | - | - |
| Nectopsyche pavida | - | - | - | - | - | - |
| Neoephemera | - | - | - | - | - | - |
| Neoperla | - | - | - | - | - | - |
| Neoplasta | - | - | - | - | - | - |
| Neoplea | - | - | - | - | - | - |
| Neoporus | - | - | - | - | - | 2 |
| Neotrichia | - | - | - | - | - | - |
| Neureclipsis | - | - | - | - | - | - |
| Neureclipsis crepuscularis | - | - | - | - | - | - |
| Neurocordulia | - | - | - | - | - | - |
| Neurocordulia alabamensis | - | - | - | - | - | - |
| Nigronia | - | - | - | - | - | - |
| Nigronia serricornis | - | - | - | - | - | - |
| Nilotanypus americanus | - | - | - | - | - | - |
| Nilotanypus fimbriatus | - | - | - | - | - | - |
| Nilothauma | - | - | - | - | - | - |
| Notomicrus nanulus | - | - | - | - | - | - |
| Nyctiophylax | - | - | - | - | - | - |
| Oecetis | - | - | - | - | 4 | 3 |
| Oecetis avara | - | - | - | - | - | - |
| Oecetis cinerascens | - | - | - | - | - | - |
| Oecetis georgia | - | - | - | - | - | - |
| Oecetis sphyra/morsei | - | - | - | - | - | - |
| Ora/scirtes | - | - | - | - | - | - |
| Oribatida | - | - | - | - | - | - |
| Ormosia | - | - | - | - | - | - |
| Orthocladius annectens | - | - | 39 | 36 | - | - |
| Orthotrichia | - | - | - | - | - | - |
| Oxus | 1 | - | - | - | - | - |
| Oxyethira | 5 | 5 | - | - | 1 | 2 |
| Pachydiplax longipennis | - | - | - | - | - | - |
| Palaemonetes | - | 1 | - | - | - | - |
| Palpomyia/bezzia grp. | - | - | - | - | - | - |
| Parachaetocladius abnobaeus | - | - | - | - | - | - |
| Parachironomus | - | - | - | - | - | - |
| Parachironomus chaetoalus complex | 2 | - | - | - | - | - |



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| As Calculated / STORET station -> | 3513 | 3513 | 3535 | 3535 | LIB104LV | LIB104LV |
|---|---|---|---|---|---|---|
| Sample date -> | 11/7/2007 | 11/7/2007 | 12/12/2007 | 12/12/2007 | 6/10/2008 | 6/10/2008 |
| Taxon Name / SampleID/BenthID -> | 63694/39707/ Rep 1 | 63694/39707/ Rep 2 | 64191/40004/ Rep 1 | 64191/40004/ Rep 2 | 65025/40260/ Rep 1 | 65025/40260/ Rep 2 |
| Parachironomus supparilis | 1 | - | - | - | - | - |
| Paracladopelma | - | - | - | - | - | - |
| Paracymus | - | - | - | - | - | - |
| Parakiefferiella sp. b epler | - | - | - | - | - | - |
| Parakiefferiella sp. f epler | - | 1 | - | - | - | - |
| Paralauterborniella nigrohalterale | - | - | - | - | - | - |
| Paraleptophlebia volitans | - | - | - | - | - | - |
| Paramerina | - | - | - | - | - | - |
| Parametriocnemus | - | - | - | - | 3 | 3 |
| Paratanytarsus | 2 | - | - | - | - | - |
| Paratanytarsus dissimilis | - | - | - | - | - | - |
| Paratanytarsus quadratus | - | 6 | - | - | - | - |
| Paratendipes subaequalis | - | - | - | - | - | - |
| Pelonomus obscurus | - | - | - | - | - | - |
| Peltodytes | - | - | - | - | - | - |
| Peltodytes dietrichi | - | - | - | - | - | - |
| Pentaneura inconspicua | - | - | - | - | - | 3 |
| Perlesta placida complex | - | - | - | - | 4 | - |
| Perlinella drymo | - | - | - | - | - | - |
| Phaenopsectra flavipes | - | - | - | - | - | - |
| Phylocentropus | - | - | - | - | - | - |
| Physa | - | - | - | - | - | - |
| Physidae | 2 | 9 | - | - | - | - |
| Pilaria | - | - | - | - | - | - |
| Placobdella | - | - | - | - | - | - |
| Planorbella | - | - | - | - | - | - |
| Planorbidae | - | - | - | - | - | - |
| Platyhelminthes | - | - | - | - | - | - |
| Plauditus | - | - | - | - | - | - |
| Plauditus bimaculatus | - | - | - | - | - | - |
| Plecoptera | - | - | - | - | - | - |
| Polycentropodidae | - | - | - | - | - | - |
| Polycentropus | - | - | - | - | - | - |
| Polypedilum aviceps | - | - | - | - | 3 | 1 |
| Polypedilum fallax | - | - | - | - | - | - |
| Polypedilum flavum | - | - | 5 | 7 | - | 1 |
| Polypedilum halterale grp. | - | - | - | - | - | - |
| Polypedilum illinoense grp. | - | 1 | 1 | 2 | 8 | 9 |
| Polypedilum scalaenum grp. | 1 | 1 | - | - | 3 | - |
| Polypedilum sp. a epler | 1 | 1 | - | - | - | - |
| Polypedilum trigonus | - | 1 | - | - | - | - |
| Polypedilum tritum | - | - | - | - | - | - |
| Potthastia | - | - | - | 1 | - | - |
| Potthastia longimana | - | - | - | - | - | - |
| Pristina | - | - | - | - | - | - |
| Procambarus | - | - | - | - | - | - |
| Procladius | - | - | - | - | - | - |
| Procloeon | - | 1 | - | - | - | - |
| Progomphus | - | - | - | - | - | - |
| Progomphus obscurus | - | - | - | - | - | - |



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| As Calculated / STORET station -> | 3513 | 3513 | 3535 | 3535 | LIB104LV | LIB104LV |
|---|---|---|---|---|---|---|
| Sample date -> | 11/7/2007 | 11/7/2007 | 12/12/2007 | 12/12/2007 | 6/10/2008 | 6/10/2008 |
| | 63694/39707/ | 63694/39707/ | 64191/40004/ | 64191/40004/ | 65025/40260/ | 65025/40260/ |
| Taxon Name / SampleID/BenthID -> | Rep 1 | Rep 2 | Rep 1 | Rep 2 | Rep 1 | Rep 2 |
| Promoresia tardella | - | - | - | - | - | - |
| Prostoma | - | - | - | - | - | - |
| Psectrocladius | - | - | - | - | - | - |
| Pseudochironomus | 6 | 8 | - | - | - | - |
| Pseudocloeon | 1 | - | - | - | 3 | - |
| Pseudocloeon ephippiatum | - | - | - | - | - | - |
| Pseudocloeon frondale | - | - | - | - | - | - |
| Pseudocloeon propinquum | - | - | - | - | - | - |
| Pseudolimnophila | - | - | - | - | - | - |
| Psychodidae | - | - | - | - | - | - |
| Pteronarcys dorsata | - | - | - | - | - | - |
| Pyralidae | 1 | - | - | - | - | - |
| Rheocricotopus robacki | - | - | - | - | - | - |
| Rheotanytarsus | - | - | - | - | - | - |
| Rheotanytarsus exiguus grp. | - | - | 1 | - | 9 | 5 |
| Rheotanytarsus pellucidus | - | - | - | - | - | 1 |
| Rhyncholimnochares | - | - | - | - | - | - |
| Robackia claviger | - | - | - | - | - | - |
| Serratella deficiens | - | - | - | - | - | - |
| Sialis | - | - | - | - | - | - |
| Simulium | - | - | 7 | 12 | - | - |
| Simulium jonesi | - | - | - | - | - | - |
| Sisyra | - | - | - | - | - | - |
| Slavina appendiculata | - | - | - | - | - | - |
| Sperchon | - | - | - | - | - | - |
| Sperchonopsis | - | - | - | - | - | - |
| Sperchopsis | - | - | - | - | - | - |
| Sperchopsis tessellatus | - | - | - | - | - | - |
| Sphaeriidae(mollusca) | - | - | - | - | - | - |
| Spirosperma | - | - | - | - | - | - |
| Staphylinidae | - | - | - | - | - | - |
| Stelechomyia perpulchra | - | - | - | - | - | - |
| Stempellina | - | - | - | - | - | - |
| Stempellinella | - | - | - | - | - | - |
| Stempellinella fimbriata | - | - | - | - | 1 | 1 |
| Stempellinella leptocelloides | - | - | - | - | - | - |
| Stenacron | - | - | - | - | - | 4 |
| Stenacron interpunctatum | - | - | - | - | - | - |
| Stenelmis | - | - | - | 1 | 8 | 11 |
| Stenochironomus | - | - | - | - | - | 4 |
| Stenus | - | - | - | - | - | - |
| Stephensoniana trivandrana | - | - | - | - | - | - |
| Stratiomyidae | 1 | - | - | - | - | - |
| Sympetrum | - | - | - | - | - | - |
| Tabanidae | - | - | - | - | - | - |
| Taeniopteryx | - | - | - | - | - | - |
| Tanytarsus | - | - | - | - | - | - |
| Tanytarsus sp. a epler | - | - | - | - | - | - |
| Tanytarsus sp. c epler | 26 | 20 | - | - | - | - |
| Tanytarsus sp. d epler | - | - | 3 | 2 | - | - |



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| As Calculated / STORET station -> | 3513 | 3513 | 3535 | 3535 | LIB104LV | LIB104LV |
|---|---|---|---|---|---|---|
| Sample date -> | 11/7/2007 | 11/7/2007 | 12/12/2007 | 12/12/2007 | 6/10/2008 | 6/10/2008 |
| Taxon Name / SampleID/BenthID -> | 63694/39707/ Rep 1 | 63694/39707/ Rep 2 | 64191/40004/ Rep 1 | 64191/40004/ Rep 2 | 65025/40260/ Rep 1 | 65025/40260/ Rep 2 |
| Tanytarsus sp. e epler | - | - | - | - | - | - |
| Tanytarsus sp. f epler | - | - | - | - | - | - |
| Tanytarsus sp. l epler | - | - | - | - | - | 1 |
| Tanytarsus sp. m epler | - | - | - | - | 23 | 20 |
| Tanytarsus sp. n epler | - | - | - | - | 1 | 4 |
| Tanytarsus sp. o epler | - | - | - | - | - | - |
| Tanytarsus sp. p epler | - | - | - | - | - | - |
| Tanytarsus sp. s epler | - | - | - | - | - | - |
| Tanytarsus sp. t epler | 1 | - | - | - | - | - |
| Tanytarsus sp. y epler | - | - | - | - | - | - |
| Thienemanniella | - | - | 1 | - | - | 1 |
| Thienemanniella lobapodema | - | - | - | - | - | - |
| Thienemanniella similis | - | - | - | - | - | - |
| Thienemanniella xena | - | - | - | - | - | - |
| Thienemannimyia grp. | - | - | - | 1 | 7 | 4 |
| Tipula | - | - | - | - | - | - |
| Tipula caloptera | - | - | - | - | - | - |
| Tipulidae | - | - | - | - | 1 | - |
| Torrenticola | - | - | - | - | - | - |
| Triaenodes | - | - | - | - | 1 | - |
| Triaenodes ignitus | - | - | - | - | - | - |
| Triaenodes perna/helo | - | - | - | - | - | - |
| Tribelos | - | - | - | - | - | 1 |
| Tribelos fuscicornis | - | - | - | - | 1 | - |
| Tribelos jucundum | - | - | - | - | - | - |
| Tricorythodes albilineatus | 13 | 10 | - | - | - | - |
| Tubificidae | - | - | - | - | - | - |
| Tvetenia | - | - | - | - | - | - |
| Tvetenia vitracies | - | - | 32 | 48 | - | - |
| Vertigo | - | - | - | - | - | - |
| Viviparus georgianus | - | - | - | - | - | - |
| Xenochironomus xenolabis | - | - | - | - | - | - |
| Xestochironomus | - | - | - | - | - | - |
| Xylotopus par | - | - | - | - | - | - |
| Zavreliella marmorata | - | - | - | - | - | - |
| Zavrelimyia sp. a epler | - | - | - | - | - | - |

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| As Calculated / STORET station -> | 22020093 | 22020093 | GAD106GS | GAD106GS | NUTREF001 | NUTREF001 |
|---|---|---|---|---|---|---|
| Sample date -> | 6/13/2008 | 6/13/2008 | 6/13/2008 | 6/13/2008 | 6/10/2008 | 6/10/2008 |
| | 65026/40261/ | 65026/40261/ | 65028/40263/ | 65028/40263/ | 65029/40264/ | 65029/40264/ |
| Taxon Name / SampleID/BenthID -> | Rep 1 | Rep 2 | Rep 1 | Rep 2 | Rep 1 | Rep 2 |
| Ablabesmyia mallochi | 1 | - | - | - | - | 1 |
| Ablabesmyia rhamphe grp. | - | - | - | - | - | - |
| Acentrella | - | - | - | - | - | - |
| Acentrella parvula | - | - | - | - | - | - |
| Acerpenna pygmaea | - | - | - | - | 5 | 8 |
| Acroneuria | - | - | 1 | 2 | - | 1 |
| Acroneuria abnormis | - | - | - | - | 1 | - |
| Acroneuria lycorias | - | - | - | - | - | - |
| Agnetina annulipes | - | - | - | - | 1 | - |
| Allonais inaequalis | - | - | - | - | - | - |
| Amnicola | - | - | - | - | - | - |
| Amphipoda | - | - | - | - | - | - |
| Ancylidae | 36 | 33 | 2 | 1 | 2 | - |
| Ancyronyx variegatus | 4 | 8 | - | - | 1 | 2 |
| Anisocentropus pyraloides | - | - | 1 | 7 | - | - |
| Apedilum | - | - | - | - | - | - |
| Argia | - | - | - | - | - | - |
| Argia fumipennis | - | - | - | - | - | - |
| Argia tibialis | - | - | - | - | - | - |
| Arrenurus | - | - | - | - | - | - |
| Asioplax | - | - | - | - | - | - |
| Atherix | - | - | - | - | 1 | 3 |
| Atractides | - | - | - | - | - | - |
| Atrichopogon | - | 1 | - | - | 1 | - |
| Aulodrilus pigueti | - | - | - | - | - | - |
| Baetidae | 2 | - | - | - | - | - |
| Baetis intercalaris | - | - | - | - | - | - |
| Baetisca becki | - | - | - | - | - | - |
| Baetisca rogersi | - | - | - | - | - | - |
| Beardius | - | - | - | - | - | - |
| Berosus | - | - | - | - | - | - |
| Bivalvia | - | - | - | - | - | - |
| Boyeria vinosa | - | - | - | 1 | - | - |
| Brachycentrus chelatus | - | - | - | - | - | - |
| Brachycentrus numerosus | - | - | - | - | - | - |
| Branchiobdellidae | - | - | - | 1 | - | - |
| Bratislavia unidentata | - | 1 | - | - | - | - |
| Brillia | - | 1 | - | - | - | - |
| Caecidotea | - | - | - | - | 3 | 1 |
| Caenis | - | - | 2 | 3 | 3 | 6 |
| Caenis diminuta | - | - | - | - | - | - |
| Caenis eglinensis | - | - | - | - | - | - |
| Caenis hilaris | - | - | - | - | - | - |
| Callibaetis | - | - | - | - | - | - |
| Callibaetis floridanus | - | - | - | - | - | - |
| Calopterygidae | - | 2 | 6 | 5 | - | 1 |
| Calopteryx | - | - | - | - | - | - |
| Cambaridae | - | - | 1 | - | - | 1 |
| Campeloma | - | - | - | - | - | - |
| Cecidomyiidae | - | - | - | - | - | - |



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| As Calculated / STORET station -> | 22020093 | 22020093 | GAD106GS | GAD106GS | NUTREF001 | NUTREF001 |
|---|---|---|---|---|---|---|
| Sample date -> | 6/13/2008 | 6/13/2008 | 6/13/2008 | 6/13/2008 | 6/10/2008 | 6/10/2008 |
| | 65026/40261/ | 65026/40261/ | 65028/40263/ | 65028/40263/ | 65029/40264/ | 65029/40264/ |
| Taxon Name / SampleID/BenthID -> | Rep 1 | Rep 2 | Rep 1 | Rep 2 | Rep 1 | Rep 2 |
| Celina | - | - | - | - | - | - |
| Centroptilum triangulifer | - | 7 | - | - | - | - |
| Ceraclea | - | - | - | - | - | 1 |
| Ceratopogonidae | - | - | - | - | - | - |
| Cernotina | - | - | - | - | - | - |
| Chauliodes | - | - | - | - | - | - |
| Cheumatopsyche | 11 | 19 | 4 | 11 | 12 | 13 |
| Chimarra | - | - | - | 2 | 1 | - |
| Chironomus | 1 | - | - | - | - | - |
| Choroterpes basalis | - | - | - | - | - | - |
| Chrysomelidae | - | - | - | - | - | - |
| Cladotanytarsus | - | - | - | - | - | - |
| Cladotanytarsus cf. daviesi | - | - | - | - | - | - |
| Cladotanytarsus sp. d epler | - | - | - | - | - | - |
| Cladotanytarsus sp. f epler | - | - | - | - | - | - |
| Cladotanytarsus viridiventris | - | - | - | - | - | - |
| Clathrosperchon | - | - | - | - | - | - |
| Climacia areolaris | - | - | - | - | - | - |
| Clinotanypus | - | - | - | - | - | - |
| Coenagrionidae | 1 | - | - | - | - | - |
| Corbicula fluminea | 2 | 1 | - | - | - | - |
| Corydalidae | - | - | - | - | - | 1 |
| Corydalus cornutus | - | - | - | - | - | - |
| Corynoneura | - | - | - | - | - | - |
| Crangonyx | - | - | - | - | - | - |
| Cricotopus | - | - | - | - | - | - |
| Cricotopus bicinctus | - | - | - | - | - | - |
| Cricotopus or orthocladius | - | - | - | - | - | - |
| Cryptochironomus | - | - | - | - | - | - |
| Cryptotendipes | - | - | - | - | - | - |
| Curculionidae | - | - | - | - | - | - |
| Cyrnellus fraternus | - | - | - | - | - | - |
| Dasyhelea | - | - | - | - | - | - |
| Dero | - | - | - | - | - | - |
| Dero digitata complex | - | - | - | - | - | - |
| Dero flabelliger | - | - | - | - | - | - |
| Dero furcata | - | - | - | - | - | - |
| Dero pectinata | - | - | - | - | - | - |
| Desmopachria | - | - | - | - | - | - |
| Desserobdella phalera | - | - | - | - | - | - |
| Dicrotendipes | - | - | - | - | - | - |
| Dicrotendipes modestus | - | - | - | - | - | - |
| Dicrotendipes neomodestus | - | - | - | - | - | - |
| Dicrotendipes simpsoni | - | - | - | - | - | - |
| Dicrotendipes sp. a epler | - | - | - | - | - | - |
| Dineutus | - | 2 | - | - | - | - |
| Diplectrona | - | - | 2 | 6 | - | - |
| Djalmabatista pulcher | - | - | - | - | - | - |
| Dryopidae | - | - | - | - | - | - |
| Dubiraphia vittata | - | - | - | - | - | 1 |



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|---|---|---|---|---|---|---|
| Sample date -> | 6/13/2008 | 6/13/2008 | 6/13/2008 | 6/13/2008 | 6/10/2008 | 6/10/2008 |
| | 65026/40261/ | 65026/40261/ | 65028/40263/ | 65028/40263/ | 65029/40264/ | 65029/40264/ |
| Taxon Name / SampleID/BenthID -> | Rep 1 | Rep 2 | Rep 1 | Rep 2 | Rep 1 | Rep 2 |
| Dytiscidae | - | - | - | - | - | - |
| Eclipidrilus | - | - | - | 1 | 1 | 1 |
| Eclipidrilus palustris | - | - | - | - | - | - |
| Ectopria | - | - | - | - | - | - |
| Ectopria thoracica | - | - | - | - | - | - |
| Einfeldia sp. a epler | - | - | - | - | - | - |
| Elimia | - | - | - | - | - | - |
| Elmidae | - | - | - | - | - | - |
| Enallagma | - | 3 | - | - | - | - |
| Enallagma coecum | - | - | - | - | - | - |
| Enchytraeidae | - | - | 4 | - | - | - |
| Endotribelos hesperium | - | - | - | - | 1 | - |
| Enochrus | - | - | - | - | - | - |
| Epicordulia princeps regina | - | - | - | - | - | - |
| Eurylophella doris | - | - | 1 | - | 1 | - |
| Ferrissia | - | - | - | - | - | - |
| Gastropoda | - | - | - | - | - | - |
| Geayia | - | - | - | - | - | - |
| Gerridae | - | - | - | - | - | - |
| Glossiphoniidae | - | - | - | - | - | - |
| Goeldichironomus | - | - | - | - | - | - |
| Goeldichironomus cf. natans | - | - | - | - | - | - |
| Goeldichironomus holoprasinus | - | - | - | - | - | - |
| Gomphidae | - | - | - | - | - | - |
| Gomphus | - | - | - | - | - | - |
| Gonielmis dietrichi | - | - | 3 | 3 | - | - |
| Gyrinidae | - | - | - | - | - | - |
| Gyrinus | - | - | - | - | - | - |
| Haemonais waldvogeli | - | - | - | - | - | - |
| Hagenius brevistylus | - | - | - | - | - | - |
| Haitia | - | - | - | - | - | - |
| Hayesomyia senata | - | - | - | - | - | - |
| Helichus | - | - | - | 2 | - | - |
| Helichus lithophilus | - | - | - | - | - | - |
| Helobdella stagnalis | - | - | - | - | - | - |
| Helobdella triserialis | - | - | - | - | - | - |
| Hemerodromia | - | 1 | 8 | 7 | - | - |
| Heptageniidae | - | - | - | - | 2 | 3 |
| Hetaerina | - | - | - | - | - | - |
| Hetaerina titia | - | - | - | - | - | - |
| Hexagenia | - | - | - | - | - | - |
| Hexatoma | - | - | - | - | - | - |
| Hirudinea | - | - | - | - | - | - |
| Hyalella azteca | - | 1 | - | - | - | - |
| Hydraena | - | - | - | - | - | - |
| Hydrobiidae | - | - | - | - | - | - |
| Hydrodroma | - | - | - | - | - | - |
| Hydrometra | - | - | - | - | - | - |
| Hydrophilidae | - | - | - | - | - | - |
| Hydropsyche | - | - | 9 | 3 | 5 | 6 |



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| As Calculated / STORET station -> | 22020093 | 22020093 | GAD106GS | GAD106GS | NUTREF001 | NUTREF001 |
|---|---|---|---|---|---|---|
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| Taxon Name / SampleID/BenthID -> | 65026/40261/ Rep 1 | 65026/40261/ Rep 2 | 65028/40263/ Rep 1 | 65028/40263/ Rep 2 | 65029/40264/ Rep 1 | 65029/40264/ Rep 2 |
| Hydropsyche incommoda | - | - | - | - | - | - |
| Hydropsyche mississippiensis | - | - | - | - | - | - |
| Hydroptila | - | - | - | - | - | - |
| Hydrovatus | - | - | - | - | - | - |
| Hygrobates | 1 | - | - | - | - | - |
| Ischnura | - | - | - | - | - | - |
| Isonychia | - | - | - | - | - | - |
| Kiefferulus | - | - | - | - | - | - |
| Koenikea | - | - | - | - | - | - |
| Krendowskia | - | - | - | - | - | - |
| Labrundinia | - | - | - | - | - | - |
| Labrundinia becki | - | - | - | - | - | - |
| Labrundinia johannseni | - | - | - | - | - | - |
| Labrundinia pilosella | - | - | - | - | - | - |
| Labrundinia sp. 3 nr. virescens | - | - | - | - | - | - |
| Laccophilus | - | - | - | - | - | - |
| Laevapex | - | - | - | - | - | - |
| Larsia | - | - | - | - | - | - |
| Larsia decolorata | - | - | - | - | - | - |
| Lauterborniella agrayloides | - | - | - | - | - | - |
| Lebertia | - | - | - | - | - | 1 |
| Lepidoptera | - | - | - | - | 1 | - |
| Lepidostoma | - | - | - | - | - | - |
| Leptophlebiidae | - | - | - | - | 11 | 12 |
| Leuctra | - | - | 2 | 1 | 6 | 9 |
| Libellulidae | - | - | 1 | - | - | - |
| Limnesia | - | - | - | - | - | - |
| Limnodrilus hoffmeisteri | - | - | - | - | - | - |
| Lioporeus | - | - | - | - | - | - |
| Lirceus | - | - | - | - | - | - |
| Lopescladius | - | - | - | - | - | - |
| Lumbriculus variegatus | - | - | - | - | - | - |
| Lymnaeidae | - | - | - | - | - | - |
| Lype diversa | - | - | 4 | 3 | - | - |
| Maccaffertium | 9 | 1 | 13 | 15 | - | - |
| Maccaffertium exiguum | - | - | - | - | - | - |
| Maccaffertium smithae | - | - | - | - | - | - |
| Macromia | - | - | - | - | - | - |
| Macromia illinoiensis georgina | - | - | - | - | - | - |
| Macronychus glabratus | 5 | 1 | - | 1 | 3 | 3 |
| Macrostemum carolina | - | - | - | - | - | - |
| Mayatrichia ayama | - | - | - | - | - | - |
| Megistocera | - | - | - | - | - | - |
| Mesonoterus | - | - | - | - | - | - |
| Mesovelia | - | - | - | - | - | - |
| Micrasema | - | - | - | - | - | - |
| Microcylloepus pusillus | - | 1 | 4 | 8 | 1 | 5 |
| Micromenetus | - | - | - | - | - | - |
| Micromenetus dilatatus avus | - | - | - | - | - | - |
| Micropsectra | - | - | - | - | - | - |



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| As Calculated / STORET station -> | 22020093 | 22020093 | GAD106GS | GAD106GS | NUTREF001 | NUTREF001 |
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| | 65026/40261/ | 65026/40261/ | 65028/40263/ | 65028/40263/ | 65029/40264/ | 65029/40264/ |
| Taxon Name / SampleID/BenthID -> | Rep 1 | Rep 2 | Rep 1 | Rep 2 | Rep 1 | Rep 2 |
| Microtendipes | - | - | - | - | - | - |
| Microtendipes pedellus grp. | - | - | - | - | - | - |
| Microtendipes rydalensis grp. | - | - | - | - | - | - |
| Microvelia | - | - | - | - | - | - |
| Mideopsis | 1 | 1 | - | - | - | - |
| Momonia | - | - | - | - | - | - |
| Monopelopia | - | - | - | - | - | - |
| Mooreobdella | - | - | - | - | - | - |
| Naididae | - | - | - | - | 1 | - |
| Nais communis complex | - | - | 2 | - | - | - |
| Nais(animal) | - | - | - | - | - | - |
| Nanocladius | - | - | - | - | - | - |
| Nectopsyche | - | - | 4 | - | - | - |
| Nectopsyche exquisita | - | - | - | - | - | - |
| Nectopsyche pavida | - | - | - | - | - | - |
| Neoephemera | - | - | - | - | - | - |
| Neoperla | - | - | - | - | 1 | 1 |
| Neoplasta | - | - | 4 | 5 | - | 1 |
| Neoplea | - | - | - | - | - | - |
| Neoporus | 1 | - | - | - | - | - |
| Neotrichia | 1 | - | - | - | - | - |
| Neureclipsis | - | - | - | - | - | - |
| Neureclipsis crepuscularis | - | - | - | - | - | - |
| Neurocordulia | - | - | - | - | - | - |
| Neurocordulia alabamensis | - | - | - | - | - | - |
| Nigronia | 1 | - | 9 | 7 | - | - |
| Nigronia serricornis | - | - | - | - | - | - |
| Nilotanypus americanus | - | - | - | - | - | - |
| Nilotanypus fimbriatus | - | - | - | - | - | - |
| Nilothauma | - | - | - | - | - | - |
| Notomicrus nanulus | - | - | - | - | - | - |
| Nyctiophylax | - | - | - | - | - | - |
| Oecetis | - | 1 | 2 | - | 12 | 10 |
| Oecetis avara | - | - | - | - | - | - |
| Oecetis cinerascens | - | - | - | - | - | - |
| Oecetis georgia | - | - | - | - | - | - |
| Oecetis sphyra/morsei | - | - | - | - | - | - |
| Ora/scirtes | - | - | - | - | - | 2 |
| Oribatida | - | - | - | 1 | - | - |
| Ormosia | - | - | - | 1 | - | - |
| Orthocladius annectens | - | - | - | - | - | - |
| Orthotrichia | - | - | - | - | - | - |
| Oxus | - | - | - | - | - | - |
| Oxyethira | - | - | - | - | - | - |
| Pachydiplax longipennis | - | - | - | - | - | - |
| Palaemonetes | - | - | - | - | - | - |
| Palpomyia/bezzia grp. | - | - | - | - | - | - |
| Parachaetocladius abnobaeus | - | - | - | - | - | - |
| Parachironomus | - | - | - | - | - | - |
| Parachironomus chaetoalus complex | - | - | - | - | - | - |



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| | 65026/40261/ | 65026/40261/ | 65028/40263/ | 65028/40263/ | 65029/40264/ | 65029/40264/ |
| Taxon Name / SampleID/BenthID -> | Rep 1 | Rep 2 | Rep 1 | Rep 2 | Rep 1 | Rep 2 |
| Parachironomus supparilis | - | - | - | - | - | - |
| Paracladopelma | 3 | - | - | - | - | - |
| Paracymus | - | 1 | - | - | - | - |
| Parakiefferiella sp. b epler | - | - | - | - | - | - |
| Parakiefferiella sp. f epler | - | - | - | - | - | - |
| Paralauterborniella nigrohalterale | - | - | - | 1 | - | - |
| Paraleptophlebia volitans | - | - | - | - | - | - |
| Paramerina | - | - | - | - | - | - |
| Parametriocnemus | - | - | 2 | - | - | - |
| Paratanytarsus | - | - | - | - | - | - |
| Paratanytarsus dissimilis | 2 | - | - | - | - | - |
| Paratanytarsus quadratus | - | - | - | - | - | - |
| Paratendipes subaequalis | - | - | - | - | - | - |
| Pelonomus obscurus | - | - | - | - | - | - |
| Peltodytes | - | - | - | - | - | - |
| Peltodytes dietrichi | - | - | - | - | - | - |
| Pentaneura inconspicua | - | - | - | - | - | - |
| Perlesta placida complex | - | - | 1 | 2 | - | - |
| Perlinella drymo | - | - | - | - | - | - |
| Phaenopsectra flavipes | - | - | - | - | - | - |
| Phylocentropus | - | - | - | - | - | - |
| Physa | 1 | - | - | - | - | - |
| Physidae | - | - | - | - | - | - |
| Pilaria | - | - | 5 | 5 | - | - |
| Placobdella | - | - | - | - | - | - |
| Planorbella | - | - | - | - | - | - |
| Planorbidae | - | - | - | - | - | - |
| Platyhelminthes | - | 1 | - | - | - | - |
| Plauditus | - | - | - | - | - | - |
| Plauditus bimaculatus | - | - | - | - | - | - |
| Plecoptera | - | - | - | - | - | - |
| Polycentropodidae | - | - | 1 | - | - | - |
| Polycentropus | - | - | - | - | - | - |
| Polypedilum aviceps | - | 1 | 7 | 9 | - | - |
| Polypedilum fallax | - | - | 4 | - | - | - |
| Polypedilum flavum | 18 | 23 | - | - | 8 | 8 |
| Polypedilum halterale grp. | - | - | - | - | - | - |
| Polypedilum illinoense grp. | 2 | 1 | 3 | 3 | 1 | - |
| Polypedilum scalaenum grp. | 1 | - | - | - | 4 | 1 |
| Polypedilum sp. a epler | - | - | - | - | - | - |
| Polypedilum trigonus | - | - | - | - | - | - |
| Polypedilum tritum | - | - | - | - | - | - |
| Potthastia | - | - | - | - | - | - |
| Potthastia longimana | - | - | - | - | 1 | - |
| Pristina | - | - | - | - | - | - |
| Procambarus | 1 | - | - | - | - | - |
| Procladius | - | - | - | - | - | - |
| Procloeon | - | - | - | - | - | - |
| Progomphus | - | 1 | 3 | - | - | - |
| Progomphus obscurus | - | - | - | - | - | - |



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| Taxon Name / SampleID/BenthID -> | Rep 1 | Rep 2 | Rep 1 | Rep 2 | Rep 1 | Rep 2 |
| Promoresia tardella | - | - | - | - | - | - |
| Prostoma | - | - | - | - | - | - |
| Psectrocladius | - | - | - | - | - | - |
| Pseudochironomus | - | - | - | - | - | - |
| Pseudocloeon | - | - | 2 | - | 2 | 2 |
| Pseudocloeon ephippiatum | - | - | - | - | - | - |
| Pseudocloeon frondale | - | - | - | - | - | - |
| Pseudocloeon propinquum | - | - | - | - | - | - |
| Pseudolimnophila | - | - | 1 | - | - | - |
| Psychodidae | - | - | 1 | 1 | - | - |
| Pteronarcys dorsata | - | - | - | - | - | - |
| Pyralidae | - | - | - | - | - | - |
| Rheocricotopus robacki | - | - | - | - | - | - |
| Rheotanytarsus | - | - | - | - | - | - |
| Rheotanytarsus exiguus grp. | 20 | 20 | 2 | - | 3 | 2 |
| Rheotanytarsus pellucidus | - | - | 2 | - | 1 | - |
| Rhyncholimnochares | - | - | - | - | - | - |
| Robackia claviger | - | - | - | - | 2 | - |
| Serratella deficiens | - | - | - | - | - | - |
| Sialis | - | - | - | - | - | - |
| Simulium | 1 | 1 | 3 | 2 | - | - |
| Simulium jonesi | - | - | - | - | - | - |
| Sisyra | - | - | - | - | - | - |
| Slavina appendiculata | - | - | - | - | - | - |
| Sperchon | - | - | - | - | - | - |
| Sperchonopsis | - | - | - | - | - | - |
| Sperchopsis | 1 | - | - | - | - | - |
| Sperchopsis tessellatus | - | - | - | - | - | - |
| Sphaeriidae(mollusca) | - | - | 2 | 5 | 2 | 1 |
| Spirosperma | - | - | - | - | - | - |
| Staphylinidae | - | - | - | - | - | - |
| Stelechomyia perpulchra | 1 | - | - | - | - | - |
| Stempellina | - | - | - | - | - | - |
| Stempellinella | - | - | - | - | - | - |
| Stempellinella fimbriata | - | - | - | - | - | - |
| Stempellinella leptocelloides | - | - | - | - | - | - |
| Stenacron | - | - | 1 | - | - | - |
| Stenacron interpunctatum | - | - | - | - | - | - |
| Stenelmis | 3 | 2 | - | 1 | 27 | 27 |
| Stenochironomus | 1 | 3 | 1 | 1 | 1 | 2 |
| Stenus | - | - | - | - | - | - |
| Stephensoniana trivandrana | - | - | - | - | - | - |
| Stratiomyidae | - | - | - | - | - | - |
| Sympetrum | - | - | - | - | - | - |
| Tabanidae | - | - | 1 | 1 | - | - |
| Taeniopteryx | - | - | - | - | - | - |
| Tanytarsus | - | - | - | - | - | - |
| Tanytarsus sp. a epler | 2 | 2 | - | - | - | - |
| Tanytarsus sp. c epler | 4 | 1 | - | - | - | - |
| Tanytarsus sp. d epler | - | - | - | - | - | 1 |



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| Taxon Name / SampleID/BenthID -> | Rep 1 | Rep 2 | Rep 1 | Rep 2 | Rep 1 | Rep 2 |
| Tanytarsus sp. e epler | - | - | - | - | - | - |
| Tanytarsus sp. f epler | - | - | - | - | - | - |
| Tanytarsus sp. l epler | - | - | - | - | 1 | - |
| Tanytarsus sp. m epler | 1 | - | 1 | - | 1 | 1 |
| Tanytarsus sp. n epler | - | - | 1 | 1 | - | - |
| Tanytarsus sp. o epler | - | - | - | - | - | - |
| Tanytarsus sp. p epler | - | - | - | - | - | - |
| Tanytarsus sp. s epler | - | - | - | - | - | - |
| Tanytarsus sp. t epler | - | - | - | - | - | - |
| Tanytarsus sp. y epler | - | - | - | - | - | - |
| Thienemanniella | - | - | - | - | - | - |
| Thienemanniella lobapodema | - | - | - | - | - | - |
| Thienemanniella similis | - | - | - | - | - | - |
| Thienemanniella xena | - | - | - | - | - | - |
| Thienemannimyia grp. | 7 | - | 3 | 6 | 10 | 1 |
| Tipula | - | - | - | - | - | - |
| Tipula caloptera | - | - | - | - | - | - |
| Tipulidae | - | - | - | - | 1 | - |
| Torrenticola | - | - | - | - | - | - |
| Triaenodes | - | - | 3 | 6 | 7 | 7 |
| Triaenodes ignitus | - | - | - | - | - | - |
| Triaenodes perna/helo | - | - | - | - | - | - |
| Tribelos | - | - | - | - | 1 | - |
| Tribelos fuscicornis | - | - | - | - | - | - |
| Tribelos jucundum | - | - | 1 | 1 | - | - |
| Tricorythodes albilineatus | - | - | - | - | - | - |
| Tubificidae | - | 1 | - | - | - | - |
| Tvetenia | - | - | 1 | - | - | - |
| Tvetenia vitracies | - | - | - | - | - | - |
| Vertigo | - | - | - | - | - | - |
| Viviparus georgianus | - | - | - | - | - | - |
| Xenochironomus xenolabis | - | - | - | - | 1 | - |
| Xestochironomus | - | - | - | - | - | - |
| Xylotopus par | - | - | - | - | - | - |
| Zavreliella marmorata | - | - | - | - | - | - |
| Zavrelimyia sp. a epler | - | - | - | - | - | - |

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| Taxon Name / SampleID/BenthID -> | 65291/40343/ Rep 1 | 65291/40343/ Rep 2 | 65292/40344/ Rep 1 | 65292/40344/ Rep 2 | 65293/40345/ Rep 1 | 65293/40345/ Rep 2 |
| Ablabesmyia mallochi | - | - | - | 1 | 1 | 1 |
| Ablabesmyia rhamphe grp. | - | - | - | - | - | 1 |
| Acentrella | - | - | - | - | - | - |
| Acentrella parvula | - | - | - | - | - | - |
| Acerpenna pygmaea | - | - | - | - | - | - |
| Acroneuria | - | - | 2 | - | - | - |
| Acroneuria abnormis | - | - | - | - | - | - |
| Acroneuria lycorias | - | - | - | 4 | - | - |
| Agnetina annulipes | - | - | - | - | - | - |
| Allonais inaequalis | - | - | - | - | - | - |
| Amnicola | - | - | - | - | - | - |
| Amphipoda | - | - | - | - | - | 1 |
| Ancylidae | - | - | - | 1 | - | - |
| Ancyronyx variegatus | 1 | - | 7 | 4 | - | - |
| Anisocentropus pyraloides | - | 1 | - | - | - | - |
| Apedilum | - | - | - | - | - | - |
| Argia | - | - | - | - | - | - |
| Argia fumipennis | - | - | - | - | - | - |
| Argia tibialis | - | - | - | - | - | - |
| Arrenurus | - | - | - | - | - | - |
| Asioplax | - | - | - | - | 3 | 6 |
| Atherix | - | - | 2 | 1 | - | - |
| Atractides | - | - | - | - | - | - |
| Atrichopogon | - | - | - | - | - | - |
| Aulodrilus pigueti | - | - | - | - | - | - |
| Baetidae | - | - | - | - | - | - |
| Baetis intercalaris | - | - | - | - | - | - |
| Baetisca becki | - | - | - | - | - | - |
| Baetisca rogersi | - | - | 1 | - | - | - |
| Beardius | - | - | - | - | - | - |
| Berosus | - | - | - | - | 2 | - |
| Bivalvia | - | - | - | - | 1 | - |
| Boyeria vinosa | - | - | - | - | - | - |
| Brachycentrus chelatus | - | 1 | - | - | - | - |
| Brachycentrus numerosus | - | - | - | - | - | - |
| Branchiobdellidae | - | - | - | - | - | - |
| Bratislavia unidentata | - | - | - | - | - | - |
| Brillia | - | - | - | - | - | - |
| Caecidotea | 14 | 15 | - | - | 1 | 3 |
| Caenis | - | - | - | - | - | - |
| Caenis diminuta | - | - | - | - | - | - |
| Caenis eglinensis | - | - | - | - | - | - |
| Caenis hilaris | - | - | - | - | - | - |
| Callibaetis | - | - | - | - | - | - |
| Callibaetis floridanus | - | - | - | - | - | - |
| Calopterygidae | - | - | - | - | - | - |
| Calopteryx | - | - | 3 | 1 | - | - |
| Cambaridae | - | - | 3 | 5 | - | - |
| Campeloma | - | - | - | - | - | - |
| Cecidomyiidae | - | 1 | - | - | - | - |



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| Taxon Name / SampleID/BenthID -> | 65291/40343/ Rep 1 | 65291/40343/ Rep 2 | 65292/40344/ Rep 1 | 65292/40344/ Rep 2 | 65293/40345/ Rep 1 | 65293/40345/ Rep 2 |
| Celina | - | - | - | - | - | - |
| Centroptilum triangulifer | - | - | - | - | - | - |
| Ceraclea | - | - | - | - | - | - |
| Ceratopogonidae | - | - | - | - | 1 | - |
| Cernotina | - | - | - | - | - | - |
| Chauliodes | - | - | - | - | - | - |
| Cheumatopsyche | 4 | 2 | 1 | 3 | 3 | 3 |
| Chimarra | 3 | - | 5 | 5 | 10 | 13 |
| Chironomus | - | - | - | - | - | - |
| Choroterpes basalis | - | - | - | - | - | - |
| Chrysomelidae | - | - | - | - | - | - |
| Cladotanytarsus | - | - | - | 1 | - | - |
| Cladotanytarsus cf. daviesi | - | - | - | - | - | - |
| Cladotanytarsus sp. d epler | - | - | - | - | - | - |
| Cladotanytarsus sp. f epler | - | - | - | - | - | - |
| Cladotanytarsus viridiventris | - | - | - | - | - | - |
| Clathrosperchon | - | - | - | - | - | - |
| Climacia areolaris | - | - | - | - | - | - |
| Clinotanypus | - | - | - | - | - | - |
| Coenagrionidae | 2 | 5 | 1 | 3 | - | - |
| Corbicula fluminea | - | - | - | - | - | - |
| Corydalidae | - | - | - | - | - | - |
| Corydalus cornutus | - | 1 | 3 | 8 | 4 | 1 |
| Corynoneura | - | - | - | - | - | - |
| Crangonyx | - | 4 | - | - | - | - |
| Cricotopus | - | - | 1 | 2 | - | 1 |
| Cricotopus bicinctus | - | - | - | - | - | - |
| Cricotopus or orthocladius | - | - | - | - | - | 3 |
| Cryptochironomus | - | - | - | - | - | - |
| Cryptotendipes | - | - | - | - | - | - |
| Curculionidae | - | - | - | - | - | - |
| Cyrnellus fraternus | - | - | - | - | - | - |
| Dasyhelea | - | - | - | - | - | - |
| Dero | - | - | - | - | - | - |
| Dero digitata complex | - | - | - | - | - | - |
| Dero flabelliger | - | - | - | - | - | - |
| Dero furcata | - | - | - | - | - | - |
| Dero pectinata | - | - | - | - | - | - |
| Desmopachria | - | - | - | - | - | - |
| Desserobdella phalera | - | - | - | - | - | - |
| Dicrotendipes | - | - | - | - | 1 | - |
| Dicrotendipes modestus | - | - | - | - | - | - |
| Dicrotendipes neomodestus | - | - | - | - | - | 1 |
| Dicrotendipes simpsoni | - | - | - | - | - | - |
| Dicrotendipes sp. a epler | - | - | - | - | - | - |
| Dineutus | - | - | 1 | - | - | - |
| Diplectrona | - | - | - | - | - | - |
| Djalmabatista pulcher | - | - | - | - | - | - |
| Dryopidae | - | - | - | - | - | - |
| Dubiraphia vittata | 1 | 1 | 2 | - | - | 2 |



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| Taxon Name / SampleID/BenthID -> | 65291/40343/ Rep 1 | 65291/40343/ Rep 2 | 65292/40344/ Rep 1 | 65292/40344/ Rep 2 | 65293/40345/ Rep 1 | 65293/40345/ Rep 2 |
| Dytiscidae | - | - | - | - | - | - |
| Eclipidrilus | 1 | - | - | - | - | - |
| Eclipidrilus palustris | - | - | - | - | - | - |
| Ectopria | - | - | 8 | 1 | - | - |
| Ectopria thoracica | 1 | - | - | - | - | - |
| Einfeldia sp. a epler | - | - | - | - | - | - |
| Elimia | - | - | - | - | - | - |
| Elmidae | - | - | - | - | - | - |
| Enallagma | - | - | - | - | - | - |
| Enallagma coecum | - | - | - | - | - | - |
| Enchytraeidae | - | - | - | - | - | - |
| Endotribelos hesperium | - | - | - | - | - | - |
| Enochrus | - | - | - | - | - | - |
| Epicordulia princeps regina | - | - | - | - | - | - |
| Eurylophella doris | - | - | - | - | - | - |
| Ferrissia | - | - | - | - | - | - |
| Gastropoda | - | - | 1 | - | - | - |
| Geayia | - | - | 1 | 3 | - | - |
| Gerridae | - | - | - | - | - | - |
| Glossiphoniidae | - | - | - | - | - | - |
| Goeldichironomus | - | - | - | - | - | - |
| Goeldichironomus cf. natans | - | - | - | - | - | - |
| Goeldichironomus holoprasinus | - | - | - | - | - | - |
| Gomphidae | 1 | - | 2 | - | - | - |
| Gomphus | - | - | - | - | - | - |
| Gonielmis dietrichi | 3 | 5 | - | - | - | - |
| Gyrinidae | - | - | - | - | - | - |
| Gyrinus | - | - | - | - | - | - |
| Haemonais waldvogeli | - | - | - | - | - | - |
| Hagenius brevistylus | - | - | - | - | - | - |
| Haitia | - | - | - | - | - | - |
| Hayesomyia senata | 2 | 6 | - | 1 | - | - |
| Helichus | - | - | - | - | - | - |
| Helichus lithophilus | - | - | - | - | - | - |
| Helobdella stagnalis | - | - | - | - | - | - |
| Helobdella triserialis | - | - | - | - | - | - |
| Hemerodromia | - | 1 | 2 | 4 | - | - |
| Heptageniidae | - | - | - | - | - | - |
| Hetaerina | - | - | - | - | - | - |
| Hetaerina titia | - | - | - | - | - | - |
| Hexagenia | - | - | - | - | - | - |
| Hexatoma | - | - | - | 2 | - | - |
| Hirudinea | - | - | - | - | - | - |
| Hyalella azteca | - | - | - | - | - | - |
| Hydraena | - | - | - | - | - | - |
| Hydrobiidae | - | - | - | - | - | - |
| Hydrodroma | - | - | - | - | - | - |
| Hydrometra | - | - | - | - | - | - |
| Hydrophilidae | - | - | - | - | - | 1 |
| Hydropsyche | 5 | 2 | 5 | 4 | 37 | 54 |



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|---|---|---|---|---|---|---|
| Sample date -> | 7/9/2008 | 7/9/2008 | 7/24/2008 | 7/24/2008 | 7/16/2008 | 7/16/2008 |
| Taxon Name / SampleID/BenthID -> | 65291/40343/ Rep 1 | 65291/40343/ Rep 2 | 65292/40344/ Rep 1 | 65292/40344/ Rep 2 | 65293/40345/ Rep 1 | 65293/40345/ Rep 2 |
| Hydropsyche incommoda | - | - | - | - | - | - |
| Hydropsyche mississippiensis | - | - | - | - | - | - |
| Hydroptila | 32 | 38 | 6 | 11 | 17 | 26 |
| Hydrovatus | - | - | - | - | - | - |
| Hygrobates | - | - | - | - | - | - |
| Ischnura | - | - | - | - | - | - |
| Isonychia | - | 2 | - | - | - | - |
| Kiefferulus | - | - | - | - | - | - |
| Koenikea | - | - | - | - | - | - |
| Krendowskia | - | - | - | - | - | - |
| Labrundinia | - | - | - | - | - | - |
| Labrundinia becki | - | - | - | - | - | - |
| Labrundinia johannseni | - | - | - | - | - | - |
| Labrundinia pilosella | - | - | - | - | - | - |
| Labrundinia sp. 3 nr. virescens | - | - | - | - | - | - |
| Laccophilus | - | - | 1 | - | - | - |
| Laevapex | - | - | - | - | - | - |
| Larsia | - | - | - | - | - | - |
| Larsia decolorata | - | - | - | - | - | - |
| Lauterborniella agrayloides | - | - | - | - | - | - |
| Lebertia | 1 | - | - | - | 3 | 1 |
| Lepidoptera | - | - | - | - | - | - |
| Lepidostoma | - | - | - | - | - | - |
| Leptophlebiidae | - | - | 2 | 1 | - | - |
| Leuctra | 3 | - | 4 | 7 | - | - |
| Libellulidae | - | - | - | - | - | 1 |
| Limnesia | - | - | - | - | - | - |
| Limnodrilus hoffmeisteri | - | - | - | - | - | - |
| Lioporeus | - | - | - | - | - | - |
| Lirceus | - | - | - | - | - | - |
| Lopescladius | - | - | - | - | - | - |
| Lumbriculus variegatus | - | - | - | - | - | - |
| Lymnaeidae | - | - | - | - | - | - |
| Lype diversa | - | - | - | - | - | - |
| Maccaffertium | 4 | 4 | - | - | - | - |
| Maccaffertium exiguum | - | - | - | - | - | - |
| Maccaffertium smithae | - | - | 5 | 4 | - | - |
| Macromia | - | - | - | 2 | - | - |
| Macromia illinoiensis georgina | - | - | - | - | - | - |
| Macronychus glabratus | - | - | - | - | - | - |
| Macrostemum carolina | - | - | - | - | - | - |
| Mayatrichia ayama | 1 | - | - | - | - | - |
| Megistocera | - | - | - | - | - | - |
| Mesonoterus | - | - | - | - | - | - |
| Mesovelia | - | - | - | - | - | - |
| Micrasema | - | - | - | - | - | - |
| Microcylloepus pusillus | - | - | 2 | - | 4 | 3 |
| Micromenetus | - | - | - | - | - | - |
| Micromenetus dilatatus avus | - | - | - | - | - | - |
| Micropsectra | - | - | - | - | - | - |



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| As Calculated / STORET station -> | 3545 | 3545 | 32030023 | 32030023 | 21010008 | 21010008 |
|---|---|---|---|---|---|---|
| Sample date -> | 7/9/2008 | 7/9/2008 | 7/24/2008 | 7/24/2008 | 7/16/2008 | 7/16/2008 |
| Taxon Name / SampleID/BenthID -> | 65291/40343/ Rep 1 | 65291/40343/ Rep 2 | 65292/40344/ Rep 1 | 65292/40344/ Rep 2 | 65293/40345/ Rep 1 | 65293/40345/ Rep 2 |
| Microtendipes | - | - | - | - | - | - |
| Microtendipes pedellus grp. | 1 | 2 | - | - | - | - |
| Microtendipes rydalensis grp. | - | - | - | - | - | - |
| Microvelia | - | - | - | - | - | - |
| Mideopsis | - | - | - | - | - | - |
| Momonia | - | - | - | - | - | - |
| Monopelopia | - | - | - | - | - | - |
| Mooreobdella | - | - | - | - | - | - |
| Naididae | - | - | - | - | - | - |
| Nais communis complex | - | - | 1 | - | - | - |
| Nais(animal) | - | - | - | - | - | - |
| Nanocladius | - | - | - | - | - | - |
| Nectopsyche | 1 | - | - | - | - | - |
| Nectopsyche exquisita | - | - | - | - | - | - |
| Nectopsyche pavida | - | - | 1 | 2 | - | - |
| Neoephemera | - | - | - | - | - | - |
| Neoperla | - | - | 3 | 1 | - | - |
| Neoplasta | - | - | - | - | - | - |
| Neoplea | - | - | - | - | - | - |
| Neoporus | - | - | - | - | - | - |
| Neotrichia | - | - | - | - | - | - |
| Neureclipsis | - | - | - | - | - | - |
| Neureclipsis crepuscularis | - | - | - | - | - | - |
| Neurocordulia | - | - | - | - | - | - |
| Neurocordulia alabamensis | - | 1 | - | - | - | - |
| Nigronia | - | - | - | - | - | - |
| Nigronia serricornis | - | - | 1 | - | - | - |
| Nilotanypus americanus | - | - | - | 1 | - | - |
| Nilotanypus fimbriatus | - | - | - | - | - | - |
| Nilothauma | - | 1 | - | - | - | - |
| Notomicrus nanulus | - | - | - | - | - | - |
| Nyctiophylax | - | - | - | - | - | - |
| Oecetis | - | - | 4 | 3 | - | - |
| Oecetis avara | - | - | - | - | 2 | - |
| Oecetis cinerascens | - | - | - | - | - | - |
| Oecetis georgia | 2 | 2 | - | - | - | - |
| Oecetis sphyra/morsei | 5 | 1 | - | - | - | - |
| Ora/scirtes | 1 | - | - | - | - | - |
| Oribatida | - | - | - | - | - | - |
| Ormosia | - | - | - | - | - | - |
| Orthocladius annectens | - | - | - | - | - | - |
| Orthotrichia | - | - | - | - | - | - |
| Oxus | - | - | - | - | - | - |
| Oxyethira | 2 | 1 | - | - | - | - |
| Pachydiplax longipennis | - | - | - | - | - | - |
| Palaemonetes | - | - | - | - | - | - |
| Palpomyia/bezzia grp. | - | 1 | - | - | - | - |
| Parachaetocladius abnobaeus | - | - | 1 | 1 | - | - |
| Parachironomus | - | - | - | - | - | - |
| Parachironomus chaetoalus complex | - | - | - | - | - | - |



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| Taxon Name / SampleID/BenthID -> | 65291/40343/ Rep 1 | 65291/40343/ Rep 2 | 65292/40344/ Rep 1 | 65292/40344/ Rep 2 | 65293/40345/ Rep 1 | 65293/40345/ Rep 2 |
| Parachironomus supparilis | - | - | - | - | - | - |
| Paracladopelma | - | - | - | - | - | - |
| Paracymus | - | - | - | - | - | - |
| Parakiefferiella sp. b epler | - | - | - | - | - | - |
| Parakiefferiella sp. f epler | - | - | - | - | - | - |
| Paralauterborniella nigrohalterale | - | - | - | - | - | - |
| Paraleptophlebia volitans | 5 | 7 | - | - | - | - |
| Paramerina | - | - | - | - | - | - |
| Parametriocnemus | 1 | - | - | - | - | - |
| Paratanytarsus | - | - | 1 | - | - | - |
| Paratanytarsus dissimilis | - | - | - | - | - | - |
| Paratanytarsus quadratus | - | - | - | - | - | - |
| Paratendipes subaequalis | - | - | - | - | - | - |
| Pelonomus obscurus | - | - | - | - | - | - |
| Peltodytes | - | - | - | - | - | - |
| Peltodytes dietrichi | - | - | - | - | - | - |
| Pentaneura inconspicua | - | - | - | - | - | - |
| Perlesta placida complex | - | - | - | - | - | - |
| Perlinella drymo | - | - | - | - | - | - |
| Phaenopsectra flavipes | - | - | - | - | - | - |
| Phylocentropus | - | - | - | - | - | - |
| Physa | - | - | - | - | - | - |
| Physidae | - | - | - | - | - | - |
| Pilaria | - | - | - | - | - | - |
| Placobdella | 1 | - | - | - | - | - |
| Planorbella | - | - | - | - | - | - |
| Planorbidae | - | - | - | - | - | - |
| Platyhelminthes | - | 1 | - | - | - | - |
| Plauditus | 2 | 2 | - | 1 | - | 1 |
| Plauditus bimaculatus | - | - | - | - | - | - |
| Plecoptera | - | - | - | - | - | - |
| Polycentropodidae | - | - | - | - | - | - |
| Polycentropus | - | - | - | - | - | - |
| Polypedilum aviceps | - | - | 3 | 1 | - | - |
| Polypedilum fallax | - | - | - | - | - | - |
| Polypedilum flavum | 1 | 2 | 8 | 13 | 16 | 13 |
| Polypedilum halterale grp. | - | - | - | - | - | - |
| Polypedilum illinoense grp. | - | - | - | 2 | 2 | 3 |
| Polypedilum scalaenum grp. | 1 | - | 4 | 7 | - | - |
| Polypedilum sp. a epler | - | - | - | - | - | - |
| Polypedilum trigonus | - | - | - | - | - | - |
| Polypedilum tritum | - | - | - | - | - | - |
| Potthastia | - | - | - | - | - | - |
| Potthastia longimana | - | - | - | - | - | - |
| Pristina | - | - | - | - | - | - |
| Procambarus | 2 | 2 | - | - | - | - |
| Procladius | - | - | - | - | - | - |
| Procloeon | - | - | - | - | - | - |
| Progomphus | - | - | - | - | - | - |
| Progomphus obscurus | - | - | - | - | - | - |



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| As Calculated / STORET station -> | 3545 | 3545 | 32030023 | 32030023 | 21010008 | 21010008 |
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| Taxon Name / SampleID/BenthID -> | 65291/40343/ Rep 1 | 65291/40343/ Rep 2 | 65292/40344/ Rep 1 | 65292/40344/ Rep 2 | 65293/40345/ Rep 1 | 65293/40345/ Rep 2 |
| Promoresia tardella | - | - | 2 | - | - | - |
| Prostoma | - | - | - | - | - | - |
| Psectrocladius | - | 1 | - | - | - | - |
| Pseudochironomus | - | - | - | - | 5 | - |
| Pseudocloeon | 4 | 4 | - | - | 4 | 1 |
| Pseudocloeon ephippiatum | - | - | - | - | - | - |
| Pseudocloeon frondale | - | - | - | - | - | - |
| Pseudocloeon propinquum | - | - | - | - | - | - |
| Pseudolimnophila | - | - | - | - | - | - |
| Psychodidae | - | - | - | - | - | - |
| Pteronarcys dorsata | - | - | - | - | - | - |
| Pyralidae | - | - | - | - | - | - |
| Rheocricotopus robacki | - | - | - | - | - | - |
| Rheotanytarsus | - | - | - | - | - | - |
| Rheotanytarsus exiguus grp. | 1 | 1 | 14 | 4 | 7 | 5 |
| Rheotanytarsus pellucidus | - | - | - | - | - | - |
| Rhyncholimnochares | - | - | - | - | - | - |
| Robackia claviger | - | - | - | - | - | - |
| Serratella deficiens | - | - | - | - | - | - |
| Sialis | - | - | - | - | - | - |
| Simulium | - | 1 | - | - | 6 | 2 |
| Simulium jonesi | - | - | - | - | - | - |
| Sisyra | - | - | - | - | - | - |
| Slavina appendiculata | - | - | - | - | - | - |
| Sperchon | - | - | - | - | - | 1 |
| Sperchonopsis | - | - | - | - | - | - |
| Sperchopsis | - | - | - | - | - | - |
| Sperchopsis tessellatus | - | - | - | - | - | - |
| Sphaeriidae(mollusca) | - | - | - | - | - | - |
| Spirosperma | 1 | - | - | - | - | - |
| Staphylinidae | - | - | - | - | - | - |
| Stelechomyia perpulchra | - | - | 1 | 2 | - | - |
| Stempellina | - | - | - | - | - | - |
| Stempellinella | - | - | - | - | - | - |
| Stempellinella fimbriata | - | - | - | - | - | - |
| Stempellinella leptocelloides | - | - | - | - | - | - |
| Stenacron | - | - | - | - | - | - |
| Stenacron interpunctatum | - | - | - | - | - | - |
| Stenelmis | 7 | 4 | 11 | 11 | - | 1 |
| Stenochironomus | - | - | 7 | 4 | - | - |
| Stenus | - | - | - | - | - | - |
| Stephensoniana trivandrana | - | - | - | - | - | - |
| Stratiomyidae | - | - | - | - | - | - |
| Sympetrum | - | - | - | - | - | - |
| Tabanidae | - | - | - | - | - | - |
| Taeniopteryx | - | - | - | - | - | - |
| Tanytarsus | - | - | - | - | - | - |
| Tanytarsus sp. a epler | 1 | 1 | - | - | - | - |
| Tanytarsus sp. c epler | 1 | - | - | - | 1 | - |
| Tanytarsus sp. d epler | - | - | 2 | 2 | - | - |



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| As Calculated / STORET station -> | 3545 | 3545 | 32030023 | 32030023 | 21010008 | 21010008 |
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| Taxon Name / SampleID/BenthID -> | 65291/40343/ Rep 1 | 65291/40343/ Rep 2 | 65292/40344/ Rep 1 | 65292/40344/ Rep 2 | 65293/40345/ Rep 1 | 65293/40345/ Rep 2 |
| Tanytarsus sp. e epler | - | - | - | - | - | - |
| Tanytarsus sp. f epler | - | - | - | - | - | - |
| Tanytarsus sp. l epler | - | 1 | - | - | - | - |
| Tanytarsus sp. m epler | - | - | - | - | - | - |
| Tanytarsus sp. n epler | - | - | - | - | - | - |
| Tanytarsus sp. o epler | - | - | - | - | - | - |
| Tanytarsus sp. p epler | - | - | - | - | - | - |
| Tanytarsus sp. s epler | - | - | - | - | - | - |
| Tanytarsus sp. t epler | - | - | - | - | - | - |
| Tanytarsus sp. y epler | - | - | - | - | - | - |
| Thienemanniella | - | - | - | - | - | - |
| Thienemanniella lobapodema | - | - | - | - | - | - |
| Thienemanniella similis | - | - | - | - | - | - |
| Thienemanniella xena | - | - | - | - | - | - |
| Thienemannimyia grp. | 8 | 5 | 3 | 4 | 2 | 2 |
| Tipula | - | - | - | - | - | - |
| Tipula caloptera | - | - | - | - | - | - |
| Tipulidae | - | - | 1 | - | - | - |
| Torrenticola | - | - | - | - | - | - |
| Triaenodes | 1 | 1 | - | - | - | - |
| Triaenodes ignitus | - | - | - | - | 3 | - |
| Triaenodes perna/helo | - | - | - | - | - | - |
| Tribelos | - | - | - | - | - | - |
| Tribelos fuscicornis | - | - | - | - | 1 | 1 |
| Tribelos jucundum | 1 | - | - | - | - | - |
| Tricorythodes albilineatus | 5 | 8 | 2 | 1 | 2 | 4 |
| Tubificidae | - | - | - | 1 | - | 1 |
| Tvetenia | - | - | - | - | - | - |
| Tvetenia vitracies | 12 | 10 | - | 4 | 2 | 3 |
| Vertigo | - | - | - | - | - | - |
| Viviparus georgianus | - | - | - | - | - | - |
| Xenochironomus xenolabis | - | - | - | - | - | - |
| Xestochironomus | - | - | - | - | - | - |
| Xylotopus par | - | - | - | - | - | - |
| Zavreliella marmorata | - | - | - | - | - | - |
| Zavrelimyia sp. a epler | - | - | - | - | - | - |



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| As Calculated / STORET station -> | 3546 | 3546 | 3549 | 3549 | 22050083 | 22050083 |
|---|---|---|---|---|---|---|
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| Taxon Name / SampleID/BenthID -> | 65296/40348/ Rep 1 | 65296/40348/ Rep 2 | 65316/40349/ Rep 1 | 65316/40349/ Rep 2 | 65379/40364/ Rep 1 | 65379/40364/ Rep 2 |
| Ablabesmyia mallochi | 4 | 5 | - | - | 1 | - |
| Ablabesmyia rhamphe grp. | 1 | 1 | - | 2 | - | - |
| Acentrella | - | - | - | - | - | - |
| Acentrella parvula | - | - | - | - | - | - |
| Acerpenna pygmaea | - | - | - | - | - | - |
| Acroneuria | 1 | - | - | - | - | - |
| Acroneuria abnormis | - | - | - | - | - | - |
| Acroneuria lycorias | - | - | - | - | - | - |
| Agnetina annulipes | - | - | - | - | - | - |
| Allonais inaequalis | - | - | - | - | - | - |
| Amnicola | - | - | - | - | - | - |
| Amphipoda | - | - | - | - | - | - |
| Ancylidae | - | - | - | - | 2 | - |
| Ancyronyx variegatus | - | - | - | 1 | - | - |
| Anisocentropus pyraloides | - | - | - | - | - | - |
| Apedilum | - | - | - | - | - | - |
| Argia | - | - | 1 | 1 | - | 4 |
| Argia fumipennis | - | - | - | - | - | - |
| Argia tibialis | - | - | - | - | - | - |
| Arrenurus | - | - | - | - | 2 | 2 |
| Asioplax | - | - | - | - | - | - |
| Atherix | - | - | - | - | - | - |
| Atractides | - | - | - | - | - | - |
| Atrichopogon | 2 | - | - | - | - | 1 |
| Aulodrilus pigueti | - | - | - | - | - | - |
| Baetidae | - | - | - | 4 | - | - |
| Baetis intercalaris | 1 | 2 | - | - | - | - |
| Baetisca becki | - | - | - | - | - | - |
| Baetisca rogersi | - | - | - | - | - | - |
| Beardius | - | - | - | - | - | - |
| Berosus | - | - | - | - | - | - |
| Bivalvia | - | - | - | - | - | - |
| Boyeria vinosa | - | - | - | - | - | - |
| Brachycentrus chelatus | - | - | - | - | - | - |
| Brachycentrus numerosus | - | 2 | - | - | - | - |
| Branchiobdellidae | - | - | - | - | - | - |
| Bratislavia unidentata | - | - | - | - | - | - |
| Brillia | - | - | - | - | - | - |
| Caecidotea | - | - | - | - | - | - |
| Caenis | 5 | 2 | - | 1 | - | - |
| Caenis diminuta | - | - | - | - | - | - |
| Caenis eglinensis | - | - | - | - | - | - |
| Caenis hilaris | - | - | - | - | - | - |
| Callibaetis | - | - | - | - | - | - |
| Callibaetis floridanus | - | - | - | - | 6 | 5 |
| Calopterygidae | - | - | - | - | - | - |
| Calopteryx | - | - | - | - | - | - |
| Cambaridae | - | 2 | - | - | - | - |
| Campeloma | - | - | - | - | - | - |
| Cecidomyiidae | - | - | - | - | - | - |



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| As Calculated / STORET station -> | 3546 | 3546 | 3549 | 3549 | 22050083 | 22050083 |
|---|---|---|---|---|---|---|
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| Taxon Name / SampleID/BenthID -> | 65296/40348/ Rep 1 | 65296/40348/ Rep 2 | 65316/40349/ Rep 1 | 65316/40349/ Rep 2 | 65379/40364/ Rep 1 | 65379/40364/ Rep 2 |
| Celina | - | - | - | - | - | - |
| Centroptilum triangulifer | - | - | - | - | - | - |
| Ceraclea | - | - | - | - | - | - |
| Ceratopogonidae | - | 1 | 1 | - | - | - |
| Cernotina | - | - | - | - | 1 | - |
| Chauliodes | - | - | - | - | - | - |
| Cheumatopsyche | 3 | 4 | - | - | 2 | - |
| Chimarra | - | - | 3 | 3 | 14 | 10 |
| Chironomus | - | - | - | - | - | - |
| Choroterpes basalis | - | - | - | - | - | - |
| Chrysomelidae | - | - | - | - | - | - |
| Cladotanytarsus | - | - | - | - | - | - |
| Cladotanytarsus cf. daviesi | - | - | - | - | - | - |
| Cladotanytarsus sp. d epler | - | - | - | - | - | - |
| Cladotanytarsus sp. f epler | - | - | - | - | - | - |
| Cladotanytarsus viridiventris | - | - | - | - | - | - |
| Clathrosperchon | - | - | - | - | - | - |
| Climacia areolaris | - | - | - | - | - | - |
| Clinotanypus | - | - | - | - | - | - |
| Coenagrionidae | - | 1 | - | - | 1 | - |
| Corbicula fluminea | - | - | - | - | 3 | - |
| Corydalidae | - | - | - | - | - | - |
| Corydalus cornutus | 3 | 2 | - | - | - | - |
| Corynoneura | - | - | - | - | - | - |
| Crangonyx | - | - | - | - | - | - |
| Cricotopus | 1 | - | - | 1 | - | - |
| Cricotopus bicinctus | - | - | - | - | - | 1 |
| Cricotopus or orthocladius | 1 | 1 | - | - | - | - |
| Cryptochironomus | 1 | 1 | - | - | - | - |
| Cryptotendipes | 1 | 1 | - | - | - | - |
| Curculionidae | - | - | - | - | - | - |
| Cyrnellus fraternus | - | 1 | - | - | - | - |
| Dasyhelea | - | - | - | - | - | - |
| Dero | - | - | - | - | - | - |
| Dero digitata complex | - | - | - | - | - | - |
| Dero flabelliger | - | - | - | - | - | - |
| Dero furcata | - | - | - | - | - | - |
| Dero pectinata | - | - | - | - | - | - |
| Desmopachria | - | - | - | - | - | - |
| Desserobdella phalera | - | - | - | - | - | - |
| Dicrotendipes | - | - | - | - | - | - |
| Dicrotendipes modestus | 1 | 1 | - | - | - | - |
| Dicrotendipes neomodestus | 2 | 2 | - | - | 2 | - |
| Dicrotendipes simpsoni | - | - | - | - | - | - |
| Dicrotendipes sp. a epler | - | - | - | - | - | - |
| Dineutus | - | 1 | - | - | - | - |
| Diplectrona | - | - | - | - | - | - |
| Djalmabatista pulcher | - | - | - | - | - | - |
| Dryopidae | - | - | - | - | - | - |
| Dubiraphia vittata | - | 2 | - | - | 5 | 2 |



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| As Calculated / STORET station -> | 3546 | 3546 | 3549 | 3549 | 22050083 | 22050083 |
|---|---|---|---|---|---|---|
| Sample date -> | 7/9/2008 | 7/9/2008 | 7/10/2008 | 7/10/2008 | 8/12/2008 | 8/12/2008 |
| Taxon Name / SampleID/BenthID -> | 65296/40348/ Rep 1 | 65296/40348/ Rep 2 | 65316/40349/ Rep 1 | 65316/40349/ Rep 2 | 65379/40364/ Rep 1 | 65379/40364/ Rep 2 |
| Dytiscidae | - | - | - | - | - | - |
| Eclipidrilus | - | - | - | - | - | - |
| Eclipidrilus palustris | - | - | - | - | - | - |
| Ectopria | - | - | - | - | - | - |
| Ectopria thoracica | 1 | 1 | - | - | - | - |
| Einfeldia sp. a epler | - | - | - | - | - | 1 |
| Elimia | 2 | - | - | - | 18 | 22 |
| Elmidae | - | - | - | - | - | - |
| Enallagma | - | - | - | - | - | - |
| Enallagma coecum | - | - | - | - | - | - |
| Enchytraeidae | - | 1 | - | - | - | - |
| Endotribelos hesperium | - | - | - | - | - | - |
| Enochrus | - | - | - | - | - | - |
| Epicordulia princeps regina | - | - | - | - | 2 | - |
| Eurylophella doris | - | - | - | - | - | - |
| Ferrissia | - | - | - | - | - | - |
| Gastropoda | - | - | - | - | - | - |
| Geayia | - | - | - | - | - | - |
| Gerridae | - | - | - | - | - | - |
| Glossiphoniidae | - | - | - | - | - | - |
| Goeldichironomus | - | - | - | - | - | - |
| Goeldichironomus cf. natans | - | - | - | - | - | - |
| Goeldichironomus holoprasinus | - | - | - | - | - | - |
| Gomphidae | - | - | - | - | - | - |
| Gomphus | - | - | - | - | - | - |
| Gonielmis dietrichi | - | - | - | - | - | - |
| Gyrinidae | - | - | - | - | - | - |
| Gyrinus | - | - | - | - | - | - |
| Haemonais waldvogeli | - | - | - | - | - | - |
| Hagenius brevistylus | - | - | - | - | - | - |
| Haitia | - | - | - | - | - | - |
| Hayesomyia senata | - | - | - | - | - | - |
| Helichus | - | - | - | - | - | - |
| Helichus lithophilus | - | - | - | - | - | - |
| Helobdella stagnalis | - | - | - | - | - | - |
| Helobdella triserialis | - | - | - | - | - | - |
| Hemerodromia | 1 | - | 1 | 2 | - | - |
| Heptageniidae | 4 | 5 | - | - | - | 1 |
| Hetaerina | - | - | - | - | - | - |
| Hetaerina titia | 1 | - | - | - | - | - |
| Hexagenia | - | - | - | - | - | - |
| Hexatoma | - | - | - | - | - | - |
| Hirudinea | - | - | - | - | - | - |
| Hyalella azteca | - | - | - | - | 3 | 4 |
| Hydraena | - | - | - | - | - | - |
| Hydrobiidae | 1 | - | - | - | 8 | 10 |
| Hydrodroma | - | - | - | - | - | - |
| Hydrometra | - | - | - | - | - | - |
| Hydrophilidae | - | - | - | - | - | - |
| Hydropsyche | 3 | 3 | - | - | - | - |



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| As Calculated / STORET station -> | 3546 | 3546 | 3549 | 3549 | 22050083 | 22050083 |
|---|---|---|---|---|---|---|
| Sample date -> | 7/9/2008 | 7/9/2008 | 7/10/2008 | 7/10/2008 | 8/12/2008 | 8/12/2008 |
| Taxon Name / SampleID/BenthID -> | 65296/40348/ Rep 1 | 65296/40348/ Rep 2 | 65316/40349/ Rep 1 | 65316/40349/ Rep 2 | 65379/40364/ Rep 1 | 65379/40364/ Rep 2 |
| Hydropsyche incommoda | - | - | 87 | 68 | - | - |
| Hydropsyche mississippiensis | - | - | 10 | 15 | - | - |
| Hydroptila | 14 | 6 | 9 | 9 | 1 | 5 |
| Hydrovatus | - | - | - | - | - | - |
| Hygrobates | - | - | - | - | - | - |
| Ischnura | - | - | - | - | - | - |
| Isonychia | 4 | 2 | - | - | - | - |
| Kiefferulus | - | - | - | - | - | - |
| Koenikea | - | - | - | - | - | - |
| Krendowskia | 2 | - | - | - | - | - |
| Labrundinia | 1 | - | - | - | - | - |
| Labrundinia becki | - | - | - | - | - | - |
| Labrundinia johannseni | - | - | - | - | - | 1 |
| Labrundinia pilosella | - | - | - | - | - | - |
| Labrundinia sp. 3 nr. virescens | - | - | - | - | - | - |
| Laccophilus | - | - | - | - | - | - |
| Laevapex | - | - | - | - | - | - |
| Larsia | - | - | - | - | - | - |
| Larsia decolorata | - | - | - | - | - | - |
| Lauterborniella agrayloides | - | - | - | - | - | - |
| Lebertia | 1 | 1 | - | - | - | - |
| Lepidoptera | - | - | - | - | - | 1 |
| Lepidostoma | - | - | - | - | - | - |
| Leptophlebiidae | 1 | - | - | - | - | - |
| Leuctra | - | - | - | - | - | - |
| Libellulidae | - | - | - | - | - | 2 |
| Limnesia | - | - | - | - | - | - |
| Limnodrilus hoffmeisteri | - | - | - | - | - | - |
| Lioporeus | - | - | - | - | - | - |
| Lirceus | - | - | - | - | - | - |
| Lopescladius | - | - | - | - | - | - |
| Lumbriculus variegatus | - | - | 1 | - | - | - |
| Lymnaeidae | - | - | - | - | 1 | - |
| Lype diversa | - | - | - | - | - | - |
| Maccaffertium | - | - | 3 | 4 | - | - |
| Maccaffertium exiguum | - | - | - | - | - | - |
| Maccaffertium smithae | - | - | - | - | - | - |
| Macromia | 1 | 1 | - | - | - | - |
| Macromia illinoiensis georgina | - | - | - | - | - | - |
| Macronychus glabratus | 5 | 5 | - | - | - | - |
| Macrostemum carolina | - | - | - | - | - | - |
| Mayatrichia ayama | - | - | - | - | - | - |
| Megistocera | - | - | - | - | - | - |
| Mesonoterus | - | - | - | - | - | - |
| Mesovelia | - | - | - | - | - | - |
| Micrasema | - | - | - | - | - | - |
| Microcylloepus pusillus | 2 | 3 | 1 | - | 9 | 9 |
| Micromenetus | - | - | - | - | - | - |
| Micromenetus dilatatus avus | - | - | - | - | - | - |
| Micropsectra | - | - | - | - | - | - |



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| As Calculated / STORET station -> | 3546 | 3546 | 3549 | 3549 | 22050083 | 22050083 |
|---|---|---|---|---|---|---|
| Sample date -> | 7/9/2008 | 7/9/2008 | 7/10/2008 | 7/10/2008 | 8/12/2008 | 8/12/2008 |
| Taxon Name / SampleID/BenthID -> | 65296/40348/ Rep 1 | 65296/40348/ Rep 2 | 65316/40349/ Rep 1 | 65316/40349/ Rep 2 | 65379/40364/ Rep 1 | 65379/40364/ Rep 2 |
| Microtendipes | - | - | - | - | - | - |
| Microtendipes pedellus grp. | - | - | - | - | - | - |
| Microtendipes rydalensis grp. | - | - | - | - | - | - |
| Microvelia | - | - | - | - | - | - |
| Mideopsis | - | - | - | - | - | 1 |
| Momonia | - | - | - | - | - | - |
| Monopelopia | - | - | - | - | - | - |
| Mooreobdella | - | - | - | - | - | - |
| Naididae | - | - | - | - | - | - |
| Nais communis complex | - | - | - | - | - | - |
| Nais(animal) | - | 1 | - | - | - | - |
| Nanocladius | - | - | - | - | - | - |
| Nectopsyche | - | - | - | - | - | - |
| Nectopsyche exquisita | - | - | - | - | - | - |
| Nectopsyche pavida | - | - | - | - | - | - |
| Neoephemera | - | - | - | - | - | - |
| Neoperla | - | - | - | - | - | - |
| Neoplasta | - | - | - | - | - | - |
| Neoplea | - | - | - | - | - | - |
| Neoporus | - | - | - | - | - | - |
| Neotrichia | - | - | - | - | - | - |
| Neureclipsis | - | - | - | - | - | - |
| Neureclipsis crepuscularis | - | - | - | - | - | - |
| Neurocordulia | - | - | - | - | - | - |
| Neurocordulia alabamensis | - | - | - | - | - | - |
| Nigronia | - | - | - | - | - | - |
| Nigronia serricornis | - | - | - | - | - | - |
| Nilotanypus americanus | - | - | - | - | - | - |
| Nilotanypus fimbriatus | - | - | - | - | - | - |
| Nilothauma | - | - | - | - | - | - |
| Notomicrus nanulus | - | - | - | - | - | - |
| Nyctiophylax | - | - | - | - | - | - |
| Oecetis | - | 5 | - | - | - | - |
| Oecetis avara | - | - | - | - | - | - |
| Oecetis cinerascens | - | - | - | - | - | - |
| Oecetis georgia | - | - | - | - | - | - |
| Oecetis sphyra/morsei | - | - | 1 | 1 | - | - |
| Ora/scirtes | - | - | - | - | - | - |
| Oribatida | - | - | - | - | - | - |
| Ormosia | - | - | - | - | - | - |
| Orthocladius annectens | - | - | - | - | - | - |
| Orthotrichia | - | - | - | - | 1 | 3 |
| Oxus | - | - | - | - | - | - |
| Oxyethira | - | - | - | - | - | - |
| Pachydiplax longipennis | - | - | - | - | - | - |
| Palaemonetes | - | - | - | - | - | - |
| Palpomyia/bezzia grp. | - | - | - | - | - | - |
| Parachaetocladius abnobaeus | - | - | - | - | - | - |
| Parachironomus | - | - | - | - | - | - |
| Parachironomus chaetoalus complex | - | - | - | - | - | - |



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| As Calculated / STORET station -> | 3546 | 3546 | 3549 | 3549 | 22050083 | 22050083 |
|---|---|---|---|---|---|---|
| Sample date -> | 7/9/2008 | 7/9/2008 | 7/10/2008 | 7/10/2008 | 8/12/2008 | 8/12/2008 |
| Taxon Name / SampleID/BenthID -> | 65296/40348/ Rep 1 | 65296/40348/ Rep 2 | 65316/40349/ Rep 1 | 65316/40349/ Rep 2 | 65379/40364/ Rep 1 | 65379/40364/ Rep 2 |
| Parachironomus supparilis | - | - | - | - | - | - |
| Paracladopelma | - | 1 | - | - | - | - |
| Paracymus | - | - | - | - | - | - |
| Parakiefferiella sp. b epler | - | - | - | - | - | - |
| Parakiefferiella sp. f epler | - | - | - | - | - | - |
| Paralauterborniella nigrohalterale | - | - | - | - | - | - |
| Paraleptophlebia volitans | - | - | - | - | - | - |
| Paramerina | - | - | - | - | - | - |
| Parametriocnemus | - | - | - | - | - | - |
| Paratanytarsus | - | - | - | - | 3 | 1 |
| Paratanytarsus dissimilis | - | - | - | - | - | - |
| Paratanytarsus quadratus | - | - | - | - | - | - |
| Paratendipes subaequalis | - | - | - | - | - | - |
| Pelonomus obscurus | - | - | - | - | 1 | - |
| Peltodytes | - | - | - | - | - | - |
| Peltodytes dietrichi | - | - | - | - | - | - |
| Pentaneura inconspicua | - | 1 | - | - | 2 | 1 |
| Perlesta placida complex | - | - | - | - | - | - |
| Perlinella drymo | - | - | - | - | - | - |
| Phaenopsectra flavipes | - | - | - | - | - | - |
| Phylocentropus | - | - | - | - | - | - |
| Physa | 1 | 1 | - | - | 3 | 1 |
| Physidae | - | - | - | - | - | - |
| Pilaria | - | - | - | - | - | - |
| Placobdella | - | - | - | - | - | - |
| Planorbella | - | - | - | - | 3 | - |
| Planorbidae | - | 1 | - | - | - | 1 |
| Platyhelminthes | 1 | - | - | - | - | - |
| Plauditus | - | - | - | - | - | - |
| Plauditus bimaculatus | 2 | 2 | - | - | - | - |
| Plecoptera | - | - | - | - | - | - |
| Polycentropodidae | - | - | - | - | - | - |
| Polycentropus | - | - | - | - | - | - |
| Polypedilum aviceps | - | 1 | - | - | - | - |
| Polypedilum fallax | - | - | - | - | - | - |
| Polypedilum flavum | 17 | 23 | 8 | 18 | 2 | 7 |
| Polypedilum halterale grp. | - | - | - | - | - | - |
| Polypedilum illinoense grp. | 1 | - | - | - | 1 | - |
| Polypedilum scalaenum grp. | - | - | 1 | 1 | - | - |
| Polypedilum sp. a epler | - | - | - | - | - | - |
| Polypedilum trigonus | - | - | - | - | - | - |
| Polypedilum tritum | - | - | - | - | - | - |
| Potthastia | - | - | - | - | - | - |
| Potthastia longimana | - | - | - | - | - | - |
| Pristina | - | - | - | - | - | - |
| Procambarus | - | - | - | - | - | - |
| Procladius | - | - | - | - | - | - |
| Procloeon | - | - | - | - | - | - |
| Progomphus | - | - | - | - | - | - |
| Progomphus obscurus | - | - | - | - | - | - |



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| As Calculated / STORET station -> | 3546 | 3546 | 3549 | 3549 | 22050083 | 22050083 |
|---|---|---|---|---|---|---|
| Sample date -> | 7/9/2008 | 7/9/2008 | 7/10/2008 | 7/10/2008 | 8/12/2008 | 8/12/2008 |
| Taxon Name / SampleID/BenthID -> | 65296/40348/ Rep 1 | 65296/40348/ Rep 2 | 65316/40349/ Rep 1 | 65316/40349/ Rep 2 | 65379/40364/ Rep 1 | 65379/40364/ Rep 2 |
| Promoresia tardella | - | - | - | - | - | - |
| Prostoma | - | - | - | - | - | - |
| Psectrocladius | - | - | - | - | - | - |
| Pseudochironomus | 3 | - | - | - | - | - |
| Pseudocloeon | 9 | 7 | - | - | - | - |
| Pseudocloeon ephippiatum | - | - | - | - | - | - |
| Pseudocloeon frondale | - | - | - | - | - | - |
| Pseudocloeon propinquum | - | - | - | - | - | - |
| Pseudolimnophila | - | - | - | - | - | - |
| Psychodidae | - | - | - | - | - | - |
| Pteronarcys dorsata | - | - | - | - | - | - |
| Pyralidae | 1 | - | - | - | - | - |
| Rheocricotopus robacki | 2 | - | - | - | - | - |
| Rheotanytarsus | - | - | - | - | - | - |
| Rheotanytarsus exiguus grp. | 8 | 5 | 1 | 6 | - | 1 |
| Rheotanytarsus pellucidus | - | - | - | 1 | - | 1 |
| Rhyncholimnochares | - | - | - | - | - | - |
| Robackia claviger | 1 | - | - | - | - | - |
| Serratella deficiens | 1 | - | 1 | - | - | - |
| Sialis | - | - | - | - | - | - |
| Simulium | 7 | 9 | 1 | - | 1 | - |
| Simulium jonesi | - | - | - | - | - | - |
| Sisyra | - | - | - | - | - | - |
| Slavina appendiculata | - | - | - | - | - | - |
| Sperchon | - | - | - | 1 | - | - |
| Sperchonopsis | - | - | - | - | - | - |
| Sperchopsis | - | - | - | - | - | - |
| Sperchopsis tessellatus | - | - | - | - | - | - |
| Sphaeriidae(mollusca) | 5 | - | - | - | - | - |
| Spirosperma | - | - | - | - | - | - |
| Staphylinidae | - | - | - | - | - | - |
| Stelechomyia perpulchra | - | 1 | - | - | - | - |
| Stempellina | - | - | - | - | - | - |
| Stempellinella | - | - | - | - | - | - |
| Stempellinella fimbriata | - | - | - | - | - | - |
| Stempellinella leptocelloides | - | - | - | - | - | - |
| Stenacron | - | - | - | - | - | - |
| Stenacron interpunctatum | - | - | - | - | - | - |
| Stenelmis | 4 | 5 | 2 | 1 | - | 2 |
| Stenochironomus | 1 | 3 | 1 | - | 1 | - |
| Stenus | - | - | - | - | - | - |
| Stephensoniana trivandrana | - | - | - | - | - | - |
| Stratiomyidae | - | - | - | - | - | - |
| Sympetrum | - | - | - | - | - | - |
| Tabanidae | - | - | - | - | - | - |
| Taeniopteryx | - | - | - | - | - | - |
| Tanytarsus | - | - | - | - | - | - |
| Tanytarsus sp. a epler | 2 | - | - | - | - | - |
| Tanytarsus sp. c epler | - | 2 | - | - | 1 | 1 |
| Tanytarsus sp. d epler | - | - | - | - | - | - |



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| As Calculated / STORET station -> | 3546 | 3546 | 3549 | 3549 | 22050083 | 22050083 |
|---|---|---|---|---|---|---|
| Sample date -> | 7/9/2008 | 7/9/2008 | 7/10/2008 | 7/10/2008 | 8/12/2008 | 8/12/2008 |
| Taxon Name / SampleID/BenthID -> | 65296/40348/ Rep 1 | 65296/40348/ Rep 2 | 65316/40349/ Rep 1 | 65316/40349/ Rep 2 | 65379/40364/ Rep 1 | 65379/40364/ Rep 2 |
| Tanytarsus sp. e epler | - | - | - | - | - | - |
| Tanytarsus sp. f epler | - | - | - | - | - | - |
| Tanytarsus sp. l epler | 1 | 1 | - | - | - | - |
| Tanytarsus sp. m epler | - | - | - | - | - | - |
| Tanytarsus sp. n epler | - | - | - | - | - | - |
| Tanytarsus sp. o epler | - | - | - | - | - | - |
| Tanytarsus sp. p epler | 1 | 1 | - | - | - | - |
| Tanytarsus sp. s epler | - | - | - | - | - | - |
| Tanytarsus sp. t epler | - | - | - | - | 1 | - |
| Tanytarsus sp. y epler | - | - | - | - | - | - |
| Thienemanniella | - | - | 1 | 1 | - | - |
| Thienemanniella lobapodema | - | - | - | - | - | - |
| Thienemanniella similis | - | - | - | - | - | - |
| Thienemanniella xena | - | - | - | - | - | - |
| Thienemannimyia grp. | - | 1 | 1 | - | - | - |
| Tipula | - | - | - | - | - | - |
| Tipula caloptera | - | - | - | - | - | - |
| Tipulidae | - | 2 | - | - | - | - |
| Torrenticola | - | - | - | - | - | - |
| Triaenodes | 2 | 3 | - | - | - | - |
| Triaenodes ignitus | - | - | - | - | - | - |
| Triaenodes perna/helo | - | - | - | - | - | - |
| Tribelos | - | - | - | - | - | - |
| Tribelos fuscicornis | - | - | - | 2 | - | - |
| Tribelos jucundum | - | - | - | - | - | - |
| Tricorythodes albilineatus | 6 | 1 | 5 | 9 | 51 | 51 |
| Tubificidae | 1 | 2 | - | - | - | - |
| Tvetenia | - | - | - | - | - | - |
| Tvetenia vitracies | - | 1 | - | - | - | - |
| Vertigo | - | - | - | - | - | - |
| Viviparus georgianus | - | - | - | - | - | - |
| Xenochironomus xenolabis | - | - | - | - | - | - |
| Xestochironomus | 1 | 1 | - | - | - | - |
| Xylotopus par | - | - | - | - | - | - |
| Zavreliella marmorata | - | - | - | - | 3 | 1 |
| Zavrelimyia sp. a epler | - | - | - | - | - | - |

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| As Calculated / STORET station -> | 22050040 | 22050040 | CLA246GS | CLA246GS | 23010464 | 23010464 |
|---|---|---|---|---|---|---|
| Sample date -> | 8/12/2008 | 8/12/2008 | 5/28/2008 | 5/28/2008 | 5/7/2008 | 5/7/2008 |
| Taxon Name / SampleID/BenthID -> | 65382/40367/ Rep 1 | 65382/40367/ Rep 2 | 65250/40368/ Rep 1 | 65250/40368/ Rep 2 | 64546/40384/ Rep 1 | 64546/40384/ Rep 2 |
| Ablabesmyia mallochi | - | - | - | 3 | - | 2 |
| Ablabesmyia rhamphe grp. | 5 | 1 | 1 | - | - | - |
| Acentrella | - | - | - | - | - | - |
| Acentrella parvula | - | - | - | - | - | - |
| Acerpenna pygmaea | - | - | - | - | - | - |
| Acroneuria | - | - | - | - | - | - |
| Acroneuria abnormis | - | - | - | - | - | - |
| Acroneuria lycorias | - | - | - | - | - | - |
| Agnetina annulipes | - | - | - | - | - | - |
| Allonais inaequalis | - | - | - | - | - | - |
| Amnicola | - | - | - | - | - | - |
| Amphipoda | - | - | - | - | - | - |
| Ancylidae | 5 | 3 | 8 | 9 | - | - |
| Ancyronyx variegatus | - | - | 2 | - | - | - |
| Anisocentropus pyraloides | - | - | - | - | - | - |
| Apedilum | - | 1 | - | - | - | - |
| Argia | - | 3 | - | - | - | - |
| Argia fumipennis | - | - | - | - | - | - |
| Argia tibialis | - | - | - | - | - | - |
| Arrenurus | 1 | - | - | - | - | - |
| Asioplax | - | - | - | - | - | - |
| Atherix | - | - | - | - | - | - |
| Atractides | - | - | - | - | - | - |
| Atrichopogon | 1 | - | - | - | - | - |
| Aulodrilus pigueti | - | - | - | - | - | - |
| Baetidae | - | - | - | - | - | - |
| Baetis intercalaris | - | - | - | - | - | - |
| Baetisca becki | - | - | - | - | - | - |
| Baetisca rogersi | - | - | - | - | - | - |
| Beardius | - | - | - | - | - | - |
| Berosus | - | - | - | - | - | - |
| Bivalvia | - | - | - | - | - | - |
| Boyeria vinosa | - | - | - | - | - | - |
| Brachycentrus chelatus | - | - | - | - | - | - |
| Brachycentrus numerosus | - | - | - | - | - | - |
| Branchiobdellidae | - | - | - | - | - | - |
| Bratislavia unidentata | - | - | - | - | - | - |
| Brillia | - | - | - | - | - | - |
| Caecidotea | - | - | - | - | - | 1 |
| Caenis | 64 | 40 | - | - | 47 | 36 |
| Caenis diminuta | - | - | - | - | - | - |
| Caenis eglinensis | - | - | - | - | - | - |
| Caenis hilaris | - | - | - | - | - | - |
| Callibaetis | - | - | - | - | - | - |
| Callibaetis floridanus | - | - | - | - | 1 | 1 |
| Calopterygidae | - | - | 1 | - | - | - |
| Calopteryx | - | - | - | 3 | - | - |
| Cambaridae | - | - | - | 1 | 2 | 1 |
| Campeloma | - | - | - | - | - | - |
| Cecidomyiidae | - | - | - | - | - | - |



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| Celina | - | - | - | - | - | - |
| Centroptilum triangulifer | - | - | - | - | - | - |
| Ceraclea | - | - | - | - | - | - |
| Ceratopogonidae | - | 2 | 1 | 1 | - | - |
| Cernotina | - | - | 1 | 1 | - | - |
| Chauliodes | - | - | - | - | - | - |
| Cheumatopsyche | - | - | 16 | 15 | 5 | 2 |
| Chimarra | - | - | 1 | 6 | - | - |
| Chironomus | - | - | - | - | 1 | - |
| Choroterpes basalis | - | - | - | - | - | - |
| Chrysomelidae | - | - | - | - | - | - |
| Cladotanytarsus | - | - | - | - | - | - |
| Cladotanytarsus cf. daviesi | - | - | - | - | - | - |
| Cladotanytarsus sp. d epler | - | - | - | - | - | - |
| Cladotanytarsus sp. f epler | - | - | - | - | - | - |
| Cladotanytarsus viridiventris | - | - | - | - | - | - |
| Clathrosperchon | - | - | - | - | - | - |
| Climacia areolaris | - | - | - | - | - | - |
| Clinotanypus | 1 | - | - | - | - | - |
| Coenagrionidae | 3 | - | 2 | 1 | - | - |
| Corbicula fluminea | 1 | 4 | - | - | - | - |
| Corydalidae | - | - | - | - | - | - |
| Corydalus cornutus | - | - | - | - | - | - |
| Corynoneura | - | - | 1 | - | - | - |
| Crangonyx | - | - | - | - | - | - |
| Cricotopus | - | - | - | - | - | - |
| Cricotopus bicinctus | - | - | - | - | - | - |
| Cricotopus or orthocladius | - | - | - | - | - | - |
| Cryptochironomus | - | - | - | - | - | - |
| Cryptotendipes | - | - | - | - | - | - |
| Curculionidae | - | - | - | - | - | - |
| Cyrnellus fraternus | - | - | - | - | - | - |
| Dasyhelea | - | - | - | - | - | - |
| Dero | - | - | - | - | - | - |
| Dero digitata complex | - | - | - | - | - | - |
| Dero flabelliger | - | - | - | - | 1 | - |
| Dero furcata | - | - | - | - | - | - |
| Dero pectinata | - | - | - | 2 | - | - |
| Desmopachria | - | - | - | - | - | - |
| Desserobdella phalera | - | - | - | - | - | 1 |
| Dicrotendipes | - | - | - | - | - | - |
| Dicrotendipes modestus | 2 | 1 | - | - | - | - |
| Dicrotendipes neomodestus | - | - | - | - | - | - |
| Dicrotendipes simpsoni | - | - | - | - | 1 | - |
| Dicrotendipes sp. a epler | - | 3 | - | - | - | - |
| Dineutus | - | - | 1 | - | - | - |
| Diplectrona | - | - | - | - | - | - |
| Djalmabatista pulcher | - | - | - | - | - | - |
| Dryopidae | - | - | - | - | - | - |
| Dubiraphia vittata | 25 | 29 | - | - | - | - |



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| Dytiscidae | - | - | - | - | - | - |
| Eclipidrilus | - | - | - | - | - | - |
| Eclipidrilus palustris | - | - | - | - | - | - |
| Ectopria | - | - | - | - | - | - |
| Ectopria thoracica | - | - | - | - | - | - |
| Einfeldia sp. a epler | - | - | - | - | - | - |
| Elimia | - | - | - | - | - | - |
| Elmidae | - | - | - | - | - | - |
| Enallagma | - | - | - | - | 3 | 3 |
| Enallagma coecum | - | - | - | - | - | - |
| Enchytraeidae | - | - | - | - | - | - |
| Endotribelos hesperium | - | - | - | - | - | - |
| Enochrus | - | - | - | - | - | - |
| Epicordulia princeps regina | - | - | - | - | - | - |
| Eurylophella doris | - | - | - | - | - | - |
| Ferrissia | - | - | - | - | - | - |
| Gastropoda | - | - | - | - | - | - |
| Geayia | - | - | - | - | - | - |
| Gerridae | - | - | - | - | - | - |
| Glossiphoniidae | - | - | - | - | - | - |
| Goeldichironomus | - | - | - | - | - | - |
| Goeldichironomus cf. natans | - | - | - | - | - | - |
| Goeldichironomus holoprasinus | - | - | - | - | - | - |
| Gomphidae | - | - | - | - | - | - |
| Gomphus | - | - | - | - | - | - |
| Gonielmis dietrichi | - | - | - | - | - | - |
| Gyrinidae | - | - | - | - | - | - |
| Gyrinus | - | - | - | - | - | - |
| Haemonais waldvogeli | - | - | - | - | - | - |
| Hagenius brevistylus | - | - | - | - | - | - |
| Haitia | - | - | - | - | - | - |
| Hayesomyia senata | - | - | - | - | - | - |
| Helichus | - | - | - | - | - | - |
| Helichus lithophilus | - | - | - | - | - | - |
| Helobdella stagnalis | - | - | - | - | 5 | 5 |
| Helobdella triserialis | - | - | - | - | - | - |
| Hemerodromia | - | - | 2 | 4 | - | - |
| Heptageniidae | 4 | 2 | - | - | - | - |
| Hetaerina | - | - | - | - | - | - |
| Hetaerina titia | - | - | - | - | - | - |
| Hexagenia | - | - | - | - | - | - |
| Hexatoma | - | - | - | - | - | - |
| Hirudinea | - | - | - | - | - | - |
| Hyalella azteca | - | - | - | - | 51 | 68 |
| Hydraena | - | - | 1 | - | - | - |
| Hydrobiidae | 19 | 24 | - | - | - | - |
| Hydrodroma | - | - | - | - | - | - |
| Hydrometra | - | - | - | - | - | - |
| Hydrophilidae | - | - | - | - | - | - |
| Hydropsyche | - | - | - | - | - | - |



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| Hydropsyche incommoda | - | - | - | - | - | - |
| Hydropsyche mississippiensis | - | - | - | - | - | - |
| Hydroptila | - | - | 1 | 1 | - | - |
| Hydrovatus | - | - | - | - | - | - |
| Hygrobates | - | - | - | - | - | - |
| Ischnura | - | - | - | - | - | 1 |
| Isonychia | - | - | - | - | - | - |
| Kiefferulus | - | - | - | - | - | - |
| Koenikea | - | - | - | - | - | - |
| Krendowskia | - | - | - | - | - | - |
| Labrundinia | 1 | - | - | - | - | - |
| Labrundinia becki | - | - | - | - | - | - |
| Labrundinia johannseni | - | - | - | - | - | - |
| Labrundinia pilosella | - | - | - | - | - | 1 |
| Labrundinia sp. 3 nr. virescens | - | - | - | - | - | - |
| Laccophilus | - | - | - | - | - | - |
| Laevapex | - | - | - | - | - | - |
| Larsia | - | - | - | - | - | - |
| Larsia decolorata | - | - | - | - | - | - |
| Lauterborniella agrayloides | - | - | - | - | - | - |
| Lebertia | - | - | - | - | - | - |
| Lepidoptera | - | - | 2 | - | - | - |
| Lepidostoma | - | - | - | - | - | - |
| Leptophlebiidae | - | - | 1 | 1 | - | - |
| Leuctra | - | - | 5 | 2 | - | - |
| Libellulidae | 9 | 5 | - | - | - | - |
| Limnesia | - | - | - | - | - | 2 |
| Limnodrilus hoffmeisteri | - | - | - | - | - | - |
| Lioporeus | - | - | - | - | - | - |
| Lirceus | - | - | - | - | - | - |
| Lopescladius | - | - | - | - | - | - |
| Lumbriculus variegatus | - | - | - | - | - | - |
| Lymnaeidae | - | - | - | - | - | - |
| Lype diversa | - | - | - | 3 | - | - |
| Maccaffertium | - | - | 1 | 1 | - | - |
| Maccaffertium exiguum | - | - | - | - | - | - |
| Maccaffertium smithae | - | - | - | - | - | - |
| Macromia | - | - | - | - | - | - |
| Macromia illinoiensis georgina | - | - | - | - | - | - |
| Macronychus glabratus | - | - | 2 | 1 | - | - |
| Macrostemum carolina | - | - | - | - | - | - |
| Mayatrichia ayama | - | - | - | - | - | - |
| Megistocera | - | - | - | - | - | - |
| Mesonoterus | - | - | - | - | - | - |
| Mesovelia | - | - | - | - | - | - |
| Micrasema | - | - | - | - | - | - |
| Microcylloepus pusillus | - | - | 3 | 6 | - | - |
| Micromenetus | - | - | - | - | - | - |
| Micromenetus dilatatus avus | - | - | - | - | - | - |
| Micropsectra | - | - | - | - | - | - |



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| Microtendipes | - | - | - | - | - | - |
| Microtendipes pedellus grp. | - | - | 1 | - | - | - |
| Microtendipes rydalensis grp. | - | - | - | - | - | - |
| Microvelia | - | - | 1 | - | - | - |
| Mideopsis | 2 | 2 | - | - | - | - |
| Momonia | - | - | - | - | - | - |
| Monopelopia | - | - | - | - | - | - |
| Mooreobdella | - | - | - | - | - | - |
| Naididae | - | 4 | - | - | - | - |
| Nais communis complex | - | - | - | - | - | - |
| Nais(animal) | - | - | - | - | - | - |
| Nanocladius | - | - | - | - | - | - |
| Nectopsyche | - | - | - | - | - | - |
| Nectopsyche exquisita | - | - | - | - | - | - |
| Nectopsyche pavida | - | - | - | - | - | - |
| Neoephemera | - | - | - | - | - | - |
| Neoperla | - | - | - | - | - | - |
| Neoplasta | - | - | - | - | - | - |
| Neoplea | - | - | - | - | - | - |
| Neoporus | 4 | 4 | - | - | - | 1 |
| Neotrichia | - | - | 3 | - | - | - |
| Neureclipsis | - | - | - | - | - | - |
| Neureclipsis crepuscularis | - | - | - | - | - | - |
| Neurocordulia | - | - | - | - | 2 | 1 |
| Neurocordulia alabamensis | - | - | - | - | - | - |
| Nigronia | - | - | - | - | - | - |
| Nigronia serricornis | - | - | - | - | - | - |
| Nilotanypus americanus | - | - | - | - | - | - |
| Nilotanypus fimbriatus | - | - | - | - | - | - |
| Nilothauma | - | - | - | 1 | - | - |
| Notomicrus nanulus | - | - | - | - | - | - |
| Nyctiophylax | - | - | - | - | - | - |
| Oecetis | - | - | 9 | - | 1 | 3 |
| Oecetis avara | - | - | - | - | - | - |
| Oecetis cinerascens | - | - | - | - | - | - |
| Oecetis georgia | - | - | - | 8 | - | - |
| Oecetis sphyra/morsei | - | - | - | - | - | - |
| Ora/scirtes | - | - | - | 1 | - | - |
| Oribatida | - | - | - | - | - | - |
| Ormosia | - | - | - | - | - | - |
| Orthocladius annectens | - | - | - | - | - | - |
| Orthotrichia | - | - | - | - | - | - |
| Oxus | - | - | - | - | - | - |
| Oxyethira | - | - | - | - | 1 | - |
| Pachydiplax longipennis | - | - | - | - | 1 | - |
| Palaemonetes | - | - | - | - | 1 | - |
| Palpomyia/bezzia grp. | - | - | - | - | - | - |
| Parachaetocladius abnobaeus | - | - | - | - | - | - |
| Parachironomus | - | - | - | - | - | - |
| Parachironomus chaetoalus complex | - | - | - | - | - | - |



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| Parachironomus supparilis | - | - | - | - | - | - |
| Paracladopelma | - | - | - | - | - | - |
| Paracymus | - | - | - | - | - | - |
| Parakiefferiella sp. b epler | - | - | - | - | - | - |
| Parakiefferiella sp. f epler | - | - | - | - | - | - |
| Paralauterborniella nigrohalterale | - | - | - | - | - | - |
| Paraleptophlebia volitans | - | - | - | - | - | - |
| Paramerina | - | - | 1 | 1 | - | - |
| Parametriocnemus | - | - | 2 | 3 | - | - |
| Paratanytarsus | - | - | - | - | - | - |
| Paratanytarsus dissimilis | - | - | - | - | - | - |
| Paratanytarsus quadratus | - | - | - | - | - | - |
| Paratendipes subaequalis | - | - | - | - | - | - |
| Pelonomus obscurus | - | - | - | - | - | - |
| Peltodytes | - | - | - | - | - | - |
| Peltodytes dietrichi | - | - | - | - | - | 1 |
| Pentaneura inconspicua | - | - | 2 | 3 | 1 | - |
| Perlesta placida complex | - | - | - | - | - | - |
| Perlinella drymo | - | - | - | - | - | - |
| Phaenopsectra flavipes | - | - | - | - | - | - |
| Phylocentropus | - | - | - | - | - | - |
| Physa | 1 | 2 | - | - | 1 | 1 |
| Physidae | - | - | - | - | - | - |
| Pilaria | - | - | - | - | - | - |
| Placobdella | - | - | - | - | - | - |
| Planorbella | - | - | - | - | - | - |
| Planorbidae | 4 | 3 | - | - | - | - |
| Platyhelminthes | - | - | - | - | - | - |
| Plauditus | - | - | - | - | - | - |
| Plauditus bimaculatus | - | - | - | - | - | - |
| Plecoptera | - | - | - | - | - | - |
| Polycentropodidae | - | - | - | - | - | - |
| Polycentropus | - | - | - | - | - | - |
| Polypedilum aviceps | - | - | - | - | - | - |
| Polypedilum fallax | - | - | - | - | - | - |
| Polypedilum flavum | - | - | 42 | 23 | - | - |
| Polypedilum halterale grp. | - | - | - | - | - | - |
| Polypedilum illinoense grp. | - | 4 | 2 | 2 | 2 | - |
| Polypedilum scalaenum grp. | - | - | 1 | 3 | - | - |
| Polypedilum sp. a epler | - | - | - | - | - | - |
| Polypedilum trigonus | - | - | - | - | - | - |
| Polypedilum tritum | - | - | - | - | - | 1 |
| Potthastia | - | - | - | - | - | - |
| Potthastia longimana | - | - | - | - | - | - |
| Pristina | - | - | - | - | - | - |
| Procambarus | - | - | - | - | - | - |
| Procladius | 1 | 1 | - | - | - | - |
| Procloeon | - | - | - | - | - | - |
| Progomphus | - | - | - | - | - | - |
| Progomphus obscurus | - | - | - | - | - | - |



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| Promoresia tardella | - | - | - | - | - | - |
| Prostoma | - | - | - | - | - | - |
| Psectrocladius | - | - | - | - | - | - |
| Pseudochironomus | - | - | - | - | - | - |
| Pseudocloeon | - | - | - | - | 2 | - |
| Pseudocloeon ephippiatum | - | - | - | - | - | - |
| Pseudocloeon frondale | - | - | 3 | 5 | - | - |
| Pseudocloeon propinquum | - | - | - | - | - | - |
| Pseudolimnophila | - | - | - | - | - | - |
| Psychodidae | - | - | - | - | - | - |
| Pteronarcys dorsata | - | - | - | - | - | - |
| Pyralidae | - | - | - | - | - | - |
| Rheocricotopus robacki | - | - | 1 | 1 | - | - |
| Rheotanytarsus | - | - | - | - | - | - |
| Rheotanytarsus exiguus grp. | - | - | 3 | 7 | 2 | 10 |
| Rheotanytarsus pellucidus | - | - | 5 | 1 | - | - |
| Rhyncholimnochares | - | - | - | - | - | - |
| Robackia claviger | - | - | - | - | - | - |
| Serratella deficiens | - | - | - | - | - | - |
| Sialis | - | - | - | - | - | - |
| Simulium | - | - | 2 | - | 1 | 2 |
| Simulium jonesi | - | - | - | - | - | - |
| Sisyra | - | - | - | - | 1 | - |
| Slavina appendiculata | - | - | 2 | 1 | 3 | 4 |
| Sperchon | - | - | - | - | - | - |
| Sperchonopsis | - | - | - | - | - | - |
| Sperchopsis | - | - | - | - | - | - |
| Sperchopsis tessellatus | - | - | - | - | - | - |
| Sphaeriidae(mollusca) | 1 | 2 | - | 1 | - | 1 |
| Spirosperma | - | - | - | - | - | - |
| Staphylinidae | - | - | - | - | - | - |
| Stelechomyia perpulchra | - | - | - | - | - | - |
| Stempellina | - | - | - | - | - | - |
| Stempellinella | - | - | - | - | - | - |
| Stempellinella fimbriata | - | - | 1 | 2 | - | - |
| Stempellinella leptocelloides | - | - | 1 | 1 | - | - |
| Stenacron | - | - | - | - | 1 | - |
| Stenacron interpunctatum | - | - | - | - | - | - |
| Stenelmis | 3 | - | 5 | 4 | - | - |
| Stenochironomus | - | - | 2 | 1 | - | - |
| Stenus | - | - | - | - | - | - |
| Stephensoniana trivandrana | - | - | - | - | - | - |
| Stratiomyidae | - | - | - | - | - | - |
| Sympetrum | - | - | - | - | - | - |
| Tabanidae | - | - | - | - | - | - |
| Taeniopteryx | - | - | - | - | - | - |
| Tanytarsus | - | - | - | - | - | - |
| Tanytarsus sp. a epler | - | - | - | - | 1 | - |
| Tanytarsus sp. c epler | - | - | - | - | - | - |
| Tanytarsus sp. d epler | - | - | - | 1 | - | - |



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| As Calculated / STORET station -> | 22050040 | 22050040 | CLA246GS | CLA246GS | 23010464 | 23010464 |
|---|---|---|---|---|---|---|
| Sample date -> | 8/12/2008 | 8/12/2008 | 5/28/2008 | 5/28/2008 | 5/7/2008 | 5/7/2008 |
| Taxon Name / SampleID/BenthID -> | 65382/40367/ Rep 1 | 65382/40367/ Rep 2 | 65250/40368/ Rep 1 | 65250/40368/ Rep 2 | 64546/40384/ Rep 1 | 64546/40384/ Rep 2 |
| Tanytarsus sp. e epler | - | - | - | - | - | - |
| Tanytarsus sp. f epler | - | - | - | - | - | - |
| Tanytarsus sp. l epler | - | - | - | 1 | - | - |
| Tanytarsus sp. m epler | - | - | 2 | - | - | - |
| Tanytarsus sp. n epler | - | - | - | - | - | - |
| Tanytarsus sp. o epler | - | - | 2 | 1 | - | - |
| Tanytarsus sp. p epler | - | - | - | - | - | - |
| Tanytarsus sp. s epler | - | - | 1 | 1 | - | - |
| Tanytarsus sp. t epler | 1 | 1 | - | - | 2 | 1 |
| Tanytarsus sp. y epler | - | - | - | - | - | - |
| Thienemanniella | - | - | - | - | - | - |
| Thienemanniella lobapodema | - | - | - | - | - | - |
| Thienemanniella similis | - | - | - | - | - | - |
| Thienemanniella xena | - | - | - | - | - | - |
| Thienemannimyia grp. | - | - | 1 | - | - | - |
| Tipula | - | - | - | - | - | - |
| Tipula caloptera | - | - | - | - | - | - |
| Tipulidae | - | - | - | - | - | - |
| Torrenticola | - | - | - | - | - | - |
| Triaenodes | - | - | 4 | 5 | - | - |
| Triaenodes ignitus | - | - | - | - | - | - |
| Triaenodes perna/helo | - | - | - | - | - | - |
| Tribelos | - | - | - | - | - | - |
| Tribelos fuscicornis | 1 | - | - | - | - | - |
| Tribelos jucundum | - | - | 1 | - | - | - |
| Tricorythodes albilineatus | - | - | - | - | - | - |
| Tubificidae | - | - | - | - | 3 | - |
| Tvetenia | - | - | - | - | - | - |
| Tvetenia vitracies | - | - | - | - | - | - |
| Vertigo | - | - | - | - | - | - |
| Viviparus georgianus | 1 | - | - | - | - | - |
| Xenochironomus xenolabis | - | - | - | - | - | 1 |
| Xestochironomus | - | - | - | - | - | - |
| Xylotopus par | - | - | - | 1 | - | - |
| Zavreliella marmorata | - | - | - | - | - | - |
| Zavrelimyia sp. a epler | - | - | - | - | - | - |

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| As Calculated / STORET station -> | WAK158LR | WAK158LR | BAK208GS | BAK208GS | CLA246GS | CLA246GS |
|---|---|---|---|---|---|---|
| Sample date -> | 6/19/2008 | 6/19/2008 | 6/18/2008 | 6/18/2008 | 10/28/2008 | 10/28/2008 |
| | 65414/40405/ | 65414/40405/ | 65306/40406/ | 65306/40406/ | 65636/40430/ | 65636/40430/ |
| Taxon Name / SampleID/BenthID -> | Rep 1 | Rep 2 | Rep 1 | Rep 2 | Rep 1 | Rep 2 |
| Ablabesmyia mallochi | 2 | - | 16 | 7 | 15 | 4 |
| Ablabesmyia rhamphe grp. | 2 | - | - | - | - | 1 |
| Acentrella | - | - | - | - | - | - |
| Acentrella parvula | - | - | - | - | - | - |
| Acerpenna pygmaea | - | - | - | - | 1 | - |
| Acroneuria | - | - | - | - | - | - |
| Acroneuria abnormis | - | - | - | - | - | - |
| Acroneuria lycorias | - | - | - | - | - | - |
| Agnetina annulipes | - | - | - | - | - | - |
| Allonais inaequalis | - | - | - | - | - | - |
| Amnicola | - | - | - | - | 6 | 5 |
| Amphipoda | - | - | - | - | - | - |
| Ancylidae | 4 | 2 | 1 | 3 | 11 | 10 |
| Ancyronyx variegatus | - | - | 4 | 3 | - | - |
| Anisocentropus pyraloides | - | - | - | - | - | - |
| Apedilum | - | - | - | - | - | - |
| Argia | 5 | 7 | - | - | 1 | 2 |
| Argia fumipennis | - | - | - | - | - | - |
| Argia tibialis | - | - | 2 | 8 | - | - |
| Arrenurus | 1 | - | - | - | - | - |
| Asioplax | - | - | - | - | - | - |
| Atherix | - | - | - | - | - | - |
| Atractides | - | - | - | - | - | - |
| Atrichopogon | 3 | 4 | - | 1 | - | 1 |
| Aulodrilus pigueti | - | - | - | - | - | - |
| Baetidae | - | - | - | - | - | - |
| Baetis intercalaris | - | - | - | - | - | - |
| Baetisca becki | - | - | - | - | - | - |
| Baetisca rogersi | - | - | - | - | - | - |
| Beardius | - | - | - | - | - | - |
| Berosus | - | - | - | 2 | - | - |
| Bivalvia | - | - | - | - | - | - |
| Boyeria vinosa | - | - | - | - | - | - |
| Brachycentrus chelatus | - | - | - | - | - | - |
| Brachycentrus numerosus | - | - | - | - | - | - |
| Branchiobdellidae | - | - | - | - | - | - |
| Bratislavia unidentata | 1 | - | - | - | - | - |
| Brillia | - | - | - | - | - | - |
| Caecidotea | 20 | 17 | - | - | 12 | 15 |
| Caenis | - | - | - | - | - | - |
| Caenis diminuta | - | - | - | - | - | - |
| Caenis eglinensis | - | - | - | - | - | - |
| Caenis hilaris | - | - | - | - | - | - |
| Callibaetis | - | - | - | - | - | - |
| Callibaetis floridanus | - | - | - | - | - | - |
| Calopterygidae | - | - | - | - | - | - |
| Calopteryx | - | - | - | - | - | 1 |
| Cambaridae | - | - | - | - | 1 | 1 |
| Campeloma | - | - | - | - | - | - |
| Cecidomyiidae | - | - | - | - | - | - |



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|---|---|---|---|---|---|---|
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| | 65414/40405/ | 65414/40405/ | 65306/40406/ | 65306/40406/ | 65636/40430/ | 65636/40430/ |
| Taxon Name / SampleID/BenthID -> | Rep 1 | Rep 2 | Rep 1 | Rep 2 | Rep 1 | Rep 2 |
| Celina | - | - | - | - | - | - |
| Centroptilum triangulifer | - | - | - | - | - | - |
| Ceraclea | - | - | - | - | - | - |
| Ceratopogonidae | - | - | - | - | - | - |
| Cernotina | 5 | 17 | - | - | - | - |
| Chauliodes | - | - | - | - | - | - |
| Cheumatopsyche | - | - | - | - | 4 | 2 |
| Chimarra | - | - | - | - | - | - |
| Chironomus | - | - | 1 | - | - | - |
| Choroterpes basalis | 6 | 6 | - | - | - | - |
| Chrysomelidae | - | - | - | - | - | - |
| Cladotanytarsus | - | - | - | - | - | - |
| Cladotanytarsus cf. daviesi | - | - | - | - | - | - |
| Cladotanytarsus sp. d epler | - | - | - | - | - | - |
| Cladotanytarsus sp. f epler | - | - | - | - | - | - |
| Cladotanytarsus viridiventris | - | - | - | - | - | - |
| Clathrosperchon | - | - | - | - | - | - |
| Climacia areolaris | - | - | 3 | 1 | - | - |
| Clinotanypus | - | - | - | - | - | - |
| Coenagrionidae | - | - | - | - | - | - |
| Corbicula fluminea | - | - | - | - | - | - |
| Corydalidae | - | - | - | - | - | - |
| Corydalus cornutus | - | - | - | - | 1 | - |
| Corynoneura | - | - | - | - | - | - |
| Crangonyx | - | - | - | - | - | 2 |
| Cricotopus | - | - | - | - | - | - |
| Cricotopus bicinctus | - | - | - | - | - | - |
| Cricotopus or orthocladius | - | - | - | - | - | - |
| Cryptochironomus | - | - | - | - | - | - |
| Cryptotendipes | - | - | - | - | - | - |
| Curculionidae | - | - | - | - | - | - |
| Cyrnellus fraternus | - | - | - | - | - | - |
| Dasyhelea | - | - | - | - | - | - |
| Dero | - | - | - | - | - | - |
| Dero digitata complex | - | - | - | - | - | - |
| Dero flabelliger | - | - | - | - | - | - |
| Dero furcata | - | - | - | - | - | - |
| Dero pectinata | - | - | - | - | - | - |
| Desmopachria | - | - | - | - | - | - |
| Desserobdella phalera | - | - | - | - | - | - |
| Dicrotendipes | - | - | - | - | - | - |
| Dicrotendipes modestus | 1 | - | - | - | - | - |
| Dicrotendipes neomodestus | - | - | - | - | - | - |
| Dicrotendipes simpsoni | - | - | - | - | - | - |
| Dicrotendipes sp. a epler | - | - | - | - | - | - |
| Dineutus | 1 | - | - | - | - | - |
| Diplectrona | - | - | - | 1 | - | - |
| Djalmabatista pulcher | - | 6 | - | - | - | - |
| Dryopidae | - | - | - | - | - | - |
| Dubiraphia vittata | 4 | 4 | - | - | - | - |



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| | 65414/40405/ | 65414/40405/ | 65306/40406/ | 65306/40406/ | 65636/40430/ | 65636/40430/ |
| Taxon Name / SampleID/BenthID -> | Rep 1 | Rep 2 | Rep 1 | Rep 2 | Rep 1 | Rep 2 |
| Dytiscidae | - | - | - | - | - | - |
| Eclipidrilus | - | - | - | - | - | - |
| Eclipidrilus palustris | - | - | - | - | - | - |
| Ectopria | - | - | - | - | - | - |
| Ectopria thoracica | 4 | 3 | - | - | - | - |
| Einfeldia sp. a epler | - | - | - | - | - | - |
| Elimia | - | - | - | - | - | - |
| Elmidae | - | - | - | - | - | - |
| Enallagma | - | - | 3 | 1 | 4 | 1 |
| Enallagma coecum | - | - | - | - | - | - |
| Enchytraeidae | - | - | 1 | - | - | - |
| Endotribelos hesperium | - | - | - | - | 1 | - |
| Enochrus | - | - | - | - | - | - |
| Epicordulia princeps regina | - | - | - | - | 1 | - |
| Eurylophella doris | - | - | - | - | 2 | 7 |
| Ferrissia | - | - | - | - | - | - |
| Gastropoda | - | - | - | - | - | - |
| Geayia | - | - | - | - | - | - |
| Gerridae | - | - | - | - | - | - |
| Glossiphoniidae | - | - | - | - | - | - |
| Goeldichironomus | - | - | - | - | - | - |
| Goeldichironomus cf. natans | - | - | - | - | - | - |
| Goeldichironomus holoprasinus | - | - | - | - | - | - |
| Gomphidae | 1 | - | - | - | - | - |
| Gomphus | - | - | - | - | - | - |
| Gonielmis dietrichi | - | - | - | - | - | - |
| Gyrinidae | - | - | - | - | - | - |
| Gyrinus | - | - | - | - | - | - |
| Haemonais waldvogeli | - | - | - | - | - | - |
| Hagenius brevistylus | - | - | - | - | - | - |
| Haitia | - | - | - | - | - | - |
| Hayesomyia senata | - | - | - | - | - | - |
| Helichus | - | - | - | - | - | - |
| Helichus lithophilus | - | - | - | - | - | - |
| Helobdella stagnalis | - | - | - | - | - | - |
| Helobdella triserialis | - | - | - | - | - | - |
| Hemerodromia | - | - | 1 | 2 | - | - |
| Heptageniidae | - | - | 3 | 2 | - | - |
| Hetaerina | - | - | - | - | - | - |
| Hetaerina titia | - | - | - | - | - | - |
| Hexagenia | - | - | - | - | - | - |
| Hexatoma | - | - | - | - | - | - |
| Hirudinea | - | - | - | - | - | 1 |
| Hyalella azteca | - | 1 | - | - | - | - |
| Hydraena | - | - | - | - | - | - |
| Hydrobiidae | - | - | - | - | - | - |
| Hydrodroma | - | - | - | - | - | - |
| Hydrometra | - | - | - | - | - | - |
| Hydrophilidae | - | - | - | - | - | - |
| Hydropsyche | - | - | - | - | - | - |



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| Sample date -> | 6/19/2008 | 6/19/2008 | 6/18/2008 | 6/18/2008 | 10/28/2008 | 10/28/2008 |
| | 65414/40405/ | 65414/40405/ | 65306/40406/ | 65306/40406/ | 65636/40430/ | 65636/40430/ |
| Taxon Name / SampleID/BenthID -> | Rep 1 | Rep 2 | Rep 1 | Rep 2 | Rep 1 | Rep 2 |
| Hydropsyche incommoda | - | - | - | - | - | - |
| Hydropsyche mississippiensis | - | - | - | - | - | - |
| Hydroptila | - | - | - | - | 1 | - |
| Hydrovatus | - | - | - | - | - | - |
| Hygrobates | - | - | - | - | - | - |
| Ischnura | - | - | - | - | - | - |
| Isonychia | - | - | - | - | - | - |
| Kiefferulus | - | - | - | - | - | - |
| Koenikea | - | 1 | - | - | - | - |
| Krendowskia | - | - | - | - | - | - |
| Labrundinia | - | - | - | - | - | - |
| Labrundinia becki | - | 3 | 4 | 2 | - | 1 |
| Labrundinia johannseni | - | - | - | - | - | - |
| Labrundinia pilosella | - | - | - | 2 | 4 | 3 |
| Labrundinia sp. 3 nr. virescens | - | - | - | - | - | - |
| Laccophilus | - | - | - | - | - | - |
| Laevapex | - | - | - | - | - | - |
| Larsia | - | - | - | - | - | 1 |
| Larsia decolorata | - | - | - | - | - | - |
| Lauterborniella agrayloides | 4 | 6 | - | - | - | - |
| Lebertia | - | - | - | - | - | - |
| Lepidoptera | - | - | 1 | - | 1 | - |
| Lepidostoma | - | - | - | - | - | - |
| Leptophlebiidae | - | - | - | - | 1 | 2 |
| Leuctra | - | - | - | - | - | - |
| Libellulidae | - | - | - | 4 | - | - |
| Limnesia | - | - | - | - | - | - |
| Limnodrilus hoffmeisteri | - | - | - | - | - | - |
| Lioporeus | - | - | - | - | - | - |
| Lirceus | - | - | - | - | - | - |
| Lopescladius | - | - | - | - | - | - |
| Lumbriculus variegatus | - | - | - | - | - | - |
| Lymnaeidae | - | - | - | - | - | - |
| Lype diversa | - | - | - | - | - | - |
| Maccaffertium | - | - | - | - | 2 | 7 |
| Maccaffertium exiguum | - | - | - | - | - | - |
| Maccaffertium smithae | - | - | - | - | - | - |
| Macromia | - | - | - | - | - | - |
| Macromia illinoiensis georgina | - | - | - | - | - | - |
| Macronychus glabratus | - | - | - | - | 3 | 7 |
| Macrostemum carolina | - | - | - | - | - | - |
| Mayatrichia ayama | - | - | - | - | - | - |
| Megistocera | - | - | - | - | - | - |
| Mesonoterus | - | - | - | - | - | - |
| Mesovelia | - | - | - | - | 1 | - |
| Micrasema | - | - | - | - | - | - |
| Microcylloepus pusillus | 2 | 6 | 12 | 6 | 5 | 8 |
| Micromenetus | 34 | 13 | - | - | 1 | - |
| Micromenetus dilatatus avus | - | - | - | - | - | - |
| Micropsectra | - | - | - | - | - | - |



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| | 65414/40405/ | 65414/40405/ | 65306/40406/ | 65306/40406/ | 65636/40430/ | 65636/40430/ |
| Taxon Name / SampleID/BenthID -> | Rep 1 | Rep 2 | Rep 1 | Rep 2 | Rep 1 | Rep 2 |
| Microtendipes | - | - | - | - | - | - |
| Microtendipes pedellus grp. | 10 | 11 | - | - | - | 3 |
| Microtendipes rydalensis grp. | - | - | - | - | - | - |
| Microvelia | - | - | - | - | - | - |
| Mideopsis | - | - | - | - | - | - |
| Momonia | - | 1 | - | - | - | - |
| Monopelopia | - | - | - | - | - | - |
| Mooreobdella | - | - | - | - | - | - |
| Naididae | - | - | - | - | - | - |
| Nais communis complex | - | - | - | - | - | - |
| Nais(animal) | - | - | - | - | - | - |
| Nanocladius | - | - | - | - | - | - |
| Nectopsyche | - | - | - | - | 2 | 2 |
| Nectopsyche exquisita | 2 | - | - | - | - | - |
| Nectopsyche pavida | - | - | - | - | - | - |
| Neoephemera | - | - | - | - | - | - |
| Neoperla | - | - | - | - | - | - |
| Neoplasta | - | - | - | - | - | - |
| Neoplea | - | - | - | - | - | - |
| Neoporus | - | - | - | - | - | - |
| Neotrichia | - | - | - | - | - | - |
| Neureclipsis | - | - | - | - | - | - |
| Neureclipsis crepuscularis | - | - | - | - | - | - |
| Neurocordulia | 1 | - | - | - | - | - |
| Neurocordulia alabamensis | - | - | 6 | - | - | - |
| Nigronia | - | - | - | - | - | - |
| Nigronia serricornis | - | - | - | - | - | - |
| Nilotanypus americanus | - | - | - | - | - | - |
| Nilotanypus fimbriatus | - | - | - | - | - | - |
| Nilothauma | - | - | - | - | - | - |
| Notomicrus nanulus | - | - | - | - | - | - |
| Nyctiophylax | - | - | 1 | - | - | - |
| Oecetis | 2 | 1 | - | - | - | 1 |
| Oecetis avara | - | - | - | - | - | - |
| Oecetis cinerascens | - | - | - | - | - | - |
| Oecetis georgia | - | - | 34 | 35 | - | - |
| Oecetis sphyra/morsei | - | - | - | - | - | - |
| Ora/scirtes | - | - | 2 | - | - | - |
| Oribatida | - | - | - | - | - | - |
| Ormosia | - | - | - | - | - | - |
| Orthocladius annectens | - | - | - | 1 | - | - |
| Orthotrichia | - | - | - | - | - | - |
| Oxus | - | - | - | - | - | - |
| Oxyethira | 1 | - | - | 1 | - | - |
| Pachydiplax longipennis | - | - | - | - | - | - |
| Palaemonetes | - | - | - | - | - | - |
| Palpomyia/bezzia grp. | - | - | - | - | - | - |
| Parachaetocladius abnobaeus | - | - | - | - | - | - |
| Parachironomus | - | 1 | - | - | - | - |
| Parachironomus chaetoalus complex | - | - | - | - | - | - |



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| | 65414/40405/ | 65414/40405/ | 65306/40406/ | 65306/40406/ | 65636/40430/ | 65636/40430/ |
| Taxon Name / SampleID/BenthID -> | Rep 1 | Rep 2 | Rep 1 | Rep 2 | Rep 1 | Rep 2 |
| Parachironomus supparilis | - | - | - | - | - | - |
| Paracladopelma | - | - | - | - | - | - |
| Paracymus | - | - | - | - | - | - |
| Parakiefferiella sp. b epler | - | - | - | - | - | - |
| Parakiefferiella sp. f epler | - | - | - | - | - | - |
| Paralauterborniella nigrohalterale | - | - | - | - | - | - |
| Paraleptophlebia volitans | 4 | 6 | - | - | - | - |
| Paramerina | - | - | - | - | - | - |
| Parametriocnemus | - | - | - | - | - | - |
| Paratanytarsus | - | - | - | - | - | - |
| Paratanytarsus dissimilis | - | - | - | - | - | - |
| Paratanytarsus quadratus | - | - | - | - | - | - |
| Paratendipes subaequalis | - | - | - | - | - | - |
| Pelonomus obscurus | - | - | - | - | - | - |
| Peltodytes | - | - | - | - | - | - |
| Peltodytes dietrichi | - | - | - | - | - | - |
| Pentaneura inconspicua | - | - | - | - | 2 | 8 |
| Perlesta placida complex | - | - | - | - | - | - |
| Perlinella drymo | - | - | - | - | - | - |
| Phaenopsectra flavipes | - | - | - | - | - | - |
| Phylocentropus | - | - | - | - | - | - |
| Physa | 4 | 2 | - | - | - | - |
| Physidae | - | - | - | - | - | - |
| Pilaria | - | - | - | - | - | - |
| Placobdella | - | - | - | - | - | - |
| Planorbella | - | - | - | - | - | - |
| Planorbidae | - | - | - | - | - | - |
| Platyhelminthes | - | - | - | - | - | - |
| Plauditus | - | - | - | - | - | - |
| Plauditus bimaculatus | - | - | - | - | - | - |
| Plecoptera | - | - | - | - | - | - |
| Polycentropodidae | - | - | - | - | - | - |
| Polycentropus | - | - | - | - | - | - |
| Polypedilum aviceps | - | - | - | - | - | - |
| Polypedilum fallax | - | - | - | - | - | - |
| Polypedilum flavum | - | - | - | - | 14 | 12 |
| Polypedilum halterale grp. | - | - | - | - | - | - |
| Polypedilum illinoense grp. | - | - | 1 | - | 21 | 9 |
| Polypedilum scalaenum grp. | - | - | - | - | - | - |
| Polypedilum sp. a epler | - | - | - | - | - | - |
| Polypedilum trigonus | - | - | - | - | - | - |
| Polypedilum tritum | - | - | - | 1 | - | - |
| Potthastia | - | - | - | - | - | - |
| Potthastia longimana | - | - | - | - | - | - |
| Pristina | - | - | 2 | 4 | - | - |
| Procambarus | - | - | - | - | - | - |
| Procladius | 2 | 1 | - | - | 1 | - |
| Procloeon | - | - | - | - | - | - |
| Progomphus | - | - | - | - | - | - |
| Progomphus obscurus | - | - | - | - | - | - |



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| As Calculated / STORET station -> | WAK158LR | WAK158LR | BAK208GS | BAK208GS | CLA246GS | CLA246GS |
|---|---|---|---|---|---|---|
| Sample date -> | 6/19/2008 | 6/19/2008 | 6/18/2008 | 6/18/2008 | 10/28/2008 | 10/28/2008 |
| | 65414/40405/ | 65414/40405/ | 65306/40406/ | 65306/40406/ | 65636/40430/ | 65636/40430/ |
| Taxon Name / SampleID/BenthID -> | Rep 1 | Rep 2 | Rep 1 | Rep 2 | Rep 1 | Rep 2 |
| Promoresia tardella | - | - | - | - | - | - |
| Prostoma | - | - | - | - | - | - |
| Psectrocladius | - | - | 1 | - | - | - |
| Pseudochironomus | - | 3 | - | - | - | - |
| Pseudocloeon | - | - | - | - | - | - |
| Pseudocloeon ephippiatum | - | - | - | - | - | - |
| Pseudocloeon frondale | - | - | - | - | - | - |
| Pseudocloeon propinquum | - | - | - | - | - | - |
| Pseudolimnophila | - | - | - | - | - | - |
| Psychodidae | - | - | - | - | - | - |
| Pteronarcys dorsata | - | - | - | - | - | - |
| Pyralidae | - | - | - | - | - | - |
| Rheocricotopus robacki | - | - | - | - | - | - |
| Rheotanytarsus | - | - | - | - | - | - |
| Rheotanytarsus exiguus grp. | - | - | 2 | 5 | - | 1 |
| Rheotanytarsus pellucidus | - | - | - | - | 2 | - |
| Rhyncholimnochares | - | - | - | - | - | - |
| Robackia claviger | - | - | - | - | - | - |
| Serratella deficiens | - | - | - | - | - | - |
| Sialis | - | 1 | - | - | - | - |
| Simulium | - | - | - | - | 1 | 1 |
| Simulium jonesi | - | - | - | - | - | - |
| Sisyra | - | - | - | - | - | - |
| Slavina appendiculata | - | - | - | - | - | - |
| Sperchon | - | - | - | - | - | - |
| Sperchonopsis | - | - | - | - | - | - |
| Sperchopsis | - | - | - | - | - | - |
| Sperchopsis tessellatus | - | - | - | - | - | - |
| Sphaeriidae(mollusca) | 2 | 3 | - | - | - | - |
| Spirosperma | - | - | - | - | - | - |
| Staphylinidae | - | - | - | - | - | 1 |
| Stelechomyia perpulchra | - | - | - | - | - | - |
| Stempellina | - | - | - | - | - | - |
| Stempellinella | - | - | - | - | 1 | - |
| Stempellinella fimbriata | 2 | - | - | - | - | - |
| Stempellinella leptocelloides | - | - | - | - | - | - |
| Stenacron | - | - | - | - | 2 | - |
| Stenacron interpunctatum | - | - | - | - | - | - |
| Stenelmis | 2 | 3 | 17 | 17 | - | - |
| Stenochironomus | - | 1 | 2 | 2 | 4 | 12 |
| Stenus | - | - | - | - | - | - |
| Stephensoniana trivandrana | - | - | - | - | - | - |
| Stratiomyidae | - | - | - | - | - | - |
| Sympetrum | - | - | - | - | - | - |
| Tabanidae | - | - | - | - | - | - |
| Taeniopteryx | - | - | - | - | - | - |
| Tanytarsus | - | - | - | - | - | - |
| Tanytarsus sp. a epler | 2 | 2 | - | - | - | - |
| Tanytarsus sp. c epler | 3 | - | - | - | - | - |
| Tanytarsus sp. d epler | - | - | 5 | 4 | 2 | - |



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| | 65414/40405/ | 65414/40405/ | 65306/40406/ | 65306/40406/ | 65636/40430/ | 65636/40430/ |
| Taxon Name / SampleID/BenthID -> | Rep 1 | Rep 2 | Rep 1 | Rep 2 | Rep 1 | Rep 2 |
| Tanytarsus sp. e epler | - | - | - | - | - | - |
| Tanytarsus sp. f epler | - | - | - | - | - | - |
| Tanytarsus sp. l epler | - | 2 | 4 | 4 | 6 | 2 |
| Tanytarsus sp. m epler | 2 | 2 | - | - | 4 | 1 |
| Tanytarsus sp. n epler | - | - | - | - | - | - |
| Tanytarsus sp. o epler | - | - | - | - | - | - |
| Tanytarsus sp. p epler | - | - | - | - | - | - |
| Tanytarsus sp. s epler | - | - | - | - | - | - |
| Tanytarsus sp. t epler | - | - | - | - | - | - |
| Tanytarsus sp. y epler | - | - | - | - | - | - |
| Thienemanniella | - | - | - | - | - | - |
| Thienemanniella lobapodema | - | - | - | - | - | - |
| Thienemanniella similis | - | - | - | - | - | - |
| Thienemanniella xena | - | - | - | - | - | - |
| Thienemannimyia grp. | - | 1 | 12 | 23 | - | - |
| Tipula | - | - | - | - | - | - |
| Tipula caloptera | - | - | - | - | - | - |
| Tipulidae | - | - | - | - | - | - |
| Torrenticola | - | 1 | - | - | - | - |
| Triaenodes | - | - | - | - | 3 | 3 |
| Triaenodes ignitus | - | - | - | - | - | - |
| Triaenodes perna/helo | - | - | 11 | 8 | - | - |
| Tribelos | - | - | 1 | - | - | - |
| Tribelos fuscicornis | - | - | - | - | - | - |
| Tribelos jucundum | 1 | - | - | 1 | 9 | 7 |
| Tricorythodes albilineatus | 4 | 3 | - | - | - | - |
| Tubificidae | - | - | - | 1 | - | - |
| Tvetenia | - | - | - | - | - | - |
| Tvetenia vitracies | - | - | - | - | - | - |
| Vertigo | - | - | - | - | - | - |
| Viviparus georgianus | - | - | - | - | - | - |
| Xenochironomus xenolabis | - | - | - | - | - | - |
| Xestochironomus | - | - | - | - | - | - |
| Xylotopus par | - | - | - | - | - | - |
| Zavreliella marmorata | - | - | - | - | - | - |
| Zavrelimyia sp. a epler | - | - | - | - | - | - |

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|---|---|---|---|---|---|---|
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| Taxon Name / SampleID/BenthID -> | 65637/40431/ Rep 1 | 65637/40431/ Rep 2 | 65567/40448/ Rep 1 | 65567/40448/ Rep 2 | 65731/40476/ Rep 1 | 65731/40476/ Rep 2 |
| Ablabesmyia mallochi | - | - | - | - | - | 1 |
| Ablabesmyia rhamphe grp. | - | - | - | - | 1 | - |
| Acentrella | - | - | - | - | - | - |
| Acentrella parvula | - | - | - | - | - | - |
| Acerpenna pygmaea | - | - | - | - | - | - |
| Acroneuria | - | - | - | - | - | - |
| Acroneuria abnormis | - | - | - | - | - | - |
| Acroneuria lycorias | - | - | - | - | - | - |
| Agnetina annulipes | - | - | - | - | - | - |
| Allonais inaequalis | - | - | - | 2 | - | - |
| Amnicola | - | - | - | - | - | - |
| Amphipoda | - | - | - | - | - | - |
| Ancylidae | - | - | 6 | 1 | 3 | 1 |
| Ancyronyx variegatus | - | - | - | - | - | 1 |
| Anisocentropus pyraloides | - | - | - | - | - | - |
| Apedilum | - | - | - | - | - | - |
| Argia | - | - | - | 1 | 3 | - |
| Argia fumipennis | - | - | - | - | - | - |
| Argia tibialis | - | - | - | - | - | 9 |
| Arrenurus | - | - | - | - | 1 | - |
| Asioplax | - | - | - | - | - | - |
| Atherix | - | - | - | - | - | - |
| Atractides | - | - | - | - | - | - |
| Atrichopogon | - | - | - | - | - | - |
| Aulodrilus pigueti | - | - | 12 | 8 | - | - |
| Baetidae | - | - | 1 | - | - | - |
| Baetis intercalaris | - | - | - | - | - | - |
| Baetisca becki | - | - | - | - | - | - |
| Baetisca rogersi | - | - | - | - | - | - |
| Beardius | - | - | - | - | - | - |
| Berosus | - | - | - | - | - | - |
| Bivalvia | - | - | - | - | - | - |
| Boyeria vinosa | - | - | - | - | - | - |
| Brachycentrus chelatus | - | - | - | - | - | - |
| Brachycentrus numerosus | - | - | - | - | - | - |
| Branchiobdellidae | - | - | - | - | - | - |
| Bratislavia unidentata | - | - | 1 | - | - | - |
| Brillia | - | - | - | - | - | - |
| Caecidotea | 30 | 17 | - | 1 | 3 | 3 |
| Caenis | 1 | - | 2 | 2 | - | - |
| Caenis diminuta | - | - | - | - | - | - |
| Caenis eglinensis | - | - | - | - | - | - |
| Caenis hilaris | - | - | - | - | - | - |
| Callibaetis | - | - | - | - | - | - |
| Callibaetis floridanus | - | - | - | - | - | - |
| Calopterygidae | - | - | - | - | - | - |
| Calopteryx | - | - | - | - | - | - |
| Cambaridae | - | - | - | - | 4 | 2 |
| Campeloma | - | - | - | - | - | - |
| Cecidomyiidae | - | - | - | - | - | - |



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| Taxon Name / SampleID/BenthID -> | 65637/40431/ Rep 1 | 65637/40431/ Rep 2 | 65567/40448/ Rep 1 | 65567/40448/ Rep 2 | 65731/40476/ Rep 1 | 65731/40476/ Rep 2 |
| Celina | - | - | - | 3 | - | - |
| Centroptilum triangulifer | - | - | - | - | - | - |
| Ceraclea | - | - | - | - | - | - |
| Ceratopogonidae | 1 | - | - | - | - | - |
| Cernotina | - | - | - | - | - | 1 |
| Chauliodes | - | - | - | - | - | - |
| Cheumatopsyche | - | - | - | 1 | - | - |
| Chimarra | 2 | - | - | - | 5 | 12 |
| Chironomus | - | - | 12 | 10 | - | - |
| Choroterpes basalis | - | - | - | - | - | - |
| Chrysomelidae | - | - | - | - | - | - |
| Cladotanytarsus | - | - | - | - | - | - |
| Cladotanytarsus cf. daviesi | 2 | - | - | - | - | - |
| Cladotanytarsus sp. d epler | - | - | - | - | - | - |
| Cladotanytarsus sp. f epler | - | - | - | - | - | - |
| Cladotanytarsus viridiventris | - | - | - | - | - | - |
| Clathrosperchon | - | - | - | - | - | - |
| Climacia areolaris | - | - | - | - | - | - |
| Clinotanypus | - | - | - | - | - | - |
| Coenagrionidae | - | - | - | - | - | - |
| Corbicula fluminea | - | - | - | - | - | - |
| Corydalidae | - | - | - | - | - | - |
| Corydalus cornutus | - | - | - | - | - | 1 |
| Corynoneura | - | - | - | - | - | - |
| Crangonyx | 1 | 3 | - | - | 1 | 1 |
| Cricotopus | - | - | - | - | - | - |
| Cricotopus bicinctus | - | - | - | - | - | - |
| Cricotopus or orthocladius | - | - | - | - | - | - |
| Cryptochironomus | - | - | - | - | - | - |
| Cryptotendipes | - | - | - | - | - | - |
| Curculionidae | - | - | - | - | - | - |
| Cyrnellus fraternus | - | - | - | - | 1 | 2 |
| Dasyhelea | - | - | - | 2 | - | - |
| Dero | - | - | - | - | - | - |
| Dero digitata complex | - | - | 6 | 10 | - | - |
| Dero flabelliger | - | - | 8 | 12 | - | - |
| Dero furcata | - | - | - | 2 | - | - |
| Dero pectinata | - | - | 4 | 5 | - | - |
| Desmopachria | - | - | - | - | - | - |
| Desserobdella phalera | - | - | - | - | - | - |
| Dicrotendipes | - | - | - | - | - | - |
| Dicrotendipes modestus | - | - | - | - | - | - |
| Dicrotendipes neomodestus | - | - | - | - | - | - |
| Dicrotendipes simpsoni | - | - | 2 | 2 | - | - |
| Dicrotendipes sp. a epler | - | - | - | - | - | - |
| Dineutus | - | - | 3 | 1 | - | - |
| Diplectrona | - | - | - | - | - | - |
| Djalmabatista pulcher | - | - | - | - | 3 | 1 |
| Dryopidae | - | - | - | - | - | - |
| Dubiraphia vittata | 1 | - | - | - | 2 | 3 |



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|---|---|---|---|---|---|---|
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| Taxon Name / SampleID/BenthID -> | 65637/40431/ Rep 1 | 65637/40431/ Rep 2 | 65567/40448/ Rep 1 | 65567/40448/ Rep 2 | 65731/40476/ Rep 1 | 65731/40476/ Rep 2 |
| Dytiscidae | - | - | - | - | - | - |
| Eclipidrilus | - | - | - | 1 | - | - |
| Eclipidrilus palustris | - | - | - | - | - | - |
| Ectopria | - | - | - | - | - | - |
| Ectopria thoracica | - | - | - | - | - | - |
| Einfeldia sp. a epler | - | - | - | - | - | - |
| Elimia | - | - | - | - | - | - |
| Elmidae | - | - | - | - | - | - |
| Enallagma | - | - | - | 1 | 3 | 2 |
| Enallagma coecum | - | - | - | - | - | - |
| Enchytraeidae | - | - | - | - | - | - |
| Endotribelos hesperium | - | - | - | - | - | - |
| Enochrus | 1 | - | - | - | - | - |
| Epicordulia princeps regina | - | - | - | - | - | - |
| Eurylophella doris | - | - | - | - | - | - |
| Ferrissia | - | - | - | - | - | - |
| Gastropoda | - | - | - | - | - | - |
| Geayia | - | - | - | - | - | - |
| Gerridae | - | - | - | - | 1 | - |
| Glossiphoniidae | - | - | - | - | - | - |
| Goeldichironomus | - | - | 4 | - | - | - |
| Goeldichironomus cf. natans | - | - | - | - | - | - |
| Goeldichironomus holoprasinus | - | - | - | 8 | - | - |
| Gomphidae | - | - | - | - | - | - |
| Gomphus | - | - | - | - | - | - |
| Gonielmis dietrichi | - | - | - | - | - | - |
| Gyrinidae | - | - | - | - | - | - |
| Gyrinus | - | - | - | - | - | - |
| Haemonais waldvogeli | - | - | - | 1 | - | - |
| Hagenius brevistylus | - | - | - | - | - | - |
| Haitia | - | - | - | - | - | - |
| Hayesomyia senata | - | - | - | - | - | - |
| Helichus | - | - | - | - | - | - |
| Helichus lithophilus | - | - | - | - | - | - |
| Helobdella stagnalis | - | - | - | - | - | - |
| Helobdella triserialis | - | - | - | - | - | - |
| Hemerodromia | - | - | - | - | 1 | 7 |
| Heptageniidae | - | - | - | - | - | - |
| Hetaerina | - | - | - | - | - | 2 |
| Hetaerina titia | - | - | - | - | - | - |
| Hexagenia | - | - | - | - | - | - |
| Hexatoma | - | - | - | - | - | - |
| Hirudinea | - | - | - | - | - | - |
| Hyalella azteca | - | - | 22 | 17 | - | - |
| Hydraena | - | - | - | - | - | - |
| Hydrobiidae | - | - | - | - | - | - |
| Hydrodroma | - | - | - | - | - | - |
| Hydrometra | 1 | - | - | - | - | - |
| Hydrophilidae | - | - | - | - | - | - |
| Hydropsyche | - | - | - | - | 25 | 24 |



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| Taxon Name / SampleID/BenthID -> | 65637/40431/ Rep 1 | 65637/40431/ Rep 2 | 65567/40448/ Rep 1 | 65567/40448/ Rep 2 | 65731/40476/ Rep 1 | 65731/40476/ Rep 2 |
| Hydropsyche incommoda | - | - | - | - | - | - |
| Hydropsyche mississippiensis | - | - | - | - | - | - |
| Hydroptila | - | - | - | - | - | - |
| Hydrovatus | - | - | 3 | - | - | - |
| Hygrobates | - | - | - | - | - | - |
| Ischnura | - | - | - | - | - | - |
| Isonychia | - | - | - | - | - | - |
| Kiefferulus | - | - | 5 | 2 | - | - |
| Koenikea | - | - | - | - | - | - |
| Krendowskia | - | - | - | - | - | - |
| Labrundinia | - | - | - | - | - | - |
| Labrundinia becki | - | - | - | - | - | - |
| Labrundinia johannseni | - | - | - | - | - | - |
| Labrundinia pilosella | - | - | - | - | - | - |
| Labrundinia sp. 3 nr. virescens | - | - | - | - | - | - |
| Laccophilus | - | - | - | - | - | - |
| Laevapex | - | - | - | - | - | - |
| Larsia | - | - | - | - | - | - |
| Larsia decolorata | - | - | - | - | - | - |
| Lauterborniella agrayloides | - | - | - | - | - | - |
| Lebertia | - | - | - | - | - | - |
| Lepidoptera | - | - | - | - | - | - |
| Lepidostoma | - | - | - | - | - | - |
| Leptophlebiidae | 64 | 69 | - | - | 5 | 7 |
| Leuctra | - | - | - | - | - | - |
| Libellulidae | - | - | - | - | - | - |
| Limnesia | - | - | - | - | - | - |
| Limnodrilus hoffmeisteri | - | - | 1 | - | - | - |
| Lioporeus | - | - | - | - | - | - |
| Lirceus | - | - | - | - | - | - |
| Lopescladius | - | - | - | - | - | - |
| Lumbriculus variegatus | - | - | - | - | - | - |
| Lymnaeidae | - | - | - | - | - | - |
| Lype diversa | - | - | - | - | - | - |
| Maccaffertium | 3 | 1 | - | - | - | - |
| Maccaffertium exiguum | - | - | - | - | 13 | 9 |
| Maccaffertium smithae | - | - | - | - | - | - |
| Macromia | - | - | - | - | - | - |
| Macromia illinoiensis georgina | - | - | - | - | - | - |
| Macronychus glabratus | - | - | - | - | - | - |
| Macrostemum carolina | - | - | - | - | 1 | 1 |
| Mayatrichia ayama | - | - | - | - | - | - |
| Megistocera | - | - | - | - | - | - |
| Mesonoterus | - | - | - | 1 | - | - |
| Mesovelia | - | - | - | - | - | - |
| Micrasema | - | - | - | - | - | - |
| Microcylloepus pusillus | - | - | - | - | 1 | - |
| Micromenetus | - | - | 5 | 2 | - | - |
| Micromenetus dilatatus avus | - | - | - | - | - | - |
| Micropsectra | - | - | - | - | - | - |



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| Taxon Name / SampleID/BenthID -> | 65637/40431/ Rep 1 | 65637/40431/ Rep 2 | 65567/40448/ Rep 1 | 65567/40448/ Rep 2 | 65731/40476/ Rep 1 | 65731/40476/ Rep 2 |
| Microtendipes | - | - | - | - | - | - |
| Microtendipes pedellus grp. | - | - | - | - | - | - |
| Microtendipes rydalensis grp. | - | - | - | - | - | - |
| Microvelia | - | - | - | - | - | - |
| Mideopsis | - | - | - | - | 1 | 1 |
| Momonia | - | - | - | - | - | - |
| Monopelopia | - | - | - | - | - | - |
| Mooreobdella | - | - | - | - | - | - |
| Naididae | 1 | - | - | - | - | - |
| Nais communis complex | - | - | - | - | - | - |
| Nais(animal) | - | 1 | - | - | - | - |
| Nanocladius | - | - | - | - | - | - |
| Nectopsyche | - | - | - | - | - | - |
| Nectopsyche exquisita | - | - | - | - | 2 | - |
| Nectopsyche pavida | - | - | - | - | - | - |
| Neoephemera | - | - | - | - | - | - |
| Neoperla | - | - | - | - | - | - |
| Neoplasta | - | - | - | - | - | - |
| Neoplea | - | - | - | - | - | - |
| Neoporus | 4 | 1 | - | - | 1 | - |
| Neotrichia | - | - | - | - | - | - |
| Neureclipsis | - | - | - | - | - | - |
| Neureclipsis crepuscularis | - | - | - | - | 2 | 8 |
| Neurocordulia | - | - | 1 | - | - | - |
| Neurocordulia alabamensis | - | - | - | - | - | - |
| Nigronia | - | - | - | - | - | - |
| Nigronia serricornis | - | - | - | - | - | - |
| Nilotanypus americanus | - | - | - | - | - | - |
| Nilotanypus fimbriatus | - | - | - | - | - | - |
| Nilothauma | - | - | - | - | - | - |
| Notomicrus nanulus | - | - | - | 1 | - | - |
| Nyctiophylax | - | - | - | - | - | - |
| Oecetis | - | - | - | - | 1 | 8 |
| Oecetis avara | - | - | - | - | - | - |
| Oecetis cinerascens | - | - | - | - | - | - |
| Oecetis georgia | - | - | - | - | - | - |
| Oecetis sphyra/morsei | - | - | - | - | - | - |
| Ora/scirtes | - | - | - | - | - | - |
| Oribatida | - | - | - | - | - | - |
| Ormosia | - | - | - | - | - | - |
| Orthocladius annectens | - | - | - | - | - | - |
| Orthotrichia | - | - | - | - | - | - |
| Oxus | - | - | - | - | - | - |
| Oxyethira | - | - | 1 | - | - | - |
| Pachydiplax longipennis | - | - | - | - | - | - |
| Palaemonetes | - | - | 3 | 3 | - | 1 |
| Palpomyia/bezzia grp. | - | - | 1 | - | - | - |
| Parachaetocladius abnobaeus | - | - | - | - | - | - |
| Parachironomus | - | - | 3 | 1 | - | - |
| Parachironomus chaetoalus complex | - | - | - | - | - | - |



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|---|---|---|---|---|---|---|
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| Taxon Name / SampleID/BenthID -> | 65637/40431/ Rep 1 | 65637/40431/ Rep 2 | 65567/40448/ Rep 1 | 65567/40448/ Rep 2 | 65731/40476/ Rep 1 | 65731/40476/ Rep 2 |
| Parachironomus supparilis | - | - | - | - | - | - |
| Paracladopelma | - | - | - | - | - | - |
| Paracymus | - | - | - | - | - | - |
| Parakiefferiella sp. b epler | - | - | - | - | - | - |
| Parakiefferiella sp. f epler | - | - | - | - | - | - |
| Paralauterborniella nigrohalterale | - | - | - | - | - | - |
| Paraleptophlebia volitans | - | - | - | - | - | - |
| Paramerina | - | - | - | - | - | - |
| Parametriocnemus | - | - | - | - | - | - |
| Paratanytarsus | - | - | - | - | - | - |
| Paratanytarsus dissimilis | - | - | - | - | - | - |
| Paratanytarsus quadratus | - | - | - | - | - | - |
| Paratendipes subaequalis | - | - | - | - | - | - |
| Pelonomus obscurus | - | - | - | - | - | - |
| Peltodytes | - | - | 3 | - | - | - |
| Peltodytes dietrichi | - | - | - | - | - | - |
| Pentaneura inconspicua | - | - | - | - | - | - |
| Perlesta placida complex | - | - | - | - | - | - |
| Perlinella drymo | - | - | - | - | - | - |
| Phaenopsectra flavipes | - | - | - | - | - | - |
| Phylocentropus | - | - | - | - | - | - |
| Physa | - | - | - | - | - | - |
| Physidae | - | - | - | - | - | - |
| Pilaria | - | - | - | - | - | - |
| Placobdella | - | - | - | - | - | - |
| Planorbella | - | - | - | - | - | - |
| Planorbidae | - | - | - | - | - | - |
| Platyhelminthes | - | - | - | 5 | - | - |
| Plauditus | - | - | - | - | - | - |
| Plauditus bimaculatus | - | - | - | - | - | - |
| Plecoptera | - | - | - | - | - | - |
| Polycentropodidae | - | - | - | - | - | - |
| Polycentropus | - | - | - | - | - | - |
| Polypedilum aviceps | - | - | - | - | - | - |
| Polypedilum fallax | - | - | - | - | - | - |
| Polypedilum flavum | - | - | - | - | 6 | 4 |
| Polypedilum halterale grp. | - | - | - | - | - | - |
| Polypedilum illinoense grp. | 3 | 4 | 3 | - | 3 | 3 |
| Polypedilum scalaenum grp. | 1 | - | - | - | - | - |
| Polypedilum sp. a epler | - | - | - | - | - | - |
| Polypedilum trigonus | - | - | - | - | - | - |
| Polypedilum tritum | - | - | - | 2 | - | - |
| Potthastia | - | - | - | - | - | - |
| Potthastia longimana | - | - | - | - | - | - |
| Pristina | - | - | - | 1 | - | - |
| Procambarus | - | - | - | - | - | - |
| Procladius | - | - | - | - | - | - |
| Procloeon | - | - | - | - | - | - |
| Progomphus | - | - | - | - | - | - |
| Progomphus obscurus | - | - | - | - | 1 | - |



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| Taxon Name / SampleID/BenthID -> | 65637/40431/ Rep 1 | 65637/40431/ Rep 2 | 65567/40448/ Rep 1 | 65567/40448/ Rep 2 | 65731/40476/ Rep 1 | 65731/40476/ Rep 2 |
| Promoresia tardella | - | - | - | - | - | - |
| Prostoma | - | - | - | - | - | - |
| Psectrocladius | - | - | - | - | - | - |
| Pseudochironomus | - | - | - | - | - | 1 |
| Pseudocloeon | - | - | - | - | - | - |
| Pseudocloeon ephippiatum | - | - | - | - | - | 1 |
| Pseudocloeon frondale | - | - | - | - | - | - |
| Pseudocloeon propinquum | - | - | - | - | - | - |
| Pseudolimnophila | - | - | - | - | - | - |
| Psychodidae | - | - | - | - | - | - |
| Pteronarcys dorsata | - | - | - | - | - | - |
| Pyralidae | - | - | - | - | - | - |
| Rheocricotopus robacki | - | - | - | - | 1 | - |
| Rheotanytarsus | - | - | - | - | - | - |
| Rheotanytarsus exiguus grp. | 2 | 4 | - | - | 21 | 12 |
| Rheotanytarsus pellucidus | - | 1 | - | - | 6 | 2 |
| Rhyncholimnochares | - | - | - | - | - | - |
| Robackia claviger | - | - | - | - | - | - |
| Serratella deficiens | - | - | - | - | 2 | 1 |
| Sialis | - | - | - | - | - | - |
| Simulium | 8 | 10 | 1 | 1 | 6 | 7 |
| Simulium jonesi | - | - | - | - | - | - |
| Sisyra | - | - | - | - | - | - |
| Slavina appendiculata | - | - | 2 | - | - | - |
| Sperchon | - | - | - | - | - | - |
| Sperchonopsis | - | - | - | - | - | - |
| Sperchopsis | - | - | - | - | - | - |
| Sperchopsis tessellatus | - | - | - | - | - | - |
| Sphaeriidae(mollusca) | 4 | 6 | 7 | 5 | - | - |
| Spirosperma | - | - | - | - | - | - |
| Staphylinidae | - | - | - | - | - | - |
| Stelechomyia perpulchra | - | - | - | - | 1 | 1 |
| Stempellina | - | - | - | - | - | - |
| Stempellinella | - | - | - | - | - | - |
| Stempellinella fimbriata | - | - | - | - | - | - |
| Stempellinella leptocelloides | - | - | - | - | - | - |
| Stenacron | - | - | - | - | - | - |
| Stenacron interpunctatum | - | - | - | - | - | - |
| Stenelmis | 1 | - | - | - | 11 | 2 |
| Stenochironomus | 2 | 1 | - | - | - | 1 |
| Stenus | 1 | - | - | - | - | - |
| Stephensoniana trivandrana | - | - | - | - | - | 1 |
| Stratiomyidae | - | - | - | - | - | - |
| Sympetrum | - | - | 1 | - | - | - |
| Tabanidae | - | - | - | - | - | - |
| Taeniopteryx | - | - | - | - | - | - |
| Tanytarsus | - | - | - | - | - | - |
| Tanytarsus sp. a epler | - | - | - | - | - | - |
| Tanytarsus sp. c epler | - | - | - | - | - | - |
| Tanytarsus sp. d epler | - | - | - | - | 1 | - |



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| Tanytarsus sp. e epler | - | - | - | - | - | - |
| Tanytarsus sp. f epler | - | - | 21 | 22 | - | - |
| Tanytarsus sp. l epler | 3 | 2 | - | - | - | 3 |
| Tanytarsus sp. m epler | - | - | - | - | - | - |
| Tanytarsus sp. n epler | - | - | - | - | - | - |
| Tanytarsus sp. o epler | 1 | - | - | - | - | - |
| Tanytarsus sp. p epler | - | - | - | - | - | - |
| Tanytarsus sp. s epler | - | - | - | - | - | - |
| Tanytarsus sp. t epler | - | - | 3 | 3 | - | - |
| Tanytarsus sp. y epler | - | - | - | - | - | - |
| Thienemanniella | - | - | - | - | - | - |
| Thienemanniella lobapodema | - | - | - | - | - | - |
| Thienemanniella similis | - | - | - | - | - | - |
| Thienemanniella xena | - | - | - | - | - | - |
| Thienemannimyia grp. | 7 | 9 | - | - | 1 | 1 |
| Tipula | - | - | - | - | - | - |
| Tipula caloptera | - | - | - | - | - | - |
| Tipulidae | - | - | - | - | - | - |
| Torrenticola | - | - | - | - | - | - |
| Triaenodes | 1 | - | - | - | - | 3 |
| Triaenodes ignitus | - | - | - | - | - | - |
| Triaenodes perna/helo | - | - | - | - | 11 | - |
| Tribelos | - | - | - | - | - | - |
| Tribelos fuscicornis | - | - | - | - | 5 | 2 |
| Tribelos jucundum | 13 | 10 | - | - | - | - |
| Tricorythodes albilineatus | - | - | - | - | - | - |
| Tubificidae | - | 2 | - | - | - | - |
| Tvetenia | - | - | - | - | - | - |
| Tvetenia vitracies | - | - | - | - | - | - |
| Vertigo | - | - | - | - | - | - |
| Viviparus georgianus | - | - | - | - | - | - |
| Xenochironomus xenolabis | - | - | - | - | - | 1 |
| Xestochironomus | - | - | - | - | - | - |
| Xylotopus par | - | - | - | - | - | - |
| Zavreliella marmorata | - | - | - | - | - | - |
| Zavrelimyia sp. a epler | - | - | - | - | - | - |

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| | 65736/40479/ | 65736/40479/ | 65737/40481/ | 65737/40481/ | 65715/40524/ | 65715/40524/ |
| Taxon Name / SampleID/BenthID -> | Rep 1 | Rep 2 | Rep 1 | Rep 2 | Rep 1 | Rep 2 |
| Ablabesmyia mallochi | 2 | - | - | 1 | 3 | 2 |
| Ablabesmyia rhamphe grp. | - | - | - | - | - | - |
| Acentrella | - | - | - | - | - | - |
| Acentrella parvula | - | - | - | - | - | - |
| Acerpenna pygmaea | 2 | 1 | - | - | - | - |
| Acroneuria | - | - | - | - | - | - |
| Acroneuria abnormis | - | - | - | - | - | - |
| Acroneuria lycorias | - | - | - | - | - | - |
| Agnetina annulipes | - | - | - | - | - | - |
| Allonais inaequalis | - | - | - | - | - | - |
| Amnicola | - | - | - | - | - | - |
| Amphipoda | - | - | - | - | - | - |
| Ancylidae | 1 | 1 | 3 | 3 | - | - |
| Ancyronyx variegatus | 4 | 1 | 2 | - | - | - |
| Anisocentropus pyraloides | - | - | - | - | - | - |
| Apedilum | 1 | - | - | - | 1 | - |
| Argia | 4 | 5 | 11 | 5 | 11 | 14 |
| Argia fumipennis | - | - | - | - | - | - |
| Argia tibialis | - | - | - | - | - | - |
| Arrenurus | 1 | 2 | - | - | 2 | 2 |
| Asioplax | - | - | - | - | - | - |
| Atherix | - | - | - | - | - | - |
| Atractides | - | - | - | - | - | - |
| Atrichopogon | - | - | - | - | - | - |
| Aulodrilus pigueti | - | - | - | - | - | - |
| Baetidae | - | - | - | - | - | - |
| Baetis intercalaris | - | - | - | - | - | - |
| Baetisca becki | - | - | - | - | - | - |
| Baetisca rogersi | - | - | - | - | - | - |
| Beardius | - | - | - | - | - | - |
| Berosus | - | - | - | - | - | - |
| Bivalvia | - | - | - | - | 1 | - |
| Boyeria vinosa | - | - | - | - | - | - |
| Brachycentrus chelatus | - | - | - | - | - | - |
| Brachycentrus numerosus | - | - | - | - | - | - |
| Branchiobdellidae | - | - | - | - | - | - |
| Bratislavia unidentata | - | - | - | - | - | - |
| Brillia | - | - | - | - | - | - |
| Caecidotea | 1 | 1 | 2 | 1 | 5 | 5 |
| Caenis | - | - | - | - | - | - |
| Caenis diminuta | - | - | - | - | - | - |
| Caenis eglinensis | - | - | - | - | - | - |
| Caenis hilaris | - | - | - | - | - | - |
| Callibaetis | - | - | - | - | - | - |
| Callibaetis floridanus | - | - | - | - | - | - |
| Calopterygidae | - | 1 | - | - | - | - |
| Calopteryx | 2 | - | 3 | 8 | - | - |
| Cambaridae | - | 1 | 1 | - | - | 3 |
| Campeloma | - | - | - | - | - | - |
| Cecidomyiidae | - | - | - | - | - | 1 |



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| | 65736/40479/ | 65736/40479/ | 65737/40481/ | 65737/40481/ | 65715/40524/ | 65715/40524/ |
| Taxon Name / SampleID/BenthID -> | Rep 1 | Rep 2 | Rep 1 | Rep 2 | Rep 1 | Rep 2 |
| Celina | - | - | - | - | - | - |
| Centroptilum triangulifer | - | - | - | - | - | - |
| Ceraclea | - | - | - | - | - | - |
| Ceratopogonidae | - | - | - | - | - | - |
| Cernotina | - | - | - | - | 2 | - |
| Chauliodes | - | - | - | - | - | - |
| Cheumatopsyche | 12 | 6 | 6 | 5 | 1 | 1 |
| Chimarra | 6 | 6 | 8 | 2 | - | - |
| Chironomus | - | - | - | - | 1 | - |
| Choroterpes basalis | - | - | - | - | - | - |
| Chrysomelidae | - | - | - | - | - | - |
| Cladotanytarsus | - | - | - | - | - | 1 |
| Cladotanytarsus cf. daviesi | - | - | - | - | - | - |
| Cladotanytarsus sp. d epler | - | - | - | - | - | - |
| Cladotanytarsus sp. f epler | - | - | - | - | - | - |
| Cladotanytarsus viridiventris | - | - | - | - | - | - |
| Clathrosperchon | - | - | - | 1 | - | - |
| Climacia areolaris | - | - | - | - | - | - |
| Clinotanypus | - | - | - | - | - | - |
| Coenagrionidae | - | - | - | - | - | - |
| Corbicula fluminea | - | - | - | - | - | - |
| Corydalidae | - | - | - | - | - | - |
| Corydalus cornutus | - | 2 | - | - | - | - |
| Corynoneura | - | - | 1 | - | - | 1 |
| Crangonyx | - | - | 5 | 8 | - | 2 |
| Cricotopus | 2 | - | - | - | - | - |
| Cricotopus bicinctus | - | - | - | - | - | - |
| Cricotopus or orthocladius | - | - | - | - | - | - |
| Cryptochironomus | - | - | - | - | - | - |
| Cryptotendipes | - | - | - | - | - | - |
| Curculionidae | - | - | - | - | - | - |
| Cyrnellus fraternus | - | - | - | - | - | - |
| Dasyhelea | - | - | - | 1 | - | - |
| Dero | - | - | - | - | - | - |
| Dero digitata complex | - | - | - | - | - | - |
| Dero flabelliger | - | - | - | - | - | - |
| Dero furcata | - | - | - | - | - | - |
| Dero pectinata | - | - | - | - | - | - |
| Desmopachria | - | - | - | - | - | - |
| Desserobdella phalera | - | - | - | - | - | - |
| Dicrotendipes | - | - | - | - | - | - |
| Dicrotendipes modestus | - | - | - | - | - | - |
| Dicrotendipes neomodestus | - | - | - | - | - | - |
| Dicrotendipes simpsoni | - | - | - | - | - | - |
| Dicrotendipes sp. a epler | - | - | - | - | - | - |
| Dineutus | - | - | 2 | - | - | - |
| Diplectrona | - | - | - | - | - | - |
| Djalmabatista pulcher | - | - | - | - | 1 | 1 |
| Dryopidae | - | - | - | - | - | - |
| Dubiraphia vittata | - | 1 | - | 1 | 4 | 2 |



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| | 65736/40479/ | 65736/40479/ | 65737/40481/ | 65737/40481/ | 65715/40524/ | 65715/40524/ |
| Taxon Name / SampleID/BenthID -> | Rep 1 | Rep 2 | Rep 1 | Rep 2 | Rep 1 | Rep 2 |
| Dytiscidae | - | 1 | - | - | - | - |
| Eclipidrilus | 3 | - | - | - | - | - |
| Eclipidrilus palustris | - | - | 3 | - | - | - |
| Ectopria | - | - | - | - | - | - |
| Ectopria thoracica | - | - | - | - | 1 | 3 |
| Einfeldia sp. a epler | - | - | - | - | - | - |
| Elimia | - | - | - | - | - | - |
| Elmidae | - | - | - | - | - | - |
| Enallagma | - | - | 2 | 1 | 1 | 1 |
| Enallagma coecum | - | - | - | - | - | - |
| Enchytraeidae | - | - | - | - | - | - |
| Endotribelos hesperium | - | - | - | - | - | - |
| Enochrus | - | - | - | - | - | - |
| Epicordulia princeps regina | - | - | - | - | - | - |
| Eurylophella doris | 8 | 2 | 2 | 2 | 8 | 2 |
| Ferrissia | - | - | - | - | - | - |
| Gastropoda | - | - | - | - | 1 | - |
| Geayia | - | - | - | - | - | - |
| Gerridae | - | - | - | - | 1 | - |
| Glossiphoniidae | - | - | - | - | - | - |
| Goeldichironomus | - | - | - | - | - | - |
| Goeldichironomus cf. natans | - | - | - | - | - | - |
| Goeldichironomus holoprasinus | - | - | - | - | - | - |
| Gomphidae | - | - | - | - | 1 | - |
| Gomphus | - | - | - | - | - | - |
| Gonielmis dietrichi | - | - | - | - | - | - |
| Gyrinidae | - | - | - | - | - | - |
| Gyrinus | - | - | - | - | - | - |
| Haemonais waldvogeli | - | - | - | - | - | - |
| Hagenius brevistylus | - | - | - | - | - | - |
| Haitia | - | - | - | - | - | - |
| Hayesomyia senata | - | - | - | - | - | - |
| Helichus | - | - | - | - | - | - |
| Helichus lithophilus | - | - | - | - | - | - |
| Helobdella stagnalis | - | - | - | - | - | - |
| Helobdella triserialis | - | - | - | - | - | - |
| Hemerodromia | 2 | 2 | 2 | 1 | 1 | 1 |
| Heptageniidae | - | - | - | - | - | - |
| Hetaerina | - | - | - | - | - | - |
| Hetaerina titia | - | - | - | - | - | - |
| Hexagenia | - | - | - | - | - | - |
| Hexatoma | - | - | - | - | - | - |
| Hirudinea | - | - | - | - | - | - |
| Hyalella azteca | - | - | - | - | - | - |
| Hydraena | - | - | - | - | - | - |
| Hydrobiidae | - | - | - | - | - | - |
| Hydrodroma | - | - | - | - | - | - |
| Hydrometra | - | - | - | - | - | - |
| Hydrophilidae | - | - | - | - | - | - |
| Hydropsyche | - | - | - | 2 | - | - |



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|---|---|---|---|---|---|---|
| Sample date -> | 11/6/2008 | 11/6/2008 | 11/6/2008 | 11/6/2008 | 11/13/2008 | 11/13/2008 |
| | 65736/40479/ | 65736/40479/ | 65737/40481/ | 65737/40481/ | 65715/40524/ | 65715/40524/ |
| Taxon Name / SampleID/BenthID -> | Rep 1 | Rep 2 | Rep 1 | Rep 2 | Rep 1 | Rep 2 |
| Hydropsyche incommoda | - | - | - | - | - | - |
| Hydropsyche mississippiensis | - | - | - | - | - | - |
| Hydroptila | 1 | 6 | - | - | 1 | - |
| Hydrovatus | - | - | - | - | - | - |
| Hygrobates | - | - | - | - | - | - |
| Ischnura | - | - | - | - | - | - |
| Isonychia | - | - | - | - | - | - |
| Kiefferulus | - | - | - | - | - | - |
| Koenikea | - | - | - | - | - | - |
| Krendowskia | - | - | - | - | - | - |
| Labrundinia | - | - | - | - | - | - |
| Labrundinia becki | - | 1 | - | - | - | - |
| Labrundinia johannseni | - | - | - | - | - | - |
| Labrundinia pilosella | - | - | - | - | - | - |
| Labrundinia sp. 3 nr. virescens | - | - | - | - | - | - |
| Laccophilus | - | - | - | - | - | - |
| Laevapex | - | - | - | - | - | - |
| Larsia | - | - | - | - | - | - |
| Larsia decolorata | - | - | - | - | - | - |
| Lauterborniella agrayloides | - | - | - | - | - | - |
| Lebertia | - | - | - | - | - | - |
| Lepidoptera | - | - | - | - | - | - |
| Lepidostoma | - | - | - | - | - | - |
| Leptophlebiidae | 2 | - | 2 | 1 | 14 | 11 |
| Leuctra | 3 | 1 | 6 | 1 | - | - |
| Libellulidae | - | - | - | - | - | - |
| Limnesia | - | - | - | - | - | - |
| Limnodrilus hoffmeisteri | - | - | - | - | - | - |
| Lioporeus | - | - | - | - | 3 | - |
| Lirceus | - | - | - | - | - | - |
| Lopescladius | - | - | - | - | - | - |
| Lumbriculus variegatus | - | - | - | - | - | - |
| Lymnaeidae | - | - | - | - | - | - |
| Lype diversa | - | 1 | - | 1 | - | - |
| Maccaffertium | 2 | - | 4 | 2 | 2 | 2 |
| Maccaffertium exiguum | - | 3 | - | - | - | - |
| Maccaffertium smithae | - | - | - | - | - | - |
| Macromia | - | - | - | - | - | - |
| Macromia illinoiensis georgina | - | - | - | - | - | - |
| Macronychus glabratus | 1 | - | - | - | - | - |
| Macrostemum carolina | - | - | - | - | - | - |
| Mayatrichia ayama | 1 | - | - | - | - | - |
| Megistocera | - | - | - | - | - | - |
| Mesonoterus | - | - | - | - | - | - |
| Mesovelia | - | - | 1 | - | - | - |
| Micrasema | - | - | - | - | - | - |
| Microcylloepus pusillus | 24 | 18 | 9 | 12 | 11 | 10 |
| Micromenetus | - | - | - | - | - | - |
| Micromenetus dilatatus avus | - | - | - | - | - | - |
| Micropsectra | - | - | - | - | - | - |



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| As Calculated / STORET station -> | CLA254LR | CLA254LR | CLA243LV | CLA243LV | WAK158LR | WAK158LR |
|---|---|---|---|---|---|---|
| Sample date -> | 11/6/2008 | 11/6/2008 | 11/6/2008 | 11/6/2008 | 11/13/2008 | 11/13/2008 |
| | 65736/40479/ | 65736/40479/ | 65737/40481/ | 65737/40481/ | 65715/40524/ | 65715/40524/ |
| Taxon Name / SampleID/BenthID -> | Rep 1 | Rep 2 | Rep 1 | Rep 2 | Rep 1 | Rep 2 |
| Microtendipes | - | - | - | - | - | 1 |
| Microtendipes pedellus grp. | 1 | 1 | - | 1 | - | - |
| Microtendipes rydalensis grp. | - | - | - | - | - | - |
| Microvelia | - | - | - | - | - | - |
| Mideopsis | - | - | - | - | 4 | 2 |
| Momonia | - | - | - | - | 4 | 6 |
| Monopelopia | - | - | - | - | - | - |
| Mooreobdella | - | - | - | - | - | - |
| Naididae | - | - | - | - | - | - |
| Nais communis complex | - | - | - | - | - | - |
| Nais(animal) | - | - | - | - | - | - |
| Nanocladius | - | - | - | - | - | - |
| Nectopsyche | - | 4 | - | - | - | - |
| Nectopsyche exquisita | - | - | - | - | 14 | 15 |
| Nectopsyche pavida | - | - | - | - | 1 | - |
| Neoephemera | - | - | - | - | - | - |
| Neoperla | 4 | 4 | - | - | - | - |
| Neoplasta | - | - | - | - | - | - |
| Neoplea | - | - | - | - | - | - |
| Neoporus | - | - | 1 | 1 | - | - |
| Neotrichia | 3 | 2 | 1 | 3 | - | 5 |
| Neureclipsis | - | - | - | - | - | - |
| Neureclipsis crepuscularis | - | - | - | - | - | - |
| Neurocordulia | - | - | - | - | - | - |
| Neurocordulia alabamensis | - | - | - | - | - | - |
| Nigronia | - | - | - | - | - | - |
| Nigronia serricornis | - | - | - | - | - | - |
| Nilotanypus americanus | - | - | - | - | - | - |
| Nilotanypus fimbriatus | - | - | - | - | - | - |
| Nilothauma | - | - | - | - | - | - |
| Notomicrus nanulus | - | - | - | - | - | - |
| Nyctiophylax | - | - | 1 | 1 | - | - |
| Oecetis | 2 | 3 | 4 | 6 | - | 3 |
| Oecetis avara | - | - | - | - | - | - |
| Oecetis cinerascens | - | - | - | - | - | - |
| Oecetis georgia | - | - | - | - | - | - |
| Oecetis sphyra/morsei | - | - | - | - | - | - |
| Ora/scirtes | - | - | - | - | - | - |
| Oribatida | - | 2 | - | - | - | - |
| Ormosia | - | - | - | - | - | - |
| Orthocladius annectens | - | - | - | - | - | - |
| Orthotrichia | - | - | - | - | - | - |
| Oxus | - | - | - | - | - | - |
| Oxyethira | - | - | - | 1 | - | - |
| Pachydiplax longipennis | - | - | - | - | 1 | - |
| Palaemonetes | - | - | - | - | - | - |
| Palpomyia/bezzia grp. | - | 1 | 2 | - | 3 | 1 |
| Parachaetocladius abnobaeus | - | - | - | - | - | - |
| Parachironomus | - | - | - | - | - | - |
| Parachironomus chaetoalus complex | - | - | - | - | - | - |



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|---|---|---|---|---|---|---|
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| | 65736/40479/ | 65736/40479/ | 65737/40481/ | 65737/40481/ | 65715/40524/ | 65715/40524/ |
| Taxon Name / SampleID/BenthID -> | Rep 1 | Rep 2 | Rep 1 | Rep 2 | Rep 1 | Rep 2 |
| Parachironomus supparilis | - | - | - | - | - | - |
| Paracladopelma | - | - | - | - | - | - |
| Paracymus | - | - | - | - | - | - |
| Parakiefferiella sp. b epler | - | - | - | - | 1 | - |
| Parakiefferiella sp. f epler | - | - | - | - | - | - |
| Paralauterborniella nigrohalterale | - | - | - | - | - | - |
| Paraleptophlebia volitans | - | - | - | - | - | - |
| Paramerina | - | - | - | - | - | - |
| Parametriocnemus | - | - | - | - | - | - |
| Paratanytarsus | - | - | - | - | - | - |
| Paratanytarsus dissimilis | - | - | - | - | - | - |
| Paratanytarsus quadratus | - | - | - | - | - | - |
| Paratendipes subaequalis | - | - | - | - | - | - |
| Pelonomus obscurus | - | - | - | - | - | - |
| Peltodytes | - | - | - | - | - | - |
| Peltodytes dietrichi | - | - | - | - | - | - |
| Pentaneura inconspicua | - | - | - | - | - | - |
| Perlesta placida complex | - | - | - | - | - | - |
| Perlinella drymo | - | - | - | - | - | - |
| Phaenopsectra flavipes | - | - | - | - | - | - |
| Phylocentropus | - | - | - | - | - | - |
| Physa | - | - | - | - | - | - |
| Physidae | - | - | - | - | - | - |
| Pilaria | - | - | - | - | - | - |
| Placobdella | - | - | - | - | - | - |
| Planorbella | - | - | - | - | - | - |
| Planorbidae | - | - | - | - | - | - |
| Platyhelminthes | - | - | - | - | - | - |
| Plauditus | - | - | - | - | - | - |
| Plauditus bimaculatus | - | - | - | - | - | - |
| Plecoptera | - | - | - | - | - | - |
| Polycentropodidae | - | - | - | - | - | - |
| Polycentropus | - | - | - | - | - | - |
| Polypedilum aviceps | - | - | - | - | - | - |
| Polypedilum fallax | - | - | - | - | - | - |
| Polypedilum flavum | 21 | 27 | 15 | 14 | 2 | 1 |
| Polypedilum halterale grp. | - | - | - | - | - | - |
| Polypedilum illinoense grp. | - | - | 4 | 1 | 1 | 1 |
| Polypedilum scalaenum grp. | - | - | 1 | - | - | - |
| Polypedilum sp. a epler | - | - | - | - | - | - |
| Polypedilum trigonus | - | - | - | - | - | - |
| Polypedilum tritum | - | - | - | - | - | - |
| Potthastia | - | - | - | - | - | - |
| Potthastia longimana | - | - | - | - | - | - |
| Pristina | - | - | - | - | - | - |
| Procambarus | - | - | - | - | - | - |
| Procladius | - | - | - | - | - | - |
| Procloeon | - | - | - | - | - | - |
| Progomphus | - | - | 2 | - | - | 3 |
| Progomphus obscurus | - | - | - | - | - | - |



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|---|---|---|---|---|---|---|
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| | 65736/40479/ | 65736/40479/ | 65737/40481/ | 65737/40481/ | 65715/40524/ | 65715/40524/ |
| Taxon Name / SampleID/BenthID -> | Rep 1 | Rep 2 | Rep 1 | Rep 2 | Rep 1 | Rep 2 |
| Promoresia tardella | - | - | - | - | - | - |
| Prostoma | - | - | - | - | - | - |
| Psectrocladius | - | - | - | - | - | - |
| Pseudochironomus | - | - | - | - | 3 | 10 |
| Pseudocloeon | 4 | 5 | - | - | - | - |
| Pseudocloeon ephippiatum | - | - | - | - | - | - |
| Pseudocloeon frondale | - | - | - | - | - | - |
| Pseudocloeon propinquum | - | - | - | - | - | - |
| Pseudolimnophila | - | - | - | - | - | - |
| Psychodidae | - | - | - | - | - | - |
| Pteronarcys dorsata | - | - | - | - | - | - |
| Pyralidae | - | - | - | - | - | - |
| Rheocricotopus robacki | - | 4 | - | - | - | - |
| Rheotanytarsus | - | - | - | - | - | - |
| Rheotanytarsus exiguus grp. | 1 | - | 16 | 16 | - | 4 |
| Rheotanytarsus pellucidus | - | 2 | - | - | - | - |
| Rhyncholimnochares | 1 | - | - | - | - | - |
| Robackia claviger | - | - | - | - | - | - |
| Serratella deficiens | - | - | - | - | - | - |
| Sialis | - | - | - | - | - | 1 |
| Simulium | - | 1 | - | 3 | - | - |
| Simulium jonesi | - | - | - | - | - | - |
| Sisyra | - | - | - | - | - | - |
| Slavina appendiculata | - | - | - | - | - | - |
| Sperchon | 3 | - | - | - | - | - |
| Sperchonopsis | - | - | - | - | - | - |
| Sperchopsis | - | - | - | - | - | - |
| Sperchopsis tessellatus | - | - | - | - | - | - |
| Sphaeriidae(mollusca) | - | 1 | - | - | - | - |
| Spirosperma | - | - | - | - | - | - |
| Staphylinidae | - | - | - | - | - | - |
| Stelechomyia perpulchra | 1 | 1 | - | - | - | - |
| Stempellina | 1 | - | - | - | - | - |
| Stempellinella | - | - | - | - | - | - |
| Stempellinella fimbriata | - | - | - | - | - | - |
| Stempellinella leptocelloides | - | - | - | - | - | - |
| Stenacron | - | - | - | - | - | - |
| Stenacron interpunctatum | - | - | - | - | - | - |
| Stenelmis | 8 | 2 | 7 | 14 | - | 4 |
| Stenochironomus | 2 | 2 | 1 | 1 | 8 | 2 |
| Stenus | - | - | - | - | - | - |
| Stephensoniana trivandrana | - | - | - | - | - | - |
| Stratiomyidae | - | - | - | - | - | - |
| Sympetrum | - | - | - | - | - | - |
| Tabanidae | - | - | - | - | - | - |
| Taeniopteryx | - | - | - | - | 5 | 1 |
| Tanytarsus | - | - | - | - | - | - |
| Tanytarsus sp. a epler | - | - | - | - | 1 | - |
| Tanytarsus sp. c epler | - | - | - | - | - | 1 |
| Tanytarsus sp. d epler | - | - | 2 | 1 | 3 | 1 |



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| As Calculated / STORET station -> | CLA254LR | CLA254LR | CLA243LV | CLA243LV | WAK158LR | WAK158LR |
|---|---|---|---|---|---|---|
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| | 65736/40479/ | 65736/40479/ | 65737/40481/ | 65737/40481/ | 65715/40524/ | 65715/40524/ |
| Taxon Name / SampleID/BenthID -> | Rep 1 | Rep 2 | Rep 1 | Rep 2 | Rep 1 | Rep 2 |
| Tanytarsus sp. e epler | - | - | - | - | - | - |
| Tanytarsus sp. f epler | - | - | - | - | - | - |
| Tanytarsus sp. l epler | 1 | - | - | - | 5 | 2 |
| Tanytarsus sp. m epler | 1 | - | - | - | - | - |
| Tanytarsus sp. n epler | - | - | - | - | - | - |
| Tanytarsus sp. o epler | - | - | - | - | - | - |
| Tanytarsus sp. p epler | - | - | - | - | - | - |
| Tanytarsus sp. s epler | - | 1 | - | - | - | - |
| Tanytarsus sp. t epler | - | - | - | - | - | - |
| Tanytarsus sp. y epler | - | - | - | - | - | - |
| Thienemanniella | - | - | - | - | - | - |
| Thienemanniella lobapodema | - | - | - | - | - | - |
| Thienemanniella similis | - | - | - | - | - | - |
| Thienemanniella xena | - | - | - | - | - | - |
| Thienemannimyia grp. | - | 1 | - | 2 | 1 | 2 |
| Tipula | - | - | - | - | - | - |
| Tipula caloptera | - | - | - | - | - | - |
| Tipulidae | - | - | - | - | - | - |
| Torrenticola | - | - | - | - | - | - |
| Triaenodes | 5 | 10 | 20 | 25 | 10 | 9 |
| Triaenodes ignitus | - | - | - | - | - | - |
| Triaenodes perna/helo | - | - | - | - | - | - |
| Tribelos | - | - | - | - | - | - |
| Tribelos fuscicornis | - | - | - | - | - | - |
| Tribelos jucundum | - | - | - | - | 13 | 6 |
| Tricorythodes albilineatus | - | - | - | - | - | 2 |
| Tubificidae | - | - | - | 1 | - | - |
| Tvetenia | - | - | - | - | - | - |
| Tvetenia vitracies | 3 | 2 | - | - | - | - |
| Vertigo | - | - | - | - | - | - |
| Viviparus georgianus | - | - | - | - | - | - |
| Xenochironomus xenolabis | - | 1 | - | - | - | - |
| Xestochironomus | - | - | - | - | - | - |
| Xylotopus par | - | - | - | 1 | - | - |
| Zavreliella marmorata | - | - | - | - | - | - |
| Zavrelimyia sp. a epler | - | - | - | - | - | - |

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| As Calculated / STORET station -> | NUTREF001 | NUTREF001 | GAD106GS | GAD106GS | GLA630GS | GLA630GS |
|---|---|---|---|---|---|---|
| Sample date -> | 11/20/2008 | 11/20/2008 | 11/20/2008 | 11/20/2008 | 12/16/2008 | 12/16/2008 |
| | 65739/40534/ | 65739/40534/ | 65741/40537/ | 65741/40537/ | 65891/40544/ | 65891/40544/ |
| Taxon Name / SampleID/BenthID -> | Rep 1 | Rep 2 | Rep 1 | Rep 2 | Rep 1 | Rep 2 |
| Ablabesmyia mallochi | - | - | - | 1 | - | 1 |
| Ablabesmyia rhamphe grp. | - | - | - | - | - | - |
| Acentrella | - | - | - | - | - | - |
| Acentrella parvula | - | - | - | - | - | - |
| Acerpenna pygmaea | - | - | - | - | - | - |
| Acroneuria | - | - | - | - | - | - |
| Acroneuria abnormis | - | - | - | - | - | - |
| Acroneuria lycorias | - | - | - | 2 | - | - |
| Agnetina annulipes | - | - | - | - | - | - |
| Allonais inaequalis | - | - | - | - | - | - |
| Amnicola | - | - | - | - | - | - |
| Amphipoda | - | - | - | - | - | - |
| Ancylidae | - | 2 | - | - | - | - |
| Ancyronyx variegatus | - | - | 6 | 4 | - | - |
| Anisocentropus pyraloides | - | - | 1 | 2 | - | - |
| Apedilum | - | - | - | - | - | - |
| Argia | - | - | 3 | 1 | - | - |
| Argia fumipennis | - | - | - | - | - | - |
| Argia tibialis | - | - | - | - | - | - |
| Arrenurus | - | - | - | - | - | - |
| Asioplax | - | - | - | - | - | - |
| Atherix | 2 | 1 | - | - | - | - |
| Atractides | - | - | 1 | - | - | - |
| Atrichopogon | - | - | - | - | 1 | - |
| Aulodrilus pigueti | - | - | - | - | - | - |
| Baetidae | 2 | 2 | - | - | 8 | 5 |
| Baetis intercalaris | - | - | - | - | - | - |
| Baetisca becki | 1 | - | - | - | - | - |
| Baetisca rogersi | - | - | - | - | - | - |
| Beardius | - | - | - | - | - | - |
| Berosus | - | - | - | - | - | - |
| Bivalvia | - | - | - | - | - | - |
| Boyeria vinosa | - | - | - | 1 | - | - |
| Brachycentrus chelatus | - | - | - | - | - | - |
| Brachycentrus numerosus | - | - | - | - | - | - |
| Branchiobdellidae | - | - | - | - | - | - |
| Bratislavia unidentata | - | - | - | - | - | - |
| Brillia | - | - | - | - | - | - |
| Caecidotea | 9 | 5 | - | - | - | - |
| Caenis | 1 | 2 | 2 | - | 4 | 12 |
| Caenis diminuta | - | - | - | - | - | - |
| Caenis eglinensis | - | - | - | - | - | - |
| Caenis hilaris | - | - | - | - | - | - |
| Callibaetis | - | - | - | - | - | - |
| Callibaetis floridanus | - | - | - | - | - | - |
| Calopterygidae | - | - | - | - | - | - |
| Calopteryx | - | 1 | - | - | - | - |
| Cambaridae | - | - | 2 | 2 | - | - |
| Campeloma | - | - | - | - | - | - |
| Cecidomyiidae | - | - | - | - | - | - |



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| As Calculated / STORET station -> | NUTREF001 | NUTREF001 | GAD106GS | GAD106GS | GLA630GS | GLA630GS |
|---|---|---|---|---|---|---|
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| | 65739/40534/ | 65739/40534/ | 65741/40537/ | 65741/40537/ | 65891/40544/ | 65891/40544/ |
| Taxon Name / SampleID/BenthID -> | Rep 1 | Rep 2 | Rep 1 | Rep 2 | Rep 1 | Rep 2 |
| Celina | - | - | - | - | - | - |
| Centroptilum triangulifer | - | - | - | - | - | - |
| Ceraclea | - | 5 | 4 | 4 | - | - |
| Ceratopogonidae | - | - | - | - | - | - |
| Cernotina | - | - | - | - | - | - |
| Chauliodes | - | - | - | - | - | - |
| Cheumatopsyche | 4 | 4 | 16 | 13 | 41 | 42 |
| Chimarra | - | 1 | - | - | - | - |
| Chironomus | - | - | - | - | - | - |
| Choroterpes basalis | - | - | - | - | - | - |
| Chrysomelidae | - | - | - | - | - | - |
| Cladotanytarsus | - | - | - | - | - | - |
| Cladotanytarsus cf. daviesi | - | - | - | - | - | - |
| Cladotanytarsus sp. d epler | - | - | - | - | - | - |
| Cladotanytarsus sp. f epler | - | - | - | - | - | - |
| Cladotanytarsus viridiventris | - | - | - | - | - | - |
| Clathrosperchon | - | 1 | 2 | 1 | - | - |
| Climacia areolaris | 1 | - | - | - | - | 1 |
| Clinotanypus | - | - | - | - | - | - |
| Coenagrionidae | - | - | - | - | - | - |
| Corbicula fluminea | - | - | - | - | - | - |
| Corydalidae | - | - | - | - | - | - |
| Corydalus cornutus | - | - | - | - | - | - |
| Corynoneura | - | - | - | - | - | - |
| Crangonyx | - | - | - | - | - | - |
| Cricotopus | - | - | - | - | - | - |
| Cricotopus bicinctus | - | - | - | - | - | - |
| Cricotopus or orthocladius | - | - | - | - | - | - |
| Cryptochironomus | - | - | - | - | - | - |
| Cryptotendipes | - | - | - | - | - | - |
| Curculionidae | - | - | - | - | - | - |
| Cyrnellus fraternus | - | - | - | - | - | - |
| Dasyhelea | - | - | - | 2 | - | - |
| Dero | - | - | - | - | - | - |
| Dero digitata complex | - | - | - | - | - | - |
| Dero flabelliger | - | - | - | - | - | - |
| Dero furcata | - | - | - | - | - | - |
| Dero pectinata | - | - | - | - | - | - |
| Desmopachria | - | - | - | - | - | - |
| Desserobdella phalera | - | - | - | - | - | - |
| Dicrotendipes | - | - | - | - | - | - |
| Dicrotendipes modestus | - | - | - | - | - | - |
| Dicrotendipes neomodestus | - | - | - | - | - | - |
| Dicrotendipes simpsoni | - | - | - | - | - | - |
| Dicrotendipes sp. a epler | - | - | - | - | - | - |
| Dineutus | - | - | 1 | 1 | - | - |
| Diplectrona | - | - | - | - | - | - |
| Djalmabatista pulcher | - | - | 1 | 1 | - | - |
| Dryopidae | - | - | - | - | - | - |
| Dubiraphia vittata | - | - | - | - | 1 | - |



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| As Calculated / STORET station -> | NUTREF001 | NUTREF001 | GAD106GS | GAD106GS | GLA630GS | GLA630GS |
|---|---|---|---|---|---|---|
| Sample date -> | 11/20/2008 | 11/20/2008 | 11/20/2008 | 11/20/2008 | 12/16/2008 | 12/16/2008 |
| | 65739/40534/ | 65739/40534/ | 65741/40537/ | 65741/40537/ | 65891/40544/ | 65891/40544/ |
| Taxon Name / SampleID/BenthID -> | Rep 1 | Rep 2 | Rep 1 | Rep 2 | Rep 1 | Rep 2 |
| Dytiscidae | - | - | - | - | - | - |
| Eclipidrilus | - | - | - | - | - | - |
| Eclipidrilus palustris | - | - | - | - | - | - |
| Ectopria | - | - | 1 | - | - | - |
| Ectopria thoracica | - | 2 | - | - | - | - |
| Einfeldia sp. a epler | - | - | - | - | - | - |
| Elimia | - | - | - | - | - | - |
| Elmidae | - | - | - | - | - | - |
| Enallagma | - | - | - | - | 2 | 2 |
| Enallagma coecum | - | - | - | - | - | - |
| Enchytraeidae | - | - | - | - | - | - |
| Endotribelos hesperium | - | - | - | - | - | - |
| Enochrus | - | - | - | - | - | - |
| Epicordulia princeps regina | - | - | - | - | - | - |
| Eurylophella doris | 71 | 61 | 7 | 5 | - | - |
| Ferrissia | - | - | - | - | - | - |
| Gastropoda | - | - | - | - | - | - |
| Geayia | - | - | - | - | - | - |
| Gerridae | - | - | - | - | - | - |
| Glossiphoniidae | - | - | - | - | - | - |
| Goeldichironomus | - | - | - | - | - | - |
| Goeldichironomus cf. natans | - | - | - | - | - | - |
| Goeldichironomus holoprasinus | - | - | - | - | - | - |
| Gomphidae | - | - | - | - | - | - |
| Gomphus | - | - | 1 | - | - | - |
| Gonielmis dietrichi | - | - | - | 1 | - | - |
| Gyrinidae | - | - | - | - | - | - |
| Gyrinus | - | - | - | - | - | - |
| Haemonais waldvogeli | - | - | - | - | - | - |
| Hagenius brevistylus | - | - | - | - | - | - |
| Haitia | - | - | - | - | - | - |
| Hayesomyia senata | - | - | - | - | - | - |
| Helichus | - | - | - | - | - | - |
| Helichus lithophilus | - | - | - | - | - | - |
| Helobdella stagnalis | - | - | - | - | - | - |
| Helobdella triserialis | - | - | - | - | - | - |
| Hemerodromia | - | - | - | - | - | - |
| Heptageniidae | - | - | - | - | - | - |
| Hetaerina | - | - | - | - | - | - |
| Hetaerina titia | - | - | - | - | - | - |
| Hexagenia | - | - | - | - | - | - |
| Hexatoma | - | - | - | - | - | - |
| Hirudinea | - | - | - | - | - | - |
| Hyalella azteca | - | - | - | - | - | 2 |
| Hydraena | - | - | - | - | - | - |
| Hydrobiidae | - | 1 | - | - | - | - |
| Hydrodroma | - | - | - | - | - | - |
| Hydrometra | - | - | - | - | - | - |
| Hydrophilidae | - | - | - | - | - | - |
| Hydropsyche | 7 | 4 | 2 | 2 | - | - |



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| As Calculated / STORET station -> | NUTREF001 | NUTREF001 | GAD106GS | GAD106GS | GLA630GS | GLA630GS |
|---|---|---|---|---|---|---|
| Sample date -> | 11/20/2008 | 11/20/2008 | 11/20/2008 | 11/20/2008 | 12/16/2008 | 12/16/2008 |
| | 65739/40534/ | 65739/40534/ | 65741/40537/ | 65741/40537/ | 65891/40544/ | 65891/40544/ |
| Taxon Name / SampleID/BenthID -> | Rep 1 | Rep 2 | Rep 1 | Rep 2 | Rep 1 | Rep 2 |
| Hydropsyche incommoda | - | - | - | - | - | - |
| Hydropsyche mississippiensis | - | - | - | - | - | - |
| Hydroptila | - | - | - | - | - | - |
| Hydrovatus | - | - | - | - | - | - |
| Hygrobates | - | - | - | - | - | - |
| Ischnura | - | - | - | - | - | - |
| Isonychia | - | - | - | - | - | - |
| Kiefferulus | - | - | - | - | - | - |
| Koenikea | - | - | - | - | - | - |
| Krendowskia | - | - | - | - | - | - |
| Labrundinia | - | - | - | - | - | - |
| Labrundinia becki | - | - | - | - | - | - |
| Labrundinia johannseni | - | - | - | - | - | - |
| Labrundinia pilosella | - | - | - | - | - | - |
| Labrundinia sp. 3 nr. virescens | - | - | - | - | - | - |
| Laccophilus | - | - | - | - | - | - |
| Laevapex | - | - | - | - | - | - |
| Larsia | - | - | - | - | - | - |
| Larsia decolorata | - | - | - | - | - | - |
| Lauterborniella agrayloides | - | - | - | - | - | - |
| Lebertia | - | - | - | 1 | - | - |
| Lepidoptera | - | - | - | - | - | - |
| Lepidostoma | - | - | 1 | - | - | - |
| Leptophlebiidae | 4 | 5 | 9 | 5 | 1 | - |
| Leuctra | - | - | - | - | - | - |
| Libellulidae | - | - | - | - | - | - |
| Limnesia | - | - | - | - | - | - |
| Limnodrilus hoffmeisteri | - | - | - | - | - | - |
| Lioporeus | - | - | - | - | - | - |
| Lirceus | - | - | - | - | - | - |
| Lopescladius | - | - | - | - | - | - |
| Lumbriculus variegatus | - | - | - | - | - | - |
| Lymnaeidae | - | - | - | - | - | - |
| Lype diversa | - | - | 2 | - | - | - |
| Maccaffertium | 4 | 3 | 11 | 13 | 2 | 6 |
| Maccaffertium exiguum | - | - | - | - | - | - |
| Maccaffertium smithae | - | - | - | - | - | - |
| Macromia | - | - | - | - | - | - |
| Macromia illinoiensis georgina | - | - | - | - | - | - |
| Macronychus glabratus | - | 1 | - | 2 | - | - |
| Macrostemum carolina | - | - | - | - | - | - |
| Mayatrichia ayama | - | - | - | - | - | - |
| Megistocera | - | - | - | - | - | - |
| Mesonoterus | - | - | - | - | - | - |
| Mesovelia | - | - | - | - | - | - |
| Micrasema | - | - | - | - | - | - |
| Microcylloepus pusillus | 5 | 5 | 4 | 5 | 25 | 22 |
| Micromenetus | - | - | - | - | - | - |
| Micromenetus dilatatus avus | - | - | - | - | - | - |
| Micropsectra | - | - | - | - | - | - |



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|---|---|---|---|---|---|---|
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| | 65739/40534/ | 65739/40534/ | 65741/40537/ | 65741/40537/ | 65891/40544/ | 65891/40544/ |
| Taxon Name / SampleID/BenthID -> | Rep 1 | Rep 2 | Rep 1 | Rep 2 | Rep 1 | Rep 2 |
| Microtendipes | - | - | - | - | - | - |
| Microtendipes pedellus grp. | - | - | - | - | - | - |
| Microtendipes rydalensis grp. | - | - | - | - | - | - |
| Microvelia | - | - | - | - | - | - |
| Mideopsis | - | - | - | 1 | - | - |
| Momonia | - | - | - | - | - | - |
| Monopelopia | - | - | - | - | - | - |
| Mooreobdella | - | - | - | - | - | - |
| Naididae | - | - | - | - | - | - |
| Nais communis complex | - | - | - | - | - | - |
| Nais(animal) | - | - | - | - | - | - |
| Nanocladius | - | - | - | - | - | - |
| Nectopsyche | - | - | - | - | - | - |
| Nectopsyche exquisita | - | - | - | - | - | - |
| Nectopsyche pavida | 2 | 2 | - | - | 13 | 10 |
| Neoephemera | 5 | 11 | - | - | - | - |
| Neoperla | - | - | - | - | - | - |
| Neoplasta | - | - | - | - | - | - |
| Neoplea | - | - | - | - | - | - |
| Neoporus | 1 | - | - | - | - | - |
| Neotrichia | - | - | - | - | 1 | - |
| Neureclipsis | - | - | - | - | - | - |
| Neureclipsis crepuscularis | - | - | - | - | - | - |
| Neurocordulia | - | - | - | - | - | - |
| Neurocordulia alabamensis | - | - | - | - | - | - |
| Nigronia | - | - | - | - | - | - |
| Nigronia serricornis | - | - | - | - | - | - |
| Nilotanypus americanus | - | - | - | - | - | - |
| Nilotanypus fimbriatus | - | - | - | - | - | - |
| Nilothauma | - | - | - | - | - | - |
| Notomicrus nanulus | - | - | - | - | - | - |
| Nyctiophylax | - | - | - | - | - | - |
| Oecetis | 1 | - | 5 | 2 | - | - |
| Oecetis avara | - | - | - | - | - | - |
| Oecetis cinerascens | - | - | - | - | - | - |
| Oecetis georgia | - | - | - | - | - | - |
| Oecetis sphyra/morsei | - | - | - | - | - | - |
| Ora/scirtes | - | - | - | - | - | - |
| Oribatida | - | - | - | - | - | - |
| Ormosia | - | - | - | - | - | - |
| Orthocladius annectens | - | - | - | - | - | - |
| Orthotrichia | - | - | - | - | - | - |
| Oxus | - | - | - | - | - | - |
| Oxyethira | - | - | - | - | - | - |
| Pachydiplax longipennis | - | - | - | - | - | - |
| Palaemonetes | - | - | - | - | - | - |
| Palpomyia/bezzia grp. | - | - | - | - | - | - |
| Parachaetocladius abnobaeus | - | - | - | - | - | - |
| Parachironomus | - | - | - | - | - | - |
| Parachironomus chaetoalus complex | - | - | - | - | - | - |



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| | 65739/40534/ | 65739/40534/ | 65741/40537/ | 65741/40537/ | 65891/40544/ | 65891/40544/ |
| Taxon Name / SampleID/BenthID -> | Rep 1 | Rep 2 | Rep 1 | Rep 2 | Rep 1 | Rep 2 |
| Parachironomus supparilis | - | - | - | - | - | - |
| Paracladopelma | - | - | - | - | - | - |
| Paracymus | - | - | - | - | - | - |
| Parakiefferiella sp. b epler | - | - | - | - | - | - |
| Parakiefferiella sp. f epler | - | - | - | - | - | - |
| Paralauterborniella nigrohalterale | - | - | - | - | - | - |
| Paraleptophlebia volitans | - | - | - | - | - | - |
| Paramerina | - | - | - | - | - | - |
| Parametriocnemus | - | - | - | 10 | - | - |
| Paratanytarsus | - | - | - | - | - | - |
| Paratanytarsus dissimilis | - | - | - | - | - | - |
| Paratanytarsus quadratus | - | - | - | - | - | - |
| Paratendipes subaequalis | - | - | - | - | 1 | - |
| Pelonomus obscurus | - | - | - | - | - | - |
| Peltodytes | - | - | - | - | - | - |
| Peltodytes dietrichi | - | - | - | - | - | - |
| Pentaneura inconspicua | - | - | - | - | 2 | 1 |
| Perlesta placida complex | - | - | - | - | - | - |
| Perlinella drymo | - | - | 3 | - | - | - |
| Phaenopsectra flavipes | - | - | - | - | - | - |
| Phylocentropus | - | - | - | - | - | - |
| Physa | - | - | - | - | - | - |
| Physidae | - | - | - | - | - | - |
| Pilaria | - | - | - | - | - | - |
| Placobdella | - | - | - | - | - | - |
| Planorbella | - | - | - | - | - | - |
| Planorbidae | - | - | - | - | - | - |
| Platyhelminthes | - | - | - | - | - | - |
| Plauditus | - | - | - | - | - | - |
| Plauditus bimaculatus | - | - | - | - | - | - |
| Plecoptera | - | - | - | - | - | - |
| Polycentropodidae | - | - | - | - | - | - |
| Polycentropus | - | - | - | - | - | - |
| Polypedilum aviceps | - | - | - | - | - | - |
| Polypedilum fallax | - | - | - | 1 | - | - |
| Polypedilum flavum | 1 | - | 14 | - | 4 | 2 |
| Polypedilum halterale grp. | - | - | 1 | - | - | - |
| Polypedilum illinoense grp. | - | - | - | 3 | 1 | - |
| Polypedilum scalaenum grp. | - | - | - | - | - | - |
| Polypedilum sp. a epler | - | - | - | - | - | - |
| Polypedilum trigonus | - | - | - | - | - | - |
| Polypedilum tritum | 1 | - | - | - | - | - |
| Potthastia | - | - | - | - | - | - |
| Potthastia longimana | - | - | - | - | - | - |
| Pristina | - | - | - | - | - | - |
| Procambarus | 3 | 3 | - | - | - | - |
| Procladius | - | - | - | - | - | - |
| Procloeon | - | - | - | - | - | - |
| Progomphus | - | - | - | - | - | - |
| Progomphus obscurus | - | - | - | - | - | - |



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| As Calculated / STORET station -> | NUTREF001 | NUTREF001 | GAD106GS | GAD106GS | GLA630GS | GLA630GS |
|---|---|---|---|---|---|---|
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| | 65739/40534/ | 65739/40534/ | 65741/40537/ | 65741/40537/ | 65891/40544/ | 65891/40544/ |
| Taxon Name / SampleID/BenthID -> | Rep 1 | Rep 2 | Rep 1 | Rep 2 | Rep 1 | Rep 2 |
| Promoresia tardella | - | - | - | - | - | - |
| Prostoma | - | - | - | - | - | - |
| Psectrocladius | - | - | - | - | - | - |
| Pseudochironomus | - | - | - | - | - | - |
| Pseudocloeon | - | - | 1 | - | - | - |
| Pseudocloeon ephippiatum | - | - | - | - | - | - |
| Pseudocloeon frondale | - | - | - | - | - | - |
| Pseudocloeon propinquum | - | - | - | - | - | - |
| Pseudolimnophila | - | - | - | - | - | - |
| Psychodidae | - | - | - | - | - | - |
| Pteronarcys dorsata | - | 1 | - | - | - | - |
| Pyralidae | - | - | - | - | - | - |
| Rheocricotopus robacki | - | - | - | 1 | - | - |
| Rheotanytarsus | - | - | - | - | - | - |
| Rheotanytarsus exiguus grp. | 6 | 3 | - | - | 41 | 47 |
| Rheotanytarsus pellucidus | - | 2 | 3 | 1 | 1 | 1 |
| Rhyncholimnochares | - | - | - | - | - | - |
| Robackia claviger | - | - | - | - | - | - |
| Serratella deficiens | - | - | - | - | - | - |
| Sialis | - | - | - | - | - | - |
| Simulium | 2 | - | 3 | 6 | 2 | 1 |
| Simulium jonesi | - | - | - | - | - | - |
| Sisyra | - | - | - | - | - | - |
| Slavina appendiculata | - | - | - | - | - | - |
| Sperchon | - | - | - | - | - | - |
| Sperchonopsis | - | - | - | - | - | - |
| Sperchopsis | - | - | - | - | - | - |
| Sperchopsis tessellatus | - | - | - | - | - | - |
| Sphaeriidae(mollusca) | - | 1 | - | - | - | 1 |
| Spirosperma | - | - | - | - | - | - |
| Staphylinidae | - | - | - | - | - | - |
| Stelechomyia perpulchra | - | - | 1 | 1 | - | - |
| Stempellina | - | - | - | - | - | - |
| Stempellinella | - | - | - | - | - | - |
| Stempellinella fimbriata | - | - | - | - | - | - |
| Stempellinella leptocelloides | - | - | - | - | - | - |
| Stenacron | - | - | 1 | - | - | - |
| Stenacron interpunctatum | - | - | - | - | - | - |
| Stenelmis | 4 | 6 | 1 | 2 | 2 | 1 |
| Stenochironomus | - | 2 | 1 | - | 1 | - |
| Stenus | - | - | - | - | - | - |
| Stephensoniana trivandrana | - | - | - | - | - | - |
| Stratiomyidae | - | - | - | - | - | - |
| Sympetrum | - | - | - | - | - | - |
| Tabanidae | - | - | - | - | - | - |
| Taeniopteryx | 3 | 2 | 26 | 37 | - | - |
| Tanytarsus | - | - | - | - | - | - |
| Tanytarsus sp. a epler | - | - | - | - | - | - |
| Tanytarsus sp. c epler | - | - | - | - | - | - |
| Tanytarsus sp. d epler | - | - | - | - | - | - |



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| As Calculated / STORET station -> | NUTREF001 | NUTREF001 | GAD106GS | GAD106GS | GLA630GS | GLA630GS |
|---|---|---|---|---|---|---|
| Sample date -> | 11/20/2008 | 11/20/2008 | 11/20/2008 | 11/20/2008 | 12/16/2008 | 12/16/2008 |
| | 65739/40534/ | 65739/40534/ | 65741/40537/ | 65741/40537/ | 65891/40544/ | 65891/40544/ |
| Taxon Name / SampleID/BenthID -> | Rep 1 | Rep 2 | Rep 1 | Rep 2 | Rep 1 | Rep 2 |
| Tanytarsus sp. e epler | - | - | - | - | - | - |
| Tanytarsus sp. f epler | - | - | - | - | - | - |
| Tanytarsus sp. l epler | - | - | - | - | - | - |
| Tanytarsus sp. m epler | - | 2 | 3 | 1 | - | - |
| Tanytarsus sp. n epler | - | - | - | - | - | - |
| Tanytarsus sp. o epler | - | - | - | - | - | - |
| Tanytarsus sp. p epler | - | - | - | - | - | - |
| Tanytarsus sp. s epler | - | - | - | - | - | - |
| Tanytarsus sp. t epler | - | - | - | - | - | - |
| Tanytarsus sp. y epler | - | - | - | - | - | - |
| Thienemanniella | - | - | - | - | - | - |
| Thienemanniella lobapodema | - | - | - | - | - | - |
| Thienemanniella similis | - | - | - | - | - | - |
| Thienemanniella xena | - | - | - | - | - | - |
| Thienemannimyia grp. | 2 | - | 1 | 6 | - | - |
| Tipula | - | - | - | - | - | - |
| Tipula caloptera | - | - | - | - | - | - |
| Tipulidae | 1 | - | 2 | - | - | - |
| Torrenticola | - | - | - | - | - | - |
| Triaenodes | 3 | 3 | 4 | 4 | - | - |
| Triaenodes ignitus | - | - | - | - | - | - |
| Triaenodes perna/helo | - | - | - | - | - | - |
| Tribelos | - | - | - | - | - | - |
| Tribelos fuscicornis | - | - | - | - | - | - |
| Tribelos jucundum | - | - | - | 1 | - | - |
| Tricorythodes albilineatus | - | - | - | - | - | - |
| Tubificidae | - | - | - | - | - | - |
| Tvetenia | - | - | - | - | - | - |
| Tvetenia vitracies | - | 2 | - | - | - | - |
| Vertigo | - | - | - | - | - | - |
| Viviparus georgianus | - | - | - | - | - | - |
| Xenochironomus xenolabis | - | - | - | - | - | - |
| Xestochironomus | - | - | - | - | - | - |
| Xylotopus par | - | - | - | - | - | - |
| Zavreliella marmorata | - | - | - | - | - | - |
| Zavrelimyia sp. a epler | - | - | - | - | - | - |

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| As Calculated / STORET station -> | 24010002 | 24010002 | 273116508208 152 | 273116508208 152 | 22050040 | 22050040 |
|---|---|---|---|---|---|---|
| Sample date -> | 12/17/2008 | 12/17/2008 | 12/17/2008 | 12/17/2008 | 1/14/2009 | 1/14/2009 |
| Taxon Name / SampleID/BenthID -> | 65900/40550/ Rep 1 | 65900/40550/ Rep 2 | 65907/40552/ Rep 1 | 65907/40552/ Rep 2 | 65932/40564/ Rep 1 | 65932/40564/ Rep 2 |
| Ablabesmyia mallochi | 1 | 1 | 2 | - | 1 | 3 |
| Ablabesmyia rhamphe grp. | - | - | - | - | 1 | 4 |
| Acentrella | - | - | - | - | - | - |
| Acentrella parvula | - | - | - | - | - | - |
| Acerpenna pygmaea | 3 | - | 3 | 2 | 3 | 8 |
| Acroneuria | - | - | - | - | - | - |
| Acroneuria abnormis | - | - | - | - | - | - |
| Acroneuria lycorias | - | - | - | - | - | - |
| Agnetina annulipes | - | - | - | - | - | - |
| Allonais inaequalis | - | - | - | - | - | - |
| Amnicola | - | - | - | - | - | - |
| Amphipoda | - | - | - | - | - | - |
| Ancylidae | 2 | 3 | 3 | 4 | 1 | 1 |
| Ancyronyx variegatus | - | - | - | - | - | - |
| Anisocentropus pyraloides | - | - | - | - | - | - |
| Apedilum | - | - | - | - | - | - |
| Argia | - | - | - | - | - | - |
| Argia fumipennis | - | - | - | - | - | - |
| Argia tibialis | - | - | - | - | - | - |
| Arrenurus | - | - | - | 1 | - | - |
| Asioplax | - | - | - | - | - | - |
| Atherix | - | - | - | - | - | - |
| Atractides | 1 | - | - | - | - | - |
| Atrichopogon | - | - | 1 | - | - | - |
| Aulodrilus pigueti | - | - | - | - | - | - |
| Baetidae | - | - | - | - | - | - |
| Baetis intercalaris | 1 | - | - | - | - | - |
| Baetisca becki | - | - | - | - | - | - |
| Baetisca rogersi | - | - | - | - | - | - |
| Beardius | - | - | - | - | - | - |
| Berosus | - | - | - | - | - | - |
| Bivalvia | - | - | - | - | - | - |
| Boyeria vinosa | - | - | - | - | - | - |
| Brachycentrus chelatus | - | - | - | - | - | - |
| Brachycentrus numerosus | - | - | - | - | - | - |
| Branchiobdellidae | - | - | - | - | - | - |
| Bratislavia unidentata | - | - | - | - | - | - |
| Brillia | - | - | - | - | - | - |
| Caecidotea | - | 1 | 1 | - | 1 | - |
| Caenis | - | - | - | - | 27 | 41 |
| Caenis diminuta | - | - | - | - | - | - |
| Caenis eglinensis | - | - | - | - | - | - |
| Caenis hilaris | - | - | - | - | - | - |
| Callibaetis | - | - | - | - | - | - |
| Callibaetis floridanus | - | - | - | - | - | - |
| Calopterygidae | - | - | - | - | - | - |
| Calopteryx | - | - | - | - | - | - |
| Cambaridae | - | - | 1 | 2 | - | - |
| Campeloma | - | - | - | - | - | - |
| Cecidomyiidae | - | - | - | - | 1 | 1 |



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| Celina | - | - | - | - | - | - |
| Centroptilum triangulifer | - | - | - | - | - | - |
| Ceraclea | - | - | - | - | - | - |
| Ceratopogonidae | - | - | - | - | 2 | 3 |
| Cernotina | - | - | - | - | - | - |
| Chauliodes | - | - | - | - | - | - |
| Cheumatopsyche | 6 | 8 | 5 | 5 | - | 1 |
| Chimarra | - | - | - | - | - | - |
| Chironomus | - | - | - | - | - | - |
| Choroterpes basalis | - | - | - | - | - | - |
| Chrysomelidae | - | - | - | - | - | - |
| Cladotanytarsus | - | - | - | - | - | - |
| Cladotanytarsus cf. daviesi | - | - | - | - | - | - |
| Cladotanytarsus sp. d epler | - | - | - | - | - | - |
| Cladotanytarsus sp. f epler | - | - | - | - | - | - |
| Cladotanytarsus viridiventris | - | - | - | - | - | - |
| Clathrosperchon | - | - | - | - | - | - |
| Climacia areolaris | - | - | - | - | - | - |
| Clinotanypus | - | - | - | - | - | - |
| Coenagrionidae | - | - | 1 | 1 | 1 | - |
| Corbicula fluminea | 4 | - | 4 | 1 | - | - |
| Corydalidae | - | - | - | - | - | - |
| Corydalus cornutus | - | - | - | - | - | - |
| Corynoneura | - | - | - | 1 | 1 | - |
| Crangonyx | - | - | - | - | - | - |
| Cricotopus | - | - | - | - | - | - |
| Cricotopus bicinctus | - | - | - | - | - | - |
| Cricotopus or orthocladius | - | - | - | - | - | - |
| Cryptochironomus | - | - | - | - | - | 1 |
| Cryptotendipes | - | - | - | - | - | - |
| Curculionidae | - | - | - | - | - | - |
| Cyrnellus fraternus | - | - | - | - | - | - |
| Dasyhelea | - | - | - | - | - | - |
| Dero | - | - | - | - | - | - |
| Dero digitata complex | - | - | - | - | - | - |
| Dero flabelliger | - | - | - | - | - | - |
| Dero furcata | - | - | - | - | - | - |
| Dero pectinata | - | - | - | - | - | - |
| Desmopachria | - | - | - | - | - | - |
| Desserobdella phalera | - | - | - | - | - | - |
| Dicrotendipes | - | - | - | - | - | - |
| Dicrotendipes modestus | - | - | - | - | - | - |
| Dicrotendipes neomodestus | - | - | - | - | - | - |
| Dicrotendipes simpsoni | - | - | - | - | - | - |
| Dicrotendipes sp. a epler | - | - | - | - | - | - |
| Dineutus | - | - | - | - | - | - |
| Diplectrona | - | - | - | - | - | - |
| Djalmabatista pulcher | - | - | - | - | 1 | - |
| Dryopidae | - | - | 1 | 1 | - | - |
| Dubiraphia vittata | - | 1 | 13 | 15 | 7 | 14 |



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| Dytiscidae | - | - | - | - | - | - |
| Eclipidrilus | - | - | - | - | - | - |
| Eclipidrilus palustris | - | - | - | 1 | - | - |
| Ectopria | - | - | - | - | - | - |
| Ectopria thoracica | - | - | - | - | - | - |
| Einfeldia sp. a epler | - | - | - | - | - | - |
| Elimia | - | - | - | - | - | - |
| Elmidae | - | - | - | - | - | - |
| Enallagma | - | - | - | - | - | - |
| Enallagma coecum | - | - | - | - | - | - |
| Enchytraeidae | - | - | - | - | - | - |
| Endotribelos hesperium | - | - | - | - | - | - |
| Enochrus | - | - | - | - | - | - |
| Epicordulia princeps regina | - | - | - | - | - | - |
| Eurylophella doris | - | - | 2 | - | 2 | 5 |
| Ferrissia | - | - | - | - | - | - |
| Gastropoda | - | - | - | - | - | - |
| Geayia | - | - | - | - | - | - |
| Gerridae | - | - | - | - | - | - |
| Glossiphoniidae | - | - | - | - | - | - |
| Goeldichironomus | - | - | - | - | - | - |
| Goeldichironomus cf. natans | - | - | - | - | - | - |
| Goeldichironomus holoprasinus | - | - | - | - | - | - |
| Gomphidae | - | - | 1 | - | - | - |
| Gomphus | - | - | - | - | - | - |
| Gonielmis dietrichi | - | - | - | - | - | - |
| Gyrinidae | - | - | - | - | 1 | - |
| Gyrinus | - | - | - | - | - | - |
| Haemonais waldvogeli | - | - | - | - | - | - |
| Hagenius brevistylus | - | - | - | - | - | - |
| Haitia | - | - | - | - | - | - |
| Hayesomyia senata | - | - | - | - | - | - |
| Helichus | - | - | - | - | - | - |
| Helichus lithophilus | - | - | - | - | - | - |
| Helobdella stagnalis | - | - | - | - | - | - |
| Helobdella triserialis | - | - | - | - | - | - |
| Hemerodromia | - | - | - | - | - | - |
| Heptageniidae | - | - | - | - | 5 | 6 |
| Hetaerina | - | - | - | - | - | - |
| Hetaerina titia | - | - | - | - | - | - |
| Hexagenia | - | - | - | - | - | - |
| Hexatoma | - | - | - | - | - | - |
| Hirudinea | - | - | - | - | - | - |
| Hyalella azteca | - | - | 1 | 1 | - | - |
| Hydraena | - | - | - | - | - | - |
| Hydrobiidae | - | - | - | - | - | 1 |
| Hydrodroma | - | - | - | - | - | - |
| Hydrometra | - | - | - | - | - | - |
| Hydrophilidae | - | - | - | - | - | - |
| Hydropsyche | 8 | 13 | - | - | - | - |



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| Hydropsyche incommoda | - | - | - | - | - | - |
| Hydropsyche mississippiensis | - | - | - | - | - | - |
| Hydroptila | - | - | - | - | - | - |
| Hydrovatus | - | - | - | - | - | - |
| Hygrobates | - | - | - | - | 1 | - |
| Ischnura | - | - | - | - | - | - |
| Isonychia | - | - | - | - | - | - |
| Kiefferulus | - | - | - | - | - | - |
| Koenikea | - | - | - | - | - | - |
| Krendowskia | - | - | - | - | - | - |
| Labrundinia | - | - | - | - | - | - |
| Labrundinia becki | - | - | - | - | - | - |
| Labrundinia johannseni | - | - | - | - | - | - |
| Labrundinia pilosella | - | - | - | - | - | - |
| Labrundinia sp. 3 nr. virescens | - | - | - | - | - | - |
| Laccophilus | - | - | - | - | - | - |
| Laevapex | - | - | - | - | - | - |
| Larsia | - | - | - | - | - | - |
| Larsia decolorata | - | - | - | - | - | - |
| Lauterborniella agrayloides | - | - | - | - | - | - |
| Lebertia | - | - | - | 1 | - | - |
| Lepidoptera | - | - | - | - | - | - |
| Lepidostoma | - | - | - | - | - | - |
| Leptophlebiidae | - | - | - | - | 2 | - |
| Leuctra | - | - | - | - | - | - |
| Libellulidae | - | - | - | - | - | - |
| Limnesia | - | - | - | - | - | - |
| Limnodrilus hoffmeisteri | - | - | 2 | 2 | - | - |
| Lioporeus | - | - | - | - | - | - |
| Lirceus | - | - | - | - | - | - |
| Lopescladius | - | - | - | - | - | - |
| Lumbriculus variegatus | - | - | - | - | 2 | 3 |
| Lymnaeidae | - | - | - | - | - | - |
| Lype diversa | - | - | - | - | - | - |
| Maccaffertium | - | - | - | - | - | - |
| Maccaffertium exiguum | 29 | 31 | - | - | - | - |
| Maccaffertium smithae | - | - | - | - | - | - |
| Macromia | - | - | - | - | - | - |
| Macromia illinoiensis georgina | - | - | - | - | - | - |
| Macronychus glabratus | - | - | - | - | - | - |
| Macrostemum carolina | - | - | - | - | - | - |
| Mayatrichia ayama | - | - | - | - | - | - |
| Megistocera | - | - | - | - | - | - |
| Mesonoterus | - | - | - | - | - | - |
| Mesovelia | - | - | - | - | - | - |
| Micrasema | - | - | - | - | - | - |
| Microcylloepus pusillus | 7 | 3 | 26 | 23 | 2 | 3 |
| Micromenetus | 1 | - | 1 | - | - | 3 |
| Micromenetus dilatatus avus | - | - | - | - | - | - |
| Micropsectra | - | - | - | - | - | - |



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| Microtendipes | - | - | - | - | - | - |
| Microtendipes pedellus grp. | - | - | - | - | - | - |
| Microtendipes rydalensis grp. | - | - | - | - | - | 2 |
| Microvelia | - | - | - | - | - | - |
| Mideopsis | - | - | - | - | - | 1 |
| Momonia | - | - | - | - | - | - |
| Monopelopia | - | - | - | - | - | - |
| Mooreobdella | - | - | - | - | - | - |
| Naididae | - | - | - | - | - | - |
| Nais communis complex | - | - | - | - | - | - |
| Nais(animal) | - | - | - | - | - | - |
| Nanocladius | - | - | - | - | - | - |
| Nectopsyche | - | - | - | - | - | - |
| Nectopsyche exquisita | 1 | 3 | - | - | - | - |
| Nectopsyche pavida | - | - | 1 | - | - | - |
| Neoephemera | - | - | - | - | - | - |
| Neoperla | - | - | - | - | - | - |
| Neoplasta | - | - | - | - | - | - |
| Neoplea | - | - | - | - | - | - |
| Neoporus | - | - | - | - | 1 | 1 |
| Neotrichia | 1 | 2 | - | 1 | - | - |
| Neureclipsis | - | - | - | - | - | - |
| Neureclipsis crepuscularis | - | - | - | - | - | - |
| Neurocordulia | - | - | - | - | - | - |
| Neurocordulia alabamensis | - | - | - | - | - | - |
| Nigronia | - | - | - | - | - | - |
| Nigronia serricornis | - | - | - | - | - | - |
| Nilotanypus americanus | - | - | - | - | - | - |
| Nilotanypus fimbriatus | - | - | 1 | - | - | - |
| Nilothauma | - | - | - | - | - | - |
| Notomicrus nanulus | - | - | - | - | - | - |
| Nyctiophylax | - | - | - | - | 1 | - |
| Oecetis | - | 2 | - | - | - | - |
| Oecetis avara | - | - | - | - | - | - |
| Oecetis cinerascens | - | - | - | - | - | - |
| Oecetis georgia | - | - | - | - | - | - |
| Oecetis sphyra/morsei | - | - | - | - | - | - |
| Ora/scirtes | 1 | - | - | 5 | 1 | - |
| Oribatida | - | - | - | - | - | - |
| Ormosia | - | - | - | - | - | - |
| Orthocladius annectens | - | - | - | - | - | - |
| Orthotrichia | - | - | - | - | - | - |
| Oxus | - | - | - | - | - | - |
| Oxyethira | - | - | - | - | - | - |
| Pachydiplax longipennis | - | - | - | - | - | - |
| Palaemonetes | - | - | 1 | - | - | - |
| Palpomyia/bezzia grp. | - | - | - | - | - | - |
| Parachaetocladius abnobaeus | - | - | - | - | - | - |
| Parachironomus | - | - | - | - | - | - |
| Parachironomus chaetoalus complex | - | - | - | - | - | - |



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| Parachironomus supparilis | - | - | - | - | - | - |
| Paracladopelma | - | - | - | - | - | - |
| Paracymus | - | - | - | - | - | - |
| Parakiefferiella sp. b epler | - | - | - | - | - | - |
| Parakiefferiella sp. f epler | - | - | - | - | - | - |
| Paralauterborniella nigrohalterale | - | - | - | - | - | - |
| Paraleptophlebia volitans | - | - | - | - | - | - |
| Paramerina | - | - | - | - | - | - |
| Parametriocnemus | - | - | - | - | - | - |
| Paratanytarsus | - | - | - | - | 41 | 16 |
| Paratanytarsus dissimilis | - | - | - | - | - | - |
| Paratanytarsus quadratus | - | - | - | - | - | - |
| Paratendipes subaequalis | - | - | - | - | - | - |
| Pelonomus obscurus | - | - | - | - | - | - |
| Peltodytes | - | - | - | - | - | - |
| Peltodytes dietrichi | - | - | - | - | - | - |
| Pentaneura inconspicua | - | 2 | 1 | 1 | - | 1 |
| Perlesta placida complex | - | - | - | - | - | - |
| Perlinella drymo | - | - | - | - | - | - |
| Phaenopsectra flavipes | - | - | - | - | - | - |
| Phylocentropus | - | - | - | - | - | - |
| Physa | - | - | - | - | - | - |
| Physidae | - | - | - | - | - | - |
| Pilaria | - | - | - | - | - | - |
| Placobdella | - | - | - | - | - | - |
| Planorbella | - | - | - | - | - | - |
| Planorbidae | - | - | - | - | - | - |
| Platyhelminthes | - | - | 1 | - | 1 | 1 |
| Plauditus | - | - | - | - | - | - |
| Plauditus bimaculatus | - | - | - | - | - | - |
| Plecoptera | - | - | - | - | - | - |
| Polycentropodidae | - | - | - | - | - | - |
| Polycentropus | - | - | - | - | - | - |
| Polypedilum aviceps | - | - | - | - | - | - |
| Polypedilum fallax | - | - | - | 2 | - | - |
| Polypedilum flavum | 50 | 56 | 45 | 39 | - | 2 |
| Polypedilum halterale grp. | - | - | 1 | - | - | - |
| Polypedilum illinoense grp. | 1 | - | 1 | 1 | - | - |
| Polypedilum scalaenum grp. | 1 | - | 2 | 4 | 12 | 1 |
| Polypedilum sp. a epler | - | - | - | - | - | - |
| Polypedilum trigonus | - | - | - | - | - | - |
| Polypedilum tritum | - | - | - | - | - | - |
| Potthastia | - | - | - | - | - | - |
| Potthastia longimana | - | - | - | - | - | - |
| Pristina | - | - | - | - | - | - |
| Procambarus | - | - | - | - | - | - |
| Procladius | - | - | - | - | - | - |
| Procloeon | - | - | - | - | - | - |
| Progomphus | - | - | - | - | - | - |
| Progomphus obscurus | - | - | - | - | - | - |



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| Promoresia tardella | - | - | - | - | - | - |
| Prostoma | - | - | - | - | - | - |
| Psectrocladius | - | - | - | - | - | - |
| Pseudochironomus | - | - | - | - | - | - |
| Pseudocloeon | - | - | - | - | 6 | 4 |
| Pseudocloeon ephippiatum | 6 | 1 | 1 | 3 | - | - |
| Pseudocloeon frondale | - | - | - | - | - | - |
| Pseudocloeon propinquum | - | - | - | - | - | - |
| Pseudolimnophila | - | - | - | - | - | - |
| Psychodidae | - | - | - | - | - | - |
| Pteronarcys dorsata | - | - | - | - | - | - |
| Pyralidae | - | - | - | - | - | - |
| Rheocricotopus robacki | 2 | 1 | - | - | - | - |
| Rheotanytarsus | - | - | - | - | - | - |
| Rheotanytarsus exiguus grp. | 18 | 17 | 14 | 13 | 18 | 17 |
| Rheotanytarsus pellucidus | - | - | 1 | - | - | - |
| Rhyncholimnochares | - | - | - | - | - | - |
| Robackia claviger | - | - | - | - | - | - |
| Serratella deficiens | - | - | - | - | - | - |
| Sialis | - | - | - | - | - | - |
| Simulium | 2 | 3 | - | 1 | 1 | - |
| Simulium jonesi | - | - | - | - | - | - |
| Sisyra | - | - | - | - | 1 | - |
| Slavina appendiculata | - | - | - | - | - | - |
| Sperchon | - | - | - | - | - | - |
| Sperchonopsis | - | - | - | - | - | - |
| Sperchopsis | - | - | - | - | - | - |
| Sperchopsis tessellatus | - | - | - | - | - | - |
| Sphaeriidae(mollusca) | - | - | - | 3 | - | 1 |
| Spirosperma | - | - | - | - | - | - |
| Staphylinidae | - | - | - | - | - | - |
| Stelechomyia perpulchra | - | - | - | 1 | - | - |
| Stempellina | - | - | - | - | - | - |
| Stempellinella | - | - | - | - | - | - |
| Stempellinella fimbriata | - | - | - | - | - | - |
| Stempellinella leptocelloides | - | - | - | - | - | - |
| Stenacron | - | - | 3 | - | - | - |
| Stenacron interpunctatum | - | - | - | 2 | - | - |
| Stenelmis | 2 | 6 | 8 | 5 | 2 | - |
| Stenochironomus | 1 | - | - | 2 | 1 | 1 |
| Stenus | - | - | - | - | - | - |
| Stephensoniana trivandrana | - | - | - | - | - | - |
| Stratiomyidae | - | - | - | - | - | - |
| Sympetrum | - | - | - | - | - | - |
| Tabanidae | - | - | - | - | - | - |
| Taeniopteryx | - | - | - | - | - | - |
| Tanytarsus | - | - | - | - | - | - |
| Tanytarsus sp. a epler | - | - | - | - | - | - |
| Tanytarsus sp. c epler | - | 1 | - | - | 1 | 1 |
| Tanytarsus sp. d epler | - | - | - | - | - | - |



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| As Calculated / STORET station -> | 24010002 | 24010002 | 273116508208 152 | 273116508208 152 | 22050040 | 22050040 |
|---|---|---|---|---|---|---|
| Sample date -> | 12/17/2008 | 12/17/2008 | 12/17/2008 | 12/17/2008 | 1/14/2009 | 1/14/2009 |
| Taxon Name / SampleID/BenthID -> | 65900/40550/ Rep 1 | 65900/40550/ Rep 2 | 65907/40552/ Rep 1 | 65907/40552/ Rep 2 | 65932/40564/ Rep 1 | 65932/40564/ Rep 2 |
| Tanytarsus sp. e epler | - | - | - | - | - | - |
| Tanytarsus sp. f epler | - | - | - | - | - | - |
| Tanytarsus sp. l epler | - | - | - | - | - | - |
| Tanytarsus sp. m epler | - | - | - | 1 | 2 | - |
| Tanytarsus sp. n epler | - | - | - | - | - | - |
| Tanytarsus sp. o epler | - | - | - | - | - | - |
| Tanytarsus sp. p epler | - | - | - | - | - | - |
| Tanytarsus sp. s epler | - | 1 | - | - | - | - |
| Tanytarsus sp. t epler | - | - | - | 1 | 1 | - |
| Tanytarsus sp. y epler | - | - | - | - | - | - |
| Thienemanniella | - | - | - | - | - | - |
| Thienemanniella lobapodema | - | - | - | - | 1 | - |
| Thienemanniella similis | - | - | - | - | - | - |
| Thienemanniella xena | - | - | - | - | - | - |
| Thienemannimyia grp. | - | - | - | - | - | - |
| Tipula | - | - | - | - | - | - |
| Tipula caloptera | - | - | - | - | - | - |
| Tipulidae | - | - | - | - | - | - |
| Torrenticola | - | - | - | - | - | - |
| Triaenodes | - | - | - | - | - | - |
| Triaenodes ignitus | - | - | 1 | 1 | - | - |
| Triaenodes perna/helo | - | - | 2 | 3 | - | - |
| Tribelos | - | - | - | - | - | - |
| Tribelos fuscicornis | - | - | - | 1 | 1 | 1 |
| Tribelos jucundum | - | - | - | - | 1 | - |
| Tricorythodes albilineatus | - | - | - | - | 1 | - |
| Tubificidae | - | - | - | - | - | - |
| Tvetenia | - | - | - | - | - | - |
| Tvetenia vitracies | - | - | - | - | - | - |
| Vertigo | - | - | - | - | - | - |
| Viviparus georgianus | - | - | - | - | - | - |
| Xenochironomus xenolabis | - | - | - | - | - | - |
| Xestochironomus | - | - | - | - | - | - |
| Xylotopus par | - | - | - | - | - | - |
| Zavreliella marmorata | - | - | - | - | - | - |
| Zavrelimyia sp. a epler | - | - | - | - | - | - |

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| As Calculated / STORET station -> | 21202 | 21202 | 22050083 | 22050083 | | |
|---|---|---|---|---|---|---|
| Sample date -> | 5/1/2008 | 5/1/2008 | 1/14/2009 | 1/14/2009 | | |
| | 66028/40571/ | 66028/40571/ | 65931/40577/ | 65931/40577/ | | |
| Taxon Name / SampleID/BenthID -> | Rep 1 | Rep 2 | Rep 1 | Rep 2 | Phylum | Class |
| Ablabesmyia mallochi | - | - | 2 | 2 | Arthropoda | Insecta |
| Ablabesmyia rhamphe grp. | 1 | - | - | - | Arthropoda | Insecta |
| Acentrella | - | - | 1 | - | Arthropoda | Insecta |
| Acentrella parvula | - | - | - | 1 | Arthropoda | Insecta |
| Acerpenna pygmaea | - | - | 5 | 2 | Arthropoda | Insecta |
| Acroneuria | - | - | - | - | Arthropoda | Insecta |
| Acroneuria abnormis | - | - | - | - | Arthropoda | Insecta |
| Acroneuria lycorias | - | - | - | - | Arthropoda | Insecta |
| Agnetina annulipes | - | - | - | - | Arthropoda | Insecta |
| Allonais inaequalis | - | - | - | - | Annelida | Oligochaeta |
| Amnicola | 8 | 4 | - | - | Mollusca | Gastropoda |
| Amphipoda | - | - | - | - | Arthropoda | Crustacea |
| Ancylidae | 1 | 4 | - | - | Mollusca | Gastropoda |
| Ancyronyx variegatus | 3 | 2 | - | - | Arthropoda | Insecta |
| Anisocentropus pyraloides | - | - | - | - | Arthropoda | Insecta |
| Apedilum | - | - | - | - | Arthropoda | Insecta |
| Argia | 2 | 1 | - | - | Arthropoda | Insecta |
| Argia fumipennis | - | - | - | - | Arthropoda | Insecta |
| Argia tibialis | - | - | - | - | Arthropoda | Insecta |
| Arrenurus | - | - | - | - | Arthropoda | Arachnida |
| Asioplax | - | - | - | - | Arthropoda | Insecta |
| Atherix | - | - | - | - | Arthropoda | Insecta |
| Atractides | - | - | - | - | Arthropoda | Arachnida |
| Atrichopogon | - | - | 1 | 1 | Arthropoda | Insecta |
| Aulodrilus pigueti | - | - | - | - | Annelida | Oligochaeta |
| Baetidae | 2 | 1 | - | - | Arthropoda | Insecta |
| Baetis intercalaris | - | - | 2 | 2 | Arthropoda | Insecta |
| Baetisca becki | - | - | - | - | Arthropoda | Insecta |
| Baetisca rogersi | - | - | - | - | Arthropoda | Insecta |
| Beardius | - | - | - | - | Arthropoda | Insecta |
| Berosus | 1 | - | - | - | Arthropoda | Insecta |
| Bivalvia | - | - | - | - | Mollusca | Bivalvia |
| Boyeria vinosa | - | 1 | - | - | Arthropoda | Insecta |
| Brachycentrus chelatus | - | - | - | - | Arthropoda | Insecta |
| Brachycentrus numerosus | - | - | - | - | Arthropoda | Insecta |
| Branchiobdellidae | - | - | - | - | Annelida | Oligochaeta |
| Bratislavia unidentata | - | - | - | - | Annelida | Oligochaeta |
| Brillia | - | - | - | - | Arthropoda | Insecta |
| Caecidotea | - | 1 | 3 | - | Arthropoda | Crustacea |
| Caenis | 3 | 3 | 3 | 4 | Arthropoda | Insecta |
| Caenis diminuta | - | - | - | - | Arthropoda | Insecta |
| Caenis eglinensis | - | - | - | - | Arthropoda | Insecta |
| Caenis hilaris | - | - | - | - | Arthropoda | Insecta |
| Callibaetis | - | - | - | - | Arthropoda | Insecta |
| Callibaetis floridanus | - | - | - | - | Arthropoda | Insecta |
| Calopterygidae | - | - | - | - | Arthropoda | Insecta |
| Calopteryx | - | - | - | - | Arthropoda | Insecta |
| Cambaridae | - | - | - | - | Arthropoda | Crustacea |
| Campeloma | - | - | - | - | Mollusca | Gastropoda |
| Cecidomyiidae | - | - | - | - | Arthropoda | Insecta |



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| As Calculated / STORET station -> | 21202 | 21202 | 22050083 | 22050083 | | |
|---|---|---|---|---|---|---|
| Sample date -> | 5/1/2008 | 5/1/2008 | 1/14/2009 | 1/14/2009 | | |
| Taxon Name / SampleID/BenthID -> | 66028/40571/ Rep 1 | 66028/40571/ Rep 2 | 65931/40577/ Rep 1 | 65931/40577/ Rep 2 | Phylum | Class |
| Celina | - | - | - | - | Arthropoda | Insecta |
| Centroptilum triangulifer | - | - | - | - | Arthropoda | Insecta |
| Ceraclea | - | - | - | - | Arthropoda | Insecta |
| Ceratopogonidae | - | - | - | - | Arthropoda | Insecta |
| Cernotina | 2 | 6 | - | - | Arthropoda | Insecta |
| Chauliodes | - | - | - | - | Arthropoda | Insecta |
| Cheumatopsyche | 9 | 9 | 6 | 4 | Arthropoda | Insecta |
| Chimarra | - | - | - | 2 | Arthropoda | Insecta |
| Chironomus | - | - | - | - | Arthropoda | Insecta |
| Choroterpes basalis | - | - | - | - | Arthropoda | Insecta |
| Chrysomelidae | - | - | - | - | Arthropoda | Insecta |
| Cladotanytarsus | - | - | - | - | Arthropoda | Insecta |
| Cladotanytarsus cf. daviesi | - | - | - | - | Arthropoda | Insecta |
| Cladotanytarsus sp. d epler | - | 1 | - | - | Arthropoda | Insecta |
| Cladotanytarsus sp. f epler | - | - | - | - | Arthropoda | Insecta |
| Cladotanytarsus viridiventris | - | - | - | - | Arthropoda | Insecta |
| Clathrosperchon | - | - | - | - | Arthropoda | Arachnida |
| Climacia areolaris | - | - | - | - | Arthropoda | Insecta |
| Clinotanypus | - | - | - | - | Arthropoda | Insecta |
| Coenagrionidae | - | - | - | 3 | Arthropoda | Insecta |
| Corbicula fluminea | 15 | 8 | - | - | Mollusca | Bivalvia |
| Corydalidae | - | - | - | - | Arthropoda | Insecta |
| Corydalus cornutus | - | - | 1 | - | Arthropoda | Insecta |
| Corynoneura | - | - | - | - | Arthropoda | Insecta |
| Crangonyx | - | - | - | - | Arthropoda | Crustacea |
| Cricotopus | - | - | - | - | Arthropoda | Insecta |
| Cricotopus bicinctus | - | - | 2 | - | Arthropoda | Insecta |
| Cricotopus or orthocladius | - | - | - | - | Arthropoda | Insecta |
| Cryptochironomus | - | - | - | - | Arthropoda | Insecta |
| Cryptotendipes | - | - | - | - | Arthropoda | Insecta |
| Curculionidae | 1 | - | - | - | Arthropoda | Insecta |
| Cyrnellus fraternus | - | - | - | - | Arthropoda | Insecta |
| Dasyhelea | - | - | - | - | Arthropoda | Insecta |
| Dero | - | - | - | - | Annelida | Oligochaeta |
| Dero digitata complex | - | - | - | - | Annelida | Oligochaeta |
| Dero flabelliger | - | - | - | - | Annelida | Oligochaeta |
| Dero furcata | - | - | - | - | Annelida | Oligochaeta |
| Dero pectinata | - | - | - | - | Annelida | Oligochaeta |
| Desmopachria | - | - | - | 1 | Arthropoda | Insecta |
| Desserobdella phalera | - | - | - | - | Annelida | Hirudinea |
| Dicrotendipes | - | - | - | - | Arthropoda | Insecta |
| Dicrotendipes modestus | - | - | - | - | Arthropoda | Insecta |
| Dicrotendipes neomodestus | - | - | - | - | Arthropoda | Insecta |
| Dicrotendipes simpsoni | - | - | - | - | Arthropoda | Insecta |
| Dicrotendipes sp. a epler | - | - | - | - | Arthropoda | Insecta |
| Dineutus | - | - | - | - | Arthropoda | Insecta |
| Diplectrona | - | - | - | - | Arthropoda | Insecta |
| Djalmabatista pulcher | 9 | 4 | - | - | Arthropoda | Insecta |
| Dryopidae | - | - | - | - | Arthropoda | Insecta |
| Dubiraphia vittata | 7 | 7 | 1 | 2 | Arthropoda | Insecta |



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| As Calculated / STORET station -> | 21202 | 21202 | 22050083 | 22050083 | | |
|---|---|---|---|---|---|---|
| Sample date -> | 5/1/2008 | 5/1/2008 | 1/14/2009 | 1/14/2009 | | |
| Taxon Name / SampleID/BenthID -> | 66028/40571/ Rep 1 | 66028/40571/ Rep 2 | 65931/40577/ Rep 1 | 65931/40577/ Rep 2 | Phylum | Class |
| Dytiscidae | - | - | - | - | Arthropoda | Insecta |
| Eclipidrilus | - | 1 | - | - | Annelida | Oligochaeta |
| Eclipidrilus palustris | - | - | 1 | - | Annelida | Oligochaeta |
| Ectopria | - | - | - | - | Arthropoda | Insecta |
| Ectopria thoracica | - | - | - | - | Arthropoda | Insecta |
| Einfeldia sp. a epler | - | - | - | - | Arthropoda | Insecta |
| Elimia | - | - | 4 | 1 | Mollusca | Gastropoda |
| Elmidae | - | - | - | - | Arthropoda | Insecta |
| Enallagma | 1 | 2 | - | - | Arthropoda | Insecta |
| Enallagma coecum | - | - | - | - | Arthropoda | Insecta |
| Enchytraeidae | - | - | - | - | Annelida | Oligochaeta |
| Endotribelos hesperium | - | - | - | - | Arthropoda | Insecta |
| Enochrus | - | - | - | - | Arthropoda | Insecta |
| Epicordulia princeps regina | - | 2 | - | - | Arthropoda | Insecta |
| Eurylophella doris | - | 1 | - | - | Arthropoda | Insecta |
| Ferrissia | - | - | - | - | Mollusca | Gastropoda |
| Gastropoda | - | - | - | - | Mollusca | Gastropoda |
| Geayia | - | - | - | - | Arthropoda | Arachnida |
| Gerridae | - | - | - | - | Arthropoda | Insecta |
| Glossiphoniidae | - | - | - | - | Annelida | Hirudinea |
| Goeldichironomus | - | - | - | - | Arthropoda | Insecta |
| Goeldichironomus cf. natans | - | - | - | - | Arthropoda | Insecta |
| Goeldichironomus holoprasinus | - | - | - | - | Arthropoda | Insecta |
| Gomphidae | - | - | - | - | Arthropoda | Insecta |
| Gomphus | - | 2 | - | - | Arthropoda | Insecta |
| Gonielmis dietrichi | - | - | - | - | Arthropoda | Insecta |
| Gyrinidae | - | - | - | - | Arthropoda | Insecta |
| Gyrinus | - | - | 2 | 2 | Arthropoda | Insecta |
| Haemonais waldvogeli | - | - | - | - | Annelida | Oligochaeta |
| Hagenius brevistylus | 1 | - | - | - | Arthropoda | Insecta |
| Haitia | - | - | - | - | Mollusca | Gastropoda |
| Hayesomyia senata | - | - | - | - | Arthropoda | Insecta |
| Helichus | - | - | - | 1 | Arthropoda | Insecta |
| Helichus lithophilus | 2 | - | - | - | Arthropoda | Insecta |
| Helobdella stagnalis | - | - | - | - | Annelida | Hirudinea |
| Helobdella triserialis | 1 | - | - | - | Annelida | Hirudinea |
| Hemerodromia | 1 | 2 | - | - | Arthropoda | Insecta |
| Heptageniidae | 1 | 1 | - | - | Arthropoda | Insecta |
| Hetaerina | - | - | - | - | Arthropoda | Insecta |
| Hetaerina titia | - | - | - | - | Arthropoda | Insecta |
| Hexagenia | - | - | - | - | Arthropoda | Insecta |
| Hexatoma | - | - | - | - | Arthropoda | Insecta |
| Hirudinea | - | - | - | - | Annelida | Hirudinea |
| Hyalella azteca | - | - | 10 | 14 | Arthropoda | Crustacea |
| Hydraena | - | - | - | - | Arthropoda | Insecta |
| Hydrobiidae | - | - | 2 | 2 | Mollusca | Gastropoda |
| Hydrodroma | - | - | - | - | Arthropoda | Arachnida |
| Hydrometra | - | - | - | - | Arthropoda | Insecta |
| Hydrophilidae | - | - | - | - | Arthropoda | Insecta |
| Hydropsyche | - | - | 10 | 11 | Arthropoda | Insecta |



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| As Calculated / STORET station -> | 21202 | 21202 | 22050083 | 22050083 | | |
|---|---|---|---|---|---|---|
| Sample date -> | 5/1/2008 | 5/1/2008 | 1/14/2009 | 1/14/2009 | | |
| Taxon Name / SampleID/BenthID -> | 66028/40571/ Rep 1 | 66028/40571/ Rep 2 | 65931/40577/ Rep 1 | 65931/40577/ Rep 2 | Phylum | Class |
| Hydropsyche incommoda | - | - | - | - | Arthropoda | Insecta |
| Hydropsyche mississippiensis | - | - | - | - | Arthropoda | Insecta |
| Hydroptila | - | 1 | - | 1 | Arthropoda | Insecta |
| Hydrovatus | - | - | - | - | Arthropoda | Insecta |
| Hygrobates | - | - | - | - | Arthropoda | Arachnida |
| Ischnura | - | - | - | - | Arthropoda | Insecta |
| Isonychia | - | - | - | - | Arthropoda | Insecta |
| Kiefferulus | - | - | - | - | Arthropoda | Insecta |
| Koenikea | - | - | - | - | Arthropoda | Arachnida |
| Krendowskia | - | - | - | - | Arthropoda | Arachnida |
| Labrundinia | - | - | - | - | Arthropoda | Insecta |
| Labrundinia becki | - | - | - | - | Arthropoda | Insecta |
| Labrundinia johannseni | - | - | - | - | Arthropoda | Insecta |
| Labrundinia pilosella | - | - | 1 | - | Arthropoda | Insecta |
| Labrundinia sp. 3 nr. virescens | - | - | - | - | Arthropoda | Insecta |
| Laccophilus | - | - | - | - | Arthropoda | Insecta |
| Laevapex | - | - | - | - | Mollusca | Gastropoda |
| Larsia | - | - | - | - | Arthropoda | Insecta |
| Larsia decolorata | - | - | - | - | Arthropoda | Insecta |
| Lauterborniella agrayloides | - | - | - | - | Arthropoda | Insecta |
| Lebertia | - | 1 | - | - | Arthropoda | Arachnida |
| Lepidoptera | - | - | - | - | Arthropoda | Insecta |
| Lepidostoma | - | - | - | - | Arthropoda | Insecta |
| Leptophlebiidae | 3 | 3 | 5 | 7 | Arthropoda | Insecta |
| Leuctra | - | - | - | - | Arthropoda | Insecta |
| Libellulidae | - | - | - | - | Arthropoda | Insecta |
| Limnesia | - | - | - | - | Arthropoda | Arachnida |
| Limnodrilus hoffmeisteri | - | - | - | - | Annelida | Oligochaeta |
| Lioporeus | - | - | - | - | Arthropoda | Insecta |
| Lirceus | - | - | - | - | Arthropoda | Crustacea |
| Lopescladius | 1 | - | - | - | Arthropoda | Insecta |
| Lumbriculus variegatus | - | - | - | - | Annelida | Oligochaeta |
| Lymnaeidae | - | - | - | - | Mollusca | Gastropoda |
| Lype diversa | - | - | - | - | Arthropoda | Insecta |
| Maccaffertium | - | - | 1 | - | Arthropoda | Insecta |
| Maccaffertium exiguum | - | - | - | - | Arthropoda | Insecta |
| Maccaffertium smithae | - | - | - | - | Arthropoda | Insecta |
| Macromia | 1 | - | - | - | Arthropoda | Insecta |
| Macromia illinoiensis georgina | - | - | - | - | Arthropoda | Insecta |
| Macronychus glabratus | - | - | - | - | Arthropoda | Insecta |
| Macrostemum carolina | - | - | - | - | Arthropoda | Insecta |
| Mayatrichia ayama | - | - | - | - | Arthropoda | Insecta |
| Megistocera | - | - | 1 | - | Arthropoda | Insecta |
| Mesonoterus | - | - | - | - | Arthropoda | Insecta |
| Mesovelia | - | - | - | - | Arthropoda | Insecta |
| Micrasema | - | - | - | - | Arthropoda | Insecta |
| Microcylloepus pusillus | 24 | 28 | 12 | 6 | Arthropoda | Insecta |
| Micromenetus | 8 | 3 | - | - | Mollusca | Gastropoda |
| Micromenetus dilatatus avus | - | - | - | - | Mollusca | Gastropoda |
| Micropsectra | - | - | - | - | Arthropoda | Insecta |



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|---|---|---|---|---|---|---|
| Sample date -> | 5/1/2008 | 5/1/2008 | 1/14/2009 | 1/14/2009 | | |
| Taxon Name / SampleID/BenthID -> | 66028/40571/ Rep 1 | 66028/40571/ Rep 2 | 65931/40577/ Rep 1 | 65931/40577/ Rep 2 | Phylum | Class |
| Microtendipes | - | - | - | - | Arthropoda | Insecta |
| Microtendipes pedellus grp. | - | - | - | - | Arthropoda | Insecta |
| Microtendipes rydalensis grp. | - | - | - | - | Arthropoda | Insecta |
| Microvelia | - | - | - | - | Arthropoda | Insecta |
| Mideopsis | - | - | - | - | Arthropoda | Arachnida |
| Momonia | - | - | - | - | Arthropoda | Arachnida |
| Monopelopia | - | - | - | - | Arthropoda | Insecta |
| Mooreobdella | - | - | - | 1 | Annelida | Hirudinea |
| Naididae | - | - | - | - | Annelida | Oligochaeta |
| Nais communis complex | - | - | - | - | Annelida | Oligochaeta |
| Nais(animal) | - | - | - | - | Annelida | Oligochaeta |
| Nanocladius | - | - | - | - | Arthropoda | Insecta |
| Nectopsyche | - | - | - | - | Arthropoda | Insecta |
| Nectopsyche exquisita | 1 | 1 | - | - | Arthropoda | Insecta |
| Nectopsyche pavida | 2 | - | - | - | Arthropoda | Insecta |
| Neoephemera | - | - | - | - | Arthropoda | Insecta |
| Neoperla | - | - | - | - | Arthropoda | Insecta |
| Neoplasta | - | - | - | - | Arthropoda | Insecta |
| Neoplea | - | 1 | - | - | Arthropoda | Insecta |
| Neoporus | - | - | - | - | Arthropoda | Insecta |
| Neotrichia | - | - | - | - | Arthropoda | Insecta |
| Neureclipsis | - | - | - | - | Arthropoda | Insecta |
| Neureclipsis crepuscularis | - | - | - | - | Arthropoda | Insecta |
| Neurocordulia | - | - | - | - | Arthropoda | Insecta |
| Neurocordulia alabamensis | - | - | - | - | Arthropoda | Insecta |
| Nigronia | - | - | - | - | Arthropoda | Insecta |
| Nigronia serricornis | - | - | - | - | Arthropoda | Insecta |
| Nilotanypus americanus | - | - | - | - | Arthropoda | Insecta |
| Nilotanypus fimbriatus | - | - | - | - | Arthropoda | Insecta |
| Nilothauma | - | - | - | - | Arthropoda | Insecta |
| Notomicrus nanulus | - | - | - | - | Arthropoda | Insecta |
| Nyctiophylax | - | - | - | - | Arthropoda | Insecta |
| Oecetis | - | - | - | 1 | Arthropoda | Insecta |
| Oecetis avara | - | - | - | - | Arthropoda | Insecta |
| Oecetis cinerascens | - | - | - | - | Arthropoda | Insecta |
| Oecetis georgia | - | - | - | - | Arthropoda | Insecta |
| Oecetis sphyra/morsei | - | - | - | - | Arthropoda | Insecta |
| Ora/scirtes | - | - | - | 1 | Arthropoda | Insecta |
| Oribatida | - | - | - | - | Arthropoda | Arachnida |
| Ormosia | - | - | - | - | Arthropoda | Insecta |
| Orthocladius annectens | - | - | - | - | Arthropoda | Insecta |
| Orthotrichia | - | - | - | - | Arthropoda | Insecta |
| Oxus | - | - | - | - | Arthropoda | Arachnida |
| Oxyethira | - | - | - | 1 | Arthropoda | Insecta |
| Pachydiplax longipennis | - | - | - | - | Arthropoda | Insecta |
| Palaemonetes | 2 | 2 | - | - | Arthropoda | Crustacea |
| Palpomyia/bezzia grp. | 1 | 4 | - | - | Arthropoda | Insecta |
| Parachaetocladius abnobaeus | - | - | - | - | Arthropoda | Insecta |
| Parachironomus | - | - | - | - | Arthropoda | Insecta |
| Parachironomus chaetoalus complex | - | - | - | - | Arthropoda | Insecta |



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| As Calculated / STORET station -> | 21202 | 21202 | 22050083 | 22050083 | | |
|---|---|---|---|---|---|---|
| Sample date -> | 5/1/2008 | 5/1/2008 | 1/14/2009 | 1/14/2009 | | |
| Taxon Name / SampleID/BenthID -> | 66028/40571/ Rep 1 | 66028/40571/ Rep 2 | 65931/40577/ Rep 1 | 65931/40577/ Rep 2 | Phylum | Class |
| Parachironomus supparilis | - | - | - | - | Arthropoda | Insecta |
| Paracladopelma | - | - | - | - | Arthropoda | Insecta |
| Paracymus | - | - | - | - | Arthropoda | Insecta |
| Parakiefferiella sp. b epler | - | - | - | - | Arthropoda | Insecta |
| Parakiefferiella sp. f epler | - | - | - | - | Arthropoda | Insecta |
| Paralauterborniella nigrohalterale | - | - | - | - | Arthropoda | Insecta |
| Paraleptophlebia volitans | - | - | - | - | Arthropoda | Insecta |
| Paramerina | - | - | - | - | Arthropoda | Insecta |
| Parametriocnemus | - | - | - | - | Arthropoda | Insecta |
| Paratanytarsus | - | - | 1 | - | Arthropoda | Insecta |
| Paratanytarsus dissimilis | - | - | - | - | Arthropoda | Insecta |
| Paratanytarsus quadratus | - | - | - | - | Arthropoda | Insecta |
| Paratendipes subaequalis | - | - | - | - | Arthropoda | Insecta |
| Pelonomus obscurus | - | - | - | - | Arthropoda | Insecta |
| Peltodytes | - | - | - | - | Arthropoda | Insecta |
| Peltodytes dietrichi | - | - | - | - | Arthropoda | Insecta |
| Pentaneura inconspicua | 2 | - | 8 | 5 | Arthropoda | Insecta |
| Perlesta placida complex | - | - | - | - | Arthropoda | Insecta |
| Perlinella drymo | - | - | - | - | Arthropoda | Insecta |
| Phaenopsectra flavipes | - | - | - | - | Arthropoda | Insecta |
| Phylocentropus | - | - | - | - | Arthropoda | Insecta |
| Physa | - | - | - | - | Mollusca | Gastropoda |
| Physidae | - | - | - | - | Mollusca | Gastropoda |
| Pilaria | - | - | - | - | Arthropoda | Insecta |
| Placobdella | - | - | - | - | Annelida | Hirudinea |
| Planorbella | - | - | - | - | Mollusca | Gastropoda |
| Planorbidae | - | - | - | - | Mollusca | Gastropoda |
| Platyhelminthes | - | - | - | 2 | Platyhelminthes | |
| Plauditus | - | - | - | - | Arthropoda | Insecta |
| Plauditus bimaculatus | - | - | - | - | Arthropoda | Insecta |
| Plecoptera | - | - | - | - | Arthropoda | Insecta |
| Polycentropodidae | - | - | - | - | Arthropoda | Insecta |
| Polycentropus | - | - | - | - | Arthropoda | Insecta |
| Polypedilum aviceps | - | - | - | - | Arthropoda | Insecta |
| Polypedilum fallax | - | 3 | - | - | Arthropoda | Insecta |
| Polypedilum flavum | 3 | 1 | 36 | 38 | Arthropoda | Insecta |
| Polypedilum halterale grp. | 1 | - | - | - | Arthropoda | Insecta |
| Polypedilum illinoense grp. | - | - | 4 | 2 | Arthropoda | Insecta |
| Polypedilum scalaenum grp. | - | - | 1 | 3 | Arthropoda | Insecta |
| Polypedilum sp. a epler | - | - | - | - | Arthropoda | Insecta |
| Polypedilum trigonus | - | - | - | - | Arthropoda | Insecta |
| Polypedilum tritum | - | - | - | - | Arthropoda | Insecta |
| Potthastia | - | - | - | - | Arthropoda | Insecta |
| Potthastia longimana | - | - | - | - | Arthropoda | Insecta |
| Pristina | - | - | - | - | Annelida | Oligochaeta |
| Procambarus | - | - | - | - | Arthropoda | Crustacea |
| Procladius | 1 | 3 | - | - | Arthropoda | Insecta |
| Procloeon | - | - | - | - | Arthropoda | Insecta |
| Progomphus | - | 1 | - | - | Arthropoda | Insecta |
| Progomphus obscurus | - | - | - | - | Arthropoda | Insecta |



US EPA ARCHIVE DOCUMENT

| As Calculated / STORET station -> | 21202 | 21202 | 22050083 | 22050083 | | |
|---|---|---|---|---|---|---|
| Sample date -> | 5/1/2008 | 5/1/2008 | 1/14/2009 | 1/14/2009 | | |
| Taxon Name / SampleID/BenthID -> | 66028/40571/ Rep 1 | 66028/40571/ Rep 2 | 65931/40577/ Rep 1 | 65931/40577/ Rep 2 | Phylum | Class |
| Promoresia tardella | - | - | - | - | Arthropoda | Insecta |
| Prostoma | - | 1 | - | - | Nemertea | Enopla |
| Psectrocladius | - | - | - | - | Arthropoda | Insecta |
| Pseudochironomus | - | - | - | - | Arthropoda | Insecta |
| Pseudocloeon | - | - | - | - | Arthropoda | Insecta |
| Pseudocloeon ephippiatum | - | - | - | 1 | Arthropoda | Insecta |
| Pseudocloeon frondale | - | - | 5 | 5 | Arthropoda | Insecta |
| Pseudocloeon propinquum | - | - | - | - | Arthropoda | Insecta |
| Pseudolimnophila | - | - | - | - | Arthropoda | Insecta |
| Psychodidae | - | - | - | - | Arthropoda | Insecta |
| Pteronarcys dorsata | - | - | - | - | Arthropoda | Insecta |
| Pyralidae | - | - | - | - | Arthropoda | Insecta |
| Rheocricotopus robacki | - | - | - | - | Arthropoda | Insecta |
| Rheotanytarsus | - | - | - | - | Arthropoda | Insecta |
| Rheotanytarsus exiguus grp. | 1 | 5 | 5 | 3 | Arthropoda | Insecta |
| Rheotanytarsus pellucidus | - | - | 3 | 4 | Arthropoda | Insecta |
| Rhyncholimnochares | - | - | - | - | Arthropoda | Arachnida |
| Robackia claviger | - | - | - | - | Arthropoda | Insecta |
| Serratella deficiens | - | - | - | - | Arthropoda | Insecta |
| Sialis | - | - | - | - | Arthropoda | Insecta |
| Simulium | - | - | 6 | 6 | Arthropoda | Insecta |
| Simulium jonesi | - | - | - | - | Arthropoda | Insecta |
| Sisyra | - | - | - | - | Arthropoda | Insecta |
| Slavina appendiculata | - | - | - | - | Annelida | Oligochaeta |
| Sperchon | - | - | - | - | Arthropoda | Arachnida |
| Sperchonopsis | - | - | - | - | Arthropoda | Arachnida |
| Sperchopsis | - | - | - | - | Arthropoda | Insecta |
| Sperchopsis tessellatus | - | - | - | - | Arthropoda | Insecta |
| Sphaeriidae(mollusca) | 7 | 8 | - | - | Mollusca | Bivalvia |
| Spirosperma | - | - | - | - | Annelida | Oligochaeta |
| Staphylinidae | - | - | - | - | Arthropoda | Insecta |
| Stelechomyia perpulchra | - | - | - | - | Arthropoda | Insecta |
| Stempellina | - | - | - | - | Arthropoda | Insecta |
| Stempellinella | - | - | - | - | Arthropoda | Insecta |
| Stempellinella fimbriata | - | - | 1 | - | Arthropoda | Insecta |
| Stempellinella leptocelloides | - | - | - | - | Arthropoda | Insecta |
| Stenacron | - | - | 2 | - | Arthropoda | Insecta |
| Stenacron interpunctatum | - | - | - | - | Arthropoda | Insecta |
| Stenelmis | 7 | 11 | - | 2 | Arthropoda | Insecta |
| Stenochironomus | - | - | 4 | 1 | Arthropoda | Insecta |
| Stenus | - | - | - | - | Arthropoda | Insecta |
| Stephensoniana trivandrana | - | - | - | - | Annelida | Oligochaeta |
| Stratiomyidae | - | - | - | - | Arthropoda | Insecta |
| Sympetrum | - | - | - | - | Arthropoda | Insecta |
| Tabanidae | - | - | - | - | Arthropoda | Insecta |
| Taeniopteryx | - | - | - | - | Arthropoda | Insecta |
| Tanytarsus | 2 | - | - | - | Arthropoda | Insecta |
| Tanytarsus sp. a epler | - | - | - | - | Arthropoda | Insecta |
| Tanytarsus sp. c epler | - | - | 1 | 4 | Arthropoda | Insecta |
| Tanytarsus sp. d epler | - | - | - | - | Arthropoda | Insecta |



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| As Calculated / STORET station -> | 21202 | 21202 | 22050083 | 22050083 | | |
|---|---|---|---|---|---|---|
| Sample date -> | 5/1/2008 | 5/1/2008 | 1/14/2009 | 1/14/2009 | | |
| Taxon Name / SampleID/BenthID -> | 66028/40571/ Rep 1 | 66028/40571/ Rep 2 | 65931/40577/ Rep 1 | 65931/40577/ Rep 2 | Phylum | Class |
| Tanytarsus sp. e epler | - | - | - | - | Arthropoda | Insecta |
| Tanytarsus sp. f epler | - | - | - | - | Arthropoda | Insecta |
| Tanytarsus sp. l epler | - | - | - | - | Arthropoda | Insecta |
| Tanytarsus sp. m epler | - | - | - | - | Arthropoda | Insecta |
| Tanytarsus sp. n epler | - | - | - | - | Arthropoda | Insecta |
| Tanytarsus sp. o epler | - | - | - | - | Arthropoda | Insecta |
| Tanytarsus sp. p epler | - | - | - | - | Arthropoda | Insecta |
| Tanytarsus sp. s epler | - | - | - | - | Arthropoda | Insecta |
| Tanytarsus sp. t epler | - | - | - | - | Arthropoda | Insecta |
| Tanytarsus sp. y epler | - | - | - | - | Arthropoda | Insecta |
| Thienemanniella | - | - | - | - | Arthropoda | Insecta |
| Thienemanniella lobapodema | - | - | 2 | - | Arthropoda | Insecta |
| Thienemanniella similis | - | - | - | - | Arthropoda | Insecta |
| Thienemanniella xena | - | - | - | - | Arthropoda | Insecta |
| Thienemannimyia grp. | - | - | - | - | Arthropoda | Insecta |
| Tipula | - | - | 1 | - | Arthropoda | Insecta |
| Tipula caloptera | - | - | - | 1 | Arthropoda | Insecta |
| Tipulidae | - | - | - | - | Arthropoda | Insecta |
| Torrenticola | - | - | - | - | Arthropoda | Arachnida |
| Triaenodes | 2 | 1 | - | - | Arthropoda | Insecta |
| Triaenodes ignitus | - | - | - | - | Arthropoda | Insecta |
| Triaenodes perna/helo | - | - | - | - | Arthropoda | Insecta |
| Tribelos | - | - | - | - | Arthropoda | Insecta |
| Tribelos fuscicornis | - | 1 | 1 | 2 | Arthropoda | Insecta |
| Tribelos jucundum | - | - | - | - | Arthropoda | Insecta |
| Tricorythodes albilineatus | - | - | 3 | 1 | Arthropoda | Insecta |
| Tubificidae | - | - | - | - | Annelida | Oligochaeta |
| Tvetenia | - | - | - | - | Arthropoda | Insecta |
| Tvetenia vitracies | - | - | - | - | Arthropoda | Insecta |
| Vertigo | - | - | - | - | Mollusca | Gastropoda |
| Viviparus georgianus | - | - | - | - | Mollusca | Gastropoda |
| Xenochironomus xenolabis | - | - | - | - | Arthropoda | Insecta |
| Xestochironomus | 1 | 1 | - | - | Arthropoda | Insecta |
| Xylotopus par | - | 1 | - | - | Arthropoda | Insecta |
| Zavreliella marmorata | - | - | - | - | Arthropoda | Insecta |
| Zavrelimyia sp. a epler | - | - | - | - | Arthropoda | Insecta |

US EPA ARCHIVE DOCUMENT

As Calculated / STORET station ->
Sample date ->

| Taxon Name / SampleID/BenthID -> | Order | Family | Genus |
|---|---|---|---|
| Ablabesmyia mallochi | Diptera | Chironomidae | Ablabesmyia |
| Ablabesmyia rhamphe grp. | Diptera | Chironomidae | Ablabesmyia |
| Acentrella | Ephemeroptera | Baetidae | Acentrella |
| Acentrella parvula | Ephemeroptera | Baetidae | Acentrella |
| Acerpenna pygmaea | Ephemeroptera | Baetidae | Acerpenna |
| Acroneuria | Plecoptera | Perlidae | Acroneuria |
| Acroneuria abnormis | Plecoptera | Perlidae | Acroneuria |
| Acroneuria lycorias | Plecoptera | Perlidae | Acroneuria |
| Agnetina annulipes | Plecoptera | Perlidae | Agnetina |
| Allonais inaequalis | Haplotaxida | Naididae | Allonais |
| Amnicola | Mesogastropoda | Bithyniidae | Amnicola |
| Amphipoda | Amphipoda | | |
| Ancylidae | Basommatophora | Ancylidae | |
| Ancyronyx variegatus | Coleoptera | Elmidae | Ancyronyx |
| Anisocentropus pyraloides | Trichoptera | Calamoceratidae | Anisocentropus |
| Apedilum | Diptera | Chironomidae | Apedilum |
| Argia | Odonata | Coenagrionidae | Argia |
| Argia fumipennis | Odonata | Coenagrionidae | Argia |
| Argia tibialis | Odonata | Coenagrionidae | Argia |
| Arrenurus | Acariformes | Arrenuridae | Arrenurus |
| Asioplax | Ephemeroptera | Leptohyphidae | Asioplax |
| Atherix | Diptera | Athericidae | Atherix |
| Atractides | Acariformes | Hygrobatidae | Atractides |
| Atrichopogon | Diptera | Ceratopogonidae | Atrichopogon |
| Aulodrilus pigueti | Haplotaxida | Tubificidae | Aulodrilus |
| Baetidae | Ephemeroptera | Baetidae | |
| Baetis intercalaris | Ephemeroptera | Baetidae | Baetis |
| Baetisca becki | Ephemeroptera | Baetiscidae | Baetisca |
| Baetisca rogersi | Ephemeroptera | Baetiscidae | Baetisca |
| Beardius | Diptera | Chironomidae | Beardius |
| Berosus | Coleoptera | Hydrophilidae | Berosus |
| Bivalvia | | | |
| Boyeria vinosa | Odonata | Aeshnidae | Boyeria |
| Brachycentrus chelatus | Trichoptera | Brachycentridae | Brachycentrus |
| Brachycentrus numerosus | Trichoptera | Brachycentridae | Brachycentrus |
| Branchiobdellidae | Branchiobdellida | Branchiobdellidae | |
| Bratislavia unidentata | Haplotaxida | Naididae | Bratislavia |
| Brillia | Diptera | Chironomidae | Brillia |
| Caecidotea | Isopoda | Asellidae | Caecidotea |
| Caenis | Ephemeroptera | Caenidae | Caenis |
| Caenis diminuta | Ephemeroptera | Caenidae | Caenis |
| Caenis eglinensis | Ephemeroptera | Caenidae | Caenis |
| Caenis hilaris | Ephemeroptera | Caenidae | Caenis |
| Callibaetis | Ephemeroptera | Baetidae | Callibaetis |
| Callibaetis floridanus | Ephemeroptera | Baetidae | Callibaetis |
| Calopterygidae | Odonata | Calopterygidae | |
| Calopteryx | Odonata | Calopterygidae | Calopteryx |
| Cambaridae | Decapoda | Cambaridae | |
| Campeloma | Mesogastropoda | Viviparidae | Campeloma |
| Cecidomyiidae | Diptera | Cecidomyiidae | |



US EPA ARCHIVE DOCUMENT

As Calculated / STORET station ->
Sample date ->

| Taxon Name / SampleID/BenthID -> | Order | Family | Genus |
|---|---|---|---|
| Celina | Coleoptera | Dytiscidae | Celina |
| Centroptilum triangulifer | Ephemeroptera | Baetidae | Centroptilum |
| Ceraclea | Trichoptera | Leptoceridae | Ceraclea |
| Ceratopogonidae | Diptera | Ceratopogonidae | |
| Cernotina | Trichoptera | Polycentropodidae | Cernotina |
| Chauliodes | Megaloptera | Corydalidae | Chauliodes |
| Cheumatopsyche | Trichoptera | Hydropsychidae | Cheumatopsyche |
| Chimarra | Trichoptera | Philopotamidae | Chimarra |
| Chironomus | Diptera | Chironomidae | Chironomus |
| Choroterpes basalis | Ephemeroptera | Leptophlebiidae | Choroterpes |
| Chrysomelidae | Coleoptera | Chrysomelidae | |
| Cladotanytarsus | Diptera | Chironomidae | Cladotanytarsus |
| Cladotanytarsus cf. daviesi | Diptera | Chironomidae | Cladotanytarsus |
| Cladotanytarsus sp. d epler | Diptera | Chironomidae | Cladotanytarsus |
| Cladotanytarsus sp. f epler | Diptera | Chironomidae | Cladotanytarsus |
| Cladotanytarsus viridiventris | Diptera | Chironomidae | Cladotanytarsus |
| Clathrosperchon | Acariformes | Clathrosperchonidae | Clathrosperchon |
| Climacia areolaris | Megaloptera | Sisyridae | Climacia |
| Clinotanypus | Diptera | Chironomidae | Clinotanypus |
| Coenagrionidae | Odonata | Coenagrionidae | |
| Corbicula fluminea | Veneroida | Corbiculidae | Corbicula |
| Corydalidae | Megaloptera | Corydalidae | |
| Corydalus cornutus | Megaloptera | Corydalidae | Corydalus |
| Corynoneura | Diptera | Chironomidae | Corynoneura |
| Crangonyx | Amphipoda | Crangonyctidae | Crangonyx |
| Cricotopus | Diptera | Chironomidae | Cricotopus |
| Cricotopus bicinctus | Diptera | Chironomidae | Cricotopus |
| Cricotopus or orthocladius | Diptera | Chironomidae | Cricotopus or orthocladius |
| Cryptochironomus | Diptera | Chironomidae | Cryptochironomus |
| Cryptotendipes | Diptera | Chironomidae | Cryptotendipes |
| Curculionidae | Coleoptera | Curculionidae | |
| Cyrnellus fraternus | Trichoptera | Polycentropodidae | Cyrnellus |
| Dasyhelea | Diptera | Ceratopogonidae | Dasyhelea |
| Dero | Haplotaxida | Naididae | Dero |
| Dero digitata complex | Haplotaxida | Naididae | Dero |
| Dero flabelliger | Haplotaxida | Naididae | Dero |
| Dero furcata | Haplotaxida | Naididae | Dero |
| Dero pectinata | Haplotaxida | Naididae | Dero |
| Desmopachria | Coleoptera | Dytiscidae | Desmopachria |
| Desserobdella phalera | Rhynchobdellida | Glossiphoniidae | Desserobdella |
| Dicrotendipes | Diptera | Chironomidae | Dicrotendipes |
| Dicrotendipes modestus | Diptera | Chironomidae | Dicrotendipes |
| Dicrotendipes neomodestus | Diptera | Chironomidae | Dicrotendipes |
| Dicrotendipes simpsoni | Diptera | Chironomidae | Dicrotendipes |
| Dicrotendipes sp. a epler | Diptera | Chironomidae | Dicrotendipes |
| Dineutus | Coleoptera | Gyrinidae | Dineutus |
| Diplectrona | Trichoptera | Hydropsychidae | Diplectrona |
| Djalmabatista pulcher | Diptera | Chironomidae | Djalmabatista |
| Dryopidae | Coleoptera | Dryopidae | |
| Dubiraphia vittata | Coleoptera | Elmidae | Dubiraphia |



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As Calculated / STORET station ->
Sample date ->

| Taxon Name / SampleID/BenthID -> | Order | Family | Genus |
|---|---|---|---|
| Dytiscidae | Coleoptera | Dytiscidae | |
| Eclipidrilus | Lumbriculida | Lumbriculidae | Eclipidrilus |
| Eclipidrilus palustris | Lumbriculida | Lumbriculidae | Eclipidrilus |
| Ectopria | Coleoptera | Psephenidae | Ectopria |
| Ectopria thoracica | Coleoptera | Psephenidae | Ectopria |
| Einfeldia sp. a epler | Diptera | Chironomidae | Einfeldia |
| Elimia | Mesogastropoda | Pleuroceridae | Elimia |
| Elmidae | Coleoptera | Elmidae | |
| Enallagma | Odonata | Coenagrionidae | Enallagma |
| Enallagma coecum | Odonata | Coenagrionidae | Enallagma |
| Enchytraeidae | Haplotaxida | Enchytraeidae | |
| Endotribelos hesperium | Diptera | Chironomidae | Endotribelos |
| Enochrus | Coleoptera | Hydrophilidae | Enochrus |
| Epicordulia princeps regina | Odonata | Libellulidae | Epicordulia |
| Eurylophella doris | Ephemeroptera | Ephemerellidae | Eurylophella |
| Ferrissia | Basommatophora | Ancylidae | Ferrissia |
| Gastropoda | | | |
| Geayia | Acariformes | Krendowskiidae | Geayia |
| Gerridae | Heteroptera | Gerridae | |
| Glossiphoniidae | Rhynchobdellida | Glossiphoniidae | |
| Goeldichironomus | Diptera | Chironomidae | Goeldichironomus |
| Goeldichironomus cf. natans | Diptera | Chironomidae | Goeldichironomus |
| Goeldichironomus holoprasinus | Diptera | Chironomidae | Goeldichironomus |
| Gomphidae | Odonata | Gomphidae | |
| Gomphus | Odonata | Gomphidae | Gomphus |
| Gonielmis dietrichi | Coleoptera | Elmidae | Gonielmis |
| Gyrinidae | Coleoptera | Gyrinidae | |
| Gyrinus | Coleoptera | Gyrinidae | Gyrinus |
| Haemonais waldvogeli | Haplotaxida | Naididae | Haemonais |
| Hagenius brevistylus | Odonata | Gomphidae | Hagenius |
| Haitia | Basommatophora | Physidae | Haitia |
| Hayesomyia senata | Diptera | Chironomidae | Hayesomyia |
| Helichus | Coleoptera | Dryopidae | Helichus |
| Helichus lithophilus | Coleoptera | Dryopidae | Helichus |
| Helobdella stagnalis | Rhynchobdellida | Glossiphoniidae | Helobdella |
| Helobdella triserialis | Rhynchobdellida | Glossiphoniidae | Helobdella |
| Hemerodromia | Diptera | Empididae | Hemerodromia |
| Heptageniidae | Ephemeroptera | Heptageniidae | |
| Hetaerina | Odonata | Calopterygidae | Hetaerina |
| Hetaerina titia | Odonata | Calopterygidae | Hetaerina |
| Hexagenia | Ephemeroptera | Ephemeridae | Hexagenia |
| Hexatoma | Diptera | Tipulidae | Hexatoma |
| Hirudinea | | | |
| Hyalella azteca | Amphipoda | Hyalellidae | Hyalella |
| Hydraena | Coleoptera | Hydraenidae | Hydraena |
| Hydrobiidae | Mesogastropoda | Hydrobiidae | |
| Hydrodroma | Acariformes | Hydrodromidae | Hydrodroma |
| Hydrometra | Heteroptera | Hydrometridae | Hydrometra |
| Hydrophilidae | Coleoptera | Hydrophilidae | |
| Hydropsyche | Trichoptera | Hydropsychidae | Hydropsyche |



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As Calculated / STORET station ->
Sample date ->

| Taxon Name / SampleID/BenthID -> | Order | Family | Genus |
|---|---|---|---|
| Hydropsyche incommoda | Trichoptera | Hydropsychidae | Hydropsyche |
| Hydropsyche mississippiensis | Trichoptera | Hydropsychidae | Hydropsyche |
| Hydroptila | Trichoptera | Hydroptilidae | Hydroptila |
| Hydrovatus | Coleoptera | Dytiscidae | Hydrovatus |
| Hygrobates | Acariformes | Hygrobatidae | Hygrobates |
| Ischnura | Odonata | Coenagrionidae | Ischnura |
| Isonychia | Ephemeroptera | Oligoneuriidae | Isonychia |
| Kiefferulus | Diptera | Chironomidae | Kiefferulus |
| Koenikea | Acariformes | Unionicolidae | Koenikea |
| Krendowskia | Acariformes | Krendowskiidae | Krendowskia |
| Labrundinia | Diptera | Chironomidae | Labrundinia |
| Labrundinia becki | Diptera | Chironomidae | Labrundinia |
| Labrundinia johannseni | Diptera | Chironomidae | Labrundinia |
| Labrundinia pilosella | Diptera | Chironomidae | Labrundinia |
| Labrundinia sp. 3 nr. virescens | Diptera | Chironomidae | Labrundinia |
| Laccophilus | Coleoptera | Dytiscidae | Laccophilus |
| Laevapex | Basommatophora | Ancylidae | Laevapex |
| Larsia | Diptera | Chironomidae | Larsia |
| Larsia decolorata | Diptera | Chironomidae | Larsia |
| Lauterborniella agrayloides | Diptera | Chironomidae | Lauterborniella |
| Lebertia | Acariformes | Lebertiidae | Lebertia |
| Lepidoptera | Lepidoptera | | |
| Lepidostoma | Trichoptera | Lepidostomatidae | Lepidostoma |
| Leptophlebiidae | Ephemeroptera | Leptophlebiidae | |
| Leuctra | Plecoptera | Leuctridae | Leuctra |
| Libellulidae | Odonata | Libellulidae | |
| Limnesia | Acariformes | Limnesiidae | Limnesia |
| Limnodrilus hoffmeisteri | Haplotaxida | Tubificidae | Limnodrilus |
| Lioporeus | Coleoptera | Dytiscidae | Lioporeus |
| Lirceus | Isopoda | Asellidae | Lirceus |
| Lopescladius | Diptera | Chironomidae | Lopescladius |
| Lumbriculus variegatus | Lumbriculida | Lumbriculidae | Lumbriculus |
| Lymnaeidae | Basommatophora | Lymnaeidae | |
| Lype diversa | Trichoptera | Psychomyiidae | Lype |
| Maccaffertium | Ephemeroptera | Heptageniidae | Maccaffertium |
| Maccaffertium exiguum | Ephemeroptera | Heptageniidae | Maccaffertium |
| Maccaffertium smithae | Ephemeroptera | Heptageniidae | Maccaffertium |
| Macromia | Odonata | Libellulidae | Macromia |
| Macromia illinoiensis georgina | Odonata | Libellulidae | Macromia |
| Macronychus glabratus | Coleoptera | Elmidae | Macronychus |
| Macrostemum carolina | Trichoptera | Hydropsychidae | Macrostemum |
| Mayatrichia ayama | Trichoptera | Hydroptilidae | Mayatrichia |
| Megistocera | Diptera | Tipulidae | Megistocera |
| Mesonoterus | Coleoptera | Noteridae | Mesonoterus |
| Mesovelia | Heteroptera | Mesoveliidae | Mesovelia |
| Micrasema | Trichoptera | Brachycentridae | Micrasema |
| Microcylloepus pusillus | Coleoptera | Elmidae | Microcylloepus |
| Micromenetus | Basommatophora | Planorbidae | Micromenetus |
| Micromenetus dilatatus avus | Basommatophora | Planorbidae | Micromenetus |
| Micropsectra | Diptera | Chironomidae | Micropsectra |



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As Calculated / STORET station ->
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| Taxon Name / SampleID/BenthID -> | Order | Family | Genus |
|---|---|---|---|
| Microtendipes | Diptera | Chironomidae | Microtendipes |
| Microtendipes pedellus grp. | Diptera | Chironomidae | Microtendipes |
| Microtendipes rydalensis grp. | Diptera | Chironomidae | Microtendipes |
| Microvelia | Heteroptera | Veliidae | Microvelia |
| Mideopsis | Acariformes | Mideopsidae | Mideopsis |
| Momonia | Acariformes | Momoniidae | Momonia |
| Monopelopia | Diptera | Chironomidae | Monopelopia |
| Mooreobdella | Arhynchobdellida | Erpobdellidae | Mooreobdella |
| Naididae | Haplotaxida | Naididae | |
| Nais communis complex | Haplotaxida | Naididae | Nais(animal) |
| Nais(animal) | Haplotaxida | Naididae | Nais(animal) |
| Nanocladius | Diptera | Chironomidae | Nanocladius |
| Nectopsyche | Trichoptera | Leptoceridae | Nectopsyche |
| Nectopsyche exquisita | Trichoptera | Leptoceridae | Nectopsyche |
| Nectopsyche pavida | Trichoptera | Leptoceridae | Nectopsyche |
| Neoephemera | Ephemeroptera | Neoephemeridae | Neoephemera |
| Neoperla | Plecoptera | Perlidae | Neoperla |
| Neoplasta | Diptera | Empididae | Neoplasta |
| Neoplea | Heteroptera | Pleidae | Neoplea |
| Neoporus | Coleoptera | Dytiscidae | Neoporus |
| Neotrichia | Trichoptera | Hydroptilidae | Neotrichia |
| Neureclipsis | Trichoptera | Polycentropodidae | Neureclipsis |
| Neureclipsis crepuscularis | Trichoptera | Polycentropodidae | Neureclipsis |
| Neurocordulia | Odonata | Libellulidae | Neurocordulia |
| Neurocordulia alabamensis | Odonata | Libellulidae | Neurocordulia |
| Nigronia | Megaloptera | Corydalidae | Nigronia |
| Nigronia serricornis | Megaloptera | Corydalidae | Nigronia |
| Nilotanypus americanus | Diptera | Chironomidae | Nilotanypus |
| Nilotanypus fimbriatus | Diptera | Chironomidae | Nilotanypus |
| Nilothauma | Diptera | Chironomidae | Nilothauma |
| Notomicrus nanulus | Coleoptera | Noteridae | Notomicrus |
| Nyctiophylax | Trichoptera | Polycentropodidae | Nyctiophylax |
| Oecetis | Trichoptera | Leptoceridae | Oecetis |
| Oecetis avara | Trichoptera | Leptoceridae | Oecetis |
| Oecetis cinerascens | Trichoptera | Leptoceridae | Oecetis |
| Oecetis georgia | Trichoptera | Leptoceridae | Oecetis |
| Oecetis sphyra/morsei | Trichoptera | Leptoceridae | Oecetis |
| Ora/scirtes | Coleoptera | Scirtidae | Ora/scirtes |
| Oribatida | Oribatida | | |
| Ormosia | Diptera | Tipulidae | Ormosia |
| Orthocladius annectens | Diptera | Chironomidae | Orthocladius |
| Orthotrichia | Trichoptera | Hydroptilidae | Orthotrichia |
| Oxus | Acariformes | Oxidae | Oxus |
| Oxyethira | Trichoptera | Hydroptilidae | Oxyethira |
| Pachydiplax longipennis | Odonata | Libellulidae | Pachydiplax |
| Palaemonetes | Decapoda | Palaemonidae | Palaemonetes |
| Palpomyia/bezzia grp. | Diptera | Ceratopogonidae | Palpomyia/bezzia grp. |
| Parachaetocladius abnobaeus | Diptera | Chironomidae | Parachaetocladius |
| Parachironomus | Diptera | Chironomidae | Parachironomus |
| Parachironomus chaetoalus complex | Diptera | Chironomidae | Parachironomus |



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As Calculated / STORET station ->
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| Taxon Name / SampleID/BenthID -> | Order | Family | Genus |
|---|---|---|---|
| Parachironomus supparilis | Diptera | Chironomidae | Parachironomus |
| Paracladopelma | Diptera | Chironomidae | Paracladopelma |
| Paracymus | Coleoptera | Hydrophilidae | Paracymus |
| Parakiefferiella sp. b epler | Diptera | Chironomidae | Parakiefferiella |
| Parakiefferiella sp. f epler | Diptera | Chironomidae | Parakiefferiella |
| Paralauterborniella nigrohalterale | Diptera | Chironomidae | Paralauterborniella |
| Paraleptophlebia volitans | Ephemeroptera | Leptophlebiidae | Paraleptophlebia |
| Paramerina | Diptera | Chironomidae | Paramerina |
| Parametriocnemus | Diptera | Chironomidae | Parametriocnemus |
| Paratanytarsus | Diptera | Chironomidae | Paratanytarsus |
| Paratanytarsus dissimilis | Diptera | Chironomidae | Paratanytarsus |
| Paratanytarsus quadratus | Diptera | Chironomidae | Paratanytarsus |
| Paratendipes subaequalis | Diptera | Chironomidae | Paratendipes |
| Pelonomus obscurus | Coleoptera | Dryopidae | Pelonomus |
| Peltodytes | Coleoptera | Haliplidae | Peltodytes |
| Peltodytes dietrichi | Coleoptera | Haliplidae | Peltodytes |
| Pentaneura inconspicua | Diptera | Chironomidae | Pentaneura |
| Perlesta placida complex | Plecoptera | Perlidae | Perlesta |
| Perlinella drymo | Plecoptera | Perlidae | Perlinella |
| Phaenopsectra flavipes | Diptera | Chironomidae | Phaenopsectra |
| Phylocentropus | Trichoptera | Dipseudopsidae | Phylocentropus |
| Physa | Basommatophora | Physidae | Physa |
| Physidae | Basommatophora | Physidae | |
| Pilaria | Diptera | Tipulidae | Pilaria |
| Placobdella | Rhynchobdellida | Glossiphoniidae | Placobdella |
| Planorbella | Basommatophora | Planorbidae | Planorbella |
| Planorbidae | Basommatophora | Planorbidae | |
| Platyhelminthes | | | |
| Plauditus | Ephemeroptera | Baetidae | Plauditus |
| Plauditus bimaculatus | Ephemeroptera | Baetidae | Plauditus |
| Plecoptera | Plecoptera | | |
| Polycentropodidae | Trichoptera | Polycentropodidae | |
| Polycentropus | Trichoptera | Polycentropodidae | Polycentropus |
| Polypedilum aviceps | Diptera | Chironomidae | Polypedilum |
| Polypedilum fallax | Diptera | Chironomidae | Polypedilum |
| Polypedilum flavum | Diptera | Chironomidae | Polypedilum |
| Polypedilum halterale grp. | Diptera | Chironomidae | Polypedilum |
| Polypedilum illinoense grp. | Diptera | Chironomidae | Polypedilum |
| Polypedilum scalaenum grp. | Diptera | Chironomidae | Polypedilum |
| Polypedilum sp. a epler | Diptera | Chironomidae | Polypedilum |
| Polypedilum trigonus | Diptera | Chironomidae | Polypedilum |
| Polypedilum tritum | Diptera | Chironomidae | Polypedilum |
| Potthastia | Diptera | Chironomidae | Potthastia |
| Potthastia longimana | Diptera | Chironomidae | Potthastia |
| Pristina | Haplotaxida | Naididae | Pristina |
| Procambarus | Decapoda | Cambaridae | Procambarus |
| Procladius | Diptera | Chironomidae | Procladius |
| Procloeon | Ephemeroptera | Baetidae | Procloeon |
| Progomphus | Odonata | Gomphidae | Progomphus |
| Progomphus obscurus | Odonata | Gomphidae | Progomphus |



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| Taxon Name / SampleID/BenthID -> | Order | Family | Genus |
|---|---|---|---|
| Promoresia tardella | Coleoptera | Elmidae | Promoresia |
| Prostoma | Hoplonemertea | Tetrastemmatidae | Prostoma |
| Psectrocladius | Diptera | Chironomidae | Psectrocladius |
| Pseudochironomus | Diptera | Chironomidae | Pseudochironomus |
| Pseudocloeon | Ephemeroptera | Baetidae | Pseudocloeon |
| Pseudocloeon ephippiatum | Ephemeroptera | Baetidae | Pseudocloeon |
| Pseudocloeon frondale | Ephemeroptera | Baetidae | Pseudocloeon |
| Pseudocloeon propinquum | Ephemeroptera | Baetidae | Pseudocloeon |
| Pseudolimnophila | Diptera | Tipulidae | Pseudolimnophila |
| Psychodidae | Diptera | Psychodidae | |
| Pteronarcys dorsata | Plecoptera | Pteronarcidae | Pteronarcys |
| Pyralidae | Lepidoptera | Pyralidae | |
| Rheocricotopus robacki | Diptera | Chironomidae | Rheocricotopus |
| Rheotanytarsus | Diptera | Chironomidae | Rheotanytarsus |
| Rheotanytarsus exiguus grp. | Diptera | Chironomidae | Rheotanytarsus |
| Rheotanytarsus pellucidus | Diptera | Chironomidae | Rheotanytarsus |
| Rhyncholimnochares | Acariformes | Limnocharidae | Rhyncholimnochares |
| Robackia claviger | Diptera | Chironomidae | Robackia |
| Serratella deficiens | Ephemeroptera | Ephemerellidae | Teloganopsis |
| Sialis | Megaloptera | Sialidae | Sialis |
| Simulium | Diptera | Simuliidae | Simulium |
| Simulium jonesi | Diptera | Simuliidae | Simulium |
| Sisyra | Megaloptera | Sisyridae | Sisyra |
| Slavina appendiculata | Haplotaxida | Naididae | Slavina |
| Sperchon | Acariformes | Sperchonidae | Sperchon |
| Sperchonopsis | Acariformes | Sperchonidae | Sperchonopsis |
| Sperchopsis | Coleoptera | Hydrophilidae | Sperchopsis |
| Sperchopsis tessellatus | Coleoptera | Hydrophilidae | Sperchopsis |
| Sphaeriidae(mollusca) | Veneroida | Sphaeriidae(mollusca) | |
| Spirosperma | Haplotaxida | Tubificidae | Spirosperma |
| Staphylinidae | Coleoptera | Staphylinidae | |
| Stelechomyia perpulchra | Diptera | Chironomidae | Stelechomyia |
| Stempellina | Diptera | Chironomidae | Stempellina |
| Stempellinella | Diptera | Chironomidae | Stempellinella |
| Stempellinella fimbriata | Diptera | Chironomidae | Stempellinella |
| Stempellinella leptocelloides | Diptera | Chironomidae | Stempellinella |
| Stenacron | Ephemeroptera | Heptageniidae | Stenacron |
| Stenacron interpunctatum | Ephemeroptera | Heptageniidae | Stenacron |
| Stenelmis | Coleoptera | Elmidae | Stenelmis |
| Stenochironomus | Diptera | Chironomidae | Stenochironomus |
| Stenus | Coleoptera | Staphylinidae | Stenus |
| Stephensoniana trivandrana | Haplotaxida | Naididae | Stephensoniana |
| Stratiomyidae | Diptera | Stratiomyidae | |
| Sympetrum | Odonata | Libellulidae | Sympetrum |
| Tabanidae | Diptera | Tabanidae | |
| Taeniopteryx | Plecoptera | Taeniopterygidae | Taeniopteryx |
| Tanytarsus | Diptera | Chironomidae | Tanytarsus |
| Tanytarsus sp. a epler | Diptera | Chironomidae | Tanytarsus |
| Tanytarsus sp. c epler | Diptera | Chironomidae | Tanytarsus |
| Tanytarsus sp. d epler | Diptera | Chironomidae | Tanytarsus |



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| Taxon Name / SampleID/BenthID -> | Order | Family | Genus |
|---|---|---|---|
| Tanytarsus sp. e epler | Diptera | Chironomidae | Tanytarsus |
| Tanytarsus sp. f epler | Diptera | Chironomidae | Tanytarsus |
| Tanytarsus sp. l epler | Diptera | Chironomidae | Tanytarsus |
| Tanytarsus sp. m epler | Diptera | Chironomidae | Tanytarsus |
| Tanytarsus sp. n epler | Diptera | Chironomidae | Tanytarsus |
| Tanytarsus sp. o epler | Diptera | Chironomidae | Tanytarsus |
| Tanytarsus sp. p epler | Diptera | Chironomidae | Tanytarsus |
| Tanytarsus sp. s epler | Diptera | Chironomidae | Tanytarsus |
| Tanytarsus sp. t epler | Diptera | Chironomidae | Tanytarsus |
| Tanytarsus sp. y epler | Diptera | Chironomidae | Tanytarsus |
| Thienemanniella | Diptera | Chironomidae | Thienemanniella |
| Thienemanniella lobapodema | Diptera | Chironomidae | Thienemanniella |
| Thienemanniella similis | Diptera | Chironomidae | Thienemanniella |
| Thienemanniella xena | Diptera | Chironomidae | Thienemanniella |
| Thienemannimyia grp. | Diptera | Chironomidae | Thienemannimyia grp. |
| Tipula | Diptera | Tipulidae | Tipula |
| Tipula caloptera | Diptera | Tipulidae | Tipula |
| Tipulidae | Diptera | Tipulidae | |
| Torrenticola | Acariformes | Torrenticolidae | Torrenticola |
| Triaenodes | Trichoptera | Leptoceridae | Triaenodes |
| Triaenodes ignitus | Trichoptera | Leptoceridae | Triaenodes |
| Triaenodes perna/helo | Trichoptera | Leptoceridae | Triaenodes |
| Tribelos | Diptera | Chironomidae | Tribelos |
| Tribelos fuscicornis | Diptera | Chironomidae | Tribelos |
| Tribelos jucundum | Diptera | Chironomidae | Tribelos |
| Tricorythodes albilineatus | Ephemeroptera | Leptohyphidae | Tricorythodes |
| Tubificidae | Haplotaxida | Tubificidae | |
| Tvetenia | Diptera | Chironomidae | Tvetenia |
| Tvetenia vitracies | Diptera | Chironomidae | Tvetenia |
| Vertigo | Stylommatophora | Pupillidae | Vertigo |
| Viviparus georgianus | Mesogastropoda | Viviparidae | Viviparus |
| Xenochironomus xenolabis | Diptera | Chironomidae | Xenochironomus |
| Xestochironomus | Diptera | Chironomidae | Xestochironomus |
| Xylotopus par | Diptera | Chironomidae | Xylotopus |
| Zavreliella marmorata | Diptera | Chironomidae | Zavreliella |
| Zavrelimyia sp. a epler | Diptera | Chironomidae | Zavrelimyia |

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|---|---|
| Ablabesmyia mallochi | |
| Ablabesmyia rhamphe grp. | |
| Acentrella | |
| Acentrella parvula | |
| Acerpenna pygmaea | |
| Acroneuria | |
| Acroneuria abnormis | |
| Acroneuria lycorias | |
| Agnetina annulipes | |
| Allonais inaequalis | |
| Amnicola | |
| Amphipoda | |
| Ancylidae | |
| Ancyronyx variegatus | |
| Anisocentropus pyraloides | |
| Apedilum | |
| Argia | |
| Argia fumipennis | |
| Argia tibialis | |
| Arrenurus | |
| Asioplax | |
| Atherix | |
| Atractides | |
| Atrichopogon | |
| Aulodrilus pigueti | |
| Baetidae | |
| Baetis intercalaris | |
| Baetisca becki | |
| Baetisca rogersi | |
| Beardius | |
| Berosus | |
| Bivalvia | |
| Boyeria vinosa | |
| Brachycentrus chelatus | |
| Brachycentrus numerosus | |
| Branchiobdellidae | |
| Bratislavia unidentata | |
| Brillia | |
| Caecidotea | |
| Caenis | |
| Caenis diminuta | |
| Caenis eglinensis | |
| Caenis hilaris | |
| Callibaetis | |
| Callibaetis floridanus | |
| Calopterygidae | |
| Calopteryx | |
| Cambaridae | |
| Campeloma | |
| Cecidomyiidae | |

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|---|---|
| Celina | |
| Centroptilum triangulifer | |
| Ceraclea | |
| Ceratopogonidae | |
| Cernotina | |
| Chauliodes | |
| Cheumatopsyche | |
| Chimarra | |
| Chironomus | |
| Choroterpes basalis | |
| Chrysomelidae | |
| Cladotanytarsus | |
| Cladotanytarsus cf. daviesi | |
| Cladotanytarsus sp. d epler | |
| Cladotanytarsus sp. f epler | |
| Cladotanytarsus viridiventris | |
| Clathrosperchon | |
| Climacia areolaris | |
| Clinotanypus | |
| Coenagrionidae | |
| Corbicula fluminea | |
| Corydalidae | |
| Corydalus cornutus | |
| Corynoneura | |
| Crangonyx | |
| Cricotopus | |
| Cricotopus bicinctus | |
| Cricotopus or orthocladius | |
| Cryptochironomus | |
| Cryptotendipes | |
| Curculionidae | |
| Cyrnellus fraternus | |
| Dasyhelea | |
| Dero | |
| Dero digitata complex | |
| Dero flabelliger | |
| Dero furcata | |
| Dero pectinata | |
| Desmopachria | |
| Desserobdella phalera | |
| Dicrotendipes | |
| Dicrotendipes modestus | |
| Dicrotendipes neomodestus | |
| Dicrotendipes simpsoni | |
| Dicrotendipes sp. a epler | |
| Dineutus | |
| Diplectrona | |
| Djalmabatista pulcher | |
| Dryopidae | |
| Dubiraphia vittata | |

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|---|---|
| Dytiscidae | |
| Eclipidrilus | |
| Eclipidrilus palustris | |
| Ectopria | |
| Ectopria thoracica | |
| Einfeldia sp. a epler | |
| Elimia | |
| Elmidae | |
| Enallagma | |
| Enallagma coecum | |
| Enchytraeidae | |
| Endotribelos hesperium | |
| Enochrus | |
| Epicordulia princeps regina | |
| Eurylophella doris | |
| Ferrissia | |
| Gastropoda | |
| Geayia | |
| Gerridae | |
| Glossiphoniidae | |
| Goeldichironomus | |
| Goeldichironomus cf. natans | |
| Goeldichironomus holoprasinus | |
| Gomphidae | |
| Gomphus | |
| Gonielmis dietrichi | |
| Gyrinidae | |
| Gyrinus | |
| Haemonais waldvogeli | |
| Hagenius brevistylus | |
| Haitia | Physa |
| Hayesomyia senata | |
| Helichus | |
| Helichus lithophilus | |
| Helobdella stagnalis | |
| Helobdella triserialis | |
| Hemerodromia | |
| Heptageniidae | |
| Hetaerina | |
| Hetaerina titia | |
| Hexagenia | |
| Hexatoma | |
| Hirudinea | |
| Hyalella azteca | |
| Hydraena | |
| Hydrobiidae | |
| Hydrodroma | |
| Hydrometra | |
| Hydrophilidae | |
| Hydropsyche | |

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| Taxon Name / SampleID/BenthID -> | Current Name |
|---|---|
| Hydropsyche incommoda | |
| Hydropsyche mississippiensis | |
| Hydroptila | |
| Hydrovatus | |
| Hygrobates | |
| Ischnura | |
| Isonychia | |
| Kiefferulus | |
| Koenikea | |
| Krendowskia | |
| Labrundinia | |
| Labrundinia becki | |
| Labrundinia johannseni | |
| Labrundinia pilosella | |
| Labrundinia sp. 3 nr. virescens | |
| Laccophilus | |
| Laevapex | |
| Larsia | |
| Larsia decolorata | |
| Lauterborniella agrayloides | |
| Lebertia | |
| Lepidoptera | |
| Lepidostoma | |
| Leptophlebiidae | |
| Leuctra | |
| Libellulidae | |
| Limnesia | |
| Limnodrilus hoffmeisteri | |
| Lioporeus | |
| Lirceus | |
| Lopescladius | |
| Lumbriculus variegatus | |
| Lymnaeidae | |
| Lype diversa | |
| Maccaffertium | |
| Maccaffertium exiguum | |
| Maccaffertium smithae | |
| Macromia | |
| Macromia illinoiensis georgina | |
| Macronychus glabratus | |
| Macrostemum carolina | |
| Mayatrichia ayama | |
| Megistocera | |
| Mesonoterus | |
| Mesovelia | |
| Micrasema | |
| Microcylloepus pusillus | |
| Micromenetus | |
| Micromenetus dilatatus avus | |
| Micropsectra | |



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|---|---|
| Microtendipes | |
| Microtendipes pedellus grp. | |
| Microtendipes rydalensis grp. | |
| Microvelia | |
| Mideopsis | |
| Momonia | |
| Monopelopia | |
| Mooreobdella | |
| Naididae | |
| Nais communis complex | |
| Nais(animal) | |
| Nanocladius | |
| Nectopsyche | |
| Nectopsyche exquisita | |
| Nectopsyche pavida | |
| Neoephemera | |
| Neoperla | |
| Neoplasta | |
| Neoplea | |
| Neoporus | |
| Neotrichia | |
| Neureclipsis | |
| Neureclipsis crepuscularis | |
| Neurocordulia | |
| Neurocordulia alabamensis | |
| Nigronia | |
| Nigronia serricornis | |
| Nilotanypus americanus | |
| Nilotanypus fimbriatus | |
| Nilothauma | |
| Notomicrus nanulus | |
| Nyctiophylax | |
| Oecetis | |
| Oecetis avara | |
| Oecetis cinerascens | |
| Oecetis georgia | |
| Oecetis sphyra/morsei | |
| Ora/scirtes | |
| Oribatida | |
| Ormosia | |
| Orthocladius annectens | |
| Orthotrichia | |
| Oxus | |
| Oxyethira | |
| Pachydiplax longipennis | |
| Palaemonetes | |
| Palpomyia/bezzia grp. | |
| Parachaetocladius abnobaeus | |
| Parachironomus | |
| Parachironomus chaetoalus complex | |



US EPA ARCHIVE DOCUMENT

As Calculated / STORET station ->
Sample date ->

| Taxon Name / SampleID/BenthID -> | Current Name |
|---|---|
| Parachironomus supparilis | Parachironomus longistilus |
| Paracladopelma | |
| Paracymus | |
| Parakiefferiella sp. b epler | |
| Parakiefferiella sp. f epler | |
| Paralauterborniella nigrohalterale | |
| Paraleptophlebia volitans | |
| Paramerina | |
| Parametriocnemus | |
| Paratanytarsus | |
| Paratanytarsus dissimilis | |
| Paratanytarsus quadratus | |
| Paratendipes subaequalis | |
| Pelonomus obscurus | |
| Peltodytes | |
| Peltodytes dietrichi | |
| Pentaneura inconspicua | |
| Perlesta placida complex | |
| Perlinella drymo | |
| Phaenopsectra flavipes | |
| Phylocentropus | |
| Physa | |
| Physidae | |
| Pilaria | |
| Placobdella | |
| Planorbella | |
| Planorbidae | |
| Platyhelminthes | |
| Plauditus | |
| Plauditus bimaculatus | |
| Plecoptera | |
| Polycentropodidae | |
| Polycentropus | |
| Polypedilum aviceps | |
| Polypedilum fallax | |
| Polypedilum flavum | |
| Polypedilum halterale grp. | |
| Polypedilum illinoense grp. | |
| Polypedilum scalaenum grp. | |
| Polypedilum sp. a epler | |
| Polypedilum trigonus | |
| Polypedilum tritum | |
| Potthastia | |
| Potthastia longimana | |
| Pristina | |
| Procambarus | |
| Procladius | |
| Procloeon | |
| Progomphus | |
| Progomphus obscurus | |

US EPA ARCHIVE DOCUMENT

As Calculated / STORET station ->
Sample date ->

| Taxon Name / SampleID/BenthID -> | Current Name |
|---|---|
| Promoresia tardella | |
| Prostoma | |
| Psectrocladius | |
| Pseudochironomus | |
| Pseudocloeon | |
| Pseudocloeon ephippiatum | |
| Pseudocloeon frondale | |
| Pseudocloeon propinquum | |
| Pseudolimnophila | |
| Psychodidae | |
| Pteronarcys dorsata | |
| Pyralidae | |
| Rheocricotopus robacki | |
| Rheotanytarsus | |
| Rheotanytarsus exiguus grp. | |
| Rheotanytarsus pellucidus | |
| Rhyncholimnochares | |
| Robackia claviger | |
| Serratella deficiens | Teloganopsis deficiens |
| Sialis | |
| Simulium | |
| Simulium jonesi | |
| Sisyra | |
| Slavina appendiculata | |
| Sperchon | |
| Sperchonopsis | |
| Sperchopsis | |
| Sperchopsis tessellatus | |
| Sphaeriidae(mollusca) | |
| Spirosperma | |
| Staphylinidae | |
| Stelechomyia perpulchra | |
| Stempellina | |
| Stempellinella | |
| Stempellinella fimbriata | |
| Stempellinella leptocelloides | |
| Stenacron | |
| Stenacron interpunctatum | |
| Stenelmis | |
| Stenochironomus | |
| Stenus | |
| Stephensoniana trivandrana | |
| Stratiomyidae | |
| Sympetrum | |
| Tabanidae | |
| Taeniopteryx | |
| Tanytarsus | |
| Tanytarsus sp. a epler | |
| Tanytarsus sp. c epler | |
| Tanytarsus sp. d epler | |

US EPA ARCHIVE DOCUMENT

As Calculated / STORET station ->
Sample date ->

| Taxon Name / SampleID/BenthID -> | Current Name |
|---|---|
| Tanytarsus sp. e epler | |
| Tanytarsus sp. f epler | |
| Tanytarsus sp. l epler | |
| Tanytarsus sp. m epler | |
| Tanytarsus sp. n epler | |
| Tanytarsus sp. o epler | |
| Tanytarsus sp. p epler | |
| Tanytarsus sp. s epler | |
| Tanytarsus sp. t epler | |
| Tanytarsus sp. y epler | |
| Thienemanniella | |
| Thienemanniella lobapodema | |
| Thienemanniella similis | |
| Thienemanniella xena | |
| Thienemannimyia grp. | |
| Tipula | |
| Tipula caloptera | |
| Tipulidae | |
| Torrenticola | |
| Triaenodes | |
| Triaenodes ignitus | |
| Triaenodes perna/helo | |
| Tribelos | |
| Tribelos fuscicornis | |
| Tribelos jucundum | |
| Tricorythodes albilineatus | |
| Tubificidae | |
| Tvetenia | |
| Tvetenia vitracies | |
| Vertigo | |
| Viviparus georgianus | |
| Xenochironomus xenolabis | |
| Xestochironomus | |
| Xylotopus par | |
| Zavreliella marmorata | |
| Zavrelimyia sp. a epler | |

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| As Calculated / STORET station -> | 22030062 | 19010042 | 28020221 | 25020111 |
|---|---|---|---|---|
| Sample date -> | 3/21/1994 | 11/1/1994 | 7/27/1994 | 10/24/1994 |
| | SampleID | SampleID | SampleID | SampleID |
| | 3105/BenthID | 3682/BenthID | 3797/BenthID | 3952/BenthID |
| Taxon Name / SampleID/BenID -> | 3980(#counted) | 4628(#counted) | 4802(#counted) | 5024(#counted) |
| Ablabesmyia (karelia) grp. | 0 | 0 | 0 | 0 |
| Ablabesmyia hauberi | 0 | 0 | 1 | 0 |
| Ablabesmyia mallochi | 1 | 0 | 0 | 2 |
| Ablabesmyia rhamphe grp. | 0 | 0 | 5 | 0 |
| Acentrella parvula | 0 | 0 | 0 | 0 |
| Acerpenna pygmaea | 0 | 0 | 9 | 0 |
| Acroneuria | 0 | 0 | 0 | 0 |
| Acroneuria abnormis | 0 | 0 | 0 | 0 |
| Acroneuria arenosa | 0 | 0 | 0 | 0 |
| Acroneuria arenosa/evoluta | 0 | 0 | 0 | 0 |
| Acroneuria lycorias | 0 | 0 | 0 | 0 |
| Agarodes libalis | 0 | 0 | 0 | 0 |
| Alluaudomyia | 0 | 0 | 0 | 0 |
| Amnicola | 0 | 0 | 0 | 0 |
| Amnicola dalli | 0 | 0 | 0 | 0 |
| Amnicola dalli johnsoni | 0 | 0 | 0 | 0 |
| Amphipoda | 0 | 0 | 0 | 0 |
| Ancylidae | 0 | 0 | 0 | 0 |
| Ancyronyx | 0 | 0 | 0 | 0 |
| Ancyronyx variegatus | 0 | 2 | 0 | 0 |
| Anisocentropus pyraloides | 0 | 0 | 0 | 0 |
| Anopheles | 0 | 0 | 0 | 0 |
| Apsectrotanypus johnsoni | 0 | 0 | 0 | 0 |
| Argia | 0 | 3 | 0 | 0 |
| Argia fumipennis | 0 | 0 | 0 | 0 |
| Argia moesta | 0 | 0 | 0 | 0 |
| Argia sedula | 0 | 0 | 1 | 9 |
| Argia tibialis | 0 | 0 | 0 | 0 |
| Arrenurus | 0 | 0 | 0 | 0 |
| Arrenurus problecornis | 0 | 0 | 1 | 0 |
| Astacidae | 0 | 0 | 0 | 0 |
| Atherix | 0 | 0 | 0 | 0 |
| Atractides | 0 | 0 | 0 | 0 |
| Atrichopogon | 0 | 0 | 0 | 0 |
| Aulodrilus pigueti | 0 | 0 | 0 | 0 |
| Aulodrilus pluriseta | 0 | 0 | 0 | 0 |
| Baetidae | 0 | 0 | 0 | 0 |
| Baetis | 6 | 0 | 0 | 0 |
| Baetis intercalaris | 0 | 0 | 0 | 0 |
| Baetisca rogersi | 0 | 0 | 0 | 0 |
| Beardius truncatus | 0 | 0 | 0 | 0 |
| Belostoma | 0 | 0 | 0 | 0 |
| Belostomatidae | 0 | 0 | 0 | 0 |
| Bivalvia | 0 | 0 | 0 | 0 |
| Bourletiella | 0 | 0 | 0 | 0 |
| Boyeria vinosa | 0 | 0 | 0 | 0 |
| Brachycentrus | 0 | 0 | 0 | 0 |
| Brachycentrus chelatus | 0 | 0 | 0 | 0 |
| Brachycentrus numerosus | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 22030062 | 19010042 | 28020221 | 25020111 |
|---|---|---|---|---|
| Sample date -> | 3/21/1994 | 11/1/1994 | 7/27/1994 | 10/24/1994 |
| | SampleID | SampleID | SampleID | SampleID |
| | 3105/BenthID | 3682/BenthID | 3797/BenthID | 3952/BenthID |
| Taxon Name / SampleID/BenID -> | 3980(#counted) | 4628(#counted) | 4802(#counted) | 5024(#counted) |
| Brachycercus maculatus | 0 | 0 | 0 | 3 |
| Caecidotea | 0 | 0 | 0 | 0 |
| Caecidotea racovitzai | 0 | 0 | 0 | 0 |
| Caenis | 0 | 0 | 0 | 0 |
| Caenis diminuta | 0 | 0 | 0 | 0 |
| Caenis hilaris | 0 | 0 | 4 | 10 |
| Callibaetis floridanus | 0 | 0 | 0 | 0 |
| Calopteryx | 0 | 0 | 0 | 0 |
| Calopteryx maculata | 0 | 0 | 0 | 0 |
| Cambaridae | 0 | 0 | 0 | 0 |
| Campeloma | 0 | 0 | 0 | 0 |
| Campeloma limum | 0 | 0 | 0 | 0 |
| Cassidinidea ovalis | 0 | 0 | 0 | 0 |
| Cecidomyiidae | 0 | 0 | 0 | 0 |
| Ceratopogonidae | 0 | 0 | 1 | 2 |
| Cernotina | 0 | 0 | 0 | 0 |
| Chaoborus | 0 | 0 | 1 | 0 |
| Chaoborus albatus | 0 | 0 | 0 | 0 |
| Chauliodes | 0 | 0 | 0 | 0 |
| Chelifera | 0 | 0 | 0 | 0 |
| Cheumatopsyche | 1 | 0 | 2 | 5 |
| Chimarra | 0 | 4 | 0 | 0 |
| Chironomus | 0 | 0 | 0 | 0 |
| Choroterpes basalis | 0 | 0 | 0 | 0 |
| Choroterpes hubbelli | 0 | 0 | 11 | 0 |
| Cladotanytarsus | 0 | 0 | 0 | 0 |
| Cladotanytarsus cf. daviesi | 0 | 0 | 0 | 0 |
| Cladotanytarsus sp. i epler | 0 | 0 | 0 | 0 |
| Clathrosperchon | 0 | 0 | 0 | 0 |
| Climacea areolaris | 0 | 0 | 0 | 0 |
| Clinotanypus | 0 | 1 | 0 | 1 |
| Coelotanypus | 0 | 0 | 0 | 0 |
| Coelotanypus scapularis | 0 | 0 | 0 | 1 |
| Coenagrionidae | 0 | 0 | 0 | 0 |
| Collembola | 0 | 0 | 0 | 0 |
| Conchapelopia | 0 | 5 | 0 | 0 |
| Corbicula fluminea | 0 | 0 | 3 | 2 |
| Corduliidae | 0 | 0 | 0 | 0 |
| Corydalus | 0 | 0 | 0 | 0 |
| Corydalus cornuta | 0 | 0 | 0 | 2 |
| Corydalus cornutus | 0 | 0 | 0 | 0 |
| Corynoneura | 1 | 0 | 0 | 0 |
| Corynoneura sp. b epler | 0 | 0 | 0 | 0 |
| Corynoneura sp. c epler | 0 | 0 | 0 | 0 |
| Corynoneura taris | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 22030062 | 19010042 | 28020221 | 25020111 |
|---|---|---|---|---|
| Sample date -> | 3/21/1994 | 11/1/1994 | 7/27/1994 | 10/24/1994 |
| | SampleID | SampleID | SampleID | SampleID |
| | 3105/BenthID | 3682/BenthID | 3797/BenthID | 3952/BenthID |
| Taxon Name / SampleID/BenID -> | 3980(#counted) | 4628(#counted) | 4802(#counted) | 5024(#counted) |
| Crangonyx | 0 | 0 | 0 | 0 |
| Cricotopus | 0 | 0 | 0 | 0 |
| Cricotopus bicinctus | 0 | 0 | 0 | 0 |
| Cricotopus bicinctus grp. | 0 | 0 | 0 | 0 |
| Cricotopus or orthocladius | 3 | 0 | 0 | 0 |
| Cryptochironomus | 0 | 0 | 0 | 0 |
| Cryptotendipes | 0 | 0 | 0 | 0 |
| Curculionidae | 0 | 0 | 0 | 0 |
| Cyrnellus fraternus | 0 | 0 | 0 | 0 |
| Demicryptochironomus | 0 | 0 | 0 | 0 |
| Dero digitata | 0 | 0 | 0 | 0 |
| Dero digitata complex | 0 | 0 | 0 | 0 |
| Dero lodeni | 0 | 0 | 0 | 0 |
| Dero pectinata | 0 | 0 | 0 | 0 |
| Dero trifida | 0 | 0 | 0 | 0 |
| Dero vaga | 0 | 0 | 0 | 0 |
| Dicrotendipes | 0 | 0 | 0 | 0 |
| Dicrotendipes modestus | 0 | 0 | 0 | 0 |
| Dicrotendipes neomodestus | 0 | 0 | 0 | 0 |
| Dicrotendipes simpsoni | 0 | 0 | 0 | 0 |
| Dicrotendipes sp. a epler | 1 | 0 | 0 | 0 |
| Dineutus | 1 | 0 | 4 | 0 |
| Dineutus discolor | 0 | 0 | 0 | 0 |
| Dineutus serrulatus | 0 | 0 | 0 | 0 |
| Diplectrona modesta | 0 | 0 | 0 | 0 |
| Dixa | 0 | 0 | 0 | 0 |
| Dixella | 0 | 0 | 0 | 0 |
| Djalmabatista pulcher | 0 | 0 | 0 | 0 |
| Dolichopodidae | 0 | 0 | 0 | 0 |
| Dromogomphus armatus | 0 | 0 | 0 | 0 |
| Dromogomphus spinosus | 1 | 0 | 0 | 0 |
| Dryopidae | 0 | 0 | 0 | 2 |
| Dubiraphia | 0 | 0 | 0 | 0 |
| Dubiraphia quadrinotata | 0 | 0 | 14 | 8 |
| Dubiraphia vittata | 0 | 1 | 0 | 0 |
| Dugesia | 0 | 0 | 0 | 0 |
| Dugesia tigrina | 0 | 0 | 0 | 0 |
| Eclipidrilus | 0 | 0 | 0 | 0 |
| Eclipidrilus palustris | 0 | 0 | 0 | 0 |
| Ectopria | 0 | 0 | 0 | 0 |
| Elimia | 0 | 0 | 0 | 0 |
| Elimia floridensis | 4 | 0 | 0 | 0 |
| Empididae | 0 | 0 | 0 | 0 |
| Enallagma | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 22030062 | 19010042 | 28020221 | 25020111 |
|---|---|---|---|---|
| Sample date -> | 3/21/1994 | 11/1/1994 | 7/27/1994 | 10/24/1994 |
| | SampleID | SampleID | SampleID | SampleID |
| | 3105/BenthID | 3682/BenthID | 3797/BenthID | 3952/BenthID |
| Taxon Name / SampleID/BenID -> | 3980(#counted) | 4628(#counted) | 4802(#counted) | 5024(#counted) |
| Enallagma cardenium | 0 | 0 | 0 | 3 |
| Enchytraeidae | 0 | 5 | 0 | 0 |
| Endotribelos hesperium | 0 | 0 | 0 | 0 |
| Enochrus | 0 | 0 | 0 | 0 |
| Ephemerellidae | 0 | 0 | 0 | 0 |
| Ephydridae | 0 | 0 | 0 | 0 |
| Epitheca | 0 | 0 | 13 | 0 |
| Epitheca princeps regina | 0 | 0 | 0 | 0 |
| Eurylophella doris | 0 | 0 | 0 | 0 |
| Eurylophella temporalis | 0 | 1 | 0 | 0 |
| Ferrissia | 0 | 0 | 0 | 0 |
| Gammaridae | 0 | 0 | 0 | 0 |
| Gammarus | 6 | 0 | 0 | 0 |
| Gammarus tigrinus | 0 | 0 | 0 | 0 |
| Gastropoda | 0 | 0 | 0 | 0 |
| Geayia | 0 | 0 | 0 | 0 |
| Gerridae | 0 | 0 | 0 | 0 |
| Gloiobdella elongata | 0 | 0 | 0 | 0 |
| Goeldichironomus fluctuans | 0 | 0 | 0 | 1 |
| Gomphidae | 0 | 0 | 0 | 0 |
| Gomphus | 0 | 0 | 0 | 0 |
| Gomphus minutus | 0 | 0 | 1 | 1 |
| Gonielmis | 0 | 0 | 0 | 0 |
| Gonielmis dietrichi | 0 | 0 | 0 | 0 |
| Grandidierella bonnieroides | 0 | 0 | 0 | 0 |
| Gyretes iricolor | 0 | 0 | 0 | 0 |
| Haber speciosus | 0 | 0 | 0 | 0 |
| Hagenius brevistylus | 0 | 0 | 0 | 0 |
| Hebetancylus excentricus | 5 | 0 | 0 | 1 |
| Helobdella stagnalis | 0 | 0 | 0 | 0 |
| Helobdella triserialis | 0 | 0 | 0 | 0 |
| Helopelopia | 1 | 0 | 0 | 0 |
| Hemerodromia | 0 | 1 | 0 | 0 |
| Hemiptera | 0 | 0 | 0 | 0 |
| Heptageniidae | 0 | 0 | 0 | 0 |
| Hetaerina | 0 | 0 | 0 | 0 |
| Hetaerina titia | 0 | 0 | 0 | 1 |
| Heteroplectron americanum | 0 | 0 | 0 | 0 |
| Hexagenia | 0 | 0 | 0 | 0 |
| Hexagenia bilineata | 0 | 0 | 0 | 0 |
| Hexagenia limbata | 1 | 0 | 0 | 0 |
| Hexagenia munda orlando | 0 | 0 | 0 | 0 |
| Hexatoma | 0 | 0 | 0 | 0 |
| Hyalella azteca | 3 | 4 | 0 | 1 |
| Hydra | 0 | 0 | 0 | 0 |
| Hydrachna | 0 | 0 | 0 | 0 |
| Hydraena marginicollis | 0 | 0 | 0 | 0 |
| Hydraenidae | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 22030062 | 19010042 | 28020221 | 25020111 |
|---|---|---|---|---|
| Sample date -> | 3/21/1994 | 11/1/1994 | 7/27/1994 | 10/24/1994 |
| | SampleID | SampleID | SampleID | SampleID |
| | 3105/BenthID | 3682/BenthID | 3797/BenthID | 3952/BenthID |
| Taxon Name / SampleID/BenID -> | 3980(#counted) | 4628(#counted) | 4802(#counted) | 5024(#counted) |
| Hydrobiidae | 0 | 0 | 0 | 0 |
| Hydrodroma | 0 | 1 | 0 | 0 |
| Hydrophilidae | 0 | 0 | 0 | 0 |
| Hydroporus | 0 | 0 | 0 | 0 |
| Hydropsyche | 0 | 2 | 0 | 18 |
| Hydropsyche decalda | 0 | 0 | 0 | 0 |
| Hydropsychidae | 0 | 0 | 0 | 0 |
| Hydroptila | 1 | 0 | 1 | 0 |
| Hydroptilidae | 0 | 0 | 0 | 0 |
| Hygrobates | 0 | 0 | 0 | 0 |
| Hygrotus | 0 | 0 | 0 | 0 |
| Ischnura | 0 | 0 | 0 | 0 |
| Ischnura hastata | 2 | 0 | 0 | 0 |
| Isonychia | 0 | 1 | 0 | 0 |
| Isoperla | 0 | 0 | 0 | 0 |
| Isopoda | 0 | 0 | 0 | 0 |
| Isotomurus | 0 | 0 | 0 | 0 |
| Isotomurus tricolor | 0 | 0 | 0 | 0 |
| Kiefferulus | 0 | 0 | 0 | 0 |
| Krendowskia | 0 | 0 | 0 | 0 |
| Labiobaetis | 0 | 0 | 0 | 0 |
| Labrundinia | 0 | 0 | 0 | 0 |
| Labrundinia becki | 0 | 0 | 0 | 0 |
| Labrundinia johannseni | 0 | 0 | 0 | 0 |
| Labrundinia neopilosella | 0 | 0 | 0 | 0 |
| Labrundinia pilosella | 1 | 2 | 0 | 0 |
| Laevapex | 0 | 0 | 0 | 0 |
| Laevapex peninsulae | 0 | 0 | 0 | 0 |
| Larsia berneri | 0 | 0 | 0 | 0 |
| Larsia decolorata | 0 | 0 | 0 | 0 |
| Lauterborniella agrayloides | 0 | 0 | 0 | 0 |
| Lebertia | 0 | 0 | 0 | 0 |
| Lepidoptera | 0 | 0 | 0 | 0 |
| Leptoceridae | 0 | 0 | 0 | 0 |
| Leptophlebia | 0 | 0 | 0 | 0 |
| Leptophlebiidae | 0 | 3 | 0 | 0 |
| Leuctra | 0 | 2 | 0 | 0 |
| Libellulidae | 0 | 0 | 0 | 0 |
| Limnesia | 0 | 0 | 1 | 0 |
| Limnodrilus hoffmeisteri | 2 | 0 | 0 | 0 |
| Limnophila | 0 | 0 | 0 | 0 |
| Limonia | 0 | 0 | 0 | 0 |
| Liodessus | 0 | 0 | 0 | 0 |
| Liodessus affinis | 0 | 0 | 0 | 0 |
| Lioporeus | 0 | 0 | 0 | 0 |
| Lirceus | 0 | 0 | 0 | 0 |
| Littoridinops monroensis | 0 | 0 | 0 | 0 |
| Lumbriculidae | 0 | 0 | 0 | 0 |
| Lumbriculus variegatus | 0 | 1 | 0 | 0 |



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| As Calculated / STORET station -> | 22030062 | 19010042 | 28020221 | 25020111 |
|---|---|---|---|---|
| Sample date -> | 3/21/1994 | 11/1/1994 | 7/27/1994 | 10/24/1994 |
| | SampleID | SampleID | SampleID | SampleID |
| | 3105/BenthID | 3682/BenthID | 3797/BenthID | 3952/BenthID |
| Taxon Name / SampleID/BenID -> | 3980(#counted) | 4628(#counted) | 4802(#counted) | 5024(#counted) |
| Lype diversa | 0 | 0 | 0 | 0 |
| Maccaffertium | 0 | 0 | 0 | 0 |
| Maccaffertium smithae | 0 | 0 | 0 | 0 |
| Macromia | 0 | 0 | 0 | 0 |
| Macromia taeniolata | 0 | 0 | 0 | 2 |
| Macromiidae | 0 | 0 | 0 | 0 |
| Macronychus glabratus | 0 | 0 | 0 | 0 |
| Macrostemum carolina | 0 | 0 | 0 | 0 |
| Mayatrichia | 0 | 0 | 0 | 0 |
| Mayatrichia ayama | 0 | 0 | 0 | 0 |
| Meropelopia | 0 | 0 | 0 | 0 |
| Mesosmittia | 0 | 0 | 0 | 0 |
| Metrobates | 0 | 0 | 0 | 1 |
| Micrasema | 1 | 0 | 0 | 0 |
| Micrasema rusticum | 0 | 0 | 0 | 0 |
| Micrasema wataga | 0 | 0 | 0 | 0 |
| Microcylloepus | 0 | 0 | 0 | 0 |
| Microcylloepus pusillus | 0 | 12 | 11 | 9 |
| Micromenetus | 0 | 0 | 0 | 0 |
| Micromenetus dilatatus | 0 | 0 | 0 | 0 |
| Microtendipes pedellus | 2 | 1 | 0 | 0 |
| Microtendipes pedellus grp. | 0 | 0 | 0 | 0 |
| Microtendipes rydalensis | 0 | 0 | 0 | 0 |
| Microtendipes rydalensis grp. | 0 | 0 | 0 | 0 |
| Mideopsis | 0 | 0 | 0 | 0 |
| Molanna | 0 | 0 | 0 | 0 |
| Mooreobdella | 0 | 0 | 0 | 0 |
| Mooreobdella tetragon | 0 | 0 | 0 | 0 |
| Muscidae | 0 | 0 | 0 | 0 |
| Naididae | 0 | 0 | 0 | 0 |
| Nais behningi | 0 | 0 | 0 | 0 |
| Nais communis | 18 | 0 | 0 | 0 |
| Nais communis complex | 0 | 0 | 0 | 0 |
| Nais pardalis | 0 | 0 | 0 | 0 |
| Nais simplex | 0 | 0 | 0 | 0 |
| Nais variabilis | 0 | 0 | 0 | 0 |
| Nanocladius | 0 | 0 | 0 | 0 |
| Nectopsyche | 0 | 0 | 0 | 0 |
| Nectopsyche candida | 0 | 0 | 0 | 0 |
| Nectopsyche exquisita | 0 | 0 | 4 | 1 |
| Nectopsyche pavida | 0 | 0 | 12 | 0 |
| Nemertea | 0 | 0 | 0 | 0 |
| Neoperla | 0 | 0 | 0 | 0 |
| Neoperla clymene | 0 | 0 | 0 | 0 |
| Neoporus | 0 | 0 | 0 | 0 |
| Neotrichia | 0 | 0 | 0 | 0 |
| Neumania | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 22030062 | 19010042 | 28020221 | 25020111 |
|---|---|---|---|---|
| Sample date -> | 3/21/1994 | 11/1/1994 | 7/27/1994 | 10/24/1994 |
| | SampleID | SampleID | SampleID | SampleID |
| | 3105/BenthID | 3682/BenthID | 3797/BenthID | 3952/BenthID |
| Taxon Name / SampleID/BenID -> | 3980(#counted) | 4628(#counted) | 4802(#counted) | 5024(#counted) |
| Neumania distincta | 0 | 0 | 1 | 0 |
| Neureclipsis | 0 | 0 | 0 | 0 |
| Neureclipsis crepuscularis | 0 | 0 | 0 | 0 |
| Neurocordulia | 0 | 0 | 0 | 0 |
| Neurocordulia alabamensis | 0 | 0 | 0 | 1 |
| Neurocordulia virginiensis | 0 | 0 | 0 | 0 |
| Nigronia | 0 | 0 | 0 | 0 |
| Nigronia fasciatus | 0 | 0 | 0 | 0 |
| Nigronia serricornis | 0 | 0 | 0 | 0 |
| Nilotanypus | 0 | 0 | 0 | 0 |
| Nilothauma | 0 | 0 | 0 | 0 |
| Notogillia wetherbyi | 0 | 0 | 0 | 0 |
| Nyctiophylax | 0 | 0 | 0 | 0 |
| Odonata | 0 | 0 | 0 | 0 |
| Odontomyia | 0 | 0 | 0 | 0 |
| Oecetis | 0 | 0 | 0 | 1 |
| Oecetis cinerascens | 1 | 10 | 0 | 0 |
| Oecetis georgia | 0 | 0 | 0 | 0 |
| Oecetis inconspicua cmplx. | 0 | 0 | 0 | 0 |
| Oecetis morsei or sphyra | 0 | 0 | 0 | 0 |
| Oecetis parva | 0 | 0 | 0 | 0 |
| Oecetis persimilis | 0 | 0 | 0 | 0 |
| Oecetis sp. a floyd | 0 | 0 | 0 | 0 |
| Oecetis sp. e floyd | 0 | 0 | 0 | 0 |
| Ora/scirtes | 0 | 0 | 0 | 0 |
| Oribatei | 0 | 0 | 0 | 0 |
| Orthocladiinae | 0 | 0 | 0 | 0 |
| Orthocladiinae gen. c epler | 0 | 0 | 0 | 0 |
| Orthocladiinae gen. f epler | 0 | 1 | 0 | 0 |
| Orthocladius annectens | 0 | 0 | 0 | 0 |
| Orthotrichia | 0 | 0 | 0 | 0 |
| Oxyethira | 1 | 0 | 3 | 0 |
| Pachydiplax longipennis | 0 | 0 | 0 | 0 |
| Pagastiella | 0 | 0 | 0 | 0 |
| Palaemonetes | 0 | 0 | 0 | 0 |
| Palaemonetes kadiakensis | 0 | 0 | 0 | 0 |
| Palaemonetes paludosus | 0 | 0 | 0 | 5 |
| Palpomyia/bezzia grp. | 0 | 3 | 0 | 0 |
| Paracladopelma | 0 | 0 | 0 | 0 |
| Paracladopelma loganae | 0 | 0 | 0 | 0 |
| Paracladopelma undine | 0 | 0 | 0 | 0 |
| Paragnetina | 0 | 0 | 0 | 0 |
| Paragnetina fumosa | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 22030062 | 19010042 | 28020221 | 25020111 |
|---|---|---|---|---|
| Sample date -> | 3/21/1994 | 11/1/1994 | 7/27/1994 | 10/24/1994 |
| | SampleID | SampleID | SampleID | SampleID |
| | 3105/BenthID | 3682/BenthID | 3797/BenthID | 3952/BenthID |
| Taxon Name / SampleID/BenID -> | 3980(#counted) | 4628(#counted) | 4802(#counted) | 5024(#counted) |
| Parakiefferiella | 0 | 0 | 0 | 0 |
| Paralauterborniella nigrohalterale | 0 | 0 | 0 | 0 |
| Paraleptophlebia volitans | 0 | 0 | 0 | 0 |
| Parametriocnemus | 0 | 1 | 0 | 0 |
| Parametriocnemus sp. f epler | 0 | 0 | 0 | 0 |
| Paranyctiophylax | 0 | 0 | 0 | 0 |
| Paraplea | 0 | 0 | 0 | 0 |
| Paraponyx | 0 | 0 | 0 | 0 |
| Paratanytarsus sp. a epler | 2 | 0 | 0 | 0 |
| Paratanytarsus sp. c epler | 0 | 0 | 0 | 0 |
| Paratendipes subaequalis | 0 | 0 | 0 | 0 |
| Pelecypoda | 0 | 0 | 0 | 0 |
| Pelonomus obscurus | 0 | 0 | 0 | 0 |
| Peltodytes | 0 | 0 | 0 | 0 |
| Pentaneura inconspicua | 0 | 0 | 0 | 0 |
| Perlesta | 0 | 0 | 0 | 0 |
| Perlesta placida | 0 | 0 | 0 | 0 |
| Perlesta placida complex | 0 | 0 | 0 | 0 |
| Perlinella | 0 | 0 | 0 | 0 |
| Petrophila | 0 | 0 | 0 | 0 |
| Phaenopsectra obediens grp. | 0 | 1 | 0 | 0 |
| Phaenopsectra punctipes grp. | 1 | 0 | 0 | 0 |
| Phylocentropus | 0 | 4 | 0 | 0 |
| Physella | 0 | 0 | 0 | 0 |
| Physella cubensis | 0 | 0 | 0 | 1 |
| Piona | 0 | 0 | 0 | 0 |
| Pisidiidae | 1 | 0 | 0 | 0 |
| Pisidium | 0 | 0 | 6 | 0 |
| Planariidae | 0 | 0 | 0 | 0 |
| Planorbella duryi | 0 | 0 | 1 | 0 |
| Planorbella scalaris | 0 | 0 | 0 | 0 |
| Planorbidae | 0 | 0 | 0 | 0 |
| Platyhelminthes | 0 | 0 | 0 | 0 |
| Plecoptera | 0 | 0 | 0 | 0 |
| Plumulariidae | 0 | 0 | 0 | 0 |
| Polycentropodidae | 0 | 0 | 0 | 0 |
| Polycentropus | 0 | 0 | 0 | 5 |
| Polypedilum | 0 | 0 | 0 | 0 |
| Polypedilum aviceps | 0 | 0 | 0 | 0 |
| Polypedilum convictum grp. | 0 | 0 | 3 | 32 |
| Polypedilum fallax | 0 | 0 | 0 | 0 |
| Polypedilum flavum | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 22030062 | 19010042 | 28020221 | 25020111 |
|---|---|---|---|---|
| Sample date -> | 3/21/1994 | 11/1/1994 | 7/27/1994 | 10/24/1994 |
| Taxon Name / SampleID/BenID -> | SampleID 3105/BenthID 3980(#counted) | SampleID 3682/BenthID 4628(#counted) | SampleID 3797/BenthID 4802(#counted) | SampleID 3952/BenthID 5024(#counted) |
| Polypedilum halterale grp. | 0 | 0 | 0 | 3 |
| Polypedilum illinoense | 24 | 2 | 0 | 0 |
| Polypedilum illinoense grp. | 0 | 0 | 0 | 0 |
| Polypedilum scalaenum | 0 | 0 | 0 | 0 |
| Polypedilum scalaenum grp. | 0 | 0 | 0 | 0 |
| Polypedilum sp. a epler | 0 | 0 | 0 | 0 |
| Polypedilum tritum | 0 | 1 | 0 | 0 |
| Pomacea paludosa | 4 | 0 | 0 | 0 |
| Pristina aequiseta | 0 | 0 | 0 | 0 |
| Pristina synclites | 0 | 0 | 0 | 0 |
| Pristinella jenkinae | 0 | 0 | 0 | 0 |
| Probezzia | 0 | 0 | 0 | 0 |
| Procambarus | 2 | 0 | 1 | 0 |
| Procladius | 0 | 0 | 0 | 0 |
| Procladius (holotanypus) | 0 | 0 | 0 | 0 |
| Procloeon viridocularis | 0 | 0 | 4 | 0 |
| Progomphus | 0 | 0 | 0 | 0 |
| Progomphus obscurus | 0 | 0 | 0 | 0 |
| Promoresia tardella | 0 | 0 | 0 | 0 |
| Prostoma rubrum | 0 | 0 | 0 | 0 |
| Psammoryctides convolutus | 0 | 0 | 0 | 0 |
| Pseudochironomus | 0 | 0 | 0 | 0 |
| Pseudocloeon | 0 | 0 | 0 | 0 |
| Psychodidae | 0 | 0 | 0 | 0 |
| Pycnopsyche | 0 | 0 | 0 | 0 |
| Pyralidae | 0 | 0 | 1 | 0 |
| Pyrgophorus platyrachis | 0 | 0 | 0 | 0 |
| Ranatra kirkaldyi | 0 | 0 | 0 | 0 |
| Rhagovelia | 0 | 0 | 0 | 0 |
| Rheocricotopus | 0 | 0 | 0 | 0 |
| Rheocricotopus robacki | 3 | 0 | 0 | 0 |
| Rheocricotopus tuberculatus | 0 | 0 | 0 | 0 |
| Rheotanytarsus | 0 | 0 | 0 | 1 |
| Rheotanytarsus distinctissimus grp. | 18 | 0 | 0 | 0 |
| Rheotanytarsus exiguus | 0 | 0 | 0 | 0 |
| Rheotanytarsus exiguus grp. | 0 | 8 | 0 | 0 |
| Rheotanytarsus pellucidus | 0 | 0 | 0 | 0 |
| Scirtes | 1 | 0 | 0 | 0 |
| Scirtidae | 0 | 0 | 0 | 0 |
| Serratella deficiens | 0 | 0 | 0 | 0 |
| Sialis | 0 | 1 | 0 | 0 |
| Silvius | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 22030062 | 19010042 | 28020221 | 25020111 |
|---|---|---|---|---|
| Sample date -> | 3/21/1994 | 11/1/1994 | 7/27/1994 | 10/24/1994 |
| | SampleID | SampleID | SampleID | SampleID |
| | 3105/BenthID | 3682/BenthID | 3797/BenthID | 3952/BenthID |
| Taxon Name / SampleID/BenID -> | 3980(#counted) | 4628(#counted) | 4802(#counted) | 5024(#counted) |
| Simuliidae | 1 | 0 | 0 | 0 |
| Simulium | 0 | 4 | 1 | 0 |
| Slavina appendiculata | 0 | 0 | 0 | 0 |
| Somatogyrus walkerianus | 0 | 0 | 0 | 0 |
| Sperchon | 0 | 0 | 0 | 0 |
| Sperchonopsis | 0 | 0 | 0 | 0 |
| Sperchopsis | 0 | 0 | 0 | 0 |
| Sphaeriidae | 0 | 0 | 0 | 0 |
| Sphaeriidae(mollusca) | 0 | 0 | 0 | 0 |
| Sphaeroma | 0 | 0 | 0 | 0 |
| Sphaeromias | 0 | 0 | 0 | 0 |
| Spirosperma | 0 | 0 | 0 | 0 |
| Spirosperma ferox | 0 | 0 | 0 | 0 |
| Stelechomyia perpulchra | 0 | 0 | 0 | 0 |
| Stempellina | 0 | 0 | 0 | 0 |
| Stempellina sp. a epler | 0 | 0 | 0 | 0 |
| Stempellinella | 1 | 0 | 0 | 0 |
| Stenacron | 0 | 0 | 0 | 0 |
| Stenacron floridense | 1 | 0 | 0 | 0 |
| Stenacron interpunctatum | 0 | 0 | 0 | 0 |
| Stenelmis | 3 | 0 | 0 | 0 |
| Stenelmis decorata | 0 | 0 | 0 | 0 |
| Stenelmis hungerfordi | 0 | 0 | 8 | 0 |
| Stenochironomus | 0 | 1 | 0 | 0 |
| Stenonema | 0 | 0 | 0 | 0 |
| Stenonema exiguum | 0 | 0 | 0 | 10 |
| Stenonema smithae | 0 | 9 | 0 | 0 |
| Stratiomyidae | 0 | 0 | 0 | 0 |
| Stylaria lacustris | 0 | 0 | 0 | 0 |
| Synorthocladius | 0 | 0 | 0 | 0 |
| Tabanus | 0 | 0 | 0 | 0 |
| Taeniopteryx lita | 0 | 0 | 0 | 0 |
| Tanytarsus | 0 | 0 | 0 | 0 |
| Tanytarsus sp. a epler | 0 | 0 | 4 | 0 |
| Tanytarsus sp. c epler | 7 | 0 | 8 | 1 |
| Tanytarsus sp. d epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. e epler | 0 | 0 | 1 | 0 |
| Tanytarsus sp. g epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. l epler | 2 | 3 | 0 | 0 |
| Tanytarsus sp. m epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. o epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. r epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. s epler | 1 | 0 | 0 | 0 |
| Tanytarsus sp. t epler | 0 | 0 | 1 | 0 |
| Tanytarsus sp. u epler | 0 | 0 | 0 | 0 |
| Taphromysis bowmani | 0 | 0 | 0 | 0 |



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|---|---|---|---|---|
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| | SampleID | SampleID | SampleID | SampleID |
| | 3105/BenthID | 3682/BenthID | 3797/BenthID | 3952/BenthID |
| Taxon Name / SampleID/BenID -> | 3980(#counted) | 4628(#counted) | 4802(#counted) | 5024(#counted) |
| Thienemanniella | 2 | 4 | 1 | 0 |
| Thienemanniella lobapodema | 0 | 0 | 0 | 0 |
| Thienemanniella similis | 0 | 0 | 0 | 0 |
| Thienemanniella sp. a epler | 0 | 0 | 0 | 0 |
| Thienemannimyia grp. | 0 | 0 | 0 | 0 |
| Tipula | 0 | 0 | 0 | 0 |
| Tipulidae | 0 | 0 | 0 | 0 |
| Torrenticola | 0 | 0 | 1 | 0 |
| Triaenodes | 0 | 1 | 1 | 0 |
| Triaenodes ignitus | 0 | 0 | 0 | 0 |
| Triaenodes perna | 0 | 0 | 0 | 0 |
| Tribelos | 0 | 1 | 0 | 0 |
| Tribelos atrum | 0 | 0 | 0 | 0 |
| Tribelos fuscicornis | 0 | 0 | 0 | 0 |
| Tribelos jucundum | 0 | 0 | 0 | 0 |
| Tricorythodes albilineatus | 0 | 0 | 0 | 0 |
| Tubificidae | 0 | 0 | 0 | 0 |
| Turbellaria | 0 | 0 | 0 | 0 |
| Tvetenia | 0 | 0 | 0 | 0 |
| Tvetenia discoloripes grp. | 0 | 0 | 0 | 0 |
| Unionicola | 0 | 0 | 0 | 0 |
| Unniella multivirga | 0 | 0 | 0 | 0 |
| Veliidae | 0 | 0 | 0 | 0 |
| Xenochironomus xenolabis | 0 | 0 | 0 | 1 |
| Xestochironomus | 0 | 0 | 0 | 0 |
| Xylotopus par | 0 | 0 | 0 | 0 |
| Zygoptera | 0 | 1 | 0 | 0 |

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| As Calculated / STORET station -> | 20010454 | 31010050 | 33010065 | 20030265 |
|---|---|---|---|---|
| Sample date -> | 1/31/1995 | 2/13/1995 | 7/12/1995 | 10/2/1995 |
| | SampleID 6810/BenthID | SampleID 7183/BenthID | SampleID 7224/BenthID | SampleID 7776/BenthID |
| Taxon Name / SampleID/BenID -> | 7823(#counted) | 8268(#counted) | 8306(#counted) | 8853(#counted) |
| Ablabesmyia (karelia) grp. | 0 | 0 | 0 | 0 |
| Ablabesmyia hauberi | 0 | 0 | 0 | 0 |
| Ablabesmyia mallochi | 0 | 0 | 0 | 0 |
| Ablabesmyia rhamphe grp. | 0 | 0 | 0 | 0 |
| Acentrella parvula | 0 | 0 | 0 | 0 |
| Acerpenna pygmaea | 0 | 0 | 4 | 0 |
| Acroneuria | 0 | 0 | 2 | 0 |
| Acroneuria abnormis | 0 | 5 | 0 | 0 |
| Acroneuria arenosa | 0 | 0 | 0 | 0 |
| Acroneuria arenosa/evoluta | 0 | 0 | 0 | 0 |
| Acroneuria lycorias | 0 | 0 | 0 | 0 |
| Agarodes libalis | 0 | 0 | 0 | 0 |
| Alluaudomyia | 1 | 0 | 0 | 0 |
| Amnicola | 2 | 0 | 0 | 4 |
| Amnicola dalli | 0 | 0 | 0 | 0 |
| Amnicola dalli johnsoni | 0 | 0 | 0 | 0 |
| Amphipoda | 0 | 0 | 0 | 0 |
| Ancylidae | 0 | 0 | 0 | 0 |
| Ancyronyx | 0 | 0 | 0 | 0 |
| Ancyronyx variegatus | 0 | 0 | 1 | 0 |
| Anisocentropus pyraloides | 0 | 1 | 5 | 0 |
| Anopheles | 0 | 0 | 0 | 0 |
| Apsectrotanypus johnsoni | 0 | 0 | 0 | 0 |
| Argia | 0 | 0 | 1 | 0 |
| Argia fumipennis | 3 | 0 | 0 | 0 |
| Argia moesta | 0 | 0 | 0 | 0 |
| Argia sedula | 0 | 0 | 0 | 0 |
| Argia tibialis | 0 | 0 | 0 | 0 |
| Arrenurus | 0 | 0 | 0 | 0 |
| Arrenurus problecornis | 0 | 0 | 0 | 0 |
| Astacidae | 1 | 0 | 0 | 0 |
| Atherix | 0 | 0 | 0 | 0 |
| Atractides | 0 | 0 | 1 | 0 |
| Atrichopogon | 0 | 0 | 0 | 0 |
| Aulodrilus pigueti | 0 | 0 | 0 | 1 |
| Aulodrilus pluriseta | 0 | 0 | 0 | 0 |
| Baetidae | 0 | 0 | 0 | 4 |
| Baetis | 0 | 0 | 0 | 0 |
| Baetis intercalaris | 0 | 0 | 0 | 0 |
| Baetisca rogersi | 0 | 0 | 0 | 0 |
| Beardius truncatus | 0 | 0 | 0 | 0 |
| Belostoma | 0 | 0 | 0 | 0 |
| Belostomatidae | 0 | 0 | 0 | 0 |
| Bivalvia | 0 | 0 | 0 | 0 |
| Bourletiella | 0 | 0 | 0 | 0 |
| Boyeria vinosa | 0 | 2 | 1 | 0 |
| Brachycentrus | 0 | 0 | 0 | 0 |
| Brachycentrus chelatus | 0 | 0 | 0 | 0 |
| Brachycentrus numerosus | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 20010454 | 31010050 | 33010065 | 20030265 |
|---|---|---|---|---|
| Sample date -> | 1/31/1995 | 2/13/1995 | 7/12/1995 | 10/2/1995 |
| | SampleID | SampleID | SampleID | SampleID |
| | 6810/BenthID | 7183/BenthID | 7224/BenthID | 7776/BenthID |
| Taxon Name / SampleID/BenID -> | 7823(#counted) | 8268(#counted) | 8306(#counted) | 8853(#counted) |
| Brachycercus maculatus | 0 | 0 | 0 | 0 |
| Caecidotea | 0 | 0 | 0 | 0 |
| Caecidotea racovitzai | 0 | 0 | 0 | 0 |
| Caenis | 0 | 0 | 0 | 0 |
| Caenis diminuta | 0 | 0 | 0 | 0 |
| Caenis hilaris | 0 | 0 | 0 | 0 |
| Callibaetis floridanus | 0 | 0 | 0 | 0 |
| Calopteryx | 0 | 0 | 1 | 0 |
| Calopteryx maculata | 0 | 0 | 0 | 0 |
| Cambaridae | 0 | 1 | 1 | 0 |
| Campeloma | 0 | 0 | 0 | 0 |
| Campeloma limum | 0 | 0 | 0 | 0 |
| Cassidinidea ovalis | 2 | 0 | 0 | 0 |
| Cecidomyiidae | 0 | 0 | 0 | 0 |
| Ceratopogonidae | 0 | 0 | 0 | 0 |
| Cernotina | 0 | 0 | 0 | 0 |
| Chaoborus | 0 | 0 | 0 | 0 |
| Chaoborus albatus | 0 | 0 | 0 | 0 |
| Chauliodes | 0 | 0 | 0 | 0 |
| Chelifera | 0 | 0 | 0 | 0 |
| Cheumatopsyche | 0 | 14 | 0 | 1 |
| Chimarra | 0 | 0 | 1 | 0 |
| Chironomus | 0 | 0 | 0 | 0 |
| Choroterpes basalis | 0 | 0 | 0 | 0 |
| Choroterpes hubbelli | 0 | 0 | 0 | 0 |
| Cladotanytarsus | 0 | 0 | 0 | 0 |
| Cladotanytarsus cf. daviesi | 0 | 0 | 0 | 0 |
| Cladotanytarsus sp. i epler | 0 | 0 | 0 | 0 |
| Clathrosperchon | 0 | 0 | 0 | 0 |
| Climacea areolaris | 0 | 0 | 0 | 0 |
| Clinotanypus | 2 | 0 | 0 | 0 |
| Coelotanypus | 0 | 0 | 0 | 0 |
| Coelotanypus scapularis | 0 | 0 | 0 | 0 |
| Coenagrionidae | 0 | 0 | 0 | 0 |
| Collembola | 0 | 0 | 0 | 0 |
| Conchapelopia | 0 | 3 | 1 | 0 |
| Corbicula fluminea | 0 | 0 | 0 | 1 |
| Corduliidae | 0 | 0 | 0 | 0 |
| Corydalus | 0 | 0 | 0 | 0 |
| Corydalus cornuta | 0 | 0 | 0 | 0 |
| Corydalus cornutus | 0 | 0 | 0 | 0 |
| Corynoneura | 0 | 0 | 0 | 0 |
| Corynoneura sp. b epler | 0 | 0 | 1 | 0 |
| Corynoneura sp. c epler | 0 | 0 | 0 | 0 |
| Corynoneura taris | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 20010454 | 31010050 | 33010065 | 20030265 |
|---|---|---|---|---|
| Sample date -> | 1/31/1995 | 2/13/1995 | 7/12/1995 | 10/2/1995 |
| | SampleID 6810/BenthID | SampleID 7183/BenthID | SampleID 7224/BenthID | SampleID 7776/BenthID |
| Taxon Name / SampleID/BenID -> | 7823(#counted) | 8268(#counted) | 8306(#counted) | 8853(#counted) |
| Crangonyx | 0 | 0 | 0 | 0 |
| Cricotopus | 0 | 0 | 0 | 0 |
| Cricotopus bicinctus | 1 | 0 | 0 | 0 |
| Cricotopus bicinctus grp. | 0 | 0 | 0 | 0 |
| Cricotopus or orthocladius | 0 | 0 | 0 | 0 |
| Cryptochironomus | 0 | 0 | 0 | 1 |
| Cryptotendipes | 0 | 0 | 0 | 0 |
| Curculionidae | 0 | 0 | 0 | 0 |
| Cyrnellus fraternus | 1 | 0 | 0 | 0 |
| Demicryptochironomus | 0 | 0 | 0 | 0 |
| Dero digitata | 0 | 0 | 0 | 0 |
| Dero digitata complex | 0 | 0 | 0 | 0 |
| Dero lodeni | 0 | 0 | 0 | 0 |
| Dero pectinata | 0 | 0 | 0 | 0 |
| Dero trifida | 0 | 0 | 0 | 0 |
| Dero vaga | 0 | 0 | 0 | 0 |
| Dicrotendipes | 0 | 0 | 0 | 0 |
| Dicrotendipes modestus | 0 | 0 | 0 | 0 |
| Dicrotendipes neomodestus | 0 | 0 | 0 | 0 |
| Dicrotendipes simpsoni | 0 | 0 | 0 | 0 |
| Dicrotendipes sp. a epler | 0 | 0 | 0 | 0 |
| Dineutus | 0 | 0 | 0 | 0 |
| Dineutus discolor | 0 | 1 | 0 | 0 |
| Dineutus serrulatus | 0 | 0 | 0 | 0 |
| Diplectrona modesta | 0 | 0 | 0 | 0 |
| Dixa | 0 | 2 | 0 | 0 |
| Dixella | 0 | 0 | 0 | 0 |
| Djalmabatista pulcher | 0 | 0 | 0 | 0 |
| Dolichopodidae | 0 | 0 | 0 | 0 |
| Dromogomphus armatus | 0 | 0 | 0 | 0 |
| Dromogomphus spinosus | 0 | 0 | 0 | 0 |
| Dryopidae | 0 | 0 | 0 | 0 |
| Dubiraphia | 0 | 3 | 0 | 0 |
| Dubiraphia quadrinotata | 0 | 0 | 0 | 0 |
| Dubiraphia vittata | 0 | 0 | 0 | 0 |
| Dugesia | 0 | 0 | 0 | 0 |
| Dugesia tigrina | 0 | 0 | 0 | 0 |
| Eclipidrilus | 0 | 0 | 3 | 3 |
| Eclipidrilus palustris | 0 | 0 | 0 | 0 |
| Ectopria | 0 | 0 | 0 | 0 |
| Elimia | 0 | 0 | 0 | 0 |
| Elimia floridensis | 10 | 0 | 0 | 0 |
| Empididae | 0 | 0 | 0 | 1 |
| Enallagma | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 20010454 | 31010050 | 33010065 | 20030265 |
|---|---|---|---|---|
| Sample date -> | 1/31/1995 | 2/13/1995 | 7/12/1995 | 10/2/1995 |
| | SampleID | SampleID | SampleID | SampleID |
| | 6810/BenthID | 7183/BenthID | 7224/BenthID | 7776/BenthID |
| Taxon Name / SampleID/BenID -> | 7823(#counted) | 8268(#counted) | 8306(#counted) | 8853(#counted) |
| Enallagma cardenium | 7 | 0 | 0 | 0 |
| Enchytraeidae | 0 | 2 | 0 | 1 |
| Endotribelos hesperium | 1 | 0 | 0 | 0 |
| Enochrus | 0 | 0 | 0 | 0 |
| Ephemerellidae | 0 | 0 | 0 | 0 |
| Ephydridae | 0 | 0 | 0 | 0 |
| Epitheca | 0 | 0 | 0 | 0 |
| Epitheca princeps regina | 0 | 0 | 0 | 0 |
| Eurylophella doris | 0 | 0 | 0 | 0 |
| Eurylophella temporalis | 0 | 0 | 0 | 0 |
| Ferrissia | 0 | 0 | 0 | 0 |
| Gammaridae | 0 | 0 | 0 | 0 |
| Gammarus | 0 | 0 | 0 | 0 |
| Gammarus tigrinus | 1 | 0 | 0 | 0 |
| Gastropoda | 0 | 0 | 0 | 0 |
| Geayia | 3 | 0 | 0 | 0 |
| Gerridae | 0 | 0 | 0 | 0 |
| Gloiobdella elongata | 0 | 0 | 0 | 0 |
| Goeldichironomus fluctuans | 0 | 0 | 0 | 0 |
| Gomphidae | 0 | 0 | 0 | 0 |
| Gomphus | 1 | 0 | 1 | 0 |
| Gomphus minutus | 0 | 0 | 0 | 0 |
| Gonielmis | 0 | 0 | 0 | 0 |
| Gonielmis dietrichi | 0 | 0 | 2 | 0 |
| Grandidierella bonnieroides | 2 | 0 | 0 | 0 |
| Gyretes iricolor | 0 | 0 | 2 | 0 |
| Haber speciosus | 0 | 0 | 1 | 0 |
| Hagenius brevistylus | 0 | 0 | 1 | 0 |
| Hebetancylus excentricus | 0 | 0 | 0 | 0 |
| Helobdella stagnalis | 0 | 0 | 0 | 0 |
| Helobdella triserialis | 0 | 0 | 0 | 0 |
| Helopelopia | 0 | 0 | 0 | 0 |
| Hemerodromia | 0 | 2 | 1 | 0 |
| Hemiptera | 0 | 0 | 0 | 1 |
| Heptageniidae | 0 | 0 | 0 | 0 |
| Hetaerina | 0 | 0 | 0 | 0 |
| Hetaerina titia | 1 | 0 | 1 | 0 |
| Heteroplectron americanum | 0 | 0 | 0 | 0 |
| Hexagenia | 0 | 0 | 0 | 0 |
| Hexagenia bilineata | 0 | 0 | 0 | 0 |
| Hexagenia limbata | 0 | 0 | 0 | 0 |
| Hexagenia munda orlando | 2 | 0 | 0 | 0 |
| Hexatoma | 0 | 0 | 1 | 0 |
| Hyalella azteca | 14 | 0 | 2 | 0 |
| Hydra | 0 | 0 | 0 | 0 |
| Hydrachna | 0 | 0 | 0 | 0 |
| Hydraena marginicollis | 0 | 0 | 0 | 0 |
| Hydraenidae | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 20010454 | 31010050 | 33010065 | 20030265 |
|---|---|---|---|---|
| Sample date -> | 1/31/1995 | 2/13/1995 | 7/12/1995 | 10/2/1995 |
| | SampleID | SampleID | SampleID | SampleID |
| | 6810/BenthID | 7183/BenthID | 7224/BenthID | 7776/BenthID |
| Taxon Name / SampleID/BenID -> | 7823(#counted) | 8268(#counted) | 8306(#counted) | 8853(#counted) |
| Hydrobiidae | 0 | 0 | 0 | 0 |
| Hydrodroma | 0 | 1 | 0 | 0 |
| Hydrophilidae | 0 | 0 | 0 | 0 |
| Hydroporus | 0 | 0 | 0 | 0 |
| Hydropsyche | 1 | 4 | 8 | 0 |
| Hydropsyche decalda | 0 | 0 | 0 | 0 |
| Hydropsychidae | 0 | 0 | 0 | 0 |
| Hydroptila | 0 | 0 | 0 | 0 |
| Hydroptilidae | 0 | 0 | 0 | 0 |
| Hygrobates | 0 | 0 | 0 | 0 |
| Hygrotus | 0 | 0 | 0 | 0 |
| Ischnura | 0 | 0 | 0 | 1 |
| Ischnura hastata | 0 | 0 | 0 | 0 |
| Isonychia | 0 | 0 | 0 | 0 |
| Isoperla | 0 | 1 | 0 | 0 |
| Isopoda | 0 | 0 | 0 | 0 |
| Isotomurus | 0 | 0 | 0 | 0 |
| Isotomurus tricolor | 0 | 0 | 0 | 0 |
| Kiefferulus | 0 | 0 | 0 | 0 |
| Krendowskia | 0 | 0 | 0 | 0 |
| Labiobaetis | 0 | 0 | 0 | 0 |
| Labrundinia | 0 | 0 | 0 | 0 |
| Labrundinia becki | 0 | 0 | 0 | 0 |
| Labrundinia johannseni | 0 | 0 | 0 | 0 |
| Labrundinia neopilosella | 0 | 0 | 0 | 0 |
| Labrundinia pilosella | 0 | 0 | 0 | 0 |
| Laevapex | 0 | 0 | 0 | 1 |
| Laevapex peninsulae | 0 | 0 | 0 | 0 |
| Larsia berneri | 0 | 0 | 0 | 0 |
| Larsia decolorata | 0 | 0 | 0 | 0 |
| Lauterborniella agrayloides | 0 | 0 | 0 | 0 |
| Lebertia | 1 | 0 | 0 | 0 |
| Lepidoptera | 0 | 0 | 0 | 0 |
| Leptoceridae | 0 | 0 | 0 | 0 |
| Leptophlebia | 0 | 0 | 0 | 0 |
| Leptophlebiidae | 0 | 0 | 4 | 0 |
| Leuctra | 0 | 0 | 8 | 0 |
| Libellulidae | 0 | 0 | 0 | 0 |
| Limnesia | 0 | 0 | 0 | 0 |
| Limnodrilus hoffmeisteri | 16 | 1 | 1 | 4 |
| Limnophila | 0 | 0 | 0 | 0 |
| Limonia | 0 | 0 | 0 | 0 |
| Liodessus | 0 | 0 | 0 | 0 |
| Liodessus affinis | 0 | 0 | 0 | 0 |
| Lioporeus | 0 | 0 | 0 | 0 |
| Lirceus | 0 | 0 | 0 | 0 |
| Littoridinops monroensis | 0 | 0 | 0 | 0 |
| Lumbriculidae | 1 | 0 | 0 | 0 |
| Lumbriculus variegatus | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 20010454 | 31010050 | 33010065 | 20030265 |
|---|---|---|---|---|
| Sample date -> | 1/31/1995 | 2/13/1995 | 7/12/1995 | 10/2/1995 |
| | SampleID 6810/BenthID | SampleID 7183/BenthID | SampleID 7224/BenthID | SampleID 7776/BenthID |
| Taxon Name / SampleID/BenID -> | 7823(#counted) | 8268(#counted) | 8306(#counted) | 8853(#counted) |
| Lype diversa | 0 | 0 | 0 | 0 |
| Maccaffertium | 0 | 0 | 0 | 0 |
| Maccaffertium smithae | 0 | 0 | 0 | 0 |
| Macromia | 0 | 0 | 0 | 0 |
| Macromia taeniolata | 0 | 0 | 0 | 0 |
| Macromiidae | 0 | 0 | 0 | 0 |
| Macronychus glabratus | 0 | 0 | 0 | 0 |
| Macrostemum carolina | 0 | 0 | 2 | 0 |
| Mayatrichia | 0 | 0 | 0 | 0 |
| Mayatrichia ayama | 0 | 0 | 0 | 0 |
| Meropelopia | 0 | 1 | 0 | 0 |
| Mesosmittia | 0 | 0 | 0 | 1 |
| Metrobates | 0 | 0 | 0 | 0 |
| Micrasema | 0 | 0 | 0 | 0 |
| Micrasema rusticum | 0 | 0 | 0 | 0 |
| Micrasema wataga | 0 | 0 | 0 | 0 |
| Microcylloepus | 0 | 0 | 0 | 0 |
| Microcylloepus pusillus | 0 | 0 | 1 | 0 |
| Micromenetus | 0 | 0 | 0 | 0 |
| Micromenetus dilatatus | 0 | 0 | 0 | 0 |
| Microtendipes pedellus | 0 | 0 | 0 | 0 |
| Microtendipes pedellus grp. | 0 | 1 | 0 | 0 |
| Microtendipes rydalensis | 0 | 0 | 0 | 0 |
| Microtendipes rydalensis grp. | 0 | 0 | 1 | 0 |
| Mideopsis | 0 | 0 | 0 | 0 |
| Molanna | 0 | 0 | 0 | 0 |
| Mooreobdella | 0 | 0 | 0 | 0 |
| Mooreobdella tetragon | 0 | 0 | 0 | 0 |
| Muscidae | 0 | 0 | 0 | 0 |
| Naididae | 0 | 0 | 0 | 0 |
| Nais behningi | 0 | 0 | 0 | 0 |
| Nais communis | 0 | 0 | 1 | 0 |
| Nais communis complex | 0 | 0 | 0 | 0 |
| Nais pardalis | 0 | 0 | 0 | 0 |
| Nais simplex | 0 | 0 | 0 | 0 |
| Nais variabilis | 0 | 0 | 0 | 0 |
| Nanocladius | 0 | 1 | 0 | 0 |
| Nectopsyche | 0 | 0 | 0 | 0 |
| Nectopsyche candida | 0 | 0 | 0 | 0 |
| Nectopsyche exquisita | 0 | 0 | 0 | 0 |
| Nectopsyche pavida | 0 | 0 | 0 | 0 |
| Nemertea | 0 | 0 | 0 | 0 |
| Neoperla | 0 | 0 | 2 | 0 |
| Neoperla clymene | 0 | 0 | 0 | 0 |
| Neoporus | 0 | 0 | 0 | 0 |
| Neotrichia | 0 | 0 | 0 | 0 |
| Neumania | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 20010454 | 31010050 | 33010065 | 20030265 |
|---|---|---|---|---|
| Sample date -> | 1/31/1995 | 2/13/1995 | 7/12/1995 | 10/2/1995 |
| | SampleID 6810/BenthID | SampleID 7183/BenthID | SampleID 7224/BenthID | SampleID 7776/BenthID |
| Taxon Name / SampleID/BenID -> | 7823(#counted) | 8268(#counted) | 8306(#counted) | 8853(#counted) |
| Neumania distincta | 0 | 0 | 0 | 0 |
| Neureclipsis | 0 | 0 | 0 | 0 |
| Neureclipsis crepuscularis | 0 | 0 | 1 | 0 |
| Neurocordulia | 0 | 0 | 3 | 0 |
| Neurocordulia alabamensis | 0 | 0 | 0 | 0 |
| Neurocordulia virginiensis | 0 | 0 | 0 | 0 |
| Nigronia | 0 | 0 | 0 | 0 |
| Nigronia fasciatus | 0 | 0 | 0 | 0 |
| Nigronia serricornis | 0 | 0 | 0 | 0 |
| Nilotanypus | 0 | 0 | 0 | 0 |
| Nilothauma | 0 | 0 | 0 | 1 |
| Notogillia wetherbyi | 0 | 0 | 0 | 0 |
| Nyctiophylax | 0 | 0 | 0 | 0 |
| Odonata | 0 | 0 | 0 | 0 |
| Odontomyia | 0 | 0 | 0 | 0 |
| Oecetis | 0 | 2 | 1 | 0 |
| Oecetis cinerascens | 0 | 0 | 0 | 0 |
| Oecetis georgia | 0 | 0 | 0 | 0 |
| Oecetis inconspicua cmplx. | 0 | 0 | 0 | 0 |
| Oecetis morsei or sphyra | 0 | 0 | 0 | 0 |
| Oecetis parva | 0 | 0 | 0 | 0 |
| Oecetis persimilis | 0 | 0 | 0 | 0 |
| Oecetis sp. a floyd | 0 | 0 | 0 | 0 |
| Oecetis sp. e floyd | 0 | 0 | 0 | 0 |
| Ora/scirtes | 0 | 0 | 0 | 0 |
| Oribatei | 0 | 0 | 0 | 0 |
| Orthocladiinae | 0 | 0 | 0 | 0 |
| Orthocladiinae gen. c epler | 0 | 0 | 0 | 0 |
| Orthocladiinae gen. f epler | 0 | 0 | 0 | 0 |
| Orthocladius annectens | 0 | 1 | 0 | 0 |
| Orthotrichia | 0 | 0 | 0 | 0 |
| Oxyethira | 2 | 0 | 0 | 0 |
| Pachydiplax longipennis | 0 | 0 | 0 | 0 |
| Pagastiella | 1 | 0 | 1 | 0 |
| Palaemonetes | 0 | 0 | 0 | 0 |
| Palaemonetes kadiakensis | 0 | 0 | 0 | 0 |
| Palaemonetes paludosus | 4 | 0 | 0 | 0 |
| Palpomyia/bezzia grp. | 4 | 0 | 1 | 3 |
| Paracladopelma | 0 | 0 | 0 | 0 |
| Paracladopelma loganae | 0 | 0 | 0 | 0 |
| Paracladopelma undine | 0 | 0 | 0 | 0 |
| Paragnetina | 0 | 0 | 1 | 0 |
| Paragnetina fumosa | 0 | 1 | 0 | 0 |



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| As Calculated / STORET station -> | 20010454 | 31010050 | 33010065 | 20030265 |
|---|---|---|---|---|
| Sample date -> | 1/31/1995 | 2/13/1995 | 7/12/1995 | 10/2/1995 |
| | SampleID 6810/BenthID | SampleID 7183/BenthID | SampleID 7224/BenthID | SampleID 7776/BenthID |
| Taxon Name / SampleID/BenID -> | 7823(#counted) | 8268(#counted) | 8306(#counted) | 8853(#counted) |
| Parakiefferiella | 1 | 0 | 0 | 0 |
| Paralauterborniella nigrohalterale | 0 | 0 | 0 | 0 |
| Paraleptophlebia volitans | 0 | 0 | 0 | 0 |
| Parametriocnemus | 0 | 0 | 6 | 4 |
| Parametriocnemus sp. f epler | 0 | 0 | 0 | 0 |
| Paranyctiophylax | 0 | 0 | 0 | 0 |
| Paraplea | 0 | 0 | 0 | 0 |
| Paraponyx | 0 | 0 | 0 | 0 |
| Paratanytarsus sp. a epler | 0 | 0 | 0 | 0 |
| Paratanytarsus sp. c epler | 0 | 0 | 0 | 0 |
| Paratendipes subaequalis | 0 | 0 | 0 | 0 |
| Pelecypoda | 0 | 0 | 0 | 0 |
| Pelonomus obscurus | 0 | 0 | 0 | 0 |
| Peltodytes | 0 | 0 | 0 | 0 |
| Pentaneura inconspicua | 0 | 0 | 0 | 0 |
| Perlesta | 0 | 0 | 0 | 0 |
| Perlesta placida | 0 | 8 | 0 | 0 |
| Perlesta placida complex | 0 | 0 | 0 | 0 |
| Perlinella | 0 | 0 | 0 | 0 |
| Petrophila | 0 | 0 | 0 | 0 |
| Phaenopsectra obediens grp. | 0 | 0 | 0 | 0 |
| Phaenopsectra punctipes grp. | 0 | 0 | 0 | 0 |
| Phylocentropus | 0 | 0 | 0 | 0 |
| Physella | 0 | 0 | 0 | 1 |
| Physella cubensis | 0 | 0 | 0 | 0 |
| Piona | 0 | 0 | 0 | 0 |
| Pisidiidae | 0 | 0 | 1 | 18 |
| Pisidium | 0 | 0 | 0 | 0 |
| Planariidae | 0 | 0 | 0 | 0 |
| Planorbella duryi | 0 | 0 | 0 | 1 |
| Planorbella scalaris | 1 | 0 | 0 | 0 |
| Planorbidae | 0 | 0 | 0 | 0 |
| Platyhelminthes | 0 | 0 | 0 | 0 |
| Plecoptera | 0 | 0 | 0 | 0 |
| Plumulariidae | 0 | 0 | 0 | 0 |
| Polycentropodidae | 0 | 0 | 0 | 0 |
| Polycentropus | 0 | 0 | 0 | 0 |
| Polypedilum | 0 | 0 | 0 | 0 |
| Polypedilum aviceps | 0 | 12 | 2 | 0 |
| Polypedilum convictum grp. | 0 | 1 | 0 | 1 |
| Polypedilum fallax | 0 | 0 | 0 | 0 |
| Polypedilum flavum | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 20010454 | 31010050 | 33010065 | 20030265 |
|---|---|---|---|---|
| Sample date -> | 1/31/1995 | 2/13/1995 | 7/12/1995 | 10/2/1995 |
| | SampleID 6810/BenthID | SampleID 7183/BenthID | SampleID 7224/BenthID | SampleID 7776/BenthID |
| Taxon Name / SampleID/BenID -> | 7823(#counted) | 8268(#counted) | 8306(#counted) | 8853(#counted) |
| Polypedilum halterale grp. | 2 | 0 | 1 | 0 |
| Polypedilum illinoense | 0 | 1 | 0 | 0 |
| Polypedilum illinoense grp. | 3 | 0 | 1 | 60 |
| Polypedilum scalaenum | 0 | 0 | 0 | 0 |
| Polypedilum scalaenum grp. | 10 | 0 | 0 | 6 |
| Polypedilum sp. a epler | 0 | 0 | 0 | 0 |
| Polypedilum tritum | 0 | 0 | 0 | 0 |
| Pomacea paludosa | 0 | 0 | 0 | 0 |
| Pristina aequiseta | 0 | 0 | 0 | 0 |
| Pristina synclites | 0 | 0 | 0 | 0 |
| Pristinella jenkinae | 0 | 0 | 0 | 0 |
| Probezzia | 0 | 0 | 0 | 0 |
| Procambarus | 0 | 0 | 0 | 0 |
| Procladius | 0 | 0 | 0 | 1 |
| Procladius (holotanypus) | 0 | 0 | 0 | 0 |
| Procloeon viridocularis | 0 | 0 | 0 | 0 |
| Progomphus | 0 | 0 | 0 | 0 |
| Progomphus obscurus | 0 | 0 | 0 | 0 |
| Promoresia tardella | 0 | 0 | 0 | 0 |
| Prostoma rubrum | 0 | 0 | 0 | 1 |
| Psammoryctides convolutus | 0 | 0 | 0 | 0 |
| Pseudochironomus | 0 | 0 | 0 | 0 |
| Pseudocloeon | 0 | 0 | 0 | 0 |
| Psychodidae | 0 | 0 | 0 | 0 |
| Pycnopsyche | 0 | 0 | 0 | 0 |
| Pyralidae | 0 | 0 | 0 | 0 |
| Pyrgophorus platyrachis | 0 | 0 | 0 | 0 |
| Ranatra kirkaldyi | 0 | 0 | 0 | 0 |
| Rhagovelia | 0 | 0 | 0 | 0 |
| Rheocricotopus | 0 | 0 | 0 | 0 |
| Rheocricotopus robacki | 0 | 1 | 2 | 1 |
| Rheocricotopus tuberculatus | 0 | 0 | 0 | 0 |
| Rheotanytarsus | 1 | 0 | 0 | 0 |
| Rheotanytarsus distinctissimus grp. | 0 | 6 | 0 | 0 |
| Rheotanytarsus exiguus | 0 | 0 | 0 | 0 |
| Rheotanytarsus exiguus grp. | 0 | 21 | 4 | 0 |
| Rheotanytarsus pellucidus | 0 | 0 | 0 | 0 |
| Scirtes | 0 | 0 | 0 | 1 |
| Scirtidae | 0 | 0 | 0 | 0 |
| Serratella deficiens | 0 | 0 | 0 | 0 |
| Sialis | 0 | 0 | 0 | 0 |
| Silvius | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 20010454 | 31010050 | 33010065 | 20030265 |
|---|---|---|---|---|
| Sample date -> | 1/31/1995 | 2/13/1995 | 7/12/1995 | 10/2/1995 |
| | SampleID | SampleID | SampleID | SampleID |
| | 6810/BenthID | 7183/BenthID | 7224/BenthID | 7776/BenthID |
| Taxon Name / SampleID/BenID -> | 7823(#counted) | 8268(#counted) | 8306(#counted) | 8853(#counted) |
| Simuliidae | 0 | 0 | 0 | 0 |
| Simulium | 1 | 2 | 1 | 0 |
| Slavina appendiculata | 0 | 0 | 0 | 0 |
| Somatogyrus walkerianus | 0 | 0 | 0 | 0 |
| Sperchon | 0 | 0 | 0 | 0 |
| Sperchonopsis | 0 | 0 | 0 | 0 |
| Sperchopsis | 0 | 0 | 0 | 0 |
| Sphaeriidae | 0 | 0 | 0 | 0 |
| Sphaeriidae(mollusca) | 0 | 0 | 0 | 0 |
| Sphaeroma | 0 | 0 | 0 | 0 |
| Sphaeromias | 0 | 0 | 0 | 0 |
| Spirosperma | 0 | 0 | 0 | 0 |
| Spirosperma ferox | 0 | 0 | 0 | 5 |
| Stelechomyia perpulchra | 0 | 1 | 0 | 0 |
| Stempellina | 0 | 1 | 0 | 0 |
| Stempellina sp. a epler | 0 | 0 | 0 | 0 |
| Stempellinella | 0 | 0 | 1 | 0 |
| Stenacron | 0 | 0 | 0 | 0 |
| Stenacron floridense | 0 | 0 | 0 | 0 |
| Stenacron interpunctatum | 0 | 0 | 0 | 0 |
| Stenelmis | 0 | 1 | 14 | 1 |
| Stenelmis decorata | 0 | 0 | 0 | 0 |
| Stenelmis hungerfordi | 0 | 0 | 0 | 0 |
| Stenochironomus | 0 | 0 | 5 | 4 |
| Stenonema | 0 | 0 | 0 | 0 |
| Stenonema exiguum | 0 | 0 | 0 | 5 |
| Stenonema smithae | 0 | 0 | 1 | 0 |
| Stratiomyidae | 0 | 0 | 0 | 0 |
| Stylaria lacustris | 0 | 0 | 0 | 0 |
| Synorthocladius | 0 | 0 | 0 | 0 |
| Tabanus | 0 | 0 | 0 | 1 |
| Taeniopteryx lita | 0 | 0 | 0 | 0 |
| Tanytarsus | 0 | 0 | 0 | 0 |
| Tanytarsus sp. a epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. c epler | 2 | 0 | 0 | 0 |
| Tanytarsus sp. d epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. e epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. g epler | 1 | 0 | 0 | 0 |
| Tanytarsus sp. l epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. m epler | 0 | 0 | 1 | 0 |
| Tanytarsus sp. o epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. r epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. s epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. t epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. u epler | 0 | 0 | 0 | 0 |
| Taphromysis bowmani | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 20010454 | 31010050 | 33010065 | 20030265 |
|---|---|---|---|---|
| Sample date -> | 1/31/1995 | 2/13/1995 | 7/12/1995 | 10/2/1995 |
| | SampleID 6810/BenthID | SampleID 7183/BenthID | SampleID 7224/BenthID | SampleID 7776/BenthID |
| Taxon Name / SampleID/BenID -> | 7823(#counted) | 8268(#counted) | 8306(#counted) | 8853(#counted) |
| Thienemanniella | 1 | 0 | 0 | 1 |
| Thienemanniella lobapodema | 0 | 0 | 0 | 0 |
| Thienemanniella similis | 0 | 0 | 0 | 0 |
| Thienemanniella sp. a epler | 0 | 0 | 0 | 0 |
| Thienemannimyia grp. | 0 | 0 | 0 | 0 |
| Tipula | 0 | 0 | 0 | 0 |
| Tipulidae | 0 | 0 | 0 | 1 |
| Torrenticola | 0 | 0 | 0 | 0 |
| Triaenodes | 0 | 0 | 0 | 0 |
| Triaenodes ignitus | 0 | 0 | 0 | 0 |
| Triaenodes perna | 0 | 0 | 0 | 0 |
| Tribelos | 0 | 0 | 0 | 0 |
| Tribelos atrum | 0 | 0 | 0 | 0 |
| Tribelos fuscicornis | 0 | 0 | 1 | 4 |
| Tribelos jucundum | 0 | 0 | 0 | 0 |
| Tricorythodes albilineatus | 2 | 0 | 0 | 0 |
| Tubificidae | 0 | 0 | 0 | 0 |
| Turbellaria | 0 | 0 | 0 | 0 |
| Tvetenia | 0 | 0 | 0 | 0 |
| Tvetenia discoloripes grp. | 0 | 1 | 0 | 0 |
| Unionicola | 0 | 0 | 0 | 0 |
| Unniella multivirga | 0 | 0 | 0 | 0 |
| Veliidae | 0 | 0 | 0 | 0 |
| Xenochironomus xenolabis | 0 | 0 | 0 | 0 |
| Xestochironomus | 0 | 0 | 0 | 0 |
| Xylotopus par | 0 | 2 | 0 | 0 |
| Zygoptera | 0 | 0 | 1 | 0 |

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| As Calculated / STORET station -> | 20030341 | 20030342 | 33010065 | 21030064 |
|---|---|---|---|---|
| Sample date -> | 10/2/1995 | 10/2/1995 | 2/14/1996 | 2/6/1996 |
| | SampleID 7778/BenthID | SampleID 7779/BenthID | SampleID 9179/BenthID | SampleID 9196/BenthID |
| Taxon Name / SampleID/BenID -> | 8855(#counted) | 8856(#counted) | 10164(#counted) | 10181(#counted) |
| Ablabesmyia (karelia) grp. | 0 | 0 | 0 | 1 |
| Ablabesmyia hauberi | 0 | 0 | 0 | 0 |
| Ablabesmyia mallochi | 2 | 4 | 9 | 0 |
| Ablabesmyia rhamphe grp. | 0 | 4 | 4 | 1 |
| Acentrella parvula | 0 | 0 | 0 | 0 |
| Acerpenna pygmaea | 4 | 0 | 0 | 0 |
| Acroneuria | 0 | 0 | 0 | 0 |
| Acroneuria abnormis | 0 | 0 | 0 | 0 |
| Acroneuria arenosa | 0 | 0 | 1 | 0 |
| Acroneuria arenosa/evoluta | 0 | 0 | 0 | 0 |
| Acroneuria lycorias | 0 | 0 | 0 | 0 |
| Agarodes libalis | 0 | 0 | 0 | 0 |
| Alluaudomyia | 0 | 0 | 0 | 0 |
| Amnicola | 0 | 0 | 0 | 0 |
| Amnicola dalli | 0 | 0 | 0 | 0 |
| Amnicola dalli johnsoni | 12 | 0 | 0 | 0 |
| Amphipoda | 0 | 0 | 0 | 0 |
| Ancylidae | 0 | 3 | 0 | 4 |
| Ancyronyx | 0 | 0 | 0 | 0 |
| Ancyronyx variegatus | 0 | 0 | 2 | 0 |
| Anisocentropus pyraloides | 0 | 0 | 0 | 0 |
| Anopheles | 0 | 0 | 0 | 0 |
| Apsectrotanypus johnsoni | 0 | 0 | 0 | 0 |
| Argia | 1 | 0 | 0 | 3 |
| Argia fumipennis | 0 | 0 | 0 | 0 |
| Argia moesta | 0 | 0 | 1 | 0 |
| Argia sedula | 0 | 0 | 0 | 0 |
| Argia tibialis | 0 | 0 | 0 | 0 |
| Arrenurus | 0 | 0 | 0 | 0 |
| Arrenurus problecornis | 0 | 0 | 0 | 0 |
| Astacidae | 0 | 0 | 0 | 0 |
| Atherix | 0 | 0 | 0 | 0 |
| Atractides | 0 | 0 | 0 | 0 |
| Atrichopogon | 0 | 0 | 0 | 0 |
| Aulodrilus pigueti | 0 | 0 | 0 | 0 |
| Aulodrilus pluriseta | 0 | 0 | 0 | 0 |
| Baetidae | 0 | 0 | 0 | 0 |
| Baetis | 0 | 0 | 0 | 0 |
| Baetis intercalaris | 0 | 0 | 0 | 0 |
| Baetisca rogersi | 0 | 0 | 0 | 0 |
| Beardius truncatus | 0 | 0 | 0 | 0 |
| Belostoma | 0 | 0 | 0 | 0 |
| Belostomatidae | 0 | 0 | 0 | 0 |
| Bivalvia | 0 | 0 | 0 | 0 |
| Bourletiella | 0 | 0 | 0 | 0 |
| Boyeria vinosa | 0 | 0 | 1 | 0 |
| Brachycentrus | 0 | 0 | 0 | 0 |
| Brachycentrus chelatus | 0 | 0 | 0 | 0 |
| Brachycentrus numerosus | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 20030341 | 20030342 | 33010065 | 21030064 |
|---|---|---|---|---|
| Sample date -> | 10/2/1995 | 10/2/1995 | 2/14/1996 | 2/6/1996 |
| | SampleID | SampleID | SampleID | SampleID |
| | 7778/BenthID | 7779/BenthID | 9179/BenthID | 9196/BenthID |
| Taxon Name / SampleID/BenID -> | 8855(#counted) | 8856(#counted) | 10164(#counted) | 10181(#counted) |
| Brachycercus maculatus | 0 | 0 | 0 | 0 |
| Caecidotea | 0 | 0 | 1 | 0 |
| Caecidotea racovitzai | 0 | 0 | 0 | 0 |
| Caenis | 1 | 0 | 0 | 2 |
| Caenis diminuta | 0 | 0 | 0 | 0 |
| Caenis hilaris | 0 | 0 | 0 | 0 |
| Callibaetis floridanus | 0 | 0 | 0 | 0 |
| Calopteryx | 1 | 0 | 0 | 0 |
| Calopteryx maculata | 0 | 0 | 0 | 0 |
| Cambaridae | 0 | 0 | 1 | 0 |
| Campeloma | 0 | 0 | 0 | 0 |
| Campeloma limum | 0 | 0 | 0 | 0 |
| Cassidinidea ovalis | 0 | 0 | 0 | 0 |
| Cecidomyiidae | 0 | 0 | 0 | 0 |
| Ceratopogonidae | 0 | 0 | 0 | 0 |
| Cernotina | 0 | 0 | 0 | 0 |
| Chaoborus | 0 | 0 | 0 | 0 |
| Chaoborus albatus | 0 | 0 | 0 | 0 |
| Chauliodes | 0 | 0 | 0 | 0 |
| Chelifera | 0 | 0 | 0 | 0 |
| Cheumatopsyche | 3 | 8 | 0 | 0 |
| Chimarra | 0 | 0 | 0 | 0 |
| Chironomus | 0 | 0 | 0 | 0 |
| Choroterpes basalis | 0 | 0 | 0 | 0 |
| Choroterpes hubbelli | 0 | 0 | 0 | 0 |
| Cladotanytarsus | 0 | 0 | 0 | 0 |
| Cladotanytarsus cf. daviesi | 0 | 0 | 0 | 0 |
| Cladotanytarsus sp. i epler | 0 | 0 | 0 | 0 |
| Clathrosperchon | 0 | 0 | 0 | 0 |
| Climacea areolaris | 0 | 0 | 0 | 0 |
| Clinotanypus | 0 | 0 | 0 | 1 |
| Coelotanypus | 0 | 0 | 0 | 0 |
| Coelotanypus scapularis | 0 | 0 | 0 | 0 |
| Coenagrionidae | 0 | 0 | 0 | 0 |
| Collembola | 0 | 0 | 0 | 0 |
| Conchapelopia | 2 | 0 | 6 | 0 |
| Corbicula fluminea | 0 | 0 | 0 | 0 |
| Corduliidae | 0 | 0 | 0 | 0 |
| Corydalus | 0 | 0 | 0 | 0 |
| Corydalus cornuta | 0 | 0 | 0 | 0 |
| Corydalus cornutus | 0 | 0 | 0 | 0 |
| Corynoneura | 0 | 0 | 0 | 0 |
| Corynoneura sp. b epler | 0 | 0 | 0 | 0 |
| Corynoneura sp. c epler | 0 | 0 | 0 | 0 |
| Corynoneura taris | 0 | 0 | 0 | 0 |



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| | SampleID 7778/BenthID | SampleID 7779/BenthID | SampleID 9179/BenthID | SampleID 9196/BenthID |
| Taxon Name / SampleID/BenID -> | 8855(#counted) | 8856(#counted) | 10164(#counted) | 10181(#counted) |
| Crangonyx | 0 | 0 | 0 | 0 |
| Cricotopus | 0 | 0 | 0 | 0 |
| Cricotopus bicinctus | 0 | 0 | 0 | 0 |
| Cricotopus bicinctus grp. | 0 | 0 | 0 | 0 |
| Cricotopus or orthocladius | 0 | 0 | 0 | 3 |
| Cryptochironomus | 0 | 0 | 0 | 0 |
| Cryptotendipes | 2 | 0 | 0 | 0 |
| Curculionidae | 0 | 0 | 0 | 0 |
| Cyrnellus fraternus | 0 | 0 | 0 | 0 |
| Demicryptochironomus | 0 | 0 | 0 | 0 |
| Dero digitata | 0 | 0 | 0 | 0 |
| Dero digitata complex | 0 | 0 | 0 | 0 |
| Dero lodeni | 0 | 0 | 0 | 0 |
| Dero pectinata | 0 | 0 | 0 | 0 |
| Dero trifida | 0 | 0 | 0 | 0 |
| Dero vaga | 0 | 0 | 0 | 0 |
| Dicrotendipes | 0 | 0 | 0 | 0 |
| Dicrotendipes modestus | 0 | 0 | 0 | 0 |
| Dicrotendipes neomodestus | 0 | 0 | 0 | 0 |
| Dicrotendipes simpsoni | 0 | 0 | 0 | 0 |
| Dicrotendipes sp. a epler | 0 | 0 | 0 | 0 |
| Dineutus | 0 | 0 | 0 | 0 |
| Dineutus discolor | 0 | 0 | 0 | 0 |
| Dineutus serrulatus | 0 | 0 | 0 | 0 |
| Diplectrona modesta | 0 | 0 | 0 | 0 |
| Dixa | 0 | 0 | 0 | 0 |
| Dixella | 0 | 0 | 0 | 0 |
| Djalmabatista pulcher | 0 | 0 | 0 | 0 |
| Dolichopodidae | 0 | 0 | 0 | 0 |
| Dromogomphus armatus | 0 | 0 | 0 | 0 |
| Dromogomphus spinosus | 0 | 0 | 0 | 0 |
| Dryopidae | 0 | 0 | 0 | 0 |
| Dubiraphia | 1 | 2 | 0 | 0 |
| Dubiraphia quadrinotata | 0 | 0 | 0 | 0 |
| Dubiraphia vittata | 0 | 0 | 0 | 0 |
| Dugesia | 0 | 0 | 0 | 0 |
| Dugesia tigrina | 0 | 0 | 0 | 0 |
| Eclipidrilus | 0 | 0 | 0 | 2 |
| Eclipidrilus palustris | 5 | 0 | 0 | 0 |
| Ectopria | 0 | 0 | 1 | 0 |
| Elimia | 0 | 0 | 0 | 0 |
| Elimia floridensis | 0 | 0 | 0 | 11 |
| Empididae | 0 | 0 | 0 | 0 |
| Enallagma | 0 | 0 | 0 | 0 |



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| | SampleID | SampleID | SampleID | SampleID |
| | 7778/BenthID | 7779/BenthID | 9179/BenthID | 9196/BenthID |
| Taxon Name / SampleID/BenID -> | 8855(#counted) | 8856(#counted) | 10164(#counted) | 10181(#counted) |
| Enallagma cardenium | 0 | 0 | 0 | 0 |
| Enchytraeidae | 8 | 2 | 1 | 0 |
| Endotribelos hesperium | 0 | 0 | 0 | 0 |
| Enochrus | 0 | 0 | 0 | 0 |
| Ephemerellidae | 0 | 0 | 0 | 0 |
| Ephydridae | 0 | 0 | 0 | 0 |
| Epitheca | 0 | 0 | 0 | 0 |
| Epitheca princeps regina | 0 | 0 | 0 | 0 |
| Eurylophella doris | 0 | 0 | 0 | 0 |
| Eurylophella temporalis | 0 | 0 | 0 | 0 |
| Ferrissia | 0 | 0 | 0 | 0 |
| Gammaridae | 0 | 0 | 0 | 0 |
| Gammarus | 0 | 0 | 0 | 8 |
| Gammarus tigrinus | 0 | 0 | 0 | 0 |
| Gastropoda | 0 | 0 | 0 | 0 |
| Geayia | 0 | 0 | 0 | 0 |
| Gerridae | 0 | 0 | 0 | 0 |
| Gloiobdella elongata | 0 | 0 | 0 | 0 |
| Goeldichironomus fluctuans | 0 | 0 | 0 | 0 |
| Gomphidae | 0 | 0 | 0 | 0 |
| Gomphus | 0 | 0 | 0 | 0 |
| Gomphus minutus | 1 | 0 | 0 | 0 |
| Gonielmis | 0 | 0 | 0 | 0 |
| Gonielmis dietrichi | 0 | 0 | 0 | 0 |
| Grandidierella bonnieroides | 0 | 0 | 0 | 0 |
| Gyretes iricolor | 0 | 0 | 0 | 0 |
| Haber speciosus | 1 | 0 | 0 | 0 |
| Hagenius brevistylus | 0 | 0 | 0 | 0 |
| Hebetancylus excentricus | 0 | 0 | 0 | 0 |
| Helobdella stagnalis | 0 | 0 | 0 | 0 |
| Helobdella triserialis | 0 | 0 | 0 | 0 |
| Helopelopia | 0 | 0 | 0 | 0 |
| Hemerodromia | 0 | 0 | 1 | 4 |
| Hemiptera | 0 | 0 | 0 | 0 |
| Heptageniidae | 0 | 0 | 0 | 0 |
| Hetaerina | 0 | 0 | 0 | 0 |
| Hetaerina titia | 0 | 0 | 0 | 0 |
| Heteroplectron americanum | 0 | 0 | 0 | 0 |
| Hexagenia | 0 | 0 | 0 | 0 |
| Hexagenia bilineata | 0 | 0 | 0 | 0 |
| Hexagenia limbata | 0 | 0 | 0 | 0 |
| Hexagenia munda orlando | 0 | 0 | 0 | 0 |
| Hexatoma | 0 | 0 | 0 | 0 |
| Hyalella azteca | 0 | 0 | 0 | 17 |
| Hydra | 0 | 0 | 0 | 0 |
| Hydrachna | 0 | 0 | 1 | 0 |
| Hydraena marginicollis | 0 | 0 | 0 | 0 |
| Hydraenidae | 0 | 0 | 0 | 0 |



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| Taxon Name / SampleID/BenID -> | 8855(#counted) | 8856(#counted) | 10164(#counted) | 10181(#counted) |
| Hydrobiidae | 0 | 0 | 0 | 1 |
| Hydrodroma | 0 | 0 | 0 | 0 |
| Hydrophilidae | 0 | 0 | 0 | 0 |
| Hydroporus | 0 | 0 | 0 | 0 |
| Hydropsyche | 0 | 0 | 0 | 0 |
| Hydropsyche decalda | 0 | 0 | 0 | 0 |
| Hydropsychidae | 0 | 0 | 0 | 0 |
| Hydroptila | 0 | 0 | 0 | 0 |
| Hydroptilidae | 0 | 0 | 0 | 0 |
| Hygrobates | 1 | 0 | 0 | 0 |
| Hygrotus | 0 | 0 | 0 | 0 |
| Ischnura | 0 | 0 | 0 | 0 |
| Ischnura hastata | 0 | 0 | 0 | 0 |
| Isonychia | 0 | 0 | 0 | 0 |
| Isoperla | 0 | 0 | 0 | 0 |
| Isopoda | 0 | 0 | 0 | 2 |
| Isotomurus | 0 | 0 | 0 | 0 |
| Isotomurus tricolor | 0 | 0 | 0 | 0 |
| Kiefferulus | 0 | 0 | 0 | 0 |
| Krendowskia | 0 | 0 | 0 | 0 |
| Labiobaetis | 0 | 0 | 0 | 0 |
| Labrundinia | 0 | 0 | 0 | 1 |
| Labrundinia becki | 0 | 1 | 0 | 0 |
| Labrundinia johannseni | 0 | 0 | 0 | 0 |
| Labrundinia neopilosella | 0 | 0 | 0 | 0 |
| Labrundinia pilosella | 0 | 0 | 0 | 0 |
| Laevapex | 0 | 0 | 0 | 0 |
| Laevapex peninsulae | 0 | 0 | 0 | 0 |
| Larsia berneri | 0 | 0 | 0 | 0 |
| Larsia decolorata | 0 | 0 | 0 | 0 |
| Lauterborniella agrayloides | 0 | 0 | 0 | 0 |
| Lebertia | 0 | 0 | 0 | 1 |
| Lepidoptera | 0 | 0 | 0 | 0 |
| Leptoceridae | 0 | 0 | 0 | 0 |
| Leptophlebia | 0 | 0 | 0 | 0 |
| Leptophlebiidae | 0 | 0 | 7 | 0 |
| Leuctra | 0 | 0 | 0 | 0 |
| Libellulidae | 0 | 0 | 0 | 0 |
| Limnesia | 0 | 0 | 0 | 0 |
| Limnodrilus hoffmeisteri | 16 | 2 | 2 | 0 |
| Limnophila | 0 | 0 | 0 | 0 |
| Limonia | 0 | 0 | 0 | 0 |
| Liodessus | 0 | 0 | 1 | 0 |
| Liodessus affinis | 0 | 0 | 0 | 0 |
| Lioporeus | 0 | 0 | 0 | 0 |
| Lirceus | 0 | 0 | 0 | 0 |
| Littoridinops monroensis | 0 | 2 | 0 | 0 |
| Lumbriculidae | 0 | 0 | 0 | 0 |
| Lumbriculus variegatus | 0 | | | |



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| | SampleID 7778/BenthID | SampleID 7779/BenthID | SampleID 9179/BenthID | SampleID 9196/BenthID |
| Taxon Name / SampleID/BenID -> | 8855(#counted) | 8856(#counted) | 10164(#counted) | 10181(#counted) |
| Lype diversa | 0 | 0 | 0 | 0 |
| Maccaffertium | 0 | 0 | 0 | 0 |
| Maccaffertium smithae | 0 | 0 | 0 | 0 |
| Macromia | 0 | 0 | 0 | 0 |
| Macromia taeniolata | 0 | 0 | 0 | 0 |
| Macromiidae | 0 | 0 | 0 | 0 |
| Macronychus glabratus | 0 | 0 | 0 | 0 |
| Macrostemum carolina | 0 | 2 | 0 | 0 |
| Mayatrichia | 0 | 0 | 0 | 0 |
| Mayatrichia ayama | 0 | 0 | 0 | 0 |
| Meropelopia | 0 | 0 | 2 | 0 |
| Mesosmittia | 0 | 1 | 0 | 0 |
| Metrobates | 0 | 0 | 0 | 0 |
| Micrasema | 0 | 0 | 0 | 0 |
| Micrasema rusticum | 0 | 0 | 0 | 0 |
| Micrasema wataga | 0 | 0 | 0 | 0 |
| Microcylloepus | 1 | 0 | 0 | 0 |
| Microcylloepus pusillus | 0 | 0 | 0 | 0 |
| Micromenetus | 0 | 2 | 0 | 0 |
| Micromenetus dilatatus | 0 | 0 | 0 | 0 |
| Microtendipes pedellus | 0 | 0 | 0 | 0 |
| Microtendipes pedellus grp. | 0 | 0 | 0 | 0 |
| Microtendipes rydalensis | 0 | 0 | 0 | 0 |
| Microtendipes rydalensis grp. | 0 | 0 | 0 | 0 |
| Mideopsis | 0 | 0 | 2 | 0 |
| Molanna | 0 | 0 | 0 | 0 |
| Mooreobdella | 0 | 0 | 0 | 0 |
| Mooreobdella tetragon | 0 | 0 | 0 | 0 |
| Muscidae | 0 | 0 | 0 | 0 |
| Naididae | 0 | 0 | 0 | 0 |
| Nais behningi | 0 | 0 | 0 | 0 |
| Nais communis | 0 | 0 | 0 | 0 |
| Nais communis complex | 0 | 0 | 0 | 0 |
| Nais pardalis | 0 | 0 | 0 | 0 |
| Nais simplex | 0 | 0 | 0 | 0 |
| Nais variabilis | 0 | 0 | 0 | 0 |
| Nanocladius | 0 | 0 | 0 | 2 |
| Nectopsyche | 0 | 0 | 0 | 0 |
| Nectopsyche candida | 1 | 0 | 0 | 0 |
| Nectopsyche exquisita | 0 | 0 | 0 | 0 |
| Nectopsyche pavida | 0 | 0 | 0 | 0 |
| Nemertea | 0 | 0 | 0 | 0 |
| Neoperla | 0 | 0 | 0 | 0 |
| Neoperla clymene | 0 | 0 | 0 | 0 |
| Neoporus | 0 | 0 | 0 | 0 |
| Neotrichia | 0 | 0 | 0 | 0 |
| Neumania | 0 | 0 | 0 | 0 |



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| | SampleID 7778/BenthID | SampleID 7779/BenthID | SampleID 9179/BenthID | SampleID 9196/BenthID |
| Taxon Name / SampleID/BenID -> | 8855(#counted) | 8856(#counted) | 10164(#counted) | 10181(#counted) |
| Neumania distincta | 0 | 0 | 0 | 0 |
| Neureclipsis | 0 | 0 | 0 | 0 |
| Neureclipsis crepuscularis | 0 | 0 | 0 | 0 |
| Neurocordulia | 0 | 0 | 0 | 0 |
| Neurocordulia alabamensis | 0 | 0 | 0 | 0 |
| Neurocordulia virginiensis | 0 | 0 | 0 | 0 |
| Nigronia | 0 | 0 | 0 | 0 |
| Nigronia fasciatus | 0 | 0 | 0 | 0 |
| Nigronia serricornis | 0 | 0 | 0 | 0 |
| Nilotanypus | 0 | 0 | 0 | 0 |
| Nilothauma | 3 | 0 | 0 | 0 |
| Notogillia wetherbyi | 0 | 0 | 0 | 0 |
| Nyctiophylax | 0 | 0 | 0 | 0 |
| Odonata | 0 | 0 | 0 | 0 |
| Odontomyia | 0 | 0 | 0 | 0 |
| Oecetis | 0 | 2 | 1 | 1 |
| Oecetis cinerascens | 0 | 0 | 0 | 0 |
| Oecetis georgia | 0 | 0 | 0 | 0 |
| Oecetis inconspicua cmplx. | 1 | 0 | 0 | 0 |
| Oecetis morsei or sphyra | 0 | 0 | 0 | 0 |
| Oecetis parva | 0 | 0 | 0 | 0 |
| Oecetis persimilis | 0 | 0 | 0 | 0 |
| Oecetis sp. a floyd | 0 | 0 | 0 | 0 |
| Oecetis sp. e floyd | 0 | 0 | 0 | 0 |
| Ora/scirtes | 0 | 0 | 0 | 0 |
| Oribatei | 0 | 0 | 0 | 0 |
| Orthocladiinae | 0 | 0 | 0 | 0 |
| Orthocladiinae gen. c epler | 0 | 0 | 0 | 0 |
| Orthocladiinae gen. f epler | 0 | 0 | 0 | 0 |
| Orthocladius annectens | 0 | 0 | 0 | 0 |
| Orthotrichia | 0 | 0 | 0 | 0 |
| Oxyethira | 0 | 0 | 0 | 0 |
| Pachydiplax longipennis | 0 | 0 | 0 | 0 |
| Pagastiella | 0 | 0 | 0 | 0 |
| Palaemonetes | 0 | 0 | 0 | 4 |
| Palaemonetes kadiakensis | 0 | 0 | 0 | 0 |
| Palaemonetes paludosus | 0 | 0 | 1 | 0 |
| Palpomyia/bezzia grp. | 20 | 1 | 1 | 2 |
| Paracladopelma | 0 | 0 | 0 | 0 |
| Paracladopelma loganae | 0 | 0 | 0 | 0 |
| Paracladopelma undine | 1 | 0 | 0 | 0 |
| Paragnetina | 0 | 0 | 0 | 0 |
| Paragnetina fumosa | 0 | 0 | 0 | 0 |



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| Taxon Name / SampleID/BenID -> | 8855(#counted) | 8856(#counted) | 10164(#counted) | 10181(#counted) |
| Parakiefferiella | 0 | 0 | 0 | 0 |
| Paralauterborniella nigrohalterale | 0 | 0 | 0 | 0 |
| Paraleptophlebia volitans | 0 | 0 | 0 | 0 |
| Parametriocnemus | 5 | 0 | 2 | 0 |
| Parametriocnemus sp. f epler | 0 | 0 | 0 | 0 |
| Paranyctiophylax | 0 | 0 | 0 | 0 |
| Paraplea | 0 | 0 | 0 | 0 |
| Paraponyx | 0 | 0 | 0 | 0 |
| Paratanytarsus sp. a epler | 0 | 0 | 0 | 0 |
| Paratanytarsus sp. c epler | 0 | 0 | 0 | 0 |
| Paratendipes subaequalis | 2 | 0 | 0 | 0 |
| Pelecypoda | 0 | 0 | 3 | 0 |
| Pelonomus obscurus | 0 | 0 | 0 | 0 |
| Peltodytes | 0 | 0 | 0 | 0 |
| Pentaneura inconspicua | 2 | 1 | 0 | 0 |
| Perlesta | 0 | 0 | 0 | 0 |
| Perlesta placida | 0 | 0 | 0 | 0 |
| Perlesta placida complex | 0 | 0 | 0 | 0 |
| Perlinella | 0 | 0 | 0 | 0 |
| Petrophila | 0 | 0 | 0 | 0 |
| Phaenopsectra obediens grp. | 0 | 0 | 0 | 0 |
| Phaenopsectra punctipes grp. | 0 | 0 | 0 | 0 |
| Phylocentropus | 0 | 0 | 0 | 0 |
| Physella | 0 | 0 | 0 | 0 |
| Physella cubensis | 0 | 0 | 0 | 0 |
| Piona | 0 | 0 | 0 | 0 |
| Pisidiidae | 17 | 24 | 0 | 3 |
| Pisidium | 0 | 0 | 0 | 0 |
| Planariidae | 0 | 0 | 0 | 0 |
| Planorbella duryi | 0 | 0 | 0 | 2 |
| Planorbella scalaris | 0 | 0 | 0 | 0 |
| Planorbidae | 0 | 0 | 0 | 0 |
| Platyhelminthes | 0 | 0 | 0 | 0 |
| Plecoptera | 0 | 0 | 0 | 0 |
| Plumulariidae | 0 | 0 | 0 | 0 |
| Polycentropodidae | 0 | 0 | 0 | 1 |
| Polycentropus | 0 | 0 | 0 | 0 |
| Polypedilum | 0 | 0 | 0 | 0 |
| Polypedilum aviceps | 0 | 0 | 0 | 0 |
| Polypedilum convictum grp. | 4 | 3 | 0 | 0 |
| Polypedilum fallax | 0 | 0 | 0 | 0 |
| Polypedilum flavum | 0 | 0 | 0 | 0 |



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| Taxon Name / SampleID/BenID -> | 8855(#counted) | 8856(#counted) | 10164(#counted) | 10181(#counted) |
| Polypedilum halterale grp. | 10 | 1 | 0 | 0 |
| Polypedilum illinoense | 0 | 0 | 0 | 0 |
| Polypedilum illinoense grp. | 4 | 15 | 4 | 18 |
| Polypedilum scalaenum | 0 | 0 | 0 | 0 |
| Polypedilum scalaenum grp. | 2 | 9 | 3 | 0 |
| Polypedilum sp. a epler | 0 | 0 | 0 | 0 |
| Polypedilum tritum | 0 | 0 | 0 | 0 |
| Pomacea paludosa | 0 | 0 | 0 | 0 |
| Pristina aequiseta | 0 | 0 | 0 | 0 |
| Pristina synclites | 0 | 0 | 0 | 0 |
| Pristinella jenkinae | 0 | 0 | 0 | 0 |
| Probezzia | 0 | 0 | 0 | 0 |
| Procambarus | 2 | 0 | 0 | 0 |
| Procladius | 0 | 0 | 0 | 0 |
| Procladius (holotanypus) | 0 | 0 | 0 | 0 |
| Procloeon viridocularis | 0 | 0 | 0 | 0 |
| Progomphus | 0 | 0 | 0 | 0 |
| Progomphus obscurus | 0 | 0 | 0 | 0 |
| Promoresia tardella | 0 | 0 | 0 | 0 |
| Prostoma rubrum | 0 | 0 | 0 | 0 |
| Psammoryctides convolutus | 0 | 0 | 0 | 0 |
| Pseudochironomus | 0 | 0 | 0 | 1 |
| Pseudocloeon | 0 | 0 | 0 | 0 |
| Psychodidae | 0 | 0 | 0 | 0 |
| Pycnopsyche | 0 | 0 | 0 | 0 |
| Pyralidae | 0 | 0 | 0 | 1 |
| Pyrgophorus platyrachis | 0 | 0 | 0 | 0 |
| Ranatra kirkaldyi | 0 | 0 | 0 | 0 |
| Rhagovelia | 0 | 0 | 0 | 0 |
| Rheocricotopus | 0 | 0 | 0 | 0 |
| Rheocricotopus robacki | 3 | 1 | 0 | 0 |
| Rheocricotopus tuberculatus | 0 | 0 | 0 | 0 |
| Rheotanytarsus | 0 | 0 | 0 | 0 |
| Rheotanytarsus distinctissimus grp. | 0 | 1 | 0 | 0 |
| Rheotanytarsus exiguus | 0 | 0 | 0 | 0 |
| Rheotanytarsus exiguus grp. | 1 | 0 | 1 | 0 |
| Rheotanytarsus pellucidus | 0 | 0 | 0 | 0 |
| Scirtes | 0 | 0 | 0 | 0 |
| Scirtidae | 0 | 0 | 0 | 0 |
| Serratella deficiens | 0 | 0 | 0 | 0 |
| Sialis | 0 | 0 | 0 | 0 |
| Silvius | 0 | 0 | 0 | 0 |



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| Taxon Name / SampleID/BenID -> | 8855(#counted) | 8856(#counted) | 10164(#counted) | 10181(#counted) |
| Simuliidae | 0 | 0 | 0 | 0 |
| Simulium | 2 | 1 | 70 | 0 |
| Slavina appendiculata | 0 | 0 | 0 | 0 |
| Somatogyrus walkerianus | 0 | 0 | 0 | 0 |
| Sperchon | 0 | 0 | 0 | 0 |
| Sperchonopsis | 0 | 0 | 0 | 0 |
| Sperchopsis | 0 | 0 | 0 | 0 |
| Sphaeriidae | 0 | 0 | 0 | 0 |
| Sphaeriidae(mollusca) | 0 | 0 | 0 | 0 |
| Sphaeroma | 0 | 0 | 0 | 0 |
| Sphaeromias | 0 | 0 | 0 | 0 |
| Spirosperma | 0 | 0 | 0 | 0 |
| Spirosperma ferox | 0 | 0 | 0 | 0 |
| Stelechomyia perpulchra | 0 | 0 | 0 | 0 |
| Stempellina | 0 | 0 | 0 | 0 |
| Stempellina sp. a epler | 0 | 0 | 0 | 0 |
| Stempellinella | 0 | 0 | 1 | 1 |
| Stenacron | 0 | 0 | 0 | 0 |
| Stenacron floridense | 0 | 0 | 0 | 0 |
| Stenacron interpunctatum | 0 | 0 | 0 | 0 |
| Stenelmis | 0 | 3 | 1 | 0 |
| Stenelmis decorata | 0 | 0 | 0 | 0 |
| Stenelmis hungerfordi | 1 | 0 | 0 | 0 |
| Stenochironomus | 1 | 4 | 2 | 0 |
| Stenonema | 0 | 0 | 2 | 0 |
| Stenonema exiguum | 0 | 0 | 0 | 0 |
| Stenonema smithae | 1 | 0 | 0 | 0 |
| Stratiomyidae | 0 | 0 | 0 | 0 |
| Stylaria lacustris | 0 | 0 | 0 | 0 |
| Synorthocladius | 0 | 0 | 0 | 0 |
| Tabanus | 0 | 0 | 0 | 0 |
| Taeniopteryx lita | 0 | 0 | 0 | 0 |
| Tanytarsus | 0 | 0 | 0 | 0 |
| Tanytarsus sp. a epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. c epler | 0 | 0 | 0 | 1 |
| Tanytarsus sp. d epler | 0 | 0 | 0 | 6 |
| Tanytarsus sp. e epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. g epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. l epler | 0 | 0 | 0 | 1 |
| Tanytarsus sp. m epler | 1 | 0 | 6 | 0 |
| Tanytarsus sp. o epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. r epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. s epler | 1 | 0 | 2 | 0 |
| Tanytarsus sp. t epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. u epler | 0 | 0 | 0 | 0 |
| Taphromysis bowmani | 0 | 0 | 0 | 0 |



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| Taxon Name / SampleID/BenID -> | 8855(#counted) | 8856(#counted) | 10164(#counted) | 10181(#counted) |
| Thienemanniella | 0 | 0 | 0 | 0 |
| Thienemanniella lobapodema | 0 | 0 | 0 | 0 |
| Thienemanniella similis | 0 | 0 | 0 | 0 |
| Thienemanniella sp. a epler | 0 | 0 | 0 | 0 |
| Thienemannimyia grp. | 0 | 0 | 0 | 0 |
| Tipula | 0 | 0 | 0 | 0 |
| Tipulidae | 0 | 0 | 0 | 0 |
| Torrenticola | 0 | 0 | 0 | 0 |
| Triaenodes | 0 | 0 | 0 | 2 |
| Triaenodes ignitus | 0 | 0 | 0 | 0 |
| Triaenodes perna | 0 | 0 | 0 | 0 |
| Tribelos | 0 | 0 | 0 | 0 |
| Tribelos atrum | 0 | 0 | 0 | 0 |
| Tribelos fuscicornis | 0 | 0 | 0 | 0 |
| Tribelos jucundum | 0 | 1 | 1 | 0 |
| Tricorythodes albilineatus | 0 | 0 | 0 | 0 |
| Tubificidae | 0 | 0 | 0 | 0 |
| Turbellaria | 0 | 0 | 0 | 0 |
| Tvetenia | 0 | 0 | 0 | 0 |
| Tvetenia discoloripes grp. | 0 | 0 | 0 | 0 |
| Unionicola | 0 | 0 | 0 | 0 |
| Unniella multivirga | 0 | 0 | 0 | 0 |
| Veliidae | 0 | 0 | 0 | 0 |
| Xenochironomus xenolabis | 0 | 0 | 0 | 0 |
| Xestochironomus | 0 | 0 | 0 | 0 |
| Xylotopus par | 0 | 0 | 2 | 0 |
| Zygoptera | 0 | 1 | 0 | 0 |

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| | SampleID 9206/BenthID | SampleID 9395/BenthID | SampleID 9396/BenthID | SampleID 9399/BenthID |
| Taxon Name / SampleID/BenID -> | 10191(#counted) | 10288(#counted) | 10289(#counted) | 10292(#counted) |
| Ablabesmyia (karelia) grp. | 0 | 0 | 0 | 0 |
| Ablabesmyia hauberi | 0 | 0 | 0 | 0 |
| Ablabesmyia mallochi | 0 | 2 | 1 | 1 |
| Ablabesmyia rhamphe grp. | 0 | 0 | 0 | 2 |
| Acentrella parvula | 0 | 0 | 0 | 0 |
| Acerpenna pygmaea | 0 | 1 | 19 | 2 |
| Acroneuria | 0 | 0 | 0 | 0 |
| Acroneuria abnormis | 0 | 0 | 0 | 0 |
| Acroneuria arenosa | 0 | 0 | 0 | 0 |
| Acroneuria arenosa/evoluta | 0 | 0 | 0 | 0 |
| Acroneuria lycorias | 0 | 0 | 0 | 0 |
| Agarodes libalis | 0 | 0 | 0 | 0 |
| Alluaudomyia | 0 | 0 | 0 | 0 |
| Amnicola | 0 | 0 | 4 | 0 |
| Amnicola dalli | 0 | 0 | 0 | 0 |
| Amnicola dalli johnsoni | 2 | 7 | 0 | 0 |
| Amphipoda | 0 | 0 | 0 | 0 |
| Ancylidae | 2 | 0 | 0 | 0 |
| Ancyronyx | 0 | 0 | 0 | 0 |
| Ancyronyx variegatus | 1 | 3 | 0 | 0 |
| Anisocentropus pyraloides | 0 | 0 | 0 | 0 |
| Anopheles | 0 | 0 | 0 | 0 |
| Apsectrotanypus johnsoni | 0 | 0 | 0 | 0 |
| Argia | 0 | 0 | 0 | 0 |
| Argia fumipennis | 0 | 0 | 0 | 0 |
| Argia moesta | 0 | 0 | 0 | 0 |
| Argia sedula | 0 | 0 | 0 | 0 |
| Argia tibialis | 0 | 0 | 0 | 0 |
| Arrenurus | 0 | 0 | 1 | 0 |
| Arrenurus problecornis | 0 | 0 | 0 | 0 |
| Astacidae | 0 | 0 | 0 | 0 |
| Atherix | 0 | 0 | 0 | 0 |
| Atractides | 1 | 0 | 0 | 0 |
| Atrichopogon | 0 | 0 | 0 | 0 |
| Aulodrilus pigueti | 0 | 0 | 0 | 0 |
| Aulodrilus pluriseta | 0 | 0 | 0 | 0 |
| Baetidae | 0 | 0 | 0 | 0 |
| Baetis | 7 | 0 | 0 | 0 |
| Baetis intercalaris | 0 | 0 | 0 | 0 |
| Baetisca rogersi | 0 | 0 | 0 | 0 |
| Beardius truncatus | 0 | 0 | 0 | 0 |
| Belostoma | 0 | 0 | 0 | 0 |
| Belostomatidae | 0 | 0 | 0 | 0 |
| Bivalvia | 0 | 0 | 0 | 0 |
| Bourletiella | 0 | 0 | 0 | 5 |
| Boyeria vinosa | 0 | 0 | 0 | 0 |
| Brachycentrus | 0 | 0 | 0 | 0 |
| Brachycentrus chelatus | 0 | 0 | 0 | 0 |
| Brachycentrus numerosus | 0 | 0 | 0 | 0 |



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| | SampleID 9206/BenthID | SampleID 9395/BenthID | SampleID 9396/BenthID | SampleID 9399/BenthID |
| Taxon Name / SampleID/BenID -> | 10191(#counted) | 10288(#counted) | 10289(#counted) | 10292(#counted) |
| Brachycercus maculatus | 0 | 0 | 0 | 0 |
| Caecidotea | 0 | 0 | 2 | 21 |
| Caecidotea racovitzai | 0 | 0 | 0 | 0 |
| Caenis | 0 | 1 | 2 | 1 |
| Caenis diminuta | 0 | 0 | 0 | 0 |
| Caenis hilaris | 0 | 0 | 0 | 0 |
| Callibaetis floridanus | 0 | 0 | 0 | 0 |
| Calopteryx | 0 | 0 | 0 | 0 |
| Calopteryx maculata | 0 | 0 | 0 | 0 |
| Cambaridae | 0 | 1 | 0 | 0 |
| Campeloma | 0 | 0 | 0 | 0 |
| Campeloma limum | 0 | 0 | 0 | 0 |
| Cassidinidea ovalis | 3 | 0 | 0 | 0 |
| Cecidomyiidae | 0 | 0 | 0 | 0 |
| Ceratopogonidae | 0 | 0 | 0 | 0 |
| Cernotina | 1 | 0 | 0 | 0 |
| Chaoborus | 0 | 0 | 0 | 0 |
| Chaoborus albatus | 0 | 0 | 0 | 1 |
| Chauliodes | 0 | 0 | 0 | 0 |
| Chelifera | 0 | 0 | 0 | 0 |
| Cheumatopsyche | 4 | 3 | 3 | 1 |
| Chimarra | 0 | 0 | 0 | 0 |
| Chironomus | 1 | 0 | 0 | 0 |
| Choroterpes basalis | 0 | 0 | 0 | 0 |
| Choroterpes hubbelli | 0 | 0 | 0 | 0 |
| Cladotanytarsus | 1 | 0 | 0 | 1 |
| Cladotanytarsus cf. daviesi | 0 | 0 | 0 | 0 |
| Cladotanytarsus sp. i epler | 0 | 0 | 0 | 0 |
| Clathrosperchon | 0 | 0 | 0 | 0 |
| Climacea areolaris | 0 | 0 | 0 | 0 |
| Clinotanypus | 0 | 0 | 0 | 0 |
| Coelotanypus | 0 | 0 | 0 | 0 |
| Coelotanypus scapularis | 0 | 0 | 0 | 0 |
| Coenagrionidae | 0 | 0 | 0 | 0 |
| Collembola | 1 | 3 | 0 | 0 |
| Conchapelopia | 0 | 0 | 0 | 0 |
| Corbicula fluminea | 0 | 0 | 3 | 0 |
| Corduliidae | 0 | 0 | 0 | 0 |
| Corydalus | 0 | 0 | 0 | 0 |
| Corydalus cornuta | 0 | 0 | 0 | 0 |
| Corydalus cornutus | 0 | 0 | 0 | 0 |
| Corynoneura | 0 | 0 | 0 | 2 |
| Corynoneura sp. b epler | 0 | 0 | 0 | 0 |
| Corynoneura sp. c epler | 0 | 0 | 0 | 0 |
| Corynoneura taris | 0 | 0 | 3 | 0 |



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| Taxon Name / SampleID/BenID -> | 10191(#counted) | 10288(#counted) | 10289(#counted) | 10292(#counted) |
| Crangonyx | 0 | 0 | 0 | 0 |
| Cricotopus | 0 | 0 | 0 | 0 |
| Cricotopus bicinctus | 0 | 0 | 0 | 1 |
| Cricotopus bicinctus grp. | 0 | 0 | 0 | 0 |
| Cricotopus or orthocladius | 1 | 0 | 0 | 0 |
| Cryptochironomus | 0 | 0 | 0 | 0 |
| Cryptotendipes | 0 | 0 | 0 | 0 |
| Curculionidae | 0 | 1 | 0 | 0 |
| Cyrnellus fraternus | 0 | 0 | 0 | 0 |
| Demicryptochironomus | 0 | 0 | 0 | 0 |
| Dero digitata | 0 | 0 | 0 | 0 |
| Dero digitata complex | 0 | 0 | 0 | 0 |
| Dero lodeni | 0 | 0 | 0 | 0 |
| Dero pectinata | 0 | 0 | 0 | 0 |
| Dero trifida | 0 | 0 | 0 | 0 |
| Dero vaga | 0 | 0 | 0 | 0 |
| Dicrotendipes | 0 | 0 | 0 | 0 |
| Dicrotendipes modestus | 0 | 0 | 0 | 0 |
| Dicrotendipes neomodestus | 0 | 0 | 0 | 0 |
| Dicrotendipes simpsoni | 0 | 0 | 0 | 0 |
| Dicrotendipes sp. a epler | 0 | 0 | 0 | 0 |
| Dineutus | 1 | 0 | 0 | 0 |
| Dineutus discolor | 0 | 0 | 0 | 0 |
| Dineutus serrulatus | 0 | 0 | 0 | 0 |
| Diplectrona modesta | 0 | 0 | 0 | 0 |
| Dixa | 0 | 0 | 0 | 0 |
| Dixella | 0 | 0 | 0 | 0 |
| Djalmabatista pulcher | 0 | 0 | 0 | 0 |
| Dolichopodidae | 0 | 0 | 0 | 0 |
| Dromogomphus armatus | 0 | 0 | 0 | 0 |
| Dromogomphus spinosus | 0 | 1 | 1 | 0 |
| Dryopidae | 0 | 0 | 0 | 0 |
| Dubiraphia | 0 | 0 | 2 | 1 |
| Dubiraphia quadrinotata | 0 | 0 | 0 | 0 |
| Dubiraphia vittata | 0 | 0 | 0 | 0 |
| Dugesia | 0 | 0 | 0 | 0 |
| Dugesia tigrina | 1 | 0 | 0 | 0 |
| Eclipidrilus | 0 | 2 | 0 | 0 |
| Eclipidrilus palustris | 0 | 0 | 3 | 7 |
| Ectopria | 0 | 0 | 0 | 0 |
| Elimia | 0 | 0 | 0 | 0 |
| Elimia floridensis | 5 | 0 | 0 | 0 |
| Empididae | 0 | 0 | 0 | 0 |
| Enallagma | 0 | 0 | 0 | 0 |



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| Enallagma cardenium | 0 | 0 | 0 | 0 |
| Enchytraeidae | 0 | 0 | 0 | 4 |
| Endotribelos hesperium | 0 | 0 | 0 | 0 |
| Enochrus | 0 | 0 | 0 | 0 |
| Ephemerellidae | 0 | 0 | 0 | 0 |
| Ephydridae | 0 | 0 | 0 | 0 |
| Epitheca | 0 | 0 | 0 | 0 |
| Epitheca princeps regina | 0 | 0 | 0 | 0 |
| Eurylophella doris | 0 | 0 | 0 | 0 |
| Eurylophella temporalis | 0 | 4 | 0 | 0 |
| Ferrissia | 0 | 0 | 0 | 0 |
| Gammaridae | 0 | 0 | 0 | 0 |
| Gammarus | 16 | 0 | 2 | 2 |
| Gammarus tigrinus | 0 | 0 | 0 | 0 |
| Gastropoda | 0 | 0 | 0 | 0 |
| Geayia | 0 | 0 | 0 | 0 |
| Gerridae | 0 | 0 | 0 | 0 |
| Gloiobdella elongata | 0 | 0 | 1 | 0 |
| Goeldichironomus fluctuans | 0 | 0 | 0 | 0 |
| Gomphidae | 1 | 0 | 0 | 0 |
| Gomphus | 0 | 0 | 0 | 0 |
| Gomphus minutus | 0 | 0 | 0 | 0 |
| Gonielmis | 0 | 0 | 0 | 0 |
| Gonielmis dietrichi | 0 | 0 | 0 | 0 |
| Grandidierella bonnieroides | 3 | 0 | 0 | 0 |
| Gyretes iricolor | 0 | 0 | 0 | 0 |
| Haber speciosus | 0 | 0 | 0 | 0 |
| Hagenius brevistylus | 0 | 0 | 0 | 0 |
| Hebetancylus excentricus | 0 | 0 | 0 | 0 |
| Helobdella stagnalis | 0 | 0 | 0 | 0 |
| Helobdella triserialis | 0 | 0 | 0 | 0 |
| Helopelopia | 0 | 0 | 0 | 0 |
| Hemerodromia | 3 | 1 | 1 | 2 |
| Hemiptera | 0 | 0 | 0 | 0 |
| Heptageniidae | 0 | 0 | 0 | 0 |
| Hetaerina | 0 | 0 | 0 | 0 |
| Hetaerina titia | 1 | 0 | 0 | 0 |
| Heteroplectron americanum | 0 | 0 | 0 | 0 |
| Hexagenia | 0 | 0 | 0 | 0 |
| Hexagenia bilineata | 0 | 0 | 0 | 0 |
| Hexagenia limbata | 0 | 0 | 0 | 0 |
| Hexagenia munda orlando | 0 | 0 | 0 | 0 |
| Hexatoma | 0 | 0 | 0 | 0 |
| Hyalella azteca | 13 | 0 | 0 | 10 |
| Hydra | 0 | 0 | 0 | 0 |
| Hydrachna | 0 | 0 | 0 | 0 |
| Hydraena marginicollis | 0 | 0 | 0 | 0 |
| Hydraenidae | 0 | 0 | 0 | 0 |



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| | SampleID 9206/BenthID | SampleID 9395/BenthID | SampleID 9396/BenthID | SampleID 9399/BenthID |
| Taxon Name / SampleID/BenID -> | 10191(#counted) | 10288(#counted) | 10289(#counted) | 10292(#counted) |
| Hydrobiidae | 0 | 0 | 0 | 0 |
| Hydrodroma | 0 | 0 | 0 | 0 |
| Hydrophilidae | 0 | 0 | 0 | 0 |
| Hydroporus | 0 | 0 | 0 | 0 |
| Hydropsyche | 7 | 0 | 0 | 1 |
| Hydropsyche decalda | 0 | 0 | 0 | 0 |
| Hydropsychidae | 0 | 0 | 0 | 0 |
| Hydroptila | 18 | 0 | 0 | 0 |
| Hydroptilidae | 0 | 0 | 0 | 0 |
| Hygrobates | 0 | 0 | 0 | 0 |
| Hygrotus | 0 | 0 | 0 | 0 |
| Ischnura | 0 | 0 | 0 | 0 |
| Ischnura hastata | 0 | 0 | 0 | 0 |
| Isonychia | 0 | 0 | 0 | 0 |
| Isoperla | 0 | 0 | 0 | 0 |
| Isopoda | 0 | 0 | 0 | 0 |
| Isotomurus | 0 | 0 | 0 | 1 |
| Isotomurus tricolor | 0 | 0 | 0 | 0 |
| Kiefferulus | 0 | 0 | 0 | 0 |
| Krendowskia | 0 | 0 | 0 | 0 |
| Labiobaetis | 0 | 0 | 0 | 0 |
| Labrundinia | 0 | 1 | 0 | 0 |
| Labrundinia becki | 0 | 0 | 0 | 0 |
| Labrundinia johannseni | 0 | 0 | 0 | 0 |
| Labrundinia neopilosella | 0 | 0 | 0 | 0 |
| Labrundinia pilosella | 0 | 0 | 0 | 3 |
| Laevapex | 0 | 0 | 0 | 0 |
| Laevapex peninsulae | 0 | 0 | 6 | 0 |
| Larsia berneri | 0 | 0 | 0 | 0 |
| Larsia decolorata | 0 | 0 | 0 | 0 |
| Lauterborniella agrayloides | 0 | 0 | 0 | 0 |
| Lebertia | 5 | 0 | 0 | 1 |
| Lepidoptera | 0 | 0 | 0 | 0 |
| Leptoceridae | 0 | 0 | 0 | 0 |
| Leptophlebia | 0 | 0 | 0 | 0 |
| Leptophlebiidae | 0 | 0 | 0 | 0 |
| Leuctra | 0 | 0 | 0 | 0 |
| Libellulidae | 0 | 0 | 0 | 0 |
| Limnesia | 0 | 0 | 0 | 0 |
| Limnodrilus hoffmeisteri | 3 | 0 | 2 | 1 |
| Limnophila | 0 | 0 | 0 | 0 |
| Limonia | 0 | 0 | 0 | 0 |
| Liodessus | 0 | 0 | 0 | 0 |
| Liodessus affinis | 0 | 0 | 0 | 0 |
| Lioporeus | 0 | 0 | 0 | 0 |
| Lirceus | 0 | 0 | 0 | 0 |
| Littoridinops monroensis | 0 | 0 | 0 | 0 |
| Lumbriculidae | 0 | 0 | 0 | 0 |
| Lumbriculus variegatus | 0 | 0 | 0 | 0 |



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| | SampleID 9206/BenthID | SampleID 9395/BenthID | SampleID 9396/BenthID | SampleID 9399/BenthID |
| Taxon Name / SampleID/BenID -> | 10191(#counted) | 10288(#counted) | 10289(#counted) | 10292(#counted) |
| Lype diversa | 0 | 0 | 0 | 0 |
| Maccaffertium | 0 | 0 | 0 | 0 |
| Maccaffertium smithae | 0 | 0 | 0 | 0 |
| Macromia | 0 | 0 | 0 | 0 |
| Macromia taeniolata | 0 | 0 | 0 | 1 |
| Macromiidae | 0 | 0 | 0 | 0 |
| Macronychus glabratus | 0 | 0 | 0 | 0 |
| Macrostemum carolina | 0 | 0 | 0 | 0 |
| Mayatrichia | 0 | 0 | 0 | 0 |
| Mayatrichia ayama | 0 | 0 | 0 | 0 |
| Meropelopia | 0 | 0 | 0 | 0 |
| Mesosmittia | 0 | 0 | 0 | 0 |
| Metrobates | 0 | 0 | 0 | 0 |
| Micrasema | 0 | 0 | 0 | 0 |
| Micrasema rusticum | 0 | 0 | 0 | 0 |
| Micrasema wataga | 0 | 0 | 0 | 0 |
| Microcylloepus | 0 | 0 | 0 | 7 |
| Microcylloepus pusillus | 4 | 8 | 2 | 0 |
| Micromenetus | 0 | 0 | 1 | 4 |
| Micromenetus dilatatus | 0 | 0 | 0 | 0 |
| Microtendipes pedellus | 0 | 0 | 0 | 0 |
| Microtendipes pedellus grp. | 0 | 0 | 0 | 0 |
| Microtendipes rydalensis | 0 | 0 | 0 | 0 |
| Microtendipes rydalensis grp. | 0 | 0 | 0 | 0 |
| Mideopsis | 0 | 0 | 0 | 0 |
| Molanna | 0 | 0 | 0 | 0 |
| Mooreobdella | 0 | 0 | 0 | 1 |
| Mooreobdella tetragon | 0 | 0 | 0 | 0 |
| Muscidae | 0 | 1 | 0 | 0 |
| Naididae | 0 | 0 | 0 | 0 |
| Nais behningi | 0 | 0 | 0 | 0 |
| Nais communis | 1 | 0 | 0 | 0 |
| Nais communis complex | 0 | 0 | 0 | 0 |
| Nais pardalis | 0 | 0 | 0 | 0 |
| Nais simplex | 0 | 0 | 0 | 0 |
| Nais variabilis | 0 | 0 | 0 | 0 |
| Nanocladius | 0 | 0 | 0 | 0 |
| Nectopsyche | 1 | 0 | 1 | 0 |
| Nectopsyche candida | 0 | 0 | 0 | 0 |
| Nectopsyche exquisita | 0 | 0 | 0 | 0 |
| Nectopsyche pavida | 0 | 0 | 0 | 0 |
| Nemertea | 0 | 0 | 0 | 0 |
| Neoperla | 0 | 0 | 0 | 0 |
| Neoperla clymene | 0 | 0 | 0 | 0 |
| Neoporus | 0 | 0 | 0 | 0 |
| Neotrichia | 1 | 0 | 0 | 0 |
| Neumania | 0 | 0 | 0 | 0 |



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| Taxon Name / SampleID/BenID -> | 10191(#counted) | 10288(#counted) | 10289(#counted) | 10292(#counted) |
| Neumania distincta | 0 | 0 | 0 | 0 |
| Neureclipsis | 0 | 0 | 0 | 0 |
| Neureclipsis crepuscularis | 0 | 0 | 0 | 0 |
| Neurocordulia | 0 | 0 | 0 | 0 |
| Neurocordulia alabamensis | 0 | 0 | 0 | 0 |
| Neurocordulia virginiensis | 0 | 0 | 0 | 0 |
| Nigronia | 0 | 0 | 0 | 0 |
| Nigronia fasciatus | 0 | 0 | 0 | 0 |
| Nigronia serricornis | 0 | 0 | 0 | 0 |
| Nilotanypus | 0 | 0 | 0 | 0 |
| Nilothauma | 0 | 0 | 0 | 0 |
| Notogillia wetherbyi | 0 | 0 | 0 | 0 |
| Nyctiophylax | 0 | 0 | 0 | 0 |
| Odonata | 0 | 0 | 0 | 0 |
| Odontomyia | 0 | 0 | 0 | 0 |
| Oecetis | 1 | 0 | 0 | 0 |
| Oecetis cinerascens | 0 | 0 | 0 | 0 |
| Oecetis georgia | 0 | 1 | 0 | 0 |
| Oecetis inconspicua cmplx. | 0 | 0 | 0 | 0 |
| Oecetis morsei or sphyra | 0 | 0 | 0 | 0 |
| Oecetis parva | 0 | 0 | 0 | 0 |
| Oecetis persimilis | 0 | 0 | 0 | 0 |
| Oecetis sp. a floyd | 0 | 0 | 0 | 0 |
| Oecetis sp. e floyd | 0 | 0 | 0 | 0 |
| Ora/scirtes | 0 | 0 | 0 | 0 |
| Oribatei | 0 | 1 | 0 | 3 |
| Orthocladiinae | 0 | 0 | 0 | 0 |
| Orthocladiinae gen. c epler | 0 | 0 | 0 | 1 |
| Orthocladiinae gen. f epler | 0 | 0 | 0 | 0 |
| Orthocladius annectens | 0 | 0 | 0 | 0 |
| Orthotrichia | 0 | 0 | 0 | 0 |
| Oxyethira | 0 | 0 | 1 | 0 |
| Pachydiplax longipennis | 0 | 0 | 0 | 0 |
| Pagastiella | 0 | 0 | 0 | 0 |
| Palaemonetes | 0 | 0 | 0 | 0 |
| Palaemonetes kadiakensis | 0 | 0 | 0 | 0 |
| Palaemonetes paludosus | 1 | 2 | 0 | 1 |
| Palpomyia/bezzia grp. | 0 | 8 | 0 | 0 |
| Paracladopelma | 0 | 0 | 0 | 0 |
| Paracladopelma loganae | 0 | 0 | 0 | 1 |
| Paracladopelma undine | 0 | 0 | 0 | 0 |
| Paragnetina | 0 | 0 | 0 | 0 |
| Paragnetina fumosa | 0 | 0 | 0 | 0 |



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| Taxon Name / SampleID/BenID -> | 10191(#counted) | 10288(#counted) | 10289(#counted) | 10292(#counted) |
| Parakiefferiella | 0 | 0 | 0 | 0 |
| Paralauterborniella nigrohalterale | 0 | 0 | 0 | 1 |
| Paraleptophlebia volitans | 0 | 11 | 0 | 0 |
| Parametriocnemus | 0 | 0 | 0 | 1 |
| Parametriocnemus sp. f epler | 0 | 0 | 0 | 0 |
| Paranyctiophylax | 0 | 0 | 0 | 0 |
| Paraplea | 0 | 0 | 0 | 0 |
| Paraponyx | 0 | 0 | 0 | 0 |
| Paratanytarsus sp. a epler | 0 | 0 | 0 | 0 |
| Paratanytarsus sp. c epler | 0 | 0 | 0 | 0 |
| Paratendipes subaequalis | 0 | 0 | 0 | 0 |
| Pelecypoda | 0 | 13 | 0 | 0 |
| Pelonomus obscurus | 0 | 0 | 0 | 0 |
| Peltodytes | 0 | 0 | 0 | 0 |
| Pentaneura inconspicua | 0 | 0 | 0 | 0 |
| Perlesta | 0 | 0 | 0 | 0 |
| Perlesta placida | 0 | 0 | 0 | 0 |
| Perlesta placida complex | 0 | 0 | 0 | 0 |
| Perlinella | 0 | 0 | 0 | 0 |
| Petrophila | 0 | 0 | 0 | 0 |
| Phaenopsectra obediens grp. | 0 | 0 | 0 | 0 |
| Phaenopsectra punctipes grp. | 0 | 0 | 0 | 0 |
| Phylocentropus | 0 | 0 | 0 | 0 |
| Physella | 0 | 0 | 0 | 0 |
| Physella cubensis | 0 | 0 | 0 | 0 |
| Piona | 0 | 0 | 0 | 0 |
| Pisidiidae | 0 | 0 | 39 | 28 |
| Pisidium | 0 | 0 | 0 | 0 |
| Planariidae | 0 | 0 | 0 | 0 |
| Planorbella duryi | 0 | 0 | 0 | 0 |
| Planorbella scalaris | 0 | 0 | 0 | 0 |
| Planorbidae | 0 | 0 | 0 | 0 |
| Platyhelminthes | 0 | 0 | 0 | 0 |
| Plecoptera | 0 | 0 | 0 | 0 |
| Plumulariidae | 0 | 0 | 0 | 0 |
| Polycentropodidae | 0 | 0 | 0 | 0 |
| Polycentropus | 0 | 0 | 0 | 0 |
| Polypedilum | 0 | 0 | 0 | 0 |
| Polypedilum aviceps | 0 | 0 | 0 | 0 |
| Polypedilum convictum grp. | 10 | 1 | 1 | 2 |
| Polypedilum fallax | 0 | 0 | 0 | 0 |
| Polypedilum flavum | 0 | 0 | 0 | 0 |



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| Sample date -> | 3/4/1996 | 3/5/1996 | 3/5/1996 | 3/5/1996 |
| | SampleID 9206/BenthID | SampleID 9395/BenthID | SampleID 9396/BenthID | SampleID 9399/BenthID |
| Taxon Name / SampleID/BenID -> | 10191(#counted) | 10288(#counted) | 10289(#counted) | 10292(#counted) |
| Polypedilum halterale grp. | 0 | 0 | 3 | 1 |
| Polypedilum illinoense | 0 | 0 | 5 | 15 |
| Polypedilum illinoense grp. | 0 | 1 | 0 | 0 |
| Polypedilum scalaenum | 0 | 0 | 0 | 0 |
| Polypedilum scalaenum grp. | 2 | 4 | 8 | 6 |
| Polypedilum sp. a epler | 0 | 0 | 0 | 0 |
| Polypedilum tritum | 0 | 0 | 0 | 0 |
| Pomacea paludosa | 0 | 0 | 0 | 0 |
| Pristina aequiseta | 0 | 0 | 0 | 0 |
| Pristina synclites | 0 | 0 | 0 | 0 |
| Pristinella jenkinae | 0 | 0 | 0 | 0 |
| Probezzia | 0 | 0 | 0 | 0 |
| Procambarus | 0 | 0 | 0 | 0 |
| Procladius | 0 | 0 | 0 | 0 |
| Procladius (holotanypus) | 0 | 0 | 0 | 0 |
| Procloeon viridocularis | 0 | 0 | 0 | 0 |
| Progomphus | 0 | 0 | 0 | 0 |
| Progomphus obscurus | 0 | 0 | 0 | 0 |
| Promoresia tardella | 0 | 0 | 0 | 0 |
| Prostoma rubrum | 0 | 0 | 0 | 0 |
| Psammoryctides convolutus | 0 | 0 | 0 | 0 |
| Pseudochironomus | 0 | 0 | 0 | 0 |
| Pseudocloeon | 0 | 0 | 0 | 0 |
| Psychodidae | 0 | 1 | 0 | 0 |
| Pycnopsyche | 0 | 0 | 0 | 0 |
| Pyralidae | 0 | 0 | 0 | 0 |
| Pyrgophorus platyrachis | 0 | 0 | 0 | 0 |
| Ranatra kirkaldyi | 0 | 0 | 0 | 1 |
| Rhagovelia | 0 | 0 | 0 | 0 |
| Rheocricotopus | 0 | 0 | 0 | 0 |
| Rheocricotopus robacki | 0 | 0 | 0 | 4 |
| Rheocricotopus tuberculatus | 0 | 0 | 0 | 0 |
| Rheotanytarsus | 0 | 0 | 0 | 0 |
| Rheotanytarsus distinctissimus grp. | 0 | 0 | 0 | 4 |
| Rheotanytarsus exiguus | 0 | 0 | 0 | 0 |
| Rheotanytarsus exiguus grp. | 0 | 0 | 5 | 6 |
| Rheotanytarsus pellucidus | 0 | 0 | 0 | 0 |
| Scirtes | 0 | 0 | 0 | 0 |
| Scirtidae | 0 | 0 | 0 | 1 |
| Serratella deficiens | 0 | 0 | 0 | 0 |
| Sialis | 0 | 0 | 0 | 0 |
| Silvius | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 20010454 | 20030341 | 20030265 | 20030342 |
|---|---|---|---|---|
| Sample date -> | 3/4/1996 | 3/5/1996 | 3/5/1996 | 3/5/1996 |
| | SampleID 9206/BenthID | SampleID 9395/BenthID | SampleID 9396/BenthID | SampleID 9399/BenthID |
| Taxon Name / SampleID/BenID -> | 10191(#counted) | 10288(#counted) | 10289(#counted) | 10292(#counted) |
| Simuliidae | 0 | 0 | 0 | 0 |
| Simulium | 4 | 4 | 3 | 0 |
| Slavina appendiculata | 1 | 0 | 0 | 0 |
| Somatogyrus walkerianus | 0 | 0 | 0 | 0 |
| Sperchon | 0 | 0 | 0 | 0 |
| Sperchonopsis | 0 | 0 | 0 | 0 |
| Sperchopsis | 0 | 0 | 0 | 0 |
| Sphaeriidae | 0 | 0 | 0 | 0 |
| Sphaeriidae(mollusca) | 0 | 0 | 0 | 0 |
| Sphaeroma | 0 | 0 | 0 | 0 |
| Sphaeromias | 0 | 0 | 0 | 0 |
| Spirosperma | 0 | 0 | 0 | 0 |
| Spirosperma ferox | 0 | 0 | 0 | 1 |
| Stelechomyia perpulchra | 0 | 1 | 0 | 0 |
| Stempellina | 0 | 0 | 0 | 0 |
| Stempellina sp. a epler | 0 | 0 | 0 | 0 |
| Stempellinella | 0 | 0 | 0 | 0 |
| Stenacron | 0 | 0 | 2 | 0 |
| Stenacron floridense | 0 | 0 | 0 | 0 |
| Stenacron interpunctatum | 0 | 5 | 0 | 0 |
| Stenelmis | 0 | 2 | 6 | 1 |
| Stenelmis decorata | 0 | 0 | 0 | 0 |
| Stenelmis hungerfordi | 0 | 0 | 0 | 0 |
| Stenochironomus | 0 | 2 | 0 | 1 |
| Stenonema | 0 | 0 | 4 | 0 |
| Stenonema exiguum | 0 | 0 | 0 | 1 |
| Stenonema smithae | 0 | 7 | 0 | 0 |
| Stratiomyidae | 0 | 0 | 0 | 0 |
| Stylaria lacustris | 0 | 0 | 0 | 0 |
| Synorthocladius | 0 | 0 | 0 | 0 |
| Tabanus | 0 | 0 | 0 | 0 |
| Taeniopteryx lita | 0 | 0 | 0 | 0 |
| Tanytarsus | 0 | 0 | 0 | 0 |
| Tanytarsus sp. a epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. c epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. d epler | 4 | 0 | 0 | 0 |
| Tanytarsus sp. e epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. g epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. l epler | 2 | 0 | 1 | 0 |
| Tanytarsus sp. m epler | 2 | 0 | 0 | 0 |
| Tanytarsus sp. o epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. r epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. s epler | 0 | 0 | 0 | 1 |
| Tanytarsus sp. t epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. u epler | 0 | 0 | 0 | 0 |
| Taphromysis bowmani | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 20010454 | 20030341 | 20030265 | 20030342 |
|---|---|---|---|---|
| Sample date -> | 3/4/1996 | 3/5/1996 | 3/5/1996 | 3/5/1996 |
| | SampleID 9206/BenthID | SampleID 9395/BenthID | SampleID 9396/BenthID | SampleID 9399/BenthID |
| Taxon Name / SampleID/BenID -> | 10191(#counted) | 10288(#counted) | 10289(#counted) | 10292(#counted) |
| Thienemanniella | 0 | 0 | 0 | 0 |
| Thienemanniella lobapodema | 0 | 0 | 0 | 0 |
| Thienemanniella similis | 0 | 0 | 0 | 0 |
| Thienemanniella sp. a epler | 0 | 0 | 0 | 0 |
| Thienemannimyia grp. | 0 | 0 | 0 | 0 |
| Tipula | 0 | 0 | 0 | 1 |
| Tipulidae | 0 | 0 | 0 | 0 |
| Torrenticola | 0 | 0 | 0 | 0 |
| Triaenodes | 0 | 0 | 0 | 0 |
| Triaenodes ignitus | 0 | 2 | 0 | 0 |
| Triaenodes perna | 0 | 0 | 0 | 0 |
| Tribelos | 0 | 0 | 0 | 0 |
| Tribelos atrum | 0 | 0 | 0 | 0 |
| Tribelos fuscicornis | 0 | 0 | 0 | 0 |
| Tribelos jucundum | 0 | 0 | 0 | 0 |
| Tricorythodes albilineatus | 10 | 0 | 0 | 0 |
| Tubificidae | 0 | 0 | 0 | 0 |
| Turbellaria | 0 | 0 | 0 | 0 |
| Tvetenia | 0 | 0 | 0 | 0 |
| Tvetenia discoloripes grp. | 0 | 0 | 0 | 0 |
| Unionicola | 0 | 1 | 0 | 0 |
| Unniella multivirga | 0 | 0 | 0 | 0 |
| Veliidae | 0 | 0 | 0 | 0 |
| Xenochironomus xenolabis | 0 | 0 | 0 | 0 |
| Xestochironomus | 0 | 0 | 0 | 0 |
| Xylotopus par | 0 | 0 | 0 | 0 |
| Zygoptera | 0 | 0 | 0 | 0 |

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| As Calculated / STORET station -> | 31010050 | 19010099 | 32020063 | 28020221 |
|---|---|---|---|---|
| Sample date -> | 7/9/1996 | 7/9/1996 | 7/16/1996 | 9/16/1996 |
| | SampleID | SampleID | SampleID | SampleID |
| | 10131/BenthID | 10591/BenthID | 10633/BenthID | 10785/BenthID |
| Taxon Name / SampleID/BenID -> | 10723(#counted) | 11209(#counted) | 11325(#counted) | 11544(#counted) |
| Ablabesmyia (karelia) grp. | 0 | 0 | 0 | 0 |
| Ablabesmyia hauberi | 0 | 0 | 0 | 0 |
| Ablabesmyia mallochi | 1 | 10 | 0 | 1 |
| Ablabesmyia rhamphe grp. | 0 | 3 | 0 | 2 |
| Acentrella parvula | 0 | 0 | 0 | 0 |
| Acerpenna pygmaea | 0 | 0 | 0 | 1 |
| Acroneuria | 2 | 0 | 0 | 0 |
| Acroneuria abnormis | 0 | 0 | 0 | 0 |
| Acroneuria arenosa | 0 | 0 | 0 | 0 |
| Acroneuria arenosa/evoluta | 0 | 0 | 0 | 0 |
| Acroneuria lycorias | 0 | 0 | 0 | 0 |
| Agarodes libalis | 0 | 0 | 0 | 0 |
| Alluaudomyia | 0 | 0 | 0 | 0 |
| Amnicola | 0 | 0 | 0 | 0 |
| Amnicola dalli | 0 | 0 | 0 | 0 |
| Amnicola dalli johnsoni | 0 | 0 | 0 | 0 |
| Amphipoda | 0 | 0 | 0 | 0 |
| Ancylidae | 0 | 22 | 2 | 0 |
| Ancyronyx | 0 | 0 | 0 | 0 |
| Ancyronyx variegatus | 0 | 1 | 2 | 1 |
| Anisocentropus pyraloides | 0 | 0 | 3 | 0 |
| Anopheles | 0 | 0 | 0 | 0 |
| Apsectrotanypus johnsoni | 1 | 0 | 0 | 0 |
| Argia | 0 | 3 | 1 | 0 |
| Argia fumipennis | 0 | 0 | 0 | 0 |
| Argia moesta | 0 | 0 | 0 | 0 |
| Argia sedula | 0 | 0 | 0 | 0 |
| Argia tibialis | 0 | 0 | 0 | 0 |
| Arrenurus | 0 | 1 | 0 | 0 |
| Arrenurus problecornis | 0 | 0 | 0 | 0 |
| Astacidae | 0 | 0 | 0 | 0 |
| Atherix | 0 | 0 | 0 | 0 |
| Atractides | 0 | 0 | 0 | 0 |
| Atrichopogon | 0 | 0 | 0 | 0 |
| Aulodrilus pigueti | 0 | 0 | 0 | 0 |
| Aulodrilus pluriseta | 0 | 0 | 0 | 0 |
| Baetidae | 0 | 0 | 0 | 0 |
| Baetis | 0 | 0 | 0 | 0 |
| Baetis intercalaris | 0 | 0 | 0 | 0 |
| Baetisca rogersi | 0 | 0 | 0 | 0 |
| Beardius truncatus | 0 | 0 | 0 | 0 |
| Belostoma | 0 | 0 | 0 | 0 |
| Belostomatidae | 0 | 0 | 0 | 0 |
| Bivalvia | 0 | 0 | 0 | 0 |
| Bourletiella | 0 | 0 | 0 | 0 |
| Boyeria vinosa | 0 | 1 | 1 | 0 |
| Brachycentrus | 2 | 0 | 0 | 0 |
| Brachycentrus chelatus | 0 | 0 | 4 | 0 |
| Brachycentrus numerosus | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 31010050 | 19010099 | 32020063 | 28020221 |
|---|---|---|---|---|
| Sample date -> | 7/9/1996 | 7/9/1996 | 7/16/1996 | 9/16/1996 |
| | SampleID | SampleID | SampleID | SampleID |
| | 10131/BenthID | 10591/BenthID | 10633/BenthID | 10785/BenthID |
| Taxon Name / SampleID/BenID -> | 10723(#counted) | 11209(#counted) | 11325(#counted) | 11544(#counted) |
| Brachycercus maculatus | 0 | 0 | 0 | 0 |
| Caecidotea | 2 | 6 | 0 | 0 |
| Caecidotea racovitzai | 0 | 0 | 0 | 0 |
| Caenis | 5 | 0 | 0 | 2 |
| Caenis diminuta | 0 | 0 | 0 | 0 |
| Caenis hilaris | 0 | 0 | 0 | 0 |
| Callibaetis floridanus | 0 | 0 | 0 | 0 |
| Calopteryx | 0 | 0 | 0 | 0 |
| Calopteryx maculata | 0 | 0 | 0 | 0 |
| Cambaridae | 2 | 0 | 1 | 0 |
| Campeloma | 0 | 1 | 0 | 0 |
| Campeloma limum | 0 | 0 | 0 | 0 |
| Cassidinidea ovalis | 0 | 0 | 0 | 0 |
| Cecidomyiidae | 0 | 0 | 0 | 0 |
| Ceratopogonidae | 0 | 0 | 0 | 0 |
| Cernotina | 1 | 1 | 0 | 0 |
| Chaoborus | 0 | 0 | 0 | 0 |
| Chaoborus albatus | 0 | 0 | 0 | 0 |
| Chauliodes | 0 | 0 | 0 | 0 |
| Chelifera | 1 | 0 | 0 | 0 |
| Cheumatopsyche | 17 | 0 | 0 | 1 |
| Chimarra | 0 | 0 | 24 | 2 |
| Chironomus | 0 | 0 | 0 | 0 |
| Choroterpes basalis | 0 | 0 | 0 | 0 |
| Choroterpes hubbelli | 0 | 0 | 0 | 0 |
| Cladotanytarsus | 0 | 0 | 1 | 0 |
| Cladotanytarsus cf. daviesi | 0 | 0 | 0 | 0 |
| Cladotanytarsus sp. i epler | 0 | 0 | 0 | 0 |
| Clathrosperchon | 0 | 0 | 0 | 0 |
| Climacea areolaris | 0 | 0 | 0 | 0 |
| Clinotanypus | 0 | 0 | 0 | 0 |
| Coelotanypus | 0 | 0 | 0 | 0 |
| Coelotanypus scapularis | 0 | 0 | 0 | 0 |
| Coenagrionidae | 2 | 0 | 0 | 0 |
| Collembola | 0 | 0 | 0 | 0 |
| Conchapelopia | 3 | 0 | 0 | 0 |
| Corbicula fluminea | 0 | 0 | 0 | 2 |
| Corduliidae | 0 | 0 | 0 | 0 |
| Corydalus | 0 | 0 | 0 | 0 |
| Corydalus cornuta | 0 | 0 | 0 | 0 |
| Corydalus cornutus | 1 | 0 | 2 | 1 |
| Corynoneura | 0 | 0 | 0 | 0 |
| Corynoneura sp. b epler | 0 | 0 | 0 | 0 |
| Corynoneura sp. c epler | 0 | 0 | 0 | 0 |
| Corynoneura taris | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 31010050 | 19010099 | 32020063 | 28020221 |
|---|---|---|---|---|
| Sample date -> | 7/9/1996 | 7/9/1996 | 7/16/1996 | 9/16/1996 |
| | SampleID | SampleID | SampleID | SampleID |
| | 10131/BenthID | 10591/BenthID | 10633/BenthID | 10785/BenthID |
| Taxon Name / SampleID/BenID -> | 10723(#counted) | 11209(#counted) | 11325(#counted) | 11544(#counted) |
| Crangonyx | 0 | 6 | 6 | 0 |
| Cricotopus | 0 | 0 | 0 | 0 |
| Cricotopus bicinctus | 0 | 0 | 0 | 0 |
| Cricotopus bicinctus grp. | 0 | 0 | 0 | 0 |
| Cricotopus or orthocladius | 0 | 0 | 0 | 5 |
| Cryptochironomus | 0 | 0 | 0 | 0 |
| Cryptotendipes | 0 | 0 | 0 | 0 |
| Curculionidae | 0 | 0 | 0 | 0 |
| Cyrnellus fraternus | 0 | 0 | 0 | 0 |
| Demicryptochironomus | 0 | 0 | 0 | 0 |
| Dero digitata | 0 | 1 | 0 | 0 |
| Dero digitata complex | 0 | 0 | 0 | 0 |
| Dero lodeni | 0 | 0 | 0 | 0 |
| Dero pectinata | 0 | 0 | 0 | 0 |
| Dero trifida | 0 | 0 | 0 | 0 |
| Dero vaga | 0 | 5 | 0 | 0 |
| Dicrotendipes | 0 | 0 | 0 | 0 |
| Dicrotendipes modestus | 0 | 0 | 0 | 1 |
| Dicrotendipes neomodestus | 0 | 0 | 0 | 0 |
| Dicrotendipes simpsoni | 0 | 0 | 0 | 0 |
| Dicrotendipes sp. a epler | 0 | 0 | 0 | 0 |
| Dineutus | 0 | 1 | 1 | 1 |
| Dineutus discolor | 0 | 0 | 0 | 0 |
| Dineutus serrulatus | 0 | 0 | 0 | 0 |
| Diplectrona modesta | 0 | 0 | 0 | 0 |
| Dixa | 0 | 0 | 0 | 0 |
| Dixella | 0 | 0 | 0 | 0 |
| Djalmabatista pulcher | 0 | 0 | 0 | 1 |
| Dolichopodidae | 0 | 0 | 0 | 0 |
| Dromogomphus armatus | 0 | 0 | 0 | 0 |
| Dromogomphus spinosus | 0 | 0 | 0 | 0 |
| Dryopidae | 0 | 0 | 0 | 0 |
| Dubiraphia | 0 | 0 | 0 | 0 |
| Dubiraphia quadrinotata | 0 | 0 | 0 | 0 |
| Dubiraphia vittata | 0 | 6 | 0 | 9 |
| Dugesia | 0 | 0 | 0 | 0 |
| Dugesia tigrina | 1 | 0 | 0 | 0 |
| Eclipidrilus | 0 | 2 | 4 | 0 |
| Eclipidrilus palustris | 7 | 0 | 0 | 0 |
| Ectopria | 0 | 0 | 0 | 0 |
| Elimia | 0 | 0 | 0 | 0 |
| Elimia floridensis | 0 | 0 | 0 | 0 |
| Empididae | 0 | 0 | 0 | 0 |
| Enallagma | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 31010050 | 19010099 | 32020063 | 28020221 |
|---|---|---|---|---|
| Sample date -> | 7/9/1996 | 7/9/1996 | 7/16/1996 | 9/16/1996 |
| | SampleID | SampleID | SampleID | SampleID |
| | 10131/BenthID | 10591/BenthID | 10633/BenthID | 10785/BenthID |
| Taxon Name / SampleID/BenID -> | 10723(#counted) | 11209(#counted) | 11325(#counted) | 11544(#counted) |
| Enallagma cardenium | 0 | 0 | 0 | 0 |
| Enchytraeidae | 0 | 1 | 12 | 0 |
| Endotribelos hesperium | 0 | 0 | 0 | 0 |
| Enochrus | 0 | 0 | 0 | 0 |
| Ephemerellidae | 0 | 0 | 0 | 0 |
| Ephydridae | 0 | 0 | 0 | 0 |
| Epitheca | 0 | 4 | 0 | 0 |
| Epitheca princeps regina | 0 | 0 | 2 | 0 |
| Eurylophella doris | 0 | 0 | 0 | 0 |
| Eurylophella temporalis | 0 | 0 | 0 | 0 |
| Ferrissia | 0 | 0 | 0 | 0 |
| Gammaridae | 0 | 0 | 0 | 0 |
| Gammarus | 0 | 0 | 0 | 0 |
| Gammarus tigrinus | 0 | 0 | 0 | 0 |
| Gastropoda | 0 | 0 | 0 | 0 |
| Geayia | 0 | 0 | 0 | 0 |
| Gerridae | 0 | 0 | 0 | 0 |
| Gloiobdella elongata | 0 | 0 | 0 | 0 |
| Goeldichironomus fluctuans | 0 | 0 | 0 | 0 |
| Gomphidae | 0 | 1 | 0 | 0 |
| Gomphus | 0 | 0 | 0 | 0 |
| Gomphus minutus | 0 | 0 | 0 | 0 |
| Gonielmis | 1 | 0 | 0 | 0 |
| Gonielmis dietrichi | 0 | 0 | 0 | 0 |
| Grandidierella bonnieroides | 0 | 0 | 0 | 0 |
| Gyretes iricolor | 0 | 0 | 0 | 0 |
| Haber speciosus | 0 | 0 | 0 | 0 |
| Hagenius brevistylus | 0 | 0 | 1 | 0 |
| Hebetancylus excentricus | 0 | 0 | 0 | 0 |
| Helobdella stagnalis | 0 | 0 | 0 | 0 |
| Helobdella triserialis | 0 | 0 | 0 | 0 |
| Helopelopia | 0 | 0 | 0 | 0 |
| Hemerodromia | 4 | 2 | 6 | 0 |
| Hemiptera | 0 | 0 | 0 | 0 |
| Heptageniidae | 0 | 0 | 0 | 0 |
| Hetaerina | 0 | 0 | 0 | 0 |
| Hetaerina titia | 0 | 0 | 0 | 0 |
| Heteroplectron americanum | 0 | 0 | 0 | 0 |
| Hexagenia | 0 | 0 | 0 | 0 |
| Hexagenia bilineata | 0 | 0 | 0 | 0 |
| Hexagenia limbata | 0 | 0 | 0 | 0 |
| Hexagenia munda orlando | 0 | 0 | 0 | 0 |
| Hexatoma | 0 | 0 | 1 | 0 |
| Hyalella azteca | 0 | 0 | 0 | 0 |
| Hydra | 0 | 0 | 0 | 0 |
| Hydrachna | 0 | 0 | 0 | 0 |
| Hydraena marginicollis | 0 | 0 | 0 | 0 |
| Hydraenidae | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 31010050 | 19010099 | 32020063 | 28020221 |
|---|---|---|---|---|
| Sample date -> | 7/9/1996 | 7/9/1996 | 7/16/1996 | 9/16/1996 |
| | SampleID | SampleID | SampleID | SampleID |
| | 10131/BenthID | 10591/BenthID | 10633/BenthID | 10785/BenthID |
| Taxon Name / SampleID/BenID -> | 10723(#counted) | 11209(#counted) | 11325(#counted) | 11544(#counted) |
| Hydrobiidae | 0 | 0 | 0 | 0 |
| Hydrodroma | 0 | 1 | 0 | 0 |
| Hydrophilidae | 0 | 0 | 0 | 0 |
| Hydroporus | 0 | 0 | 0 | 0 |
| Hydropsyche | 6 | 0 | 3 | 1 |
| Hydropsyche decalda | 0 | 0 | 0 | 0 |
| Hydropsychidae | 0 | 0 | 0 | 0 |
| Hydroptila | 0 | 0 | 0 | 0 |
| Hydroptilidae | 0 | 0 | 0 | 0 |
| Hygrobates | 0 | 0 | 0 | 0 |
| Hygrotus | 0 | 0 | 0 | 0 |
| Ischnura | 0 | 1 | 0 | 5 |
| Ischnura hastata | 0 | 0 | 0 | 0 |
| Isonychia | 1 | 0 | 0 | 0 |
| Isoperla | 0 | 0 | 0 | 0 |
| Isopoda | 0 | 0 | 0 | 0 |
| Isotomurus | 0 | 0 | 0 | 0 |
| Isotomurus tricolor | 0 | 0 | 0 | 0 |
| Kiefferulus | 0 | 1 | 0 | 0 |
| Krendowskia | 0 | 0 | 0 | 0 |
| Labiobaetis | 1 | 0 | 0 | 2 |
| Labrundinia | 0 | 0 | 0 | 0 |
| Labrundinia becki | 0 | 0 | 0 | 0 |
| Labrundinia johannseni | 0 | 0 | 0 | 0 |
| Labrundinia neopilosella | 0 | 0 | 0 | 0 |
| Labrundinia pilosella | 0 | 0 | 0 | 0 |
| Laevapex | 0 | 0 | 0 | 0 |
| Laevapex peninsulae | 0 | 0 | 0 | 0 |
| Larsia berneri | 0 | 0 | 0 | 0 |
| Larsia decolorata | 0 | 0 | 0 | 0 |
| Lauterborniella agrayloides | 0 | 0 | 0 | 0 |
| Lebertia | 1 | 0 | 0 | 0 |
| Lepidoptera | 0 | 0 | 0 | 0 |
| Leptoceridae | 0 | 0 | 0 | 0 |
| Leptophlebia | 0 | 0 | 0 | 0 |
| Leptophlebiidae | 3 | 0 | 0 | 6 |
| Leuctra | 1 | 0 | 2 | 0 |
| Libellulidae | 0 | 0 | 0 | 0 |
| Limnesia | 0 | 0 | 0 | 0 |
| Limnodrilus hoffmeisteri | 5 | 10 | 3 | 1 |
| Limnophila | 0 | 0 | 0 | 0 |
| Limonia | 0 | 0 | 0 | 0 |
| Liodessus | 0 | 0 | 0 | 0 |
| Liodessus affinis | 0 | 0 | 0 | 0 |
| Lioporeus | 0 | 0 | 1 | 0 |
| Lirceus | 0 | 0 | 0 | 0 |
| Littoridinops monroensis | 0 | 0 | 0 | 0 |
| Lumbriculidae | 0 | 0 | 0 | 0 |
| Lumbriculus variegatus | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 31010050 | 19010099 | 32020063 | 28020221 |
|---|---|---|---|---|
| Sample date -> | 7/9/1996 | 7/9/1996 | 7/16/1996 | 9/16/1996 |
| | SampleID | SampleID | SampleID | SampleID |
| | 10131/BenthID | 10591/BenthID | 10633/BenthID | 10785/BenthID |
| Taxon Name / SampleID/BenID -> | 10723(#counted) | 11209(#counted) | 11325(#counted) | 11544(#counted) |
| Lype diversa | 0 | 0 | 0 | 0 |
| Maccaffertium | 0 | 0 | 0 | 0 |
| Maccaffertium smithae | 0 | 0 | 0 | 0 |
| Macromia | 0 | 0 | 0 | 0 |
| Macromia taeniolata | 0 | 0 | 0 | 2 |
| Macromiidae | 0 | 1 | 0 | 0 |
| Macronychus glabratus | 1 | 0 | 0 | 0 |
| Macrostemum carolina | 0 | 0 | 0 | 0 |
| Mayatrichia | 0 | 0 | 0 | 0 |
| Mayatrichia ayama | 0 | 0 | 0 | 0 |
| Meropelopia | 0 | 0 | 0 | 0 |
| Mesosmittia | 0 | 0 | 0 | 0 |
| Metrobates | 0 | 0 | 0 | 0 |
| Micrasema | 0 | 0 | 0 | 0 |
| Micrasema rusticum | 0 | 0 | 0 | 0 |
| Micrasema wataga | 0 | 0 | 0 | 0 |
| Microcylloepus | 0 | 0 | 0 | 0 |
| Microcylloepus pusillus | 6 | 4 | 0 | 19 |
| Micromenetus | 0 | 11 | 0 | 0 |
| Micromenetus dilatatus | 0 | 0 | 0 | 0 |
| Microtendipes pedellus | 0 | 0 | 0 | 0 |
| Microtendipes pedellus grp. | 9 | 2 | 1 | 0 |
| Microtendipes rydalensis | 0 | 0 | 0 | 0 |
| Microtendipes rydalensis grp. | 3 | 0 | 2 | 0 |
| Mideopsis | 1 | 1 | 0 | 0 |
| Molanna | 0 | 0 | 0 | 0 |
| Mooreobdella | 0 | 0 | 0 | 0 |
| Mooreobdella tetragon | 0 | 0 | 0 | 0 |
| Muscidae | 0 | 0 | 0 | 0 |
| Naididae | 0 | 0 | 0 | 0 |
| Nais behningi | 0 | 0 | 0 | 0 |
| Nais communis | 0 | 0 | 0 | 0 |
| Nais communis complex | 0 | 0 | 0 | 0 |
| Nais pardalis | 0 | 0 | 0 | 0 |
| Nais simplex | 0 | 0 | 1 | 0 |
| Nais variabilis | 0 | 0 | 0 | 0 |
| Nanocladius | 0 | 1 | 0 | 0 |
| Nectopsyche | 0 | 0 | 0 | 0 |
| Nectopsyche candida | 0 | 0 | 0 | 0 |
| Nectopsyche exquisita | 0 | 0 | 0 | 0 |
| Nectopsyche pavida | 0 | 0 | 0 | 0 |
| Nemertea | 0 | 0 | 0 | 0 |
| Neoperla | 0 | 0 | 0 | 0 |
| Neoperla clymene | 0 | 0 | 0 | 0 |
| Neoporus | 2 | 0 | 0 | 0 |
| Neotrichia | 0 | 0 | 0 | 0 |
| Neumania | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 31010050 | 19010099 | 32020063 | 28020221 |
|---|---|---|---|---|
| Sample date -> | 7/9/1996 | 7/9/1996 | 7/16/1996 | 9/16/1996 |
| | SampleID | SampleID | SampleID | SampleID |
| | 10131/BenthID | 10591/BenthID | 10633/BenthID | 10785/BenthID |
| Taxon Name / SampleID/BenID -> | 10723(#counted) | 11209(#counted) | 11325(#counted) | 11544(#counted) |
| Neumania distincta | 0 | 0 | 0 | 0 |
| Neureclipsis | 0 | 0 | 0 | 0 |
| Neureclipsis crepuscularis | 0 | 0 | 0 | 0 |
| Neurocordulia | 0 | 0 | 0 | 0 |
| Neurocordulia alabamensis | 0 | 0 | 0 | 1 |
| Neurocordulia virginiensis | 0 | 0 | 0 | 0 |
| Nigronia | 2 | 0 | 0 | 0 |
| Nigronia fasciatus | 0 | 0 | 1 | 0 |
| Nigronia serricornis | 0 | 0 | 0 | 0 |
| Nilotanypus | 0 | 0 | 1 | 0 |
| Nilothauma | 0 | 1 | 0 | 0 |
| Notogillia wetherbyi | 0 | 0 | 0 | 0 |
| Nyctiophylax | 0 | 0 | 0 | 0 |
| Odonata | 0 | 0 | 0 | 0 |
| Odontomyia | 0 | 0 | 0 | 0 |
| Oecetis | 5 | 2 | 0 | 0 |
| Oecetis cinerascens | 0 | 0 | 0 | 0 |
| Oecetis georgia | 0 | 0 | 0 | 0 |
| Oecetis inconspicua cmplx. | 0 | 0 | 0 | 0 |
| Oecetis morsei or sphyra | 0 | 0 | 0 | 0 |
| Oecetis parva | 0 | 0 | 5 | 0 |
| Oecetis persimilis | 0 | 0 | 0 | 0 |
| Oecetis sp. a floyd | 0 | 0 | 0 | 0 |
| Oecetis sp. e floyd | 0 | 0 | 0 | 0 |
| Ora/scirtes | 0 | 0 | 0 | 0 |
| Oribatei | 0 | 1 | 0 | 0 |
| Orthocladiinae | 0 | 0 | 0 | 0 |
| Orthocladiinae gen. c epler | 0 | 0 | 0 | 0 |
| Orthocladiinae gen. f epler | 0 | 0 | 0 | 0 |
| Orthocladius annectens | 2 | 0 | 0 | 0 |
| Orthotrichia | 0 | 0 | 0 | 0 |
| Oxyethira | 0 | 0 | 0 | 0 |
| Pachydiplax longipennis | 0 | 1 | 0 | 0 |
| Pagastiella | 0 | 0 | 0 | 0 |
| Palaemonetes | 0 | 0 | 0 | 0 |
| Palaemonetes kadiakensis | 0 | 0 | 0 | 0 |
| Palaemonetes paludosus | 0 | 0 | 0 | 1 |
| Palpomyia/bezzia grp. | 1 | 1 | 2 | 6 |
| Paracladopelma | 0 | 0 | 0 | 0 |
| Paracladopelma loganae | 0 | 0 | 0 | 0 |
| Paracladopelma undine | 0 | 0 | 0 | 0 |
| Paragnetina | 0 | 0 | 0 | 0 |
| Paragnetina fumosa | 0 | 0 | 0 | 0 |



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|---|---|---|---|---|
| Sample date -> | 7/9/1996 | 7/9/1996 | 7/16/1996 | 9/16/1996 |
| | SampleID | SampleID | SampleID | SampleID |
| | 10131/BenthID | 10591/BenthID | 10633/BenthID | 10785/BenthID |
| Taxon Name / SampleID/BenID -> | 10723(#counted) | 11209(#counted) | 11325(#counted) | 11544(#counted) |
| Parakiefferiella | 0 | 0 | 0 | 0 |
| Paralauterborniella nigrohalterale | 0 | 0 | 0 | 0 |
| Paraleptophlebia volitans | 0 | 0 | 0 | 0 |
| Parametriocnemus | 0 | 0 | 0 | 0 |
| Parametriocnemus sp. f epler | 0 | 0 | 0 | 0 |
| Paranyctiophylax | 0 | 0 | 0 | 0 |
| Paraplea | 0 | 0 | 0 | 0 |
| Paraponyx | 0 | 0 | 0 | 0 |
| Paratanytarsus sp. a epler | 0 | 0 | 0 | 0 |
| Paratanytarsus sp. c epler | 0 | 0 | 0 | 0 |
| Paratendipes subaequalis | 0 | 0 | 0 | 0 |
| Pelecypoda | 0 | 12 | 0 | 0 |
| Pelonomus obscurus | 0 | 0 | 0 | 0 |
| Peltodytes | 0 | 0 | 0 | 0 |
| Pentaneura inconspicua | 1 | 0 | 0 | 0 |
| Perlesta | 0 | 0 | 0 | 0 |
| Perlesta placida | 0 | 0 | 1 | 0 |
| Perlesta placida complex | 0 | 0 | 0 | 0 |
| Perlinella | 0 | 0 | 0 | 0 |
| Petrophila | 0 | 0 | 0 | 0 |
| Phaenopsectra obediens grp. | 0 | 0 | 0 | 0 |
| Phaenopsectra punctipes grp. | 0 | 0 | 0 | 0 |
| Phylocentropus | 0 | 0 | 0 | 0 |
| Physella | 0 | 0 | 0 | 0 |
| Physella cubensis | 0 | 0 | 0 | 0 |
| Piona | 3 | 0 | 0 | 0 |
| Pisidiidae | 0 | 0 | 4 | 3 |
| Pisidium | 0 | 0 | 0 | 0 |
| Planariidae | 0 | 0 | 0 | 0 |
| Planorbella duryi | 0 | 0 | 0 | 0 |
| Planorbella scalaris | 0 | 0 | 0 | 0 |
| Planorbidae | 0 | 0 | 0 | 0 |
| Platyhelminthes | 0 | 0 | 0 | 0 |
| Plecoptera | 0 | 0 | 0 | 0 |
| Plumulariidae | 0 | 0 | 0 | 0 |
| Polycentropodidae | 0 | 0 | 0 | 0 |
| Polycentropus | 0 | 0 | 0 | 0 |
| Polypedilum | 0 | 0 | 0 | 0 |
| Polypedilum aviceps | 14 | 0 | 0 | 0 |
| Polypedilum convictum grp. | 0 | 0 | 3 | 2 |
| Polypedilum fallax | 0 | 0 | 0 | 0 |
| Polypedilum flavum | 0 | 0 | 0 | 0 |



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| | SampleID | SampleID | SampleID | SampleID |
| | 10131/BenthID | 10591/BenthID | 10633/BenthID | 10785/BenthID |
| Taxon Name / SampleID/BenID -> | 10723(#counted) | 11209(#counted) | 11325(#counted) | 11544(#counted) |
| Polypedilum halterale grp. | 1 | 0 | 1 | 0 |
| Polypedilum illinoense | 0 | 7 | 0 | 0 |
| Polypedilum illinoense grp. | 2 | 0 | 0 | 0 |
| Polypedilum scalaenum | 0 | 0 | 0 | 0 |
| Polypedilum scalaenum grp. | 2 | 0 | 0 | 0 |
| Polypedilum sp. a epler | 0 | 0 | 0 | 0 |
| Polypedilum tritum | 0 | 0 | 0 | 0 |
| Pomacea paludosa | 0 | 0 | 0 | 0 |
| Pristina aequiseta | 0 | 0 | 0 | 0 |
| Pristina synclites | 0 | 0 | 0 | 0 |
| Pristinella jenkinae | 0 | 1 | 0 | 0 |
| Probezzia | 0 | 0 | 0 | 0 |
| Procambarus | 0 | 0 | 0 | 0 |
| Procladius | 0 | 1 | 0 | 0 |
| Procladius (holotanypus) | 0 | 0 | 0 | 0 |
| Procloeon viridocularis | 0 | 0 | 0 | 0 |
| Progomphus | 0 | 0 | 0 | 0 |
| Progomphus obscurus | 0 | 0 | 0 | 0 |
| Promoresia tardella | 0 | 0 | 0 | 0 |
| Prostoma rubrum | 0 | 0 | 0 | 0 |
| Psammoryctides convolutus | 0 | 0 | 0 | 0 |
| Pseudochironomus | 1 | 0 | 0 | 0 |
| Pseudocloeon | 0 | 0 | 0 | 0 |
| Psychodidae | 0 | 0 | 0 | 0 |
| Pycnopsyche | 0 | 0 | 0 | 0 |
| Pyralidae | 0 | 0 | 0 | 0 |
| Pyrgophorus platyrachis | 0 | 0 | 0 | 0 |
| Ranatra kirkaldyi | 0 | 0 | 0 | 0 |
| Rhagovelia | 0 | 0 | 0 | 0 |
| Rheocricotopus | 0 | 0 | 0 | 0 |
| Rheocricotopus robacki | 1 | 0 | 1 | 0 |
| Rheocricotopus tuberculatus | 0 | 0 | 0 | 0 |
| Rheotanytarsus | 0 | 0 | 2 | 0 |
| Rheotanytarsus distinctissimus grp. | 0 | 0 | 0 | 1 |
| Rheotanytarsus exiguus | 0 | 0 | 0 | 0 |
| Rheotanytarsus exiguus grp. | 2 | 0 | 0 | 0 |
| Rheotanytarsus pellucidus | 0 | 0 | 0 | 0 |
| Scirtes | 0 | 0 | 0 | 0 |
| Scirtidae | 0 | 0 | 0 | 0 |
| Serratella deficiens | 1 | 0 | 0 | 0 |
| Sialis | 0 | 3 | 0 | 0 |
| Silvius | 0 | 0 | 0 | 0 |



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| | SampleID | SampleID | SampleID | SampleID |
| | 10131/BenthID | 10591/BenthID | 10633/BenthID | 10785/BenthID |
| Taxon Name / SampleID/BenID -> | 10723(#counted) | 11209(#counted) | 11325(#counted) | 11544(#counted) |
| Simuliidae | 0 | 0 | 0 | 0 |
| Simulium | 0 | 0 | 5 | 3 |
| Slavina appendiculata | 2 | 2 | 0 | 0 |
| Somatogyrus walkerianus | 0 | 0 | 1 | 0 |
| Sperchon | 0 | 0 | 0 | 0 |
| Sperchonopsis | 0 | 0 | 0 | 0 |
| Sperchopsis | 0 | 0 | 0 | 0 |
| Sphaeriidae | 0 | 0 | 0 | 0 |
| Sphaeriidae(mollusca) | 0 | 0 | 0 | 0 |
| Sphaeroma | 0 | 0 | 0 | 0 |
| Sphaeromias | 0 | 0 | 0 | 0 |
| Spirosperma | 0 | 0 | 0 | 0 |
| Spirosperma ferox | 0 | 0 | 0 | 0 |
| Stelechomyia perpulchra | 0 | 0 | 0 | 0 |
| Stempellina | 0 | 0 | 0 | 0 |
| Stempellina sp. a epler | 0 | 0 | 0 | 0 |
| Stempellinella | 0 | 2 | 1 | 0 |
| Stenacron | 0 | 0 | 0 | 0 |
| Stenacron floridense | 0 | 0 | 6 | 0 |
| Stenacron interpunctatum | 0 | 0 | 0 | 1 |
| Stenelmis | 1 | 3 | 12 | 11 |
| Stenelmis decorata | 0 | 0 | 0 | 0 |
| Stenelmis hungerfordi | 0 | 0 | 0 | 0 |
| Stenochironomus | 2 | 1 | 7 | 1 |
| Stenonema | 0 | 0 | 0 | 0 |
| Stenonema exiguum | 0 | 0 | 0 | 3 |
| Stenonema smithae | 1 | 0 | 7 | 0 |
| Stratiomyidae | 0 | 0 | 0 | 0 |
| Stylaria lacustris | 0 | 0 | 0 | 0 |
| Synorthocladius | 0 | 0 | 0 | 0 |
| Tabanus | 0 | 0 | 0 | 0 |
| Taeniopteryx lita | 0 | 0 | 0 | 0 |
| Tanytarsus | 0 | 0 | 0 | 0 |
| Tanytarsus sp. a epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. c epler | 0 | 0 | 0 | 7 |
| Tanytarsus sp. d epler | 3 | 0 | 1 | 0 |
| Tanytarsus sp. e epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. g epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. l epler | 0 | 0 | 1 | 0 |
| Tanytarsus sp. m epler | 0 | 0 | 3 | 0 |
| Tanytarsus sp. o epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. r epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. s epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. t epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. u epler | 0 | 0 | 0 | 0 |
| Taphromysis bowmani | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 31010050 | 19010099 | 32020063 | 28020221 |
|---|---|---|---|---|
| Sample date -> | 7/9/1996 | 7/9/1996 | 7/16/1996 | 9/16/1996 |
| | SampleID | SampleID | SampleID | SampleID |
| | 10131/BenthID | 10591/BenthID | 10633/BenthID | 10785/BenthID |
| Taxon Name / SampleID/BenID -> | 10723(#counted) | 11209(#counted) | 11325(#counted) | 11544(#counted) |
| Thienemanniella | 0 | 0 | 0 | 0 |
| Thienemanniella lobapodema | 0 | 0 | 0 | 0 |
| Thienemanniella similis | 0 | 0 | 0 | 0 |
| Thienemanniella sp. a epler | 2 | 0 | 0 | 0 |
| Thienemannimyia grp. | 0 | 0 | 1 | 0 |
| Tipula | 0 | 0 | 0 | 0 |
| Tipulidae | 0 | 0 | 0 | 0 |
| Torrenticola | 0 | 1 | 0 | 0 |
| Triaenodes | 4 | 1 | 0 | 1 |
| Triaenodes ignitus | 0 | 0 | 0 | 0 |
| Triaenodes perna | 0 | 0 | 0 | 0 |
| Tribelos | 0 | 0 | 0 | 0 |
| Tribelos atrum | 0 | 0 | 0 | 0 |
| Tribelos fuscicornis | 1 | 2 | 0 | 0 |
| Tribelos jucundum | 2 | 4 | 0 | 0 |
| Tricorythodes albilineatus | 1 | 0 | 0 | 0 |
| Tubificidae | 0 | 0 | 0 | 0 |
| Turbellaria | 0 | 0 | 0 | 0 |
| Tvetenia | 0 | 0 | 0 | 0 |
| Tvetenia discoloripes grp. | 0 | 0 | 0 | 0 |
| Unionicola | 0 | 0 | 0 | 0 |
| Unniella multivirga | 0 | 0 | 0 | 0 |
| Veliidae | 0 | 0 | 0 | 0 |
| Xenochironomus xenolabis | 0 | 0 | 0 | 0 |
| Xestochironomus | 0 | 0 | 0 | 0 |
| Xylotopus par | 1 | 0 | 0 | 0 |
| Zygoptera | 0 | 0 | 0 | 0 |

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| As Calculated / STORET station -> | 20020317 | 22030062 | 33040064 | 26011019 |
|---|---|---|---|---|
| Sample date -> | 9/16/1996 | 2/11/1997 | 2/25/1997 | 2/18/1997 |
| | SampleID | SampleID | SampleID | SampleID |
| | 10844/BenthID | 11464/BenthID | 11607/BenthID | 12089/BenthID |
| Taxon Name / SampleID/BenID -> | 11554(#counted) | 11963(#counted) | 12057(#counted) | 12197(#counted) |
| Ablabesmyia (karelia) grp. | 0 | 0 | 0 | 0 |
| Ablabesmyia hauberi | 0 | 0 | 0 | 0 |
| Ablabesmyia mallochi | 0 | 0 | 0 | 3 |
| Ablabesmyia rhamphe grp. | 0 | 0 | 1 | 1 |
| Acentrella parvula | 0 | 0 | 0 | 0 |
| Acerpenna pygmaea | 0 | 0 | 0 | 0 |
| Acroneuria | 0 | 0 | 0 | 0 |
| Acroneuria abnormis | 0 | 0 | 0 | 0 |
| Acroneuria arenosa | 0 | 0 | 0 | 0 |
| Acroneuria arenosa/evoluta | 0 | 0 | 0 | 0 |
| Acroneuria lycorias | 0 | 0 | 0 | 0 |
| Agarodes libalis | 0 | 0 | 0 | 0 |
| Alluaudomyia | 0 | 0 | 0 | 0 |
| Amnicola | 0 | 0 | 0 | 0 |
| Amnicola dalli | 0 | 0 | 0 | 0 |
| Amnicola dalli johnsoni | 0 | 0 | 0 | 0 |
| Amphipoda | 0 | 0 | 1 | 0 |
| Ancylidae | 0 | 2 | 2 | 0 |
| Ancyronyx | 0 | 0 | 0 | 0 |
| Ancyronyx variegatus | 0 | 0 | 0 | 0 |
| Anisocentropus pyraloides | 0 | 0 | 0 | 0 |
| Anopheles | 0 | 0 | 0 | 0 |
| Apsectrotanypus johnsoni | 0 | 0 | 0 | 0 |
| Argia | 0 | 0 | 0 | 0 |
| Argia fumipennis | 0 | 0 | 0 | 0 |
| Argia moesta | 0 | 0 | 0 | 0 |
| Argia sedula | 0 | 0 | 0 | 0 |
| Argia tibialis | 0 | 0 | 0 | 0 |
| Arrenurus | 0 | 0 | 0 | 0 |
| Arrenurus problecornis | 0 | 0 | 0 | 0 |
| Astacidae | 0 | 0 | 0 | 0 |
| Atherix | 0 | 0 | 0 | 0 |
| Atractides | 0 | 2 | 0 | 0 |
| Atrichopogon | 0 | 0 | 0 | 0 |
| Aulodrilus pigueti | 1 | 0 | 0 | 0 |
| Aulodrilus pluriseta | 0 | 0 | 0 | 0 |
| Baetidae | 0 | 0 | 0 | 0 |
| Baetis | 3 | 0 | 0 | 0 |
| Baetis intercalaris | 0 | 0 | 0 | 0 |
| Baetisca rogersi | 0 | 0 | 0 | 0 |
| Beardius truncatus | 0 | 0 | 0 | 0 |
| Belostoma | 0 | 0 | 0 | 0 |
| Belostomatidae | 0 | 0 | 0 | 0 |
| Bivalvia | 0 | 0 | 0 | 0 |
| Bourletiella | 0 | 0 | 0 | 0 |
| Boyeria vinosa | 0 | 0 | 0 | 0 |
| Brachycentrus | 0 | 0 | 0 | 0 |
| Brachycentrus chelatus | 0 | 0 | 0 | 0 |
| Brachycentrus numerosus | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 20020317 | 22030062 | 33040064 | 26011019 |
|---|---|---|---|---|
| Sample date -> | 9/16/1996 | 2/11/1997 | 2/25/1997 | 2/18/1997 |
| | SampleID | SampleID | SampleID | SampleID |
| | 10844/BenthID | 11464/BenthID | 11607/BenthID | 12089/BenthID |
| Taxon Name / SampleID/BenID -> | 11554(#counted) | 11963(#counted) | 12057(#counted) | 12197(#counted) |
| Brachycercus maculatus | 0 | 0 | 0 | 0 |
| Caecidotea | 0 | 0 | 0 | 0 |
| Caecidotea racovitzai | 0 | 0 | 0 | 0 |
| Caenis | 0 | 0 | 0 | 0 |
| Caenis diminuta | 0 | 0 | 0 | 0 |
| Caenis hilaris | 0 | 0 | 0 | 0 |
| Callibaetis floridanus | 0 | 0 | 0 | 0 |
| Calopteryx | 0 | 0 | 0 | 0 |
| Calopteryx maculata | 0 | 0 | 1 | 0 |
| Cambaridae | 1 | 0 | 0 | 0 |
| Campeloma | 0 | 0 | 0 | 0 |
| Campeloma limum | 0 | 0 | 0 | 0 |
| Cassidinidea ovalis | 0 | 0 | 0 | 0 |
| Cecidomyiidae | 0 | 0 | 0 | 0 |
| Ceratopogonidae | 0 | 0 | 0 | 0 |
| Cernotina | 0 | 1 | 0 | 0 |
| Chaoborus | 0 | 0 | 0 | 0 |
| Chaoborus albatus | 0 | 0 | 0 | 0 |
| Chauliodes | 0 | 0 | 0 | 0 |
| Chelifera | 0 | 0 | 0 | 0 |
| Cheumatopsyche | 13 | 28 | 0 | 0 |
| Chimarra | 0 | 0 | 0 | 0 |
| Chironomus | 0 | 0 | 0 | 0 |
| Choroterpes basalis | 0 | 0 | 0 | 0 |
| Choroterpes hubbelli | 0 | 0 | 0 | 0 |
| Cladotanytarsus | 0 | 1 | 0 | 0 |
| Cladotanytarsus cf. daviesi | 0 | 0 | 0 | 0 |
| Cladotanytarsus sp. i epler | 0 | 0 | 0 | 0 |
| Clathrosperchon | 0 | 0 | 0 | 0 |
| Climacea areolaris | 0 | 0 | 0 | 0 |
| Clinotanypus | 0 | 0 | 0 | 0 |
| Coelotanypus | 0 | 0 | 0 | 0 |
| Coelotanypus scapularis | 0 | 0 | 0 | 0 |
| Coenagrionidae | 0 | 0 | 0 | 0 |
| Collembola | 0 | 0 | 0 | 0 |
| Conchapelopia | 0 | 0 | 6 | 0 |
| Corbicula fluminea | 2 | 0 | 0 | 4 |
| Corduliidae | 1 | 0 | 0 | 0 |
| Corydalus | 0 | 0 | 0 | 0 |
| Corydalus cornuta | 0 | 0 | 0 | 0 |
| Corydalus cornutus | 0 | 0 | 0 | 0 |
| Corynoneura | 0 | 0 | 0 | 0 |
| Corynoneura sp. b epler | 0 | 0 | 0 | 0 |
| Corynoneura sp. c epler | 0 | 1 | 0 | 0 |
| Corynoneura taris | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 20020317 | 22030062 | 33040064 | 26011019 |
|---|---|---|---|---|
| Sample date -> | 9/16/1996 | 2/11/1997 | 2/25/1997 | 2/18/1997 |
| | SampleID | SampleID | SampleID | SampleID |
| | 10844/BenthID | 11464/BenthID | 11607/BenthID | 12089/BenthID |
| Taxon Name / SampleID/BenID -> | 11554(#counted) | 11963(#counted) | 12057(#counted) | 12197(#counted) |
| Crangonyx | 0 | 0 | 0 | 0 |
| Cricotopus | 0 | 0 | 0 | 0 |
| Cricotopus bicinctus | 0 | 0 | 0 | 0 |
| Cricotopus bicinctus grp. | 1 | 5 | 0 | 0 |
| Cricotopus or orthocladius | 11 | 0 | 0 | 1 |
| Cryptochironomus | 0 | 0 | 0 | 1 |
| Cryptotendipes | 7 | 0 | 0 | 0 |
| Curculionidae | 0 | 0 | 0 | 0 |
| Cyrnellus fraternus | 0 | 0 | 0 | 0 |
| Demicryptochironomus | 0 | 0 | 0 | 0 |
| Dero digitata | 0 | 0 | 0 | 0 |
| Dero digitata complex | 0 | 0 | 0 | 0 |
| Dero lodeni | 0 | 0 | 0 | 0 |
| Dero pectinata | 0 | 0 | 0 | 0 |
| Dero trifida | 0 | 0 | 0 | 1 |
| Dero vaga | 0 | 0 | 0 | 0 |
| Dicrotendipes | 0 | 0 | 0 | 0 |
| Dicrotendipes modestus | 0 | 0 | 0 | 3 |
| Dicrotendipes neomodestus | 0 | 0 | 0 | 0 |
| Dicrotendipes simpsoni | 0 | 0 | 0 | 0 |
| Dicrotendipes sp. a epler | 0 | 0 | 0 | 0 |
| Dineutus | 0 | 0 | 0 | 0 |
| Dineutus discolor | 0 | 0 | 0 | 0 |
| Dineutus serrulatus | 0 | 0 | 0 | 0 |
| Diplectrona modesta | 0 | 0 | 0 | 0 |
| Dixa | 0 | 0 | 0 | 0 |
| Dixella | 0 | 1 | 0 | 0 |
| Djalmabatista pulcher | 0 | 0 | 0 | 3 |
| Dolichopodidae | 0 | 0 | 0 | 0 |
| Dromogomphus armatus | 0 | 0 | 0 | 0 |
| Dromogomphus spinosus | 0 | 0 | 0 | 0 |
| Dryopidae | 0 | 0 | 0 | 0 |
| Dubiraphia | 0 | 0 | 4 | 0 |
| Dubiraphia quadrinotata | 0 | 0 | 0 | 0 |
| Dubiraphia vittata | 0 | 0 | 0 | 4 |
| Dugesia | 0 | 0 | 0 | 0 |
| Dugesia tigrina | 2 | 0 | 0 | 0 |
| Eclipidrilus | 1 | 0 | 4 | 0 |
| Eclipidrilus palustris | 0 | 0 | 0 | 0 |
| Ectopria | 0 | 0 | 0 | 0 |
| Elimia | 0 | 0 | 0 | 0 |
| Elimia floridensis | 0 | 19 | 0 | 0 |
| Empididae | 0 | 0 | 0 | 0 |
| Enallagma | 0 | 3 | 0 | 0 |



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| As Calculated / STORET station -> | 20020317 | 22030062 | 33040064 | 26011019 |
|---|---|---|---|---|
| Sample date -> | 9/16/1996 | 2/11/1997 | 2/25/1997 | 2/18/1997 |
| | SampleID | SampleID | SampleID | SampleID |
| | 10844/BenthID | 11464/BenthID | 11607/BenthID | 12089/BenthID |
| Taxon Name / SampleID/BenID -> | 11554(#counted) | 11963(#counted) | 12057(#counted) | 12197(#counted) |
| Enallagma cardenium | 0 | 0 | 0 | 1 |
| Enchytraeidae | 0 | 0 | 30 | 0 |
| Endotribelos hesperium | 0 | 0 | 0 | 0 |
| Enochrus | 0 | 0 | 0 | 0 |
| Ephemerellidae | 0 | 0 | 0 | 0 |
| Ephydridae | 0 | 0 | 0 | 0 |
| Epitheca | 0 | 0 | 0 | 0 |
| Epitheca princeps regina | 0 | 0 | 0 | 0 |
| Eurylophella doris | 0 | 0 | 0 | 0 |
| Eurylophella temporalis | 0 | 0 | 3 | 0 |
| Ferrissia | 0 | 0 | 0 | 0 |
| Gammaridae | 0 | 0 | 0 | 0 |
| Gammarus | 6 | 0 | 0 | 0 |
| Gammarus tigrinus | 0 | 0 | 0 | 0 |
| Gastropoda | 0 | 0 | 0 | 0 |
| Geayia | 0 | 0 | 0 | 0 |
| Gerridae | 0 | 0 | 0 | 0 |
| Gloiobdella elongata | 0 | 0 | 0 | 0 |
| Goeldichironomus fluctuans | 0 | 0 | 0 | 0 |
| Gomphidae | 0 | 0 | 0 | 0 |
| Gomphus | 2 | 0 | 0 | 0 |
| Gomphus minutus | 0 | 0 | 0 | 0 |
| Gonielmis | 0 | 0 | 0 | 0 |
| Gonielmis dietrichi | 0 | 0 | 0 | 0 |
| Grandidierella bonnieroides | 0 | 0 | 0 | 0 |
| Gyretes iricolor | 0 | 0 | 0 | 0 |
| Haber speciosus | 0 | 0 | 0 | 0 |
| Hagenius brevistylus | 0 | 0 | 0 | 0 |
| Hebetancylus excentricus | 0 | 0 | 0 | 0 |
| Helobdella stagnalis | 0 | 0 | 0 | 0 |
| Helobdella triserialis | 0 | 0 | 0 | 0 |
| Helopelopia | 0 | 0 | 0 | 0 |
| Hemerodromia | 0 | 4 | 0 | 0 |
| Hemiptera | 0 | 0 | 0 | 0 |
| Heptageniidae | 0 | 0 | 0 | 0 |
| Hetaerina | 0 | 0 | 0 | 1 |
| Hetaerina titia | 0 | 0 | 0 | 0 |
| Heteroplectron americanum | 0 | 0 | 0 | 0 |
| Hexagenia | 0 | 0 | 1 | 0 |
| Hexagenia bilineata | 0 | 0 | 0 | 0 |
| Hexagenia limbata | 0 | 0 | 0 | 0 |
| Hexagenia munda orlando | 0 | 0 | 0 | 0 |
| Hexatoma | 0 | 0 | 0 | 0 |
| Hyalella azteca | 11 | 9 | 0 | 27 |
| Hydra | 0 | 0 | 0 | 0 |
| Hydrachna | 0 | 0 | 0 | 0 |
| Hydraena marginicollis | 0 | 0 | 0 | 0 |
| Hydraenidae | 0 | 0 | 0 | 0 |



US EPA ARCHIVE DOCUMENT

| As Calculated / STORET station -> | 20020317 | 22030062 | 33040064 | 26011019 |
|---|---|---|---|---|
| Sample date -> | 9/16/1996 | 2/11/1997 | 2/25/1997 | 2/18/1997 |
| | SampleID | SampleID | SampleID | SampleID |
| | 10844/BenthID | 11464/BenthID | 11607/BenthID | 12089/BenthID |
| Taxon Name / SampleID/BenID -> | 11554(#counted) | 11963(#counted) | 12057(#counted) | 12197(#counted) |
| Hydrobiidae | 0 | 0 | 0 | 0 |
| Hydrodroma | 0 | 0 | 0 | 0 |
| Hydrophilidae | 0 | 0 | 0 | 0 |
| Hydroporus | 0 | 0 | 2 | 0 |
| Hydropsyche | 25 | 0 | 0 | 0 |
| Hydropsyche decalda | 0 | 0 | 0 | 0 |
| Hydropsychidae | 0 | 0 | 0 | 0 |
| Hydroptila | 2 | 3 | 0 | 3 |
| Hydroptilidae | 0 | 0 | 0 | 0 |
| Hygrobates | 0 | 0 | 0 | 0 |
| Hygrotus | 0 | 0 | 1 | 0 |
| Ischnura | 0 | 0 | 0 | 4 |
| Ischnura hastata | 0 | 0 | 0 | 0 |
| Isonychia | 0 | 0 | 0 | 0 |
| Isoperla | 0 | 0 | 0 | 0 |
| Isopoda | 0 | 0 | 0 | 0 |
| Isotomurus | 0 | 0 | 0 | 0 |
| Isotomurus tricolor | 0 | 1 | 0 | 0 |
| Kiefferulus | 0 | 0 | 0 | 0 |
| Krendowskia | 0 | 0 | 0 | 0 |
| Labiobaetis | 1 | 2 | 0 | 3 |
| Labrundinia | 0 | 0 | 1 | 0 |
| Labrundinia becki | 0 | 0 | 0 | 0 |
| Labrundinia johannseni | 0 | 0 | 0 | 0 |
| Labrundinia neopilosella | 0 | 0 | 0 | 0 |
| Labrundinia pilosella | 0 | 0 | 0 | 0 |
| Laevapex | 0 | 0 | 0 | 0 |
| Laevapex peninsulae | 0 | 0 | 0 | 0 |
| Larsia berneri | 0 | 0 | 0 | 0 |
| Larsia decolorata | 0 | 0 | 0 | 0 |
| Lauterborniella agrayloides | 0 | 0 | 0 | 0 |
| Lebertia | 3 | 1 | 0 | 0 |
| Lepidoptera | 0 | 0 | 0 | 1 |
| Leptoceridae | 0 | 0 | 0 | 0 |
| Leptophlebia | 0 | 0 | 0 | 0 |
| Leptophlebiidae | 0 | 0 | 7 | 0 |
| Leuctra | 0 | 0 | 1 | 0 |
| Libellulidae | 0 | 0 | 0 | 0 |
| Limnesia | 0 | 0 | 0 | 0 |
| Limnodrilus hoffmeisteri | 17 | 0 | 0 | 4 |
| Limnophila | 0 | 0 | 0 | 0 |
| Limonia | 0 | 0 | 0 | 0 |
| Liodessus | 0 | 0 | 0 | 0 |
| Liodessus affinis | 0 | 0 | 0 | 0 |
| Lioporeus | 0 | 0 | 0 | 0 |
| Lirceus | 0 | 0 | 0 | 0 |
| Littoridinops monroensis | 0 | 0 | 0 | 0 |
| Lumbriculidae | 0 | 0 | 0 | 0 |
| Lumbriculus variegatus | 0 | 0 | 0 | 0 |



US EPA ARCHIVE DOCUMENT

| As Calculated / STORET station -> | 20020317 | 22030062 | 33040064 | 26011019 |
|---|---|---|---|---|
| Sample date -> | 9/16/1996 | 2/11/1997 | 2/25/1997 | 2/18/1997 |
| | SampleID | SampleID | SampleID | SampleID |
| | 10844/BenthID | 11464/BenthID | 11607/BenthID | 12089/BenthID |
| Taxon Name / SampleID/BenID -> | 11554(#counted) | 11963(#counted) | 12057(#counted) | 12197(#counted) |
| Lype diversa | 0 | 0 | 0 | 0 |
| Maccaffertium | 0 | 0 | 0 | 0 |
| Maccaffertium smithae | 0 | 0 | 0 | 0 |
| Macromia | 0 | 0 | 0 | 0 |
| Macromia taeniolata | 0 | 0 | 0 | 1 |
| Macromiidae | 0 | 0 | 0 | 0 |
| Macronychus glabratus | 0 | 1 | 0 | 0 |
| Macrostemum carolina | 0 | 0 | 0 | 0 |
| Mayatrichia | 0 | 0 | 0 | 0 |
| Mayatrichia ayama | 0 | 0 | 0 | 0 |
| Meropelopia | 0 | 0 | 0 | 0 |
| Mesosmittia | 0 | 0 | 0 | 0 |
| Metrobates | 0 | 0 | 0 | 0 |
| Micrasema | 0 | 5 | 0 | 0 |
| Micrasema rusticum | 0 | 0 | 0 | 0 |
| Micrasema wataga | 0 | 0 | 0 | 0 |
| Microcylloepus | 0 | 0 | 0 | 0 |
| Microcylloepus pusillus | 0 | 0 | 0 | 10 |
| Micromenetus | 0 | 0 | 0 | 0 |
| Micromenetus dilatatus | 0 | 0 | 0 | 0 |
| Microtendipes pedellus | 0 | 0 | 16 | 0 |
| Microtendipes pedellus grp. | 0 | 0 | 0 | 0 |
| Microtendipes rydalensis | 0 | 0 | 0 | 0 |
| Microtendipes rydalensis grp. | 0 | 0 | 0 | 0 |
| Mideopsis | 2 | 0 | 1 | 0 |
| Molanna | 0 | 0 | 1 | 0 |
| Mooreobdella | 0 | 0 | 0 | 0 |
| Mooreobdella tetragon | 0 | 0 | 0 | 1 |
| Muscidae | 0 | 0 | 0 | 0 |
| Naididae | 0 | 0 | 0 | 0 |
| Nais behningi | 0 | 0 | 0 | 0 |
| Nais communis | 0 | 0 | 0 | 0 |
| Nais communis complex | 0 | 0 | 0 | 0 |
| Nais pardalis | 0 | 0 | 0 | 0 |
| Nais simplex | 0 | 0 | 0 | 0 |
| Nais variabilis | 0 | 0 | 0 | 0 |
| Nanocladius | 0 | 0 | 0 | 0 |
| Nectopsyche | 2 | 0 | 0 | 0 |
| Nectopsyche candida | 0 | 0 | 0 | 0 |
| Nectopsyche exquisita | 0 | 0 | 0 | 7 |
| Nectopsyche pavida | 0 | 0 | 0 | 0 |
| Nemertea | 0 | 0 | 0 | 0 |
| Neoperla | 0 | 0 | 0 | 0 |
| Neoperla clymene | 0 | 0 | 0 | 0 |
| Neoporus | 0 | 0 | 0 | 0 |
| Neotrichia | 0 | 0 | 0 | 0 |
| Neumania | 0 | 0 | | |



US EPA ARCHIVE DOCUMENT

| As Calculated / STORET station -> | 20020317 | 22030062 | 33040064 | 26011019 |
|---|---|---|---|---|
| Sample date -> | 9/16/1996 | 2/11/1997 | 2/25/1997 | 2/18/1997 |
| | SampleID | SampleID | SampleID | SampleID |
| | 10844/BenthID | 11464/BenthID | 11607/BenthID | 12089/BenthID |
| Taxon Name / SampleID/BenID -> | 11554(#counted) | 11963(#counted) | 12057(#counted) | 12197(#counted) |
| Neumania distincta | 0 | 0 | 0 | 0 |
| Neureclipsis | 0 | 0 | 0 | 0 |
| Neureclipsis crepuscularis | 0 | 0 | 0 | 0 |
| Neurocordulia | 0 | 0 | 0 | 0 |
| Neurocordulia alabamensis | 0 | 0 | 0 | 0 |
| Neurocordulia virginiensis | 0 | 0 | 0 | 0 |
| Nigronia | 0 | 0 | 0 | 0 |
| Nigronia fasciatus | 0 | 0 | 0 | 0 |
| Nigronia serricornis | 0 | 0 | 0 | 0 |
| Nilotanypus | 0 | 0 | 0 | 0 |
| Nilothauma | 0 | 0 | 0 | 2 |
| Notogillia wetherbyi | 0 | 0 | 0 | 0 |
| Nyctiophylax | 0 | 0 | 1 | 0 |
| Odonata | 0 | 0 | 0 | 0 |
| Odontomyia | 0 | 0 | 0 | 0 |
| Oecetis | 2 | 1 | 1 | 6 |
| Oecetis cinerascens | 0 | 0 | 0 | 0 |
| Oecetis georgia | 0 | 0 | 0 | 0 |
| Oecetis inconspicua cmplx. | 0 | 0 | 0 | 0 |
| Oecetis morsei or sphyra | 0 | 0 | 0 | 0 |
| Oecetis parva | 0 | 0 | 0 | 0 |
| Oecetis persimilis | 0 | 0 | 0 | 0 |
| Oecetis sp. a floyd | 0 | 0 | 0 | 0 |
| Oecetis sp. e floyd | 0 | 0 | 0 | 0 |
| Ora/scirtes | 0 | 0 | 0 | 0 |
| Oribatei | 0 | 0 | 0 | 0 |
| Orthocladiinae | 0 | 0 | 0 | 0 |
| Orthocladiinae gen. c epler | 0 | 0 | 0 | 0 |
| Orthocladiinae gen. f epler | 0 | 0 | 0 | 0 |
| Orthocladius annectens | 0 | 0 | 0 | 0 |
| Orthotrichia | 0 | 5 | 0 | 0 |
| Oxyethira | 0 | 1 | 1 | 1 |
| Pachydiplax longipennis | 0 | 0 | 0 | 0 |
| Pagastiella | 0 | 0 | 0 | 0 |
| Palaemonetes | 0 | 0 | 0 | 0 |
| Palaemonetes kadiakensis | 0 | 0 | 0 | 0 |
| Palaemonetes paludosus | 2 | 0 | 0 | 0 |
| Palpomyia/bezzia grp. | 5 | 0 | 5 | 1 |
| Paracladopelma | 0 | 0 | 0 | 0 |
| Paracladopelma loganae | 0 | 0 | 0 | 0 |
| Paracladopelma undine | 0 | 0 | 0 | 0 |
| Paragnetina | 0 | 0 | 0 | 0 |
| Paragnetina fumosa | 0 | 0 | 0 | 0 |



US EPA ARCHIVE DOCUMENT

| As Calculated / STORET station -> | 20020317 | 22030062 | 33040064 | 26011019 |
|---|---|---|---|---|
| Sample date -> | 9/16/1996 | 2/11/1997 | 2/25/1997 | 2/18/1997 |
| | SampleID | SampleID | SampleID | SampleID |
| | 10844/BenthID | 11464/BenthID | 11607/BenthID | 12089/BenthID |
| Taxon Name / SampleID/BenID -> | 11554(#counted) | 11963(#counted) | 12057(#counted) | 12197(#counted) |
| Parakiefferiella | 0 | 0 | 0 | 0 |
| Paralauterborniella nigrohalterale | 2 | 0 | 1 | 0 |
| Paraleptophlebia volitans | 0 | 0 | 0 | 0 |
| Parametriocnemus | 0 | 3 | 3 | 0 |
| Parametriocnemus sp. f epler | 0 | 0 | 0 | 0 |
| Paranyctiophylax | 0 | 0 | 0 | 0 |
| Paraplea | 0 | 0 | 0 | 0 |
| Paraponyx | 0 | 0 | 0 | 0 |
| Paratanytarsus sp. a epler | 0 | 0 | 0 | 0 |
| Paratanytarsus sp. c epler | 0 | 3 | 0 | 0 |
| Paratendipes subaequalis | 0 | 0 | 0 | 0 |
| Pelecypoda | 0 | 0 | 0 | 0 |
| Pelonomus obscurus | 0 | 0 | 0 | 0 |
| Peltodytes | 0 | 0 | 0 | 0 |
| Pentaneura inconspicua | 4 | 1 | 0 | 0 |
| Perlesta | 0 | 0 | 0 | 0 |
| Perlesta placida | 0 | 0 | 0 | 0 |
| Perlesta placida complex | 0 | 0 | 0 | 0 |
| Perlinella | 0 | 0 | 0 | 0 |
| Petrophila | 0 | 0 | 0 | 0 |
| Phaenopsectra obediens grp. | 0 | 0 | 0 | 0 |
| Phaenopsectra punctipes grp. | 0 | 1 | 0 | 0 |
| Phylocentropus | 0 | 0 | 0 | 0 |
| Physella | 0 | 0 | 0 | 0 |
| Physella cubensis | 0 | 0 | 0 | 0 |
| Piona | 0 | 0 | 0 | 0 |
| Pisidiidae | 0 | 0 | 0 | 5 |
| Pisidium | 0 | 0 | 0 | 0 |
| Planariidae | 0 | 0 | 0 | 0 |
| Planorbella duryi | 0 | 0 | 0 | 0 |
| Planorbella scalaris | 0 | 0 | 0 | 0 |
| Planorbidae | 0 | 0 | 0 | 0 |
| Platyhelminthes | 0 | 0 | 0 | 0 |
| Plecoptera | 0 | 0 | 0 | 0 |
| Plumulariidae | 0 | 0 | 0 | 0 |
| Polycentropodidae | 0 | 0 | 0 | 0 |
| Polycentropus | 0 | 0 | 0 | 0 |
| Polypedilum | 0 | 0 | 1 | 0 |
| Polypedilum aviceps | 0 | 0 | 0 | 0 |
| Polypedilum convictum grp. | 18 | 1 | 0 | 14 |
| Polypedilum fallax | 0 | 0 | 0 | 3 |
| Polypedilum flavum | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 20020317 | 22030062 | 33040064 | 26011019 |
|---|---|---|---|---|
| Sample date -> | 9/16/1996 | 2/11/1997 | 2/25/1997 | 2/18/1997 |
| | SampleID | SampleID | SampleID | SampleID |
| | 10844/BenthID | 11464/BenthID | 11607/BenthID | 12089/BenthID |
| Taxon Name / SampleID/BenID -> | 11554(#counted) | 11963(#counted) | 12057(#counted) | 12197(#counted) |
| Polypedilum halterale grp. | 1 | 0 | 0 | 0 |
| Polypedilum illinoense | 0 | 0 | 0 | 0 |
| Polypedilum illinoense grp. | 2 | 11 | 0 | 2 |
| Polypedilum scalaenum | 0 | 0 | 0 | 0 |
| Polypedilum scalaenum grp. | 0 | 0 | 0 | 13 |
| Polypedilum sp. a epler | 0 | 0 | 0 | 0 |
| Polypedilum tritum | 0 | 0 | 0 | 0 |
| Pomacea paludosa | 0 | 0 | 0 | 0 |
| Pristina aequiseta | 0 | 0 | 0 | 0 |
| Pristina synclites | 0 | 0 | 0 | 0 |
| Pristinella jenkinae | 0 | 0 | 0 | 0 |
| Probezzia | 0 | 0 | 0 | 0 |
| Procambarus | 0 | 0 | 0 | 0 |
| Procladius | 0 | 0 | 2 | 0 |
| Procladius (holotanypus) | 0 | 0 | 0 | 0 |
| Procloeon viridocularis | 0 | 0 | 0 | 0 |
| Progomphus | 0 | 0 | 0 | 0 |
| Progomphus obscurus | 0 | 0 | 0 | 0 |
| Promoresia tardella | 0 | 0 | 0 | 0 |
| Prostoma rubrum | 0 | 0 | 0 | 0 |
| Psammoryctides convolutus | 0 | 0 | 0 | 0 |
| Pseudochironomus | 0 | 0 | 0 | 0 |
| Pseudocloeon | 0 | 0 | 0 | 0 |
| Psychodidae | 0 | 0 | 0 | 0 |
| Pycnopsyche | 0 | 0 | 0 | 0 |
| Pyralidae | 2 | 0 | 0 | 0 |
| Pyrgophorus platyrachis | 0 | 0 | 0 | 0 |
| Ranatra kirkaldyi | 0 | 0 | 0 | 0 |
| Rhagovelia | 0 | 0 | 0 | 0 |
| Rheocricotopus | 0 | 0 | 0 | 0 |
| Rheocricotopus robacki | 0 | 8 | 0 | 1 |
| Rheocricotopus tuberculatus | 0 | 0 | 8 | 0 |
| Rheotanytarsus | 0 | 0 | 0 | 0 |
| Rheotanytarsus distinctissimus grp. | 1 | 7 | 0 | 0 |
| Rheotanytarsus exiguus | 0 | 0 | 0 | 0 |
| Rheotanytarsus exiguus grp. | 2 | 0 | 0 | 1 |
| Rheotanytarsus pellucidus | 0 | 0 | 0 | 0 |
| Scirtes | 0 | 0 | 0 | 1 |
| Scirtidae | 0 | 0 | 0 | 0 |
| Serratella deficiens | 0 | 0 | 0 | 0 |
| Sialis | 0 | 0 | 0 | 0 |
| Silvius | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 20020317 | 22030062 | 33040064 | 26011019 |
|---|---|---|---|---|
| Sample date -> | 9/16/1996 | 2/11/1997 | 2/25/1997 | 2/18/1997 |
| | SampleID | SampleID | SampleID | SampleID |
| | 10844/BenthID | 11464/BenthID | 11607/BenthID | 12089/BenthID |
| Taxon Name / SampleID/BenID -> | 11554(#counted) | 11963(#counted) | 12057(#counted) | 12197(#counted) |
| Simuliidae | 0 | 0 | 0 | 0 |
| Simulium | 1 | 0 | 2 | 0 |
| Slavina appendiculata | 0 | 1 | 0 | 0 |
| Somatogyrus walkerianus | 0 | 0 | 0 | 0 |
| Sperchon | 0 | 0 | 0 | 0 |
| Sperchonopsis | 0 | 0 | 0 | 0 |
| Sperchopsis | 0 | 0 | 0 | 0 |
| Sphaeriidae | 0 | 0 | 0 | 0 |
| Sphaeriidae(mollusca) | 0 | 0 | 0 | 0 |
| Sphaeroma | 0 | 0 | 0 | 0 |
| Sphaeromias | 0 | 0 | 0 | 0 |
| Spirosperma | 0 | 0 | 0 | 0 |
| Spirosperma ferox | 0 | 0 | 0 | 0 |
| Stelechomyia perpulchra | 0 | 0 | 0 | 0 |
| Stempellina | 0 | 0 | 0 | 0 |
| Stempellina sp. a epler | 0 | 0 | 0 | 0 |
| Stempellinella | 0 | 1 | 0 | 4 |
| Stenacron | 0 | 0 | 1 | 0 |
| Stenacron floridense | 0 | 0 | 0 | 0 |
| Stenacron interpunctatum | 0 | 0 | 0 | 0 |
| Stenelmis | 0 | 0 | 0 | 2 |
| Stenelmis decorata | 0 | 0 | 0 | 0 |
| Stenelmis hungerfordi | 0 | 0 | 0 | 0 |
| Stenochironomus | 0 | 5 | 1 | 1 |
| Stenonema | 0 | 0 | 0 | 0 |
| Stenonema exiguum | 0 | 5 | 0 | 0 |
| Stenonema smithae | 0 | 0 | 0 | 0 |
| Stratiomyidae | 0 | 0 | 0 | 0 |
| Stylaria lacustris | 0 | 0 | 0 | 0 |
| Synorthocladius | 0 | 0 | 0 | 0 |
| Tabanus | 0 | 0 | 0 | 0 |
| Taeniopteryx lita | 0 | 0 | 0 | 0 |
| Tanytarsus | 0 | 0 | 0 | 0 |
| Tanytarsus sp. a epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. c epler | 0 | 0 | 4 | 0 |
| Tanytarsus sp. d epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. e epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. g epler | 2 | 0 | 0 | 0 |
| Tanytarsus sp. l epler | 1 | 1 | 4 | 6 |
| Tanytarsus sp. m epler | 0 | 0 | 9 | 4 |
| Tanytarsus sp. o epler | 0 | 0 | 5 | 0 |
| Tanytarsus sp. r epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. s epler | 0 | 0 | 3 | 2 |
| Tanytarsus sp. t epler | 0 | 2 | 0 | 0 |
| Tanytarsus sp. u epler | 0 | 0 | 0 | 0 |
| Taphromysis bowmani | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 20020317 | 22030062 | 33040064 | 26011019 |
|---|---|---|---|---|
| Sample date -> | 9/16/1996 | 2/11/1997 | 2/25/1997 | 2/18/1997 |
| | SampleID | SampleID | SampleID | SampleID |
| | 10844/BenthID | 11464/BenthID | 11607/BenthID | 12089/BenthID |
| Taxon Name / SampleID/BenID -> | 11554(#counted) | 11963(#counted) | 12057(#counted) | 12197(#counted) |
| Thienemanniella | 0 | 0 | 0 | 0 |
| Thienemanniella lobapodema | 0 | 0 | 0 | 0 |
| Thienemanniella similis | 3 | 0 | 0 | 0 |
| Thienemanniella sp. a epler | 0 | 0 | 0 | 0 |
| Thienemannimyia grp. | 0 | 0 | 2 | 0 |
| Tipula | 0 | 0 | 0 | 0 |
| Tipulidae | 0 | 0 | 0 | 0 |
| Torrenticola | 0 | 0 | 0 | 0 |
| Triaenodes | 0 | 1 | 0 | 0 |
| Triaenodes ignitus | 0 | 0 | 0 | 0 |
| Triaenodes perna | 0 | 0 | 0 | 0 |
| Tribelos | 0 | 0 | 1 | 0 |
| Tribelos atrum | 0 | 0 | 0 | 0 |
| Tribelos fuscicornis | 0 | 0 | 0 | 1 |
| Tribelos jucundum | 0 | 0 | 0 | 0 |
| Tricorythodes albilineatus | 4 | 0 | 0 | 0 |
| Tubificidae | 0 | 0 | 0 | 0 |
| Turbellaria | 0 | 0 | 0 | 0 |
| Tvetenia | 0 | 0 | 0 | 0 |
| Tvetenia discoloripes grp. | 0 | 0 | 0 | 0 |
| Unionicola | 0 | 0 | 0 | 0 |
| Unniella multivirga | 0 | 0 | 1 | 0 |
| Veliidae | 0 | 0 | 0 | 0 |
| Xenochironomus xenolabis | 0 | 0 | 0 | 0 |
| Xestochironomus | 0 | 0 | 0 | 0 |
| Xylotopus par | 0 | 0 | 0 | 0 |
| Zygoptera | 0 | 0 | 0 | 2 |

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| As Calculated / STORET station -> | 31020040 | 26011020 | 20030456 | 33010054 |
|---|---|---|---|---|
| Sample date -> | 2/4/1997 | 2/18/1997 | 7/2/1997 | 8/12/1997 |
| | SampleID | SampleID | SampleID | SampleID |
| | 12092/BenthID | 12224/BenthID | 12401/BenthID | 12436/BenthID |
| Taxon Name / SampleID/BenID -> | 12201(#counted) | 12340(#counted) | 12463(#counted) | 12486(#counted) |
| Ablabesmyia (karelia) grp. | 0 | 0 | 0 | 0 |
| Ablabesmyia hauberi | 0 | 0 | 0 | 0 |
| Ablabesmyia mallochi | 0 | 0 | 1 | 0 |
| Ablabesmyia rhamphe grp. | 0 | 0 | 0 | 0 |
| Acentrella parvula | 0 | 0 | 0 | 0 |
| Acerpenna pygmaea | 0 | 2 | 1 | 0 |
| Acroneuria | 14 | 0 | 0 | 1 |
| Acroneuria abnormis | 0 | 0 | 0 | 0 |
| Acroneuria arenosa | 0 | 0 | 0 | 0 |
| Acroneuria arenosa/evoluta | 0 | 0 | 0 | 0 |
| Acroneuria lycorias | 0 | 0 | 0 | 0 |
| Agarodes libalis | 0 | 0 | 0 | 0 |
| Alluaudomyia | 0 | 0 | 0 | 0 |
| Amnicola | 0 | 0 | 0 | 0 |
| Amnicola dalli | 0 | 0 | 0 | 0 |
| Amnicola dalli johnsoni | 0 | 0 | 0 | 0 |
| Amphipoda | 0 | 0 | 0 | 0 |
| Ancylidae | 0 | 0 | 4 | 0 |
| Ancyronyx | 1 | 0 | 0 | 0 |
| Ancyronyx variegatus | 0 | 0 | 0 | 7 |
| Anisocentropus pyraloides | 0 | 0 | 0 | 0 |
| Anopheles | 0 | 1 | 0 | 0 |
| Apsectrotanypus johnsoni | 0 | 0 | 0 | 0 |
| Argia | 1 | 0 | 0 | 0 |
| Argia fumipennis | 0 | 0 | 0 | 0 |
| Argia moesta | 0 | 0 | 0 | 0 |
| Argia sedula | 0 | 0 | 0 | 0 |
| Argia tibialis | 0 | 0 | 0 | 0 |
| Arrenurus | 0 | 2 | 0 | 1 |
| Arrenurus problecornis | 0 | 0 | 0 | 0 |
| Astacidae | 0 | 0 | 0 | 0 |
| Atherix | 0 | 0 | 0 | 0 |
| Atractides | 0 | 0 | 0 | 0 |
| Atrichopogon | 0 | 0 | 0 | 0 |
| Aulodrilus pigueti | 0 | 0 | 0 | 0 |
| Aulodrilus pluriseta | 0 | 0 | 0 | 0 |
| Baetidae | 0 | 0 | 0 | 0 |
| Baetis | 0 | 0 | 0 | 0 |
| Baetis intercalaris | 0 | 0 | 0 | 0 |
| Baetisca rogersi | 0 | 0 | 0 | 0 |
| Beardius truncatus | 0 | 0 | 0 | 0 |
| Belostoma | 0 | 0 | 0 | 0 |
| Belostomatidae | 0 | 0 | 0 | 0 |
| Bivalvia | 0 | 0 | 0 | 0 |
| Bourletiella | 0 | 0 | 0 | 0 |
| Boyeria vinosa | 0 | 0 | 0 | 1 |
| Brachycentrus | 0 | 0 | 0 | 0 |
| Brachycentrus chelatus | 0 | 0 | 0 | 4 |
| Brachycentrus numerosus | 0 | 0 | 0 | 0 |



US EPA ARCHIVE DOCUMENT

| As Calculated / STORET station -> | 31020040 | 26011020 | 20030456 | 33010054 |
|---|---|---|---|---|
| Sample date -> | 2/4/1997 | 2/18/1997 | 7/2/1997 | 8/12/1997 |
| | SampleID | SampleID | SampleID | SampleID |
| | 12092/BenthID | 12224/BenthID | 12401/BenthID | 12436/BenthID |
| Taxon Name / SampleID/BenID -> | 12201(#counted) | 12340(#counted) | 12463(#counted) | 12486(#counted) |
| Brachycercus maculatus | 0 | 0 | 0 | 0 |
| Caecidotea | 0 | 0 | 0 | 0 |
| Caecidotea racovitzai | 0 | 0 | 0 | 0 |
| Caenis | 0 | 0 | 0 | 0 |
| Caenis diminuta | 0 | 0 | 0 | 0 |
| Caenis hilaris | 0 | 0 | 0 | 0 |
| Callibaetis floridanus | 0 | 0 | 1 | 0 |
| Calopteryx | 0 | 0 | 4 | 0 |
| Calopteryx maculata | 0 | 0 | 0 | 0 |
| Cambaridae | 0 | 0 | 0 | 0 |
| Campeloma | 0 | 0 | 0 | 0 |
| Campeloma limum | 0 | 0 | 0 | 0 |
| Cassidinidea ovalis | 0 | 0 | 0 | 0 |
| Cecidomyiidae | 0 | 0 | 0 | 0 |
| Ceratopogonidae | 0 | 0 | 0 | 0 |
| Cernotina | 0 | 0 | 0 | 0 |
| Chaoborus | 0 | 0 | 0 | 0 |
| Chaoborus albatus | 0 | 0 | 0 | 0 |
| Chauliodes | 0 | 0 | 0 | 0 |
| Chelifera | 0 | 0 | 0 | 0 |
| Cheumatopsyche | 0 | 2 | 0 | 0 |
| Chimarra | 3 | 0 | 0 | 0 |
| Chironomus | 0 | 0 | 0 | 0 |
| Choroterpes basalis | 0 | 0 | 0 | 0 |
| Choroterpes hubbelli | 0 | 0 | 0 | 0 |
| Cladotanytarsus | 0 | 0 | 0 | 0 |
| Cladotanytarsus cf. daviesi | 0 | 0 | 0 | 0 |
| Cladotanytarsus sp. i epler | 0 | 0 | 0 | 0 |
| Clathrosperchon | 0 | 0 | 0 | 0 |
| Climacea areolaris | 0 | 0 | 0 | 0 |
| Clinotanypus | 0 | 0 | 0 | 0 |
| Coelotanypus | 0 | 0 | 0 | 0 |
| Coelotanypus scapularis | 0 | 0 | 0 | 0 |
| Coenagrionidae | 0 | 0 | 0 | 0 |
| Collembola | 0 | 0 | 0 | 0 |
| Conchapelopia | 1 | 0 | 1 | 1 |
| Corbicula fluminea | 0 | 1 | 0 | 0 |
| Corduliidae | 0 | 0 | 0 | 0 |
| Corydalus | 0 | 0 | 0 | 0 |
| Corydalus cornuta | 0 | 0 | 0 | 0 |
| Corydalus cornutus | 0 | 0 | 0 | 0 |
| Corynoneura | 0 | 0 | 1 | 0 |
| Corynoneura sp. b epler | 0 | 0 | 0 | 0 |
| Corynoneura sp. c epler | 0 | 0 | 0 | 0 |
| Corynoneura taris | 0 | 0 | 0 | 0 |



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| Taxon Name / SampleID/BenID -> | 12201(#counted) | 12340(#counted) | 12463(#counted) | 12486(#counted) |
| Crangonyx | 0 | 0 | 0 | 0 |
| Cricotopus | 0 | 0 | 0 | 0 |
| Cricotopus bicinctus | 0 | 0 | 0 | 0 |
| Cricotopus bicinctus grp. | 0 | 0 | 0 | 0 |
| Cricotopus or orthocladius | 0 | 0 | 0 | 0 |
| Cryptochironomus | 0 | 0 | 0 | 0 |
| Cryptotendipes | 0 | 0 | 0 | 0 |
| Curculionidae | 0 | 0 | 0 | 0 |
| Cyrnellus fraternus | 0 | 0 | 0 | 0 |
| Demicryptochironomus | 0 | 0 | 0 | 0 |
| Dero digitata | 0 | 0 | 0 | 0 |
| Dero digitata complex | 0 | 0 | 0 | 0 |
| Dero lodeni | 0 | 0 | 0 | 0 |
| Dero pectinata | 0 | 0 | 0 | 0 |
| Dero trifida | 0 | 0 | 0 | 0 |
| Dero vaga | 0 | 0 | 0 | 0 |
| Dicrotendipes | 0 | 0 | 0 | 0 |
| Dicrotendipes modestus | 0 | 0 | 0 | 0 |
| Dicrotendipes neomodestus | 0 | 0 | 0 | 0 |
| Dicrotendipes simpsoni | 0 | 0 | 0 | 0 |
| Dicrotendipes sp. a epler | 0 | 0 | 0 | 0 |
| Dineutus | 0 | 0 | 0 | 0 |
| Dineutus discolor | 0 | 0 | 0 | 0 |
| Dineutus serrulatus | 0 | 0 | 0 | 0 |
| Diplectrona modesta | 0 | 0 | 0 | 1 |
| Dixa | 0 | 0 | 0 | 0 |
| Dixella | 0 | 0 | 0 | 0 |
| Djalmabatista pulcher | 0 | 1 | 0 | 0 |
| Dolichopodidae | 0 | 0 | 0 | 0 |
| Dromogomphus armatus | 0 | 0 | 0 | 0 |
| Dromogomphus spinosus | 0 | 0 | 0 | 0 |
| Dryopidae | 0 | 0 | 0 | 0 |
| Dubiraphia | 0 | 0 | 0 | 2 |
| Dubiraphia quadrinotata | 0 | 0 | 0 | 0 |
| Dubiraphia vittata | 0 | 2 | 0 | 0 |
| Dugesia | 0 | 0 | 0 | 0 |
| Dugesia tigrina | 0 | 0 | 0 | 0 |
| Eclipidrilus | 1 | 0 | 0 | 0 |
| Eclipidrilus palustris | 0 | 0 | 0 | 0 |
| Ectopria | 0 | 0 | 0 | 1 |
| Elimia | 0 | 0 | 0 | 0 |
| Elimia floridensis | 0 | 0 | 0 | 0 |
| Empididae | 0 | 0 | 0 | 0 |
| Enallagma | 0 | 1 | 0 | 0 |



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| Taxon Name / SampleID/BenID -> | 12201(#counted) | 12340(#counted) | 12463(#counted) | 12486(#counted) |
| Enallagma cardenium | 0 | 0 | 0 | 0 |
| Enchytraeidae | 1 | 1 | 0 | 3 |
| Endotribelos hesperium | 0 | 0 | 0 | 0 |
| Enochrus | 0 | 0 | 0 | 0 |
| Ephemerellidae | 0 | 0 | 0 | 0 |
| Ephydridae | 0 | 0 | 0 | 2 |
| Epitheca | 0 | 0 | 0 | 0 |
| Epitheca princeps regina | 0 | 0 | 0 | 0 |
| Eurylophella doris | 8 | 0 | 0 | 0 |
| Eurylophella temporalis | 0 | 0 | 0 | 0 |
| Ferrissia | 0 | 0 | 0 | 0 |
| Gammaridae | 0 | 0 | 0 | 0 |
| Gammarus | 0 | 0 | 1 | 0 |
| Gammarus tigrinus | 0 | 0 | 0 | 0 |
| Gastropoda | 0 | 0 | 0 | 0 |
| Geayia | 0 | 0 | 0 | 0 |
| Gerridae | 0 | 0 | 0 | 0 |
| Gloiobdella elongata | 0 | 0 | 0 | 0 |
| Goeldichironomus fluctuans | 0 | 0 | 0 | 0 |
| Gomphidae | 0 | 0 | 1 | 0 |
| Gomphus | 0 | 0 | 0 | 0 |
| Gomphus minutus | 0 | 0 | 0 | 0 |
| Gonielmis | 0 | 0 | 0 | 0 |
| Gonielmis dietrichi | 2 | 0 | 0 | 3 |
| Grandidierella bonnieroides | 0 | 0 | 0 | 0 |
| Gyretes iricolor | 0 | 0 | 0 | 0 |
| Haber speciosus | 0 | 0 | 0 | 0 |
| Hagenius brevistylus | 0 | 0 | 0 | 0 |
| Hebetancylus excentricus | 0 | 0 | 0 | 0 |
| Helobdella stagnalis | 0 | 0 | 0 | 0 |
| Helobdella triserialis | 0 | 0 | 0 | 0 |
| Helopelopia | 0 | 0 | 0 | 0 |
| Hemerodromia | 0 | 5 | 15 | 2 |
| Hemiptera | 0 | 0 | 0 | 0 |
| Heptageniidae | 0 | 0 | 0 | 0 |
| Hetaerina | 0 | 0 | 0 | 0 |
| Hetaerina titia | 0 | 0 | 0 | 0 |
| Heteroplectron americanum | 0 | 0 | 0 | 0 |
| Hexagenia | 0 | 0 | 1 | 0 |
| Hexagenia bilineata | 0 | 0 | 0 | 0 |
| Hexagenia limbata | 0 | 0 | 0 | 0 |
| Hexagenia munda orlando | 0 | 0 | 0 | 0 |
| Hexatoma | 1 | 0 | 0 | 0 |
| Hyalella azteca | 0 | 11 | 0 | 0 |
| Hydra | 0 | 0 | 0 | 0 |
| Hydrachna | 0 | 0 | 0 | 0 |
| Hydraena marginicollis | 0 | 0 | 0 | 0 |
| Hydraenidae | 0 | 0 | 0 | 0 |



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| Hydrobiidae | 0 | 0 | 0 | 0 |
| Hydrodroma | 0 | 0 | 0 | 0 |
| Hydrophilidae | 0 | 0 | 0 | 0 |
| Hydroporus | 0 | 0 | 0 | 0 |
| Hydropsyche | 2 | 0 | 0 | 9 |
| Hydropsyche decalda | 0 | 0 | 0 | 0 |
| Hydropsychidae | 0 | 0 | 0 | 0 |
| Hydroptila | 0 | 4 | 0 | 0 |
| Hydroptilidae | 0 | 0 | 0 | 0 |
| Hygrobates | 0 | 0 | 0 | 0 |
| Hygrotus | 0 | 0 | 0 | 0 |
| Ischnura | 0 | 0 | 1 | 0 |
| Ischnura hastata | 0 | 0 | 0 | 0 |
| Isonychia | 0 | 0 | 0 | 0 |
| Isoperla | 19 | 0 | 0 | 0 |
| Isopoda | 0 | 0 | 0 | 0 |
| Isotomurus | 0 | 0 | 0 | 0 |
| Isotomurus tricolor | 0 | 0 | 0 | 0 |
| Kiefferulus | 0 | 0 | 0 | 0 |
| Krendowskia | 0 | 0 | 0 | 0 |
| Labiobaetis | 0 | 0 | 0 | 0 |
| Labrundinia | 0 | 0 | 1 | 0 |
| Labrundinia becki | 0 | 0 | 0 | 0 |
| Labrundinia johannseni | 0 | 0 | 0 | 0 |
| Labrundinia neopilosella | 0 | 0 | 0 | 0 |
| Labrundinia pilosella | 0 | 0 | 0 | 0 |
| Laevapex | 0 | 0 | 0 | 0 |
| Laevapex peninsulae | 0 | 0 | 0 | 0 |
| Larsia berneri | 0 | 0 | 0 | 1 |
| Larsia decolorata | 0 | 0 | 1 | 0 |
| Lauterborniella agrayloides | 0 | 0 | 0 | 0 |
| Lebertia | 0 | 0 | 0 | 0 |
| Lepidoptera | 0 | 0 | 0 | 0 |
| Leptoceridae | 0 | 0 | 0 | 0 |
| Leptophlebia | 0 | 0 | 0 | 0 |
| Leptophlebiidae | 3 | 0 | 1 | 1 |
| Leuctra | 0 | 0 | 20 | 8 |
| Libellulidae | 0 | 0 | 0 | 0 |
| Limnesia | 0 | 0 | 0 | 0 |
| Limnodrilus hoffmeisteri | 0 | 0 | 1 | 1 |
| Limnophila | 0 | 0 | 0 | 0 |
| Limonia | 0 | 0 | 0 | 0 |
| Liodessus | 0 | 0 | 0 | 0 |
| Liodessus affinis | 0 | 0 | 0 | 0 |
| Lioporeus | 0 | 0 | 0 | 0 |
| Lirceus | 0 | 0 | 0 | 0 |
| Littoridinops monroensis | 0 | 0 | 0 | 0 |
| Lumbriculidae | 0 | 0 | 0 | 0 |
| Lumbriculus variegatus | 0 | 0 | 0 | 0 |



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| Taxon Name / SampleID/BenID -> | 12201(#counted) | 12340(#counted) | 12463(#counted) | 12486(#counted) |
| Lype diversa | 0 | 0 | 0 | 1 |
| Maccaffertium | 0 | 0 | 0 | 0 |
| Maccaffertium smithae | 0 | 0 | 0 | 0 |
| Macromia | 0 | 0 | 0 | 0 |
| Macromia taeniolata | 0 | 0 | 0 | 0 |
| Macromiidae | 0 | 0 | 0 | 0 |
| Macronychus glabratus | 0 | 0 | 0 | 0 |
| Macrostemum carolina | 0 | 0 | 0 | 0 |
| Mayatrichia | 0 | 0 | 0 | 0 |
| Mayatrichia ayama | 0 | 1 | 0 | 0 |
| Meropelopia | 0 | 0 | 0 | 0 |
| Mesosmittia | 0 | 0 | 0 | 0 |
| Metrobates | 0 | 0 | 0 | 0 |
| Micrasema | 0 | 0 | 0 | 0 |
| Micrasema rusticum | 0 | 0 | 0 | 0 |
| Micrasema wataga | 0 | 0 | 0 | 0 |
| Microcylloepus | 0 | 0 | 0 | 0 |
| Microcylloepus pusillus | 0 | 14 | 0 | 9 |
| Micromenetus | 0 | 0 | 0 | 0 |
| Micromenetus dilatatus | 0 | 0 | 0 | 0 |
| Microtendipes pedellus | 0 | 0 | 0 | 0 |
| Microtendipes pedellus grp. | 0 | 0 | 2 | 0 |
| Microtendipes rydalensis | 0 | 0 | 0 | 1 |
| Microtendipes rydalensis grp. | 0 | 0 | 0 | 0 |
| Mideopsis | 0 | 0 | 0 | 0 |
| Molanna | 0 | 0 | 0 | 0 |
| Mooreobdella | 0 | 0 | 0 | 0 |
| Mooreobdella tetragon | 0 | 0 | 0 | 0 |
| Muscidae | 0 | 0 | 0 | 0 |
| Naididae | 0 | 0 | 0 | 0 |
| Nais behningi | 0 | 0 | 0 | 0 |
| Nais communis | 0 | 2 | 1 | 0 |
| Nais communis complex | 0 | 0 | 0 | 0 |
| Nais pardalis | 0 | 1 | 0 | 0 |
| Nais simplex | 0 | 0 | 0 | 0 |
| Nais variabilis | 0 | 0 | 0 | 0 |
| Nanocladius | 0 | 0 | 0 | 0 |
| Nectopsyche | 0 | 0 | 1 | 0 |
| Nectopsyche candida | 0 | 0 | 0 | 0 |
| Nectopsyche exquisita | 0 | 1 | 0 | 0 |
| Nectopsyche pavida | 0 | 0 | 0 | 0 |
| Nemertea | 0 | 0 | 0 | 0 |
| Neoperla | 0 | 0 | 0 | 0 |
| Neoperla clymene | 0 | 0 | 0 | 0 |
| Neoporus | 0 | 0 | 0 | 0 |
| Neotrichia | 0 | 1 | 0 | 0 |
| Neumania | 0 | 0 | 0 | 0 |



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| Taxon Name / SampleID/BenID -> | 12201(#counted) | 12340(#counted) | 12463(#counted) | 12486(#counted) |
| Neumania distincta | 0 | 0 | 0 | 0 |
| Neureclipsis | 0 | 0 | 0 | 0 |
| Neureclipsis crepuscularis | 0 | 0 | 0 | 0 |
| Neurocordulia | 0 | 0 | 0 | 0 |
| Neurocordulia alabamensis | 0 | 0 | 0 | 0 |
| Neurocordulia virginiensis | 0 | 0 | 0 | 0 |
| Nigronia | 0 | 0 | 0 | 0 |
| Nigronia fasciatus | 0 | 0 | 0 | 0 |
| Nigronia serricornis | 0 | 0 | 0 | 0 |
| Nilotanypus | 0 | 0 | 0 | 0 |
| Nilothauma | 0 | 0 | 0 | 0 |
| Notogillia wetherbyi | 0 | 0 | 0 | 0 |
| Nyctiophylax | 0 | 0 | 0 | 0 |
| Odonata | 0 | 0 | 0 | 0 |
| Odontomyia | 0 | 0 | 0 | 0 |
| Oecetis | 1 | 9 | 0 | 0 |
| Oecetis cinerascens | 0 | 0 | 0 | 0 |
| Oecetis georgia | 0 | 0 | 10 | 0 |
| Oecetis inconspicua cmplx. | 0 | 0 | 0 | 0 |
| Oecetis morsei or sphyra | 0 | 0 | 0 | 1 |
| Oecetis parva | 0 | 0 | 0 | 0 |
| Oecetis persimilis | 0 | 0 | 0 | 0 |
| Oecetis sp. a floyd | 0 | 0 | 0 | 0 |
| Oecetis sp. e floyd | 0 | 0 | 0 | 0 |
| Ora/scirtes | 0 | 0 | 0 | 0 |
| Oribatei | 0 | 1 | 0 | 0 |
| Orthocladiinae | 0 | 0 | 0 | 0 |
| Orthocladiinae gen. c epler | 0 | 0 | 0 | 0 |
| Orthocladiinae gen. f epler | 0 | 0 | 0 | 0 |
| Orthocladius annectens | 0 | 0 | 0 | 0 |
| Orthotrichia | 0 | 0 | 0 | 0 |
| Oxyethira | 0 | 0 | 0 | 0 |
| Pachydiplax longipennis | 0 | 0 | 0 | 0 |
| Pagastiella | 0 | 0 | 0 | 0 |
| Palaemonetes | 0 | 0 | 0 | 0 |
| Palaemonetes kadiakensis | 0 | 0 | 0 | 0 |
| Palaemonetes paludosus | 0 | 0 | 0 | 0 |
| Palpomyia/bezzia grp. | 0 | 3 | 0 | 0 |
| Paracladopelma | 0 | 0 | 0 | 0 |
| Paracladopelma loganae | 0 | 0 | 0 | 0 |
| Paracladopelma undine | 0 | 0 | 0 | 0 |
| Paragnetina | 0 | 0 | 0 | 0 |
| Paragnetina fumosa | 0 | 0 | 0 | 1 |



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| Taxon Name / SampleID/BenID -> | 12201(#counted) | 12340(#counted) | 12463(#counted) | 12486(#counted) |
| Parakiefferiella | 0 | 0 | 0 | 0 |
| Paralauterborniella nigrohalterale | 0 | 0 | 0 | 0 |
| Paraleptophlebia volitans | 0 | 0 | 0 | 0 |
| Parametriocnemus | 0 | 0 | 4 | 1 |
| Parametriocnemus sp. f epler | 0 | 0 | 0 | 0 |
| Paranyctiophylax | 0 | 0 | 0 | 0 |
| Paraplea | 0 | 0 | 0 | 0 |
| Paraponyx | 0 | 0 | 0 | 0 |
| Paratanytarsus sp. a epler | 0 | 0 | 0 | 0 |
| Paratanytarsus sp. c epler | 0 | 0 | 0 | 0 |
| Paratendipes subaequalis | 0 | 0 | 0 | 0 |
| Pelecypoda | 0 | 0 | 0 | 0 |
| Pelonomus obscurus | 0 | 0 | 0 | 0 |
| Peltodytes | 0 | 0 | 0 | 0 |
| Pentaneura inconspicua | 0 | 0 | 0 | 1 |
| Perlesta | 21 | 0 | 0 | 0 |
| Perlesta placida | 0 | 0 | 0 | 0 |
| Perlesta placida complex | 0 | 0 | 0 | 0 |
| Perlinella | 0 | 0 | 0 | 0 |
| Petrophila | 0 | 0 | 0 | 0 |
| Phaenopsectra obediens grp. | 0 | 0 | 0 | 0 |
| Phaenopsectra punctipes grp. | 0 | 0 | 0 | 0 |
| Phylocentropus | 0 | 0 | 0 | 0 |
| Physella | 0 | 1 | 0 | 0 |
| Physella cubensis | 0 | 0 | 0 | 0 |
| Piona | 0 | 0 | 0 | 0 |
| Pisidiidae | 0 | 11 | 0 | 0 |
| Pisidium | 0 | 0 | 0 | 0 |
| Planariidae | 0 | 0 | 0 | 0 |
| Planorbella duryi | 0 | 0 | 0 | 0 |
| Planorbella scalaris | 0 | 0 | 0 | 0 |
| Planorbidae | 0 | 0 | 0 | 0 |
| Platyhelminthes | 0 | 0 | 0 | 0 |
| Plecoptera | 0 | 0 | 0 | 0 |
| Plumulariidae | 0 | 0 | 0 | 0 |
| Polycentropodidae | 0 | 0 | 0 | 0 |
| Polycentropus | 0 | 0 | 1 | 0 |
| Polypedilum | 0 | 0 | 0 | 0 |
| Polypedilum aviceps | 0 | 0 | 0 | 0 |
| Polypedilum convictum grp. | 2 | 0 | 0 | 16 |
| Polypedilum fallax | 1 | 0 | 0 | 1 |
| Polypedilum flavum | 0 | 0 | 0 | 0 |



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| Polypedilum halterale grp. | 0 | 0 | 0 | 0 |
| Polypedilum illinoense | 0 | 0 | 0 | 0 |
| Polypedilum illinoense grp. | 0 | 4 | 0 | 2 |
| Polypedilum scalaenum | 0 | 0 | 0 | 0 |
| Polypedilum scalaenum grp. | 0 | 0 | 2 | 1 |
| Polypedilum sp. a epler | 0 | 0 | 0 | 0 |
| Polypedilum tritum | 0 | 0 | 0 | 0 |
| Pomacea paludosa | 0 | 0 | 0 | 0 |
| Pristina aequiseta | 0 | 0 | 0 | 0 |
| Pristina synclites | 0 | 0 | 0 | 0 |
| Pristinella jenkinae | 0 | 0 | 0 | 0 |
| Probezzia | 0 | 0 | 0 | 0 |
| Procambarus | 2 | 0 | 2 | 0 |
| Procladius | 0 | 0 | 0 | 0 |
| Procladius (holotanypus) | 0 | 0 | 0 | 0 |
| Procloeon viridocularis | 0 | 0 | 0 | 0 |
| Progomphus | 0 | 0 | 0 | 0 |
| Progomphus obscurus | 0 | 0 | 0 | 0 |
| Promoresia tardella | 0 | 0 | 0 | 0 |
| Prostoma rubrum | 0 | 2 | 0 | 0 |
| Psammoryctides convolutus | 0 | 0 | 0 | 0 |
| Pseudochironomus | 0 | 0 | 0 | 2 |
| Pseudocloeon | 0 | 0 | 0 | 0 |
| Psychodidae | 0 | 0 | 0 | 0 |
| Pycnopsyche | 1 | 0 | 0 | 0 |
| Pyralidae | 0 | 0 | 0 | 0 |
| Pyrgophorus platyrachis | 0 | 0 | 0 | 0 |
| Ranatra kirkaldyi | 0 | 0 | 0 | 0 |
| Rhagovelia | 0 | 0 | 0 | 0 |
| Rheocricotopus | 0 | 0 | 0 | 0 |
| Rheocricotopus robacki | 2 | 2 | 1 | 0 |
| Rheocricotopus tuberculatus | 0 | 0 | 0 | 0 |
| Rheotanytarsus | 0 | 0 | 0 | 0 |
| Rheotanytarsus distinctissimus grp. | 0 | 9 | 2 | 0 |
| Rheotanytarsus exiguus | 0 | 0 | 0 | 12 |
| Rheotanytarsus exiguus grp. | 6 | 5 | 11 | 0 |
| Rheotanytarsus pellucidus | 0 | 0 | 0 | 0 |
| Scirtes | 0 | 0 | 0 | 0 |
| Scirtidae | 0 | 0 | 0 | 0 |
| Serratella deficiens | 0 | 0 | 0 | 0 |
| Sialis | 0 | 0 | 0 | 0 |
| Silvius | 0 | 0 | 0 | 0 |



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| Simuliidae | 0 | 0 | 0 | 2 |
| Simulium | 6 | 0 | 4 | 0 |
| Slavina appendiculata | 0 | 0 | 0 | 0 |
| Somatogyrus walkerianus | 0 | 0 | 0 | 0 |
| Sperchon | 0 | 0 | 1 | 0 |
| Sperchonopsis | 0 | 0 | 0 | 1 |
| Sperchopsis | 0 | 0 | 0 | 0 |
| Sphaeriidae | 0 | 0 | 0 | 0 |
| Sphaeriidae(mollusca) | 0 | 0 | 0 | 0 |
| Sphaeroma | 0 | 0 | 0 | 0 |
| Sphaeromias | 0 | 0 | 0 | 0 |
| Spirosperma | 0 | 0 | 0 | 0 |
| Spirosperma ferox | 0 | 0 | 0 | 0 |
| Stelechomyia perpulchra | 0 | 0 | 0 | 1 |
| Stempellina | 0 | 0 | 0 | 1 |
| Stempellina sp. a epler | 0 | 0 | 0 | 0 |
| Stempellinella | 1 | 0 | 0 | 0 |
| Stenacron | 0 | 0 | 0 | 0 |
| Stenacron floridense | 0 | 0 | 0 | 0 |
| Stenacron interpunctatum | 0 | 0 | 0 | 0 |
| Stenelmis | 3 | 3 | 5 | 0 |
| Stenelmis decorata | 0 | 0 | 0 | 19 |
| Stenelmis hungerfordi | 0 | 0 | 0 | 0 |
| Stenochironomus | 9 | 0 | 1 | 0 |
| Stenonema | 0 | 0 | 0 | 1 |
| Stenonema exiguum | 0 | 1 | 0 | 0 |
| Stenonema smithae | 13 | 0 | 6 | 0 |
| Stratiomyidae | 0 | 0 | 0 | 0 |
| Stylaria lacustris | 0 | 1 | 0 | 0 |
| Synorthocladius | 0 | 0 | 0 | 0 |
| Tabanus | 0 | 0 | 0 | 0 |
| Taeniopteryx lita | 0 | 0 | 0 | 0 |
| Tanytarsus | 0 | 0 | 0 | 0 |
| Tanytarsus sp. a epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. c epler | 1 | 0 | 0 | 0 |
| Tanytarsus sp. d epler | 0 | 0 | 0 | 2 |
| Tanytarsus sp. e epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. g epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. l epler | 1 | 0 | 4 | 0 |
| Tanytarsus sp. m epler | 0 | 4 | 0 | 0 |
| Tanytarsus sp. o epler | 0 | 0 | 0 | 1 |
| Tanytarsus sp. r epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. s epler | 0 | 0 | 1 | 0 |
| Tanytarsus sp. t epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. u epler | 0 | 0 | 0 | 0 |
| Taphromysis bowmani | 0 | 0 | 0 | 0 |



US EPA ARCHIVE DOCUMENT

| As Calculated / STORET station -> | 31020040 | 26011020 | 20030456 | 33010054 |
|---|---|---|---|---|
| Sample date -> | 2/4/1997 | 2/18/1997 | 7/2/1997 | 8/12/1997 |
| | SampleID 12092/BenthID | SampleID 12224/BenthID | SampleID 12401/BenthID | SampleID 12436/BenthID |
| Taxon Name / SampleID/BenID -> | 12201(#counted) | 12340(#counted) | 12463(#counted) | 12486(#counted) |
| Thienemanniella | 0 | 0 | 0 | 0 |
| Thienemanniella lobapodema | 0 | 0 | 0 | 0 |
| Thienemanniella similis | 0 | 0 | 0 | 0 |
| Thienemanniella sp. a epler | 0 | 0 | 1 | 0 |
| Thienemannimyia grp. | 0 | 0 | 1 | 1 |
| Tipula | 0 | 0 | 0 | 0 |
| Tipulidae | 0 | 0 | 0 | 0 |
| Torrenticola | 0 | 0 | 0 | 0 |
| Triaenodes | 0 | 0 | 0 | 0 |
| Triaenodes ignitus | 0 | 0 | 0 | 0 |
| Triaenodes perna | 0 | 0 | 0 | 0 |
| Tribelos | 0 | 0 | 0 | 0 |
| Tribelos atrum | 0 | 0 | 0 | 0 |
| Tribelos fuscicornis | 0 | 0 | 0 | 0 |
| Tribelos jucundum | 1 | 2 | 1 | 0 |
| Tricorythodes albilineatus | 0 | 0 | 0 | 0 |
| Tubificidae | 0 | 0 | 0 | 0 |
| Turbellaria | 0 | 0 | 0 | 0 |
| Tvetenia | 0 | 0 | 0 | 0 |
| Tvetenia discoloripes grp. | 2 | 0 | 0 | 0 |
| Unionicola | 0 | 0 | 0 | 0 |
| Unniella multivirga | 0 | 0 | 0 | 0 |
| Veliidae | 0 | 0 | 0 | 0 |
| Xenochironomus xenolabis | 0 | 0 | 0 | 0 |
| Xestochironomus | 0 | 0 | 0 | 0 |
| Xylotopus par | 0 | 0 | 0 | 0 |
| Zygoptera | 0 | 0 | 0 | 0 |

US EPA ARCHIVE DOCUMENT

| As Calculated / STORET station -> | 21010018 | 26010972 | 22020062 | 31020040 |
|---|---|---|---|---|
| Sample date -> | 7/17/1997 | 9/30/1997 | 8/12/1997 | 2/10/1998 |
| | SampleID | SampleID | SampleID | SampleID |
| | 12450/BenthID | 12600/BenthID | 12609/BenthID | 13475/BenthID |
| Taxon Name / SampleID/BenID -> | 12500(#counted) | 12548(#counted) | 12557(#counted) | 12867(#counted) |
| Ablabesmyia (karelia) grp. | 0 | 0 | 0 | 0 |
| Ablabesmyia hauberi | 0 | 0 | 0 | 0 |
| Ablabesmyia mallochi | 2 | 2 | 0 | 1 |
| Ablabesmyia rhamphe grp. | 0 | 2 | 1 | 0 |
| Acentrella parvula | 0 | 0 | 0 | 0 |
| Acerpenna pygmaea | 0 | 4 | 0 | 0 |
| Acroneuria | 0 | 0 | 0 | 18 |
| Acroneuria abnormis | 0 | 0 | 0 | 0 |
| Acroneuria arenosa | 0 | 0 | 0 | 0 |
| Acroneuria arenosa/evoluta | 0 | 0 | 0 | 0 |
| Acroneuria lycorias | 0 | 0 | 0 | 0 |
| Agarodes libalis | 0 | 0 | 0 | 0 |
| Alluaudomyia | 0 | 0 | 0 | 0 |
| Amnicola | 0 | 0 | 0 | 0 |
| Amnicola dalli | 0 | 0 | 0 | 0 |
| Amnicola dalli johnsoni | 0 | 0 | 0 | 0 |
| Amphipoda | 0 | 0 | 0 | 0 |
| Ancylidae | 0 | 0 | 0 | 0 |
| Ancyronyx | 0 | 0 | 0 | 0 |
| Ancyronyx variegatus | 0 | 0 | 0 | 1 |
| Anisocentropus pyraloides | 0 | 0 | 0 | 0 |
| Anopheles | 0 | 0 | 0 | 0 |
| Apsectrotanypus johnsoni | 0 | 0 | 0 | 0 |
| Argia | 0 | 0 | 0 | 0 |
| Argia fumipennis | 0 | 0 | 0 | 0 |
| Argia moesta | 0 | 0 | 0 | 0 |
| Argia sedula | 0 | 0 | 0 | 0 |
| Argia tibialis | 0 | 0 | 0 | 0 |
| Arrenurus | 0 | 0 | 0 | 0 |
| Arrenurus problecornis | 0 | 0 | 0 | 0 |
| Astacidae | 0 | 0 | 0 | 0 |
| Atherix | 0 | 0 | 0 | 0 |
| Atractides | 0 | 0 | 0 | 0 |
| Atrichopogon | 0 | 0 | 0 | 0 |
| Aulodrilus pigueti | 0 | 1 | 0 | 0 |
| Aulodrilus pluriseta | 0 | 1 | 0 | 0 |
| Baetidae | 0 | 0 | 0 | 0 |
| Baetis | 0 | 0 | 0 | 0 |
| Baetis intercalaris | 0 | 0 | 0 | 0 |
| Baetisca rogersi | 0 | 0 | 0 | 0 |
| Beardius truncatus | 0 | 0 | 0 | 0 |
| Belostoma | 0 | 0 | 0 | 0 |
| Belostomatidae | 1 | 0 | 0 | 0 |
| Bivalvia | 0 | 0 | 0 | 0 |
| Bourletiella | 0 | 0 | 0 | 0 |
| Boyeria vinosa | 0 | 0 | 0 | 0 |
| Brachycentrus | 0 | 0 | 0 | 0 |
| Brachycentrus chelatus | 0 | 0 | 0 | 0 |
| Brachycentrus numerosus | 0 | 0 | 0 | 0 |



US EPA ARCHIVE DOCUMENT

| As Calculated / STORET station -> | 21010018 | 26010972 | 22020062 | 31020040 |
|---|---|---|---|---|
| Sample date -> | 7/17/1997 | 9/30/1997 | 8/12/1997 | 2/10/1998 |
| | SampleID | SampleID | SampleID | SampleID |
| | 12450/BenthID | 12600/BenthID | 12609/BenthID | 13475/BenthID |
| Taxon Name / SampleID/BenID -> | 12500(#counted) | 12548(#counted) | 12557(#counted) | 12867(#counted) |
| Brachycercus maculatus | 0 | 0 | 0 | 0 |
| Caecidotea | 0 | 0 | 0 | 0 |
| Caecidotea racovitzai | 0 | 0 | 0 | 0 |
| Caenis | 0 | 1 | 0 | 1 |
| Caenis diminuta | 0 | 0 | 0 | 0 |
| Caenis hilaris | 0 | 0 | 0 | 0 |
| Callibaetis floridanus | 0 | 0 | 0 | 0 |
| Calopteryx | 0 | 0 | 0 | 0 |
| Calopteryx maculata | 0 | 0 | 0 | 0 |
| Cambaridae | 0 | 0 | 0 | 0 |
| Campeloma | 0 | 0 | 0 | 0 |
| Campeloma limum | 0 | 0 | 0 | 0 |
| Cassidinidea ovalis | 0 | 0 | 0 | 0 |
| Cecidomyiidae | 0 | 0 | 0 | 0 |
| Ceratopogonidae | 0 | 0 | 0 | 0 |
| Cernotina | 1 | 0 | 0 | 0 |
| Chaoborus | 0 | 0 | 0 | 0 |
| Chaoborus albatus | 0 | 0 | 0 | 0 |
| Chauliodes | 0 | 0 | 0 | 0 |
| Chelifera | 0 | 0 | 0 | 0 |
| Cheumatopsyche | 33 | 0 | 0 | 0 |
| Chimarra | 5 | 1 | 0 | 0 |
| Chironomus | 0 | 1 | 0 | 0 |
| Choroterpes basalis | 0 | 0 | 0 | 0 |
| Choroterpes hubbelli | 0 | 0 | 0 | 0 |
| Cladotanytarsus | 0 | 0 | 0 | 0 |
| Cladotanytarsus cf. daviesi | 0 | 0 | 0 | 0 |
| Cladotanytarsus sp. i epler | 0 | 0 | 0 | 0 |
| Clathrosperchon | 0 | 0 | 1 | 0 |
| Climacea areolaris | 0 | 0 | 0 | 0 |
| Clinotanypus | 0 | 0 | 0 | 0 |
| Coelotanypus | 0 | 0 | 0 | 0 |
| Coelotanypus scapularis | 0 | 0 | 0 | 0 |
| Coenagrionidae | 0 | 0 | 0 | 0 |
| Collembola | 0 | 0 | 0 | 0 |
| Conchapelopia | 0 | 0 | 2 | 0 |
| Corbicula fluminea | 0 | 0 | 0 | 0 |
| Corduliidae | 0 | 0 | 0 | 0 |
| Corydalus | 0 | 0 | 0 | 1 |
| Corydalus cornuta | 0 | 0 | 0 | 0 |
| Corydalus cornutus | 1 | 0 | 0 | 0 |
| Corynoneura | 0 | 0 | 0 | 0 |
| Corynoneura sp. b epler | 0 | 0 | 3 | 0 |
| Corynoneura sp. c epler | 0 | 0 | 0 | 0 |
| Corynoneura taris | 0 | 0 | 0 | 0 |



US EPA ARCHIVE DOCUMENT

| As Calculated / STORET station -> | 21010018 | 26010972 | 22020062 | 31020040 |
|---|---|---|---|---|
| Sample date -> | 7/17/1997 | 9/30/1997 | 8/12/1997 | 2/10/1998 |
| | SampleID | SampleID | SampleID | SampleID |
| | 12450/BenthID | 12600/BenthID | 12609/BenthID | 13475/BenthID |
| Taxon Name / SampleID/BenID -> | 12500(#counted) | 12548(#counted) | 12557(#counted) | 12867(#counted) |
| Crangonyx | 4 | 0 | 0 | 0 |
| Cricotopus | 0 | 0 | 0 | 0 |
| Cricotopus bicinctus | 0 | 0 | 0 | 0 |
| Cricotopus bicinctus grp. | 0 | 0 | 0 | 0 |
| Cricotopus or orthocladius | 0 | 0 | 0 | 0 |
| Cryptochironomus | 0 | 0 | 1 | 0 |
| Cryptotendipes | 0 | 0 | 0 | 0 |
| Curculionidae | 0 | 0 | 0 | 0 |
| Cyrnellus fraternus | 0 | 0 | 0 | 0 |
| Demicryptochironomus | 0 | 0 | 0 | 0 |
| Dero digitata | 0 | 0 | 0 | 0 |
| Dero digitata complex | 0 | 0 | 0 | 0 |
| Dero lodeni | 0 | 0 | 0 | 0 |
| Dero pectinata | 0 | 0 | 0 | 0 |
| Dero trifida | 0 | 0 | 0 | 0 |
| Dero vaga | 0 | 0 | 0 | 0 |
| Dicrotendipes | 0 | 0 | 0 | 0 |
| Dicrotendipes modestus | 0 | 0 | 0 | 0 |
| Dicrotendipes neomodestus | 0 | 0 | 0 | 0 |
| Dicrotendipes simpsoni | 0 | 0 | 0 | 0 |
| Dicrotendipes sp. a epler | 0 | 0 | 0 | 0 |
| Dineutus | 0 | 0 | 1 | 0 |
| Dineutus discolor | 0 | 0 | 0 | 1 |
| Dineutus serrulatus | 0 | 0 | 0 | 0 |
| Diplectrona modesta | 0 | 0 | 0 | 0 |
| Dixa | 0 | 0 | 0 | 0 |
| Dixella | 0 | 0 | 0 | 0 |
| Djalmabatista pulcher | 0 | 1 | 0 | 0 |
| Dolichopodidae | 0 | 0 | 0 | 0 |
| Dromogomphus armatus | 0 | 0 | 0 | 0 |
| Dromogomphus spinosus | 0 | 0 | 0 | 0 |
| Dryopidae | 0 | 0 | 0 | 0 |
| Dubiraphia | 0 | 2 | 1 | 0 |
| Dubiraphia quadrinotata | 0 | 0 | 0 | 0 |
| Dubiraphia vittata | 0 | 0 | 0 | 0 |
| Dugesia | 0 | 0 | 0 | 0 |
| Dugesia tigrina | 0 | 0 | 0 | 0 |
| Eclipidrilus | 0 | 0 | 1 | 4 |
| Eclipidrilus palustris | 0 | 4 | 0 | 0 |
| Ectopria | 0 | 0 | 0 | 0 |
| Elimia | 0 | 0 | 0 | 0 |
| Elimia floridensis | 0 | 0 | 0 | 0 |
| Empididae | 0 | 0 | 0 | 0 |
| Enallagma | 0 | 4 | 0 | 0 |



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| As Calculated / STORET station -> | 21010018 | 26010972 | 22020062 | 31020040 |
|---|---|---|---|---|
| Sample date -> | 7/17/1997 | 9/30/1997 | 8/12/1997 | 2/10/1998 |
| | SampleID | SampleID | SampleID | SampleID |
| | 12450/BenthID | 12600/BenthID | 12609/BenthID | 13475/BenthID |
| Taxon Name / SampleID/BenID -> | 12500(#counted) | 12548(#counted) | 12557(#counted) | 12867(#counted) |
| Enallagma cardenium | 0 | 0 | 0 | 0 |
| Enchytraeidae | 0 | 7 | 32 | 3 |
| Endotribelos hesperium | 0 | 0 | 0 | 0 |
| Enochrus | 0 | 0 | 0 | 0 |
| Ephemerellidae | 0 | 0 | 0 | 0 |
| Ephydridae | 0 | 0 | 0 | 0 |
| Epitheca | 0 | 0 | 0 | 0 |
| Epitheca princeps regina | 0 | 0 | 0 | 0 |
| Eurylophella doris | 0 | 0 | 0 | 0 |
| Eurylophella temporalis | 0 | 0 | 0 | 0 |
| Ferrissia | 0 | 2 | 0 | 0 |
| Gammaridae | 0 | 0 | 0 | 0 |
| Gammarus | 0 | 0 | 0 | 0 |
| Gammarus tigrinus | 0 | 0 | 0 | 0 |
| Gastropoda | 0 | 0 | 0 | 0 |
| Geayia | 0 | 0 | 0 | 0 |
| Gerridae | 0 | 0 | 0 | 0 |
| Gloiobdella elongata | 0 | 0 | 0 | 0 |
| Goeldichironomus fluctuans | 0 | 0 | 0 | 0 |
| Gomphidae | 0 | 0 | 0 | 0 |
| Gomphus | 0 | 0 | 0 | 0 |
| Gomphus minutus | 0 | 0 | 0 | 0 |
| Gonielmis | 0 | 0 | 0 | 0 |
| Gonielmis dietrichi | 0 | 0 | 4 | 0 |
| Grandidierella bonnieroides | 0 | 0 | 0 | 0 |
| Gyretes iricolor | 0 | 0 | 0 | 0 |
| Haber speciosus | 0 | 0 | 0 | 0 |
| Hagenius brevistylus | 0 | 0 | 0 | 0 |
| Hebetancylus excentricus | 0 | 0 | 0 | 0 |
| Helobdella stagnalis | 0 | 0 | 0 | 0 |
| Helobdella triserialis | 0 | 0 | 0 | 0 |
| Helopelopia | 0 | 0 | 0 | 0 |
| Hemerodromia | 5 | 4 | 1 | 2 |
| Hemiptera | 0 | 0 | 0 | 0 |
| Heptageniidae | 0 | 0 | 0 | 0 |
| Hetaerina | 0 | 0 | 0 | 0 |
| Hetaerina titia | 0 | 0 | 0 | 0 |
| Heteroplectron americanum | 0 | 0 | 0 | 0 |
| Hexagenia | 0 | 0 | 0 | 0 |
| Hexagenia bilineata | 0 | 0 | 0 | 0 |
| Hexagenia limbata | 0 | 0 | 0 | 0 |
| Hexagenia munda orlando | 0 | 0 | 0 | 0 |
| Hexatoma | 0 | 0 | 0 | 0 |
| Hyalella azteca | 0 | 5 | 0 | 0 |
| Hydra | 0 | 0 | 0 | 0 |
| Hydrachna | 0 | 0 | 0 | 0 |
| Hydraena marginicollis | 0 | 0 | 0 | 0 |
| Hydraenidae | 0 | 0 | 0 | 0 |



US EPA ARCHIVE DOCUMENT

| As Calculated / STORET station -> | 21010018 | 26010972 | 22020062 | 31020040 |
|---|---|---|---|---|
| Sample date -> | 7/17/1997 | 9/30/1997 | 8/12/1997 | 2/10/1998 |
| | SampleID | SampleID | SampleID | SampleID |
| | 12450/BenthID | 12600/BenthID | 12609/BenthID | 13475/BenthID |
| Taxon Name / SampleID/BenID -> | 12500(#counted) | 12548(#counted) | 12557(#counted) | 12867(#counted) |
| Hydrobiidae | 0 | 0 | 0 | 0 |
| Hydrodroma | 0 | 0 | 0 | 0 |
| Hydrophilidae | 0 | 1 | 0 | 0 |
| Hydroporus | 0 | 0 | 0 | 0 |
| Hydropsyche | 4 | 0 | 4 | 5 |
| Hydropsyche decalda | 0 | 0 | 0 | 0 |
| Hydropsychidae | 0 | 0 | 0 | 0 |
| Hydroptila | 0 | 0 | 0 | 0 |
| Hydroptilidae | 0 | 0 | 0 | 0 |
| Hygrobates | 0 | 0 | 0 | 0 |
| Hygrotus | 2 | 0 | 0 | 0 |
| Ischnura | 0 | 0 | 0 | 0 |
| Ischnura hastata | 0 | 0 | 0 | 0 |
| Isonychia | 0 | 0 | 0 | 0 |
| Isoperla | 0 | 0 | 0 | 2 |
| Isopoda | 0 | 0 | 0 | 0 |
| Isotomurus | 0 | 0 | 0 | 0 |
| Isotomurus tricolor | 0 | 0 | 0 | 0 |
| Kiefferulus | 0 | 0 | 0 | 0 |
| Krendowskia | 0 | 0 | 1 | 0 |
| Labiobaetis | 0 | 0 | 0 | 0 |
| Labrundinia | 0 | 0 | 0 | 0 |
| Labrundinia becki | 0 | 0 | 0 | 0 |
| Labrundinia johannseni | 0 | 0 | 0 | 0 |
| Labrundinia neopilosella | 0 | 0 | 0 | 0 |
| Labrundinia pilosella | 1 | 2 | 0 | 0 |
| Laevapex | 0 | 0 | 0 | 0 |
| Laevapex peninsulae | 0 | 0 | 0 | 0 |
| Larsia berneri | 0 | 0 | 0 | 0 |
| Larsia decolorata | 0 | 0 | 0 | 0 |
| Lauterborniella agrayloides | 0 | 0 | 0 | 0 |
| Lebertia | 0 | 0 | 0 | 0 |
| Lepidoptera | 0 | 0 | 0 | 0 |
| Leptoceridae | 0 | 0 | 0 | 0 |
| Leptophlebia | 0 | 0 | 0 | 0 |
| Leptophlebiidae | 0 | 2 | 2 | 0 |
| Leuctra | 0 | 0 | 1 | 0 |
| Libellulidae | 0 | 0 | 0 | 0 |
| Limnesia | 0 | 0 | 0 | 0 |
| Limnodrilus hoffmeisteri | 0 | 1 | 0 | 0 |
| Limnophila | 0 | 0 | 0 | 0 |
| Limonia | 0 | 3 | 0 | 0 |
| Liodessus | 0 | 0 | 0 | 0 |
| Liodessus affinis | 0 | 0 | 0 | 0 |
| Lioporeus | 0 | 0 | 0 | 0 |
| Lirceus | 0 | 0 | 0 | 0 |
| Littoridinops monroensis | 0 | 0 | 0 | 0 |
| Lumbriculidae | 0 | 0 | 0 | 0 |
| Lumbriculus variegatus | 0 | 0 | 0 | 0 |



US EPA ARCHIVE DOCUMENT

| As Calculated / STORET station -> | 21010018 | 26010972 | 22020062 | 31020040 |
|---|---|---|---|---|
| Sample date -> | 7/17/1997 | 9/30/1997 | 8/12/1997 | 2/10/1998 |
| | SampleID | SampleID | SampleID | SampleID |
| | 12450/BenthID | 12600/BenthID | 12609/BenthID | 13475/BenthID |
| Taxon Name / SampleID/BenID -> | 12500(#counted) | 12548(#counted) | 12557(#counted) | 12867(#counted) |
| Lype diversa | 0 | 0 | 0 | 0 |
| Maccaffertium | 0 | 0 | 0 | 0 |
| Maccaffertium smithae | 0 | 0 | 0 | 0 |
| Macromia | 0 | 1 | 0 | 0 |
| Macromia taeniolata | 0 | 0 | 0 | 0 |
| Macromiidae | 0 | 0 | 0 | 0 |
| Macronychus glabratus | 0 | 0 | 0 | 0 |
| Macrostemum carolina | 0 | 0 | 0 | 0 |
| Mayatrichia | 0 | 0 | 0 | 0 |
| Mayatrichia ayama | 0 | 0 | 0 | 0 |
| Meropelopia | 0 | 0 | 0 | 0 |
| Mesosmittia | 0 | 0 | 0 | 0 |
| Metrobates | 0 | 0 | 0 | 0 |
| Micrasema | 0 | 0 | 0 | 0 |
| Micrasema rusticum | 0 | 0 | 0 | 0 |
| Micrasema wataga | 0 | 0 | 0 | 0 |
| Microcylloepus | 0 | 0 | 0 | 0 |
| Microcylloepus pusillus | 6 | 10 | 1 | 0 |
| Micromenetus | 0 | 0 | 0 | 0 |
| Micromenetus dilatatus | 0 | 0 | 0 | 0 |
| Microtendipes pedellus | 0 | 0 | 0 | 0 |
| Microtendipes pedellus grp. | 0 | 0 | 2 | 1 |
| Microtendipes rydalensis | 0 | 0 | 0 | 0 |
| Microtendipes rydalensis grp. | 0 | 0 | 0 | 1 |
| Mideopsis | 0 | 0 | 0 | 0 |
| Molanna | 0 | 0 | 0 | 0 |
| Mooreobdella | 0 | 0 | 0 | 0 |
| Mooreobdella tetragon | 0 | 0 | 0 | 0 |
| Muscidae | 0 | 0 | 0 | 0 |
| Naididae | 0 | 0 | 0 | 0 |
| Nais behningi | 0 | 0 | 0 | 0 |
| Nais communis | 0 | 0 | 0 | 1 |
| Nais communis complex | 0 | 0 | 0 | 0 |
| Nais pardalis | 0 | 0 | 0 | 0 |
| Nais simplex | 0 | 0 | 0 | 0 |
| Nais variabilis | 0 | 0 | 0 | 0 |
| Nanocladius | 0 | 0 | 0 | 0 |
| Nectopsyche | 4 | 0 | 1 | 0 |
| Nectopsyche candida | 0 | 0 | 0 | 0 |
| Nectopsyche exquisita | 0 | 0 | 0 | 0 |
| Nectopsyche pavida | 0 | 0 | 0 | 0 |
| Nemertea | 0 | 0 | 0 | 0 |
| Neoperla | 0 | 0 | 0 | 0 |
| Neoperla clymene | 0 | 0 | 0 | 0 |
| Neoporus | 0 | 0 | 0 | 0 |
| Neotrichia | 2 | 5 | 0 | 0 |
| Neumania | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 21010018 | 26010972 | 22020062 | 31020040 |
|---|---|---|---|---|
| Sample date -> | 7/17/1997 | 9/30/1997 | 8/12/1997 | 2/10/1998 |
| | SampleID | SampleID | SampleID | SampleID |
| | 12450/BenthID | 12600/BenthID | 12609/BenthID | 13475/BenthID |
| Taxon Name / SampleID/BenID -> | 12500(#counted) | 12548(#counted) | 12557(#counted) | 12867(#counted) |
| Neumania distincta | 0 | 0 | 0 | 0 |
| Neureclipsis | 0 | 0 | 0 | 0 |
| Neureclipsis crepuscularis | 0 | 0 | 0 | 0 |
| Neurocordulia | 0 | 0 | 0 | 0 |
| Neurocordulia alabamensis | 0 | 0 | 0 | 0 |
| Neurocordulia virginiensis | 0 | 0 | 0 | 0 |
| Nigronia | 0 | 0 | 0 | 0 |
| Nigronia fasciatus | 0 | 0 | 0 | 0 |
| Nigronia serricornis | 0 | 0 | 0 | 0 |
| Nilotanypus | 0 | 0 | 0 | 0 |
| Nilothauma | 0 | 0 | 0 | 0 |
| Notogillia wetherbyi | 0 | 0 | 0 | 0 |
| Nyctiophylax | 0 | 0 | 0 | 0 |
| Odonata | 0 | 0 | 0 | 0 |
| Odontomyia | 0 | 0 | 0 | 0 |
| Oecetis | 0 | 5 | 0 | 0 |
| Oecetis cinerascens | 0 | 0 | 0 | 0 |
| Oecetis georgia | 0 | 0 | 0 | 0 |
| Oecetis inconspicua cmplx. | 0 | 0 | 0 | 0 |
| Oecetis morsei or sphyra | 0 | 0 | 0 | 0 |
| Oecetis parva | 0 | 0 | 0 | 0 |
| Oecetis persimilis | 0 | 0 | 0 | 0 |
| Oecetis sp. a floyd | 0 | 0 | 0 | 0 |
| Oecetis sp. e floyd | 0 | 0 | 0 | 0 |
| Ora/scirtes | 0 | 0 | 0 | 0 |
| Oribatei | 1 | 0 | 0 | 1 |
| Orthocladiinae | 0 | 0 | 0 | 0 |
| Orthocladiinae gen. c epler | 0 | 0 | 0 | 0 |
| Orthocladiinae gen. f epler | 0 | 0 | 0 | 0 |
| Orthocladius annectens | 0 | 0 | 0 | 0 |
| Orthotrichia | 0 | 0 | 0 | 0 |
| Oxyethira | 0 | 0 | 0 | 0 |
| Pachydiplax longipennis | 0 | 0 | 0 | 0 |
| Pagastiella | 0 | 0 | 0 | 0 |
| Palaemonetes | 0 | 0 | 0 | 0 |
| Palaemonetes kadiakensis | 0 | 0 | 0 | 0 |
| Palaemonetes paludosus | 0 | 0 | 0 | 0 |
| Palpomyia/bezzia grp. | 0 | 1 | 0 | 0 |
| Paracladopelma | 0 | 0 | 0 | 0 |
| Paracladopelma loganae | 0 | 0 | 0 | 0 |
| Paracladopelma undine | 0 | 0 | 0 | 0 |
| Paragnetina | 0 | 0 | 0 | 0 |
| Paragnetina fumosa | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 21010018 | 26010972 | 22020062 | 31020040 |
|---|---|---|---|---|
| Sample date -> | 7/17/1997 | 9/30/1997 | 8/12/1997 | 2/10/1998 |
| | SampleID 12450/BenthID | SampleID 12600/BenthID | SampleID 12609/BenthID | SampleID 13475/BenthID |
| Taxon Name / SampleID/BenID -> | 12500(#counted) | 12548(#counted) | 12557(#counted) | 12867(#counted) |
| Parakiefferiella | 0 | 0 | 0 | 0 |
| Paralauterborniella nigrohalterale | 0 | 0 | 0 | 0 |
| Paraleptophlebia volitans | 0 | 0 | 0 | 0 |
| Parametriocnemus | 2 | 0 | 0 | 0 |
| Parametriocnemus sp. f epler | 0 | 0 | 14 | 5 |
| Paranyctiophylax | 0 | 0 | 0 | 0 |
| Paraplea | 0 | 0 | 0 | 0 |
| Paraponyx | 0 | 0 | 0 | 0 |
| Paratanytarsus sp. a epler | 0 | 0 | 0 | 0 |
| Paratanytarsus sp. c epler | 0 | 0 | 0 | 0 |
| Paratendipes subaequalis | 0 | 0 | 0 | 0 |
| Pelecypoda | 0 | 0 | 0 | 0 |
| Pelonomus obscurus | 0 | 0 | 0 | 0 |
| Peltodytes | 0 | 0 | 0 | 0 |
| Pentaneura inconspicua | 0 | 0 | 3 | 0 |
| Perlesta | 0 | 0 | 0 | 0 |
| Perlesta placida | 0 | 0 | 0 | 0 |
| Perlesta placida complex | 0 | 0 | 0 | 0 |
| Perlinella | 0 | 0 | 0 | 0 |
| Petrophila | 0 | 0 | 0 | 0 |
| Phaenopsectra obediens grp. | 0 | 0 | 0 | 0 |
| Phaenopsectra punctipes grp. | 0 | 0 | 0 | 0 |
| Phylocentropus | 0 | 0 | 0 | 0 |
| Physella | 0 | 0 | 0 | 0 |
| Physella cubensis | 0 | 0 | 0 | 0 |
| Piona | 0 | 0 | 0 | 0 |
| Pisidiidae | 0 | 6 | 0 | 0 |
| Pisidium | 0 | 0 | 0 | 0 |
| Planariidae | 0 | 0 | 0 | 0 |
| Planorbella duryi | 0 | 0 | 0 | 0 |
| Planorbella scalaris | 0 | 0 | 0 | 0 |
| Planorbidae | 0 | 0 | 0 | 0 |
| Platyhelminthes | 0 | 0 | 0 | 0 |
| Plecoptera | 0 | 0 | 0 | 0 |
| Plumulariidae | 0 | 0 | 0 | 0 |
| Polycentropodidae | 0 | 0 | 0 | 0 |
| Polycentropus | 0 | 0 | 0 | 0 |
| Polypedilum | 0 | 0 | 0 | 0 |
| Polypedilum aviceps | 0 | 0 | 1 | 0 |
| Polypedilum convictum grp. | 19 | 6 | 3 | 1 |
| Polypedilum fallax | 0 | 1 | 0 | 0 |
| Polypedilum flavum | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 21010018 | 26010972 | 22020062 | 31020040 |
|---|---|---|---|---|
| Sample date -> | 7/17/1997 | 9/30/1997 | 8/12/1997 | 2/10/1998 |
| | SampleID | SampleID | SampleID | SampleID |
| | 12450/BenthID | 12600/BenthID | 12609/BenthID | 13475/BenthID |
| Taxon Name / SampleID/BenID -> | 12500(#counted) | 12548(#counted) | 12557(#counted) | 12867(#counted) |
| Polypedilum halterale grp. | 0 | 1 | 0 | 0 |
| Polypedilum illinoense | 0 | 0 | 0 | 0 |
| Polypedilum illinoense grp. | 0 | 0 | 0 | 0 |
| Polypedilum scalaenum | 0 | 0 | 0 | 0 |
| Polypedilum scalaenum grp. | 5 | 0 | 0 | 0 |
| Polypedilum sp. a epler | 0 | 0 | 0 | 0 |
| Polypedilum tritum | 0 | 0 | 0 | 0 |
| Pomacea paludosa | 0 | 0 | 0 | 0 |
| Pristina aequiseta | 0 | 0 | 0 | 0 |
| Pristina synclites | 0 | 2 | 0 | 0 |
| Pristinella jenkinae | 0 | 0 | 0 | 0 |
| Probezzia | 0 | 0 | 0 | 1 |
| Procambarus | 0 | 0 | 0 | 9 |
| Procladius | 0 | 0 | 0 | 0 |
| Procladius (holotanypus) | 0 | 0 | 0 | 0 |
| Procloeon viridocularis | 0 | 0 | 0 | 0 |
| Progomphus | 0 | 0 | 0 | 0 |
| Progomphus obscurus | 0 | 0 | 0 | 0 |
| Promoresia tardella | 0 | 0 | 0 | 0 |
| Prostoma rubrum | 0 | 0 | 0 | 0 |
| Psammoryctides convolutus | 0 | 0 | 0 | 0 |
| Pseudochironomus | 0 | 0 | 0 | 1 |
| Pseudocloeon | 0 | 0 | 0 | 0 |
| Psychodidae | 0 | 0 | 0 | 0 |
| Pycnopsyche | 0 | 0 | 0 | 0 |
| Pyralidae | 0 | 0 | 0 | 0 |
| Pyrgophorus platyrachis | 0 | 0 | 0 | 0 |
| Ranatra kirkaldyi | 0 | 0 | 0 | 0 |
| Rhagovelia | 0 | 0 | 1 | 0 |
| Rheocricotopus | 0 | 0 | 0 | 0 |
| Rheocricotopus robacki | 2 | 0 | 3 | 2 |
| Rheocricotopus tuberculatus | 0 | 0 | 0 | 1 |
| Rheotanytarsus | 0 | 0 | 0 | 0 |
| Rheotanytarsus distinctissimus grp. | 3 | 0 | 0 | 0 |
| Rheotanytarsus exiguus | 0 | 0 | 0 | 0 |
| Rheotanytarsus exiguus grp. | 4 | 3 | 5 | 0 |
| Rheotanytarsus pellucidus | 0 | 0 | 0 | 0 |
| Scirtes | 0 | 0 | 0 | 0 |
| Scirtidae | 0 | 0 | 0 | 0 |
| Serratella deficiens | 0 | 0 | 0 | 0 |
| Sialis | 0 | 0 | 0 | 0 |
| Silvius | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 21010018 | 26010972 | 22020062 | 31020040 |
|---|---|---|---|---|
| Sample date -> | 7/17/1997 | 9/30/1997 | 8/12/1997 | 2/10/1998 |
| | SampleID | SampleID | SampleID | SampleID |
| | 12450/BenthID | 12600/BenthID | 12609/BenthID | 13475/BenthID |
| Taxon Name / SampleID/BenID -> | 12500(#counted) | 12548(#counted) | 12557(#counted) | 12867(#counted) |
| Simuliidae | 0 | 0 | 6 | 0 |
| Simulium | 2 | 5 | 0 | 60 |
| Slavina appendiculata | 0 | 0 | 0 | 0 |
| Somatogyrus walkerianus | 0 | 0 | 0 | 0 |
| Sperchon | 0 | 0 | 0 | 0 |
| Sperchonopsis | 0 | 0 | 0 | 0 |
| Sperchopsis | 0 | 0 | 0 | 0 |
| Sphaeriidae | 0 | 0 | 0 | 0 |
| Sphaeriidae(mollusca) | 0 | 0 | 0 | 0 |
| Sphaeroma | 0 | 0 | 0 | 0 |
| Sphaeromias | 0 | 0 | 0 | 0 |
| Spirosperma | 0 | 0 | 0 | 0 |
| Spirosperma ferox | 0 | 0 | 0 | 0 |
| Stelechomyia perpulchra | 0 | 0 | 0 | 0 |
| Stempellina | 0 | 0 | 0 | 0 |
| Stempellina sp. a epler | 0 | 0 | 0 | 0 |
| Stempellinella | 0 | 0 | 1 | 0 |
| Stenacron | 0 | 0 | 0 | 0 |
| Stenacron floridense | 0 | 0 | 0 | 0 |
| Stenacron interpunctatum | 0 | 0 | 0 | 0 |
| Stenelmis | 1 | 0 | 4 | 5 |
| Stenelmis decorata | 0 | 0 | 0 | 0 |
| Stenelmis hungerfordi | 0 | 0 | 0 | 0 |
| Stenochironomus | 2 | 8 | 2 | 2 |
| Stenonema | 0 | 0 | 1 | 0 |
| Stenonema exiguum | 0 | 0 | 0 | 0 |
| Stenonema smithae | 1 | 0 | 0 | 3 |
| Stratiomyidae | 0 | 1 | 0 | 0 |
| Stylaria lacustris | 0 | 0 | 0 | 0 |
| Synorthocladius | 0 | 0 | 0 | 0 |
| Tabanus | 0 | 0 | 0 | 0 |
| Taeniopteryx lita | 0 | 0 | 0 | 0 |
| Tanytarsus | 0 | 0 | 0 | 0 |
| Tanytarsus sp. a epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. c epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. d epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. e epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. g epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. l epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. m epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. o epler | 0 | 1 | 0 | 0 |
| Tanytarsus sp. r epler | 0 | 1 | 0 | 1 |
| Tanytarsus sp. s epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. t epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. u epler | 0 | 0 | 0 | 0 |
| Taphromysis bowmani | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 21010018 | 26010972 | 22020062 | 31020040 |
|---|---|---|---|---|
| Sample date -> | 7/17/1997 | 9/30/1997 | 8/12/1997 | 2/10/1998 |
| | SampleID | SampleID | SampleID | SampleID |
| | 12450/BenthID | 12600/BenthID | 12609/BenthID | 13475/BenthID |
| Taxon Name / SampleID/BenID -> | 12500(#counted) | 12548(#counted) | 12557(#counted) | 12867(#counted) |
| Thienemanniella | 0 | 0 | 0 | 0 |
| Thienemanniella lobapodema | 0 | 0 | 0 | 0 |
| Thienemanniella similis | 0 | 0 | 0 | 0 |
| Thienemanniella sp. a epler | 0 | 0 | 1 | 0 |
| Thienemannimyia grp. | 0 | 0 | 0 | 7 |
| Tipula | 0 | 0 | 0 | 0 |
| Tipulidae | 0 | 0 | 0 | 0 |
| Torrenticola | 0 | 0 | 0 | 0 |
| Triaenodes | 2 | 0 | 0 | 0 |
| Triaenodes ignitus | 0 | 0 | 0 | 0 |
| Triaenodes perna | 0 | 0 | 0 | 0 |
| Tribelos | 0 | 0 | 0 | 0 |
| Tribelos atrum | 1 | 0 | 0 | 0 |
| Tribelos fuscicornis | 0 | 0 | 0 | 0 |
| Tribelos jucundum | 0 | 1 | 0 | 0 |
| Tricorythodes albilineatus | 0 | 0 | 0 | 0 |
| Tubificidae | 0 | 0 | 0 | 0 |
| Turbellaria | 0 | 0 | 0 | 0 |
| Tvetenia | 9 | 0 | 0 | 0 |
| Tvetenia discoloripes grp. | 0 | 0 | 0 | 0 |
| Unionicola | 0 | 0 | 0 | 0 |
| Unniella multivirga | 0 | 0 | 0 | 0 |
| Veliidae | 0 | 0 | 0 | 0 |
| Xenochironomus xenolabis | 0 | 0 | 0 | 0 |
| Xestochironomus | 0 | 1 | 0 | 0 |
| Xylotopus par | 0 | 0 | 0 | 0 |
| Zygoptera | 1 | 0 | 0 | 0 |

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| As Calculated / STORET station -> | 20030414 | 33040064 | 20030456 | 20020012 |
|---|---|---|---|---|
| Sample date -> | 3/10/1998 | 7/1/1998 | 2/12/1998 | 8/11/1998 |
| | SampleID | SampleID | SampleID | SampleID |
| | 13535/BenthID | 14213/BenthID | 14231/BenthID | 14930/BenthID |
| Taxon Name / SampleID/BenID -> | 12898(#counted) | 13118(#counted) | 13136(#counted) | 13379(#counted) |
| Ablabesmyia (karelia) grp. | 0 | 0 | 0 | 0 |
| Ablabesmyia hauberi | 0 | 0 | 0 | 0 |
| Ablabesmyia mallochi | 0 | 0 | 0 | 0 |
| Ablabesmyia rhamphe grp. | 0 | 0 | 0 | 0 |
| Acentrella parvula | 0 | 0 | 0 | 0 |
| Acerpenna pygmaea | 0 | 0 | 0 | 0 |
| Acroneuria | 0 | 0 | 0 | 0 |
| Acroneuria abnormis | 0 | 0 | 0 | 0 |
| Acroneuria arenosa | 0 | 0 | 0 | 0 |
| Acroneuria arenosa/evoluta | 0 | 0 | 0 | 0 |
| Acroneuria lycorias | 0 | 0 | 0 | 0 |
| Agarodes libalis | 0 | 0 | 0 | 0 |
| Alluaudomyia | 0 | 0 | 0 | 0 |
| Amnicola | 0 | 0 | 0 | 0 |
| Amnicola dalli | 0 | 0 | 0 | 0 |
| Amnicola dalli johnsoni | 0 | 0 | 0 | 0 |
| Amphipoda | 0 | 2 | 0 | 0 |
| Ancylidae | 1 | 0 | 0 | 2 |
| Ancyronyx | 0 | 0 | 0 | 0 |
| Ancyronyx variegatus | 0 | 1 | 0 | 0 |
| Anisocentropus pyraloides | 0 | 1 | 0 | 0 |
| Anopheles | 0 | 0 | 0 | 0 |
| Apsectrotanypus johnsoni | 0 | 0 | 0 | 0 |
| Argia | 3 | 2 | 0 | 0 |
| Argia fumipennis | 0 | 0 | 0 | 0 |
| Argia moesta | 0 | 0 | 0 | 0 |
| Argia sedula | 0 | 0 | 0 | 0 |
| Argia tibialis | 0 | 0 | 3 | 0 |
| Arrenurus | 0 | 0 | 0 | 0 |
| Arrenurus problecornis | 0 | 0 | 0 | 0 |
| Astacidae | 0 | 0 | 0 | 0 |
| Atherix | 0 | 0 | 0 | 0 |
| Atractides | 0 | 0 | 0 | 0 |
| Atrichopogon | 0 | 0 | 0 | 0 |
| Aulodrilus pigueti | 0 | 0 | 0 | 0 |
| Aulodrilus pluriseta | 0 | 0 | 0 | 0 |
| Baetidae | 0 | 0 | 0 | 0 |
| Baetis | 0 | 0 | 0 | 5 |
| Baetis intercalaris | 0 | 0 | 0 | 0 |
| Baetisca rogersi | 0 | 0 | 0 | 0 |
| Beardius truncatus | 0 | 0 | 0 | 0 |
| Belostoma | 0 | 0 | 0 | 0 |
| Belostomatidae | 0 | 0 | 0 | 0 |
| Bivalvia | 0 | 0 | 0 | 0 |
| Bourletiella | 0 | 0 | 0 | 0 |
| Boyeria vinosa | 0 | 1 | 4 | 0 |
| Brachycentrus | 0 | 0 | 0 | 0 |
| Brachycentrus chelatus | 0 | 0 | 0 | 0 |
| Brachycentrus numerosus | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 20030414 | 33040064 | 20030456 | 20020012 |
|---|---|---|---|---|
| Sample date -> | 3/10/1998 | 7/1/1998 | 2/12/1998 | 8/11/1998 |
| | SampleID | SampleID | SampleID | SampleID |
| | 13535/BenthID | 14213/BenthID | 14231/BenthID | 14930/BenthID |
| Taxon Name / SampleID/BenID -> | 12898(#counted) | 13118(#counted) | 13136(#counted) | 13379(#counted) |
| Brachycercus maculatus | 0 | 0 | 0 | 0 |
| Caecidotea | 0 | 0 | 0 | 0 |
| Caecidotea racovitzai | 0 | 0 | 0 | 0 |
| Caenis | 0 | 0 | 0 | 0 |
| Caenis diminuta | 0 | 0 | 0 | 0 |
| Caenis hilaris | 0 | 0 | 0 | 0 |
| Callibaetis floridanus | 0 | 0 | 0 | 0 |
| Calopteryx | 0 | 0 | 0 | 0 |
| Calopteryx maculata | 1 | 0 | 0 | 0 |
| Cambaridae | 1 | 0 | 0 | 0 |
| Campeloma | 0 | 0 | 0 | 0 |
| Campeloma limum | 0 | 0 | 0 | 0 |
| Cassidinidea ovalis | 0 | 0 | 0 | 0 |
| Cecidomyiidae | 0 | 0 | 0 | 0 |
| Ceratopogonidae | 0 | 2 | 0 | 0 |
| Cernotina | 0 | 0 | 1 | 0 |
| Chaoborus | 0 | 0 | 0 | 0 |
| Chaoborus albatus | 0 | 0 | 0 | 0 |
| Chauliodes | 0 | 0 | 0 | 0 |
| Chelifera | 0 | 0 | 0 | 0 |
| Cheumatopsyche | 4 | 2 | 0 | 7 |
| Chimarra | 0 | 11 | 15 | 0 |
| Chironomus | 0 | 0 | 0 | 0 |
| Choroterpes basalis | 0 | 0 | 0 | 0 |
| Choroterpes hubbelli | 0 | 0 | 0 | 0 |
| Cladotanytarsus | 2 | 0 | 0 | 0 |
| Cladotanytarsus cf. daviesi | 0 | 0 | 0 | 0 |
| Cladotanytarsus sp. i epler | 0 | 0 | 0 | 0 |
| Clathrosperchon | 0 | 0 | 0 | 0 |
| Climacea areolaris | 0 | 0 | 0 | 0 |
| Clinotanypus | 0 | 0 | 0 | 0 |
| Coelotanypus | 0 | 0 | 0 | 0 |
| Coelotanypus scapularis | 0 | 0 | 0 | 0 |
| Coenagrionidae | 0 | 0 | 0 | 0 |
| Collembola | 0 | 0 | 0 | 0 |
| Conchapelopia | 0 | 0 | 1 | 0 |
| Corbicula fluminea | 0 | 0 | 0 | 16 |
| Corduliidae | 0 | 0 | 0 | 0 |
| Corydalus | 0 | 0 | 0 | 0 |
| Corydalus cornuta | 0 | 0 | 0 | 0 |
| Corydalus cornutus | 0 | 0 | 0 | 0 |
| Corynoneura | 0 | 0 | 0 | 0 |
| Corynoneura sp. b epler | 0 | 0 | 0 | 0 |
| Corynoneura sp. c epler | 0 | 0 | 0 | 0 |
| Corynoneura taris | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 20030414 | 33040064 | 20030456 | 20020012 |
|---|---|---|---|---|
| Sample date -> | 3/10/1998 | 7/1/1998 | 2/12/1998 | 8/11/1998 |
| | SampleID | SampleID | SampleID | SampleID |
| | 13535/BenthID | 14213/BenthID | 14231/BenthID | 14930/BenthID |
| Taxon Name / SampleID/BenID -> | 12898(#counted) | 13118(#counted) | 13136(#counted) | 13379(#counted) |
| Crangonyx | 1 | 0 | 2 | 4 |
| Cricotopus | 0 | 0 | 0 | 0 |
| Cricotopus bicinctus | 0 | 0 | 0 | 1 |
| Cricotopus bicinctus grp. | 0 | 0 | 0 | 0 |
| Cricotopus or orthocladius | 1 | 0 | 0 | 0 |
| Cryptochironomus | 0 | 0 | 0 | 0 |
| Cryptotendipes | 0 | 0 | 0 | 1 |
| Curculionidae | 0 | 0 | 0 | 0 |
| Cyrnellus fraternus | 0 | 0 | 0 | 0 |
| Demicryptochironomus | 0 | 1 | 0 | 0 |
| Dero digitata | 0 | 0 | 0 | 0 |
| Dero digitata complex | 0 | 0 | 0 | 0 |
| Dero lodeni | 0 | 0 | 0 | 0 |
| Dero pectinata | 0 | 0 | 0 | 0 |
| Dero trifida | 0 | 0 | 0 | 0 |
| Dero vaga | 0 | 0 | 0 | 0 |
| Dicrotendipes | 0 | 0 | 0 | 0 |
| Dicrotendipes modestus | 0 | 0 | 0 | 0 |
| Dicrotendipes neomodestus | 0 | 0 | 0 | 0 |
| Dicrotendipes simpsoni | 0 | 0 | 0 | 0 |
| Dicrotendipes sp. a epler | 0 | 0 | 0 | 0 |
| Dineutus | 0 | 0 | 0 | 0 |
| Dineutus discolor | 0 | 0 | 0 | 0 |
| Dineutus serrulatus | 0 | 0 | 0 | 0 |
| Diplectrona modesta | 0 | 1 | 0 | 0 |
| Dixa | 0 | 0 | 0 | 0 |
| Dixella | 0 | 0 | 0 | 0 |
| Djalmabatista pulcher | 1 | 0 | 0 | 0 |
| Dolichopodidae | 0 | 0 | 0 | 0 |
| Dromogomphus armatus | 0 | 0 | 0 | 0 |
| Dromogomphus spinosus | 0 | 0 | 0 | 0 |
| Dryopidae | 0 | 0 | 0 | 0 |
| Dubiraphia | 0 | 0 | 0 | 0 |
| Dubiraphia quadrinotata | 0 | 0 | 0 | 0 |
| Dubiraphia vittata | 0 | 0 | 0 | 0 |
| Dugesia | 0 | 0 | 0 | 0 |
| Dugesia tigrina | 0 | 0 | 0 | 0 |
| Eclipidrilus | 0 | 0 | 0 | 0 |
| Eclipidrilus palustris | 0 | 0 | 0 | 0 |
| Ectopria | 0 | 0 | 0 | 0 |
| Elimia | 0 | 0 | 0 | 0 |
| Elimia floridensis | 0 | 0 | 0 | 0 |
| Empididae | 0 | 0 | 0 | 0 |
| Enallagma | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 20030414 | 33040064 | 20030456 | 20020012 |
|---|---|---|---|---|
| Sample date -> | 3/10/1998 | 7/1/1998 | 2/12/1998 | 8/11/1998 |
| | SampleID | SampleID | SampleID | SampleID |
| | 13535/BenthID | 14213/BenthID | 14231/BenthID | 14930/BenthID |
| Taxon Name / SampleID/BenID -> | 12898(#counted) | 13118(#counted) | 13136(#counted) | 13379(#counted) |
| Enallagma cardenium | 0 | 0 | 0 | 0 |
| Enchytraeidae | 0 | 0 | 0 | 2 |
| Endotribelos hesperium | 0 | 0 | 0 | 0 |
| Enochrus | 0 | 0 | 0 | 0 |
| Ephemerellidae | 0 | 0 | 0 | 0 |
| Ephydridae | 0 | 0 | 0 | 0 |
| Epitheca | 0 | 0 | 0 | 0 |
| Epitheca princeps regina | 0 | 0 | 0 | 0 |
| Eurylophella doris | 0 | 5 | 0 | 0 |
| Eurylophella temporalis | 0 | 0 | 0 | 0 |
| Ferrissia | 0 | 0 | 0 | 0 |
| Gammaridae | 0 | 0 | 0 | 0 |
| Gammarus | 0 | 0 | 0 | 3 |
| Gammarus tigrinus | 0 | 0 | 0 | 0 |
| Gastropoda | 0 | 0 | 0 | 0 |
| Geayia | 0 | 0 | 0 | 0 |
| Gerridae | 0 | 0 | 0 | 0 |
| Gloiobdella elongata | 0 | 0 | 0 | 0 |
| Goeldichironomus fluctuans | 0 | 0 | 0 | 0 |
| Gomphidae | 0 | 1 | 0 | 2 |
| Gomphus | 0 | 0 | 0 | 0 |
| Gomphus minutus | 0 | 0 | 0 | 0 |
| Gonielmis | 0 | 0 | 0 | 0 |
| Gonielmis dietrichi | 0 | 0 | 0 | 0 |
| Grandidierella bonnieroides | 0 | 0 | 0 | 0 |
| Gyretes iricolor | 0 | 0 | 0 | 0 |
| Haber speciosus | 1 | 0 | 0 | 5 |
| Hagenius brevistylus | 0 | 0 | 0 | 0 |
| Hebetancylus excentricus | 0 | 0 | 0 | 0 |
| Helobdella stagnalis | 0 | 0 | 0 | 0 |
| Helobdella triserialis | 0 | 0 | 0 | 0 |
| Helopelopia | 0 | 0 | 0 | 0 |
| Hemerodromia | 3 | 0 | 14 | 2 |
| Hemiptera | 0 | 0 | 0 | 0 |
| Heptageniidae | 0 | 1 | 0 | 0 |
| Hetaerina | 0 | 0 | 0 | 0 |
| Hetaerina titia | 0 | 0 | 0 | 0 |
| Heteroplectron americanum | 0 | 1 | 0 | 0 |
| Hexagenia | 0 | 0 | 0 | 0 |
| Hexagenia bilineata | 0 | 0 | 0 | 0 |
| Hexagenia limbata | 0 | 0 | 0 | 0 |
| Hexagenia munda orlando | 0 | 0 | 0 | 0 |
| Hexatoma | 0 | 0 | 0 | 0 |
| Hyalella azteca | 0 | 0 | 0 | 0 |
| Hydra | 0 | 0 | 0 | 0 |
| Hydrachna | 0 | 0 | 0 | 0 |
| Hydraena marginicollis | 0 | 0 | 0 | 0 |
| Hydraenidae | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 20030414 | 33040064 | 20030456 | 20020012 |
|---|---|---|---|---|
| Sample date -> | 3/10/1998 | 7/1/1998 | 2/12/1998 | 8/11/1998 |
| | SampleID | SampleID | SampleID | SampleID |
| | 13535/BenthID | 14213/BenthID | 14231/BenthID | 14930/BenthID |
| Taxon Name / SampleID/BenID -> | 12898(#counted) | 13118(#counted) | 13136(#counted) | 13379(#counted) |
| Hydrobiidae | 0 | 0 | 0 | 0 |
| Hydrodroma | 0 | 0 | 0 | 0 |
| Hydrophilidae | 0 | 0 | 0 | 0 |
| Hydroporus | 0 | 0 | 0 | 0 |
| Hydropsyche | 0 | 0 | 0 | 1 |
| Hydropsyche decalda | 0 | 0 | 0 | 0 |
| Hydropsychidae | 0 | 0 | 0 | 0 |
| Hydroptila | 0 | 0 | 0 | 20 |
| Hydroptilidae | 0 | 0 | 0 | 0 |
| Hygrobates | 0 | 0 | 0 | 0 |
| Hygrotus | 0 | 0 | 0 | 0 |
| Ischnura | 0 | 0 | 0 | 0 |
| Ischnura hastata | 0 | 0 | 0 | 0 |
| Isonychia | 0 | 0 | 0 | 0 |
| Isoperla | 0 | 0 | 0 | 0 |
| Isopoda | 0 | 0 | 0 | 0 |
| Isotomurus | 0 | 0 | 0 | 0 |
| Isotomurus tricolor | 0 | 0 | 0 | 0 |
| Kiefferulus | 0 | 0 | 0 | 0 |
| Krendowskia | 0 | 0 | 0 | 0 |
| Labiobaetis | 0 | 0 | 0 | 8 |
| Labrundinia | 0 | 0 | 0 | 0 |
| Labrundinia becki | 0 | 0 | 0 | 0 |
| Labrundinia johannseni | 0 | 0 | 0 | 0 |
| Labrundinia neopilosella | 0 | 0 | 0 | 0 |
| Labrundinia pilosella | 1 | 0 | 0 | 0 |
| Laevapex | 0 | 0 | 0 | 0 |
| Laevapex peninsulae | 0 | 0 | 0 | 0 |
| Larsia berneri | 0 | 0 | 0 | 0 |
| Larsia decolorata | 0 | 0 | 0 | 0 |
| Lauterborniella agrayloides | 0 | 0 | 0 | 0 |
| Lebertia | 0 | 0 | 0 | 0 |
| Lepidoptera | 0 | 0 | 0 | 0 |
| Leptoceridae | 0 | 0 | 0 | 0 |
| Leptophlebia | 0 | 0 | 0 | 0 |
| Leptophlebiidae | 4 | 0 | 1 | 0 |
| Leuctra | 0 | 39 | 7 | 0 |
| Libellulidae | 0 | 0 | 0 | 0 |
| Limnesia | 0 | 0 | 0 | 0 |
| Limnodrilus hoffmeisteri | 0 | 0 | 0 | 4 |
| Limnophila | 1 | 0 | 0 | 0 |
| Limonia | 0 | 0 | 0 | 0 |
| Liodessus | 0 | 0 | 0 | 0 |
| Liodessus affinis | 0 | 0 | 0 | 0 |
| Lioporeus | 0 | 0 | 0 | 0 |
| Lirceus | 0 | 0 | 0 | 0 |
| Littoridinops monroensis | 0 | 0 | 0 | 0 |
| Lumbriculidae | 0 | 0 | 0 | 0 |
| Lumbriculus variegatus | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 20030414 | 33040064 | 20030456 | 20020012 |
|---|---|---|---|---|
| Sample date -> | 3/10/1998 | 7/1/1998 | 2/12/1998 | 8/11/1998 |
| | SampleID | SampleID | SampleID | SampleID |
| | 13535/BenthID | 14213/BenthID | 14231/BenthID | 14930/BenthID |
| Taxon Name / SampleID/BenID -> | 12898(#counted) | 13118(#counted) | 13136(#counted) | 13379(#counted) |
| Lype diversa | 0 | 0 | 1 | 1 |
| Maccaffertium | 0 | 0 | 0 | 0 |
| Maccaffertium smithae | 0 | 0 | 0 | 0 |
| Macromia | 0 | 0 | 0 | 0 |
| Macromia taeniolata | 0 | 0 | 0 | 0 |
| Macromiidae | 0 | 0 | 0 | 0 |
| Macronychus glabratus | 0 | 0 | 0 | 0 |
| Macrostemum carolina | 0 | 0 | 0 | 0 |
| Mayatrichia | 1 | 0 | 0 | 0 |
| Mayatrichia ayama | 0 | 0 | 0 | 0 |
| Meropelopia | 0 | 31 | 0 | 0 |
| Mesosmittia | 0 | 0 | 0 | 0 |
| Metrobates | 0 | 0 | 0 | 0 |
| Micrasema | 0 | 0 | 0 | 0 |
| Micrasema rusticum | 0 | 0 | 0 | 0 |
| Micrasema wataga | 1 | 0 | 0 | 0 |
| Microcylloepus | 0 | 0 | 0 | 0 |
| Microcylloepus pusillus | 1 | 0 | 2 | 2 |
| Micromenetus | 0 | 0 | 0 | 0 |
| Micromenetus dilatatus | 0 | 0 | 0 | 0 |
| Microtendipes pedellus | 0 | 0 | 0 | 0 |
| Microtendipes pedellus grp. | 1 | 10 | 0 | 0 |
| Microtendipes rydalensis | 0 | 0 | 0 | 0 |
| Microtendipes rydalensis grp. | 0 | 0 | 0 | 0 |
| Mideopsis | 0 | 0 | 0 | 0 |
| Molanna | 0 | 0 | 0 | 0 |
| Mooreobdella | 0 | 0 | 0 | 0 |
| Mooreobdella tetragon | 0 | 0 | 0 | 0 |
| Muscidae | 0 | 0 | 0 | 0 |
| Naididae | 0 | 1 | 0 | 0 |
| Nais behningi | 0 | 0 | 0 | 0 |
| Nais communis | 0 | 0 | 0 | 2 |
| Nais communis complex | 0 | 0 | 0 | 0 |
| Nais pardalis | 0 | 0 | 0 | 0 |
| Nais simplex | 1 | 0 | 0 | 0 |
| Nais variabilis | 0 | 0 | 0 | 0 |
| Nanocladius | 0 | 0 | 0 | 0 |
| Nectopsyche | 2 | 0 | 0 | 0 |
| Nectopsyche candida | 0 | 0 | 0 | 0 |
| Nectopsyche exquisita | 0 | 0 | 0 | 1 |
| Nectopsyche pavida | 0 | 0 | 0 | 0 |
| Nemertea | 0 | 0 | 0 | 0 |
| Neoperla | 5 | 0 | 3 | 0 |
| Neoperla clymene | 0 | 0 | 0 | 0 |
| Neoporus | 0 | 0 | 0 | 0 |
| Neotrichia | 7 | 0 | 0 | 1 |
| Neumania | 0 | 0 | 0 | 0 |



US EPA ARCHIVE DOCUMENT

| As Calculated / STORET station -> | 20030414 | 33040064 | 20030456 | 20020012 |
|---|---|---|---|---|
| Sample date -> | 3/10/1998 | 7/1/1998 | 2/12/1998 | 8/11/1998 |
| | SampleID | SampleID | SampleID | SampleID |
| | 13535/BenthID | 14213/BenthID | 14231/BenthID | 14930/BenthID |
| Taxon Name / SampleID/BenID -> | 12898(#counted) | 13118(#counted) | 13136(#counted) | 13379(#counted) |
| Neumania distincta | 0 | 0 | 0 | 0 |
| Neureclipsis | 0 | 4 | 0 | 0 |
| Neureclipsis crepuscularis | 0 | 0 | 0 | 0 |
| Neurocordulia | 0 | 0 | 0 | 0 |
| Neurocordulia alabamensis | 0 | 0 | 0 | 0 |
| Neurocordulia virginiensis | 0 | 0 | 0 | 0 |
| Nigronia | 0 | 0 | 0 | 0 |
| Nigronia fasciatus | 0 | 0 | 0 | 0 |
| Nigronia serricornis | 0 | 2 | 0 | 0 |
| Nilotanypus | 0 | 0 | 0 | 0 |
| Nilothauma | 0 | 1 | 0 | 0 |
| Notogillia wetherbyi | 0 | 0 | 0 | 0 |
| Nyctiophylax | 0 | 0 | 0 | 0 |
| Odonata | 0 | 0 | 0 | 0 |
| Odontomyia | 0 | 0 | 0 | 0 |
| Oecetis | 0 | 0 | 0 | 0 |
| Oecetis cinerascens | 0 | 0 | 0 | 0 |
| Oecetis georgia | 3 | 0 | 4 | 0 |
| Oecetis inconspicua cmplx. | 0 | 0 | 0 | 0 |
| Oecetis morsei or sphyra | 0 | 0 | 0 | 0 |
| Oecetis parva | 0 | 0 | 0 | 0 |
| Oecetis persimilis | 0 | 0 | 0 | 0 |
| Oecetis sp. a floyd | 0 | 4 | 0 | 0 |
| Oecetis sp. e floyd | 0 | 0 | 0 | 0 |
| Ora/scirtes | 0 | 0 | 0 | 0 |
| Oribatei | 0 | 0 | 0 | 0 |
| Orthocladiinae | 0 | 6 | 1 | 0 |
| Orthocladiinae gen. c epler | 0 | 0 | 0 | 0 |
| Orthocladiinae gen. f epler | 0 | 0 | 0 | 0 |
| Orthocladius annectens | 18 | 0 | 0 | 0 |
| Orthotrichia | 0 | 0 | 0 | 0 |
| Oxyethira | 0 | 0 | 0 | 0 |
| Pachydiplax longipennis | 0 | 0 | 0 | 0 |
| Pagastiella | 0 | 0 | 0 | 0 |
| Palaemonetes | 0 | 0 | 0 | 0 |
| Palaemonetes kadiakensis | 0 | 0 | 0 | 0 |
| Palaemonetes paludosus | 0 | 0 | 0 | 0 |
| Palpomyia/bezzia grp. | 0 | 0 | 1 | 1 |
| Paracladopelma | 0 | 0 | 0 | 0 |
| Paracladopelma loganae | 0 | 0 | 0 | 0 |
| Paracladopelma undine | 0 | 0 | 0 | 0 |
| Paragnetina | 0 | 0 | 0 | 0 |
| Paragnetina fumosa | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 20030414 | 33040064 | 20030456 | 20020012 |
|---|---|---|---|---|
| Sample date -> | 3/10/1998 | 7/1/1998 | 2/12/1998 | 8/11/1998 |
| | SampleID | SampleID | SampleID | SampleID |
| | 13535/BenthID | 14213/BenthID | 14231/BenthID | 14930/BenthID |
| Taxon Name / SampleID/BenID -> | 12898(#counted) | 13118(#counted) | 13136(#counted) | 13379(#counted) |
| Parakiefferiella | 0 | 0 | 0 | 0 |
| Paralauterborniella nigrohalterale | 0 | 0 | 0 | 0 |
| Paraleptophlebia volitans | 0 | 0 | 0 | 0 |
| Parametriocnemus | 0 | 0 | 0 | 0 |
| Parametriocnemus sp. f epler | 9 | 0 | 8 | 0 |
| Paranyctiophylax | 0 | 0 | 0 | 0 |
| Paraplea | 0 | 0 | 0 | 0 |
| Paraponyx | 0 | 0 | 0 | 0 |
| Paratanytarsus sp. a epler | 0 | 0 | 0 | 0 |
| Paratanytarsus sp. c epler | 0 | 0 | 0 | 0 |
| Paratendipes subaequalis | 0 | 0 | 0 | 0 |
| Pelecypoda | 0 | 0 | 0 | 0 |
| Pelonomus obscurus | 0 | 0 | 0 | 0 |
| Peltodytes | 0 | 0 | 0 | 0 |
| Pentaneura inconspicua | 3 | 0 | 0 | 0 |
| Perlesta | 0 | 0 | 5 | 0 |
| Perlesta placida | 0 | 0 | 0 | 0 |
| Perlesta placida complex | 0 | 0 | 0 | 0 |
| Perlinella | 0 | 0 | 0 | 0 |
| Petrophila | 0 | 0 | 0 | 0 |
| Phaenopsectra obediens grp. | 0 | 0 | 0 | 0 |
| Phaenopsectra punctipes grp. | 0 | 0 | 0 | 0 |
| Phylocentropus | 0 | 0 | 0 | 0 |
| Physella | 0 | 0 | 0 | 0 |
| Physella cubensis | 0 | 0 | 0 | 0 |
| Piona | 0 | 0 | 0 | 0 |
| Pisidiidae | 0 | 0 | 0 | 0 |
| Pisidium | 0 | 0 | 0 | 0 |
| Planariidae | 0 | 0 | 0 | 0 |
| Planorbella duryi | 0 | 0 | 0 | 0 |
| Planorbella scalaris | 0 | 0 | 0 | 0 |
| Planorbidae | 0 | 0 | 0 | 1 |
| Platyhelminthes | 0 | 0 | 0 | 0 |
| Plecoptera | 0 | 0 | 0 | 0 |
| Plumulariidae | 0 | 0 | 0 | 0 |
| Polycentropodidae | 0 | 0 | 0 | 0 |
| Polycentropus | 1 | 0 | 0 | 0 |
| Polypedilum | 0 | 0 | 0 | 0 |
| Polypedilum aviceps | 0 | 0 | 1 | 0 |
| Polypedilum convictum grp. | 0 | 0 | 1 | 0 |
| Polypedilum fallax | 0 | 3 | 0 | 0 |
| Polypedilum flavum | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 20030414 | 33040064 | 20030456 | 20020012 |
|---|---|---|---|---|
| Sample date -> | 3/10/1998 | 7/1/1998 | 2/12/1998 | 8/11/1998 |
| | SampleID | SampleID | SampleID | SampleID |
| | 13535/BenthID | 14213/BenthID | 14231/BenthID | 14930/BenthID |
| Taxon Name / SampleID/BenID -> | 12898(#counted) | 13118(#counted) | 13136(#counted) | 13379(#counted) |
| Polypedilum halterale grp. | 4 | 0 | 0 | 0 |
| Polypedilum illinoense | 0 | 2 | 0 | 0 |
| Polypedilum illinoense grp. | 0 | 0 | 3 | 0 |
| Polypedilum scalaenum | 0 | 3 | 0 | 0 |
| Polypedilum scalaenum grp. | 0 | 0 | 0 | 0 |
| Polypedilum sp. a epler | 0 | 0 | 0 | 1 |
| Polypedilum tritum | 0 | 0 | 0 | 0 |
| Pomacea paludosa | 0 | 0 | 0 | 0 |
| Pristina aequiseta | 0 | 0 | 0 | 1 |
| Pristina synclites | 0 | 0 | 0 | 0 |
| Pristinella jenkinae | 0 | 0 | 0 | 0 |
| Probezzia | 5 | 0 | 0 | 0 |
| Procambarus | 0 | 0 | 1 | 0 |
| Procladius | 0 | 0 | 0 | 0 |
| Procladius (holotanypus) | 0 | 0 | 0 | 0 |
| Procloeon viridocularis | 0 | 0 | 0 | 0 |
| Progomphus | 0 | 0 | 0 | 0 |
| Progomphus obscurus | 0 | 0 | 0 | 0 |
| Promoresia tardella | 0 | 0 | 0 | 0 |
| Prostoma rubrum | 0 | 0 | 0 | 0 |
| Psammoryctides convolutus | 0 | 0 | 0 | 0 |
| Pseudochironomus | 0 | 0 | 0 | 0 |
| Pseudocloeon | 0 | 0 | 0 | 0 |
| Psychodidae | 0 | 0 | 0 | 0 |
| Pycnopsyche | 1 | 0 | 1 | 0 |
| Pyralidae | 0 | 0 | 0 | 0 |
| Pyrgophorus platyrachis | 0 | 0 | 0 | 0 |
| Ranatra kirkaldyi | 0 | 0 | 0 | 0 |
| Rhagovelia | 0 | 0 | 0 | 0 |
| Rheocricotopus | 0 | 0 | 0 | 0 |
| Rheocricotopus robacki | 2 | 0 | 0 | 0 |
| Rheocricotopus tuberculatus | 0 | 0 | 0 | 0 |
| Rheotanytarsus | 0 | 0 | 0 | 0 |
| Rheotanytarsus distinctissimus grp. | 1 | 0 | 1 | 2 |
| Rheotanytarsus exiguus | 0 | 7 | 0 | 0 |
| Rheotanytarsus exiguus grp. | 6 | 0 | 3 | 2 |
| Rheotanytarsus pellucidus | 0 | 0 | 0 | 0 |
| Scirtes | 0 | 0 | 0 | 0 |
| Scirtidae | 0 | 0 | 0 | 0 |
| Serratella deficiens | 0 | 0 | 0 | 0 |
| Sialis | 0 | 0 | 0 | 0 |
| Silvius | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 20030414 | 33040064 | 20030456 | 20020012 |
|---|---|---|---|---|
| Sample date -> | 3/10/1998 | 7/1/1998 | 2/12/1998 | 8/11/1998 |
| | SampleID | SampleID | SampleID | SampleID |
| | 13535/BenthID | 14213/BenthID | 14231/BenthID | 14930/BenthID |
| Taxon Name / SampleID/BenID -> | 12898(#counted) | 13118(#counted) | 13136(#counted) | 13379(#counted) |
| Simuliidae | 0 | 0 | 0 | 0 |
| Simulium | 4 | 0 | 17 | 22 |
| Slavina appendiculata | 0 | 0 | 0 | 0 |
| Somatogyrus walkerianus | 0 | 0 | 0 | 0 |
| Sperchon | 0 | 0 | 0 | 0 |
| Sperchonopsis | 0 | 0 | 0 | 0 |
| Sperchopsis | 0 | 0 | 0 | 0 |
| Sphaeriidae | 0 | 0 | 0 | 0 |
| Sphaeriidae(mollusca) | 0 | 0 | 0 | 0 |
| Sphaeroma | 0 | 0 | 0 | 0 |
| Sphaeromias | 0 | 0 | 0 | 1 |
| Spirosperma | 0 | 0 | 0 | 0 |
| Spirosperma ferox | 0 | 0 | 0 | 0 |
| Stelechomyia perpulchra | 0 | 1 | 0 | 0 |
| Stempellina | 0 | 0 | 0 | 0 |
| Stempellina sp. a epler | 0 | 0 | 0 | 0 |
| Stempellinella | 1 | 0 | 0 | 0 |
| Stenacron | 0 | 0 | 0 | 0 |
| Stenacron floridense | 0 | 0 | 0 | 0 |
| Stenacron interpunctatum | 0 | 0 | 0 | 0 |
| Stenelmis | 4 | 2 | 9 | 6 |
| Stenelmis decorata | 0 | 0 | 0 | 0 |
| Stenelmis hungerfordi | 0 | 0 | 0 | 0 |
| Stenochironomus | 3 | 4 | 1 | 1 |
| Stenonema | 0 | 0 | 0 | 0 |
| Stenonema exiguum | 0 | 0 | 0 | 3 |
| Stenonema smithae | 0 | 0 | 14 | 0 |
| Stratiomyidae | 0 | 0 | 0 | 0 |
| Stylaria lacustris | 0 | 0 | 0 | 0 |
| Synorthocladius | 0 | 0 | 0 | 0 |
| Tabanus | 0 | 0 | 0 | 0 |
| Taeniopteryx lita | 0 | 0 | 0 | 0 |
| Tanytarsus | 0 | 0 | 0 | 0 |
| Tanytarsus sp. a epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. c epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. d epler | 0 | 5 | 0 | 0 |
| Tanytarsus sp. e epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. g epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. l epler | 0 | 0 | 0 | 1 |
| Tanytarsus sp. m epler | 1 | 6 | 0 | 0 |
| Tanytarsus sp. o epler | 0 | 5 | 0 | 0 |
| Tanytarsus sp. r epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. s epler | 4 | 0 | 0 | 0 |
| Tanytarsus sp. t epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. u epler | 0 | 0 | 0 | 0 |
| Taphromysis bowmani | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 20030414 | 33040064 | 20030456 | 20020012 |
|---|---|---|---|---|
| Sample date -> | 3/10/1998 | 7/1/1998 | 2/12/1998 | 8/11/1998 |
| | SampleID | SampleID | SampleID | SampleID |
| | 13535/BenthID | 14213/BenthID | 14231/BenthID | 14930/BenthID |
| Taxon Name / SampleID/BenID -> | 12898(#counted) | 13118(#counted) | 13136(#counted) | 13379(#counted) |
| Thienemanniella | 0 | 0 | 0 | 0 |
| Thienemanniella lobapodema | 0 | 0 | 0 | 0 |
| Thienemanniella similis | 1 | 0 | 0 | 1 |
| Thienemanniella sp. a epler | 1 | 0 | 0 | 0 |
| Thienemannimyia grp. | 4 | 0 | 1 | 0 |
| Tipula | 0 | 0 | 0 | 0 |
| Tipulidae | 0 | 0 | 1 | 0 |
| Torrenticola | 1 | 0 | 0 | 0 |
| Triaenodes | 0 | 0 | 0 | 0 |
| Triaenodes ignitus | 0 | 1 | 0 | 3 |
| Triaenodes perna | 0 | 0 | 0 | 0 |
| Tribelos | 0 | 0 | 0 | 0 |
| Tribelos atrum | 0 | 0 | 0 | 0 |
| Tribelos fuscicornis | 0 | 0 | 0 | 0 |
| Tribelos jucundum | 0 | 3 | 0 | 0 |
| Tricorythodes albilineatus | 0 | 0 | 0 | 11 |
| Tubificidae | 0 | 0 | 0 | 0 |
| Turbellaria | 0 | 0 | 0 | 1 |
| Tvetenia | 0 | 0 | 0 | 0 |
| Tvetenia discoloripes grp. | 0 | 0 | 0 | 0 |
| Unionicola | 0 | 0 | 0 | 0 |
| Unniella multivirga | 0 | 0 | 0 | 0 |
| Veliidae | 0 | 0 | 0 | 0 |
| Xenochironomus xenolabis | 0 | 0 | 0 | 0 |
| Xestochironomus | 0 | 0 | 0 | 3 |
| Xylotopus par | 0 | 1 | 1 | 0 |
| Zygoptera | 0 | 0 | 0 | 0 |

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| As Calculated / STORET station -> | 33040014 | 22020062 | 25020111 | 28010223 |
|---|---|---|---|---|
| Sample date -> | 7/15/1998 | 9/9/1998 | 2/17/1999 | 3/22/1999 |
| | SampleID | SampleID | SampleID | SampleID |
| | 14965/BenthID | 14966/BenthID | 15951/BenthID | 16636/BenthID |
| Taxon Name / SampleID/BenID -> | 13401(#counted) | 13403(#counted) | 14187(#counted) | 14709(#counted) |
| Ablabesmyia (karelia) grp. | 0 | 0 | 0 | 0 |
| Ablabesmyia hauberi | 0 | 0 | 0 | 0 |
| Ablabesmyia mallochi | 0 | 5 | 0 | 6 |
| Ablabesmyia rhamphe grp. | 0 | 0 | 0 | 8 |
| Acentrella parvula | 0 | 0 | 0 | 0 |
| Acerpenna pygmaea | 0 | 0 | 0 | 0 |
| Acroneuria | 1 | 1 | 0 | 0 |
| Acroneuria abnormis | 0 | 0 | 0 | 0 |
| Acroneuria arenosa | 0 | 0 | 0 | 0 |
| Acroneuria arenosa/evoluta | 0 | 0 | 0 | 0 |
| Acroneuria lycorias | 0 | 0 | 0 | 0 |
| Agarodes libalis | 0 | 0 | 0 | 0 |
| Alluaudomyia | 0 | 0 | 0 | 0 |
| Amnicola | 0 | 0 | 0 | 0 |
| Amnicola dalli | 0 | 0 | 0 | 0 |
| Amnicola dalli johnsoni | 0 | 0 | 0 | 0 |
| Amphipoda | 0 | 1 | 0 | 0 |
| Ancylidae | 0 | 2 | 0 | 0 |
| Ancyronyx | 0 | 0 | 0 | 0 |
| Ancyronyx variegatus | 1 | 0 | 0 | 0 |
| Anisocentropus pyraloides | 0 | 1 | 0 | 0 |
| Anopheles | 0 | 0 | 0 | 0 |
| Apsectrotanypus johnsoni | 0 | 0 | 0 | 0 |
| Argia | 1 | 0 | 0 | 0 |
| Argia fumipennis | 0 | 0 | 0 | 0 |
| Argia moesta | 0 | 0 | 0 | 0 |
| Argia sedula | 0 | 0 | 3 | 0 |
| Argia tibialis | 0 | 0 | 0 | 0 |
| Arrenurus | 0 | 0 | 0 | 0 |
| Arrenurus problecornis | 0 | 0 | 0 | 0 |
| Astacidae | 0 | 0 | 0 | 0 |
| Atherix | 1 | 0 | 0 | 0 |
| Atractides | 0 | 0 | 0 | 0 |
| Atrichopogon | 2 | 0 | 0 | 0 |
| Aulodrilus pigueti | 0 | 0 | 0 | 0 |
| Aulodrilus pluriseta | 0 | 0 | 0 | 0 |
| Baetidae | 0 | 0 | 1 | 0 |
| Baetis | 0 | 0 | 0 | 0 |
| Baetis intercalaris | 0 | 0 | 0 | 0 |
| Baetisca rogersi | 0 | 0 | 0 | 0 |
| Beardius truncatus | 0 | 0 | 0 | 1 |
| Belostoma | 0 | 0 | 0 | 0 |
| Belostomatidae | 0 | 0 | 0 | 0 |
| Bivalvia | 0 | 0 | 0 | 0 |
| Bourletiella | 0 | 0 | 0 | 0 |
| Boyeria vinosa | 1 | 0 | 0 | 0 |
| Brachycentrus | 0 | 0 | 0 | 0 |
| Brachycentrus chelatus | 0 | 0 | 0 | 0 |
| Brachycentrus numerosus | 0 | 3 | 0 | 0 |



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| As Calculated / STORET station -> | 33040014 | 22020062 | 25020111 | 28010223 |
|---|---|---|---|---|
| Sample date -> | 7/15/1998 | 9/9/1998 | 2/17/1999 | 3/22/1999 |
| | SampleID | SampleID | SampleID | SampleID |
| | 14965/BenthID | 14966/BenthID | 15951/BenthID | 16636/BenthID |
| Taxon Name / SampleID/BenID -> | 13401(#counted) | 13403(#counted) | 14187(#counted) | 14709(#counted) |
| Brachycercus maculatus | 0 | 0 | 1 | 0 |
| Caecidotea | 0 | 2 | 0 | 3 |
| Caecidotea racovitzai | 0 | 0 | 0 | 0 |
| Caenis | 2 | 0 | 0 | 20 |
| Caenis diminuta | 0 | 0 | 0 | 0 |
| Caenis hilaris | 0 | 0 | 1 | 0 |
| Callibaetis floridanus | 0 | 0 | 0 | 0 |
| Calopteryx | 0 | 0 | 0 | 0 |
| Calopteryx maculata | 0 | 0 | 0 | 0 |
| Cambaridae | 2 | 5 | 0 | 0 |
| Campeloma | 0 | 0 | 0 | 0 |
| Campeloma limum | 0 | 0 | 0 | 0 |
| Cassidinidea ovalis | 0 | 0 | 0 | 0 |
| Cecidomyiidae | 1 | 1 | 0 | 0 |
| Ceratopogonidae | 0 | 0 | 3 | 0 |
| Cernotina | 0 | 0 | 1 | 0 |
| Chaoborus | 0 | 0 | 0 | 0 |
| Chaoborus albatus | 0 | 0 | 0 | 0 |
| Chauliodes | 0 | 0 | 0 | 0 |
| Chelifera | 0 | 0 | 0 | 0 |
| Cheumatopsyche | 35 | 0 | 3 | 0 |
| Chimarra | 5 | 0 | 0 | 0 |
| Chironomus | 0 | 0 | 0 | 0 |
| Choroterpes basalis | 0 | 0 | 0 | 0 |
| Choroterpes hubbelli | 0 | 0 | 0 | 0 |
| Cladotanytarsus | 0 | 0 | 0 | 0 |
| Cladotanytarsus cf. daviesi | 0 | 0 | 0 | 0 |
| Cladotanytarsus sp. i epler | 0 | 0 | 0 | 0 |
| Clathrosperchon | 0 | 0 | 0 | 0 |
| Climacea areolaris | 0 | 0 | 0 | 0 |
| Clinotanypus | 0 | 2 | 0 | 0 |
| Coelotanypus | 0 | 0 | 0 | 0 |
| Coelotanypus scapularis | 0 | 0 | 0 | 0 |
| Coenagrionidae | 0 | 0 | 0 | 0 |
| Collembola | 0 | 0 | 0 | 0 |
| Conchapelopia | 2 | 2 | 0 | 0 |
| Corbicula fluminea | 0 | 0 | 2 | 0 |
| Corduliidae | 0 | 0 | 0 | 16 |
| Corydalus | 0 | 0 | 0 | 0 |
| Corydalus cornuta | 0 | 0 | 0 | 0 |
| Corydalus cornutus | 4 | 0 | 0 | 0 |
| Corynoneura | 0 | 2 | 0 | 0 |
| Corynoneura sp. b epler | 0 | 0 | 0 | 0 |
| Corynoneura sp. c epler | 0 | 0 | 0 | 0 |
| Corynoneura taris | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 33040014 | 22020062 | 25020111 | 28010223 |
|---|---|---|---|---|
| Sample date -> | 7/15/1998 | 9/9/1998 | 2/17/1999 | 3/22/1999 |
| | SampleID 14965/BenthID | SampleID 14966/BenthID | SampleID 15951/BenthID | SampleID 16636/BenthID |
| Taxon Name / SampleID/BenID -> | 13401(#counted) | 13403(#counted) | 14187(#counted) | 14709(#counted) |
| Crangonyx | 0 | 0 | 0 | 0 |
| Cricotopus | 0 | 0 | 0 | 0 |
| Cricotopus bicinctus | 0 | 0 | 0 | 0 |
| Cricotopus bicinctus grp. | 0 | 0 | 3 | 0 |
| Cricotopus or orthocladius | 2 | 0 | 0 | 0 |
| Cryptochironomus | 0 | 0 | 1 | 0 |
| Cryptotendipes | 0 | 0 | 0 | 0 |
| Curculionidae | 0 | 0 | 0 | 0 |
| Cyrnellus fraternus | 0 | 0 | 0 | 0 |
| Demicryptochironomus | 0 | 0 | 0 | 0 |
| Dero digitata | 0 | 0 | 0 | 0 |
| Dero digitata complex | 0 | 0 | 0 | 0 |
| Dero lodeni | 0 | 0 | 0 | 0 |
| Dero pectinata | 0 | 0 | 0 | 1 |
| Dero trifida | 0 | 0 | 0 | 0 |
| Dero vaga | 0 | 0 | 0 | 0 |
| Dicrotendipes | 0 | 0 | 0 | 0 |
| Dicrotendipes modestus | 0 | 0 | 0 | 6 |
| Dicrotendipes neomodestus | 0 | 0 | 0 | 0 |
| Dicrotendipes simpsoni | 0 | 0 | 0 | 0 |
| Dicrotendipes sp. a epler | 0 | 0 | 0 | 0 |
| Dineutus | 0 | 0 | 0 | 0 |
| Dineutus discolor | 0 | 0 | 0 | 0 |
| Dineutus serrulatus | 0 | 0 | 0 | 0 |
| Diplectrona modesta | 0 | 0 | 0 | 0 |
| Dixa | 0 | 0 | 0 | 0 |
| Dixella | 0 | 0 | 0 | 0 |
| Djalmabatista pulcher | 0 | 0 | 0 | 0 |
| Dolichopodidae | 0 | 0 | 0 | 0 |
| Dromogomphus armatus | 0 | 0 | 0 | 0 |
| Dromogomphus spinosus | 0 | 0 | 0 | 0 |
| Dryopidae | 0 | 0 | 0 | 0 |
| Dubiraphia | 0 | 0 | 0 | 0 |
| Dubiraphia quadrinotata | 0 | 0 | 0 | 0 |
| Dubiraphia vittata | 0 | 0 | 15 | 0 |
| Dugesia | 0 | 0 | 0 | 0 |
| Dugesia tigrina | 0 | 0 | 0 | 0 |
| Eclipidrilus | 0 | 0 | 0 | 0 |
| Eclipidrilus palustris | 0 | 0 | 0 | 1 |
| Ectopria | 0 | 0 | 0 | 0 |
| Elimia | 0 | 0 | 0 | 0 |
| Elimia floridensis | 0 | 0 | 0 | 0 |
| Empididae | 0 | 0 | 0 | 0 |
| Enallagma | 0 | 0 | 0 | 0 |



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|---|---|---|---|---|
| Sample date -> | 7/15/1998 | 9/9/1998 | 2/17/1999 | 3/22/1999 |
| | SampleID | SampleID | SampleID | SampleID |
| | 14965/BenthID | 14966/BenthID | 15951/BenthID | 16636/BenthID |
| Taxon Name / SampleID/BenID -> | 13401(#counted) | 13403(#counted) | 14187(#counted) | 14709(#counted) |
| Enallagma cardenium | 0 | 0 | 0 | 9 |
| Enchytraeidae | 0 | 11 | 0 | 0 |
| Endotribelos hesperium | 0 | 0 | 0 | 0 |
| Enochrus | 0 | 0 | 0 | 2 |
| Ephemerellidae | 0 | 2 | 0 | 0 |
| Ephydridae | 0 | 0 | 0 | 0 |
| Epitheca | 0 | 0 | 0 | 0 |
| Epitheca princeps regina | 0 | 0 | 0 | 0 |
| Eurylophella doris | 0 | 0 | 0 | 0 |
| Eurylophella temporalis | 0 | 0 | 0 | 0 |
| Ferrissia | 0 | 0 | 0 | 0 |
| Gammaridae | 0 | 0 | 0 | 0 |
| Gammarus | 0 | 0 | 0 | 0 |
| Gammarus tigrinus | 0 | 0 | 0 | 0 |
| Gastropoda | 0 | 0 | 0 | 1 |
| Geayia | 0 | 0 | 0 | 0 |
| Gerridae | 0 | 0 | 0 | 1 |
| Gloiobdella elongata | 0 | 0 | 0 | 0 |
| Goeldichironomus fluctuans | 0 | 0 | 0 | 0 |
| Gomphidae | 0 | 0 | 0 | 0 |
| Gomphus | 0 | 0 | 0 | 0 |
| Gomphus minutus | 0 | 0 | 0 | 0 |
| Gonielmis | 0 | 0 | 0 | 0 |
| Gonielmis dietrichi | 1 | 2 | 0 | 0 |
| Grandidierella bonnieroides | 0 | 0 | 0 | 0 |
| Gyretes iricolor | 0 | 0 | 0 | 0 |
| Haber speciosus | 0 | 0 | 0 | 0 |
| Hagenius brevistylus | 0 | 0 | 0 | 0 |
| Hebetancylus excentricus | 0 | 0 | 2 | 0 |
| Helobdella stagnalis | 0 | 0 | 0 | 0 |
| Helobdella triserialis | 0 | 0 | 1 | 0 |
| Helopelopia | 0 | 0 | 0 | 0 |
| Hemerodromia | 4 | 1 | 0 | 0 |
| Hemiptera | 0 | 0 | 0 | 0 |
| Heptageniidae | 0 | 0 | 0 | 0 |
| Hetaerina | 0 | 0 | 0 | 0 |
| Hetaerina titia | 0 | 0 | 2 | 0 |
| Heteroplectron americanum | 0 | 0 | 0 | 0 |
| Hexagenia | 0 | 0 | 0 | 0 |
| Hexagenia bilineata | 1 | 0 | 0 | 0 |
| Hexagenia limbata | 0 | 0 | 0 | 0 |
| Hexagenia munda orlando | 0 | 0 | 0 | 0 |
| Hexatoma | 2 | 0 | 0 | 0 |
| Hyalella azteca | 0 | 0 | 0 | 25 |
| Hydra | 0 | 0 | 0 | 0 |
| Hydrachna | 0 | 0 | 0 | 0 |
| Hydraena marginicollis | 0 | 0 | 0 | 0 |
| Hydraenidae | 1 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 33040014 | 22020062 | 25020111 | 28010223 |
|---|---|---|---|---|
| Sample date -> | 7/15/1998 | 9/9/1998 | 2/17/1999 | 3/22/1999 |
| | SampleID | SampleID | SampleID | SampleID |
| | 14965/BenthID | 14966/BenthID | 15951/BenthID | 16636/BenthID |
| Taxon Name / SampleID/BenID -> | 13401(#counted) | 13403(#counted) | 14187(#counted) | 14709(#counted) |
| Hydrobiidae | 0 | 0 | 0 | 0 |
| Hydrodroma | 0 | 0 | 0 | 0 |
| Hydrophilidae | 0 | 0 | 0 | 0 |
| Hydroporus | 0 | 0 | 0 | 0 |
| Hydropsyche | 20 | 0 | 6 | 0 |
| Hydropsyche decalda | 0 | 0 | 0 | 0 |
| Hydropsychidae | 0 | 0 | 0 | 0 |
| Hydroptila | 4 | 0 | 0 | 0 |
| Hydroptilidae | 0 | 0 | 0 | 0 |
| Hygrobates | 0 | 0 | 0 | 0 |
| Hygrotus | 0 | 0 | 0 | 0 |
| Ischnura | 0 | 0 | 0 | 0 |
| Ischnura hastata | 0 | 0 | 0 | 0 |
| Isonychia | 0 | 0 | 0 | 0 |
| Isoperla | 0 | 0 | 0 | 0 |
| Isopoda | 0 | 0 | 0 | 0 |
| Isotomurus | 0 | 0 | 0 | 0 |
| Isotomurus tricolor | 0 | 0 | 0 | 0 |
| Kiefferulus | 0 | 0 | 0 | 0 |
| Krendowskia | 0 | 0 | 0 | 0 |
| Labiobaetis | 0 | 0 | 0 | 0 |
| Labrundinia | 0 | 0 | 0 | 0 |
| Labrundinia becki | 0 | 0 | 0 | 13 |
| Labrundinia johannseni | 0 | 0 | 0 | 0 |
| Labrundinia neopilosella | 0 | 0 | 0 | 0 |
| Labrundinia pilosella | 0 | 0 | 0 | 0 |
| Laevapex | 0 | 0 | 0 | 0 |
| Laevapex peninsulae | 0 | 0 | 0 | 0 |
| Larsia berneri | 0 | 0 | 0 | 0 |
| Larsia decolorata | 0 | 0 | 0 | 0 |
| Lauterborniella agrayloides | 0 | 0 | 0 | 0 |
| Lebertia | 0 | 0 | 0 | 0 |
| Lepidoptera | 0 | 0 | 0 | 0 |
| Leptoceridae | 2 | 0 | 0 | 0 |
| Leptophlebia | 0 | 0 | 0 | 5 |
| Leptophlebiidae | 1 | 2 | 0 | 0 |
| Leuctra | 2 | 6 | 0 | 0 |
| Libellulidae | 0 | 0 | 0 | 0 |
| Limnesia | 0 | 0 | 0 | 0 |
| Limnodrilus hoffmeisteri | 0 | 0 | 0 | 0 |
| Limnophila | 0 | 0 | 0 | 0 |
| Limonia | 0 | 0 | 0 | 0 |
| Liodessus | 0 | 0 | 0 | 0 |
| Liodessus affinis | 0 | 0 | 0 | 0 |
| Lioporeus | 0 | 0 | 0 | 0 |
| Lirceus | 0 | 0 | 0 | 0 |
| Littoridinops monroensis | 0 | 0 | 0 | 0 |
| Lumbriculidae | 0 | 0 | 0 | 0 |
| Lumbriculus variegatus | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 33040014 | 22020062 | 25020111 | 28010223 |
|---|---|---|---|---|
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| | SampleID | SampleID | SampleID | SampleID |
| | 14965/BenthID | 14966/BenthID | 15951/BenthID | 16636/BenthID |
| Taxon Name / SampleID/BenID -> | 13401(#counted) | 13403(#counted) | 14187(#counted) | 14709(#counted) |
| Lype diversa | 1 | 0 | 0 | 0 |
| Maccaffertium | 0 | 0 | 0 | 0 |
| Maccaffertium smithae | 0 | 0 | 0 | 0 |
| Macromia | 0 | 0 | 0 | 0 |
| Macromia taeniolata | 0 | 0 | 0 | 0 |
| Macromiidae | 0 | 0 | 0 | 0 |
| Macronychus glabratus | 20 | 0 | 0 | 0 |
| Macrostemum carolina | 0 | 0 | 0 | 0 |
| Mayatrichia | 0 | 0 | 0 | 0 |
| Mayatrichia ayama | 0 | 0 | 0 | 0 |
| Meropelopia | 0 | 0 | 0 | 0 |
| Mesosmittia | 0 | 0 | 0 | 0 |
| Metrobates | 0 | 0 | 0 | 0 |
| Micrasema | 1 | 0 | 0 | 0 |
| Micrasema rusticum | 0 | 0 | 0 | 0 |
| Micrasema wataga | 0 | 0 | 0 | 0 |
| Microcylloepus | 0 | 0 | 0 | 7 |
| Microcylloepus pusillus | 0 | 1 | 3 | 0 |
| Micromenetus | 0 | 0 | 0 | 0 |
| Micromenetus dilatatus | 0 | 0 | 0 | 0 |
| Microtendipes pedellus | 0 | 0 | 0 | 0 |
| Microtendipes pedellus grp. | 0 | 0 | 0 | 0 |
| Microtendipes rydalensis | 0 | 0 | 0 | 0 |
| Microtendipes rydalensis grp. | 1 | 0 | 0 | 0 |
| Mideopsis | 0 | 0 | 0 | 0 |
| Molanna | 0 | 0 | 0 | 0 |
| Mooreobdella | 0 | 0 | 0 | 0 |
| Mooreobdella tetragon | 0 | 0 | 0 | 0 |
| Muscidae | 0 | 0 | 0 | 0 |
| Naididae | 0 | 0 | 0 | 0 |
| Nais behningi | 0 | 0 | 0 | 0 |
| Nais communis | 0 | 0 | 0 | 0 |
| Nais communis complex | 0 | 0 | 0 | 0 |
| Nais pardalis | 0 | 0 | 0 | 0 |
| Nais simplex | 0 | 0 | 0 | 0 |
| Nais variabilis | 0 | 0 | 0 | 0 |
| Nanocladius | 0 | 0 | 0 | 0 |
| Nectopsyche | 0 | 0 | 0 | 0 |
| Nectopsyche candida | 0 | 0 | 0 | 0 |
| Nectopsyche exquisita | 0 | 0 | 2 | 0 |
| Nectopsyche pavida | 0 | 0 | 3 | 0 |
| Nemertea | 0 | 0 | 0 | 0 |
| Neoperla | 0 | 0 | 0 | 0 |
| Neoperla clymene | 0 | 0 | 0 | 0 |
| Neoporus | 0 | 0 | 0 | 0 |
| Neotrichia | 0 | 0 | 0 | 0 |
| Neumania | 0 | 0 | 0 | 0 |



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|---|---|---|---|---|
| Sample date -> | 7/15/1998 | 9/9/1998 | 2/17/1999 | 3/22/1999 |
| | SampleID 14965/BenthID | SampleID 14966/BenthID | SampleID 15951/BenthID | SampleID 16636/BenthID |
| Taxon Name / SampleID/BenID -> | 13401(#counted) | 13403(#counted) | 14187(#counted) | 14709(#counted) |
| Neumania distincta | 0 | 0 | 0 | 0 |
| Neureclipsis | 0 | 0 | 0 | 0 |
| Neureclipsis crepuscularis | 0 | 0 | 0 | 0 |
| Neurocordulia | 0 | 0 | 0 | 0 |
| Neurocordulia alabamensis | 0 | 0 | 0 | 0 |
| Neurocordulia virginiensis | 0 | 0 | 0 | 0 |
| Nigronia | 0 | 0 | 0 | 0 |
| Nigronia fasciatus | 0 | 0 | 0 | 0 |
| Nigronia serricornis | 0 | 0 | 0 | 0 |
| Nilotanypus | 0 | 0 | 0 | 0 |
| Nilothauma | 0 | 0 | 1 | 0 |
| Notogillia wetherbyi | 0 | 0 | 0 | 0 |
| Nyctiophylax | 0 | 0 | 0 | 0 |
| Odonata | 0 | 0 | 0 | 0 |
| Odontomyia | 0 | 0 | 0 | 0 |
| Oecetis | 0 | 0 | 3 | 0 |
| Oecetis cinerascens | 0 | 0 | 0 | 0 |
| Oecetis georgia | 0 | 0 | 0 | 0 |
| Oecetis inconspicua cmplx. | 0 | 0 | 0 | 0 |
| Oecetis morsei or sphyra | 0 | 0 | 0 | 0 |
| Oecetis parva | 0 | 0 | 0 | 0 |
| Oecetis persimilis | 0 | 0 | 0 | 0 |
| Oecetis sp. a floyd | 0 | 0 | 0 | 0 |
| Oecetis sp. e floyd | 0 | 0 | 0 | 0 |
| Ora/scirtes | 0 | 0 | 0 | 0 |
| Oribatei | 0 | 0 | 0 | 0 |
| Orthocladiinae | 0 | 0 | 0 | 0 |
| Orthocladiinae gen. c epler | 0 | 0 | 0 | 0 |
| Orthocladiinae gen. f epler | 0 | 0 | 0 | 0 |
| Orthocladius annectens | 0 | 0 | 0 | 0 |
| Orthotrichia | 0 | 0 | 0 | 0 |
| Oxyethira | 0 | 0 | 0 | 0 |
| Pachydiplax longipennis | 0 | 0 | 0 | 0 |
| Pagastiella | 0 | 0 | 0 | 0 |
| Palaemonetes | 0 | 0 | 0 | 7 |
| Palaemonetes kadiakensis | 0 | 0 | 0 | 0 |
| Palaemonetes paludosus | 0 | 0 | 0 | 0 |
| Palpomyia/bezzia grp. | 1 | 0 | 0 | 8 |
| Paracladopelma | 0 | 0 | 0 | 0 |
| Paracladopelma loganae | 0 | 0 | 0 | 0 |
| Paracladopelma undine | 0 | 0 | 0 | 0 |
| Paragnetina | 2 | 0 | 0 | 0 |
| Paragnetina fumosa | 0 | 0 | 0 | 0 |



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|---|---|---|---|---|
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| | SampleID | SampleID | SampleID | SampleID |
| | 14965/BenthID | 14966/BenthID | 15951/BenthID | 16636/BenthID |
| Taxon Name / SampleID/BenID -> | 13401(#counted) | 13403(#counted) | 14187(#counted) | 14709(#counted) |
| Parakiefferiella | 0 | 0 | 0 | 0 |
| Paralauterborniella nigrohalterale | 0 | 0 | 0 | 0 |
| Paraleptophlebia volitans | 0 | 0 | 0 | 0 |
| Parametriocnemus | 0 | 0 | 0 | 0 |
| Parametriocnemus sp. f epler | 2 | 0 | 0 | 0 |
| Paranyctiophylax | 2 | 1 | 0 | 0 |
| Paraplea | 0 | 0 | 0 | 0 |
| Paraponyx | 0 | 0 | 0 | 0 |
| Paratanytarsus sp. a epler | 0 | 0 | 0 | 0 |
| Paratanytarsus sp. c epler | 0 | 0 | 0 | 0 |
| Paratendipes subaequalis | 0 | 0 | 0 | 0 |
| Pelecypoda | 0 | 0 | 0 | 1 |
| Pelonomus obscurus | 0 | 0 | 0 | 0 |
| Peltodytes | 0 | 0 | 0 | 0 |
| Pentaneura inconspicua | 0 | 4 | 1 | 0 |
| Perlesta | 0 | 0 | 0 | 0 |
| Perlesta placida | 0 | 0 | 0 | 0 |
| Perlesta placida complex | 0 | 0 | 0 | 0 |
| Perlinella | 0 | 1 | 0 | 0 |
| Petrophila | 0 | 0 | 0 | 0 |
| Phaenopsectra obediens grp. | 0 | 0 | 0 | 0 |
| Phaenopsectra punctipes grp. | 0 | 0 | 0 | 0 |
| Phylocentropus | 0 | 0 | 0 | 0 |
| Physella | 0 | 0 | 0 | 0 |
| Physella cubensis | 0 | 0 | 0 | 0 |
| Piona | 0 | 0 | 0 | 0 |
| Pisidiidae | 0 | 0 | 0 | 0 |
| Pisidium | 0 | 0 | 0 | 0 |
| Planariidae | 0 | 0 | 0 | 0 |
| Planorbella duryi | 0 | 0 | 0 | 0 |
| Planorbella scalaris | 0 | 0 | 0 | 0 |
| Planorbidae | 0 | 0 | 0 | 0 |
| Platyhelminthes | 0 | 0 | 0 | 0 |
| Plecoptera | 0 | 0 | 0 | 0 |
| Plumulariidae | 0 | 0 | 0 | 1 |
| Polycentropodidae | 0 | 0 | 0 | 0 |
| Polycentropus | 0 | 0 | 0 | 0 |
| Polypedilum | 0 | 0 | 0 | 0 |
| Polypedilum aviceps | 1 | 2 | 0 | 0 |
| Polypedilum convictum grp. | 1 | 6 | 14 | 0 |
| Polypedilum fallax | 0 | 0 | 0 | 0 |
| Polypedilum flavum | 0 | 0 | 0 | 0 |



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| | SampleID | SampleID | SampleID | SampleID |
| | 14965/BenthID | 14966/BenthID | 15951/BenthID | 16636/BenthID |
| Taxon Name / SampleID/BenID -> | 13401(#counted) | 13403(#counted) | 14187(#counted) | 14709(#counted) |
| Polypedilum halterale grp. | 0 | 0 | 0 | 0 |
| Polypedilum illinoense | 0 | 0 | 0 | 0 |
| Polypedilum illinoense grp. | 2 | 2 | 0 | 4 |
| Polypedilum scalaenum | 0 | 0 | 0 | 0 |
| Polypedilum scalaenum grp. | 2 | 0 | 1 | 0 |
| Polypedilum sp. a epler | 0 | 0 | 0 | 0 |
| Polypedilum tritum | 0 | 1 | 0 | 0 |
| Pomacea paludosa | 0 | 0 | 0 | 0 |
| Pristina aequiseta | 0 | 0 | 0 | 0 |
| Pristina synclites | 0 | 0 | 0 | 1 |
| Pristinella jenkinae | 0 | 0 | 0 | 0 |
| Probezzia | 0 | 0 | 0 | 0 |
| Procambarus | 0 | 0 | 0 | 0 |
| Procladius | 0 | 0 | 0 | 0 |
| Procladius (holotanypus) | 0 | 0 | 0 | 0 |
| Procloeon viridocularis | 0 | 0 | 0 | 0 |
| Progomphus | 0 | 0 | 0 | 0 |
| Progomphus obscurus | 0 | 0 | 0 | 0 |
| Promoresia tardella | 0 | 0 | 0 | 0 |
| Prostoma rubrum | 0 | 0 | 0 | 0 |
| Psammoryctides convolutus | 0 | 0 | 0 | 0 |
| Pseudochironomus | 0 | 1 | 0 | 0 |
| Pseudocloeon | 0 | 0 | 0 | 0 |
| Psychodidae | 0 | 0 | 0 | 0 |
| Pycnopsyche | 0 | 0 | 0 | 0 |
| Pyralidae | 0 | 0 | 0 | 0 |
| Pyrgophorus platyrachis | 0 | 0 | 8 | 0 |
| Ranatra kirkaldyi | 0 | 0 | 0 | 0 |
| Rhagovelia | 0 | 0 | 0 | 0 |
| Rheocricotopus | 0 | 0 | 0 | 0 |
| Rheocricotopus robacki | 3 | 0 | 0 | 0 |
| Rheocricotopus tuberculatus | 0 | 0 | 0 | 0 |
| Rheotanytarsus | 0 | 0 | 0 | 0 |
| Rheotanytarsus distinctissimus grp. | 0 | 0 | 0 | 0 |
| Rheotanytarsus exiguus | 0 | 0 | 0 | 0 |
| Rheotanytarsus exiguus grp. | 5 | 0 | 8 | 0 |
| Rheotanytarsus pellucidus | 0 | 0 | 0 | 0 |
| Scirtes | 0 | 0 | 0 | 0 |
| Scirtidae | 0 | 0 | 0 | 0 |
| Serratella deficiens | 0 | 0 | 0 | 0 |
| Sialis | 0 | 0 | 0 | 0 |
| Silvius | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 33040014 | 22020062 | 25020111 | 28010223 |
|---|---|---|---|---|
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| | SampleID | SampleID | SampleID | SampleID |
| | 14965/BenthID | 14966/BenthID | 15951/BenthID | 16636/BenthID |
| Taxon Name / SampleID/BenID -> | 13401(#counted) | 13403(#counted) | 14187(#counted) | 14709(#counted) |
| Simuliidae | 0 | 0 | 0 | 0 |
| Simulium | 7 | 0 | 0 | 0 |
| Slavina appendiculata | 0 | 0 | 0 | 0 |
| Somatogyrus walkerianus | 0 | 0 | 0 | 0 |
| Sperchon | 0 | 0 | 0 | 0 |
| Sperchonopsis | 0 | 0 | 0 | 0 |
| Sperchopsis | 1 | 0 | 0 | 0 |
| Sphaeriidae | 0 | 0 | 0 | 0 |
| Sphaeriidae(mollusca) | 0 | 0 | 0 | 0 |
| Sphaeroma | 0 | 0 | 0 | 0 |
| Sphaeromias | 0 | 0 | 0 | 0 |
| Spirosperma | 0 | 0 | 0 | 0 |
| Spirosperma ferox | 0 | 0 | 0 | 0 |
| Stelechomyia perpulchra | 3 | 1 | 0 | 0 |
| Stempellina | 0 | 0 | 0 | 0 |
| Stempellina sp. a epler | 0 | 0 | 0 | 0 |
| Stempellinella | 0 | 0 | 0 | 0 |
| Stenacron | 0 | 0 | 0 | 0 |
| Stenacron floridense | 0 | 0 | 0 | 0 |
| Stenacron interpunctatum | 0 | 0 | 0 | 0 |
| Stenelmis | 3 | 9 | 11 | 7 |
| Stenelmis decorata | 0 | 0 | 0 | 0 |
| Stenelmis hungerfordi | 0 | 0 | 0 | 0 |
| Stenochironomus | 0 | 11 | 1 | 0 |
| Stenonema | 0 | 0 | 2 | 0 |
| Stenonema exiguum | 2 | 4 | 0 | 0 |
| Stenonema smithae | 2 | 2 | 0 | 0 |
| Stratiomyidae | 0 | 0 | 0 | 0 |
| Stylaria lacustris | 0 | 0 | 0 | 0 |
| Synorthocladius | 0 | 0 | 0 | 0 |
| Tabanus | 2 | 0 | 0 | 0 |
| Taeniopteryx lita | 0 | 0 | 0 | 0 |
| Tanytarsus | 0 | 1 | 0 | 0 |
| Tanytarsus sp. a epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. c epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. d epler | 1 | 0 | 0 | 0 |
| Tanytarsus sp. e epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. g epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. l epler | 1 | 0 | 2 | 4 |
| Tanytarsus sp. m epler | 2 | 0 | 0 | 0 |
| Tanytarsus sp. o epler | 1 | 0 | 0 | 0 |
| Tanytarsus sp. r epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. s epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. t epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. u epler | 0 | 0 | 0 | 0 |
| Taphromysis bowmani | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 33040014 | 22020062 | 25020111 | 28010223 |
|---|---|---|---|---|
| Sample date -> | 7/15/1998 | 9/9/1998 | 2/17/1999 | 3/22/1999 |
| | SampleID | SampleID | SampleID | SampleID |
| | 14965/BenthID | 14966/BenthID | 15951/BenthID | 16636/BenthID |
| Taxon Name / SampleID/BenID -> | 13401(#counted) | 13403(#counted) | 14187(#counted) | 14709(#counted) |
| Thienemanniella | 0 | 0 | 0 | 0 |
| Thienemanniella lobapodema | 0 | 0 | 0 | 0 |
| Thienemanniella similis | 0 | 0 | 0 | 0 |
| Thienemanniella sp. a epler | 1 | 0 | 0 | 0 |
| Thienemannimyia grp. | 2 | 2 | 0 | 0 |
| Tipula | 0 | 0 | 0 | 0 |
| Tipulidae | 0 | 0 | 0 | 0 |
| Torrenticola | 0 | 0 | 0 | 0 |
| Triaenodes | 0 | 0 | 0 | 0 |
| Triaenodes ignitus | 0 | 0 | 0 | 0 |
| Triaenodes perna | 0 | 0 | 0 | 0 |
| Tribelos | 0 | 0 | 0 | 0 |
| Tribelos atrum | 0 | 0 | 0 | 0 |
| Tribelos fuscicornis | 0 | 0 | 0 | 0 |
| Tribelos jucundum | 0 | 0 | 0 | 0 |
| Tricorythodes albilineatus | 0 | 0 | 5 | 0 |
| Tubificidae | 0 | 0 | 0 | 0 |
| Turbellaria | 0 | 0 | 0 | 0 |
| Tvetenia | 0 | 0 | 0 | 0 |
| Tvetenia discoloripes grp. | 1 | 0 | 0 | 0 |
| Unionicola | 0 | 0 | 0 | 0 |
| Unniella multivirga | 0 | 0 | 0 | 0 |
| Veliidae | 1 | 0 | 0 | 0 |
| Xenochironomus xenolabis | 0 | 0 | 0 | 0 |
| Xestochironomus | 0 | 0 | 0 | 0 |
| Xylotopus par | 0 | 0 | 0 | 0 |
| Zygoptera | 1 | 0 | 0 | 0 |

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| As Calculated / STORET station -> | 32020063 | 21010018 | 26011020 | 28010223 |
|---|---|---|---|---|
| Sample date -> | 1/21/1999 | 7/27/1999 | 7/20/1999 | 10/7/1999 |
| | SampleID | SampleID | SampleID | SampleID |
| | 16643/BenthID | 18076/BenthID | 18372/BenthID | 18594/BenthID |
| Taxon Name / SampleID/BenID -> | 14716(#counted) | 15790(#counted) | 15965(#counted) | 16087(#counted) |
| Ablabesmyia (karelia) grp. | 0 | 0 | 0 | 0 |
| Ablabesmyia hauberi | 0 | 0 | 0 | 0 |
| Ablabesmyia mallochi | 0 | 3 | 2 | 0 |
| Ablabesmyia rhamphe grp. | 0 | 2 | 0 | 0 |
| Acentrella parvula | 0 | 0 | 0 | 0 |
| Acerpenna pygmaea | 0 | 0 | 7 | 0 |
| Acroneuria | 0 | 0 | 0 | 0 |
| Acroneuria abnormis | 0 | 0 | 0 | 0 |
| Acroneuria arenosa | 0 | 0 | 0 | 0 |
| Acroneuria arenosa/evoluta | 0 | 0 | 0 | 0 |
| Acroneuria lycorias | 0 | 0 | 0 | 0 |
| Agarodes libalis | 0 | 0 | 0 | 0 |
| Alluaudomyia | 0 | 0 | 0 | 0 |
| Amnicola | 0 | 0 | 0 | 0 |
| Amnicola dalli | 0 | 0 | 0 | 0 |
| Amnicola dalli johnsoni | 0 | 0 | 0 | 0 |
| Amphipoda | 0 | 0 | 0 | 0 |
| Ancylidae | 0 | 5 | 0 | 0 |
| Ancyronyx | 0 | 0 | 0 | 0 |
| Ancyronyx variegatus | 2 | 2 | 0 | 0 |
| Anisocentropus pyraloides | 0 | 0 | 0 | 0 |
| Anopheles | 0 | 0 | 0 | 0 |
| Apsectrotanypus johnsoni | 0 | 0 | 0 | 0 |
| Argia | 1 | 1 | 1 | 0 |
| Argia fumipennis | 0 | 0 | 0 | 0 |
| Argia moesta | 0 | 0 | 0 | 0 |
| Argia sedula | 0 | 0 | 0 | 0 |
| Argia tibialis | 0 | 0 | 0 | 0 |
| Arrenurus | 0 | 0 | 0 | 0 |
| Arrenurus problecornis | 0 | 0 | 0 | 0 |
| Astacidae | 0 | 0 | 0 | 0 |
| Atherix | 0 | 0 | 0 | 0 |
| Atractides | 0 | 0 | 0 | 0 |
| Atrichopogon | 0 | 1 | 0 | 0 |
| Aulodrilus pigueti | 0 | 0 | 0 | 0 |
| Aulodrilus pluriseta | 0 | 0 | 0 | 0 |
| Baetidae | 0 | 0 | 0 | 16 |
| Baetis | 0 | 0 | 0 | 0 |
| Baetis intercalaris | 0 | 0 | 0 | 0 |
| Baetisca rogersi | 0 | 0 | 0 | 0 |
| Beardius truncatus | 0 | 0 | 0 | 0 |
| Belostoma | 0 | 0 | 0 | 0 |
| Belostomatidae | 0 | 0 | 0 | 0 |
| Bivalvia | 0 | 0 | 0 | 0 |
| Bourletiella | 0 | 0 | 0 | 0 |
| Boyeria vinosa | 0 | 0 | 0 | 0 |
| Brachycentrus | 0 | 0 | 0 | 0 |
| Brachycentrus chelatus | 1 | 0 | 0 | 0 |
| Brachycentrus numerosus | 0 | 0 | 0 | 0 |



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| | SampleID | SampleID | SampleID | SampleID |
| | 16643/BenthID | 18076/BenthID | 18372/BenthID | 18594/BenthID |
| Taxon Name / SampleID/BenID -> | 14716(#counted) | 15790(#counted) | 15965(#counted) | 16087(#counted) |
| Brachycercus maculatus | 0 | 0 | 0 | 0 |
| Caecidotea | 2 | 5 | 0 | 0 |
| Caecidotea racovitzai | 0 | 0 | 0 | 0 |
| Caenis | 0 | 13 | 2 | 3 |
| Caenis diminuta | 0 | 0 | 0 | 0 |
| Caenis hilaris | 0 | 0 | 0 | 0 |
| Callibaetis floridanus | 0 | 0 | 0 | 0 |
| Calopteryx | 0 | 0 | 0 | 0 |
| Calopteryx maculata | 0 | 0 | 0 | 0 |
| Cambaridae | 1 | 0 | 0 | 0 |
| Campeloma | 0 | 0 | 0 | 0 |
| Campeloma limum | 0 | 0 | 0 | 0 |
| Cassidinidea ovalis | 0 | 0 | 0 | 0 |
| Cecidomyiidae | 0 | 0 | 0 | 0 |
| Ceratopogonidae | 0 | 0 | 0 | 1 |
| Cernotina | 0 | 0 | 0 | 0 |
| Chaoborus | 0 | 0 | 0 | 0 |
| Chaoborus albatus | 0 | 0 | 0 | 0 |
| Chauliodes | 0 | 0 | 0 | 1 |
| Chelifera | 0 | 0 | 0 | 0 |
| Cheumatopsyche | 0 | 0 | 0 | 0 |
| Chimarra | 13 | 0 | 0 | 0 |
| Chironomus | 0 | 0 | 0 | 0 |
| Choroterpes basalis | 0 | 0 | 0 | 12 |
| Choroterpes hubbelli | 0 | 0 | 0 | 0 |
| Cladotanytarsus | 0 | 0 | 0 | 0 |
| Cladotanytarsus cf. daviesi | 0 | 0 | 0 | 0 |
| Cladotanytarsus sp. i epler | 0 | 0 | 0 | 0 |
| Clathrosperchon | 0 | 0 | 0 | 0 |
| Climacea areolaris | 0 | 0 | 0 | 0 |
| Clinotanypus | 0 | 0 | 0 | 0 |
| Coelotanypus | 0 | 0 | 0 | 0 |
| Coelotanypus scapularis | 0 | 0 | 0 | 0 |
| Coenagrionidae | 0 | 0 | 0 | 0 |
| Collembola | 0 | 0 | 0 | 0 |
| Conchapelopia | 0 | 0 | 0 | 0 |
| Corbicula fluminea | 0 | 0 | 15 | 0 |
| Corduliidae | 0 | 0 | 4 | 0 |
| Corydalus | 0 | 0 | 0 | 0 |
| Corydalus cornuta | 0 | 0 | 0 | 0 |
| Corydalus cornutus | 0 | 0 | 0 | 0 |
| Corynoneura | 0 | 0 | 0 | 0 |
| Corynoneura sp. b epler | 0 | 0 | 0 | 0 |
| Corynoneura sp. c epler | 0 | 0 | 0 | 0 |
| Corynoneura taris | 0 | 0 | 0 | 1 |



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| Taxon Name / SampleID/BenID -> | 14716(#counted) | 15790(#counted) | 15965(#counted) | 16087(#counted) |
| Crangonyx | 3 | 0 | 0 | 1 |
| Cricotopus | 0 | 0 | 0 | 0 |
| Cricotopus bicinctus | 0 | 0 | 0 | 0 |
| Cricotopus bicinctus grp. | 0 | 0 | 0 | 0 |
| Cricotopus or orthocladius | 0 | 0 | 0 | 0 |
| Cryptochironomus | 0 | 1 | 0 | 1 |
| Cryptotendipes | 0 | 0 | 0 | 0 |
| Curculionidae | 0 | 0 | 0 | 0 |
| Cyrnellus fraternus | 0 | 0 | 0 | 0 |
| Demicryptochironomus | 0 | 0 | 0 | 0 |
| Dero digitata | 0 | 0 | 0 | 0 |
| Dero digitata complex | 0 | 0 | 0 | 0 |
| Dero lodeni | 0 | 0 | 0 | 0 |
| Dero pectinata | 0 | 0 | 0 | 0 |
| Dero trifida | 0 | 0 | 0 | 0 |
| Dero vaga | 0 | 0 | 0 | 1 |
| Dicrotendipes | 0 | 0 | 0 | 0 |
| Dicrotendipes modestus | 0 | 0 | 0 | 0 |
| Dicrotendipes neomodestus | 0 | 0 | 0 | 0 |
| Dicrotendipes simpsoni | 0 | 2 | 0 | 0 |
| Dicrotendipes sp. a epler | 0 | 0 | 0 | 0 |
| Dineutus | 0 | 0 | 0 | 0 |
| Dineutus discolor | 0 | 0 | 0 | 0 |
| Dineutus serrulatus | 0 | 0 | 0 | 2 |
| Diplectrona modesta | 0 | 0 | 0 | 0 |
| Dixa | 0 | 0 | 0 | 0 |
| Dixella | 0 | 0 | 0 | 0 |
| Djalmabatista pulcher | 0 | 0 | 3 | 0 |
| Dolichopodidae | 0 | 0 | 0 | 0 |
| Dromogomphus armatus | 0 | 0 | 0 | 0 |
| Dromogomphus spinosus | 0 | 0 | 0 | 0 |
| Dryopidae | 0 | 0 | 0 | 0 |
| Dubiraphia | 0 | 0 | 0 | 0 |
| Dubiraphia quadrinotata | 0 | 0 | 0 | 0 |
| Dubiraphia vittata | 0 | 0 | 2 | 0 |
| Dugesia | 0 | 0 | 0 | 0 |
| Dugesia tigrina | 0 | 0 | 0 | 0 |
| Eclipidrilus | 0 | 0 | 0 | 0 |
| Eclipidrilus palustris | 2 | 0 | 0 | 0 |
| Ectopria | 0 | 0 | 0 | 0 |
| Elimia | 0 | 0 | 0 | 0 |
| Elimia floridensis | 0 | 0 | 0 | 0 |
| Empididae | 0 | 0 | 0 | 0 |
| Enallagma | 0 | 0 | 1 | 0 |



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| Enallagma cardenium | 0 | 0 | 0 | 0 |
| Enchytraeidae | 2 | 0 | 1 | 0 |
| Endotribelos hesperium | 0 | 0 | 0 | 0 |
| Enochrus | 0 | 0 | 0 | 0 |
| Ephemerellidae | 0 | 0 | 0 | 0 |
| Ephydridae | 0 | 0 | 0 | 0 |
| Epitheca | 0 | 0 | 0 | 0 |
| Epitheca princeps regina | 0 | 0 | 0 | 0 |
| Eurylophella doris | 4 | 0 | 0 | 0 |
| Eurylophella temporalis | 0 | 0 | 0 | 0 |
| Ferrissia | 0 | 0 | 0 | 0 |
| Gammaridae | 0 | 0 | 0 | 0 |
| Gammarus | 0 | 0 | 0 | 0 |
| Gammarus tigrinus | 0 | 0 | 0 | 0 |
| Gastropoda | 0 | 0 | 0 | 0 |
| Geayia | 0 | 0 | 0 | 0 |
| Gerridae | 0 | 0 | 0 | 0 |
| Gloiobdella elongata | 0 | 0 | 0 | 0 |
| Goeldichironomus fluctuans | 0 | 0 | 0 | 0 |
| Gomphidae | 0 | 0 | 5 | 0 |
| Gomphus | 0 | 0 | 0 | 0 |
| Gomphus minutus | 0 | 0 | 0 | 0 |
| Gonielmis | 0 | 0 | 0 | 0 |
| Gonielmis dietrichi | 0 | 0 | 0 | 0 |
| Grandidierella bonnieroides | 0 | 0 | 0 | 0 |
| Gyretes iricolor | 0 | 0 | 0 | 0 |
| Haber speciosus | 0 | 0 | 0 | 0 |
| Hagenius brevistylus | 0 | 0 | 0 | 0 |
| Hebetancylus excentricus | 0 | 0 | 0 | 2 |
| Helobdella stagnalis | 0 | 0 | 0 | 0 |
| Helobdella triserialis | 0 | 0 | 0 | 0 |
| Helopelopia | 0 | 0 | 0 | 0 |
| Hemerodromia | 3 | 0 | 2 | 0 |
| Hemiptera | 0 | 0 | 0 | 0 |
| Heptageniidae | 0 | 0 | 0 | 0 |
| Hetaerina | 0 | 0 | 0 | 0 |
| Hetaerina titia | 0 | 0 | 0 | 0 |
| Heteroplectron americanum | 0 | 0 | 0 | 0 |
| Hexagenia | 0 | 0 | 0 | 0 |
| Hexagenia bilineata | 0 | 0 | 0 | 0 |
| Hexagenia limbata | 0 | 0 | 0 | 0 |
| Hexagenia munda orlando | 0 | 0 | 0 | 0 |
| Hexatoma | 1 | 0 | 0 | 0 |
| Hyalella azteca | 0 | 1 | 32 | 3 |
| Hydra | 0 | 0 | 0 | 0 |
| Hydrachna | 0 | 0 | 0 | 0 |
| Hydraena marginicollis | 0 | 0 | 0 | 0 |
| Hydraenidae | 0 | 0 | 0 | 0 |



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| Hydrobiidae | 0 | 0 | 0 | 1 |
| Hydrodroma | 0 | 0 | 0 | 0 |
| Hydrophilidae | 0 | 0 | 0 | 0 |
| Hydroporus | 0 | 0 | 0 | 0 |
| Hydropsyche | 1 | 0 | 0 | 0 |
| Hydropsyche decalda | 0 | 0 | 0 | 0 |
| Hydropsychidae | 0 | 1 | 2 | 0 |
| Hydroptila | 1 | 0 | 3 | 0 |
| Hydroptilidae | 0 | 0 | 0 | 0 |
| Hygrobates | 0 | 0 | 0 | 0 |
| Hygrotus | 0 | 0 | 0 | 0 |
| Ischnura | 0 | 0 | 0 | 0 |
| Ischnura hastata | 0 | 0 | 0 | 0 |
| Isonychia | 0 | 0 | 0 | 0 |
| Isoperla | 0 | 0 | 0 | 0 |
| Isopoda | 0 | 0 | 0 | 0 |
| Isotomurus | 0 | 0 | 0 | 0 |
| Isotomurus tricolor | 0 | 0 | 0 | 0 |
| Kiefferulus | 0 | 0 | 0 | 0 |
| Krendowskia | 0 | 0 | 0 | 0 |
| Labiobaetis | 0 | 2 | 0 | 0 |
| Labrundinia | 0 | 0 | 0 | 0 |
| Labrundinia becki | 0 | 0 | 0 | 2 |
| Labrundinia johannseni | 0 | 0 | 0 | 0 |
| Labrundinia neopilosella | 0 | 0 | 0 | 0 |
| Labrundinia pilosella | 0 | 0 | 0 | 3 |
| Laevapex | 0 | 0 | 0 | 0 |
| Laevapex peninsulae | 0 | 0 | 0 | 0 |
| Larsia berneri | 0 | 0 | 0 | 0 |
| Larsia decolorata | 0 | 0 | 0 | 1 |
| Lauterborniella agrayloides | 0 | 0 | 0 | 0 |
| Lebertia | 0 | 0 | 3 | 0 |
| Lepidoptera | 0 | 0 | 0 | 0 |
| Leptoceridae | 0 | 0 | 0 | 0 |
| Leptophlebia | 0 | 0 | 0 | 0 |
| Leptophlebiidae | 0 | 6 | 0 | 0 |
| Leuctra | 0 | 0 | 0 | 0 |
| Libellulidae | 0 | 4 | 0 | 0 |
| Limnesia | 0 | 0 | 0 | 0 |
| Limnodrilus hoffmeisteri | 1 | 0 | 1 | 0 |
| Limnophila | 0 | 0 | 0 | 0 |
| Limonia | 0 | 0 | 0 | 0 |
| Liodessus | 0 | 0 | 0 | 0 |
| Liodessus affinis | 0 | 0 | 0 | 0 |
| Lioporeus | 0 | 0 | 0 | 0 |
| Lirceus | 0 | 0 | 0 | 0 |
| Littoridinops monroensis | 0 | 0 | 0 | 0 |
| Lumbriculidae | 0 | 0 | 0 | 0 |
| Lumbriculus variegatus | 0 | 0 | 1 | 0 |



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| Taxon Name / SampleID/BenID -> | 14716(#counted) | 15790(#counted) | 15965(#counted) | 16087(#counted) |
| Lype diversa | 0 | 0 | 0 | 0 |
| Maccaffertium | 0 | 0 | 0 | 0 |
| Maccaffertium smithae | 0 | 0 | 0 | 0 |
| Macromia | 0 | 0 | 0 | 0 |
| Macromia taeniolata | 0 | 0 | 0 | 0 |
| Macromiidae | 0 | 0 | 1 | 0 |
| Macronychus glabratus | 0 | 0 | 0 | 0 |
| Macrostemum carolina | 0 | 0 | 0 | 0 |
| Mayatrichia | 0 | 0 | 0 | 0 |
| Mayatrichia ayama | 0 | 0 | 0 | 0 |
| Meropelopia | 0 | 0 | 0 | 0 |
| Mesosmittia | 0 | 0 | 0 | 0 |
| Metrobates | 0 | 0 | 0 | 0 |
| Micrasema | 0 | 0 | 0 | 0 |
| Micrasema rusticum | 0 | 0 | 0 | 0 |
| Micrasema wataga | 0 | 0 | 0 | 0 |
| Microcylloepus | 0 | 0 | 0 | 0 |
| Microcylloepus pusillus | 0 | 2 | 25 | 1 |
| Micromenetus | 0 | 0 | 0 | 0 |
| Micromenetus dilatatus | 0 | 0 | 0 | 0 |
| Microtendipes pedellus | 0 | 0 | 0 | 0 |
| Microtendipes pedellus grp. | 1 | 0 | 0 | 0 |
| Microtendipes rydalensis | 0 | 0 | 0 | 0 |
| Microtendipes rydalensis grp. | 0 | 0 | 0 | 0 |
| Mideopsis | 0 | 0 | 0 | 0 |
| Molanna | 0 | 0 | 0 | 0 |
| Mooreobdella | 0 | 0 | 0 | 0 |
| Mooreobdella tetragon | 0 | 0 | 0 | 0 |
| Muscidae | 0 | 0 | 0 | 0 |
| Naididae | 0 | 0 | 0 | 0 |
| Nais behningi | 0 | 0 | 0 | 0 |
| Nais communis | 0 | 0 | 0 | 0 |
| Nais communis complex | 0 | 0 | 3 | 0 |
| Nais pardalis | 0 | 0 | 0 | 0 |
| Nais simplex | 0 | 0 | 0 | 0 |
| Nais variabilis | 0 | 0 | 0 | 0 |
| Nanocladius | 0 | 0 | 0 | 0 |
| Nectopsyche | 0 | 0 | 0 | 0 |
| Nectopsyche candida | 0 | 0 | 0 | 0 |
| Nectopsyche exquisita | 0 | 0 | 14 | 0 |
| Nectopsyche pavida | 0 | 0 | 1 | 0 |
| Nemertea | 0 | 0 | 0 | 0 |
| Neoperla | 0 | 0 | 0 | 0 |
| Neoperla clymene | 0 | 0 | 0 | 0 |
| Neoporus | 0 | 0 | 0 | 0 |
| Neotrichia | 0 | 0 | 0 | 0 |
| Neumania | 0 | 0 | 0 | 0 |



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| Taxon Name / SampleID/BenID -> | 14716(#counted) | 15790(#counted) | 15965(#counted) | 16087(#counted) |
| Neumania distincta | 0 | 0 | 0 | 0 |
| Neureclipsis | 0 | 0 | 0 | 0 |
| Neureclipsis crepuscularis | 0 | 0 | 0 | 0 |
| Neurocordulia | 0 | 0 | 0 | 0 |
| Neurocordulia alabamensis | 0 | 0 | 0 | 0 |
| Neurocordulia virginiensis | 2 | 0 | 0 | 0 |
| Nigronia | 0 | 0 | 0 | 0 |
| Nigronia fasciatus | 0 | 0 | 0 | 0 |
| Nigronia serricornis | 0 | 0 | 0 | 0 |
| Nilotanypus | 0 | 0 | 0 | 0 |
| Nilothauma | 1 | 0 | 0 | 0 |
| Notogillia wetherbyi | 0 | 0 | 0 | 0 |
| Nyctiophylax | 0 | 0 | 0 | 0 |
| Odonata | 0 | 0 | 0 | 1 |
| Odontomyia | 0 | 0 | 0 | 0 |
| Oecetis | 0 | 0 | 0 | 0 |
| Oecetis cinerascens | 0 | 0 | 0 | 0 |
| Oecetis georgia | 0 | 0 | 0 | 0 |
| Oecetis inconspicua cmplx. | 0 | 0 | 5 | 0 |
| Oecetis morsei or sphyra | 4 | 0 | 0 | 0 |
| Oecetis parva | 0 | 0 | 0 | 0 |
| Oecetis persimilis | 0 | 0 | 0 | 0 |
| Oecetis sp. a floyd | 0 | 0 | 0 | 0 |
| Oecetis sp. e floyd | 0 | 0 | 0 | 0 |
| Ora/scirtes | 0 | 0 | 0 | 0 |
| Oribatei | 0 | 0 | 0 | 0 |
| Orthocladiinae | 1 | 0 | 0 | 0 |
| Orthocladiinae gen. c epler | 0 | 0 | 0 | 0 |
| Orthocladiinae gen. f epler | 0 | 0 | 0 | 0 |
| Orthocladius annectens | 0 | 0 | 0 | 0 |
| Orthotrichia | 0 | 0 | 0 | 0 |
| Oxyethira | 0 | 0 | 0 | 0 |
| Pachydiplax longipennis | 0 | 0 | 0 | 0 |
| Pagastiella | 0 | 0 | 0 | 0 |
| Palaemonetes | 0 | 0 | 0 | 0 |
| Palaemonetes kadiakensis | 0 | 0 | 0 | 1 |
| Palaemonetes paludosus | 0 | 0 | 0 | 0 |
| Palpomyia/bezzia grp. | 0 | 0 | 2 | 0 |
| Paracladopelma | 0 | 0 | 0 | 0 |
| Paracladopelma loganae | 0 | 0 | 0 | 0 |
| Paracladopelma undine | 0 | 0 | 0 | 0 |
| Paragnetina | 0 | 0 | 0 | 0 |
| Paragnetina fumosa | 0 | 0 | 0 | 0 |



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| Parakiefferiella | 0 | 0 | 0 | 0 |
| Paralauterborniella nigrohalterale | 0 | 0 | 0 | 0 |
| Paraleptophlebia volitans | 0 | 0 | 0 | 0 |
| Parametriocnemus | 0 | 0 | 0 | 0 |
| Parametriocnemus sp. f epler | 0 | 0 | 0 | 0 |
| Paranyctiophylax | 2 | 0 | 0 | 0 |
| Paraplea | 0 | 0 | 0 | 0 |
| Paraponyx | 0 | 0 | 0 | 0 |
| Paratanytarsus sp. a epler | 0 | 0 | 0 | 0 |
| Paratanytarsus sp. c epler | 0 | 0 | 0 | 0 |
| Paratendipes subaequalis | 0 | 0 | 0 | 0 |
| Pelecypoda | 0 | 0 | 0 | 0 |
| Pelonomus obscurus | 0 | 0 | 0 | 1 |
| Peltodytes | 0 | 0 | 0 | 0 |
| Pentaneura inconspicua | 0 | 0 | 0 | 0 |
| Perlesta | 4 | 0 | 0 | 0 |
| Perlesta placida | 0 | 0 | 0 | 0 |
| Perlesta placida complex | 0 | 0 | 0 | 0 |
| Perlinella | 0 | 0 | 0 | 0 |
| Petrophila | 0 | 0 | 0 | 0 |
| Phaenopsectra obediens grp. | 0 | 0 | 0 | 0 |
| Phaenopsectra punctipes grp. | 0 | 0 | 0 | 0 |
| Phylocentropus | 0 | 0 | 0 | 0 |
| Physella | 0 | 0 | 0 | 0 |
| Physella cubensis | 0 | 0 | 0 | 0 |
| Piona | 0 | 0 | 0 | 0 |
| Pisidiidae | 0 | 0 | 0 | 0 |
| Pisidium | 0 | 0 | 0 | 0 |
| Planariidae | 0 | 0 | 0 | 0 |
| Planorbella duryi | 0 | 0 | 0 | 0 |
| Planorbella scalaris | 0 | 0 | 0 | 0 |
| Planorbidae | 0 | 38 | 0 | 0 |
| Platyhelminthes | 0 | 0 | 0 | 0 |
| Plecoptera | 0 | 0 | 0 | 0 |
| Plumulariidae | 0 | 0 | 0 | 0 |
| Polycentropodidae | 0 | 0 | 0 | 0 |
| Polycentropus | 0 | 0 | 0 | 0 |
| Polypedilum | 0 | 0 | 0 | 0 |
| Polypedilum aviceps | 3 | 0 | 0 | 0 |
| Polypedilum convictum grp. | 3 | 0 | 0 | 0 |
| Polypedilum fallax | 0 | 0 | 2 | 0 |
| Polypedilum flavum | 0 | 0 | 0 | 0 |



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| Polypedilum halterale grp. | 0 | 0 | 0 | 0 |
| Polypedilum illinoense | 0 | 0 | 0 | 0 |
| Polypedilum illinoense grp. | 0 | 0 | 0 | 17 |
| Polypedilum scalaenum | 0 | 0 | 0 | 0 |
| Polypedilum scalaenum grp. | 0 | 0 | 0 | 0 |
| Polypedilum sp. a epler | 0 | 0 | 0 | 0 |
| Polypedilum tritum | 0 | 0 | 0 | 0 |
| Pomacea paludosa | 0 | 0 | 0 | 0 |
| Pristina aequiseta | 0 | 0 | 0 | 0 |
| Pristina synclites | 0 | 0 | 0 | 0 |
| Pristinella jenkinae | 0 | 0 | 0 | 0 |
| Probezzia | 1 | 0 | 0 | 0 |
| Procambarus | 0 | 0 | 0 | 0 |
| Procladius | 0 | 1 | 0 | 0 |
| Procladius (holotanypus) | 0 | 0 | 0 | 0 |
| Procloeon viridocularis | 0 | 0 | 0 | 0 |
| Progomphus | 0 | 0 | 0 | 0 |
| Progomphus obscurus | 0 | 0 | 0 | 0 |
| Promoresia tardella | 0 | 0 | 0 | 0 |
| Prostoma rubrum | 0 | 0 | 0 | 0 |
| Psammoryctides convolutus | 0 | 0 | 0 | 0 |
| Pseudochironomus | 0 | 0 | 0 | 0 |
| Pseudocloeon | 0 | 0 | 0 | 0 |
| Psychodidae | 0 | 0 | 0 | 0 |
| Pycnopsyche | 1 | 0 | 0 | 0 |
| Pyralidae | 0 | 0 | 0 | 0 |
| Pyrgophorus platyrachis | 0 | 0 | 0 | 0 |
| Ranatra kirkaldyi | 0 | 0 | 0 | 0 |
| Rhagovelia | 0 | 0 | 0 | 0 |
| Rheocricotopus | 0 | 0 | 0 | 0 |
| Rheocricotopus robacki | 0 | 0 | 0 | 0 |
| Rheocricotopus tuberculatus | 0 | 0 | 0 | 0 |
| Rheotanytarsus | 0 | 0 | 0 | 0 |
| Rheotanytarsus distinctissimus grp. | 0 | 0 | 0 | 2 |
| Rheotanytarsus exiguus | 0 | 0 | 0 | 0 |
| Rheotanytarsus exiguus grp. | 1 | 0 | 8 | 10 |
| Rheotanytarsus pellucidus | 0 | 0 | 0 | 0 |
| Scirtes | 0 | 0 | 1 | 0 |
| Scirtidae | 0 | 0 | 0 | 0 |
| Serratella deficiens | 0 | 0 | 0 | 0 |
| Sialis | 0 | 0 | 0 | 0 |
| Silvius | 0 | 0 | 0 | 0 |



US EPA ARCHIVE DOCUMENT

| As Calculated / STORET station -> | 32020063 | 21010018 | 26011020 | 28010223 |
|---|---|---|---|---|
| Sample date -> | 1/21/1999 | 7/27/1999 | 7/20/1999 | 10/7/1999 |
| | SampleID | SampleID | SampleID | SampleID |
| | 16643/BenthID | 18076/BenthID | 18372/BenthID | 18594/BenthID |
| Taxon Name / SampleID/BenID -> | 14716(#counted) | 15790(#counted) | 15965(#counted) | 16087(#counted) |
| Simuliidae | 0 | 0 | 0 | 0 |
| Simulium | 18 | 0 | 1 | 15 |
| Slavina appendiculata | 0 | 0 | 0 | 0 |
| Somatogyrus walkerianus | 0 | 0 | 0 | 0 |
| Sperchon | 0 | 0 | 0 | 0 |
| Sperchonopsis | 0 | 0 | 0 | 0 |
| Sperchopsis | 0 | 0 | 0 | 0 |
| Sphaeriidae | 0 | 0 | 0 | 0 |
| Sphaeriidae(mollusca) | 0 | 4 | 0 | 0 |
| Sphaeroma | 0 | 0 | 0 | 0 |
| Sphaeromias | 0 | 0 | 0 | 0 |
| Spirosperma | 0 | 0 | 0 | 0 |
| Spirosperma ferox | 0 | 0 | 0 | 0 |
| Stelechomyia perpulchra | 0 | 0 | 0 | 0 |
| Stempellina | 5 | 0 | 0 | 0 |
| Stempellina sp. a epler | 0 | 0 | 0 | 0 |
| Stempellinella | 0 | 0 | 0 | 0 |
| Stenacron | 0 | 0 | 0 | 0 |
| Stenacron floridense | 1 | 0 | 0 | 0 |
| Stenacron interpunctatum | 0 | 0 | 0 | 0 |
| Stenelmis | 0 | 6 | 4 | 5 |
| Stenelmis decorata | 0 | 0 | 0 | 0 |
| Stenelmis hungerfordi | 0 | 0 | 0 | 0 |
| Stenochironomus | 1 | 19 | 2 | 1 |
| Stenonema | 0 | 3 | 0 | 0 |
| Stenonema exiguum | 3 | 0 | 0 | 0 |
| Stenonema smithae | 5 | 0 | 1 | 0 |
| Stratiomyidae | 0 | 0 | 0 | 0 |
| Stylaria lacustris | 0 | 0 | 0 | 0 |
| Synorthocladius | 0 | 0 | 0 | 0 |
| Tabanus | 1 | 0 | 0 | 0 |
| Taeniopteryx lita | 0 | 0 | 0 | 0 |
| Tanytarsus | 0 | 0 | 0 | 0 |
| Tanytarsus sp. a epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. c epler | 0 | 0 | 0 | 2 |
| Tanytarsus sp. d epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. e epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. g epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. l epler | 0 | 0 | 2 | 13 |
| Tanytarsus sp. m epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. o epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. r epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. s epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. t epler | 0 | 0 | 0 | 1 |
| Tanytarsus sp. u epler | 0 | 0 | 0 | 0 |
| Taphromysis bowmani | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 32020063 | 21010018 | 26011020 | 28010223 |
|---|---|---|---|---|
| Sample date -> | 1/21/1999 | 7/27/1999 | 7/20/1999 | 10/7/1999 |
| | SampleID | SampleID | SampleID | SampleID |
| | 16643/BenthID | 18076/BenthID | 18372/BenthID | 18594/BenthID |
| Taxon Name / SampleID/BenID -> | 14716(#counted) | 15790(#counted) | 15965(#counted) | 16087(#counted) |
| Thienemanniella | 0 | 0 | 0 | 0 |
| Thienemanniella lobapodema | 0 | 0 | 0 | 0 |
| Thienemanniella similis | 0 | 0 | 0 | 0 |
| Thienemanniella sp. a epler | 0 | 0 | 0 | 0 |
| Thienemannimyia grp. | 3 | 0 | 0 | 0 |
| Tipula | 0 | 0 | 0 | 0 |
| Tipulidae | 0 | 0 | 0 | 0 |
| Torrenticola | 0 | 0 | 0 | 0 |
| Triaenodes | 0 | 5 | 0 | 0 |
| Triaenodes ignitus | 0 | 0 | 0 | 0 |
| Triaenodes perna | 0 | 0 | 0 | 0 |
| Tribelos | 0 | 0 | 0 | 0 |
| Tribelos atrum | 0 | 0 | 0 | 0 |
| Tribelos fuscicornis | 0 | 0 | 0 | 0 |
| Tribelos jucundum | 0 | 1 | 0 | 0 |
| Tricorythodes albilineatus | 0 | 0 | 0 | 0 |
| Tubificidae | 0 | 0 | 0 | 0 |
| Turbellaria | 0 | 0 | 0 | 3 |
| Tvetenia | 0 | 0 | 0 | 0 |
| Tvetenia discoloripes grp. | 0 | 0 | 0 | 0 |
| Unionicola | 0 | 0 | 0 | 0 |
| Unniella multivirga | 0 | 0 | 0 | 0 |
| Veliidae | 0 | 0 | 0 | 0 |
| Xenochironomus xenolabis | 0 | 4 | 0 | 0 |
| Xestochironomus | 0 | 0 | 2 | 0 |
| Xylotopus par | 1 | 0 | 0 | 0 |
| Zygoptera | 0 | 0 | 0 | 0 |

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| As Calculated / STORET station -> | 20030414 | 19010099 | 21030064 | 26010972 |
|---|---|---|---|---|
| Sample date -> | 1/12/2000 | 2/1/2000 | 3/15/2000 | 1/10/2000 |
| | SampleID 20471/BenthID | SampleID 20474/BenthID | SampleID 20479/BenthID | SampleID 20480/BenthID |
| Taxon Name / SampleID/BenID -> | 17104(#counted) | 17107(#counted) | 17112(#counted) | 17113(#counted) |
| Ablabesmyia (karelia) grp. | 0 | 0 | 0 | 0 |
| Ablabesmyia hauberi | 0 | 0 | 0 | 0 |
| Ablabesmyia mallochi | 1 | 7 | 11 | 0 |
| Ablabesmyia rhamphe grp. | 0 | 0 | 1 | 0 |
| Acentrella parvula | 0 | 0 | 0 | 0 |
| Acerpenna pygmaea | 0 | 0 | 0 | 0 |
| Acroneuria | 0 | 0 | 0 | 0 |
| Acroneuria abnormis | 0 | 0 | 0 | 0 |
| Acroneuria arenosa | 0 | 0 | 0 | 0 |
| Acroneuria arenosa/evoluta | 0 | 0 | 0 | 0 |
| Acroneuria lycorias | 0 | 0 | 0 | 0 |
| Agarodes libalis | 3 | 0 | 0 | 0 |
| Alluaudomyia | 0 | 0 | 0 | 0 |
| Amnicola | 0 | 0 | 0 | 0 |
| Amnicola dalli | 0 | 0 | 0 | 0 |
| Amnicola dalli johnsoni | 0 | 0 | 0 | 0 |
| Amphipoda | 0 | 0 | 0 | 0 |
| Ancylidae | 3 | 0 | 0 | 0 |
| Ancyronyx | 0 | 0 | 0 | 0 |
| Ancyronyx variegatus | 0 | 1 | 0 | 0 |
| Anisocentropus pyraloides | 2 | 0 | 0 | 0 |
| Anopheles | 0 | 0 | 0 | 0 |
| Apsectrotanypus johnsoni | 0 | 0 | 0 | 0 |
| Argia | 0 | 1 | 0 | 3 |
| Argia fumipennis | 0 | 0 | 0 | 0 |
| Argia moesta | 0 | 0 | 0 | 0 |
| Argia sedula | 0 | 0 | 0 | 0 |
| Argia tibialis | 0 | 0 | 0 | 0 |
| Arrenurus | 1 | 0 | 0 | 0 |
| Arrenurus problecornis | 0 | 3 | 0 | 0 |
| Astacidae | 0 | 0 | 0 | 0 |
| Atherix | 0 | 0 | 0 | 0 |
| Atractides | 0 | 0 | 0 | 1 |
| Atrichopogon | 0 | 0 | 0 | 1 |
| Aulodrilus pigueti | 1 | 0 | 0 | 0 |
| Aulodrilus pluriseta | 0 | 0 | 0 | 0 |
| Baetidae | 0 | 0 | 0 | 0 |
| Baetis | 0 | 1 | 0 | 0 |
| Baetis intercalaris | 2 | 0 | 0 | 0 |
| Baetisca rogersi | 0 | 0 | 0 | 0 |
| Beardius truncatus | 0 | 0 | 2 | 0 |
| Belostoma | 0 | 0 | 0 | 0 |
| Belostomatidae | 0 | 0 | 0 | 0 |
| Bivalvia | 0 | 0 | 0 | 0 |
| Bourletiella | 0 | 0 | 0 | 0 |
| Boyeria vinosa | 0 | 0 | 0 | 0 |
| Brachycentrus | 0 | 0 | 0 | 0 |
| Brachycentrus chelatus | 0 | 0 | 0 | 0 |
| Brachycentrus numerosus | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 20030414 | 19010099 | 21030064 | 26010972 |
|---|---|---|---|---|
| Sample date -> | 1/12/2000 | 2/1/2000 | 3/15/2000 | 1/10/2000 |
| | SampleID | SampleID | SampleID | SampleID |
| | 20471/BenthID | 20474/BenthID | 20479/BenthID | 20480/BenthID |
| Taxon Name / SampleID/BenID -> | 17104(#counted) | 17107(#counted) | 17112(#counted) | 17113(#counted) |
| Brachycercus maculatus | 0 | 0 | 0 | 0 |
| Caecidotea | 0 | 8 | 6 | 0 |
| Caecidotea racovitzai | 0 | 0 | 0 | 0 |
| Caenis | 0 | 1 | 0 | 2 |
| Caenis diminuta | 0 | 0 | 0 | 0 |
| Caenis hilaris | 0 | 0 | 0 | 0 |
| Callibaetis floridanus | 0 | 0 | 0 | 0 |
| Calopteryx | 2 | 0 | 0 | 1 |
| Calopteryx maculata | 0 | 0 | 0 | 0 |
| Cambaridae | 0 | 0 | 0 | 0 |
| Campeloma | 0 | 3 | 0 | 0 |
| Campeloma limum | 0 | 0 | 0 | 0 |
| Cassidinidea ovalis | 0 | 0 | 0 | 0 |
| Cecidomyiidae | 0 | 0 | 0 | 0 |
| Ceratopogonidae | 0 | 0 | 0 | 0 |
| Cernotina | 0 | 0 | 0 | 0 |
| Chaoborus | 0 | 0 | 0 | 0 |
| Chaoborus albatus | 0 | 0 | 0 | 0 |
| Chauliodes | 0 | 0 | 0 | 0 |
| Chelifera | 0 | 0 | 0 | 0 |
| Cheumatopsyche | 8 | 0 | 0 | 5 |
| Chimarra | 8 | 0 | 0 | 0 |
| Chironomus | 0 | 0 | 0 | 0 |
| Choroterpes basalis | 0 | 0 | 0 | 0 |
| Choroterpes hubbelli | 0 | 0 | 0 | 0 |
| Cladotanytarsus | 1 | 0 | 4 | 0 |
| Cladotanytarsus cf. daviesi | 0 | 0 | 0 | 0 |
| Cladotanytarsus sp. i epler | 0 | 0 | 0 | 0 |
| Clathrosperchon | 0 | 0 | 0 | 0 |
| Climacea areolaris | 0 | 0 | 0 | 0 |
| Clinotanypus | 0 | 0 | 2 | 0 |
| Coelotanypus | 0 | 0 | 0 | 0 |
| Coelotanypus scapularis | 0 | 0 | 0 | 0 |
| Coenagrionidae | 2 | 0 | 0 | 0 |
| Collembola | 0 | 0 | 0 | 0 |
| Conchapelopia | 2 | 0 | 0 | 0 |
| Corbicula fluminea | 0 | 0 | 0 | 0 |
| Corduliidae | 0 | 0 | 0 | 0 |
| Corydalus | 0 | 0 | 0 | 0 |
| Corydalus cornuta | 0 | 0 | 0 | 0 |
| Corydalus cornutus | 0 | 0 | 0 | 0 |
| Corynoneura | 0 | 0 | 1 | 0 |
| Corynoneura sp. b epler | 0 | 0 | 0 | 0 |
| Corynoneura sp. c epler | 0 | 0 | 0 | 0 |
| Corynoneura taris | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 20030414 | 19010099 | 21030064 | 26010972 |
|---|---|---|---|---|
| Sample date -> | 1/12/2000 | 2/1/2000 | 3/15/2000 | 1/10/2000 |
| | SampleID 20471/BenthID | SampleID 20474/BenthID | SampleID 20479/BenthID | SampleID 20480/BenthID |
| Taxon Name / SampleID/BenID -> | 17104(#counted) | 17107(#counted) | 17112(#counted) | 17113(#counted) |
| Crangonyx | 0 | 0 | 0 | 0 |
| Cricotopus | 0 | 0 | 0 | 0 |
| Cricotopus bicinctus | 0 | 0 | 0 | 0 |
| Cricotopus bicinctus grp. | 0 | 0 | 5 | 0 |
| Cricotopus or orthocladius | 0 | 0 | 0 | 0 |
| Cryptochironomus | 0 | 0 | 1 | 0 |
| Cryptotendipes | 0 | 0 | 0 | 0 |
| Curculionidae | 0 | 0 | 0 | 0 |
| Cyrnellus fraternus | 0 | 0 | 0 | 0 |
| Demicryptochironomus | 0 | 0 | 0 | 0 |
| Dero digitata | 0 | 0 | 0 | 0 |
| Dero digitata complex | 0 | 0 | 0 | 3 |
| Dero lodeni | 0 | 0 | 0 | 0 |
| Dero pectinata | 0 | 0 | 0 | 0 |
| Dero trifida | 0 | 0 | 0 | 0 |
| Dero vaga | 0 | 0 | 0 | 0 |
| Dicrotendipes | 0 | 0 | 0 | 0 |
| Dicrotendipes modestus | 0 | 0 | 0 | 0 |
| Dicrotendipes neomodestus | 0 | 0 | 0 | 0 |
| Dicrotendipes simpsoni | 0 | 0 | 0 | 0 |
| Dicrotendipes sp. a epler | 0 | 0 | 0 | 0 |
| Dineutus | 0 | 0 | 0 | 0 |
| Dineutus discolor | 0 | 0 | 0 | 0 |
| Dineutus serrulatus | 0 | 0 | 0 | 0 |
| Diplectrona modesta | 0 | 0 | 0 | 0 |
| Dixa | 0 | 0 | 0 | 0 |
| Dixella | 0 | 0 | 0 | 0 |
| Djalmabatista pulcher | 4 | 0 | 0 | 0 |
| Dolichopodidae | 0 | 0 | 0 | 0 |
| Dromogomphus armatus | 0 | 0 | 0 | 0 |
| Dromogomphus spinosus | 0 | 0 | 0 | 0 |
| Dryopidae | 0 | 0 | 0 | 0 |
| Dubiraphia | 0 | 0 | 0 | 0 |
| Dubiraphia quadrinotata | 0 | 0 | 0 | 0 |
| Dubiraphia vittata | 0 | 1 | 1 | 1 |
| Dugesia | 0 | 0 | 0 | 0 |
| Dugesia tigrina | 0 | 0 | 0 | 0 |
| Eclipidrilus | 3 | 0 | 0 | 0 |
| Eclipidrilus palustris | 0 | 0 | 0 | 3 |
| Ectopria | 0 | 0 | 0 | 0 |
| Elimia | 0 | 0 | 0 | 0 |
| Elimia floridensis | 0 | 0 | 0 | 0 |
| Empididae | 0 | 0 | 0 | 0 |
| Enallagma | 0 | 1 | 0 | 0 |



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| As Calculated / STORET station -> | 20030414 | 19010099 | 21030064 | 26010972 |
|---|---|---|---|---|
| Sample date -> | 1/12/2000 | 2/1/2000 | 3/15/2000 | 1/10/2000 |
| | SampleID | SampleID | SampleID | SampleID |
| | 20471/BenthID | 20474/BenthID | 20479/BenthID | 20480/BenthID |
| Taxon Name / SampleID/BenID -> | 17104(#counted) | 17107(#counted) | 17112(#counted) | 17113(#counted) |
| Enallagma cardenium | 0 | 0 | 0 | 0 |
| Enchytraeidae | 0 | 1 | 0 | 0 |
| Endotribelos hesperium | 0 | 0 | 0 | 0 |
| Enochrus | 0 | 0 | 0 | 0 |
| Ephemerellidae | 0 | 0 | 0 | 0 |
| Ephydridae | 0 | 0 | 0 | 0 |
| Epitheca | 0 | 0 | 0 | 0 |
| Epitheca princeps regina | 0 | 0 | 0 | 0 |
| Eurylophella doris | 0 | 0 | 0 | 1 |
| Eurylophella temporalis | 0 | 0 | 0 | 0 |
| Ferrissia | 0 | 0 | 0 | 0 |
| Gammaridae | 0 | 0 | 0 | 0 |
| Gammarus | 0 | 0 | 3 | 0 |
| Gammarus tigrinus | 0 | 0 | 0 | 0 |
| Gastropoda | 0 | 0 | 0 | 0 |
| Geayia | 0 | 0 | 0 | 0 |
| Gerridae | 0 | 0 | 0 | 0 |
| Gloiobdella elongata | 0 | 0 | 0 | 0 |
| Goeldichironomus fluctuans | 0 | 0 | 0 | 0 |
| Gomphidae | 0 | 0 | 1 | 0 |
| Gomphus | 0 | 0 | 0 | 0 |
| Gomphus minutus | 0 | 0 | 0 | 0 |
| Gonielmis | 0 | 0 | 0 | 0 |
| Gonielmis dietrichi | 0 | 0 | 0 | 0 |
| Grandidierella bonnieroides | 0 | 0 | 0 | 0 |
| Gyretes iricolor | 0 | 0 | 0 | 0 |
| Haber speciosus | 0 | 0 | 0 | 0 |
| Hagenius brevistylus | 0 | 0 | 0 | 0 |
| Hebetancylus excentricus | 0 | 0 | 0 | 0 |
| Helobdella stagnalis | 0 | 0 | 0 | 0 |
| Helobdella triserialis | 0 | 0 | 0 | 0 |
| Helopelopia | 0 | 0 | 0 | 0 |
| Hemerodromia | 2 | 0 | 2 | 8 |
| Hemiptera | 0 | 0 | 0 | 0 |
| Heptageniidae | 0 | 0 | 0 | 0 |
| Hetaerina | 0 | 0 | 0 | 0 |
| Hetaerina titia | 0 | 0 | 0 | 0 |
| Heteroplectron americanum | 0 | 0 | 0 | 0 |
| Hexagenia | 0 | 0 | 0 | 0 |
| Hexagenia bilineata | 0 | 0 | 0 | 0 |
| Hexagenia limbata | 0 | 0 | 0 | 0 |
| Hexagenia munda orlando | 0 | 0 | 0 | 0 |
| Hexatoma | 0 | 0 | 0 | 0 |
| Hyalella azteca | 0 | 15 | 4 | 10 |
| Hydra | 0 | 0 | 0 | 1 |
| Hydrachna | 0 | 0 | 0 | 0 |
| Hydraena marginicollis | 0 | 0 | 0 | 0 |
| Hydraenidae | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 20030414 | 19010099 | 21030064 | 26010972 |
|---|---|---|---|---|
| Sample date -> | 1/12/2000 | 2/1/2000 | 3/15/2000 | 1/10/2000 |
| | SampleID 20471/BenthID | SampleID 20474/BenthID | SampleID 20479/BenthID | SampleID 20480/BenthID |
| Taxon Name / SampleID/BenID -> | 17104(#counted) | 17107(#counted) | 17112(#counted) | 17113(#counted) |
| Hydrobiidae | 0 | 0 | 0 | 0 |
| Hydrodroma | 0 | 0 | 1 | 0 |
| Hydrophilidae | 0 | 0 | 0 | 0 |
| Hydroporus | 0 | 5 | 0 | 0 |
| Hydropsyche | 1 | 0 | 0 | 0 |
| Hydropsyche decalda | 0 | 0 | 0 | 0 |
| Hydropsychidae | 0 | 0 | 2 | 0 |
| Hydroptila | 0 | 0 | 0 | 0 |
| Hydroptilidae | 0 | 0 | 0 | 0 |
| Hygrobates | 0 | 0 | 0 | 0 |
| Hygrotus | 0 | 0 | 0 | 0 |
| Ischnura | 0 | 0 | 0 | 2 |
| Ischnura hastata | 0 | 0 | 0 | 0 |
| Isonychia | 0 | 0 | 0 | 0 |
| Isoperla | 0 | 0 | 0 | 0 |
| Isopoda | 0 | 0 | 0 | 0 |
| Isotomurus | 0 | 0 | 0 | 0 |
| Isotomurus tricolor | 0 | 0 | 0 | 0 |
| Kiefferulus | 0 | 0 | 0 | 0 |
| Krendowskia | 0 | 0 | 2 | 0 |
| Labiobaetis | 0 | 0 | 0 | 0 |
| Labrundinia | 0 | 0 | 0 | 0 |
| Labrundinia becki | 0 | 0 | 0 | 0 |
| Labrundinia johannseni | 0 | 0 | 0 | 0 |
| Labrundinia neopilosella | 0 | 0 | 2 | 0 |
| Labrundinia pilosella | 0 | 0 | 0 | 0 |
| Laevapex | 0 | 0 | 0 | 0 |
| Laevapex peninsulae | 0 | 0 | 0 | 0 |
| Larsia berneri | 0 | 0 | 0 | 0 |
| Larsia decolorata | 0 | 0 | 0 | 0 |
| Lauterborniella agrayloides | 0 | 8 | 0 | 0 |
| Lebertia | 0 | 1 | 0 | 0 |
| Lepidoptera | 0 | 0 | 0 | 0 |
| Leptoceridae | 0 | 0 | 0 | 0 |
| Leptophlebia | 0 | 0 | 0 | 0 |
| Leptophlebiidae | 8 | 13 | 0 | 0 |
| Leuctra | 0 | 0 | 0 | 0 |
| Libellulidae | 0 | 1 | 0 | 0 |
| Limnesia | 0 | 0 | 0 | 0 |
| Limnodrilus hoffmeisteri | 1 | 0 | 1 | 1 |
| Limnophila | 0 | 0 | 0 | 0 |
| Limonia | 0 | 0 | 0 | 0 |
| Liodessus | 0 | 0 | 0 | 0 |
| Liodessus affinis | 0 | 0 | 0 | 0 |
| Lioporeus | 0 | 0 | 0 | 0 |
| Lirceus | 0 | 0 | 0 | 0 |
| Littoridinops monroensis | 0 | 0 | 0 | 0 |
| Lumbriculidae | 0 | 0 | 0 | 0 |
| Lumbriculus variegatus | 0 | 0 | 1 | 0 |



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| As Calculated / STORET station -> | 20030414 | 19010099 | 21030064 | 26010972 |
|---|---|---|---|---|
| Sample date -> | 1/12/2000 | 2/1/2000 | 3/15/2000 | 1/10/2000 |
| | SampleID 20471/BenthID | SampleID 20474/BenthID | SampleID 20479/BenthID | SampleID 20480/BenthID |
| Taxon Name / SampleID/BenID -> | 17104(#counted) | 17107(#counted) | 17112(#counted) | 17113(#counted) |
| Lype diversa | 0 | 0 | 0 | 0 |
| Maccaffertium | 0 | 0 | 0 | 0 |
| Maccaffertium smithae | 0 | 0 | 0 | 0 |
| Macromia | 1 | 0 | 0 | 0 |
| Macromia taeniolata | 0 | 0 | 0 | 0 |
| Macromiidae | 0 | 0 | 0 | 0 |
| Macronychus glabratus | 0 | 0 | 0 | 0 |
| Macrostemum carolina | 0 | 0 | 0 | 0 |
| Mayatrichia | 0 | 0 | 0 | 0 |
| Mayatrichia ayama | 0 | 0 | 0 | 0 |
| Meropelopia | 0 | 0 | 0 | 0 |
| Mesosmittia | 0 | 0 | 0 | 0 |
| Metrobates | 0 | 0 | 0 | 0 |
| Micrasema | 0 | 0 | 0 | 0 |
| Micrasema rusticum | 0 | 0 | 0 | 0 |
| Micrasema wataga | 0 | 0 | 0 | 0 |
| Microcylloepus | 0 | 0 | 0 | 0 |
| Microcylloepus pusillus | 0 | 0 | 0 | 14 |
| Micromenetus | 0 | 0 | 0 | 0 |
| Micromenetus dilatatus | 0 | 0 | 0 | 0 |
| Microtendipes pedellus | 0 | 0 | 0 | 0 |
| Microtendipes pedellus grp. | 3 | 1 | 0 | 0 |
| Microtendipes rydalensis | 0 | 0 | 0 | 0 |
| Microtendipes rydalensis grp. | 0 | 0 | 0 | 0 |
| Mideopsis | 0 | 0 | 0 | 1 |
| Molanna | 0 | 0 | 0 | 0 |
| Mooreobdella | 0 | 0 | 0 | 0 |
| Mooreobdella tetragon | 0 | 0 | 0 | 0 |
| Muscidae | 0 | 0 | 0 | 0 |
| Naididae | 0 | 0 | 0 | 0 |
| Nais behningi | 0 | 0 | 0 | 0 |
| Nais communis | 0 | 0 | 0 | 0 |
| Nais communis complex | 0 | 0 | 0 | 1 |
| Nais pardalis | 0 | 0 | 0 | 0 |
| Nais simplex | 0 | 0 | 0 | 0 |
| Nais variabilis | 0 | 0 | 0 | 0 |
| Nanocladius | 0 | 0 | 0 | 0 |
| Nectopsyche | 0 | 0 | 0 | 0 |
| Nectopsyche candida | 0 | 0 | 0 | 0 |
| Nectopsyche exquisita | 0 | 0 | 0 | 0 |
| Nectopsyche pavida | 0 | 0 | 5 | 0 |
| Nemertea | 0 | 0 | 0 | 0 |
| Neoperla | 1 | 0 | 0 | 0 |
| Neoperla clymene | 0 | 0 | 0 | 0 |
| Neoporus | 0 | 0 | 0 | 0 |
| Neotrichia | 2 | 0 | 0 | 0 |
| Neumania | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 20030414 | 19010099 | 21030064 | 26010972 |
|---|---|---|---|---|
| Sample date -> | 1/12/2000 | 2/1/2000 | 3/15/2000 | 1/10/2000 |
| | SampleID 20471/BenthID | SampleID 20474/BenthID | SampleID 20479/BenthID | SampleID 20480/BenthID |
| Taxon Name / SampleID/BenID -> | 17104(#counted) | 17107(#counted) | 17112(#counted) | 17113(#counted) |
| Neumania distincta | 0 | 0 | 0 | 0 |
| Neureclipsis | 0 | 0 | 0 | 0 |
| Neureclipsis crepuscularis | 0 | 0 | 0 | 0 |
| Neurocordulia | 0 | 0 | 0 | 0 |
| Neurocordulia alabamensis | 0 | 0 | 0 | 0 |
| Neurocordulia virginiensis | 0 | 0 | 0 | 1 |
| Nigronia | 0 | 0 | 0 | 0 |
| Nigronia fasciatus | 0 | 0 | 0 | 0 |
| Nigronia serricornis | 0 | 0 | 0 | 0 |
| Nilotanypus | 0 | 0 | 0 | 0 |
| Nilothauma | 1 | 0 | 0 | 0 |
| Notogillia wetherbyi | 0 | 0 | 0 | 0 |
| Nyctiophylax | 0 | 0 | 0 | 0 |
| Odonata | 0 | 0 | 0 | 0 |
| Odontomyia | 0 | 0 | 0 | 0 |
| Oecetis | 0 | 0 | 0 | 0 |
| Oecetis cinerascens | 0 | 0 | 0 | 0 |
| Oecetis georgia | 1 | 0 | 1 | 0 |
| Oecetis inconspicua cmplx. | 0 | 0 | 0 | 0 |
| Oecetis morsei or sphyra | 0 | 0 | 0 | 0 |
| Oecetis parva | 0 | 0 | 0 | 0 |
| Oecetis persimilis | 0 | 0 | 0 | 9 |
| Oecetis sp. a floyd | 0 | 0 | 0 | 0 |
| Oecetis sp. e floyd | 0 | 0 | 1 | 0 |
| Ora/scirtes | 0 | 0 | 0 | 0 |
| Oribatei | 1 | 0 | 0 | 0 |
| Orthocladiinae | 0 | 1 | 0 | 0 |
| Orthocladiinae gen. c epler | 0 | 0 | 0 | 0 |
| Orthocladiinae gen. f epler | 0 | 0 | 0 | 0 |
| Orthocladius annectens | 0 | 0 | 0 | 0 |
| Orthotrichia | 0 | 0 | 0 | 0 |
| Oxyethira | 0 | 0 | 0 | 0 |
| Pachydiplax longipennis | 0 | 0 | 0 | 0 |
| Pagastiella | 0 | 0 | 0 | 0 |
| Palaemonetes | 0 | 0 | 1 | 0 |
| Palaemonetes kadiakensis | 0 | 0 | 0 | 0 |
| Palaemonetes paludosus | 0 | 0 | 0 | 0 |
| Palpomyia/bezzia grp. | 0 | 0 | 2 | 1 |
| Paracladopelma | 0 | 0 | 0 | 0 |
| Paracladopelma loganae | 0 | 0 | 0 | 0 |
| Paracladopelma undine | 0 | 0 | 0 | 0 |
| Paragnetina | 0 | 0 | 0 | 0 |
| Paragnetina fumosa | 0 | 0 | 0 | 0 |



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|---|---|---|---|---|
| Sample date -> | 1/12/2000 | 2/1/2000 | 3/15/2000 | 1/10/2000 |
| | SampleID 20471/BenthID | SampleID 20474/BenthID | SampleID 20479/BenthID | SampleID 20480/BenthID |
| Taxon Name / SampleID/BenID -> | 17104(#counted) | 17107(#counted) | 17112(#counted) | 17113(#counted) |
| Parakiefferiella | 0 | 0 | 0 | 0 |
| Paralauterborniella nigrohalterale | 0 | 0 | 0 | 0 |
| Paraleptophlebia volitans | 0 | 0 | 0 | 0 |
| Parametriocnemus | 4 | 0 | 0 | 0 |
| Parametriocnemus sp. f epler | 0 | 0 | 0 | 0 |
| Paranyctiophylax | 0 | 0 | 0 | 1 |
| Paraplea | 0 | 0 | 0 | 0 |
| Paraponyx | 0 | 0 | 0 | 0 |
| Paratanytarsus sp. a epler | 0 | 0 | 0 | 0 |
| Paratanytarsus sp. c epler | 0 | 0 | 15 | 0 |
| Paratendipes subaequalis | 0 | 0 | 0 | 0 |
| Pelecypoda | 0 | 4 | 0 | 0 |
| Pelonomus obscurus | 0 | 0 | 0 | 0 |
| Peltodytes | 0 | 0 | 0 | 0 |
| Pentaneura inconspicua | 4 | 0 | 0 | 0 |
| Perlesta | 0 | 0 | 0 | 0 |
| Perlesta placida | 0 | 0 | 0 | 0 |
| Perlesta placida complex | 0 | 0 | 0 | 0 |
| Perlinella | 0 | 0 | 0 | 0 |
| Petrophila | 0 | 0 | 0 | 0 |
| Phaenopsectra obediens grp. | 0 | 0 | 0 | 0 |
| Phaenopsectra punctipes grp. | 0 | 0 | 0 | 0 |
| Phylocentropus | 0 | 0 | 1 | 0 |
| Physella | 0 | 3 | 0 | 0 |
| Physella cubensis | 0 | 0 | 0 | 0 |
| Piona | 0 | 0 | 0 | 0 |
| Pisidiidae | 0 | 0 | 0 | 0 |
| Pisidium | 0 | 0 | 0 | 0 |
| Planariidae | 0 | 0 | 0 | 2 |
| Planorbella duryi | 0 | 0 | 0 | 0 |
| Planorbella scalaris | 0 | 0 | 0 | 0 |
| Planorbidae | 0 | 8 | 0 | 0 |
| Platyhelminthes | 0 | 0 | 0 | 0 |
| Plecoptera | 0 | 0 | 0 | 0 |
| Plumulariidae | 0 | 0 | 0 | 0 |
| Polycentropodidae | 1 | 0 | 0 | 0 |
| Polycentropus | 0 | 0 | 0 | 1 |
| Polypedilum | 0 | 0 | 0 | 0 |
| Polypedilum aviceps | 0 | 0 | 0 | 0 |
| Polypedilum convictum grp. | 0 | 0 | 0 | 32 |
| Polypedilum fallax | 0 | 0 | 1 | 0 |
| Polypedilum flavum | 0 | 0 | 0 | 0 |



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|---|---|---|---|---|
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| | SampleID 20471/BenthID | SampleID 20474/BenthID | SampleID 20479/BenthID | SampleID 20480/BenthID |
| Taxon Name / SampleID/BenID -> | 17104(#counted) | 17107(#counted) | 17112(#counted) | 17113(#counted) |
| Polypedilum halterale grp. | 1 | 0 | 0 | 0 |
| Polypedilum illinoense | 0 | 0 | 0 | 0 |
| Polypedilum illinoense grp. | 0 | 2 | 2 | 1 |
| Polypedilum scalaenum | 0 | 0 | 0 | 0 |
| Polypedilum scalaenum grp. | 0 | 0 | 4 | 1 |
| Polypedilum sp. a epler | 0 | 0 | 0 | 0 |
| Polypedilum tritum | 0 | 0 | 0 | 0 |
| Pomacea paludosa | 0 | 0 | 4 | 0 |
| Pristina aequiseta | 0 | 0 | 0 | 3 |
| Pristina synclites | 0 | 0 | 0 | 0 |
| Pristinella jenkinae | 0 | 0 | 0 | 0 |
| Probezzia | 0 | 0 | 0 | 0 |
| Procambarus | 0 | 0 | 0 | 1 |
| Procladius | 0 | 0 | 0 | 0 |
| Procladius (holotanypus) | 0 | 0 | 0 | 0 |
| Procloeon viridocularis | 0 | 0 | 0 | 0 |
| Progomphus | 0 | 0 | 0 | 0 |
| Progomphus obscurus | 0 | 0 | 0 | 0 |
| Promoresia tardella | 0 | 0 | 0 | 0 |
| Prostoma rubrum | 0 | 0 | 0 | 0 |
| Psammoryctides convolutus | 0 | 0 | 0 | 0 |
| Pseudochironomus | 0 | 0 | 2 | 0 |
| Pseudocloeon | 0 | 0 | 0 | 5 |
| Psychodidae | 0 | 0 | 0 | 0 |
| Pycnopsyche | 1 | 0 | 0 | 0 |
| Pyralidae | 0 | 0 | 0 | 0 |
| Pyrgophorus platyrachis | 0 | 0 | 0 | 0 |
| Ranatra kirkaldyi | 0 | 0 | 0 | 0 |
| Rhagovelia | 0 | 0 | 0 | 0 |
| Rheocricotopus | 0 | 0 | 0 | 0 |
| Rheocricotopus robacki | 0 | 0 | 0 | 1 |
| Rheocricotopus tuberculatus | 0 | 1 | 0 | 0 |
| Rheotanytarsus | 0 | 0 | 0 | 0 |
| Rheotanytarsus distinctissimus grp. | 1 | 0 | 0 | 0 |
| Rheotanytarsus exiguus | 0 | 0 | 0 | 0 |
| Rheotanytarsus exiguus grp. | 6 | 2 | 0 | 10 |
| Rheotanytarsus pellucidus | 0 | 0 | 0 | 0 |
| Scirtes | 0 | 0 | 0 | 1 |
| Scirtidae | 0 | 0 | 0 | 0 |
| Serratella deficiens | 0 | 0 | 0 | 0 |
| Sialis | 0 | 0 | 0 | 0 |
| Silvius | 0 | 0 | 0 | 0 |



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|---|---|---|---|---|
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| | SampleID 20471/BenthID | SampleID 20474/BenthID | SampleID 20479/BenthID | SampleID 20480/BenthID |
| Taxon Name / SampleID/BenID -> | 17104(#counted) | 17107(#counted) | 17112(#counted) | 17113(#counted) |
| Simuliidae | 0 | 0 | 0 | 0 |
| Simulium | 2 | 1 | 0 | 7 |
| Slavina appendiculata | 0 | 0 | 0 | 10 |
| Somatogyrus walkerianus | 0 | 0 | 0 | 0 |
| Sperchon | 0 | 0 | 0 | 0 |
| Sperchonopsis | 0 | 0 | 0 | 0 |
| Sperchopsis | 0 | 0 | 0 | 0 |
| Sphaeriidae | 0 | 0 | 0 | 0 |
| Sphaeriidae(mollusca) | 0 | 0 | 0 | 0 |
| Sphaeroma | 0 | 0 | 0 | 0 |
| Sphaeromias | 0 | 0 | 3 | 0 |
| Spirosperma | 0 | 0 | 0 | 0 |
| Spirosperma ferox | 0 | 0 | 0 | 0 |
| Stelechomyia perpulchra | 0 | 0 | 0 | 0 |
| Stempellina | 0 | 0 | 0 | 0 |
| Stempellina sp. a epler | 0 | 0 | 0 | 0 |
| Stempellinella | 0 | 0 | 0 | 0 |
| Stenacron | 0 | 2 | 0 | 0 |
| Stenacron floridense | 0 | 0 | 0 | 2 |
| Stenacron interpunctatum | 0 | 0 | 0 | 0 |
| Stenelmis | 2 | 2 | 1 | 0 |
| Stenelmis decorata | 0 | 0 | 0 | 0 |
| Stenelmis hungerfordi | 0 | 0 | 0 | 0 |
| Stenochironomus | 1 | 7 | 1 | 4 |
| Stenonema | 0 | 1 | 1 | 0 |
| Stenonema exiguum | 0 | 0 | 0 | 6 |
| Stenonema smithae | 5 | 0 | 0 | 0 |
| Stratiomyidae | 0 | 0 | 0 | 0 |
| Stylaria lacustris | 0 | 0 | 0 | 0 |
| Synorthocladius | 0 | 0 | 0 | 0 |
| Tabanus | 0 | 0 | 0 | 0 |
| Taeniopteryx lita | 0 | 0 | 0 | 0 |
| Tanytarsus | 0 | 0 | 0 | 0 |
| Tanytarsus sp. a epler | 11 | 0 | 0 | 4 |
| Tanytarsus sp. c epler | 0 | 1 | 0 | 0 |
| Tanytarsus sp. d epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. e epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. g epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. l epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. m epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. o epler | 2 | 0 | 0 | 0 |
| Tanytarsus sp. r epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. s epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. t epler | 0 | 0 | 12 | 0 |
| Tanytarsus sp. u epler | 0 | 0 | 0 | 0 |
| Taphromysis bowmani | 0 | 0 | 0 | 0 |



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|---|---|---|---|---|
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| | SampleID 20471/BenthID | SampleID 20474/BenthID | SampleID 20479/BenthID | SampleID 20480/BenthID |
| Taxon Name / SampleID/BenID -> | 17104(#counted) | 17107(#counted) | 17112(#counted) | 17113(#counted) |
| Thienemanniella | 0 | 0 | 1 | 0 |
| Thienemanniella lobapodema | 0 | 0 | 0 | 0 |
| Thienemanniella similis | 0 | 0 | 0 | 0 |
| Thienemanniella sp. a epler | 0 | 0 | 0 | 0 |
| Thienemannimyia grp. | 0 | 2 | 0 | 0 |
| Tipula | 0 | 0 | 0 | 0 |
| Tipulidae | 0 | 0 | 0 | 0 |
| Torrenticola | 0 | 0 | 0 | 0 |
| Triaenodes | 5 | 2 | 0 | 3 |
| Triaenodes ignitus | 0 | 0 | 0 | 0 |
| Triaenodes perna | 0 | 0 | 0 | 0 |
| Tribelos | 0 | 0 | 0 | 0 |
| Tribelos atrum | 0 | 0 | 0 | 0 |
| Tribelos fuscicornis | 0 | 0 | 0 | 1 |
| Tribelos jucundum | 0 | 0 | 0 | 1 |
| Tricorythodes albilineatus | 0 | 0 | 0 | 0 |
| Tubificidae | 0 | 0 | 0 | 0 |
| Turbellaria | 0 | 0 | 0 | 0 |
| Tvetenia | 0 | 0 | 0 | 0 |
| Tvetenia discoloripes grp. | 0 | 0 | 0 | 0 |
| Unionicola | 0 | 0 | 0 | 0 |
| Unniella multivirga | 0 | 0 | 0 | 0 |
| Veliidae | 0 | 0 | 0 | 0 |
| Xenochironomus xenolabis | 0 | 0 | 0 | 0 |
| Xestochironomus | 0 | 0 | 0 | 0 |
| Xylotopus par | 0 | 0 | 0 | 0 |
| Zygoptera | 0 | 0 | 0 | 0 |

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| As Calculated / STORET station -> | 20020012 | 22030010 | 33010054 | 33040014 |
|---|---|---|---|---|
| Sample date -> | 2/15/2000 | 8/22/2000 | 2/22/2001 | 2/8/2001 |
| | SampleID | SampleID | SampleID | SampleID |
| | 21571/BenthID | 22114/BenthID | 24523/BenthID | 24524/BenthID |
| Taxon Name / SampleID/BenID -> | 17864(#counted) | 18267(#counted) | 19456(#counted) | 19457(#counted) |
| Ablabesmyia (karelia) grp. | 0 | 0 | 0 | 0 |
| Ablabesmyia hauberi | 0 | 0 | 0 | 0 |
| Ablabesmyia mallochi | 0 | 1 | 0 | 1 |
| Ablabesmyia rhamphe grp. | 0 | 0 | 0 | 0 |
| Acentrella parvula | 0 | 0 | 0 | 0 |
| Acerpenna pygmaea | 0 | 7 | 0 | 0 |
| Acroneuria | 0 | 0 | 4 | 20 |
| Acroneuria abnormis | 0 | 0 | 0 | 0 |
| Acroneuria arenosa | 0 | 0 | 0 | 0 |
| Acroneuria arenosa/evoluta | 0 | 0 | 0 | 0 |
| Acroneuria lycorias | 0 | 0 | 0 | 0 |
| Agarodes libalis | 0 | 0 | 0 | 0 |
| Alluaudomyia | 0 | 0 | 0 | 0 |
| Amnicola | 0 | 0 | 0 | 0 |
| Amnicola dalli | 0 | 0 | 0 | 0 |
| Amnicola dalli johnsoni | 0 | 0 | 0 | 0 |
| Amphipoda | 0 | 0 | 1 | 0 |
| Ancylidae | 1 | 1 | 0 | 0 |
| Ancyronyx | 0 | 0 | 0 | 0 |
| Ancyronyx variegatus | 0 | 0 | 0 | 0 |
| Anisocentropus pyraloides | 0 | 0 | 0 | 0 |
| Anopheles | 0 | 0 | 0 | 0 |
| Apsectrotanypus johnsoni | 0 | 0 | 0 | 0 |
| Argia | 0 | 6 | 2 | 0 |
| Argia fumipennis | 0 | 0 | 0 | 0 |
| Argia moesta | 0 | 0 | 0 | 0 |
| Argia sedula | 0 | 0 | 0 | 0 |
| Argia tibialis | 0 | 0 | 0 | 0 |
| Arrenurus | 0 | 0 | 0 | 0 |
| Arrenurus problecornis | 0 | 0 | 0 | 0 |
| Astacidae | 0 | 0 | 0 | 0 |
| Atherix | 0 | 0 | 0 | 0 |
| Atractides | 0 | 0 | 0 | 0 |
| Atrichopogon | 1 | 5 | 0 | 0 |
| Aulodrilus pigueti | 0 | 0 | 0 | 0 |
| Aulodrilus pluriseta | 0 | 0 | 0 | 0 |
| Baetidae | 0 | 0 | 0 | 0 |
| Baetis | 0 | 0 | 0 | 0 |
| Baetis intercalaris | 0 | 0 | 0 | 0 |
| Baetisca rogersi | 0 | 0 | 0 | 4 |
| Beardius truncatus | 0 | 0 | 0 | 0 |
| Belostoma | 0 | 0 | 0 | 0 |
| Belostomatidae | 0 | 0 | 0 | 0 |
| Bivalvia | 0 | 0 | 0 | 0 |
| Bourletiella | 0 | 0 | 0 | 0 |
| Boyeria vinosa | 0 | 0 | 1 | 0 |
| Brachycentrus | 0 | 0 | 0 | 0 |
| Brachycentrus chelatus | 0 | 0 | 1 | 0 |
| Brachycentrus numerosus | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 20020012 | 22030010 | 33010054 | 33040014 |
|---|---|---|---|---|
| Sample date -> | 2/15/2000 | 8/22/2000 | 2/22/2001 | 2/8/2001 |
| | SampleID | SampleID | SampleID | SampleID |
| | 21571/BenthID | 22114/BenthID | 24523/BenthID | 24524/BenthID |
| Taxon Name / SampleID/BenID -> | 17864(#counted) | 18267(#counted) | 19456(#counted) | 19457(#counted) |
| Brachycercus maculatus | 0 | 0 | 0 | 0 |
| Caecidotea | 0 | 2 | 0 | 0 |
| Caecidotea racovitzai | 0 | 0 | 0 | 0 |
| Caenis | 0 | 1 | 0 | 2 |
| Caenis diminuta | 0 | 0 | 0 | 0 |
| Caenis hilaris | 0 | 0 | 0 | 0 |
| Callibaetis floridanus | 0 | 1 | 0 | 0 |
| Calopteryx | 0 | 0 | 1 | 0 |
| Calopteryx maculata | 0 | 0 | 0 | 0 |
| Cambaridae | 0 | 0 | 2 | 0 |
| Campeloma | 0 | 0 | 0 | 0 |
| Campeloma limum | 0 | 0 | 0 | 0 |
| Cassidinidea ovalis | 0 | 0 | 0 | 0 |
| Cecidomyiidae | 0 | 0 | 0 | 0 |
| Ceratopogonidae | 0 | 0 | 0 | 0 |
| Cernotina | 0 | 0 | 0 | 0 |
| Chaoborus | 0 | 0 | 0 | 0 |
| Chaoborus albatus | 0 | 0 | 0 | 0 |
| Chauliodes | 0 | 0 | 0 | 0 |
| Chelifera | 0 | 0 | 0 | 0 |
| Cheumatopsyche | 4 | 0 | 0 | 26 |
| Chimarra | 0 | 0 | 6 | 1 |
| Chironomus | 0 | 0 | 0 | 0 |
| Choroterpes basalis | 0 | 0 | 0 | 0 |
| Choroterpes hubbelli | 0 | 0 | 0 | 0 |
| Cladotanytarsus | 0 | 0 | 0 | 0 |
| Cladotanytarsus cf. daviesi | 0 | 0 | 0 | 0 |
| Cladotanytarsus sp. i epler | 0 | 0 | 0 | 0 |
| Clathrosperchon | 0 | 1 | 0 | 0 |
| Climacea areolaris | 0 | 0 | 0 | 0 |
| Clinotanypus | 0 | 0 | 1 | 0 |
| Coelotanypus | 0 | 0 | 0 | 0 |
| Coelotanypus scapularis | 0 | 0 | 0 | 0 |
| Coenagrionidae | 0 | 0 | 0 | 0 |
| Collembola | 0 | 0 | 0 | 0 |
| Conchapelopia | 0 | 0 | 3 | 0 |
| Corbicula fluminea | 0 | 0 | 0 | 0 |
| Corduliidae | 0 | 0 | 0 | 0 |
| Corydalus | 0 | 0 | 0 | 0 |
| Corydalus cornuta | 0 | 0 | 0 | 0 |
| Corydalus cornutus | 2 | 0 | 0 | 1 |
| Corynoneura | 0 | 0 | 0 | 0 |
| Corynoneura sp. b epler | 0 | 0 | 0 | 0 |
| Corynoneura sp. c epler | 0 | 0 | 0 | 0 |
| Corynoneura taris | 0 | 0 | 0 | 0 |



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| | SampleID 21571/BenthID | SampleID 22114/BenthID | SampleID 24523/BenthID | SampleID 24524/BenthID |
| Taxon Name / SampleID/BenID -> | 17864(#counted) | 18267(#counted) | 19456(#counted) | 19457(#counted) |
| Crangonyx | 0 | 0 | 0 | 0 |
| Cricotopus | 0 | 0 | 0 | 0 |
| Cricotopus bicinctus | 0 | 0 | 1 | 0 |
| Cricotopus bicinctus grp. | 4 | 0 | 0 | 0 |
| Cricotopus or orthocladius | 0 | 1 | 0 | 0 |
| Cryptochironomus | 0 | 0 | 0 | 0 |
| Cryptotendipes | 2 | 0 | 0 | 0 |
| Curculionidae | 0 | 0 | 0 | 0 |
| Cyrnellus fraternus | 0 | 0 | 0 | 0 |
| Demicryptochironomus | 0 | 0 | 0 | 0 |
| Dero digitata | 0 | 0 | 0 | 0 |
| Dero digitata complex | 0 | 0 | 0 | 0 |
| Dero lodeni | 0 | 0 | 0 | 0 |
| Dero pectinata | 0 | 0 | 0 | 0 |
| Dero trifida | 0 | 0 | 0 | 0 |
| Dero vaga | 0 | 0 | 0 | 0 |
| Dicrotendipes | 0 | 0 | 0 | 0 |
| Dicrotendipes modestus | 0 | 1 | 0 | 0 |
| Dicrotendipes neomodestus | 0 | 0 | 0 | 0 |
| Dicrotendipes simpsoni | 0 | 0 | 0 | 0 |
| Dicrotendipes sp. a epler | 0 | 0 | 0 | 0 |
| Dineutus | 0 | 0 | 0 | 3 |
| Dineutus discolor | 0 | 0 | 0 | 0 |
| Dineutus serrulatus | 0 | 0 | 0 | 0 |
| Diplectrona modesta | 0 | 0 | 0 | 0 |
| Dixa | 0 | 0 | 0 | 0 |
| Dixella | 0 | 0 | 0 | 0 |
| Djalmabatista pulcher | 0 | 1 | 0 | 0 |
| Dolichopodidae | 0 | 0 | 0 | 0 |
| Dromogomphus armatus | 0 | 0 | 0 | 0 |
| Dromogomphus spinosus | 0 | 0 | 0 | 0 |
| Dryopidae | 0 | 0 | 0 | 0 |
| Dubiraphia | 0 | 0 | 0 | 0 |
| Dubiraphia quadrinotata | 0 | 0 | 0 | 0 |
| Dubiraphia vittata | 2 | 3 | 4 | 0 |
| Dugesia | 0 | 0 | 0 | 0 |
| Dugesia tigrina | 0 | 0 | 0 | 0 |
| Eclipidrilus | 0 | 0 | 3 | 0 |
| Eclipidrilus palustris | 1 | 0 | 0 | 0 |
| Ectopria | 0 | 0 | 1 | 0 |
| Elimia | 0 | 4 | 0 | 0 |
| Elimia floridensis | 2 | 0 | 0 | 0 |
| Empididae | 0 | 0 | 0 | 0 |
| Enallagma | 0 | 3 | 0 | 0 |



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| | SampleID | SampleID | SampleID | SampleID |
| | 21571/BenthID | 22114/BenthID | 24523/BenthID | 24524/BenthID |
| Taxon Name / SampleID/BenID -> | 17864(#counted) | 18267(#counted) | 19456(#counted) | 19457(#counted) |
| Enallagma cardenium | 0 | 0 | 0 | 0 |
| Enchytraeidae | 0 | 0 | 1 | 0 |
| Endotribelos hesperium | 0 | 0 | 0 | 0 |
| Enochrus | 0 | 0 | 0 | 0 |
| Ephemerellidae | 0 | 0 | 0 | 0 |
| Ephydridae | 0 | 0 | 0 | 0 |
| Epitheca | 0 | 0 | 0 | 0 |
| Epitheca princeps regina | 0 | 0 | 0 | 0 |
| Eurylophella doris | 0 | 0 | 14 | 0 |
| Eurylophella temporalis | 0 | 0 | 0 | 0 |
| Ferrissia | 0 | 0 | 0 | 0 |
| Gammaridae | 0 | 1 | 0 | 0 |
| Gammarus | 0 | 0 | 0 | 0 |
| Gammarus tigrinus | 0 | 0 | 0 | 0 |
| Gastropoda | 0 | 0 | 0 | 0 |
| Geayia | 0 | 0 | 0 | 0 |
| Gerridae | 0 | 0 | 0 | 0 |
| Gloiobdella elongata | 0 | 0 | 0 | 0 |
| Goeldichironomus fluctuans | 0 | 0 | 0 | 0 |
| Gomphidae | 0 | 0 | 0 | 0 |
| Gomphus | 0 | 0 | 0 | 0 |
| Gomphus minutus | 0 | 0 | 0 | 0 |
| Gonielmis | 0 | 0 | 0 | 3 |
| Gonielmis dietrichi | 0 | 0 | 6 | 0 |
| Grandidierella bonnieroides | 0 | 0 | 0 | 0 |
| Gyretes iricolor | 0 | 0 | 0 | 0 |
| Haber speciosus | 2 | 0 | 0 | 0 |
| Hagenius brevistylus | 0 | 0 | 0 | 0 |
| Hebetancylus excentricus | 0 | 0 | 0 | 0 |
| Helobdella stagnalis | 0 | 0 | 0 | 0 |
| Helobdella triserialis | 0 | 0 | 0 | 0 |
| Helopelopia | 0 | 0 | 0 | 0 |
| Hemerodromia | 3 | 0 | 4 | 5 |
| Hemiptera | 0 | 0 | 0 | 0 |
| Heptageniidae | 0 | 0 | 6 | 4 |
| Hetaerina | 0 | 0 | 0 | 0 |
| Hetaerina titia | 1 | 0 | 0 | 0 |
| Heteroplectron americanum | 0 | 0 | 0 | 0 |
| Hexagenia | 0 | 0 | 2 | 6 |
| Hexagenia bilineata | 0 | 0 | 0 | 0 |
| Hexagenia limbata | 0 | 0 | 0 | 0 |
| Hexagenia munda orlando | 0 | 0 | 0 | 0 |
| Hexatoma | 0 | 0 | 1 | 0 |
| Hyalella azteca | 28 | 7 | 0 | 0 |
| Hydra | 0 | 0 | 0 | 0 |
| Hydrachna | 0 | 0 | 0 | 0 |
| Hydraena marginicollis | 0 | 0 | 0 | 0 |
| Hydraenidae | 0 | 0 | 0 | 0 |



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| | SampleID 21571/BenthID | SampleID 22114/BenthID | SampleID 24523/BenthID | SampleID 24524/BenthID |
| Taxon Name / SampleID/BenID -> | 17864(#counted) | 18267(#counted) | 19456(#counted) | 19457(#counted) |
| Hydrobiidae | 0 | 5 | 0 | 0 |
| Hydrodroma | 0 | 3 | 1 | 0 |
| Hydrophilidae | 0 | 0 | 0 | 0 |
| Hydroporus | 0 | 0 | 0 | 0 |
| Hydropsyche | 0 | 0 | 2 | 0 |
| Hydropsyche decalda | 0 | 0 | 0 | 0 |
| Hydropsychidae | 0 | 1 | 0 | 0 |
| Hydroptila | 0 | 0 | 2 | 0 |
| Hydroptilidae | 0 | 0 | 0 | 2 |
| Hygrobates | 0 | 0 | 0 | 0 |
| Hygrotus | 0 | 0 | 0 | 0 |
| Ischnura | 0 | 0 | 0 | 0 |
| Ischnura hastata | 0 | 0 | 0 | 0 |
| Isonychia | 0 | 0 | 0 | 0 |
| Isoperla | 0 | 0 | 0 | 0 |
| Isopoda | 0 | 0 | 0 | 0 |
| Isotomurus | 0 | 0 | 0 | 0 |
| Isotomurus tricolor | 0 | 0 | 0 | 0 |
| Kiefferulus | 0 | 0 | 0 | 0 |
| Krendowskia | 0 | 0 | 0 | 0 |
| Labiobaetis | 0 | 0 | 0 | 0 |
| Labrundinia | 0 | 0 | 0 | 0 |
| Labrundinia becki | 0 | 1 | 0 | 0 |
| Labrundinia johannseni | 0 | 1 | 0 | 0 |
| Labrundinia neopilosella | 0 | 0 | 0 | 0 |
| Labrundinia pilosella | 0 | 0 | 0 | 0 |
| Laevapex | 0 | 0 | 0 | 0 |
| Laevapex peninsulae | 0 | 0 | 0 | 0 |
| Larsia berneri | 0 | 0 | 0 | 0 |
| Larsia decolorata | 0 | 0 | 0 | 0 |
| Lauterborniella agrayloides | 0 | 0 | 0 | 0 |
| Lebertia | 0 | 0 | 0 | 3 |
| Lepidoptera | 0 | 1 | 0 | 0 |
| Leptoceridae | 0 | 0 | 0 | 0 |
| Leptophlebia | 0 | 0 | 0 | 0 |
| Leptophlebiidae | 0 | 0 | 1 | 0 |
| Leuctra | 0 | 0 | 0 | 0 |
| Libellulidae | 0 | 0 | 0 | 0 |
| Limnesia | 0 | 0 | 0 | 0 |
| Limnodrilus hoffmeisteri | 5 | 0 | 1 | 1 |
| Limnophila | 0 | 0 | 0 | 0 |
| Limonia | 0 | 0 | 0 | 0 |
| Liodessus | 0 | 0 | 0 | 0 |
| Liodessus affinis | 0 | 0 | 0 | 0 |
| Lioporeus | 0 | 0 | 0 | 0 |
| Lirceus | 0 | 0 | 0 | 0 |
| Littoridinops monroensis | 0 | 0 | 0 | 0 |
| Lumbriculidae | 0 | 0 | 0 | 0 |
| Lumbriculus variegatus | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 20020012 | 22030010 | 33010054 | 33040014 |
|---|---|---|---|---|
| Sample date -> | 2/15/2000 | 8/22/2000 | 2/22/2001 | 2/8/2001 |
| | SampleID | SampleID | SampleID | SampleID |
| | 21571/BenthID | 22114/BenthID | 24523/BenthID | 24524/BenthID |
| Taxon Name / SampleID/BenID -> | 17864(#counted) | 18267(#counted) | 19456(#counted) | 19457(#counted) |
| Lype diversa | 0 | 0 | 0 | 2 |
| Maccaffertium | 0 | 0 | 0 | 0 |
| Maccaffertium smithae | 0 | 0 | 0 | 0 |
| Macromia | 0 | 0 | 0 | 0 |
| Macromia taeniolata | 0 | 0 | 0 | 0 |
| Macromiidae | 0 | 0 | 0 | 0 |
| Macronychus glabratus | 0 | 0 | 1 | 3 |
| Macrostemum carolina | 0 | 0 | 0 | 0 |
| Mayatrichia | 0 | 0 | 0 | 0 |
| Mayatrichia ayama | 0 | 0 | 0 | 0 |
| Meropelopia | 0 | 0 | 0 | 0 |
| Mesosmittia | 0 | 0 | 0 | 0 |
| Metrobates | 0 | 0 | 0 | 0 |
| Micrasema | 0 | 0 | 0 | 0 |
| Micrasema rusticum | 0 | 0 | 0 | 1 |
| Micrasema wataga | 0 | 0 | 0 | 0 |
| Microcylloepus | 0 | 0 | 0 | 0 |
| Microcylloepus pusillus | 3 | 0 | 1 | 0 |
| Micromenetus | 0 | 0 | 0 | 0 |
| Micromenetus dilatatus | 0 | 0 | 0 | 0 |
| Microtendipes pedellus | 0 | 0 | 0 | 0 |
| Microtendipes pedellus grp. | 0 | 0 | 0 | 0 |
| Microtendipes rydalensis | 0 | 0 | 0 | 0 |
| Microtendipes rydalensis grp. | 0 | 0 | 0 | 0 |
| Mideopsis | 0 | 0 | 0 | 0 |
| Molanna | 0 | 0 | 0 | 0 |
| Mooreobdella | 0 | 0 | 0 | 0 |
| Mooreobdella tetragon | 0 | 0 | 0 | 0 |
| Muscidae | 0 | 0 | 0 | 0 |
| Naididae | 0 | 0 | 0 | 1 |
| Nais behningi | 0 | 0 | 0 | 0 |
| Nais communis | 0 | 1 | 0 | 0 |
| Nais communis complex | 0 | 0 | 0 | 0 |
| Nais pardalis | 0 | 0 | 0 | 0 |
| Nais simplex | 0 | 0 | 0 | 0 |
| Nais variabilis | 0 | 0 | 0 | 0 |
| Nanocladius | 0 | 0 | 0 | 0 |
| Nectopsyche | 1 | 0 | 0 | 0 |
| Nectopsyche candida | 0 | 0 | 0 | 0 |
| Nectopsyche exquisita | 0 | 0 | 0 | 0 |
| Nectopsyche pavida | 0 | 0 | 0 | 0 |
| Nemertea | 0 | 0 | 0 | 0 |
| Neoperla | 0 | 0 | 0 | 0 |
| Neoperla clymene | 0 | 0 | 0 | 0 |
| Neoporus | 0 | 0 | 0 | 0 |
| Neotrichia | 3 | 0 | 0 | 0 |
| Neumania | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 20020012 | 22030010 | 33010054 | 33040014 |
|---|---|---|---|---|
| Sample date -> | 2/15/2000 | 8/22/2000 | 2/22/2001 | 2/8/2001 |
| | SampleID | SampleID | SampleID | SampleID |
| | 21571/BenthID | 22114/BenthID | 24523/BenthID | 24524/BenthID |
| Taxon Name / SampleID/BenID -> | 17864(#counted) | 18267(#counted) | 19456(#counted) | 19457(#counted) |
| Neumania distincta | 0 | 0 | 0 | 0 |
| Neureclipsis | 0 | 0 | 0 | 1 |
| Neureclipsis crepuscularis | 0 | 0 | 0 | 0 |
| Neurocordulia | 0 | 0 | 0 | 0 |
| Neurocordulia alabamensis | 0 | 0 | 0 | 0 |
| Neurocordulia virginiensis | 0 | 0 | 0 | 0 |
| Nigronia | 0 | 0 | 0 | 0 |
| Nigronia fasciatus | 0 | 0 | 0 | 0 |
| Nigronia serricornis | 0 | 0 | 1 | 0 |
| Nilotanypus | 0 | 0 | 0 | 0 |
| Nilothauma | 0 | 0 | 0 | 0 |
| Notogillia wetherbyi | 0 | 0 | 0 | 0 |
| Nyctiophylax | 0 | 0 | 0 | 0 |
| Odonata | 0 | 0 | 0 | 0 |
| Odontomyia | 0 | 2 | 0 | 0 |
| Oecetis | 1 | 2 | 0 | 0 |
| Oecetis cinerascens | 0 | 0 | 0 | 0 |
| Oecetis georgia | 0 | 0 | 2 | 0 |
| Oecetis inconspicua cmplx. | 0 | 0 | 0 | 0 |
| Oecetis morsei or sphyra | 0 | 0 | 0 | 0 |
| Oecetis parva | 0 | 0 | 0 | 0 |
| Oecetis persimilis | 0 | 0 | 0 | 0 |
| Oecetis sp. a floyd | 0 | 0 | 0 | 0 |
| Oecetis sp. e floyd | 0 | 0 | 0 | 0 |
| Ora/scirtes | 0 | 0 | 0 | 0 |
| Oribatei | 0 | 0 | 0 | 0 |
| Orthocladiinae | 0 | 0 | 0 | 0 |
| Orthocladiinae gen. c epler | 0 | 0 | 0 | 0 |
| Orthocladiinae gen. f epler | 0 | 0 | 0 | 0 |
| Orthocladius annectens | 0 | 0 | 1 | 0 |
| Orthotrichia | 0 | 0 | 0 | 0 |
| Oxyethira | 0 | 0 | 1 | 0 |
| Pachydiplax longipennis | 0 | 0 | 0 | 0 |
| Pagastiella | 0 | 0 | 0 | 0 |
| Palaemonetes | 4 | 2 | 0 | 0 |
| Palaemonetes kadiakensis | 0 | 0 | 0 | 0 |
| Palaemonetes paludosus | 0 | 0 | 0 | 0 |
| Palpomyia/bezzia grp. | 0 | 0 | 0 | 0 |
| Paracladopelma | 0 | 0 | 0 | 1 |
| Paracladopelma loganae | 0 | 0 | 0 | 0 |
| Paracladopelma undine | 0 | 0 | 0 | 0 |
| Paragnetina | 0 | 0 | 0 | 0 |
| Paragnetina fumosa | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 20020012 | 22030010 | 33010054 | 33040014 |
|---|---|---|---|---|
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| | SampleID | SampleID | SampleID | SampleID |
| | 21571/BenthID | 22114/BenthID | 24523/BenthID | 24524/BenthID |
| Taxon Name / SampleID/BenID -> | 17864(#counted) | 18267(#counted) | 19456(#counted) | 19457(#counted) |
| Parakiefferiella | 0 | 0 | 0 | 0 |
| Paralauterborniella nigrohalterale | 0 | 0 | 0 | 0 |
| Paraleptophlebia volitans | 0 | 0 | 0 | 0 |
| Parametriocnemus | 0 | 0 | 1 | 1 |
| Parametriocnemus sp. f epler | 0 | 0 | 0 | 0 |
| Paranyctiophylax | 0 | 0 | 0 | 1 |
| Paraplea | 0 | 0 | 0 | 0 |
| Paraponyx | 0 | 0 | 0 | 0 |
| Paratanytarsus sp. a epler | 0 | 0 | 0 | 0 |
| Paratanytarsus sp. c epler | 0 | 2 | 0 | 0 |
| Paratendipes subaequalis | 0 | 0 | 0 | 0 |
| Pelecypoda | 1 | 0 | 0 | 1 |
| Pelonomus obscurus | 0 | 0 | 0 | 0 |
| Peltodytes | 0 | 0 | 0 | 0 |
| Pentaneura inconspicua | 1 | 1 | 0 | 0 |
| Perlesta | 0 | 0 | 2 | 0 |
| Perlesta placida | 0 | 0 | 0 | 0 |
| Perlesta placida complex | 0 | 0 | 0 | 0 |
| Perlinella | 0 | 0 | 0 | 0 |
| Petrophila | 0 | 0 | 0 | 0 |
| Phaenopsectra obediens grp. | 0 | 0 | 0 | 0 |
| Phaenopsectra punctipes grp. | 0 | 0 | 0 | 0 |
| Phylocentropus | 0 | 0 | 0 | 0 |
| Physella | 0 | 0 | 0 | 0 |
| Physella cubensis | 0 | 0 | 0 | 0 |
| Piona | 0 | 0 | 0 | 0 |
| Pisidiidae | 0 | 0 | 0 | 0 |
| Pisidium | 0 | 0 | 0 | 0 |
| Planariidae | 0 | 0 | 0 | 0 |
| Planorbella duryi | 0 | 0 | 0 | 0 |
| Planorbella scalaris | 0 | 0 | 0 | 0 |
| Planorbidae | 0 | 0 | 0 | 0 |
| Platyhelminthes | 0 | 0 | 0 | 0 |
| Plecoptera | 0 | 0 | 0 | 0 |
| Plumulariidae | 0 | 0 | 0 | 0 |
| Polycentropodidae | 0 | 0 | 0 | 0 |
| Polycentropus | 0 | 0 | 0 | 0 |
| Polypedilum | 0 | 0 | 0 | 0 |
| Polypedilum aviceps | 0 | 0 | 1 | 21 |
| Polypedilum convictum grp. | 13 | 3 | 7 | 0 |
| Polypedilum fallax | 0 | 0 | 0 | 1 |
| Polypedilum flavum | 0 | 0 | 0 | 0 |



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| | SampleID | SampleID | SampleID | SampleID |
| | 21571/BenthID | 22114/BenthID | 24523/BenthID | 24524/BenthID |
| Taxon Name / SampleID/BenID -> | 17864(#counted) | 18267(#counted) | 19456(#counted) | 19457(#counted) |
| Polypedilum halterale grp. | 0 | 0 | 0 | 0 |
| Polypedilum illinoense | 0 | 0 | 0 | 0 |
| Polypedilum illinoense grp. | 0 | 9 | 0 | 0 |
| Polypedilum scalaenum | 0 | 0 | 0 | 0 |
| Polypedilum scalaenum grp. | 2 | 2 | 0 | 1 |
| Polypedilum sp. a epler | 0 | 0 | 0 | 0 |
| Polypedilum tritum | 0 | 5 | 0 | 0 |
| Pomacea paludosa | 0 | 0 | 0 | 0 |
| Pristina aequiseta | 0 | 0 | 0 | 0 |
| Pristina synclites | 0 | 0 | 0 | 0 |
| Pristinella jenkinae | 0 | 0 | 0 | 0 |
| Probezzia | 0 | 0 | 0 | 0 |
| Procambarus | 0 | 0 | 0 | 0 |
| Procladius | 0 | 0 | 1 | 0 |
| Procladius (holotanypus) | 0 | 0 | 0 | 0 |
| Procloeon viridocularis | 0 | 0 | 0 | 0 |
| Progomphus | 0 | 0 | 0 | 1 |
| Progomphus obscurus | 0 | 0 | 0 | 0 |
| Promoresia tardella | 0 | 0 | 0 | 0 |
| Prostoma rubrum | 0 | 0 | 0 | 0 |
| Psammoryctides convolutus | 0 | 0 | 0 | 0 |
| Pseudochironomus | 0 | 0 | 1 | 0 |
| Pseudocloeon | 5 | 0 | 0 | 0 |
| Psychodidae | 0 | 0 | 0 | 0 |
| Pycnopsyche | 0 | 0 | 0 | 0 |
| Pyralidae | 0 | 0 | 0 | 0 |
| Pyrgophorus platyrachis | 0 | 0 | 0 | 0 |
| Ranatra kirkaldyi | 0 | 0 | 0 | 0 |
| Rhagovelia | 0 | 1 | 0 | 0 |
| Rheocricotopus | 0 | 0 | 0 | 0 |
| Rheocricotopus robacki | 0 | 0 | 0 | 1 |
| Rheocricotopus tuberculatus | 0 | 0 | 0 | 0 |
| Rheotanytarsus | 0 | 0 | 0 | 0 |
| Rheotanytarsus distinctissimus grp. | 0 | 1 | 0 | 0 |
| Rheotanytarsus exiguus | 0 | 0 | 0 | 0 |
| Rheotanytarsus exiguus grp. | 18 | 0 | 3 | 5 |
| Rheotanytarsus pellucidus | 0 | 0 | 0 | 0 |
| Scirtes | 0 | 0 | 0 | 0 |
| Scirtidae | 0 | 0 | 0 | 0 |
| Serratella deficiens | 0 | 0 | 0 | 0 |
| Sialis | 0 | 0 | 0 | 0 |
| Silvius | 0 | 0 | 0 | 0 |



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| | SampleID 21571/BenthID | SampleID 22114/BenthID | SampleID 24523/BenthID | SampleID 24524/BenthID |
| Taxon Name / SampleID/BenID -> | 17864(#counted) | 18267(#counted) | 19456(#counted) | 19457(#counted) |
| Simuliidae | 0 | 0 | 0 | 0 |
| Simulium | 3 | 0 | 5 | 10 |
| Slavina appendiculata | 0 | 0 | 0 | 0 |
| Somatogyrus walkerianus | 0 | 0 | 0 | 0 |
| Sperchon | 0 | 0 | 0 | 0 |
| Sperchonopsis | 0 | 0 | 0 | 0 |
| Sperchopsis | 0 | 0 | 0 | 0 |
| Sphaeriidae | 0 | 0 | 0 | 0 |
| Sphaeriidae(mollusca) | 0 | 0 | 0 | 0 |
| Sphaeroma | 0 | 0 | 0 | 0 |
| Sphaeromias | 2 | 0 | 0 | 0 |
| Spirosperma | 0 | 0 | 0 | 0 |
| Spirosperma ferox | 0 | 0 | 0 | 0 |
| Stelechomyia perpulchra | 2 | 0 | 0 | 0 |
| Stempellina | 0 | 0 | 0 | 0 |
| Stempellina sp. a epler | 0 | 0 | 0 | 0 |
| Stempellinella | 0 | 0 | 0 | 0 |
| Stenacron | 0 | 0 | 0 | 0 |
| Stenacron floridense | 0 | 0 | 0 | 0 |
| Stenacron interpunctatum | 0 | 0 | 0 | 0 |
| Stenelmis | 3 | 2 | 13 | 4 |
| Stenelmis decorata | 0 | 0 | 0 | 0 |
| Stenelmis hungerfordi | 0 | 0 | 0 | 0 |
| Stenochironomus | 0 | 0 | 1 | 1 |
| Stenonema | 0 | 0 | 0 | 0 |
| Stenonema exiguum | 2 | 0 | 0 | 0 |
| Stenonema smithae | 0 | 0 | 0 | 0 |
| Stratiomyidae | 0 | 0 | 0 | 0 |
| Stylaria lacustris | 0 | 0 | 0 | 0 |
| Synorthocladius | 0 | 0 | 0 | 1 |
| Tabanus | 0 | 0 | 0 | 0 |
| Taeniopteryx lita | 0 | 0 | 0 | 0 |
| Tanytarsus | 0 | 0 | 1 | 1 |
| Tanytarsus sp. a epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. c epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. d epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. e epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. g epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. l epler | 1 | 1 | 0 | 0 |
| Tanytarsus sp. m epler | 1 | 1 | 0 | 0 |
| Tanytarsus sp. o epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. r epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. s epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. t epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. u epler | 0 | 0 | 0 | 0 |
| Taphromysis bowmani | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 20020012 | 22030010 | 33010054 | 33040014 |
|---|---|---|---|---|
| Sample date -> | 2/15/2000 | 8/22/2000 | 2/22/2001 | 2/8/2001 |
| | SampleID | SampleID | SampleID | SampleID |
| | 21571/BenthID | 22114/BenthID | 24523/BenthID | 24524/BenthID |
| Taxon Name / SampleID/BenID -> | 17864(#counted) | 18267(#counted) | 19456(#counted) | 19457(#counted) |
| Thienemanniella | 0 | 0 | 0 | 0 |
| Thienemanniella lobapodema | 0 | 0 | 0 | 0 |
| Thienemanniella similis | 0 | 0 | 0 | 0 |
| Thienemanniella sp. a epler | 0 | 0 | 0 | 0 |
| Thienemannimyia grp. | 0 | 0 | 0 | 5 |
| Tipula | 0 | 0 | 0 | 0 |
| Tipulidae | 0 | 0 | 0 | 0 |
| Torrenticola | 0 | 0 | 0 | 0 |
| Triaenodes | 0 | 0 | 0 | 0 |
| Triaenodes ignitus | 0 | 0 | 0 | 0 |
| Triaenodes perna | 0 | 2 | 0 | 0 |
| Tribelos | 0 | 0 | 0 | 0 |
| Tribelos atrum | 0 | 0 | 0 | 0 |
| Tribelos fuscicornis | 0 | 2 | 0 | 0 |
| Tribelos jucundum | 0 | 0 | 0 | 2 |
| Tricorythodes albilineatus | 7 | 10 | 0 | 0 |
| Tubificidae | 0 | 0 | 0 | 0 |
| Turbellaria | 0 | 0 | 0 | 0 |
| Tvetenia | 0 | 1 | 0 | 0 |
| Tvetenia discoloripes grp. | 0 | 0 | 0 | 0 |
| Unionicola | 0 | 0 | 0 | 0 |
| Unniella multivirga | 0 | 0 | 0 | 0 |
| Veliidae | 0 | 0 | 0 | 0 |
| Xenochironomus xenolabis | 0 | 0 | 0 | 0 |
| Xestochironomus | 6 | 0 | 0 | 0 |
| Xylotopus par | 0 | 0 | 0 | 0 |
| Zygoptera | 0 | 0 | 0 | 0 |

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| As Calculated / STORET station -> | 22030010 | 20020317 | 26011019 | 19010042 |
|---|---|---|---|---|
| Sample date -> | 9/18/2001 | 9/4/2001 | 9/5/2001 | 7/10/2001 |
| | SampleID 25672/BenthID | SampleID 26863/BenthID | SampleID 26865/BenthID | SampleID 26868/BenthID |
| Taxon Name / SampleID/BenID -> | 19985(#counted) | 20697(#counted) | 20699(#counted) | 20702(#counted) |
| Ablabesmyia (karelia) grp. | 0 | 0 | 0 | 0 |
| Ablabesmyia hauberi | 0 | 0 | 0 | 0 |
| Ablabesmyia mallochi | 0 | 0 | 1 | 3 |
| Ablabesmyia rhamphe grp. | 0 | 0 | 0 | 0 |
| Acentrella parvula | 0 | 0 | 0 | 0 |
| Acerpenna pygmaea | 0 | 0 | 0 | 0 |
| Acroneuria | 0 | 0 | 0 | 0 |
| Acroneuria abnormis | 0 | 0 | 0 | 0 |
| Acroneuria arenosa | 0 | 0 | 0 | 0 |
| Acroneuria arenosa/evoluta | 0 | 0 | 0 | 0 |
| Acroneuria lycorias | 0 | 0 | 0 | 0 |
| Agarodes libalis | 0 | 0 | 0 | 0 |
| Alluaudomyia | 0 | 0 | 0 | 0 |
| Amnicola | 0 | 0 | 0 | 0 |
| Amnicola dalli | 7 | 0 | 0 | 0 |
| Amnicola dalli johnsoni | 0 | 0 | 0 | 0 |
| Amphipoda | 0 | 0 | 0 | 0 |
| Ancylidae | 0 | 0 | 1 | 0 |
| Ancyronyx | 0 | 0 | 0 | 0 |
| Ancyronyx variegatus | 0 | 0 | 0 | 1 |
| Anisocentropus pyraloides | 0 | 0 | 0 | 0 |
| Anopheles | 0 | 0 | 0 | 0 |
| Apsectrotanypus johnsoni | 0 | 0 | 0 | 0 |
| Argia | 6 | 0 | 3 | 0 |
| Argia fumipennis | 0 | 0 | 0 | 0 |
| Argia moesta | 0 | 0 | 0 | 0 |
| Argia sedula | 0 | 0 | 0 | 0 |
| Argia tibialis | 0 | 0 | 0 | 0 |
| Arrenurus | 1 | 0 | 1 | 0 |
| Arrenurus problecornis | 0 | 0 | 0 | 0 |
| Astacidae | 0 | 0 | 0 | 0 |
| Atherix | 0 | 0 | 0 | 0 |
| Atractides | 0 | 0 | 0 | 0 |
| Atrichopogon | 0 | 0 | 0 | 0 |
| Aulodrilus pigueti | 0 | 0 | 0 | 1 |
| Aulodrilus pluriseta | 0 | 0 | 0 | 0 |
| Baetidae | 0 | 0 | 0 | 0 |
| Baetis | 0 | 0 | 0 | 0 |
| Baetis intercalaris | 0 | 0 | 0 | 0 |
| Baetisca rogersi | 0 | 0 | 0 | 0 |
| Beardius truncatus | 0 | 0 | 0 | 0 |
| Belostoma | 0 | 0 | 0 | 1 |
| Belostomatidae | 0 | 0 | 0 | 0 |
| Bivalvia | 0 | 0 | 0 | 0 |
| Bourletiella | 0 | 0 | 0 | 0 |
| Boyeria vinosa | 0 | 0 | 0 | 0 |
| Brachycentrus | 0 | 0 | 0 | 0 |
| Brachycentrus chelatus | 0 | 0 | 0 | 0 |
| Brachycentrus numerosus | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 22030010 | 20020317 | 26011019 | 19010042 |
|---|---|---|---|---|
| Sample date -> | 9/18/2001 | 9/4/2001 | 9/5/2001 | 7/10/2001 |
| | SampleID 25672/BenthID | SampleID 26863/BenthID | SampleID 26865/BenthID | SampleID 26868/BenthID |
| Taxon Name / SampleID/BenID -> | 19985(#counted) | 20697(#counted) | 20699(#counted) | 20702(#counted) |
| Brachycercus maculatus | 0 | 0 | 0 | 0 |
| Caecidotea | 4 | 0 | 0 | 14 |
| Caecidotea racovitzai | 0 | 0 | 0 | 0 |
| Caenis | 0 | 0 | 17 | 0 |
| Caenis diminuta | 0 | 0 | 0 | 0 |
| Caenis hilaris | 0 | 0 | 0 | 0 |
| Callibaetis floridanus | 0 | 5 | 1 | 0 |
| Calopteryx | 0 | 0 | 1 | 0 |
| Calopteryx maculata | 0 | 0 | 0 | 0 |
| Cambaridae | 0 | 1 | 0 | 0 |
| Campeloma | 0 | 0 | 0 | 0 |
| Campeloma limum | 0 | 0 | 0 | 2 |
| Cassidinidea ovalis | 0 | 0 | 0 | 0 |
| Cecidomyiidae | 0 | 0 | 0 | 0 |
| Ceratopogonidae | 0 | 0 | 0 | 0 |
| Cernotina | 0 | 0 | 0 | 0 |
| Chaoborus | 0 | 0 | 0 | 0 |
| Chaoborus albatus | 0 | 0 | 0 | 0 |
| Chauliodes | 0 | 0 | 0 | 0 |
| Chelifera | 0 | 0 | 0 | 0 |
| Cheumatopsyche | 0 | 35 | 2 | 0 |
| Chimarra | 0 | 0 | 0 | 1 |
| Chironomus | 0 | 0 | 0 | 0 |
| Choroterpes basalis | 0 | 0 | 4 | 0 |
| Choroterpes hubbelli | 0 | 0 | 0 | 0 |
| Cladotanytarsus | 0 | 0 | 1 | 0 |
| Cladotanytarsus cf. daviesi | 0 | 0 | 0 | 0 |
| Cladotanytarsus sp. i epler | 0 | 0 | 0 | 0 |
| Clathrosperchon | 0 | 1 | 0 | 0 |
| Climacea areolaris | 0 | 0 | 0 | 0 |
| Clinotanypus | 0 | 0 | 0 | 0 |
| Coelotanypus | 0 | 0 | 0 | 1 |
| Coelotanypus scapularis | 0 | 0 | 0 | 0 |
| Coenagrionidae | 0 | 0 | 0 | 0 |
| Collembola | 0 | 0 | 0 | 0 |
| Conchapelopia | 0 | 0 | 0 | 0 |
| Corbicula fluminea | 0 | 0 | 0 | 0 |
| Corduliidae | 0 | 0 | 0 | 0 |
| Corydalus | 0 | 0 | 0 | 0 |
| Corydalus cornuta | 0 | 0 | 0 | 0 |
| Corydalus cornutus | 0 | 0 | 1 | 0 |
| Corynoneura | 0 | 0 | 0 | 0 |
| Corynoneura sp. b epler | 0 | 0 | 0 | 0 |
| Corynoneura sp. c epler | 0 | 0 | 0 | 0 |
| Corynoneura taris | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | 22030010 | 20020317 | 26011019 | 19010042 |
|---|---|---|---|---|
| Sample date -> | 9/18/2001 | 9/4/2001 | 9/5/2001 | 7/10/2001 |
| | SampleID 25672/BenthID | SampleID 26863/BenthID | SampleID 26865/BenthID | SampleID 26868/BenthID |
| Taxon Name / SampleID/BenID -> | 19985(#counted) | 20697(#counted) | 20699(#counted) | 20702(#counted) |
| Crangonyx | 0 | 0 | 0 | 4 |
| Cricotopus | 1 | 0 | 0 | 0 |
| Cricotopus bicinctus | 0 | 13 | 0 | 0 |
| Cricotopus bicinctus grp. | 0 | 0 | 0 | 0 |
| Cricotopus or orthocladius | 0 | 0 | 0 | 0 |
| Cryptochironomus | 0 | 0 | 0 | 0 |
| Cryptotendipes | 0 | 0 | 0 | 0 |
| Curculionidae | 0 | 0 | 0 | 0 |
| Cyrnellus fraternus | 0 | 0 | 0 | 0 |
| Demicryptochironomus | 0 | 0 | 0 | 0 |
| Dero digitata | 0 | 0 | 0 | 0 |
| Dero digitata complex | 0 | 0 | 0 | 0 |
| Dero lodeni | 0 | 0 | 1 | 0 |
| Dero pectinata | 0 | 0 | 0 | 1 |
| Dero trifida | 0 | 0 | 0 | 0 |
| Dero vaga | 0 | 0 | 0 | 0 |
| Dicrotendipes | 0 | 0 | 0 | 0 |
| Dicrotendipes modestus | 0 | 0 | 0 | 0 |
| Dicrotendipes neomodestus | 0 | 0 | 0 | 0 |
| Dicrotendipes simpsoni | 0 | 0 | 0 | 0 |
| Dicrotendipes sp. a epler | 0 | 0 | 0 | 0 |
| Dineutus | 0 | 0 | 0 | 0 |
| Dineutus discolor | 0 | 0 | 0 | 0 |
| Dineutus serrulatus | 0 | 0 | 0 | 0 |
| Diplectrona modesta | 0 | 0 | 0 | 0 |
| Dixa | 0 | 0 | 0 | 0 |
| Dixella | 0 | 0 | 0 | 0 |
| Djalmabatista pulcher | 0 | 1 | 2 | 0 |
| Dolichopodidae | 0 | 0 | 0 | 0 |
| Dromogomphus armatus | 0 | 0 | 0 | 0 |
| Dromogomphus spinosus | 0 | 0 | 0 | 0 |
| Dryopidae | 0 | 0 | 0 | 0 |
| Dubiraphia | 0 | 0 | 0 | 0 |
| Dubiraphia quadrinotata | 0 | 0 | 0 | 0 |
| Dubiraphia vittata | 9 | 0 | 13 | 5 |
| Dugesia | 0 | 0 | 0 | 0 |
| Dugesia tigrina | 0 | 0 | 0 | 0 |
| Eclipidrilus | 0 | 0 | 0 | 2 |
| Eclipidrilus palustris | 0 | 0 | 0 | 0 |
| Ectopria | 0 | 0 | 0 | 0 |
| Elimia | 10 | 0 | 0 | 0 |
| Elimia floridensis | 0 | 0 | 0 | 0 |
| Empididae | 0 | 0 | 0 | 0 |
| Enallagma | 0 | 0 | 0 | 0 |



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| Enallagma cardenium | 0 | 0 | 0 | 0 |
| Enchytraeidae | 0 | 0 | 0 | 0 |
| Endotribelos hesperium | 0 | 0 | 0 | 0 |
| Enochrus | 0 | 0 | 0 | 0 |
| Ephemerellidae | 0 | 0 | 0 | 0 |
| Ephydridae | 0 | 0 | 0 | 0 |
| Epitheca | 0 | 0 | 0 | 0 |
| Epitheca princeps regina | 0 | 0 | 0 | 0 |
| Eurylophella doris | 0 | 0 | 0 | 0 |
| Eurylophella temporalis | 0 | 0 | 0 | 0 |
| Ferrissia | 0 | 0 | 0 | 0 |
| Gammaridae | 0 | 0 | 0 | 0 |
| Gammarus | 0 | 6 | 0 | 0 |
| Gammarus tigrinus | 0 | 0 | 0 | 0 |
| Gastropoda | 0 | 0 | 0 | 0 |
| Geayia | 0 | 0 | 0 | 0 |
| Gerridae | 0 | 0 | 0 | 0 |
| Gloiobdella elongata | 0 | 0 | 0 | 0 |
| Goeldichironomus fluctuans | 0 | 0 | 0 | 0 |
| Gomphidae | 0 | 0 | 0 | 0 |
| Gomphus | 0 | 0 | 3 | 0 |
| Gomphus minutus | 0 | 0 | 0 | 0 |
| Gonielmis | 0 | 0 | 0 | 0 |
| Gonielmis dietrichi | 0 | 0 | 0 | 0 |
| Grandidierella bonnieroides | 0 | 0 | 0 | 0 |
| Gyretes iricolor | 0 | 0 | 0 | 0 |
| Haber speciosus | 1 | 0 | 0 | 0 |
| Hagenius brevistylus | 0 | 0 | 0 | 0 |
| Hebetancylus excentricus | 0 | 0 | 0 | 0 |
| Helobdella stagnalis | 0 | 0 | 0 | 0 |
| Helobdella triserialis | 0 | 0 | 0 | 0 |
| Helopelopia | 0 | 0 | 0 | 0 |
| Hemerodromia | 0 | 0 | 0 | 0 |
| Hemiptera | 0 | 0 | 0 | 0 |
| Heptageniidae | 0 | 3 | 2 | 0 |
| Hetaerina | 0 | 0 | 0 | 0 |
| Hetaerina titia | 0 | 0 | 0 | 0 |
| Heteroplectron americanum | 0 | 0 | 0 | 0 |
| Hexagenia | 1 | 0 | 0 | 0 |
| Hexagenia bilineata | 0 | 0 | 0 | 0 |
| Hexagenia limbata | 0 | 0 | 0 | 0 |
| Hexagenia munda orlando | 0 | 0 | 0 | 0 |
| Hexatoma | 0 | 0 | 0 | 0 |
| Hyalella azteca | 11 | 10 | 2 | 0 |
| Hydra | 0 | 0 | 0 | 0 |
| Hydrachna | 0 | 0 | 0 | 0 |
| Hydraena marginicollis | 0 | 0 | 0 | 0 |
| Hydraenidae | 0 | 0 | 0 | 0 |



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| Hydrobiidae | 0 | 0 | 0 | 0 |
| Hydrodroma | 6 | 0 | 0 | 1 |
| Hydrophilidae | 0 | 0 | 0 | 0 |
| Hydroporus | 0 | 0 | 0 | 0 |
| Hydropsyche | 0 | 11 | 2 | 0 |
| Hydropsyche decalda | 0 | 0 | 0 | 0 |
| Hydropsychidae | 0 | 0 | 0 | 0 |
| Hydroptila | 0 | 3 | 0 | 0 |
| Hydroptilidae | 0 | 0 | 0 | 0 |
| Hygrobates | 0 | 0 | 0 | 0 |
| Hygrotus | 0 | 0 | 0 | 0 |
| Ischnura | 0 | 0 | 0 | 2 |
| Ischnura hastata | 0 | 0 | 0 | 0 |
| Isonychia | 0 | 0 | 0 | 0 |
| Isoperla | 0 | 0 | 0 | 0 |
| Isopoda | 0 | 0 | 0 | 0 |
| Isotomurus | 0 | 0 | 0 | 0 |
| Isotomurus tricolor | 0 | 0 | 0 | 0 |
| Kiefferulus | 0 | 0 | 0 | 0 |
| Krendowskia | 2 | 0 | 2 | 0 |
| Labiobaetis | 0 | 0 | 0 | 0 |
| Labrundinia | 0 | 0 | 0 | 1 |
| Labrundinia becki | 0 | 0 | 0 | 0 |
| Labrundinia johannseni | 0 | 0 | 0 | 0 |
| Labrundinia neopilosella | 0 | 0 | 0 | 0 |
| Labrundinia pilosella | 0 | 0 | 0 | 0 |
| Laevapex | 0 | 0 | 0 | 0 |
| Laevapex peninsulae | 0 | 0 | 0 | 0 |
| Larsia berneri | 0 | 0 | 0 | 0 |
| Larsia decolorata | 0 | 0 | 0 | 0 |
| Lauterborniella agrayloides | 0 | 0 | 0 | 0 |
| Lebertia | 1 | 0 | 0 | 0 |
| Lepidoptera | 0 | 0 | 0 | 0 |
| Leptoceridae | 0 | 0 | 0 | 0 |
| Leptophlebia | 0 | 0 | 0 | 0 |
| Leptophlebiidae | 0 | 0 | 0 | 0 |
| Leuctra | 0 | 0 | 0 | 0 |
| Libellulidae | 0 | 0 | 0 | 0 |
| Limnesia | 0 | 0 | 0 | 0 |
| Limnodrilus hoffmeisteri | 0 | 3 | 3 | 3 |
| Limnophila | 0 | 0 | 0 | 0 |
| Limonia | 0 | 0 | 0 | 0 |
| Liodessus | 0 | 0 | 0 | 0 |
| Liodessus affinis | 0 | 0 | 0 | 0 |
| Lioporeus | 0 | 0 | 0 | 0 |
| Lirceus | 0 | 0 | 0 | 0 |
| Littoridinops monroensis | 0 | 0 | 0 | 0 |
| Lumbriculidae | 0 | 0 | 0 | 0 |
| Lumbriculus variegatus | 0 | 0 | 0 | 0 |



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| Taxon Name / SampleID/BenID -> | 19985(#counted) | 20697(#counted) | 20699(#counted) | 20702(#counted) |
| Lype diversa | 0 | 0 | 0 | 0 |
| Maccaffertium | 0 | 0 | 0 | 0 |
| Maccaffertium smithae | 0 | 0 | 0 | 0 |
| Macromia | 0 | 0 | 0 | 0 |
| Macromia taeniolata | 0 | 0 | 0 | 0 |
| Macromiidae | 0 | 0 | 0 | 0 |
| Macronychus glabratus | 0 | 0 | 0 | 0 |
| Macrostemum carolina | 0 | 0 | 0 | 0 |
| Mayatrichia | 0 | 0 | 0 | 0 |
| Mayatrichia ayama | 0 | 0 | 0 | 0 |
| Meropelopia | 0 | 0 | 0 | 0 |
| Mesosmittia | 0 | 0 | 0 | 0 |
| Metrobates | 0 | 0 | 0 | 0 |
| Micrasema | 1 | 0 | 0 | 0 |
| Micrasema rusticum | 0 | 0 | 0 | 0 |
| Micrasema wataga | 0 | 0 | 0 | 0 |
| Microcylloepus | 0 | 0 | 0 | 0 |
| Microcylloepus pusillus | 2 | 2 | 5 | 0 |
| Micromenetus | 0 | 0 | 3 | 0 |
| Micromenetus dilatatus | 0 | 0 | 0 | 7 |
| Microtendipes pedellus | 0 | 0 | 0 | 0 |
| Microtendipes pedellus grp. | 0 | 0 | 0 | 0 |
| Microtendipes rydalensis | 0 | 0 | 0 | 0 |
| Microtendipes rydalensis grp. | 0 | 0 | 0 | 0 |
| Mideopsis | 0 | 0 | 0 | 0 |
| Molanna | 0 | 0 | 0 | 0 |
| Mooreobdella | 0 | 0 | 0 | 0 |
| Mooreobdella tetragon | 0 | 0 | 0 | 0 |
| Muscidae | 0 | 0 | 0 | 0 |
| Naididae | 0 | 0 | 0 | 0 |
| Nais behningi | 0 | 0 | 0 | 0 |
| Nais communis | 0 | 0 | 0 | 0 |
| Nais communis complex | 0 | 0 | 0 | 0 |
| Nais pardalis | 0 | 0 | 0 | 0 |
| Nais simplex | 0 | 0 | 0 | 0 |
| Nais variabilis | 0 | 0 | 0 | 0 |
| Nanocladius | 0 | 0 | 0 | 0 |
| Nectopsyche | 0 | 0 | 3 | 0 |
| Nectopsyche candida | 0 | 0 | 0 | 0 |
| Nectopsyche exquisita | 0 | 0 | 0 | 0 |
| Nectopsyche pavida | 0 | 0 | 0 | 0 |
| Nemertea | 0 | 0 | 0 | 0 |
| Neoperla | 0 | 0 | 0 | 0 |
| Neoperla clymene | 0 | 0 | 0 | 0 |
| Neoporus | 0 | 0 | 0 | 0 |
| Neotrichia | 0 | 0 | 0 | 0 |
| Neumania | 1 | 0 | 0 | 0 |



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| Taxon Name / SampleID/BenID -> | 19985(#counted) | 20697(#counted) | 20699(#counted) | 20702(#counted) |
| Neumania distincta | 0 | 0 | 0 | 0 |
| Neureclipsis | 0 | 0 | 0 | 0 |
| Neureclipsis crepuscularis | 0 | 0 | 0 | 0 |
| Neurocordulia | 0 | 0 | 0 | 0 |
| Neurocordulia alabamensis | 0 | 0 | 1 | 0 |
| Neurocordulia virginiensis | 0 | 0 | 0 | 0 |
| Nigronia | 0 | 0 | 0 | 0 |
| Nigronia fasciatus | 0 | 0 | 0 | 0 |
| Nigronia serricornis | 0 | 0 | 0 | 0 |
| Nilotanypus | 0 | 0 | 0 | 0 |
| Nilothauma | 0 | 0 | 0 | 0 |
| Notogillia wetherbyi | 1 | 0 | 0 | 0 |
| Nyctiophylax | 0 | 0 | 0 | 0 |
| Odonata | 0 | 0 | 0 | 0 |
| Odontomyia | 0 | 0 | 0 | 0 |
| Oecetis | 0 | 2 | 0 | 0 |
| Oecetis cinerascens | 0 | 0 | 0 | 0 |
| Oecetis georgia | 0 | 0 | 0 | 0 |
| Oecetis inconspicua cmplx. | 0 | 0 | 0 | 0 |
| Oecetis morsei or sphyra | 0 | 0 | 0 | 0 |
| Oecetis parva | 0 | 0 | 0 | 0 |
| Oecetis persimilis | 0 | 0 | 0 | 0 |
| Oecetis sp. a floyd | 0 | 0 | 0 | 0 |
| Oecetis sp. e floyd | 0 | 0 | 0 | 0 |
| Ora/scirtes | 0 | 0 | 0 | 0 |
| Oribatei | 0 | 0 | 0 | 0 |
| Orthocladiinae | 0 | 1 | 0 | 0 |
| Orthocladiinae gen. c epler | 0 | 0 | 0 | 0 |
| Orthocladiinae gen. f epler | 0 | 0 | 0 | 0 |
| Orthocladius annectens | 0 | 0 | 0 | 0 |
| Orthotrichia | 0 | 0 | 0 | 0 |
| Oxyethira | 0 | 0 | 3 | 0 |
| Pachydiplax longipennis | 0 | 0 | 0 | 0 |
| Pagastiella | 0 | 0 | 0 | 0 |
| Palaemonetes | 0 | 0 | 0 | 0 |
| Palaemonetes kadiakensis | 0 | 0 | 0 | 0 |
| Palaemonetes paludosus | 2 | 0 | 0 | 0 |
| Palpomyia/bezzia grp. | 0 | 0 | 0 | 0 |
| Paracladopelma | 0 | 0 | 0 | 0 |
| Paracladopelma loganae | 0 | 0 | 0 | 0 |
| Paracladopelma undine | 0 | 0 | 0 | 0 |
| Paragnetina | 0 | 0 | 0 | 0 |
| Paragnetina fumosa | 0 | 0 | 0 | 0 |



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| Taxon Name / SampleID/BenID -> | 19985(#counted) | 20697(#counted) | 20699(#counted) | 20702(#counted) |
| Parakiefferiella | 0 | 0 | 0 | 0 |
| Paralauterborniella nigrohalterale | 0 | 0 | 0 | 0 |
| Paraleptophlebia volitans | 0 | 0 | 0 | 0 |
| Parametriocnemus | 0 | 0 | 0 | 0 |
| Parametriocnemus sp. f epler | 0 | 0 | 0 | 0 |
| Paranyctiophylax | 0 | 0 | 0 | 0 |
| Paraplea | 0 | 0 | 0 | 0 |
| Paraponyx | 1 | 0 | 0 | 0 |
| Paratanytarsus sp. a epler | 0 | 0 | 0 | 0 |
| Paratanytarsus sp. c epler | 0 | 0 | 0 | 1 |
| Paratendipes subaequalis | 0 | 0 | 0 | 0 |
| Pelecypoda | 0 | 0 | 0 | 0 |
| Pelonomus obscurus | 0 | 0 | 0 | 0 |
| Peltodytes | 0 | 0 | 0 | 1 |
| Pentaneura inconspicua | 0 | 5 | 1 | 0 |
| Perlesta | 0 | 0 | 0 | 0 |
| Perlesta placida | 0 | 0 | 0 | 0 |
| Perlesta placida complex | 0 | 0 | 0 | 0 |
| Perlinella | 0 | 0 | 0 | 0 |
| Petrophila | 0 | 2 | 0 | 0 |
| Phaenopsectra obediens grp. | 0 | 0 | 0 | 0 |
| Phaenopsectra punctipes grp. | 0 | 0 | 0 | 1 |
| Phylocentropus | 0 | 0 | 0 | 0 |
| Physella | 0 | 0 | 0 | 0 |
| Physella cubensis | 0 | 0 | 0 | 0 |
| Piona | 0 | 0 | 0 | 0 |
| Pisidiidae | 0 | 0 | 0 | 0 |
| Pisidium | 0 | 0 | 0 | 0 |
| Planariidae | 0 | 0 | 0 | 1 |
| Planorbella duryi | 0 | 0 | 0 | 0 |
| Planorbella scalaris | 0 | 0 | 0 | 0 |
| Planorbidae | 0 | 0 | 0 | 0 |
| Platyhelminthes | 0 | 0 | 0 | 0 |
| Plecoptera | 0 | 0 | 0 | 0 |
| Plumulariidae | 0 | 0 | 0 | 0 |
| Polycentropodidae | 1 | 0 | 0 | 0 |
| Polycentropus | 0 | 0 | 0 | 0 |
| Polypedilum | 0 | 0 | 0 | 0 |
| Polypedilum aviceps | 0 | 0 | 0 | 0 |
| Polypedilum convictum grp. | 0 | 22 | 10 | 0 |
| Polypedilum fallax | 0 | 0 | 0 | 0 |
| Polypedilum flavum | 0 | 0 | 0 | 0 |



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| Taxon Name / SampleID/BenID -> | 19985(#counted) | 20697(#counted) | 20699(#counted) | 20702(#counted) |
| Polypedilum halterale grp. | 0 | 0 | 0 | 0 |
| Polypedilum illinoense | 11 | 0 | 0 | 0 |
| Polypedilum illinoense grp. | 0 | 0 | 0 | 5 |
| Polypedilum scalaenum | 0 | 0 | 0 | 0 |
| Polypedilum scalaenum grp. | 0 | 0 | 0 | 0 |
| Polypedilum sp. a epler | 0 | 0 | 0 | 0 |
| Polypedilum tritum | 0 | 0 | 0 | 0 |
| Pomacea paludosa | 0 | 0 | 0 | 0 |
| Pristina aequiseta | 0 | 0 | 0 | 0 |
| Pristina synclites | 0 | 0 | 0 | 0 |
| Pristinella jenkinae | 0 | 0 | 0 | 0 |
| Probezzia | 0 | 0 | 0 | 0 |
| Procambarus | 4 | 0 | 0 | 0 |
| Procladius | 0 | 0 | 0 | 0 |
| Procladius (holotanypus) | 0 | 0 | 0 | 0 |
| Procloeon viridocularis | 0 | 0 | 0 | 0 |
| Progomphus | 0 | 0 | 0 | 0 |
| Progomphus obscurus | 0 | 0 | 0 | 0 |
| Promoresia tardella | 0 | 0 | 0 | 0 |
| Prostoma rubrum | 0 | 0 | 0 | 0 |
| Psammoryctides convolutus | 0 | 1 | 0 | 0 |
| Pseudochironomus | 0 | 5 | 0 | 0 |
| Pseudocloeon | 0 | 0 | 0 | 0 |
| Psychodidae | 0 | 0 | 0 | 0 |
| Pycnopsyche | 0 | 0 | 0 | 0 |
| Pyralidae | 0 | 0 | 0 | 0 |
| Pyrgophorus platyrachis | 0 | 0 | 0 | 0 |
| Ranatra kirkaldyi | 0 | 0 | 0 | 0 |
| Rhagovelia | 0 | 0 | 0 | 0 |
| Rheocricotopus | 0 | 0 | 0 | 0 |
| Rheocricotopus robacki | 0 | 0 | 0 | 0 |
| Rheocricotopus tuberculatus | 0 | 0 | 0 | 0 |
| Rheotanytarsus | 0 | 0 | 0 | 0 |
| Rheotanytarsus distinctissimus grp. | 0 | 0 | 1 | 0 |
| Rheotanytarsus exiguus | 0 | 0 | 0 | 0 |
| Rheotanytarsus exiguus grp. | 0 | 0 | 9 | 0 |
| Rheotanytarsus pellucidus | 0 | 0 | 0 | 0 |
| Scirtes | 1 | 0 | 0 | 0 |
| Scirtidae | 0 | 0 | 0 | 0 |
| Serratella deficiens | 0 | 0 | 0 | 0 |
| Sialis | 0 | 0 | 0 | 0 |
| Silvius | 0 | 0 | 0 | 0 |



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| Simuliidae | 0 | 0 | 0 | 0 |
| Simulium | 0 | 0 | 0 | 26 |
| Slavina appendiculata | 0 | 0 | 5 | 1 |
| Somatogyrus walkerianus | 0 | 0 | 0 | 0 |
| Sperchon | 0 | 0 | 0 | 0 |
| Sperchonopsis | 0 | 0 | 0 | 0 |
| Sperchopsis | 0 | 0 | 0 | 0 |
| Sphaeriidae | 0 | 0 | 0 | 16 |
| Sphaeriidae(mollusca) | 0 | 0 | 0 | 0 |
| Sphaeroma | 0 | 2 | 0 | 0 |
| Sphaeromias | 0 | 0 | 0 | 0 |
| Spirosperma | 0 | 0 | 0 | 0 |
| Spirosperma ferox | 0 | 0 | 0 | 1 |
| Stelechomyia perpulchra | 0 | 0 | 0 | 0 |
| Stempellina | 2 | 0 | 0 | 0 |
| Stempellina sp. a epler | 0 | 0 | 0 | 0 |
| Stempellinella | 0 | 0 | 0 | 0 |
| Stenacron | 0 | 0 | 0 | 0 |
| Stenacron floridense | 0 | 0 | 0 | 0 |
| Stenacron interpunctatum | 2 | 0 | 0 | 0 |
| Stenelmis | 0 | 0 | 6 | 1 |
| Stenelmis decorata | 0 | 0 | 0 | 0 |
| Stenelmis hungerfordi | 0 | 0 | 0 | 0 |
| Stenochironomus | 0 | 1 | 1 | 0 |
| Stenonema | 0 | 0 | 0 | 0 |
| Stenonema exiguum | 0 | 0 | 0 | 0 |
| Stenonema smithae | 0 | 0 | 0 | 0 |
| Stratiomyidae | 0 | 0 | 0 | 0 |
| Stylaria lacustris | 0 | 0 | 0 | 0 |
| Synorthocladius | 0 | 0 | 0 | 0 |
| Tabanus | 0 | 0 | 0 | 0 |
| Taeniopteryx lita | 0 | 0 | 0 | 0 |
| Tanytarsus | 2 | 0 | 0 | 0 |
| Tanytarsus sp. a epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. c epler | 0 | 2 | 0 | 0 |
| Tanytarsus sp. d epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. e epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. g epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. l epler | 0 | 0 | 0 | 2 |
| Tanytarsus sp. m epler | 0 | 0 | 1 | 0 |
| Tanytarsus sp. o epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. r epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. s epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. t epler | 0 | 0 | 3 | 2 |
| Tanytarsus sp. u epler | 0 | 0 | 0 | 2 |
| Taphromysis bowmani | 1 | 0 | 0 | 0 |



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| Thienemanniella | 0 | 0 | 0 | 0 |
| Thienemanniella lobapodema | 0 | 0 | 0 | 0 |
| Thienemanniella similis | 0 | 1 | 0 | 0 |
| Thienemanniella sp. a epler | 0 | 0 | 0 | 0 |
| Thienemannimyia grp. | 0 | 0 | 0 | 0 |
| Tipula | 0 | 0 | 0 | 0 |
| Tipulidae | 0 | 0 | 0 | 0 |
| Torrenticola | 0 | 0 | 0 | 0 |
| Triaenodes | 0 | 0 | 0 | 0 |
| Triaenodes ignitus | 0 | 0 | 0 | 0 |
| Triaenodes perna | 0 | 0 | 0 | 0 |
| Tribelos | 0 | 0 | 0 | 0 |
| Tribelos atrum | 0 | 0 | 0 | 0 |
| Tribelos fuscicornis | 0 | 0 | 1 | 0 |
| Tribelos jucundum | 0 | 0 | 0 | 3 |
| Tricorythodes albilineatus | 8 | 4 | 0 | 0 |
| Tubificidae | 0 | 0 | 0 | 0 |
| Turbellaria | 0 | 0 | 0 | 0 |
| Tvetenia | 0 | 0 | 0 | 0 |
| Tvetenia discoloripes grp. | 0 | 0 | 0 | 0 |
| Unionicola | 0 | 0 | 0 | 1 |
| Unniella multivirga | 0 | 0 | 0 | 0 |
| Veliidae | 0 | 0 | 0 | 0 |
| Xenochironomus xenolabis | 0 | 0 | 0 | 0 |
| Xestochironomus | 0 | 0 | 0 | 0 |
| Xylotopus par | 0 | 0 | 0 | 0 |
| Zygoptera | 0 | 0 | 2 | 0 |

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| | SampleID 47698/BenthID | SampleID 48420/BenthID | SampleID 50131/BenthID | SampleID 52996/BenthID |
| Taxon Name / SampleID/BenID -> | 32249(#counted) | 33507(#counted) | 33604(#counted) | 33624(#counted) |
| Ablabesmyia (karelia) grp. | 0 | 0 | 0 | 0 |
| Ablabesmyia hauberi | 0 | 0 | 0 | 0 |
| Ablabesmyia mallochi | 0 | 0 | 0 | 0 |
| Ablabesmyia rhamphe grp. | 0 | 1 | 0 | 0 |
| Acentrella parvula | 0 | 0 | 0 | 0 |
| Acerpenna pygmaea | 0 | 0 | 0 | 0 |
| Acroneuria | 0 | 0 | 0 | 0 |
| Acroneuria abnormis | 0 | 2 | 0 | 0 |
| Acroneuria arenosa | 0 | 0 | 0 | 0 |
| Acroneuria arenosa/evoluta | 0 | 0 | 1 | 0 |
| Acroneuria lycorias | 0 | 0 | 0 | 0 |
| Agarodes libalis | 0 | 0 | 0 | 0 |
| Alluaudomyia | 0 | 0 | 0 | 0 |
| Amnicola | 0 | 0 | 0 | 0 |
| Amnicola dalli | 0 | 0 | 0 | 0 |
| Amnicola dalli johnsoni | 0 | 0 | 0 | 0 |
| Amphipoda | 0 | 0 | 0 | 0 |
| Ancylidae | 0 | 0 | 0 | 0 |
| Ancyronyx | 0 | 0 | 0 | 0 |
| Ancyronyx variegatus | 1 | 1 | 0 | 1 |
| Anisocentropus pyraloides | 0 | 0 | 0 | 0 |
| Anopheles | 0 | 0 | 0 | 0 |
| Apsectrotanypus johnsoni | 0 | 0 | 0 | 0 |
| Argia | 4 | 1 | 0 | 1 |
| Argia fumipennis | 0 | 0 | 0 | 0 |
| Argia moesta | 0 | 0 | 0 | 0 |
| Argia sedula | 0 | 0 | 0 | 0 |
| Argia tibialis | 0 | 0 | 0 | 0 |
| Arrenurus | 0 | 0 | 0 | 0 |
| Arrenurus problecornis | 0 | 0 | 0 | 0 |
| Astacidae | 0 | 0 | 0 | 0 |
| Atherix | 0 | 0 | 0 | 0 |
| Atractides | 0 | 0 | 0 | 0 |
| Atrichopogon | 0 | 0 | 0 | 0 |
| Aulodrilus pigueti | 0 | 0 | 0 | 0 |
| Aulodrilus pluriseta | 0 | 0 | 0 | 0 |
| Baetidae | 0 | 0 | 1 | 0 |
| Baetis | 0 | 0 | 0 | 0 |
| Baetis intercalaris | 0 | 0 | 0 | 0 |
| Baetisca rogersi | 0 | 0 | 0 | 0 |
| Beardius truncatus | 0 | 0 | 0 | 0 |
| Belostoma | 0 | 0 | 0 | 0 |
| Belostomatidae | 0 | 0 | 0 | 0 |
| Bivalvia | 0 | 0 | 0 | 0 |
| Bourletiella | 0 | 0 | 0 | 0 |
| Boyeria vinosa | 0 | 0 | 0 | 0 |
| Brachycentrus | 0 | 0 | 0 | 0 |
| Brachycentrus chelatus | 0 | 0 | 0 | 0 |
| Brachycentrus numerosus | 0 | 0 | 0 | 0 |



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| | SampleID | SampleID | SampleID | SampleID |
| | 47698/BenthID | 48420/BenthID | 50131/BenthID | 52996/BenthID |
| Taxon Name / SampleID/BenID -> | 32249(#counted) | 33507(#counted) | 33604(#counted) | 33624(#counted) |
| Brachycercus maculatus | 0 | 0 | 0 | 0 |
| Caecidotea | 0 | 0 | 0 | 10 |
| Caecidotea racovitzai | 0 | 0 | 0 | 0 |
| Caenis | 0 | 0 | 0 | 0 |
| Caenis diminuta | 0 | 0 | 0 | 0 |
| Caenis hilaris | 0 | 0 | 0 | 0 |
| Callibaetis floridanus | 0 | 0 | 0 | 0 |
| Calopteryx | 0 | 1 | 0 | 0 |
| Calopteryx maculata | 0 | 0 | 0 | 0 |
| Cambaridae | 0 | 0 | 0 | 0 |
| Campeloma | 0 | 0 | 0 | 0 |
| Campeloma limum | 0 | 0 | 0 | 0 |
| Cassidinidea ovalis | 0 | 0 | 0 | 0 |
| Cecidomyiidae | 0 | 0 | 0 | 0 |
| Ceratopogonidae | 0 | 1 | 0 | 0 |
| Cernotina | 0 | 0 | 0 | 0 |
| Chaoborus | 0 | 0 | 0 | 0 |
| Chaoborus albatus | 0 | 0 | 0 | 0 |
| Chauliodes | 0 | 0 | 0 | 0 |
| Chelifera | 0 | 0 | 0 | 0 |
| Cheumatopsyche | 0 | 0 | 9 | 1 |
| Chimarra | 16 | 1 | 6 | 0 |
| Chironomus | 0 | 0 | 0 | 0 |
| Choroterpes basalis | 0 | 0 | 0 | 0 |
| Choroterpes hubbelli | 0 | 0 | 0 | 0 |
| Cladotanytarsus | 0 | 0 | 0 | 0 |
| Cladotanytarsus cf. daviesi | 0 | 0 | 0 | 0 |
| Cladotanytarsus sp. i epler | 0 | 4 | 0 | 0 |
| Clathrosperchon | 0 | 0 | 0 | 0 |
| Climacea areolaris | 0 | 0 | 0 | 0 |
| Clinotanypus | 0 | 0 | 0 | 0 |
| Coelotanypus | 0 | 0 | 0 | 0 |
| Coelotanypus scapularis | 0 | 0 | 0 | 0 |
| Coenagrionidae | 0 | 0 | 0 | 0 |
| Collembola | 0 | 0 | 0 | 0 |
| Conchapelopia | 0 | 0 | 0 | 0 |
| Corbicula fluminea | 0 | 0 | 0 | 0 |
| Corduliidae | 0 | 0 | 0 | 0 |
| Corydalus | 0 | 0 | 0 | 0 |
| Corydalus cornuta | 0 | 0 | 0 | 0 |
| Corydalus cornutus | 1 | 0 | 2 | 0 |
| Corynoneura | 0 | 0 | 0 | 0 |
| Corynoneura sp. b epler | 0 | 0 | 0 | 0 |
| Corynoneura sp. c epler | 0 | 0 | 0 | 0 |
| Corynoneura taris | 0 | 0 | 0 | 0 |



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| | SampleID 47698/BenthID | SampleID 48420/BenthID | SampleID 50131/BenthID | SampleID 52996/BenthID |
| Taxon Name / SampleID/BenID -> | 32249(#counted) | 33507(#counted) | 33604(#counted) | 33624(#counted) |
| Crangonyx | 0 | 0 | 5 | 1 |
| Cricotopus | 0 | 0 | 0 | 0 |
| Cricotopus bicinctus | 0 | 0 | 0 | 0 |
| Cricotopus bicinctus grp. | 0 | 0 | 0 | 0 |
| Cricotopus or orthocladius | 0 | 0 | 0 | 0 |
| Cryptochironomus | 0 | 0 | 0 | 0 |
| Cryptotendipes | 0 | 0 | 0 | 0 |
| Curculionidae | 0 | 0 | 0 | 0 |
| Cyrnellus fraternus | 0 | 0 | 0 | 0 |
| Demicryptochironomus | 0 | 0 | 0 | 0 |
| Dero digitata | 0 | 0 | 0 | 0 |
| Dero digitata complex | 0 | 0 | 0 | 0 |
| Dero lodeni | 0 | 0 | 0 | 0 |
| Dero pectinata | 0 | 0 | 0 | 0 |
| Dero trifida | 0 | 0 | 0 | 0 |
| Dero vaga | 0 | 0 | 0 | 0 |
| Dicrotendipes | 0 | 0 | 0 | 0 |
| Dicrotendipes modestus | 0 | 0 | 0 | 0 |
| Dicrotendipes neomodestus | 0 | 0 | 0 | 0 |
| Dicrotendipes simpsoni | 0 | 0 | 0 | 0 |
| Dicrotendipes sp. a epler | 0 | 0 | 0 | 0 |
| Dineutus | 0 | 0 | 0 | 0 |
| Dineutus discolor | 0 | 0 | 0 | 0 |
| Dineutus serrulatus | 0 | 0 | 0 | 0 |
| Diplectrona modesta | 0 | 0 | 0 | 0 |
| Dixa | 0 | 0 | 0 | 0 |
| Dixella | 0 | 0 | 0 | 0 |
| Djalmabatista pulcher | 0 | 0 | 0 | 0 |
| Dolichopodidae | 0 | 0 | 0 | 0 |
| Dromogomphus armatus | 0 | 0 | 0 | 0 |
| Dromogomphus spinosus | 0 | 0 | 0 | 0 |
| Dryopidae | 0 | 0 | 0 | 0 |
| Dubiraphia | 0 | 0 | 0 | 0 |
| Dubiraphia quadrinotata | 0 | 0 | 0 | 0 |
| Dubiraphia vittata | 2 | 0 | 0 | 0 |
| Dugesia | 0 | 0 | 0 | 0 |
| Dugesia tigrina | 0 | 0 | 0 | 0 |
| Eclipidrilus | 0 | 1 | 1 | 3 |
| Eclipidrilus palustris | 0 | 0 | 0 | 0 |
| Ectopria | 0 | 0 | 0 | 0 |
| Elimia | 0 | 0 | 0 | 0 |
| Elimia floridensis | 0 | 0 | 0 | 0 |
| Empididae | 0 | 0 | 0 | 0 |
| Enallagma | 0 | 0 | 0 | 0 |



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| | SampleID | SampleID | SampleID | SampleID |
| | 47698/BenthID | 48420/BenthID | 50131/BenthID | 52996/BenthID |
| Taxon Name / SampleID/BenID -> | 32249(#counted) | 33507(#counted) | 33604(#counted) | 33624(#counted) |
| Enallagma cardenium | 0 | 0 | 0 | 0 |
| Enchytraeidae | 0 | 0 | 0 | 0 |
| Endotribelos hesperium | 0 | 0 | 0 | 0 |
| Enochrus | 0 | 0 | 0 | 0 |
| Ephemerellidae | 0 | 0 | 0 | 0 |
| Ephydridae | 0 | 0 | 0 | 0 |
| Epitheca | 0 | 0 | 0 | 0 |
| Epitheca princeps regina | 0 | 0 | 0 | 0 |
| Eurylophella doris | 0 | 7 | 2 | 1 |
| Eurylophella temporalis | 0 | 0 | 0 | 0 |
| Ferrissia | 0 | 0 | 0 | 0 |
| Gammaridae | 0 | 0 | 0 | 0 |
| Gammarus | 0 | 0 | 0 | 0 |
| Gammarus tigrinus | 0 | 0 | 0 | 0 |
| Gastropoda | 0 | 0 | 0 | 0 |
| Geayia | 0 | 0 | 0 | 0 |
| Gerridae | 0 | 0 | 0 | 0 |
| Gloiobdella elongata | 0 | 0 | 0 | 0 |
| Goeldichironomus fluctuans | 0 | 0 | 0 | 0 |
| Gomphidae | 0 | 0 | 0 | 0 |
| Gomphus | 0 | 0 | 0 | 0 |
| Gomphus minutus | 0 | 0 | 0 | 0 |
| Gonielmis | 0 | 0 | 0 | 0 |
| Gonielmis dietrichi | 0 | 0 | 0 | 0 |
| Grandidierella bonnieroides | 0 | 0 | 0 | 0 |
| Gyretes iricolor | 0 | 0 | 0 | 0 |
| Haber speciosus | 0 | 0 | 0 | 0 |
| Hagenius brevistylus | 0 | 0 | 0 | 0 |
| Hebetancylus excentricus | 0 | 0 | 0 | 4 |
| Helobdella stagnalis | 0 | 0 | 0 | 0 |
| Helobdella triserialis | 0 | 0 | 0 | 0 |
| Helopelopia | 0 | 0 | 0 | 0 |
| Hemerodromia | 2 | 0 | 0 | 0 |
| Hemiptera | 0 | 0 | 0 | 0 |
| Heptageniidae | 0 | 0 | 0 | 0 |
| Hetaerina | 0 | 0 | 0 | 0 |
| Hetaerina titia | 0 | 0 | 0 | 0 |
| Heteroplectron americanum | 0 | 0 | 0 | 0 |
| Hexagenia | 0 | 1 | 0 | 0 |
| Hexagenia bilineata | 0 | 0 | 0 | 0 |
| Hexagenia limbata | 0 | 0 | 0 | 0 |
| Hexagenia munda orlando | 0 | 0 | 0 | 0 |
| Hexatoma | 0 | 0 | 0 | 0 |
| Hyalella azteca | 0 | 0 | 0 | 0 |
| Hydra | 0 | 0 | 0 | 0 |
| Hydrachna | 0 | 0 | 0 | 0 |
| Hydraena marginicollis | 0 | 0 | 0 | 0 |
| Hydraenidae | 0 | 0 | 0 | 0 |



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| | SampleID 47698/BenthID | SampleID 48420/BenthID | SampleID 50131/BenthID | SampleID 52996/BenthID |
| Taxon Name / SampleID/BenID -> | 32249(#counted) | 33507(#counted) | 33604(#counted) | 33624(#counted) |
| Hydrobiidae | 0 | 0 | 0 | 0 |
| Hydrodroma | 0 | 0 | 0 | 0 |
| Hydrophilidae | 0 | 0 | 0 | 0 |
| Hydroporus | 0 | 0 | 0 | 0 |
| Hydropsyche | 5 | 1 | 0 | 1 |
| Hydropsyche decalda | 0 | 0 | 0 | 0 |
| Hydropsychidae | 0 | 0 | 0 | 0 |
| Hydroptila | 0 | 0 | 0 | 0 |
| Hydroptilidae | 0 | 0 | 0 | 0 |
| Hygrobates | 0 | 0 | 0 | 0 |
| Hygrotus | 0 | 0 | 0 | 0 |
| Ischnura | 0 | 0 | 0 | 3 |
| Ischnura hastata | 0 | 0 | 0 | 0 |
| Isonychia | 0 | 0 | 0 | 0 |
| Isoperla | 0 | 0 | 0 | 0 |
| Isopoda | 0 | 0 | 0 | 0 |
| Isotomurus | 0 | 0 | 0 | 0 |
| Isotomurus tricolor | 0 | 0 | 0 | 0 |
| Kiefferulus | 0 | 0 | 0 | 0 |
| Krendowskia | 0 | 0 | 0 | 0 |
| Labiobaetis | 0 | 0 | 0 | 0 |
| Labrundinia | 0 | 0 | 0 | 0 |
| Labrundinia becki | 0 | 0 | 0 | 0 |
| Labrundinia johannseni | 0 | 0 | 0 | 0 |
| Labrundinia neopilosella | 0 | 0 | 0 | 0 |
| Labrundinia pilosella | 0 | 0 | 0 | 0 |
| Laevapex | 0 | 0 | 0 | 0 |
| Laevapex peninsulae | 0 | 0 | 0 | 0 |
| Larsia berneri | 0 | 0 | 0 | 0 |
| Larsia decolorata | 0 | 0 | 0 | 0 |
| Lauterborniella agrayloides | 0 | 0 | 0 | 0 |
| Lebertia | 0 | 0 | 0 | 0 |
| Lepidoptera | 0 | 0 | 0 | 0 |
| Leptoceridae | 0 | 0 | 0 | 0 |
| Leptophlebia | 0 | 0 | 0 | 14 |
| Leptophlebiidae | 0 | 3 | 0 | 0 |
| Leuctra | 0 | 0 | 1 | 0 |
| Libellulidae | 0 | 0 | 0 | 1 |
| Limnesia | 0 | 0 | 0 | 0 |
| Limnodrilus hoffmeisteri | 0 | 2 | 0 | 0 |
| Limnophila | 0 | 0 | 0 | 0 |
| Limonia | 0 | 0 | 0 | 0 |
| Liodessus | 0 | 0 | 0 | 0 |
| Liodessus affinis | 0 | 0 | 0 | 0 |
| Lioporeus | 0 | 0 | 0 | 0 |
| Lirceus | 0 | 0 | 0 | 0 |
| Littoridinops monroensis | 0 | 0 | 0 | 0 |
| Lumbriculidae | 0 | 0 | 0 | 0 |
| Lumbriculus variegatus | 0 | 0 | 0 | 0 |



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| | SampleID 47698/BenthID | SampleID 48420/BenthID | SampleID 50131/BenthID | SampleID 52996/BenthID |
| Taxon Name / SampleID/BenID -> | 32249(#counted) | 33507(#counted) | 33604(#counted) | 33624(#counted) |
| Lype diversa | 0 | 0 | 0 | 0 |
| Maccaffertium | 0 | 2 | 2 | 3 |
| Maccaffertium smithae | 41 | 0 | 0 | 0 |
| Macromia | 0 | 0 | 0 | 0 |
| Macromia taeniolata | 0 | 0 | 0 | 0 |
| Macromiidae | 0 | 0 | 0 | 0 |
| Macronychus glabratus | 0 | 0 | 0 | 0 |
| Macrostemum carolina | 0 | 0 | 0 | 0 |
| Mayatrichia | 0 | 0 | 0 | 0 |
| Mayatrichia ayama | 0 | 0 | 0 | 0 |
| Meropelopia | 0 | 0 | 0 | 0 |
| Mesosmittia | 0 | 0 | 0 | 0 |
| Metrobates | 0 | 0 | 0 | 0 |
| Micrasema | 0 | 0 | 0 | 0 |
| Micrasema rusticum | 0 | 9 | 0 | 0 |
| Micrasema wataga | 0 | 0 | 0 | 0 |
| Microcylloepus | 0 | 0 | 0 | 0 |
| Microcylloepus pusillus | 3 | 0 | 17 | 0 |
| Micromenetus | 0 | 0 | 0 | 0 |
| Micromenetus dilatatus | 0 | 0 | 0 | 0 |
| Microtendipes pedellus | 0 | 0 | 0 | 0 |
| Microtendipes pedellus grp. | 0 | 0 | 5 | 2 |
| Microtendipes rydalensis | 0 | 0 | 0 | 0 |
| Microtendipes rydalensis grp. | 0 | 2 | 0 | 0 |
| Mideopsis | 0 | 0 | 0 | 0 |
| Molanna | 0 | 0 | 0 | 0 |
| Mooreobdella | 0 | 0 | 0 | 0 |
| Mooreobdella tetragon | 0 | 0 | 0 | 0 |
| Muscidae | 0 | 0 | 0 | 0 |
| Naididae | 0 | 0 | 0 | 0 |
| Nais behningi | 0 | 0 | 0 | 0 |
| Nais communis | 0 | 0 | 0 | 0 |
| Nais communis complex | 0 | 0 | 0 | 0 |
| Nais pardalis | 0 | 0 | 0 | 0 |
| Nais simplex | 0 | 0 | 0 | 0 |
| Nais variabilis | 0 | 0 | 0 | 0 |
| Nanocladius | 0 | 0 | 0 | 0 |
| Nectopsyche | 0 | 0 | 0 | 0 |
| Nectopsyche candida | 0 | 0 | 0 | 0 |
| Nectopsyche exquisita | 0 | 0 | 0 | 0 |
| Nectopsyche pavida | 0 | 0 | 0 | 0 |
| Nemertea | 0 | 0 | 0 | 0 |
| Neoperla | 0 | 0 | 1 | 0 |
| Neoperla clymene | 0 | 0 | 0 | 0 |
| Neoporus | 0 | 0 | 0 | 0 |
| Neotrichia | 0 | 0 | 0 | 0 |
| Neumania | 0 | 0 | 0 | 0 |



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| | SampleID 47698/BenthID | SampleID 48420/BenthID | SampleID 50131/BenthID | SampleID 52996/BenthID |
| Taxon Name / SampleID/BenID -> | 32249(#counted) | 33507(#counted) | 33604(#counted) | 33624(#counted) |
| Neumania distincta | 0 | 0 | 0 | 0 |
| Neureclipsis | 0 | 0 | 0 | 0 |
| Neureclipsis crepuscularis | 0 | 0 | 0 | 0 |
| Neurocordulia | 0 | 0 | 0 | 0 |
| Neurocordulia alabamensis | 0 | 0 | 0 | 0 |
| Neurocordulia virginiensis | 0 | 0 | 0 | 0 |
| Nigronia | 0 | 0 | 0 | 0 |
| Nigronia fasciatus | 0 | 0 | 0 | 0 |
| Nigronia serricornis | 0 | 0 | 0 | 0 |
| Nilotanypus | 0 | 0 | 0 | 0 |
| Nilothauma | 0 | 0 | 0 | 0 |
| Notogillia wetherbyi | 0 | 0 | 0 | 0 |
| Nyctiophylax | 0 | 0 | 0 | 0 |
| Odonata | 0 | 0 | 0 | 0 |
| Odontomyia | 0 | 0 | 0 | 0 |
| Oecetis | 2 | 0 | 0 | 0 |
| Oecetis cinerascens | 0 | 0 | 0 | 0 |
| Oecetis georgia | 0 | 0 | 0 | 0 |
| Oecetis inconspicua cmplx. | 0 | 0 | 0 | 0 |
| Oecetis morsei or sphyra | 0 | 0 | 0 | 0 |
| Oecetis parva | 0 | 0 | 0 | 0 |
| Oecetis persimilis | 0 | 0 | 0 | 0 |
| Oecetis sp. a floyd | 0 | 0 | 0 | 0 |
| Oecetis sp. e floyd | 0 | 0 | 0 | 0 |
| Ora/scirtes | 0 | 0 | 0 | 0 |
| Oribatei | 0 | 0 | 0 | 0 |
| Orthocladiinae | 0 | 0 | 0 | 0 |
| Orthocladiinae gen. c epler | 0 | 0 | 0 | 0 |
| Orthocladiinae gen. f epler | 0 | 0 | 0 | 0 |
| Orthocladius annectens | 0 | 0 | 0 | 0 |
| Orthotrichia | 0 | 0 | 0 | 0 |
| Oxyethira | 0 | 0 | 0 | 0 |
| Pachydiplax longipennis | 0 | 0 | 0 | 0 |
| Pagastiella | 0 | 0 | 0 | 0 |
| Palaemonetes | 0 | 0 | 0 | 0 |
| Palaemonetes kadiakensis | 0 | 0 | 0 | 0 |
| Palaemonetes paludosus | 0 | 0 | 0 | 0 |
| Palpomyia/bezzia grp. | 0 | 0 | 0 | 0 |
| Paracladopelma | 0 | 0 | 0 | 0 |
| Paracladopelma loganae | 0 | 3 | 0 | 0 |
| Paracladopelma undine | 0 | 0 | 0 | 0 |
| Paragnetina | 0 | 0 | 0 | 0 |
| Paragnetina fumosa | 0 | 0 | 0 | 0 |



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| Taxon Name / SampleID/BenID -> | 32249(#counted) | 33507(#counted) | 33604(#counted) | 33624(#counted) |
| Parakiefferiella | 0 | 0 | 0 | 0 |
| Paralauterborniella nigrohalterale | 0 | 1 | 0 | 0 |
| Paraleptophlebia volitans | 0 | 0 | 0 | 0 |
| Parametriocnemus | 0 | 2 | 0 | 0 |
| Parametriocnemus sp. f epler | 0 | 0 | 0 | 0 |
| Paranyctiophylax | 0 | 0 | 0 | 0 |
| Paraplea | 0 | 0 | 0 | 0 |
| Paraponyx | 0 | 0 | 0 | 0 |
| Paratanytarsus sp. a epler | 0 | 0 | 0 | 0 |
| Paratanytarsus sp. c epler | 0 | 0 | 0 | 0 |
| Paratendipes subaequalis | 0 | 0 | 0 | 0 |
| Pelecypoda | 0 | 0 | 0 | 0 |
| Pelonomus obscurus | 0 | 0 | 0 | 0 |
| Peltodytes | 0 | 0 | 0 | 0 |
| Pentaneura inconspicua | 0 | 0 | 1 | 0 |
| Perlesta | 0 | 0 | 0 | 0 |
| Perlesta placida | 0 | 0 | 0 | 0 |
| Perlesta placida complex | 0 | 2 | 0 | 0 |
| Perlinella | 0 | 1 | 0 | 0 |
| Petrophila | 0 | 0 | 0 | 0 |
| Phaenopsectra obediens grp. | 0 | 0 | 0 | 0 |
| Phaenopsectra punctipes grp. | 0 | 0 | 0 | 0 |
| Phylocentropus | 0 | 0 | 0 | 0 |
| Physella | 0 | 0 | 0 | 0 |
| Physella cubensis | 0 | 0 | 0 | 0 |
| Piona | 0 | 0 | 0 | 0 |
| Pisidiidae | 0 | 0 | 0 | 0 |
| Pisidium | 0 | 0 | 0 | 0 |
| Planariidae | 0 | 0 | 0 | 0 |
| Planorbella duryi | 0 | 0 | 0 | 0 |
| Planorbella scalaris | 0 | 0 | 0 | 0 |
| Planorbidae | 0 | 0 | 0 | 0 |
| Platyhelminthes | 0 | 0 | 0 | 0 |
| Plecoptera | 0 | 0 | 0 | 0 |
| Plumulariidae | 0 | 0 | 0 | 0 |
| Polycentropodidae | 0 | 0 | 0 | 0 |
| Polycentropus | 0 | 0 | 0 | 0 |
| Polypedilum | 0 | 0 | 0 | 0 |
| Polypedilum aviceps | 0 | 4 | 0 | 0 |
| Polypedilum convictum grp. | 0 | 0 | 0 | 0 |
| Polypedilum fallax | 0 | 0 | 0 | 0 |
| Polypedilum flavum | 5 | 0 | 29 | 10 |



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| | SampleID | SampleID | SampleID | SampleID |
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| Taxon Name / SampleID/BenID -> | 32249(#counted) | 33507(#counted) | 33604(#counted) | 33624(#counted) |
| Polypedilum halterale grp. | 0 | 0 | 0 | 0 |
| Polypedilum illinoense | 0 | 0 | 0 | 0 |
| Polypedilum illinoense grp. | 0 | 0 | 1 | 1 |
| Polypedilum scalaenum | 0 | 0 | 0 | 0 |
| Polypedilum scalaenum grp. | 0 | 2 | 0 | 1 |
| Polypedilum sp. a epler | 0 | 0 | 0 | 1 |
| Polypedilum tritum | 0 | 0 | 0 | 0 |
| Pomacea paludosa | 0 | 0 | 0 | 0 |
| Pristina aequiseta | 0 | 0 | 0 | 0 |
| Pristina synclites | 0 | 0 | 0 | 0 |
| Pristinella jenkinae | 0 | 0 | 0 | 0 |
| Probezzia | 0 | 0 | 0 | 0 |
| Procambarus | 0 | 0 | 0 | 0 |
| Procladius | 0 | 0 | 0 | 0 |
| Procladius (holotanypus) | 0 | 0 | 0 | 0 |
| Procloeon viridocularis | 0 | 0 | 0 | 0 |
| Progomphus | 0 | 0 | 0 | 0 |
| Progomphus obscurus | 0 | 0 | 0 | 0 |
| Promoresia tardella | 0 | 6 | 0 | 0 |
| Prostoma rubrum | 0 | 0 | 0 | 0 |
| Psammoryctides convolutus | 0 | 0 | 0 | 0 |
| Pseudochironomus | 0 | 0 | 0 | 0 |
| Pseudocloeon | 0 | 0 | 0 | 0 |
| Psychodidae | 0 | 0 | 0 | 0 |
| Pycnopsyche | 0 | 0 | 0 | 0 |
| Pyralidae | 0 | 0 | 0 | 0 |
| Pyrgophorus platyrachis | 0 | 0 | 0 | 0 |
| Ranatra kirkaldyi | 0 | 0 | 0 | 0 |
| Rhagovelia | 0 | 0 | 0 | 0 |
| Rheocricotopus | 0 | 0 | 3 | 0 |
| Rheocricotopus robacki | 0 | 0 | 0 | 0 |
| Rheocricotopus tuberculatus | 0 | 0 | 0 | 0 |
| Rheotanytarsus | 0 | 0 | 0 | 0 |
| Rheotanytarsus distinctissimus grp. | 0 | 0 | 0 | 0 |
| Rheotanytarsus exiguus | 0 | 0 | 0 | 0 |
| Rheotanytarsus exiguus grp. | 6 | 4 | 1 | 19 |
| Rheotanytarsus pellucidus | 0 | 1 | 0 | 0 |
| Scirtes | 0 | 0 | 0 | 0 |
| Scirtidae | 0 | 0 | 0 | 0 |
| Serratella deficiens | 0 | 0 | 0 | 0 |
| Sialis | 0 | 0 | 0 | 0 |
| Silvius | 0 | 1 | 0 | 0 |



US EPA ARCHIVE DOCUMENT

| As Calculated / STORET station -> | BAK210GS | 32030023 | CLA254LR | CLA243LV |
|---|---|---|---|---|
| Sample date -> | 11/1/2005 | 2/15/2006 | 11/14/2005 | 11/14/2005 |
| | SampleID | SampleID | SampleID | SampleID |
| | 47698/BenthID | 48420/BenthID | 50131/BenthID | 52996/BenthID |
| Taxon Name / SampleID/BenID -> | 32249(#counted) | 33507(#counted) | 33604(#counted) | 33624(#counted) |
| Simuliidae | 0 | 0 | 0 | 0 |
| Simulium | 1 | 16 | 1 | 2 |
| Slavina appendiculata | 0 | 0 | 2 | 0 |
| Somatogyrus walkerianus | 0 | 0 | 0 | 0 |
| Sperchon | 0 | 0 | 0 | 0 |
| Sperchonopsis | 0 | 0 | 0 | 0 |
| Sperchopsis | 0 | 0 | 0 | 0 |
| Sphaeriidae | 0 | 0 | 0 | 0 |
| Sphaeriidae(mollusca) | 0 | 0 | 0 | 0 |
| Sphaeroma | 0 | 0 | 0 | 0 |
| Sphaeromias | 0 | 0 | 0 | 0 |
| Spirosperma | 0 | 0 | 0 | 2 |
| Spirosperma ferox | 0 | 0 | 0 | 0 |
| Stelechomyia perpulchra | 0 | 0 | 0 | 2 |
| Stempellina | 0 | 0 | 0 | 0 |
| Stempellina sp. a epler | 0 | 0 | 0 | 0 |
| Stempellinella | 0 | 0 | 0 | 0 |
| Stenacron | 0 | 1 | 0 | 0 |
| Stenacron floridense | 0 | 0 | 0 | 0 |
| Stenacron interpunctatum | 0 | 0 | 0 | 0 |
| Stenelmis | 1 | 0 | 9 | 3 |
| Stenelmis decorata | 0 | 0 | 0 | 0 |
| Stenelmis hungerfordi | 0 | 0 | 0 | 0 |
| Stenochironomus | 8 | 1 | 1 | 4 |
| Stenonema | 0 | 0 | 0 | 0 |
| Stenonema exiguum | 0 | 0 | 0 | 0 |
| Stenonema smithae | 0 | 0 | 0 | 0 |
| Stratiomyidae | 0 | 0 | 0 | 0 |
| Stylaria lacustris | 0 | 0 | 0 | 0 |
| Synorthocladius | 0 | 0 | 0 | 0 |
| Tabanus | 0 | 0 | 0 | 0 |
| Taeniopteryx lita | 0 | 1 | 0 | 0 |
| Tanytarsus | 0 | 0 | 0 | 0 |
| Tanytarsus sp. a epler | 0 | 0 | 0 | 1 |
| Tanytarsus sp. c epler | 2 | 0 | 0 | 1 |
| Tanytarsus sp. d epler | 0 | 2 | 0 | 0 |
| Tanytarsus sp. e epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. g epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. l epler | 0 | 0 | 3 | 9 |
| Tanytarsus sp. m epler | 0 | 2 | 0 | 0 |
| Tanytarsus sp. o epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. r epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. s epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. t epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. u epler | 0 | 0 | 0 | 0 |
| Taphromysis bowmani | 0 | 0 | 0 | 0 |



US EPA ARCHIVE DOCUMENT

| As Calculated / STORET station -> | BAK210GS | 32030023 | CLA254LR | CLA243LV |
|---|---|---|---|---|
| Sample date -> | 11/1/2005 | 2/15/2006 | 11/14/2005 | 11/14/2005 |
| | SampleID 47698/BenthID | SampleID 48420/BenthID | SampleID 50131/BenthID | SampleID 52996/BenthID |
| Taxon Name / SampleID/BenID -> | 32249(#counted) | 33507(#counted) | 33604(#counted) | 33624(#counted) |
| Thienemanniella | 0 | 0 | 0 | 1 |
| Thienemanniella lobapodema | 0 | 0 | 0 | 0 |
| Thienemanniella similis | 0 | 0 | 0 | 0 |
| Thienemanniella sp. a epler | 0 | 0 | 0 | 0 |
| Thienemannimyia grp. | 6 | 2 | 1 | 0 |
| Tipula | 0 | 0 | 0 | 0 |
| Tipulidae | 0 | 0 | 0 | 0 |
| Torrenticola | 0 | 0 | 0 | 0 |
| Triaenodes | 0 | 0 | 0 | 0 |
| Triaenodes ignitus | 0 | 0 | 0 | 0 |
| Triaenodes perna | 0 | 0 | 0 | 0 |
| Tribelos | 0 | 0 | 0 | 0 |
| Tribelos atrum | 0 | 0 | 0 | 0 |
| Tribelos fuscicornis | 0 | 0 | 0 | 1 |
| Tribelos jucundum | 0 | 10 | 0 | 1 |
| Tricorythodes albilineatus | 0 | 0 | 0 | 0 |
| Tubificidae | 0 | 0 | 0 | 0 |
| Turbellaria | 0 | 0 | 0 | 0 |
| Tvetenia | 0 | 0 | 0 | 0 |
| Tvetenia discoloripes grp. | 0 | 0 | 0 | 0 |
| Unionicola | 0 | 0 | 0 | 0 |
| Unniella multivirga | 0 | 0 | 0 | 1 |
| Veliidae | 0 | 0 | 0 | 0 |
| Xenochironomus xenolabis | 0 | 0 | 0 | 0 |
| Xestochironomus | 0 | 0 | 0 | 0 |
| Xylotopus par | 0 | 0 | 0 | 0 |
| Zygoptera | 0 | 0 | 0 | 0 |

US EPA ARCHIVE DOCUMENT

| As Calculated / STORET station -> | LEV502GS | PUT308GS | 21010008 | BAK210GS |
|---|---|---|---|---|
| Sample date -> | 12/6/2005 | 12/13/2005 | 4/24/2006 | 3/20/2006 |
| | SampleID 52471/BenthID | SampleID 52912/BenthID | SampleID 53274/BenthID | SampleID 53732/BenthID |
| Taxon Name / SampleID/BenID -> | 34244(#counted) | 34645(#counted) | 34807(#counted) | 35065(#counted) |
| Ablabesmyia (karelia) grp. | 0 | 0 | 0 | 0 |
| Ablabesmyia hauberi | 0 | 0 | 0 | 0 |
| Ablabesmyia mallochi | 0 | 0 | 0 | 0 |
| Ablabesmyia rhamphe grp. | 0 | 0 | 0 | 0 |
| Acentrella parvula | 1 | 0 | 0 | 0 |
| Acerpenna pygmaea | 3 | 0 | 0 | 0 |
| Acroneuria | 0 | 0 | 0 | 0 |
| Acroneuria abnormis | 0 | 0 | 0 | 0 |
| Acroneuria arenosa | 0 | 0 | 0 | 0 |
| Acroneuria arenosa/evoluta | 0 | 0 | 0 | 0 |
| Acroneuria lycorias | 0 | 0 | 0 | 0 |
| Agarodes libalis | 0 | 0 | 0 | 0 |
| Alluaudomyia | 0 | 0 | 0 | 0 |
| Amnicola | 0 | 0 | 0 | 0 |
| Amnicola dalli | 0 | 0 | 0 | 0 |
| Amnicola dalli johnsoni | 0 | 0 | 0 | 0 |
| Amphipoda | 0 | 2 | 0 | 0 |
| Ancylidae | 1 | 0 | 0 | 0 |
| Ancyronyx | 0 | 0 | 0 | 0 |
| Ancyronyx variegatus | 0 | 0 | 0 | 0 |
| Anisocentropus pyraloides | 0 | 0 | 0 | 0 |
| Anopheles | 0 | 0 | 0 | 0 |
| Apsectrotanypus johnsoni | 0 | 0 | 0 | 0 |
| Argia | 0 | 0 | 0 | 1 |
| Argia fumipennis | 0 | 0 | 0 | 0 |
| Argia moesta | 0 | 0 | 0 | 0 |
| Argia sedula | 0 | 0 | 0 | 0 |
| Argia tibialis | 0 | 0 | 0 | 0 |
| Arrenurus | 0 | 0 | 0 | 0 |
| Arrenurus problecornis | 0 | 0 | 0 | 0 |
| Astacidae | 0 | 0 | 0 | 0 |
| Atherix | 0 | 0 | 0 | 0 |
| Atractides | 0 | 0 | 3 | 0 |
| Atrichopogon | 0 | 0 | 0 | 0 |
| Aulodrilus pigueti | 0 | 0 | 0 | 0 |
| Aulodrilus pluriseta | 0 | 0 | 0 | 0 |
| Baetidae | 0 | 0 | 0 | 0 |
| Baetis | 0 | 0 | 0 | 0 |
| Baetis intercalaris | 1 | 0 | 0 | 0 |
| Baetisca rogersi | 0 | 0 | 0 | 0 |
| Beardius truncatus | 0 | 0 | 0 | 0 |
| Belostoma | 0 | 0 | 0 | 0 |
| Belostomatidae | 0 | 0 | 0 | 0 |
| Bivalvia | 1 | 1 | 0 | 0 |
| Bourletiella | 0 | 0 | 0 | 0 |
| Boyeria vinosa | 0 | 1 | 0 | 0 |
| Brachycentrus | 0 | 0 | 0 | 0 |
| Brachycentrus chelatus | 0 | 0 | 0 | 0 |
| Brachycentrus numerosus | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | LEV502GS | PUT308GS | 21010008 | BAK210GS |
|---|---|---|---|---|
| Sample date -> | 12/6/2005 | 12/13/2005 | 4/24/2006 | 3/20/2006 |
| | SampleID 52471/BenthID | SampleID 52912/BenthID | SampleID 53274/BenthID | SampleID 53732/BenthID |
| Taxon Name / SampleID/BenID -> | 34244(#counted) | 34645(#counted) | 34807(#counted) | 35065(#counted) |
| Brachycercus maculatus | 0 | 0 | 0 | 0 |
| Caecidotea | 0 | 8 | 0 | 0 |
| Caecidotea racovitzai | 0 | 0 | 0 | 0 |
| Caenis | 4 | 0 | 1 | 0 |
| Caenis diminuta | 0 | 0 | 0 | 0 |
| Caenis hilaris | 0 | 0 | 0 | 0 |
| Callibaetis floridanus | 0 | 0 | 0 | 0 |
| Calopteryx | 0 | 0 | 0 | 0 |
| Calopteryx maculata | 0 | 0 | 0 | 0 |
| Cambaridae | 0 | 0 | 0 | 0 |
| Campeloma | 0 | 0 | 0 | 0 |
| Campeloma limum | 0 | 0 | 0 | 0 |
| Cassidinidea ovalis | 0 | 0 | 0 | 0 |
| Cecidomyiidae | 0 | 0 | 0 | 0 |
| Ceratopogonidae | 0 | 0 | 0 | 0 |
| Cernotina | 0 | 0 | 0 | 0 |
| Chaoborus | 0 | 0 | 0 | 0 |
| Chaoborus albatus | 0 | 0 | 0 | 0 |
| Chauliodes | 0 | 0 | 0 | 0 |
| Chelifera | 0 | 0 | 0 | 0 |
| Cheumatopsyche | 4 | 4 | 2 | 0 |
| Chimarra | 5 | 5 | 3 | 4 |
| Chironomus | 0 | 0 | 0 | 0 |
| Choroterpes basalis | 0 | 0 | 0 | 0 |
| Choroterpes hubbelli | 0 | 0 | 0 | 0 |
| Cladotanytarsus | 0 | 0 | 0 | 0 |
| Cladotanytarsus cf. daviesi | 0 | 0 | 0 | 0 |
| Cladotanytarsus sp. i epler | 0 | 0 | 0 | 0 |
| Clathrosperchon | 0 | 0 | 0 | 0 |
| Climacea areolaris | 0 | 1 | 0 | 0 |
| Clinotanypus | 0 | 0 | 0 | 0 |
| Coelotanypus | 0 | 0 | 0 | 0 |
| Coelotanypus scapularis | 0 | 0 | 0 | 0 |
| Coenagrionidae | 2 | 0 | 0 | 0 |
| Collembola | 0 | 0 | 0 | 0 |
| Conchapelopia | 0 | 0 | 0 | 0 |
| Corbicula fluminea | 0 | 0 | 1 | 0 |
| Corduliidae | 0 | 0 | 0 | 0 |
| Corydalus | 0 | 0 | 0 | 0 |
| Corydalus cornuta | 0 | 0 | 0 | 0 |
| Corydalus cornutus | 1 | 1 | 0 | 0 |
| Corynoneura | 0 | 0 | 0 | 0 |
| Corynoneura sp. b epler | 0 | 0 | 0 | 0 |
| Corynoneura sp. c epler | 0 | 0 | 0 | 0 |
| Corynoneura taris | 0 | 0 | 0 | 0 |



US EPA ARCHIVE DOCUMENT

| As Calculated / STORET station -> | LEV502GS | PUT308GS | 21010008 | BAK210GS |
|---|---|---|---|---|
| Sample date -> | 12/6/2005 | 12/13/2005 | 4/24/2006 | 3/20/2006 |
| | SampleID 52471/BenthID | SampleID 52912/BenthID | SampleID 53274/BenthID | SampleID 53732/BenthID |
| Taxon Name / SampleID/BenID -> | 34244(#counted) | 34645(#counted) | 34807(#counted) | 35065(#counted) |
| Crangonyx | 2 | 0 | 0 | 1 |
| Cricotopus | 0 | 0 | 0 | 0 |
| Cricotopus bicinctus | 0 | 0 | 0 | 0 |
| Cricotopus bicinctus grp. | 0 | 0 | 0 | 0 |
| Cricotopus or orthocladius | 0 | 0 | 0 | 0 |
| Cryptochironomus | 0 | 0 | 0 | 0 |
| Cryptotendipes | 0 | 0 | 0 | 0 |
| Curculionidae | 0 | 0 | 0 | 0 |
| Cyrnellus fraternus | 0 | 0 | 0 | 0 |
| Demicryptochironomus | 0 | 0 | 0 | 0 |
| Dero digitata | 0 | 0 | 0 | 0 |
| Dero digitata complex | 0 | 0 | 0 | 0 |
| Dero lodeni | 0 | 0 | 0 | 0 |
| Dero pectinata | 0 | 0 | 0 | 0 |
| Dero trifida | 0 | 0 | 0 | 0 |
| Dero vaga | 0 | 0 | 0 | 0 |
| Dicrotendipes | 0 | 0 | 0 | 0 |
| Dicrotendipes modestus | 0 | 0 | 0 | 0 |
| Dicrotendipes neomodestus | 1 | 0 | 0 | 0 |
| Dicrotendipes simpsoni | 0 | 0 | 0 | 0 |
| Dicrotendipes sp. a epler | 0 | 0 | 0 | 0 |
| Dineutus | 0 | 0 | 0 | 0 |
| Dineutus discolor | 0 | 0 | 0 | 0 |
| Dineutus serrulatus | 0 | 0 | 0 | 0 |
| Diplectrona modesta | 0 | 0 | 0 | 0 |
| Dixa | 0 | 0 | 0 | 0 |
| Dixella | 0 | 0 | 0 | 0 |
| Djalmabatista pulcher | 0 | 0 | 0 | 0 |
| Dolichopodidae | 0 | 0 | 0 | 0 |
| Dromogomphus armatus | 0 | 0 | 0 | 0 |
| Dromogomphus spinosus | 0 | 0 | 0 | 0 |
| Dryopidae | 0 | 0 | 0 | 0 |
| Dubiraphia | 0 | 0 | 0 | 0 |
| Dubiraphia quadrinotata | 0 | 0 | 0 | 0 |
| Dubiraphia vittata | 4 | 0 | 0 | 0 |
| Dugesia | 0 | 0 | 0 | 0 |
| Dugesia tigrina | 0 | 0 | 0 | 0 |
| Eclipidrilus | 0 | 0 | 1 | 9 |
| Eclipidrilus palustris | 0 | 0 | 0 | 0 |
| Ectopria | 0 | 0 | 0 | 0 |
| Elimia | 0 | 0 | 0 | 0 |
| Elimia floridensis | 0 | 0 | 0 | 0 |
| Empididae | 0 | 0 | 0 | 0 |
| Enallagma | 0 | 1 | 0 | 0 |



US EPA ARCHIVE DOCUMENT

| As Calculated / STORET station -> | LEV502GS | PUT308GS | 21010008 | BAK210GS |
|---|---|---|---|---|
| Sample date -> | 12/6/2005 | 12/13/2005 | 4/24/2006 | 3/20/2006 |
| | SampleID 52471/BenthID | SampleID 52912/BenthID | SampleID 53274/BenthID | SampleID 53732/BenthID |
| Taxon Name / SampleID/BenID -> | 34244(#counted) | 34645(#counted) | 34807(#counted) | 35065(#counted) |
| Enallagma cardenium | 0 | 0 | 0 | 0 |
| Enchytraeidae | 0 | 0 | 0 | 5 |
| Endotribelos hesperium | 0 | 0 | 0 | 0 |
| Enochrus | 1 | 0 | 0 | 0 |
| Ephemerellidae | 0 | 0 | 0 | 0 |
| Ephydridae | 0 | 0 | 0 | 0 |
| Epitheca | 0 | 0 | 0 | 0 |
| Epitheca princeps regina | 0 | 0 | 0 | 0 |
| Eurylophella doris | 0 | 0 | 0 | 0 |
| Eurylophella temporalis | 0 | 0 | 0 | 0 |
| Ferrissia | 0 | 0 | 0 | 0 |
| Gammaridae | 0 | 0 | 0 | 0 |
| Gammarus | 0 | 0 | 0 | 0 |
| Gammarus tigrinus | 0 | 0 | 0 | 0 |
| Gastropoda | 0 | 0 | 0 | 0 |
| Geayia | 0 | 0 | 0 | 0 |
| Gerridae | 0 | 0 | 0 | 0 |
| Gloiobdella elongata | 0 | 0 | 0 | 0 |
| Goeldichironomus fluctuans | 0 | 0 | 0 | 0 |
| Gomphidae | 0 | 0 | 0 | 0 |
| Gomphus | 0 | 0 | 0 | 0 |
| Gomphus minutus | 0 | 0 | 0 | 0 |
| Gonielmis | 0 | 0 | 0 | 0 |
| Gonielmis dietrichi | 0 | 0 | 0 | 0 |
| Grandidierella bonnieroides | 0 | 0 | 0 | 0 |
| Gyretes iricolor | 0 | 0 | 0 | 0 |
| Haber speciosus | 0 | 0 | 0 | 0 |
| Hagenius brevistylus | 0 | 0 | 0 | 0 |
| Hebetancylus excentricus | 0 | 0 | 0 | 0 |
| Helobdella stagnalis | 0 | 0 | 0 | 0 |
| Helobdella triserialis | 0 | 0 | 0 | 0 |
| Helopelopia | 0 | 0 | 0 | 0 |
| Hemerodromia | 0 | 1 | 0 | 0 |
| Hemiptera | 0 | 0 | 0 | 0 |
| Heptageniidae | 0 | 0 | 0 | 0 |
| Hetaerina | 0 | 0 | 0 | 0 |
| Hetaerina titia | 0 | 0 | 0 | 0 |
| Heteroplectron americanum | 0 | 0 | 0 | 0 |
| Hexagenia | 0 | 0 | 0 | 0 |
| Hexagenia bilineata | 0 | 0 | 0 | 0 |
| Hexagenia limbata | 0 | 0 | 0 | 0 |
| Hexagenia munda orlando | 0 | 0 | 0 | 0 |
| Hexatoma | 0 | 0 | 0 | 0 |
| Hyalella azteca | 0 | 0 | 0 | 0 |
| Hydra | 0 | 0 | 0 | 0 |
| Hydrachna | 0 | 0 | 0 | 0 |
| Hydraena marginicollis | 1 | 0 | 0 | 0 |
| Hydraenidae | 0 | 0 | 0 | 0 |



US EPA ARCHIVE DOCUMENT

| As Calculated / STORET station -> | LEV502GS | PUT308GS | 21010008 | BAK210GS |
|---|---|---|---|---|
| Sample date -> | 12/6/2005 | 12/13/2005 | 4/24/2006 | 3/20/2006 |
| | SampleID 52471/BenthID | SampleID 52912/BenthID | SampleID 53274/BenthID | SampleID 53732/BenthID |
| Taxon Name / SampleID/BenID -> | 34244(#counted) | 34645(#counted) | 34807(#counted) | 35065(#counted) |
| Hydrobiidae | 0 | 0 | 0 | 0 |
| Hydrodroma | 0 | 0 | 0 | 0 |
| Hydrophilidae | 0 | 0 | 0 | 0 |
| Hydroporus | 0 | 0 | 0 | 0 |
| Hydropsyche | 3 | 0 | 0 | 0 |
| Hydropsyche decalda | 0 | 4 | 0 | 0 |
| Hydropsychidae | 0 | 0 | 0 | 0 |
| Hydroptila | 0 | 0 | 0 | 0 |
| Hydroptilidae | 0 | 0 | 0 | 0 |
| Hygrobates | 0 | 0 | 0 | 0 |
| Hygrotus | 0 | 0 | 0 | 0 |
| Ischnura | 0 | 0 | 0 | 0 |
| Ischnura hastata | 0 | 0 | 0 | 0 |
| Isonychia | 0 | 0 | 2 | 0 |
| Isoperla | 0 | 0 | 0 | 0 |
| Isopoda | 0 | 0 | 0 | 0 |
| Isotomurus | 0 | 0 | 0 | 0 |
| Isotomurus tricolor | 0 | 0 | 0 | 0 |
| Kiefferulus | 0 | 0 | 0 | 0 |
| Krendowskia | 0 | 0 | 0 | 0 |
| Labiobaetis | 0 | 0 | 0 | 0 |
| Labrundinia | 0 | 0 | 0 | 0 |
| Labrundinia becki | 0 | 0 | 0 | 0 |
| Labrundinia johannseni | 0 | 0 | 0 | 0 |
| Labrundinia neopilosella | 0 | 0 | 0 | 0 |
| Labrundinia pilosella | 0 | 0 | 0 | 0 |
| Laevapex | 0 | 0 | 0 | 0 |
| Laevapex peninsulae | 0 | 0 | 0 | 0 |
| Larsia berneri | 0 | 0 | 0 | 0 |
| Larsia decolorata | 0 | 0 | 0 | 0 |
| Lauterborniella agrayloides | 0 | 0 | 0 | 0 |
| Lebertia | 0 | 0 | 0 | 0 |
| Lepidoptera | 0 | 0 | 0 | 0 |
| Leptoceridae | 0 | 0 | 0 | 0 |
| Leptophlebia | 0 | 0 | 0 | 0 |
| Leptophlebiidae | 0 | 3 | 0 | 0 |
| Leuctra | 0 | 0 | 0 | 0 |
| Libellulidae | 0 | 0 | 0 | 0 |
| Limnesia | 0 | 0 | 0 | 0 |
| Limnodrilus hoffmeisteri | 0 | 0 | 0 | 0 |
| Limnophila | 0 | 0 | 0 | 0 |
| Limonia | 0 | 0 | 0 | 0 |
| Liodessus | 0 | 0 | 0 | 0 |
| Liodessus affinis | 1 | 0 | 0 | 0 |
| Lioporeus | 0 | 0 | 0 | 0 |
| Lirceus | 18 | 0 | 0 | 0 |
| Littoridinops monroensis | 0 | 0 | 0 | 0 |
| Lumbriculidae | 0 | 0 | 0 | 0 |
| Lumbriculus variegatus | 0 | 0 | 0 | 0 |



US EPA ARCHIVE DOCUMENT

| As Calculated / STORET station -> | LEV502GS | PUT308GS | 21010008 | BAK210GS |
|---|---|---|---|---|
| Sample date -> | 12/6/2005 | 12/13/2005 | 4/24/2006 | 3/20/2006 |
| | SampleID 52471/BenthID | SampleID 52912/BenthID | SampleID 53274/BenthID | SampleID 53732/BenthID |
| Taxon Name / SampleID/BenID -> | 34244(#counted) | 34645(#counted) | 34807(#counted) | 35065(#counted) |
| Lype diversa | 0 | 0 | 0 | 0 |
| Maccaffertium | 8 | 10 | 0 | 3 |
| Maccaffertium smithae | 0 | 0 | 4 | 0 |
| Macromia | 0 | 1 | 1 | 0 |
| Macromia taeniolata | 0 | 0 | 0 | 0 |
| Macromiidae | 0 | 0 | 0 | 0 |
| Macronychus glabratus | 1 | 1 | 0 | 0 |
| Macrostemum carolina | 0 | 0 | 0 | 0 |
| Mayatrichia | 0 | 0 | 0 | 0 |
| Mayatrichia ayama | 0 | 0 | 0 | 0 |
| Meropelopia | 0 | 0 | 0 | 0 |
| Mesosmittia | 0 | 0 | 0 | 0 |
| Metrobates | 0 | 0 | 0 | 0 |
| Micrasema | 0 | 0 | 0 | 0 |
| Micrasema rusticum | 0 | 0 | 0 | 0 |
| Micrasema wataga | 0 | 0 | 0 | 0 |
| Microcylloepus | 0 | 0 | 0 | 0 |
| Microcylloepus pusillus | 1 | 12 | 0 | 0 |
| Micromenetus | 0 | 0 | 0 | 0 |
| Micromenetus dilatatus | 4 | 0 | 0 | 0 |
| Microtendipes pedellus | 0 | 0 | 0 | 0 |
| Microtendipes pedellus grp. | 0 | 5 | 0 | 0 |
| Microtendipes rydalensis | 0 | 0 | 0 | 0 |
| Microtendipes rydalensis grp. | 0 | 0 | 0 | 0 |
| Mideopsis | 0 | 0 | 0 | 0 |
| Molanna | 0 | 0 | 0 | 0 |
| Mooreobdella | 0 | 0 | 0 | 0 |
| Mooreobdella tetragon | 0 | 0 | 0 | 0 |
| Muscidae | 0 | 0 | 0 | 0 |
| Naididae | 0 | 0 | 0 | 0 |
| Nais behningi | 0 | 0 | 1 | 0 |
| Nais communis | 0 | 0 | 0 | 0 |
| Nais communis complex | 0 | 3 | 0 | 0 |
| Nais pardalis | 0 | 0 | 0 | 0 |
| Nais simplex | 0 | 0 | 0 | 0 |
| Nais variabilis | 0 | 0 | 0 | 0 |
| Nanocladius | 0 | 0 | 0 | 0 |
| Nectopsyche | 0 | 0 | 0 | 0 |
| Nectopsyche candida | 0 | 0 | 0 | 0 |
| Nectopsyche exquisita | 0 | 0 | 0 | 0 |
| Nectopsyche pavida | 0 | 0 | 0 | 0 |
| Nemertea | 1 | 0 | 0 | 0 |
| Neoperla | 0 | 0 | 0 | 0 |
| Neoperla clymene | 0 | 0 | 4 | 0 |
| Neoporus | 0 | 0 | 0 | 0 |
| Neotrichia | 0 | 0 | 1 | 0 |
| Neumania | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | LEV502GS | PUT308GS | 21010008 | BAK210GS |
|---|---|---|---|---|
| Sample date -> | 12/6/2005 | 12/13/2005 | 4/24/2006 | 3/20/2006 |
| | SampleID 52471/BenthID | SampleID 52912/BenthID | SampleID 53274/BenthID | SampleID 53732/BenthID |
| Taxon Name / SampleID/BenID -> | 34244(#counted) | 34645(#counted) | 34807(#counted) | 35065(#counted) |
| Neumania distincta | 0 | 0 | 0 | 0 |
| Neureclipsis | 0 | 0 | 0 | 0 |
| Neureclipsis crepuscularis | 0 | 0 | 0 | 0 |
| Neurocordulia | 0 | 5 | 0 | 0 |
| Neurocordulia alabamensis | 0 | 0 | 0 | 0 |
| Neurocordulia virginiensis | 0 | 0 | 0 | 0 |
| Nigronia | 0 | 0 | 0 | 0 |
| Nigronia fasciatus | 0 | 0 | 0 | 0 |
| Nigronia serricornis | 0 | 0 | 0 | 0 |
| Nilotanypus | 0 | 0 | 0 | 0 |
| Nilothauma | 0 | 0 | 0 | 0 |
| Notogillia wetherbyi | 0 | 0 | 0 | 0 |
| Nyctiophylax | 0 | 0 | 0 | 0 |
| Odonata | 0 | 0 | 0 | 0 |
| Odontomyia | 0 | 0 | 0 | 0 |
| Oecetis | 0 | 0 | 0 | 1 |
| Oecetis cinerascens | 0 | 0 | 0 | 0 |
| Oecetis georgia | 0 | 0 | 0 | 0 |
| Oecetis inconspicua cmplx. | 0 | 0 | 0 | 0 |
| Oecetis morsei or sphyra | 0 | 0 | 0 | 0 |
| Oecetis parva | 0 | 0 | 0 | 0 |
| Oecetis persimilis | 0 | 0 | 0 | 0 |
| Oecetis sp. a floyd | 0 | 0 | 0 | 0 |
| Oecetis sp. e floyd | 0 | 0 | 0 | 0 |
| Ora/scirtes | 1 | 0 | 0 | 0 |
| Oribatei | 0 | 0 | 0 | 0 |
| Orthocladiinae | 0 | 0 | 0 | 0 |
| Orthocladiinae gen. c epler | 0 | 0 | 0 | 0 |
| Orthocladiinae gen. f epler | 0 | 0 | 0 | 0 |
| Orthocladius annectens | 0 | 0 | 0 | 0 |
| Orthotrichia | 0 | 0 | 0 | 0 |
| Oxyethira | 0 | 0 | 0 | 0 |
| Pachydiplax longipennis | 0 | 0 | 0 | 0 |
| Pagastiella | 0 | 0 | 0 | 0 |
| Palaemonetes | 0 | 0 | 0 | 0 |
| Palaemonetes kadiakensis | 0 | 0 | 0 | 0 |
| Palaemonetes paludosus | 0 | 0 | 0 | 0 |
| Palpomyia/bezzia grp. | 0 | 0 | 0 | 0 |
| Paracladopelma | 0 | 1 | 0 | 0 |
| Paracladopelma loganae | 0 | 0 | 0 | 0 |
| Paracladopelma undine | 0 | 0 | 0 | 0 |
| Paragnetina | 0 | 0 | 0 | 0 |
| Paragnetina fumosa | 0 | 0 | 0 | 0 |



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|---|---|---|---|---|
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| | SampleID 52471/BenthID | SampleID 52912/BenthID | SampleID 53274/BenthID | SampleID 53732/BenthID |
| Taxon Name / SampleID/BenID -> | 34244(#counted) | 34645(#counted) | 34807(#counted) | 35065(#counted) |
| Parakiefferiella | 0 | 0 | 0 | 0 |
| Paralauterborniella nigrohalterale | 0 | 0 | 0 | 0 |
| Paraleptophlebia volitans | 0 | 0 | 0 | 0 |
| Parametriocnemus | 0 | 0 | 1 | 0 |
| Parametriocnemus sp. f epler | 0 | 0 | 0 | 0 |
| Paranyctiophylax | 0 | 0 | 0 | 0 |
| Paraplea | 1 | 0 | 0 | 0 |
| Paraponyx | 0 | 0 | 0 | 0 |
| Paratanytarsus sp. a epler | 0 | 0 | 0 | 0 |
| Paratanytarsus sp. c epler | 0 | 0 | 0 | 0 |
| Paratendipes subaequalis | 0 | 0 | 0 | 0 |
| Pelecypoda | 0 | 0 | 0 | 0 |
| Pelonomus obscurus | 0 | 0 | 0 | 0 |
| Peltodytes | 0 | 0 | 0 | 0 |
| Pentaneura inconspicua | 0 | 1 | 1 | 0 |
| Perlesta | 0 | 0 | 0 | 0 |
| Perlesta placida | 0 | 0 | 0 | 0 |
| Perlesta placida complex | 0 | 0 | 0 | 0 |
| Perlinella | 0 | 0 | 0 | 0 |
| Petrophila | 0 | 0 | 0 | 0 |
| Phaenopsectra obediens grp. | 0 | 0 | 0 | 0 |
| Phaenopsectra punctipes grp. | 0 | 0 | 0 | 0 |
| Phylocentropus | 0 | 0 | 0 | 0 |
| Physella | 0 | 0 | 0 | 0 |
| Physella cubensis | 0 | 0 | 0 | 0 |
| Piona | 0 | 0 | 0 | 0 |
| Pisidiidae | 0 | 0 | 0 | 0 |
| Pisidium | 0 | 0 | 0 | 0 |
| Planariidae | 0 | 0 | 0 | 0 |
| Planorbella duryi | 0 | 0 | 0 | 0 |
| Planorbella scalaris | 0 | 0 | 0 | 0 |
| Planorbidae | 0 | 0 | 0 | 0 |
| Platyhelminthes | 0 | 0 | 0 | 0 |
| Plecoptera | 0 | 0 | 0 | 0 |
| Plumulariidae | 0 | 0 | 0 | 0 |
| Polycentropodidae | 0 | 0 | 0 | 1 |
| Polycentropus | 0 | 0 | 0 | 0 |
| Polypedilum | 0 | 0 | 0 | 0 |
| Polypedilum aviceps | 0 | 0 | 0 | 0 |
| Polypedilum convictum grp. | 0 | 0 | 0 | 0 |
| Polypedilum fallax | 0 | 0 | 0 | 0 |
| Polypedilum flavum | 11 | 3 | 7 | 3 |



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|---|---|---|---|---|
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| | SampleID 52471/BenthID | SampleID 52912/BenthID | SampleID 53274/BenthID | SampleID 53732/BenthID |
| Taxon Name / SampleID/BenID -> | 34244(#counted) | 34645(#counted) | 34807(#counted) | 35065(#counted) |
| Polypedilum halterale grp. | 0 | 0 | 0 | 0 |
| Polypedilum illinoense | 0 | 0 | 0 | 0 |
| Polypedilum illinoense grp. | 0 | 0 | 4 | 0 |
| Polypedilum scalaenum | 0 | 0 | 0 | 0 |
| Polypedilum scalaenum grp. | 0 | 0 | 11 | 0 |
| Polypedilum sp. a epler | 0 | 0 | 0 | 0 |
| Polypedilum tritum | 0 | 0 | 0 | 0 |
| Pomacea paludosa | 0 | 0 | 0 | 0 |
| Pristina aequiseta | 0 | 0 | 0 | 0 |
| Pristina synclites | 0 | 0 | 0 | 0 |
| Pristinella jenkinae | 0 | 0 | 0 | 0 |
| Probezzia | 0 | 0 | 0 | 0 |
| Procambarus | 0 | 0 | 0 | 0 |
| Procladius | 1 | 0 | 0 | 0 |
| Procladius (holotanypus) | 0 | 0 | 0 | 0 |
| Procloeon viridocularis | 0 | 0 | 0 | 0 |
| Progomphus | 0 | 0 | 0 | 0 |
| Progomphus obscurus | 0 | 2 | 0 | 0 |
| Promoresia tardella | 0 | 0 | 0 | 0 |
| Prostoma rubrum | 0 | 0 | 0 | 0 |
| Psammoryctides convolutus | 0 | 0 | 0 | 0 |
| Pseudochironomus | 0 | 0 | 0 | 0 |
| Pseudocloeon | 1 | 3 | 3 | 0 |
| Psychodidae | 0 | 0 | 0 | 0 |
| Pycnopsyche | 0 | 0 | 0 | 0 |
| Pyralidae | 0 | 0 | 0 | 0 |
| Pyrgophorus platyrachis | 0 | 0 | 0 | 0 |
| Ranatra kirkaldyi | 0 | 0 | 0 | 0 |
| Rhagovelia | 0 | 0 | 0 | 0 |
| Rheocricotopus | 0 | 0 | 0 | 0 |
| Rheocricotopus robacki | 0 | 6 | 0 | 0 |
| Rheocricotopus tuberculatus | 0 | 0 | 0 | 1 |
| Rheotanytarsus | 0 | 0 | 0 | 0 |
| Rheotanytarsus distinctissimus grp. | 0 | 0 | 0 | 0 |
| Rheotanytarsus exiguus | 0 | 0 | 0 | 0 |
| Rheotanytarsus exiguus grp. | 0 | 4 | 10 | 15 |
| Rheotanytarsus pellucidus | 0 | 0 | 0 | 0 |
| Scirtes | 0 | 0 | 0 | 0 |
| Scirtidae | 0 | 0 | 0 | 0 |
| Serratella deficiens | 0 | 0 | 0 | 0 |
| Sialis | 0 | 0 | 0 | 0 |
| Silvius | 0 | 0 | 0 | 0 |



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|---|---|---|---|---|
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| | SampleID 52471/BenthID | SampleID 52912/BenthID | SampleID 53274/BenthID | SampleID 53732/BenthID |
| Taxon Name / SampleID/BenID -> | 34244(#counted) | 34645(#counted) | 34807(#counted) | 35065(#counted) |
| Simuliidae | 0 | 0 | 0 | 0 |
| Simulium | 9 | 7 | 0 | 55 |
| Slavina appendiculata | 0 | 0 | 0 | 0 |
| Somatogyrus walkerianus | 0 | 0 | 0 | 0 |
| Sperchon | 0 | 0 | 0 | 0 |
| Sperchonopsis | 0 | 0 | 0 | 0 |
| Sperchopsis | 0 | 0 | 0 | 0 |
| Sphaeriidae | 0 | 0 | 0 | 0 |
| Sphaeriidae(mollusca) | 0 | 0 | 0 | 0 |
| Sphaeroma | 0 | 0 | 0 | 0 |
| Sphaeromias | 0 | 0 | 0 | 0 |
| Spirosperma | 0 | 0 | 0 | 0 |
| Spirosperma ferox | 0 | 0 | 0 | 0 |
| Stelechomyia perpulchra | 0 | 0 | 0 | 0 |
| Stempellina | 0 | 0 | 0 | 0 |
| Stempellina sp. a epler | 0 | 0 | 1 | 0 |
| Stempellinella | 0 | 0 | 0 | 0 |
| Stenacron | 0 | 0 | 0 | 0 |
| Stenacron floridense | 0 | 0 | 0 | 0 |
| Stenacron interpunctatum | 0 | 0 | 0 | 0 |
| Stenelmis | 1 | 9 | 23 | 1 |
| Stenelmis decorata | 0 | 0 | 0 | 0 |
| Stenelmis hungerfordi | 0 | 0 | 0 | 0 |
| Stenochironomus | 1 | 2 | 2 | 2 |
| Stenonema | 0 | 0 | 0 | 0 |
| Stenonema exiguum | 0 | 0 | 0 | 0 |
| Stenonema smithae | 0 | 0 | 0 | 0 |
| Stratiomyidae | 0 | 0 | 0 | 0 |
| Stylaria lacustris | 0 | 0 | 0 | 0 |
| Synorthocladius | 0 | 0 | 0 | 0 |
| Tabanus | 0 | 0 | 0 | 0 |
| Taeniopteryx lita | 0 | 0 | 0 | 0 |
| Tanytarsus | 0 | 1 | 0 | 0 |
| Tanytarsus sp. a epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. c epler | 0 | 0 | 5 | 2 |
| Tanytarsus sp. d epler | 0 | 0 | 1 | 0 |
| Tanytarsus sp. e epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. g epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. l epler | 1 | 0 | 1 | 1 |
| Tanytarsus sp. m epler | 2 | 0 | 0 | 0 |
| Tanytarsus sp. o epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. r epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. s epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. t epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. u epler | 0 | 0 | 0 | 0 |
| Taphromysis bowmani | 0 | 0 | 0 | 0 |



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|---|---|---|---|---|
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| | SampleID 52471/BenthID | SampleID 52912/BenthID | SampleID 53274/BenthID | SampleID 53732/BenthID |
| Taxon Name / SampleID/BenID -> | 34244(#counted) | 34645(#counted) | 34807(#counted) | 35065(#counted) |
| Thienemanniella | 0 | 0 | 1 | 0 |
| Thienemanniella lobapodema | 0 | 0 | 0 | 0 |
| Thienemanniella similis | 0 | 0 | 0 | 0 |
| Thienemanniella sp. a epler | 0 | 0 | 0 | 0 |
| Thienemannimyia grp. | 0 | 1 | 5 | 4 |
| Tipula | 0 | 0 | 0 | 1 |
| Tipulidae | 0 | 0 | 0 | 0 |
| Torrenticola | 0 | 0 | 0 | 0 |
| Triaenodes | 1 | 0 | 0 | 0 |
| Triaenodes ignitus | 0 | 0 | 0 | 0 |
| Triaenodes perna | 0 | 0 | 0 | 0 |
| Tribelos | 0 | 0 | 0 | 0 |
| Tribelos atrum | 0 | 0 | 0 | 0 |
| Tribelos fuscicornis | 0 | 0 | 0 | 0 |
| Tribelos jucundum | 0 | 0 | 0 | 0 |
| Tricorythodes albilineatus | 0 | 0 | 0 | 0 |
| Tubificidae | 3 | 1 | 0 | 0 |
| Turbellaria | 0 | 0 | 0 | 0 |
| Tvetenia | 0 | 0 | 0 | 0 |
| Tvetenia discoloripes grp. | 0 | 0 | 0 | 0 |
| Unionicola | 0 | 0 | 0 | 0 |
| Unniella multivirga | 0 | 0 | 0 | 0 |
| Veliidae | 0 | 0 | 0 | 0 |
| Xenochironomus xenolabis | 0 | 0 | 0 | 0 |
| Xestochironomus | 0 | 0 | 0 | 0 |
| Xylotopus par | 0 | 0 | 0 | 0 |
| Zygoptera | 0 | 0 | 0 | 0 |

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| As Calculated / STORET station -> | GLA630GS | 273116508208152 | GAD104US | UNI234LV |
|---|---|---|---|---|
| Sample date -> | 1/23/2006 | 6/21/2006 | 11/14/2005 | 11/15/2005 |
| | SampleID 53951/BenthID | SampleID 52834/BenthID | SampleID 49652/BenthID | SampleID 53059/BenthID |
| Taxon Name / SampleID/BenID -> | 35284(#counted) | 35565(#counted) | 35784(#counted) | 36666(#counted) |
| Ablabesmyia (karelia) grp. | 0 | 0 | 0 | 0 |
| Ablabesmyia hauberi | 0 | 0 | 0 | 0 |
| Ablabesmyia mallochi | 1 | 0 | 0 | 1 |
| Ablabesmyia rhamphe grp. | 0 | 0 | 0 | 5 |
| Acentrella parvula | 0 | 0 | 0 | 0 |
| Acerpenna pygmaea | 0 | 0 | 0 | 0 |
| Acroneuria | 0 | 0 | 0 | 0 |
| Acroneuria abnormis | 0 | 0 | 0 | 0 |
| Acroneuria arenosa | 0 | 0 | 0 | 0 |
| Acroneuria arenosa/evoluta | 0 | 0 | 0 | 0 |
| Acroneuria lycorias | 0 | 0 | 0 | 0 |
| Agarodes libalis | 0 | 0 | 0 | 0 |
| Alluaudomyia | 0 | 0 | 0 | 0 |
| Amnicola | 0 | 0 | 0 | 0 |
| Amnicola dalli | 0 | 0 | 0 | 0 |
| Amnicola dalli johnsoni | 0 | 0 | 0 | 0 |
| Amphipoda | 0 | 0 | 0 | 0 |
| Ancylidae | 0 | 0 | 0 | 0 |
| Ancyronyx | 0 | 0 | 0 | 0 |
| Ancyronyx variegatus | 0 | 0 | 3 | 9 |
| Anisocentropus pyraloides | 0 | 0 | 0 | 0 |
| Anopheles | 0 | 0 | 0 | 0 |
| Apsectrotanypus johnsoni | 0 | 0 | 0 | 0 |
| Argia | 0 | 0 | 0 | 0 |
| Argia fumipennis | 0 | 0 | 0 | 0 |
| Argia moesta | 0 | 0 | 0 | 0 |
| Argia sedula | 0 | 0 | 0 | 0 |
| Argia tibialis | 0 | 0 | 0 | 18 |
| Arrenurus | 0 | 0 | 0 | 0 |
| Arrenurus problecornis | 0 | 0 | 0 | 0 |
| Astacidae | 0 | 0 | 0 | 0 |
| Atherix | 0 | 0 | 0 | 0 |
| Atractides | 0 | 0 | 0 | 0 |
| Atrichopogon | 0 | 0 | 2 | 0 |
| Aulodrilus pigueti | 0 | 2 | 0 | 0 |
| Aulodrilus pluriseta | 0 | 0 | 0 | 0 |
| Baetidae | 0 | 0 | 0 | 0 |
| Baetis | 0 | 0 | 0 | 0 |
| Baetis intercalaris | 0 | 0 | 14 | 0 |
| Baetisca rogersi | 0 | 0 | 0 | 0 |
| Beardius truncatus | 0 | 0 | 0 | 0 |
| Belostoma | 0 | 0 | 0 | 0 |
| Belostomatidae | 0 | 0 | 0 | 0 |
| Bivalvia | 0 | 6 | 0 | 0 |
| Bourletiella | 0 | 0 | 0 | 0 |
| Boyeria vinosa | 0 | 0 | 0 | 0 |
| Brachycentrus | 0 | 0 | 0 | 0 |
| Brachycentrus chelatus | 0 | 0 | 0 | 0 |
| Brachycentrus numerosus | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | GLA630GS | 273116508208152 | GAD104US | UNI234LV |
|---|---|---|---|---|
| Sample date -> | 1/23/2006 | 6/21/2006 | 11/14/2005 | 11/15/2005 |
| | SampleID 53951/BenthID | SampleID 52834/BenthID | SampleID 49652/BenthID | SampleID 53059/BenthID |
| Taxon Name / SampleID/BenID -> | 35284(#counted) | 35565(#counted) | 35784(#counted) | 36666(#counted) |
| Brachycercus maculatus | 0 | 0 | 0 | 0 |
| Caecidotea | 0 | 0 | 0 | 0 |
| Caecidotea racovitzai | 1 | 0 | 0 | 0 |
| Caenis | 0 | 1 | 0 | 0 |
| Caenis diminuta | 31 | 0 | 1 | 0 |
| Caenis hilaris | 0 | 0 | 0 | 0 |
| Callibaetis floridanus | 0 | 0 | 0 | 0 |
| Calopteryx | 0 | 0 | 1 | 1 |
| Calopteryx maculata | 0 | 0 | 0 | 0 |
| Cambaridae | 0 | 0 | 0 | 0 |
| Campeloma | 0 | 0 | 0 | 0 |
| Campeloma limum | 0 | 0 | 0 | 0 |
| Cassidinidea ovalis | 0 | 0 | 0 | 0 |
| Cecidomyiidae | 0 | 0 | 0 | 0 |
| Ceratopogonidae | 0 | 0 | 0 | 0 |
| Cernotina | 0 | 1 | 0 | 0 |
| Chaoborus | 0 | 0 | 0 | 0 |
| Chaoborus albatus | 0 | 0 | 0 | 0 |
| Chauliodes | 0 | 0 | 0 | 0 |
| Chelifera | 0 | 0 | 0 | 0 |
| Cheumatopsyche | 1 | 0 | 15 | 2 |
| Chimarra | 0 | 0 | 0 | 0 |
| Chironomus | 0 | 0 | 0 | 0 |
| Choroterpes basalis | 0 | 0 | 0 | 0 |
| Choroterpes hubbelli | 0 | 0 | 0 | 0 |
| Cladotanytarsus | 0 | 0 | 0 | 0 |
| Cladotanytarsus cf. daviesi | 1 | 0 | 0 | 0 |
| Cladotanytarsus sp. i epler | 0 | 0 | 0 | 0 |
| Clathrosperchon | 0 | 0 | 0 | 0 |
| Climacea areolaris | 0 | 0 | 0 | 0 |
| Clinotanypus | 0 | 0 | 0 | 0 |
| Coelotanypus | 0 | 0 | 0 | 0 |
| Coelotanypus scapularis | 0 | 0 | 0 | 0 |
| Coenagrionidae | 0 | 0 | 0 | 0 |
| Collembola | 0 | 0 | 0 | 0 |
| Conchapelopia | 0 | 0 | 0 | 0 |
| Corbicula fluminea | 0 | 0 | 0 | 0 |
| Corduliidae | 0 | 0 | 0 | 0 |
| Corydalus | 0 | 0 | 0 | 0 |
| Corydalus cornuta | 0 | 0 | 0 | 0 |
| Corydalus cornutus | 0 | 1 | 0 | 0 |
| Corynoneura | 0 | 0 | 1 | 0 |
| Corynoneura sp. b epler | 0 | 0 | 0 | 0 |
| Corynoneura sp. c epler | 0 | 0 | 0 | 0 |
| Corynoneura taris | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | GLA630GS | 273116508208152 | GAD104US | UNI234LV |
|---|---|---|---|---|
| Sample date -> | 1/23/2006 | 6/21/2006 | 11/14/2005 | 11/15/2005 |
| | SampleID 53951/BenthID | SampleID 52834/BenthID | SampleID 49652/BenthID | SampleID 53059/BenthID |
| Taxon Name / SampleID/BenID -> | 35284(#counted) | 35565(#counted) | 35784(#counted) | 36666(#counted) |
| Crangonyx | 0 | 0 | 0 | 2 |
| Cricotopus | 0 | 0 | 0 | 0 |
| Cricotopus bicinctus | 0 | 0 | 0 | 0 |
| Cricotopus bicinctus grp. | 0 | 0 | 0 | 0 |
| Cricotopus or orthocladius | 0 | 0 | 0 | 0 |
| Cryptochironomus | 1 | 0 | 0 | 0 |
| Cryptotendipes | 0 | 0 | 0 | 0 |
| Curculionidae | 0 | 0 | 0 | 0 |
| Cyrnellus fraternus | 0 | 0 | 0 | 0 |
| Demicryptochironomus | 0 | 0 | 0 | 0 |
| Dero digitata | 0 | 0 | 0 | 0 |
| Dero digitata complex | 1 | 7 | 0 | 0 |
| Dero lodeni | 0 | 0 | 0 | 0 |
| Dero pectinata | 0 | 0 | 0 | 0 |
| Dero trifida | 0 | 0 | 0 | 0 |
| Dero vaga | 0 | 0 | 0 | 0 |
| Dicrotendipes | 4 | 0 | 0 | 0 |
| Dicrotendipes modestus | 0 | 0 | 0 | 0 |
| Dicrotendipes neomodestus | 0 | 1 | 0 | 0 |
| Dicrotendipes simpsoni | 0 | 0 | 0 | 0 |
| Dicrotendipes sp. a epler | 0 | 0 | 0 | 0 |
| Dineutus | 0 | 0 | 0 | 0 |
| Dineutus discolor | 0 | 0 | 0 | 0 |
| Dineutus serrulatus | 0 | 0 | 0 | 0 |
| Diplectrona modesta | 0 | 0 | 0 | 0 |
| Dixa | 0 | 0 | 0 | 0 |
| Dixella | 0 | 0 | 0 | 0 |
| Djalmabatista pulcher | 0 | 0 | 0 | 0 |
| Dolichopodidae | 0 | 1 | 0 | 0 |
| Dromogomphus armatus | 1 | 0 | 0 | 0 |
| Dromogomphus spinosus | 0 | 0 | 0 | 0 |
| Dryopidae | 0 | 0 | 0 | 0 |
| Dubiraphia | 0 | 0 | 0 | 0 |
| Dubiraphia quadrinotata | 0 | 0 | 0 | 0 |
| Dubiraphia vittata | 7 | 18 | 0 | 4 |
| Dugesia | 4 | 0 | 0 | 0 |
| Dugesia tigrina | 0 | 0 | 0 | 0 |
| Eclipidrilus | 0 | 0 | 0 | 0 |
| Eclipidrilus palustris | 0 | 1 | 0 | 2 |
| Ectopria | 0 | 0 | 0 | 0 |
| Elimia | 0 | 0 | 0 | 0 |
| Elimia floridensis | 0 | 0 | 0 | 0 |
| Empididae | 0 | 0 | 0 | 0 |
| Enallagma | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | GLA630GS | 273116508208152 | GAD104US | UNI234LV |
|---|---|---|---|---|
| Sample date -> | 1/23/2006 | 6/21/2006 | 11/14/2005 | 11/15/2005 |
| | SampleID 53951/BenthID | SampleID 52834/BenthID | SampleID 49652/BenthID | SampleID 53059/BenthID |
| Taxon Name / SampleID/BenID -> | 35284(#counted) | 35565(#counted) | 35784(#counted) | 36666(#counted) |
| Enallagma cardenium | 0 | 0 | 0 | 0 |
| Enchytraeidae | 0 | 1 | 0 | 0 |
| Endotribelos hesperium | 0 | 0 | 0 | 0 |
| Enochrus | 0 | 0 | 0 | 0 |
| Ephemerellidae | 0 | 1 | 0 | 0 |
| Ephydridae | 0 | 0 | 0 | 0 |
| Epitheca | 0 | 0 | 0 | 0 |
| Epitheca princeps regina | 0 | 0 | 0 | 0 |
| Eurylophella doris | 0 | 0 | 0 | 0 |
| Eurylophella temporalis | 0 | 0 | 0 | 0 |
| Ferrissia | 0 | 0 | 0 | 0 |
| Gammaridae | 0 | 0 | 0 | 0 |
| Gammarus | 0 | 0 | 0 | 0 |
| Gammarus tigrinus | 0 | 0 | 0 | 0 |
| Gastropoda | 0 | 1 | 0 | 0 |
| Geayia | 0 | 0 | 0 | 0 |
| Gerridae | 0 | 0 | 0 | 0 |
| Gloiobdella elongata | 0 | 0 | 0 | 0 |
| Goeldichironomus fluctuans | 0 | 0 | 0 | 0 |
| Gomphidae | 0 | 1 | 0 | 0 |
| Gomphus | 0 | 0 | 0 | 0 |
| Gomphus minutus | 0 | 0 | 0 | 0 |
| Gonielmis | 0 | 0 | 0 | 0 |
| Gonielmis dietrichi | 0 | 0 | 0 | 0 |
| Grandidierella bonnieroides | 0 | 0 | 0 | 0 |
| Gyretes iricolor | 0 | 0 | 0 | 0 |
| Haber speciosus | 0 | 0 | 0 | 0 |
| Hagenius brevistylus | 0 | 0 | 0 | 0 |
| Hebetancylus excentricus | 0 | 0 | 0 | 0 |
| Helobdella stagnalis | 1 | 0 | 0 | 0 |
| Helobdella triserialis | 0 | 0 | 0 | 0 |
| Helopelopia | 0 | 0 | 0 | 0 |
| Hemerodromia | 0 | 0 | 0 | 0 |
| Hemiptera | 0 | 0 | 0 | 0 |
| Heptageniidae | 0 | 0 | 0 | 0 |
| Hetaerina | 0 | 0 | 0 | 0 |
| Hetaerina titia | 0 | 0 | 0 | 0 |
| Heteroplectron americanum | 0 | 0 | 0 | 0 |
| Hexagenia | 0 | 0 | 0 | 0 |
| Hexagenia bilineata | 0 | 0 | 0 | 0 |
| Hexagenia limbata | 0 | 0 | 0 | 0 |
| Hexagenia munda orlando | 0 | 0 | 0 | 0 |
| Hexatoma | 0 | 0 | 0 | 0 |
| Hyalella azteca | 5 | 0 | 0 | 0 |
| Hydra | 0 | 0 | 0 | 0 |
| Hydrachna | 0 | 0 | 0 | 0 |
| Hydraena marginicollis | 0 | 0 | 0 | 0 |
| Hydraenidae | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | GLA630GS | 273116508208152 | GAD104US | UNI234LV |
|---|---|---|---|---|
| Sample date -> | 1/23/2006 | 6/21/2006 | 11/14/2005 | 11/15/2005 |
| | SampleID 53951/BenthID | SampleID 52834/BenthID | SampleID 49652/BenthID | SampleID 53059/BenthID |
| Taxon Name / SampleID/BenID -> | 35284(#counted) | 35565(#counted) | 35784(#counted) | 36666(#counted) |
| Hydrobiidae | 0 | 0 | 0 | 0 |
| Hydrodroma | 0 | 0 | 0 | 0 |
| Hydrophilidae | 0 | 0 | 0 | 0 |
| Hydroporus | 0 | 0 | 0 | 0 |
| Hydropsyche | 0 | 0 | 0 | 4 |
| Hydropsyche decalda | 0 | 0 | 0 | 0 |
| Hydropsychidae | 0 | 0 | 0 | 0 |
| Hydroptila | 0 | 0 | 0 | 0 |
| Hydroptilidae | 0 | 0 | 0 | 0 |
| Hygrobates | 0 | 0 | 0 | 0 |
| Hygrotus | 0 | 0 | 0 | 0 |
| Ischnura | 0 | 1 | 0 | 0 |
| Ischnura hastata | 0 | 0 | 0 | 0 |
| Isonychia | 0 | 0 | 0 | 0 |
| Isoperla | 0 | 0 | 0 | 0 |
| Isopoda | 0 | 0 | 0 | 0 |
| Isotomurus | 0 | 0 | 0 | 0 |
| Isotomurus tricolor | 0 | 0 | 0 | 0 |
| Kiefferulus | 0 | 0 | 0 | 0 |
| Krendowskia | 0 | 0 | 0 | 0 |
| Labiobaetis | 0 | 0 | 0 | 0 |
| Labrundinia | 0 | 0 | 0 | 0 |
| Labrundinia becki | 0 | 0 | 0 | 0 |
| Labrundinia johannseni | 0 | 0 | 0 | 0 |
| Labrundinia neopilosella | 0 | 0 | 0 | 0 |
| Labrundinia pilosella | 0 | 0 | 0 | 0 |
| Laevapex | 0 | 0 | 0 | 0 |
| Laevapex peninsulae | 0 | 0 | 0 | 0 |
| Larsia berneri | 0 | 0 | 0 | 0 |
| Larsia decolorata | 0 | 0 | 0 | 0 |
| Lauterborniella agrayloides | 0 | 0 | 0 | 0 |
| Lebertia | 0 | 0 | 0 | 0 |
| Lepidoptera | 0 | 0 | 0 | 0 |
| Leptoceridae | 1 | 0 | 0 | 0 |
| Leptophlebia | 0 | 0 | 0 | 0 |
| Leptophlebiidae | 0 | 0 | 0 | 4 |
| Leuctra | 0 | 0 | 0 | 0 |
| Libellulidae | 0 | 0 | 0 | 0 |
| Limnesia | 0 | 0 | 0 | 0 |
| Limnodrilus hoffmeisteri | 0 | 0 | 0 | 0 |
| Limnophila | 0 | 0 | 0 | 0 |
| Limonia | 0 | 0 | 0 | 0 |
| Liodessus | 0 | 0 | 0 | 0 |
| Liodessus affinis | 0 | 0 | 0 | 0 |
| Lioporeus | 0 | 0 | 0 | 0 |
| Lirceus | 0 | 0 | 0 | 0 |
| Littoridinops monroensis | 0 | 0 | 0 | 0 |
| Lumbriculidae | 0 | 0 | 0 | 0 |
| Lumbriculus variegatus | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | GLA630GS | 273116508208152 | GAD104US | UNI234LV |
|---|---|---|---|---|
| Sample date -> | 1/23/2006 | 6/21/2006 | 11/14/2005 | 11/15/2005 |
| | SampleID 53951/BenthID | SampleID 52834/BenthID | SampleID 49652/BenthID | SampleID 53059/BenthID |
| Taxon Name / SampleID/BenID -> | 35284(#counted) | 35565(#counted) | 35784(#counted) | 36666(#counted) |
| Lype diversa | 0 | 0 | 0 | 0 |
| Maccaffertium | 0 | 0 | 0 | 0 |
| Maccaffertium smithae | 0 | 0 | 13 | 0 |
| Macromia | 0 | 0 | 0 | 0 |
| Macromia taeniolata | 0 | 0 | 0 | 0 |
| Macromiidae | 0 | 0 | 0 | 0 |
| Macronychus glabratus | 0 | 0 | 3 | 0 |
| Macrostemum carolina | 0 | 0 | 0 | 0 |
| Mayatrichia | 0 | 0 | 0 | 0 |
| Mayatrichia ayama | 0 | 0 | 0 | 0 |
| Meropelopia | 0 | 0 | 0 | 0 |
| Mesosmittia | 0 | 0 | 0 | 0 |
| Metrobates | 0 | 0 | 0 | 0 |
| Micrasema | 0 | 0 | 0 | 0 |
| Micrasema rusticum | 0 | 0 | 0 | 0 |
| Micrasema wataga | 0 | 0 | 0 | 0 |
| Microcylloepus | 0 | 0 | 0 | 0 |
| Microcylloepus pusillus | 26 | 13 | 1 | 7 |
| Micromenetus | 0 | 0 | 0 | 0 |
| Micromenetus dilatatus | 0 | 0 | 0 | 0 |
| Microtendipes pedellus | 0 | 0 | 0 | 0 |
| Microtendipes pedellus grp. | 0 | 0 | 0 | 0 |
| Microtendipes rydalensis | 0 | 0 | 0 | 0 |
| Microtendipes rydalensis grp. | 0 | 0 | 0 | 0 |
| Mideopsis | 0 | 2 | 0 | 0 |
| Molanna | 0 | 0 | 0 | 0 |
| Mooreobdella | 0 | 0 | 0 | 0 |
| Mooreobdella tetragon | 0 | 0 | 0 | 0 |
| Muscidae | 0 | 0 | 0 | 0 |
| Naididae | 0 | 0 | 0 | 0 |
| Nais behningi | 0 | 0 | 0 | 0 |
| Nais communis | 0 | 0 | 0 | 0 |
| Nais communis complex | 0 | 0 | 0 | 0 |
| Nais pardalis | 0 | 0 | 0 | 0 |
| Nais simplex | 0 | 0 | 0 | 0 |
| Nais variabilis | 0 | 0 | 2 | 0 |
| Nanocladius | 0 | 0 | 0 | 0 |
| Nectopsyche | 0 | 0 | 0 | 0 |
| Nectopsyche candida | 0 | 0 | 0 | 0 |
| Nectopsyche exquisita | 0 | 0 | 0 | 0 |
| Nectopsyche pavida | 0 | 0 | 0 | 0 |
| Nemertea | 0 | 0 | 0 | 0 |
| Neoperla | 0 | 0 | 0 | 0 |
| Neoperla clymene | 0 | 0 | 0 | 0 |
| Neoporus | 0 | 0 | 0 | 0 |
| Neotrichia | 0 | 0 | 0 | 0 |
| Neumania | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | GLA630GS | 273116508208152 | GAD104US | UNI234LV |
|---|---|---|---|---|
| Sample date -> | 1/23/2006 | 6/21/2006 | 11/14/2005 | 11/15/2005 |
| | SampleID 53951/BenthID | SampleID 52834/BenthID | SampleID 49652/BenthID | SampleID 53059/BenthID |
| Taxon Name / SampleID/BenID -> | 35284(#counted) | 35565(#counted) | 35784(#counted) | 36666(#counted) |
| Neumania distincta | 0 | 0 | 0 | 0 |
| Neureclipsis | 0 | 0 | 0 | 0 |
| Neureclipsis crepuscularis | 0 | 0 | 0 | 0 |
| Neurocordulia | 0 | 0 | 0 | 3 |
| Neurocordulia alabamensis | 0 | 0 | 0 | 0 |
| Neurocordulia virginiensis | 0 | 0 | 0 | 0 |
| Nigronia | 0 | 0 | 0 | 0 |
| Nigronia fasciatus | 0 | 0 | 0 | 0 |
| Nigronia serricornis | 0 | 0 | 0 | 0 |
| Nilotanypus | 0 | 0 | 0 | 0 |
| Nilothauma | 0 | 0 | 0 | 0 |
| Notogillia wetherbyi | 0 | 0 | 0 | 0 |
| Nyctiophylax | 0 | 0 | 0 | 0 |
| Odonata | 0 | 0 | 0 | 0 |
| Odontomyia | 0 | 0 | 0 | 0 |
| Oecetis | 0 | 0 | 0 | 8 |
| Oecetis cinerascens | 0 | 0 | 0 | 0 |
| Oecetis georgia | 0 | 0 | 0 | 0 |
| Oecetis inconspicua cmplx. | 0 | 0 | 0 | 0 |
| Oecetis morsei or sphyra | 0 | 0 | 0 | 0 |
| Oecetis parva | 0 | 0 | 0 | 0 |
| Oecetis persimilis | 0 | 0 | 0 | 0 |
| Oecetis sp. a floyd | 0 | 0 | 0 | 0 |
| Oecetis sp. e floyd | 0 | 0 | 0 | 0 |
| Ora/scirtes | 0 | 0 | 0 | 0 |
| Oribatei | 0 | 0 | 0 | 0 |
| Orthocladiinae | 0 | 0 | 0 | 0 |
| Orthocladiinae gen. c epler | 0 | 0 | 0 | 0 |
| Orthocladiinae gen. f epler | 0 | 0 | 0 | 0 |
| Orthocladius annectens | 0 | 0 | 0 | 0 |
| Orthotrichia | 0 | 0 | 0 | 0 |
| Oxyethira | 0 | 3 | 0 | 0 |
| Pachydiplax longipennis | 0 | 0 | 0 | 0 |
| Pagastiella | 0 | 0 | 0 | 0 |
| Palaemonetes | 0 | 0 | 0 | 0 |
| Palaemonetes kadiakensis | 0 | 0 | 0 | 0 |
| Palaemonetes paludosus | 0 | 0 | 0 | 0 |
| Palpomyia/bezzia grp. | 0 | 0 | 0 | 0 |
| Paracladopelma | 0 | 0 | 0 | 0 |
| Paracladopelma loganae | 0 | 0 | 0 | 0 |
| Paracladopelma undine | 0 | 0 | 0 | 0 |
| Paragnetina | 0 | 0 | 0 | 0 |
| Paragnetina fumosa | 0 | 0 | 0 | 0 |



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|---|---|---|---|---|
| Sample date -> | 1/23/2006 | 6/21/2006 | 11/14/2005 | 11/15/2005 |
| | SampleID 53951/BenthID | SampleID 52834/BenthID | SampleID 49652/BenthID | SampleID 53059/BenthID |
| Taxon Name / SampleID/BenID -> | 35284(#counted) | 35565(#counted) | 35784(#counted) | 36666(#counted) |
| Parakiefferiella | 0 | 0 | 0 | 0 |
| Paralauterborniella nigrohalterale | 0 | 0 | 0 | 0 |
| Paraleptophlebia volitans | 0 | 0 | 0 | 0 |
| Parametriocnemus | 0 | 0 | 0 | 0 |
| Parametriocnemus sp. f epler | 0 | 0 | 0 | 0 |
| Paranyctiophylax | 0 | 0 | 0 | 0 |
| Paraplea | 0 | 0 | 0 | 0 |
| Paraponyx | 0 | 0 | 0 | 0 |
| Paratanytarsus sp. a epler | 0 | 0 | 0 | 0 |
| Paratanytarsus sp. c epler | 0 | 0 | 0 | 0 |
| Paratendipes subaequalis | 0 | 0 | 0 | 0 |
| Pelecypoda | 0 | 0 | 0 | 0 |
| Pelonomus obscurus | 0 | 0 | 0 | 0 |
| Peltodytes | 0 | 0 | 0 | 0 |
| Pentaneura inconspicua | 0 | 1 | 0 | 0 |
| Perlesta | 0 | 0 | 0 | 0 |
| Perlesta placida | 0 | 0 | 0 | 0 |
| Perlesta placida complex | 0 | 0 | 0 | 0 |
| Perlinella | 0 | 0 | 0 | 0 |
| Petrophila | 0 | 0 | 0 | 0 |
| Phaenopsectra obediens grp. | 0 | 0 | 0 | 0 |
| Phaenopsectra punctipes grp. | 0 | 0 | 0 | 0 |
| Phylocentropus | 0 | 0 | 0 | 0 |
| Physella | 0 | 0 | 0 | 0 |
| Physella cubensis | 0 | 0 | 0 | 0 |
| Piona | 0 | 0 | 0 | 0 |
| Pisidiidae | 0 | 0 | 0 | 0 |
| Pisidium | 0 | 0 | 0 | 0 |
| Planariidae | 0 | 0 | 0 | 0 |
| Planorbella duryi | 0 | 0 | 0 | 0 |
| Planorbella scalaris | 0 | 0 | 0 | 0 |
| Planorbidae | 0 | 0 | 0 | 0 |
| Platyhelminthes | 0 | 4 | 0 | 0 |
| Plecoptera | 0 | 0 | 1 | 0 |
| Plumulariidae | 0 | 0 | 0 | 0 |
| Polycentropodidae | 0 | 0 | 0 | 0 |
| Polycentropus | 0 | 0 | 0 | 0 |
| Polypedilum | 0 | 0 | 0 | 0 |
| Polypedilum aviceps | 0 | 0 | 0 | 0 |
| Polypedilum convictum grp. | 0 | 0 | 0 | 0 |
| Polypedilum fallax | 0 | 0 | 0 | 0 |
| Polypedilum flavum | 0 | 2 | 16 | 0 |



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|---|---|---|---|---|
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| | SampleID 53951/BenthID | SampleID 52834/BenthID | SampleID 49652/BenthID | SampleID 53059/BenthID |
| Taxon Name / SampleID/BenID -> | 35284(#counted) | 35565(#counted) | 35784(#counted) | 36666(#counted) |
| Polypedilum halterale grp. | 0 | 0 | 0 | 0 |
| Polypedilum illinoense | 0 | 0 | 0 | 0 |
| Polypedilum illinoense grp. | 0 | 0 | 0 | 1 |
| Polypedilum scalaenum | 0 | 0 | 0 | 0 |
| Polypedilum scalaenum grp. | 0 | 0 | 0 | 0 |
| Polypedilum sp. a epler | 0 | 0 | 0 | 0 |
| Polypedilum tritum | 10 | 0 | 0 | 0 |
| Pomacea paludosa | 0 | 0 | 0 | 0 |
| Pristina aequiseta | 0 | 0 | 0 | 0 |
| Pristina synclites | 0 | 0 | 0 | 0 |
| Pristinella jenkinae | 0 | 0 | 0 | 0 |
| Probezzia | 0 | 0 | 0 | 0 |
| Procambarus | 0 | 0 | 0 | 0 |
| Procladius | 0 | 0 | 0 | 0 |
| Procladius (holotanypus) | 0 | 1 | 0 | 0 |
| Procloeon viridocularis | 0 | 0 | 0 | 0 |
| Progomphus | 0 | 0 | 0 | 0 |
| Progomphus obscurus | 0 | 0 | 0 | 0 |
| Promoresia tardella | 0 | 0 | 0 | 0 |
| Prostoma rubrum | 0 | 0 | 0 | 0 |
| Psammoryctides convolutus | 0 | 0 | 0 | 0 |
| Pseudochironomus | 0 | 0 | 0 | 0 |
| Pseudocloeon | 0 | 0 | 0 | 0 |
| Psychodidae | 0 | 0 | 0 | 0 |
| Pycnopsyche | 0 | 0 | 0 | 0 |
| Pyralidae | 0 | 0 | 0 | 0 |
| Pyrgophorus platyrachis | 0 | 0 | 0 | 0 |
| Ranatra kirkaldyi | 0 | 0 | 0 | 0 |
| Rhagovelia | 0 | 0 | 0 | 0 |
| Rheocricotopus | 0 | 0 | 0 | 0 |
| Rheocricotopus robacki | 0 | 0 | 0 | 0 |
| Rheocricotopus tuberculatus | 0 | 0 | 0 | 0 |
| Rheotanytarsus | 0 | 0 | 0 | 0 |
| Rheotanytarsus distinctissimus grp. | 0 | 0 | 0 | 0 |
| Rheotanytarsus exiguus | 0 | 0 | 0 | 0 |
| Rheotanytarsus exiguus grp. | 0 | 1 | 9 | 10 |
| Rheotanytarsus pellucidus | 0 | 0 | 0 | 0 |
| Scirtes | 0 | 0 | 0 | 0 |
| Scirtidae | 0 | 0 | 0 | 0 |
| Serratella deficiens | 0 | 0 | 0 | 0 |
| Sialis | 0 | 0 | 0 | 0 |
| Silvius | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | GLA630GS | 273116508208152 | GAD104US | UNI234LV |
|---|---|---|---|---|
| Sample date -> | 1/23/2006 | 6/21/2006 | 11/14/2005 | 11/15/2005 |
| | SampleID 53951/BenthID | SampleID 52834/BenthID | SampleID 49652/BenthID | SampleID 53059/BenthID |
| Taxon Name / SampleID/BenID -> | 35284(#counted) | 35565(#counted) | 35784(#counted) | 36666(#counted) |
| Simuliidae | 0 | 0 | 0 | 0 |
| Simulium | 0 | 0 | 23 | 0 |
| Slavina appendiculata | 2 | 3 | 0 | 2 |
| Somatogyrus walkerianus | 0 | 0 | 0 | 0 |
| Sperchon | 0 | 0 | 0 | 0 |
| Sperchonopsis | 0 | 0 | 0 | 0 |
| Sperchopsis | 0 | 0 | 0 | 0 |
| Sphaeriidae | 0 | 0 | 0 | 0 |
| Sphaeriidae(mollusca) | 0 | 0 | 0 | 0 |
| Sphaeroma | 0 | 0 | 0 | 0 |
| Sphaeromias | 0 | 0 | 0 | 0 |
| Spirosperma | 0 | 0 | 0 | 0 |
| Spirosperma ferox | 0 | 0 | 0 | 0 |
| Stelechomyia perpulchra | 0 | 0 | 0 | 0 |
| Stempellina | 0 | 0 | 0 | 0 |
| Stempellina sp. a epler | 0 | 0 | 0 | 0 |
| Stempellinella | 0 | 0 | 0 | 0 |
| Stenacron | 0 | 0 | 0 | 0 |
| Stenacron floridense | 0 | 0 | 0 | 0 |
| Stenacron interpunctatum | 0 | 0 | 0 | 0 |
| Stenelmis | 0 | 4 | 1 | 10 |
| Stenelmis decorata | 0 | 0 | 0 | 0 |
| Stenelmis hungerfordi | 0 | 0 | 0 | 0 |
| Stenochironomus | 5 | 1 | 0 | 0 |
| Stenonema | 0 | 0 | 0 | 0 |
| Stenonema exiguum | 0 | 0 | 0 | 0 |
| Stenonema smithae | 0 | 0 | 0 | 0 |
| Stratiomyidae | 0 | 0 | 0 | 0 |
| Stylaria lacustris | 0 | 0 | 0 | 0 |
| Synorthocladius | 0 | 0 | 0 | 0 |
| Tabanus | 0 | 0 | 0 | 0 |
| Taeniopteryx lita | 0 | 0 | 0 | 0 |
| Tanytarsus | 4 | 0 | 1 | 0 |
| Tanytarsus sp. a epler | 0 | 3 | 0 | 0 |
| Tanytarsus sp. c epler | 0 | 3 | 0 | 0 |
| Tanytarsus sp. d epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. e epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. g epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. l epler | 0 | 0 | 0 | 2 |
| Tanytarsus sp. m epler | 0 | 13 | 0 | 0 |
| Tanytarsus sp. o epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. r epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. s epler | 0 | 5 | 0 | 0 |
| Tanytarsus sp. t epler | 0 | 0 | 0 | 0 |
| Tanytarsus sp. u epler | 0 | 0 | 0 | 0 |
| Taphromysis bowmani | 0 | 0 | 0 | 0 |



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| As Calculated / STORET station -> | GLA630GS | 273116508208152 | GAD104US | UNI234LV |
|---|---|---|---|---|
| Sample date -> | 1/23/2006 | 6/21/2006 | 11/14/2005 | 11/15/2005 |
| | SampleID 53951/BenthID | SampleID 52834/BenthID | SampleID 49652/BenthID | SampleID 53059/BenthID |
| Taxon Name / SampleID/BenID -> | 35284(#counted) | 35565(#counted) | 35784(#counted) | 36666(#counted) |
| Thienemanniella | 0 | 0 | 0 | 0 |
| Thienemanniella lobapodema | 2 | 0 | 0 | 0 |
| Thienemanniella similis | 0 | 0 | 0 | 0 |
| Thienemanniella sp. a epler | 0 | 0 | 0 | 0 |
| Thienemannimyia grp. | 0 | 0 | 0 | 4 |
| Tipula | 0 | 0 | 0 | 0 |
| Tipulidae | 0 | 0 | 0 | 0 |
| Torrenticola | 0 | 0 | 0 | 0 |
| Triaenodes | 0 | 2 | 0 | 0 |
| Triaenodes ignitus | 0 | 0 | 0 | 0 |
| Triaenodes perna | 0 | 0 | 0 | 0 |
| Tribelos | 0 | 0 | 0 | 0 |
| Tribelos atrum | 0 | 0 | 0 | 0 |
| Tribelos fuscicornis | 0 | 0 | 0 | 0 |
| Tribelos jucundum | 0 | 0 | 0 | 1 |
| Tricorythodes albilineatus | 0 | 0 | 0 | 0 |
| Tubificidae | 1 | 0 | 0 | 0 |
| Turbellaria | 0 | 0 | 0 | 0 |
| Tvetenia | 0 | 0 | 0 | 0 |
| Tvetenia discoloripes grp. | 0 | 0 | 0 | 0 |
| Unionicola | 0 | 0 | 0 | 0 |
| Unniella multivirga | 0 | 0 | 0 | 0 |
| Veliidae | 0 | 0 | 0 | 0 |
| Xenochironomus xenolabis | 0 | 0 | 0 | 0 |
| Xestochironomus | 0 | 0 | 0 | 0 |
| Xylotopus par | 0 | 0 | 0 | 0 |
| Zygoptera | 0 | 0 | 0 | 0 |

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As Calculated / STORET station -> LIB104LV
Sample date -> 11/21/2005

| Taxon Name / SampleID/BenID -> | SampleID 49677/BenthID 36688(#counted) | Phylum | Class | Order |
|---|---|---|---|---|
| Ablabesmyia (karelia) grp. | 0 | Arthropoda | Insecta | Diptera |
| Ablabesmyia hauberi | 0 | Arthropoda | Insecta | Diptera |
| Ablabesmyia mallochi | 0 | Arthropoda | Insecta | Diptera |
| Ablabesmyia rhamphe grp. | 0 | Arthropoda | Insecta | Diptera |
| Acentrella parvula | 0 | Arthropoda | Insecta | Ephemeroptera |
| Acerpenna pygmaea | 0 | Arthropoda | Insecta | Ephemeroptera |
| Acroneuria | 0 | Arthropoda | Insecta | Plecoptera |
| Acroneuria abnormis | 0 | Arthropoda | Insecta | Plecoptera |
| Acroneuria arenosa | 0 | Arthropoda | Insecta | Plecoptera |
| Acroneuria arenosa/evoluta | 0 | Arthropoda | Insecta | Plecoptera |
| Acroneuria lycorias | 6 | Arthropoda | Insecta | Plecoptera |
| Agarodes libalis | 0 | Arthropoda | Insecta | Trichoptera |
| Alluaudomyia | 0 | Arthropoda | Insecta | Diptera |
| Amnicola | 0 | Mollusca | Gastropoda | Mesogastropoda |
| Amnicola dalli | 0 | Mollusca | Gastropoda | Mesogastropoda |
| Amnicola dalli johnsoni | 0 | Mollusca | Gastropoda | Mesogastropoda |
| Amphipoda | 0 | Arthropoda | Crustacea | Amphipoda |
| Ancylidae | 0 | Mollusca | Gastropoda | Basommatophora |
| Ancyronyx | 0 | Arthropoda | Insecta | Coleoptera |
| Ancyronyx variegatus | 3 | Arthropoda | Insecta | Coleoptera |
| Anisocentropus pyraloides | 0 | Arthropoda | Insecta | Trichoptera |
| Anopheles | 0 | Arthropoda | Insecta | Diptera |
| Apsectrotanypus johnsoni | 0 | Arthropoda | Insecta | Diptera |
| Argia | 1 | Arthropoda | Insecta | Odonata |
| Argia fumipennis | 0 | Arthropoda | Insecta | Odonata |
| Argia moesta | 0 | Arthropoda | Insecta | Odonata |
| Argia sedula | 0 | Arthropoda | Insecta | Odonata |
| Argia tibialis | 0 | Arthropoda | Insecta | Odonata |
| Arrenurus | 0 | Arthropoda | Arachnida | Acariformes |
| Arrenurus problecornis | 0 | Arthropoda | Arachnida | Acariformes |
| Astacidae | 0 | Arthropoda | Crustacea | Decapoda |
| Atherix | 0 | Arthropoda | Insecta | Diptera |
| Atractides | 0 | Arthropoda | Arachnida | Acariformes |
| Atrichopogon | 0 | Arthropoda | Insecta | Diptera |
| Aulodrilus pigueti | 0 | Annelida | Oligochaeta | Haplotaxida |
| Aulodrilus pluriseta | 0 | Annelida | Oligochaeta | Haplotaxida |
| Baetidae | 0 | Arthropoda | Insecta | Ephemeroptera |
| Baetis | 0 | Arthropoda | Insecta | Ephemeroptera |
| Baetis intercalaris | 0 | Arthropoda | Insecta | Ephemeroptera |
| Baetisca rogersi | 0 | Arthropoda | Insecta | Ephemeroptera |
| Beardius truncatus | 0 | Arthropoda | Insecta | Diptera |
| Belostoma | 0 | Arthropoda | Insecta | Heteroptera |
| Belostomatidae | 0 | Arthropoda | Insecta | Heteroptera |
| Bivalvia | 0 | Mollusca | Bivalvia | Bivalvia |
| Bourletiella | 0 | Arthropoda | Insecta | Collembola |
| Boyeria vinosa | 0 | Arthropoda | Insecta | Odonata |
| Brachycentrus | 0 | Arthropoda | Insecta | Trichoptera |
| Brachycentrus chelatus | 0 | Arthropoda | Insecta | Trichoptera |
| Brachycentrus numerosus | 0 | Arthropoda | Insecta | Trichoptera |



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As Calculated / STORET station -> LIB104LV
Sample date -> 11/21/2005

| Taxon Name / SampleID/BenID -> | SampleID 49677/BenthID 36688(#counted) | Phylum | Class | Order |
|---|---|---|---|---|
| Brachycercus maculatus | 0 | Arthropoda | Insecta | Ephemeroptera |
| Caecidotea | 0 | Arthropoda | Crustacea | Isopoda |
| Caecidotea racovitzai | 0 | Arthropoda | Crustacea | Isopoda |
| Caenis | 0 | Arthropoda | Insecta | Ephemeroptera |
| Caenis diminuta | 0 | Arthropoda | Insecta | Ephemeroptera |
| Caenis hilaris | 0 | Arthropoda | Insecta | Ephemeroptera |
| Callibaetis floridanus | 0 | Arthropoda | Insecta | Ephemeroptera |
| Calopteryx | 0 | Arthropoda | Insecta | Odonata |
| Calopteryx maculata | 1 | Arthropoda | Insecta | Odonata |
| Cambaridae | 0 | Arthropoda | Crustacea | Decapoda |
| Campeloma | 0 | Mollusca | Gastropoda | Mesogastropoda |
| Campeloma limum | 0 | Mollusca | Gastropoda | Mesogastropoda |
| Cassidinidea ovalis | 0 | Arthropoda | Crustacea | Isopoda |
| Cecidomyiidae | 0 | Arthropoda | Insecta | Diptera |
| Ceratopogonidae | 0 | Arthropoda | Insecta | Diptera |
| Cernotina | 0 | Arthropoda | Insecta | Trichoptera |
| Chaoborus | 0 | Arthropoda | Insecta | Diptera |
| Chaoborus albatus | 0 | Arthropoda | Insecta | Diptera |
| Chauliodes | 0 | Arthropoda | Insecta | Megaloptera |
| Chelifera | 0 | Arthropoda | Insecta | Diptera |
| Cheumatopsyche | 1 | Arthropoda | Insecta | Trichoptera |
| Chimarra | 2 | Arthropoda | Insecta | Trichoptera |
| Chironomus | 0 | Arthropoda | Insecta | Diptera |
| Choroterpes basalis | 0 | Arthropoda | Insecta | Ephemeroptera |
| Choroterpes hubbelli | 0 | Arthropoda | Insecta | Ephemeroptera |
| Cladotanytarsus | 0 | Arthropoda | Insecta | Diptera |
| Cladotanytarsus cf. daviesi | 0 | Arthropoda | Insecta | Diptera |
| Cladotanytarsus sp. i epler | 0 | Arthropoda | Insecta | Diptera |
| Clathrosperchon | 0 | Arthropoda | Arachnida | Acariformes |
| Climacea areolaris | 0 | Arthropoda | Insecta | Megaloptera |
| Clinotanypus | 0 | Arthropoda | Insecta | Diptera |
| Coelotanypus | 0 | Arthropoda | Insecta | Diptera |
| Coelotanypus scapularis | 0 | Arthropoda | Insecta | Diptera |
| Coenagrionidae | 0 | Arthropoda | Insecta | Odonata |
| Collembola | 0 | Arthropoda | Insecta | Collembola |
| Conchapelopia | 0 | Arthropoda | Insecta | Diptera |
| Corbicula fluminea | 0 | Mollusca | Bivalvia | Veneroida |
| Corduliidae | 0 | Arthropoda | Insecta | Odonata |
| Corydalus | 0 | Arthropoda | Insecta | Megaloptera |
| Corydalus cornuta | 0 | Arthropoda | Insecta | Megaloptera |
| Corydalus cornutus | 0 | Arthropoda | Insecta | Megaloptera |
| Corynoneura | 0 | Arthropoda | Insecta | Diptera |
| Corynoneura sp. b epler | 0 | Arthropoda | Insecta | Diptera |
| Corynoneura sp. c epler | 0 | Arthropoda | Insecta | Diptera |
| Corynoneura taris | 0 | Arthropoda | Insecta | Diptera |



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| Taxon Name / SampleID/BenID -> | SampleID 49677/BenthID 36688(#counted) | Phylum | Class | Order |
|---|---|---|---|---|
| Crangonyx | 0 | Arthropoda | Crustacea | Amphipoda |
| Cricotopus | 0 | Arthropoda | Insecta | Diptera |
| Cricotopus bicinctus | 0 | Arthropoda | Insecta | Diptera |
| Cricotopus bicinctus grp. | 0 | Arthropoda | Insecta | Diptera |
| Cricotopus or orthocladius | 0 | Arthropoda | Insecta | Diptera |
| Cryptochironomus | 0 | Arthropoda | Insecta | Diptera |
| Cryptotendipes | 0 | Arthropoda | Insecta | Diptera |
| Curculionidae | 0 | Arthropoda | Insecta | Coleoptera |
| Cyrnellus fraternus | 0 | Arthropoda | Insecta | Trichoptera |
| Demicryptochironomus | 0 | Arthropoda | Insecta | Diptera |
| Dero digitata | 0 | Annelida | Oligochaeta | Haplotaxida |
| Dero digitata complex | 0 | Annelida | Oligochaeta | Haplotaxida |
| Dero lodeni | 0 | Annelida | Oligochaeta | Haplotaxida |
| Dero pectinata | 0 | Annelida | Oligochaeta | Haplotaxida |
| Dero trifida | 0 | Annelida | Oligochaeta | Haplotaxida |
| Dero vaga | 0 | Annelida | Oligochaeta | Haplotaxida |
| Dicrotendipes | 0 | Arthropoda | Insecta | Diptera |
| Dicrotendipes modestus | 0 | Arthropoda | Insecta | Diptera |
| Dicrotendipes neomodestus | 0 | Arthropoda | Insecta | Diptera |
| Dicrotendipes simpsoni | 0 | Arthropoda | Insecta | Diptera |
| Dicrotendipes sp. a epler | 0 | Arthropoda | Insecta | Diptera |
| Dineutus | 0 | Arthropoda | Insecta | Coleoptera |
| Dineutus discolor | 1 | Arthropoda | Insecta | Coleoptera |
| Dineutus serrulatus | 0 | Arthropoda | Insecta | Coleoptera |
| Diplectrona modesta | 0 | Arthropoda | Insecta | Trichoptera |
| Dixa | 0 | Arthropoda | Insecta | Diptera |
| Dixella | 0 | Arthropoda | Insecta | Diptera |
| Djalmabatista pulcher | 0 | Arthropoda | Insecta | Diptera |
| Dolichopodidae | 0 | Arthropoda | Insecta | Diptera |
| Dromogomphus armatus | 0 | Arthropoda | Insecta | Odonata |
| Dromogomphus spinosus | 0 | Arthropoda | Insecta | Odonata |
| Dryopidae | 0 | Arthropoda | Insecta | Coleoptera |
| Dubiraphia | 0 | Arthropoda | Insecta | Coleoptera |
| Dubiraphia quadrinotata | 0 | Arthropoda | Insecta | Coleoptera |
| Dubiraphia vittata | 0 | Arthropoda | Insecta | Coleoptera |
| Dugesia | 0 | Platyhelminthes | Turbellaria | Tricladida |
| Dugesia tigrina | 0 | Platyhelminthes | Turbellaria | Tricladida |
| Eclipidrilus | 0 | Annelida | Oligochaeta | Lumbriculida |
| Eclipidrilus palustris | 0 | Annelida | Oligochaeta | Lumbriculida |
| Ectopria | 0 | Arthropoda | Insecta | Coleoptera |
| Elimia | 0 | Mollusca | Gastropoda | Mesogastropoda |
| Elimia floridensis | 0 | Mollusca | Gastropoda | Mesogastropoda |
| Empididae | 0 | Arthropoda | Insecta | Diptera |
| Enallagma | 0 | Arthropoda | Insecta | Odonata |



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| Taxon Name / SampleID/BenID -> | SampleID 49677/BenthID 36688(#counted) | Phylum | Class | Order |
|---|---|---|---|---|
| Enallagma cardenium | 0 | Arthropoda | Insecta | Odonata |
| Enchytraeidae | 1 | Annelida | Oligochaeta | Haplotaxida |
| Endotribelos hesperium | 0 | Arthropoda | Insecta | Diptera |
| Enochrus | 0 | Arthropoda | Insecta | Coleoptera |
| Ephemerellidae | 0 | Arthropoda | Insecta | Ephemeroptera |
| Ephydridae | 0 | Arthropoda | Insecta | Diptera |
| Epitheca | 0 | Arthropoda | Insecta | Odonata |
| Epitheca princeps regina | 0 | Arthropoda | Insecta | Odonata |
| Eurylophella doris | 7 | Arthropoda | Insecta | Ephemeroptera |
| Eurylophella temporalis | 0 | Arthropoda | Insecta | Ephemeroptera |
| Ferrissia | 0 | Mollusca | Gastropoda | Basommatophora |
| Gammaridae | 0 | Arthropoda | Crustacea | Amphipoda |
| Gammarus | 0 | Arthropoda | Crustacea | Amphipoda |
| Gammarus tigrinus | 0 | Arthropoda | Crustacea | Amphipoda |
| Gastropoda | 0 | Mollusca | Gastropoda | Gastropoda |
| Geayia | 0 | Arthropoda | Arachnida | Acariformes |
| Gerridae | 0 | Arthropoda | Insecta | Heteroptera |
| Gloiobdella elongata | 0 | Annelida | Hirudinea | Rhynchobdellida |
| Goeldichironomus fluctuans | 0 | Arthropoda | Insecta | Diptera |
| Gomphidae | 0 | Arthropoda | Insecta | Odonata |
| Gomphus | 0 | Arthropoda | Insecta | Odonata |
| Gomphus minutus | 0 | Arthropoda | Insecta | Odonata |
| Gonielmis | 0 | Arthropoda | Insecta | Coleoptera |
| Gonielmis dietrichi | 2 | Arthropoda | Insecta | Coleoptera |
| Grandidierella bonnieroides | 0 | Arthropoda | Crustacea | Amphipoda |
| Gyretes iricolor | 0 | Arthropoda | Insecta | Coleoptera |
| Haber speciosus | 0 | Annelida | Oligochaeta | Haplotaxida |
| Hagenius brevistylus | 0 | Arthropoda | Insecta | Odonata |
| Hebetancylus excentricus | 0 | Mollusca | Gastropoda | Basommatophora |
| Helobdella stagnalis | 0 | Annelida | Hirudinea | Rhynchobdellida |
| Helobdella triserialis | 0 | Annelida | Hirudinea | Rhynchobdellida |
| Helopelopia | 0 | Arthropoda | Insecta | Diptera |
| Hemerodromia | 3 | Arthropoda | Insecta | Diptera |
| Hemiptera | 0 | Arthropoda | Insecta | Hemiptera |
| Heptageniidae | 0 | Arthropoda | Insecta | Ephemeroptera |
| Hetaerina | 0 | Arthropoda | Insecta | Odonata |
| Hetaerina titia | 0 | Arthropoda | Insecta | Odonata |
| Heteroplectron americanum | 0 | Arthropoda | Insecta | Trichoptera |
| Hexagenia | 0 | Arthropoda | Insecta | Ephemeroptera |
| Hexagenia bilineata | 0 | Arthropoda | Insecta | Ephemeroptera |
| Hexagenia limbata | 0 | Arthropoda | Insecta | Ephemeroptera |
| Hexagenia munda orlando | 0 | Arthropoda | Insecta | Ephemeroptera |
| Hexatoma | 0 | Arthropoda | Insecta | Diptera |
| Hyalella azteca | 0 | Arthropoda | Crustacea | Amphipoda |
| Hydra | 0 | Cnidaria | Hydrozoa | Hydroida |
| Hydrachna | 0 | Arthropoda | Arachnida | Acariformes |
| Hydraena marginicollis | 0 | Arthropoda | Insecta | Coleoptera |
| Hydraenidae | 0 | Arthropoda | Insecta | Coleoptera |



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| Taxon Name / SampleID/BenID -> | SampleID 49677/BenthID 36688(#counted) | Phylum | Class | Order |
|---|---|---|---|---|
| Crangonyx | 0 | Arthropoda | Crustacea | Amphipoda |
| Cricotopus | 0 | Arthropoda | Insecta | Diptera |
| Cricotopus bicinctus | 0 | Arthropoda | Insecta | Diptera |
| Cricotopus bicinctus grp. | 0 | Arthropoda | Insecta | Diptera |
| Cricotopus or orthocladius | 0 | Arthropoda | Insecta | Diptera |
| Cryptochironomus | 0 | Arthropoda | Insecta | Diptera |
| Cryptotendipes | 0 | Arthropoda | Insecta | Diptera |
| Curculionidae | 0 | Arthropoda | Insecta | Coleoptera |
| Cyrnellus fraternus | 0 | Arthropoda | Insecta | Trichoptera |
| Demicryptochironomus | 0 | Arthropoda | Insecta | Diptera |
| Dero digitata | 0 | Annelida | Oligochaeta | Haplotaxida |
| Dero digitata complex | 0 | Annelida | Oligochaeta | Haplotaxida |
| Dero lodeni | 0 | Annelida | Oligochaeta | Haplotaxida |
| Dero pectinata | 0 | Annelida | Oligochaeta | Haplotaxida |
| Dero trifida | 0 | Annelida | Oligochaeta | Haplotaxida |
| Dero vaga | 0 | Annelida | Oligochaeta | Haplotaxida |
| Dicrotendipes | 0 | Arthropoda | Insecta | Diptera |
| Dicrotendipes modestus | 0 | Arthropoda | Insecta | Diptera |
| Dicrotendipes neomodestus | 0 | Arthropoda | Insecta | Diptera |
| Dicrotendipes simpsoni | 0 | Arthropoda | Insecta | Diptera |
| Dicrotendipes sp. a epler | 0 | Arthropoda | Insecta | Diptera |
| Dineutus | 0 | Arthropoda | Insecta | Coleoptera |
| Dineutus discolor | 1 | Arthropoda | Insecta | Coleoptera |
| Dineutus serrulatus | 0 | Arthropoda | Insecta | Coleoptera |
| Diplectrona modesta | 0 | Arthropoda | Insecta | Trichoptera |
| Dixa | 0 | Arthropoda | Insecta | Diptera |
| Dixella | 0 | Arthropoda | Insecta | Diptera |
| Djalmabatista pulcher | 0 | Arthropoda | Insecta | Diptera |
| Dolichopodidae | 0 | Arthropoda | Insecta | Diptera |
| Dromogomphus armatus | 0 | Arthropoda | Insecta | Odonata |
| Dromogomphus spinosus | 0 | Arthropoda | Insecta | Odonata |
| Dryopidae | 0 | Arthropoda | Insecta | Coleoptera |
| Dubiraphia | 0 | Arthropoda | Insecta | Coleoptera |
| Dubiraphia quadrinotata | 0 | Arthropoda | Insecta | Coleoptera |
| Dubiraphia vittata | 0 | Arthropoda | Insecta | Coleoptera |
| Dugesia | 0 | Platyhelminthes | Turbellaria | Tricladida |
| Dugesia tigrina | 0 | Platyhelminthes | Turbellaria | Tricladida |
| Eclipidrilus | 0 | Annelida | Oligochaeta | Lumbriculida |
| Eclipidrilus palustris | 0 | Annelida | Oligochaeta | Lumbriculida |
| Ectopria | 0 | Arthropoda | Insecta | Coleoptera |
| Elimia | 0 | Mollusca | Gastropoda | Mesogastropoda |
| Elimia floridensis | 0 | Mollusca | Gastropoda | Mesogastropoda |
| Empididae | 0 | Arthropoda | Insecta | Diptera |
| Enallagma | 0 | Arthropoda | Insecta | Odonata |



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| Taxon Name / SampleID/BenID -> | SampleID 49677/BenthID 36688(#counted) | Phylum | Class | Order |
|---|---|---|---|---|
| Lype diversa | 1 | Arthropoda | Insecta | Trichoptera |
| Maccaffertium | 0 | Arthropoda | Insecta | Ephemeroptera |
| Maccaffertium smithae | 9 | Arthropoda | Insecta | Ephemeroptera |
| Macromia | 0 | Arthropoda | Insecta | Odonata |
| Macromia taeniolata | 0 | Arthropoda | Insecta | Odonata |
| Macromiidae | 0 | Arthropoda | Insecta | Odonata |
| Macronychus glabratus | 0 | Arthropoda | Insecta | Coleoptera |
| Macrostemum carolina | 0 | Arthropoda | Insecta | Trichoptera |
| Mayatrichia | 0 | Arthropoda | Insecta | Trichoptera |
| Mayatrichia ayama | 0 | Arthropoda | Insecta | Trichoptera |
| Meropelopia | 0 | Arthropoda | Insecta | Diptera |
| Mesosmittia | 0 | Arthropoda | Insecta | Diptera |
| Metrobates | 0 | Arthropoda | Insecta | Heteroptera |
| Micrasema | 0 | Arthropoda | Insecta | Trichoptera |
| Micrasema rusticum | 0 | Arthropoda | Insecta | Trichoptera |
| Micrasema wataga | 0 | Arthropoda | Insecta | Trichoptera |
| Microcylloepus | 0 | Arthropoda | Insecta | Coleoptera |
| Microcylloepus pusillus | 2 | Arthropoda | Insecta | Coleoptera |
| Micromenetus | 0 | Mollusca | Gastropoda | Basommatophora |
| Micromenetus dilatatus | 0 | Mollusca | Gastropoda | Basommatophora |
| Microtendipes pedellus | 0 | Arthropoda | Insecta | Diptera |
| Microtendipes pedellus grp. | 0 | Arthropoda | Insecta | Diptera |
| Microtendipes rydalensis | 0 | Arthropoda | Insecta | Diptera |
| Microtendipes rydalensis grp. | 0 | Arthropoda | Insecta | Diptera |
| Mideopsis | 0 | Arthropoda | Arachnida | Acariformes |
| Molanna | 0 | Arthropoda | Insecta | Trichoptera |
| Mooreobdella | 0 | Annelida | Hirudinea | Arhynchobdellida |
| Mooreobdella tetragon | 0 | Annelida | Hirudinea | Arhynchobdellida |
| Muscidae | 0 | Arthropoda | Insecta | Diptera |
| Naididae | 0 | Annelida | Oligochaeta | Haplotaxida |
| Nais behningi | 0 | Annelida | Oligochaeta | Haplotaxida |
| Nais communis | 0 | Annelida | Oligochaeta | Haplotaxida |
| Nais communis complex | 0 | Annelida | Oligochaeta | Haplotaxida |
| Nais pardalis | 0 | Annelida | Oligochaeta | Haplotaxida |
| Nais simplex | 0 | Annelida | Oligochaeta | Haplotaxida |
| Nais variabilis | 0 | Annelida | Oligochaeta | Haplotaxida |
| Nanocladius | 0 | Arthropoda | Insecta | Diptera |
| Nectopsyche | 0 | Arthropoda | Insecta | Trichoptera |
| Nectopsyche candida | 0 | Arthropoda | Insecta | Trichoptera |
| Nectopsyche exquisita | 0 | Arthropoda | Insecta | Trichoptera |
| Nectopsyche pavida | 0 | Arthropoda | Insecta | Trichoptera |
| Nemertea | 0 | Nemertea | Nemertea | Nemertea |
| Neoperla | 0 | Arthropoda | Insecta | Plecoptera |
| Neoperla clymene | 0 | Arthropoda | Insecta | Plecoptera |
| Neoporus | 0 | Arthropoda | Insecta | Coleoptera |
| Neotrichia | 0 | Arthropoda | Insecta | Trichoptera |
| Neumania | 0 | Arthropoda | Arachnida | Acariformes |



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| Taxon Name / SampleID/BenID -> | SampleID 49677/BenthID 36688(#counted) | Phylum | Class | Order |
|---|---|---|---|---|
| Neumania distincta | 0 | Arthropoda | Arachnida | Acariformes |
| Neureclipsis | 0 | Arthropoda | Insecta | Trichoptera |
| Neureclipsis crepuscularis | 0 | Arthropoda | Insecta | Trichoptera |
| Neurocordulia | 0 | Arthropoda | Insecta | Odonata |
| Neurocordulia alabamensis | 0 | Arthropoda | Insecta | Odonata |
| Neurocordulia virginiensis | 0 | Arthropoda | Insecta | Odonata |
| Nigronia | 0 | Arthropoda | Insecta | Megaloptera |
| Nigronia fasciatus | 0 | Arthropoda | Insecta | Megaloptera |
| Nigronia serricornis | 0 | Arthropoda | Insecta | Megaloptera |
| Nilotanypus | 0 | Arthropoda | Insecta | Diptera |
| Nilothauma | 0 | Arthropoda | Insecta | Diptera |
| Notogillia wetherbyi | 0 | Mollusca | Gastropoda | Mesogastropoda |
| Nyctiophylax | 0 | Arthropoda | Insecta | Trichoptera |
| Odonata | 0 | Arthropoda | Insecta | Odonata |
| Odontomyia | 0 | Arthropoda | Insecta | Diptera |
| Oecetis | 4 | Arthropoda | Insecta | Trichoptera |
| Oecetis cinerascens | 0 | Arthropoda | Insecta | Trichoptera |
| Oecetis georgia | 0 | Arthropoda | Insecta | Trichoptera |
| Oecetis inconspicua cmplx. | 0 | Arthropoda | Insecta | Trichoptera |
| Oecetis morsei or sphyra | 0 | Arthropoda | Insecta | Trichoptera |
| Oecetis parva | 0 | Arthropoda | Insecta | Trichoptera |
| Oecetis persimilis | 0 | Arthropoda | Insecta | Trichoptera |
| Oecetis sp. a floyd | 0 | Arthropoda | Insecta | Trichoptera |
| Oecetis sp. e floyd | 0 | Arthropoda | Insecta | Trichoptera |
| Ora/scirtes | 1 | Arthropoda | Insecta | Coleoptera |
| Oribatei | 0 | Arthropoda | Arachnida | Oribatei |
| Orthocladiinae | 0 | Arthropoda | Insecta | Diptera |
| Orthocladiinae gen. c epler | 0 | Arthropoda | Insecta | Diptera |
| Orthocladiinae gen. f epler | 0 | Arthropoda | Insecta | Diptera |
| Orthocladius annectens | 0 | Arthropoda | Insecta | Diptera |
| Orthotrichia | 0 | Arthropoda | Insecta | Trichoptera |
| Oxyethira | 0 | Arthropoda | Insecta | Trichoptera |
| Pachydiplax longipennis | 0 | Arthropoda | Insecta | Odonata |
| Pagastiella | 0 | Arthropoda | Insecta | Diptera |
| Palaemonetes | 0 | Arthropoda | Crustacea | Decapoda |
| Palaemonetes kadiakensis | 0 | Arthropoda | Crustacea | Decapoda |
| Palaemonetes paludosus | 0 | Arthropoda | Crustacea | Decapoda |
| Palpomyia/bezzia grp. | 1 | Arthropoda | Insecta | Diptera |
| Paracladopelma | 0 | Arthropoda | Insecta | Diptera |
| Paracladopelma loganae | 0 | Arthropoda | Insecta | Diptera |
| Paracladopelma undine | 0 | Arthropoda | Insecta | Diptera |
| Paragnetina | 0 | Arthropoda | Insecta | Plecoptera |
| Paragnetina fumosa | 0 | Arthropoda | Insecta | Plecoptera |



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| Taxon Name / SampleID/BenID -> | SampleID 49677/BenthID 36688(#counted) | Phylum | Class | Order |
|---|---|---|---|---|
| Parakiefferiella | 0 | Arthropoda | Insecta | Diptera |
| Paralauterborniella nigrohalterale | 0 | Arthropoda | Insecta | Diptera |
| Paraleptophlebia volitans | 0 | Arthropoda | Insecta | Ephemeroptera |
| Parametriocnemus | 0 | Arthropoda | Insecta | Diptera |
| Parametriocnemus sp. f epler | 0 | Arthropoda | Insecta | Diptera |
| Paranyctiophylax | 0 | Arthropoda | Insecta | Trichoptera |
| Paraplea | 0 | Arthropoda | Insecta | Heteroptera |
| Paraponyx | 0 | Arthropoda | Insecta | Lepidoptera |
| Paratanytarsus sp. a epler | 0 | Arthropoda | Insecta | Diptera |
| Paratanytarsus sp. c epler | 0 | Arthropoda | Insecta | Diptera |
| Paratendipes subaequalis | 0 | Arthropoda | Insecta | Diptera |
| Pelecypoda | 0 | Mollusca | Pelecypoda | Pelecypoda |
| Pelonomus obscurus | 0 | Arthropoda | Insecta | Coleoptera |
| Peltodytes | 0 | Arthropoda | Insecta | Coleoptera |
| Pentaneura inconspicua | 0 | Arthropoda | Insecta | Diptera |
| Perlesta | 0 | Arthropoda | Insecta | Plecoptera |
| Perlesta placida | 0 | Arthropoda | Insecta | Plecoptera |
| Perlesta placida complex | 0 | Arthropoda | Insecta | Plecoptera |
| Perlinella | 0 | Arthropoda | Insecta | Plecoptera |
| Petrophila | 0 | Arthropoda | Insecta | Lepidoptera |
| Phaenopsectra obediens grp. | 0 | Arthropoda | Insecta | Diptera |
| Phaenopsectra punctipes grp. | 0 | Arthropoda | Insecta | Diptera |
| Phylocentropus | 0 | Arthropoda | Insecta | Trichoptera |
| Physella | 0 | Mollusca | Gastropoda | Basommatophora |
| Physella cubensis | 0 | Mollusca | Gastropoda | Basommatophora |
| Piona | 0 | Arthropoda | Arachnida | Acariformes |
| Pisidiidae | 0 | Mollusca | Bivalvia | Veneroida |
| Pisidium | 0 | Mollusca | Bivalvia | Veneroida |
| Planariidae | 0 | Platyhelminthes | Turbellaria | Tricladida |
| Planorbella duryi | 0 | Mollusca | Gastropoda | Basommatophora |
| Planorbella scalaris | 0 | Mollusca | Gastropoda | Basommatophora |
| Planorbidae | 0 | Mollusca | Gastropoda | Basommatophora |
| Platyhelminthes | 0 | Platyhelminthes | Platyhelminthes | Platyhelminthes |
| Plecoptera | 0 | Arthropoda | Insecta | Plecoptera |
| Plumulariidae | 0 | Cnidaria | Hydrozoa | Hydroida |
| Polycentropodidae | 0 | Arthropoda | Insecta | Trichoptera |
| Polycentropus | 0 | Arthropoda | Insecta | Trichoptera |
| Polypedilum | 0 | Arthropoda | Insecta | Diptera |
| Polypedilum aviceps | 0 | Arthropoda | Insecta | Diptera |
| Polypedilum convictum grp. | 0 | Arthropoda | Insecta | Diptera |
| Polypedilum fallax | 0 | Arthropoda | Insecta | Diptera |
| Polypedilum flavum | 0 | Arthropoda | Insecta | Diptera |



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|---|---|---|---|---|
| Sample date -> | 11/21/2005 | | | |
| | SampleID | | | |
| | 49677/BenthID | | | |
| Taxon Name / SampleID/BenID -> | 36688(#counted) | Phylum | Class | Order |
| Polypedilum halterale grp. | 0 | Arthropoda | Insecta | Diptera |
| Polypedilum illinoense | 0 | Arthropoda | Insecta | Diptera |
| Polypedilum illinoense grp. | 0 | Arthropoda | Insecta | Diptera |
| Polypedilum scalaenum | 0 | Arthropoda | Insecta | Diptera |
| Polypedilum scalaenum grp. | 3 | Arthropoda | Insecta | Diptera |
| Polypedilum sp. a epler | 0 | Arthropoda | Insecta | Diptera |
| Polypedilum tritum | 1 | Arthropoda | Insecta | Diptera |
| Pomacea paludosa | 0 | Mollusca | Gastropoda | Mesogastropoda |
| Pristina aequiseta | 0 | Annelida | Oligochaeta | Haplotaxida |
| Pristina synclites | 0 | Annelida | Oligochaeta | Haplotaxida |
| Pristinella jenkinae | 0 | Annelida | Oligochaeta | Haplotaxida |
| Probezzia | 0 | Arthropoda | Insecta | Diptera |
| Procambarus | 0 | Arthropoda | Crustacea | Decapoda |
| Procladius | 0 | Arthropoda | Insecta | Diptera |
| Procladius (holotanypus) | 0 | Arthropoda | Insecta | Diptera |
| Procloeon viridocularis | 0 | Arthropoda | Insecta | Ephemeroptera |
| Progomphus | 0 | Arthropoda | Insecta | Odonata |
| Progomphus obscurus | 0 | Arthropoda | Insecta | Odonata |
| Promoresia tardella | 0 | Arthropoda | Insecta | Coleoptera |
| Prostoma rubrum | 0 | Nemertea | Enopla | Hoplonemertea |
| Psammoryctides convolutus | 0 | Annelida | Oligochaeta | Haplotaxida |
| Pseudochironomus | 0 | Arthropoda | Insecta | Diptera |
| Pseudocloeon | 0 | Arthropoda | Insecta | Ephemeroptera |
| Psychodidae | 1 | Arthropoda | Insecta | Diptera |
| Pycnopsyche | 0 | Arthropoda | Insecta | Trichoptera |
| Pyralidae | 0 | Arthropoda | Insecta | Lepidoptera |
| Pyrgophorus platyrachis | 0 | Mollusca | Gastropoda | Mesogastropoda |
| Ranatra kirkaldyi | 0 | Arthropoda | Insecta | Heteroptera |
| Rhagovelia | 0 | Arthropoda | Insecta | Heteroptera |
| Rheocricotopus | 0 | Arthropoda | Insecta | Diptera |
| Rheocricotopus robacki | 0 | Arthropoda | Insecta | Diptera |
| Rheocricotopus tuberculatus | 0 | Arthropoda | Insecta | Diptera |
| Rheotanytarsus | 0 | Arthropoda | Insecta | Diptera |
| Rheotanytarsus distinctissimus grp. | 0 | Arthropoda | Insecta | Diptera |
| Rheotanytarsus exiguus | 0 | Arthropoda | Insecta | Diptera |
| Rheotanytarsus exiguus grp. | 0 | Arthropoda | Insecta | Diptera |
| Rheotanytarsus pellucidus | 0 | Arthropoda | Insecta | Diptera |
| Scirtes | 0 | Arthropoda | Insecta | Coleoptera |
| Scirtidae | 0 | Arthropoda | Insecta | Coleoptera |
| Serratella deficiens | 0 | Arthropoda | Insecta | Ephemeroptera |
| Sialis | 0 | Arthropoda | Insecta | Megaloptera |
| Silvius | 0 | Arthropoda | Insecta | Diptera |



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| Taxon Name / SampleID/BenID -> | SampleID 49677/BenthID 36688(#counted) | Phylum | Class | Order |
|---|---|---|---|---|
| Simuliidae | 0 | Arthropoda | Insecta | Diptera |
| Simulium | 6 | Arthropoda | Insecta | Diptera |
| Slavina appendiculata | 0 | Annelida | Oligochaeta | Haplotaxida |
| Somatogyrus walkerianus | 0 | Mollusca | Gastropoda | Mesogastropoda |
| Sperchon | 0 | Arthropoda | Arachnida | Acariformes |
| Sperchonopsis | 0 | Arthropoda | Arachnida | Acariformes |
| Sperchopsis | 0 | Arthropoda | Insecta | Coleoptera |
| Sphaeriidae | 0 | Mollusca | Bivalvia | Veneroida |
| Sphaeriidae(mollusca) | 0 | Mollusca | Bivalvia | Veneroida |
| Sphaeroma | 0 | Arthropoda | Crustacea | Isopoda |
| Sphaeromias | 0 | Arthropoda | Insecta | Diptera |
| Spirosperma | 0 | Annelida | Oligochaeta | Haplotaxida |
| Spirosperma ferox | 0 | Annelida | Oligochaeta | Haplotaxida |
| Stelechomyia perpulchra | 3 | Arthropoda | Insecta | Diptera |
| Stempellina | 0 | Arthropoda | Insecta | Diptera |
| Stempellina sp. a epler | 0 | Arthropoda | Insecta | Diptera |
| Stempellinella | 0 | Arthropoda | Insecta | Diptera |
| Stenacron | 0 | Arthropoda | Insecta | Ephemeroptera |
| Stenacron floridense | 0 | Arthropoda | Insecta | Ephemeroptera |
| Stenacron interpunctatum | 0 | Arthropoda | Insecta | Ephemeroptera |
| Stenelmis | 0 | Arthropoda | Insecta | Coleoptera |
| Stenelmis decorata | 0 | Arthropoda | Insecta | Coleoptera |
| Stenelmis hungerfordi | 8 | Arthropoda | Insecta | Coleoptera |
| Stenochironomus | 15 | Arthropoda | Insecta | Diptera |
| Stenonema | 0 | Arthropoda | Insecta | Ephemeroptera |
| Stenonema exiguum | 0 | Arthropoda | Insecta | Ephemeroptera |
| Stenonema smithae | 0 | Arthropoda | Insecta | Ephemeroptera |
| Stratiomyidae | 0 | Arthropoda | Insecta | Diptera |
| Stylaria lacustris | 0 | Annelida | Oligochaeta | Haplotaxida |
| Synorthocladius | 0 | Arthropoda | Insecta | Diptera |
| Tabanus | 0 | Arthropoda | Insecta | Diptera |
| Taeniopteryx lita | 0 | Arthropoda | Insecta | Plecoptera |
| Tanytarsus | 1 | Arthropoda | Insecta | Diptera |
| Tanytarsus sp. a epler | 0 | Arthropoda | Insecta | Diptera |
| Tanytarsus sp. c epler | 0 | Arthropoda | Insecta | Diptera |
| Tanytarsus sp. d epler | 0 | Arthropoda | Insecta | Diptera |
| Tanytarsus sp. e epler | 0 | Arthropoda | Insecta | Diptera |
| Tanytarsus sp. g epler | 0 | Arthropoda | Insecta | Diptera |
| Tanytarsus sp. l epler | 0 | Arthropoda | Insecta | Diptera |
| Tanytarsus sp. m epler | 0 | Arthropoda | Insecta | Diptera |
| Tanytarsus sp. o epler | 0 | Arthropoda | Insecta | Diptera |
| Tanytarsus sp. r epler | 0 | Arthropoda | Insecta | Diptera |
| Tanytarsus sp. s epler | 0 | Arthropoda | Insecta | Diptera |
| Tanytarsus sp. t epler | 0 | Arthropoda | Insecta | Diptera |
| Tanytarsus sp. u epler | 0 | Arthropoda | Insecta | Diptera |
| Taphromysis bowmani | 0 | Arthropoda | Crustacea | Mysidacea |



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| Taxon Name / SampleID/BenID -> | SampleID 49677/BenthID 36688(#counted) | Phylum | Class | Order |
|---|---|---|---|---|
| Thienemanniella | 0 | Arthropoda | Insecta | Diptera |
| Thienemanniella lobapodema | 0 | Arthropoda | Insecta | Diptera |
| Thienemanniella similis | 0 | Arthropoda | Insecta | Diptera |
| Thienemanniella sp. a epler | 0 | Arthropoda | Insecta | Diptera |
| Thienemannimyia grp. | 0 | Arthropoda | Insecta | Diptera |
| Tipula | 0 | Arthropoda | Insecta | Diptera |
| Tipulidae | 0 | Arthropoda | Insecta | Diptera |
| Torrenticola | 0 | Arthropoda | Arachnida | Acariformes |
| Triaenodes | 0 | Arthropoda | Insecta | Trichoptera |
| Triaenodes ignitus | 0 | Arthropoda | Insecta | Trichoptera |
| Triaenodes perna | 0 | Arthropoda | Insecta | Trichoptera |
| Tribelos | 0 | Arthropoda | Insecta | Diptera |
| Tribelos atrum | 0 | Arthropoda | Insecta | Diptera |
| Tribelos fuscicornis | 0 | Arthropoda | Insecta | Diptera |
| Tribelos jucundum | 0 | Arthropoda | Insecta | Diptera |
| Tricorythodes albilineatus | 0 | Arthropoda | Insecta | Ephemeroptera |
| Tubificidae | 0 | Annelida | Oligochaeta | Haplotaxida |
| Turbellaria | 0 | Platyhelminthes | Turbellaria | Turbellaria |
| Tvetenia | 0 | Arthropoda | Insecta | Diptera |
| Tvetenia discoloripes grp. | 0 | Arthropoda | Insecta | Diptera |
| Unionicola | 0 | Arthropoda | Arachnida | Acariformes |
| Unniella multivirga | 0 | Arthropoda | Insecta | Diptera |
| Veliidae | 0 | Arthropoda | Insecta | Heteroptera |
| Xenochironomus xenolabis | 0 | Arthropoda | Insecta | Diptera |
| Xestochironomus | 0 | Arthropoda | Insecta | Diptera |
| Xylotopus par | 1 | Arthropoda | Insecta | Diptera |
| Zygoptera | 0 | Arthropoda | Insecta | Zygoptera |

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|---|---|---|---|
| Ablabesmyia (karelia) grp. | Chironomidae | Ablabesmyia | |
| Ablabesmyia hauberi | Chironomidae | Ablabesmyia | |
| Ablabesmyia mallochi | Chironomidae | Ablabesmyia | |
| Ablabesmyia rhamphe grp. | Chironomidae | Ablabesmyia | |
| Acentrella parvula | Baetidae | Acentrella | |
| Acerpenna pygmaea | Baetidae | Acerpenna | |
| Acroneuria | Perlidae | Acroneuria | |
| Acroneuria abnormis | Perlidae | Acroneuria | |
| Acroneuria arenosa | Perlidae | Acroneuria | Acroneuria arenosa/evoluta |
| Acroneuria arenosa/evoluta | Perlidae | Acroneuria | |
| Acroneuria lycorias | Perlidae | Acroneuria | |
| Agarodes libalis | Sericostomatidae | Agarodes | |
| Alluaudomyia | Ceratopogonidae | Alluaudomyia | |
| Amnicola | Bithyniidae | Amnicola | |
| Amnicola dalli | Bithyniidae | Amnicola | |
| Amnicola dalli johnsoni | Bithyniidae | Amnicola | |
| Amphipoda | Amphipoda | Amphipoda | |
| Ancylidae | Ancylidae | Ancylidae | |
| Ancyronyx | Elmidae | Ancyronyx | |
| Ancyronyx variegatus | Elmidae | Ancyronyx | |
| Anisocentropus pyraloides | Calamoceratidae | Anisocentropus | |
| Anopheles | Culicidae | Anopheles | |
| Apsectrotanypus johnsoni | Chironomidae | Apsectrotanypus | |
| Argia | Coenagrionidae | Argia | |
| Argia fumipennis | Coenagrionidae | Argia | |
| Argia moesta | Coenagrionidae | Argia | |
| Argia sedula | Coenagrionidae | Argia | |
| Argia tibialis | Coenagrionidae | Argia | |
| Arrenurus | Arrenuridae | Arrenurus | |
| Arrenurus problecornis | Arrenuridae | Arrenurus | |
| Astacidae | Astacidae | Astacidae | Cambaridae |
| Atherix | Athericidae | Atherix | |
| Atractides | Hygrobatidae | Atractides | |
| Atrichopogon | Ceratopogonidae | Atrichopogon | |
| Aulodrilus pigueti | Tubificidae | Aulodrilus | |
| Aulodrilus pluriseta | Tubificidae | Aulodrilus | |
| Baetidae | Baetidae | Baetidae | |
| Baetis | Baetidae | Baetis | |
| Baetis intercalaris | Baetidae | Baetis | |
| Baetisca rogersi | Baetiscidae | Baetisca | |
| Beardius truncatus | Chironomidae | Beardius | |
| Belostoma | Belostomatidae | Belostoma | |
| Belostomatidae | Belostomatidae | Belostomatidae | |
| Bivalvia | Bivalvia | Bivalvia | |
| Bourletiella | Sminthuridae | Bourletiella | |
| Boyeria vinosa | Aeshnidae | Boyeria | |
| Brachycentrus | Brachycentridae | Brachycentrus | |
| Brachycentrus chelatus | Brachycentridae | Brachycentrus | |
| Brachycentrus numerosus | Brachycentridae | Brachycentrus | |



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| Taxon Name / SampleID/BenID -> | Family | Genus | Current Name |
|---|---|---|---|
| Brachycercus maculatus | Caenidae | Sparbarus | Sparbarus maculata |
| Caecidotea | Asellidae | Caecidotea | |
| Caecidotea racovitzai | Asellidae | Caecidotea | |
| Caenis | Caenidae | Caenis | |
| Caenis diminuta | Caenidae | Caenis | |
| Caenis hilaris | Caenidae | Caenis | |
| Callibaetis floridanus | Baetidae | Callibaetis | |
| Calopteryx | Calopterygidae | Calopteryx | |
| Calopteryx maculata | Calopterygidae | Calopteryx | |
| Cambaridae | Cambaridae | Cambaridae | |
| Campeloma | Viviparidae | Campeloma | |
| Campeloma limum | Viviparidae | Campeloma | |
| Cassidinidea ovalis | Sphaeromatidae | Cassidinidea | |
| Cecidomyiidae | Cecidomyiidae | Cecidomyiidae | |
| Ceratopogonidae | Ceratopogonidae | Ceratopogonidae | |
| Cernotina | Polycentropodidae | Cernotina | |
| Chaoborus | Chaoboridae | Chaoborus | |
| Chaoborus albatus | Chaoboridae | Chaoborus | |
| Chauliodes | Corydalidae | Chauliodes | |
| Chelifera | Empididae | Chelifera | |
| Cheumatopsyche | Hydropsychidae | Cheumatopsyche | |
| Chimarra | Philopotamidae | Chimarra | |
| Chironomus | Chironomidae | Chironomus | |
| Choroterpes basalis | Leptophlebiidae | Choroterpes | |
| Choroterpes hubbelli | Leptophlebiidae | Choroterpes | Choroterpes basalis |
| Cladotanytarsus | Chironomidae | Cladotanytarsus | |
| Cladotanytarsus cf. daviesi | Chironomidae | Cladotanytarsus | |
| Cladotanytarsus sp. i epler | Chironomidae | Cladotanytarsus | |
| Clathrosperchon | Clathrosperchonidae | Clathrosperchon | |
| Climacea areolaris | Sisyridae | Climacia | Climacia areolaris |
| Clinotanypus | Chironomidae | Clinotanypus | |
| Coelotanypus | Chironomidae | Coelotanypus | |
| Coelotanypus scapularis | Chironomidae | Coelotanypus | |
| Coenagrionidae | Coenagrionidae | Coenagrionidae | |
| Collembola | Collembola | Collembola | |
| Conchapelopia | Chironomidae | Conchapelopia | |
| Corbicula fluminea | Corbiculidae | Corbicula | |
| Corduliidae | Corduliidae | Corduliidae | Libellulidae |
| Corydalus | Corydalidae | Corydalus | |
| Corydalus cornuta | Corydalidae | Corydalus | Corydalus cornutus |
| Corydalus cornutus | Corydalidae | Corydalus | |
| Corynoneura | Chironomidae | Corynoneura | |
| Corynoneura sp. b epler | Chironomidae | Corynoneura | |
| Corynoneura sp. c epler | Chironomidae | Corynoneura | |
| Corynoneura taris | Chironomidae | Corynoneura | |



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| Taxon Name / SampleID/BenID -> | Family | Genus | Current Name |
|---|---|---|---|
| Crangonyx | Crangonyctidae | Crangonyx | |
| Cricotopus | Chironomidae | Cricotopus | |
| Cricotopus bicinctus | Chironomidae | Cricotopus | |
| Cricotopus bicinctus grp. | Chironomidae | Cricotopus | |
| Cricotopus or orthocladius | Chironomidae | Cricotopus or orthocladius | |
| Cryptochironomus | Chironomidae | Cryptochironomus | |
| Cryptotendipes | Chironomidae | Cryptotendipes | |
| Curculionidae | Curculionidae | Curculionidae | |
| Cyrnellus fraternus | Polycentropodidae | Cyrnellus | |
| Demicryptochironomus | Chironomidae | Demicryptochironomus | |
| Dero digitata | Naididae | Dero | Dero digitata complex |
| Dero digitata complex | Naididae | Dero | |
| Dero lodeni | Naididae | Dero | |
| Dero pectinata | Naididae | Dero | |
| Dero trifida | Naididae | Dero | Dero digitata complex |
| Dero vaga | Naididae | Dero | |
| Dicrotendipes | Chironomidae | Dicrotendipes | |
| Dicrotendipes modestus | Chironomidae | Dicrotendipes | |
| Dicrotendipes neomodestus | Chironomidae | Dicrotendipes | |
| Dicrotendipes simpsoni | Chironomidae | Dicrotendipes | |
| Dicrotendipes sp. a epler | Chironomidae | Dicrotendipes | |
| Dineutus | Gyrinidae | Dineutus | |
| Dineutus discolor | Gyrinidae | Dineutus | |
| Dineutus serrulatus | Gyrinidae | Dineutus | |
| Diplectrona modesta | Hydropsychidae | Diplectrona | |
| Dixa | Dixidae | Dixa | |
| Dixella | Dixidae | Dixella | |
| Djalmabatista pulcher | Chironomidae | Djalmabatista | |
| Dolichopodidae | Dolichopodidae | Dolichopodidae | |
| Dromogomphus armatus | Gomphidae | Dromogomphus | |
| Dromogomphus spinosus | Gomphidae | Dromogomphus | |
| Dryopidae | Dryopidae | Dryopidae | |
| Dubiraphia | Elmidae | Dubiraphia | |
| Dubiraphia quadrinotata | Elmidae | Dubiraphia | |
| Dubiraphia vittata | Elmidae | Dubiraphia | |
| Dugesia | Dugesiidae | Dugesia | Girardia |
| Dugesia tigrina | Dugesiidae | Dugesia | |
| Eclipidrilus | Lumbriculidae | Eclipidrilus | |
| Eclipidrilus palustris | Lumbriculidae | Eclipidrilus | |
| Ectopria | Psephenidae | Ectopria | |
| Elimia | Pleuroceridae | Elimia | |
| Elimia floridensis | Pleuroceridae | Elimia | |
| Empididae | Empididae | Empididae | |
| Enallagma | Coenagrionidae | Enallagma | |



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| Taxon Name / SampleID/BenID -> | Family | Genus | Current Name |
|---|---|---|---|
| Enallagma cardenium | Coenagrionidae | Enallagma | Enallagma coecum |
| Enchytraeidae | Enchytraeidae | Enchytraeidae | |
| Endotribelos hesperium | Chironomidae | Endotribelos | |
| Enochrus | Hydrophilidae | Enochrus | |
| Ephemerellidae | Ephemerellidae | Ephemerellidae | |
| Ephydridae | Ephydridae | Ephydridae | |
| Epitheca | Libellulidae | Epitheca | Tetragoneuria |
| Epitheca princeps regina | Libellulidae | Epicordulia | Epicordulia regina |
| Eurylophella doris | Ephemerellidae | Eurylophella | |
| Eurylophella temporalis | Ephemerellidae | Eurylophella | Eurylophella doris |
| Ferrissia | Ancylidae | Ferrissia | |
| Gammaridae | Gammaridae | Gammaridae | |
| Gammarus | Gammaridae | Gammarus | |
| Gammarus tigrinus | Gammaridae | Gammarus | Gammarus cf. tigrinus |
| Gastropoda | Gastropoda | Gastropoda | |
| Geayia | Krendowskiidae | Geayia | |
| Gerridae | Gerridae | Gerridae | |
| Gloiobdella elongata | Glossiphoniidae | Gloiobdella | |
| Goeldichironomus fluctuans | Chironomidae | Goeldichironomus | |
| Gomphidae | Gomphidae | Gomphidae | |
| Gomphus | Gomphidae | Gomphus | |
| Gomphus minutus | Gomphidae | Gomphus | |
| Gonielmis | Elmidae | Gonielmis | |
| Gonielmis dietrichi | Elmidae | Gonielmis | |
| Grandidierella bonnieroides | Aoridae | Grandidierella | |
| Gyretes iricolor | Gyrinidae | Gyretes | |
| Haber speciosus | Tubificidae | Haber | |
| Hagenius brevistylus | Gomphidae | Hagenius | |
| Hebetancylus excentricus | Ancylidae | Hebetancylus | |
| Helobdella stagnalis | Glossiphoniidae | Helobdella | |
| Helobdella triserialis | Glossiphoniidae | Helobdella | |
| Helopelopia | Chironomidae | Helopelopia | |
| Hemerodromia | Empididae | Hemerodromia | |
| Hemiptera | Hemiptera | Hemiptera | Heteroptera |
| Heptageniidae | Heptageniidae | Heptageniidae | |
| Hetaerina | Calopterygidae | Hetaerina | |
| Hetaerina titia | Calopterygidae | Hetaerina | |
| Heteroplectron americanum | Calamoceratidae | Heteroplectron | |
| Hexagenia | Ephemeridae | Hexagenia | |
| Hexagenia bilineata | Ephemeridae | Hexagenia | |
| Hexagenia limbata | Ephemeridae | Hexagenia | |
| Hexagenia munda orlando | Ephemeridae | Hexagenia | |
| Hexatoma | Tipulidae | Hexatoma | |
| Hyalella azteca | Hyalellidae | Hyalella | |
| Hydra | Hydridae | Hydra | |
| Hydrachna | Hydrachnidae | Hydrachna | |
| Hydraena marginicollis | Hydraenidae | Hydraena | |
| Hydraenidae | Hydraenidae | Hydraenidae | |



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| Taxon Name / SampleID/BenID -> | Family | Genus | Current Name |
|---|---|---|---|
| Hydrobiidae | Hydrobiidae | Hydrobiidae | |
| Hydrodroma | Hydrodromidae | Hydrodroma | |
| Hydrophilidae | Hydrophilidae | Hydrophilidae | |
| Hydroporus | Dytiscidae | Hydroporus | |
| Hydropsyche | Hydropsychidae | Hydropsyche | |
| Hydropsyche decalda | Hydropsychidae | Hydropsyche | |
| Hydropsychidae | Hydropsychidae | Hydropsychidae | |
| Hydroptila | Hydroptilidae | Hydroptila | |
| Hydroptilidae | Hydroptilidae | Hydroptilidae | |
| Hygrobates | Hygrobatidae | Hygrobates | |
| Hygrotus | Dytiscidae | Hygrotus | |
| Ischnura | Coenagrionidae | Ischnura | |
| Ischnura hastata | Coenagrionidae | Ischnura | |
| Isonychia | Oligoneuriidae | Isonychia | |
| Isoperla | Perlodidae | Isoperla | |
| Isopoda | Isopoda | Isopoda | |
| Isotomurus | Isotomidae | Isotomurus | |
| Isotomurus tricolor | Isotomidae | Isotomurus | |
| Kiefferulus | Chironomidae | Kiefferulus | |
| Krendowskia | Krendowskiidae | Krendowskia | |
| Labiobaetis | Baetidae | Labiobaetis | Pseudocloeon |
| Labrundinia | Chironomidae | Labrundinia | |
| Labrundinia becki | Chironomidae | Labrundinia | |
| Labrundinia johannseni | Chironomidae | Labrundinia | |
| Labrundinia neopilosella | Chironomidae | Labrundinia | |
| Labrundinia pilosella | Chironomidae | Labrundinia | |
| Laevapex | Ancylidae | Laevapex | |
| Laevapex peninsulae | Ancylidae | Laevapex | |
| Larsia berneri | Chironomidae | Larsia | |
| Larsia decolorata | Chironomidae | Larsia | |
| Lauterborniella agrayloides | Chironomidae | Lauterborniella | |
| Lebertia | Lebertiidae | Lebertia | |
| Lepidoptera | Lepidoptera | Lepidoptera | |
| Leptoceridae | Leptoceridae | Leptoceridae | |
| Leptophlebia | Leptophlebiidae | Leptophlebia | |
| Leptophlebiidae | Leptophlebiidae | Leptophlebiidae | |
| Leuctra | Leuctridae | Leuctra | |
| Libellulidae | Libellulidae | Libellulidae | |
| Limnesia | Limnesiidae | Limnesia | |
| Limnodrilus hoffmeisteri | Tubificidae | Limnodrilus | |
| Limnophila | Tipulidae | Limnophila | |
| Limonia | Tipulidae | Limonia | |
| Liodessus | Dytiscidae | Liodessus | |
| Liodessus affinis | Dytiscidae | Liodessus | Liodessus novaffinis |
| Lioporeus | Dytiscidae | Lioporeus | |
| Lirceus | Asellidae | Lirceus | |
| Littoridinops monroensis | Hydrobiidae | Littoridinops | |
| Lumbriculidae | Lumbriculidae | Lumbriculidae | |
| Lumbriculus variegatus | Lumbriculidae | Lumbriculus | |



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| Taxon Name / SampleID/BenID -> | Family | Genus | Current Name |
|---|---|---|---|
| Lype diversa | Psychomyiidae | Lype | |
| Maccaffertium | Heptageniidae | Maccaffertium | |
| Maccaffertium smithae | Heptageniidae | Maccaffertium | |
| Macromia | Libellulidae | Macromia | |
| Macromia taeniolata | Libellulidae | Macromia | |
| Macromiidae | Macromiidae | Macromiidae | |
| Macronychus glabratus | Elmidae | Macronychus | |
| Macrostemum carolina | Hydropsychidae | Macrostemum | |
| Mayatrichia | Hydroptilidae | Mayatrichia | |
| Mayatrichia ayama | Hydroptilidae | Mayatrichia | |
| Meropelopia | Chironomidae | Meropelopia | |
| Mesosmittia | Chironomidae | Mesosmittia | |
| Metrobates | Gerridae | Metrobates | |
| Micrasema | Brachycentridae | Micrasema | |
| Micrasema rusticum | Brachycentridae | Micrasema | |
| Micrasema wataga | Brachycentridae | Micrasema | |
| Microcylloepus | Elmidae | Microcylloepus | |
| Microcylloepus pusillus | Elmidae | Microcylloepus | |
| Micromenetus | Planorbidae | Micromenetus | |
| Micromenetus dilatatus | Planorbidae | Micromenetus | |
| Microtendipes pedellus | Chironomidae | Microtendipes | |
| Microtendipes pedellus grp. | Chironomidae | Microtendipes | |
| Microtendipes rydalensis | Chironomidae | Microtendipes | |
| Microtendipes rydalensis grp. | Chironomidae | Microtendipes | |
| Mideopsis | Mideopsidae | Mideopsis | |
| Molanna | Molannidae | Molanna | |
| Mooreobdella | Erpobdellidae | Mooreobdella | |
| Mooreobdella tetragon | Erpobdellidae | Mooreobdella | |
| Muscidae | Muscidae | Muscidae | |
| Naididae | Naididae | Naididae | |
| Nais behningi | Naididae | Nais(animal) | |
| Nais communis | Naididae | Nais(animal) | Nais communis complex |
| Nais communis complex | Naididae | Nais(animal) | |
| Nais pardalis | Naididae | Nais(animal) | Nais communis complex |
| Nais simplex | Naididae | Nais(animal) | |
| Nais variabilis | Naididae | Nais(animal) | Nais communis complex |
| Nanocladius | Chironomidae | Nanocladius | |
| Nectopsyche | Leptoceridae | Nectopsyche | |
| Nectopsyche candida | Leptoceridae | Nectopsyche | |
| Nectopsyche exquisita | Leptoceridae | Nectopsyche | |
| Nectopsyche pavida | Leptoceridae | Nectopsyche | |
| Nemertea | Nemertea | Nemertea | |
| Neoperla | Perlidae | Neoperla | |
| Neoperla clymene | Perlidae | Neoperla | |
| Neoporus | Dytiscidae | Neoporus | |
| Neotrichia | Hydroptilidae | Neotrichia | |
| Neumania | Unionicolidae | Neumania | |



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| Taxon Name / SampleID/BenID -> | Family | Genus | Current Name |
|---|---|---|---|
| Neumania distincta | Unionicolidae | Neumania | |
| Neureclipsis | Polycentropodidae | Neureclipsis | |
| Neureclipsis crepuscularis | Polycentropodidae | Neureclipsis | |
| Neurocordulia | Libellulidae | Neurocordulia | |
| Neurocordulia alabamensis | Libellulidae | Neurocordulia | |
| Neurocordulia virginiensis | Libellulidae | Neurocordulia | |
| Nigronia | Corydalidae | Nigronia | |
| Nigronia fasciatus | Corydalidae | Nigronia | |
| Nigronia serricornis | Corydalidae | Nigronia | |
| Nilotanypus | Chironomidae | Nilotanypus | |
| Nilothauma | Chironomidae | Nilothauma | |
| Notogillia wetherbyi | Hydrobiidae | Notogillia | |
| Nyctiophylax | Polycentropodidae | Nyctiophylax | |
| Odonata | Odonata | Odonata | |
| Odontomyia | Stratiomyidae | Odontomyia | |
| Oecetis | Leptoceridae | Oecetis | |
| Oecetis cinerascens | Leptoceridae | Oecetis | |
| Oecetis georgia | Leptoceridae | Oecetis | |
| Oecetis inconspicua cmplx. | Leptoceridae | Oecetis | |
| Oecetis morsei or sphyra | Leptoceridae | Oecetis | Oecetis sphyra/morsei |
| Oecetis parva | Leptoceridae | Oecetis | |
| Oecetis persimilis | Leptoceridae | Oecetis | |
| Oecetis sp. a floyd | Leptoceridae | Oecetis | |
| Oecetis sp. e floyd | Leptoceridae | Oecetis | |
| Ora/scirtes | Scirtidae | Ora/scirtes | |
| Oribatei | Oribatei | Oribatei | Oribatida |
| Orthocladiinae | Orthocladiinae | Orthocladiinae | |
| Orthocladiinae gen. c epler | Chironomidae | Orthocladiinae gen. c epler | |
| Orthocladiinae gen. f epler | Chironomidae | Orthocladiinae gen. f epler | |
| Orthocladius annectens | Chironomidae | Orthocladius | |
| Orthotrichia | Hydroptilidae | Orthotrichia | |
| Oxyethira | Hydroptilidae | Oxyethira | |
| Pachydiplax longipennis | Libellulidae | Pachydiplax | |
| Pagastiella | Chironomidae | Pagastiella | |
| Palaemonetes | Palaemonidae | Palaemonetes | |
| Palaemonetes kadiakensis | Palaemonidae | Palaemonetes | |
| Palaemonetes paludosus | Palaemonidae | Palaemonetes | |
| Palpomyia/bezzia grp. | Ceratopogonidae | Palpomyia/bezzia grp. | |
| Paracladopelma | Chironomidae | Paracladopelma | |
| Paracladopelma loganae | Chironomidae | Paracladopelma | |
| Paracladopelma undine | Chironomidae | Paracladopelma | |
| Paragnetina | Perlidae | Paragnetina | |
| Paragnetina fumosa | Perlidae | Paragnetina | |



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| Taxon Name / SampleID/BenID -> | Family | Genus | Current Name |
|---|---|---|---|
| Parakiefferiella | Chironomidae | Parakiefferiella | |
| Paralauterborniella nigrohalterale | Chironomidae | Paralauterborniella | |
| Paraleptophlebia volitans | Leptophlebiidae | Paraleptophlebia | |
| Parametriocnemus | Chironomidae | Parametriocnemus | |
| Parametriocnemus sp. f epler | Chironomidae | Parametriocnemus | |
| Paranyctiophylax | Polycentropodidae | Paranyctiophylax | |
| Paraplea | Pleidae | Paraplea | |
| Paraponyx | Pyralidae | Paraponyx | Parapoynx |
| Paratanytarsus sp. a epler | Chironomidae | Paratanytarsus | |
| Paratanytarsus sp. c epler | Chironomidae | Paratanytarsus | |
| Paratendipes subaequalis | Chironomidae | Paratendipes | |
| Pelecypoda | Pelecypoda | Pelecypoda | Bivalvia |
| Pelonomus obscurus | Dryopidae | Pelonomus | |
| Peltodytes | Haliplidae | Peltodytes | |
| Pentaneura inconspicua | Chironomidae | Pentaneura | |
| Perlesta | Perlidae | Perlesta | |
| Perlesta placida | Perlidae | Perlesta | |
| Perlesta placida complex | Perlidae | Perlesta | |
| Perlinella | Perlidae | Perlinella | |
| Petrophila | Pyralidae | Petrophila | |
| Phaenopsectra obediens grp. | Chironomidae | Phaenopsectra | |
| Phaenopsectra punctipes grp. | Chironomidae | Phaenopsectra | |
| Phylocentropus | Dipseudopsidae | Phylocentropus | |
| Physella | Physidae | Physella | Physa |
| Physella cubensis | Physidae | Haitia | Haitia |
| Piona | Pionidae | Piona | |
| Pisidiidae | Pisidiidae | Pisidiidae | Sphaeriidae(mollusca) |
| Pisidium | Pisidiidae | Pisidium | |
| Planariidae | Planariidae | Planariidae | |
| Planorbella duryi | Planorbidae | Planorbella | |
| Planorbella scalaris | Planorbidae | Planorbella | |
| Planorbidae | Planorbidae | Planorbidae | |
| Platyhelminthes | Platyhelminthes | Platyhelminthes | |
| Plecoptera | Plecoptera | Plecoptera | |
| Plumulariidae | Plumulariidae | Plumulariidae | |
| Polycentropodidae | Polycentropodidae | Polycentropodidae | |
| Polycentropus | Polycentropodidae | Polycentropus | |
| Polypedilum | Chironomidae | Polypedilum | |
| Polypedilum aviceps | Chironomidae | Polypedilum | |
| Polypedilum convictum grp. | Chironomidae | Polypedilum | Polypedilum flavum |
| Polypedilum fallax | Chironomidae | Polypedilum | |
| Polypedilum flavum | Chironomidae | Polypedilum | |



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| Taxon Name / SampleID/BenID -> | Family | Genus | Current Name |
|---|---|---|---|
| Polypedilum halterale grp. | Chironomidae | Polypedilum | |
| Polypedilum illinoense | Chironomidae | Polypedilum | Polypedilum illinoense grp. |
| Polypedilum illinoense grp. | Chironomidae | Polypedilum | |
| Polypedilum scalaenum | Chironomidae | Polypedilum | Polypedilum scalaenum grp. |
| Polypedilum scalaenum grp. | Chironomidae | Polypedilum | |
| Polypedilum sp. a epler | Chironomidae | Polypedilum | |
| Polypedilum tritum | Chironomidae | Polypedilum | |
| Pomacea paludosa | Ampullariidae | Pomacea | |
| Pristina aequiseta | Naididae | Pristina | |
| Pristina synclites | Naididae | Pristina | |
| Pristinella jenkinae | Naididae | Pristina | Pristina jenkinae |
| Probezzia | Ceratopogonidae | Probezzia | |
| Procambarus | Cambaridae | Procambarus | |
| Procladius | Chironomidae | Procladius | |
| Procladius (holotanypus) | Chironomidae | Procladius (holotanypus) | |
| Procloeon viridocularis | Baetidae | Procloeon | |
| Progomphus | Gomphidae | Progomphus | |
| Progomphus obscurus | Gomphidae | Progomphus | |
| Promoresia tardella | Elmidae | Promoresia | |
| Prostoma rubrum | Tetrastemmatidae | Prostoma | Prostoma graecense |
| Psammoryctides convolutus | Tubificidae | Psammoryctides | |
| Pseudochironomus | Chironomidae | Pseudochironomus | |
| Pseudocloeon | Baetidae | Pseudocloeon | |
| Psychodidae | Psychodidae | Psychodidae | |
| Pycnopsyche | Limnephilidae | Pycnopsyche | |
| Pyralidae | Pyralidae | Pyralidae | |
| Pyrgophorus platyrachis | Hydrobiidae | Pyrgophorus | |
| Ranatra kirkaldyi | Nepidae | Ranatra | |
| Rhagovelia | Veliidae | Rhagovelia | |
| Rheocricotopus | Chironomidae | Rheocricotopus | |
| Rheocricotopus robacki | Chironomidae | Rheocricotopus | |
| Rheocricotopus tuberculatus | Chironomidae | Rheocricotopus | |
| Rheotanytarsus | Chironomidae | Rheotanytarsus | |
| Rheotanytarsus distinctissimus grp. | Chironomidae | Rheotanytarsus | Rheotanytarsus pellucidus |
| Rheotanytarsus exiguus | Chironomidae | Rheotanytarsus | Rheotanytarsus exiguus grp. |
| Rheotanytarsus exiguus grp. | Chironomidae | Rheotanytarsus | |
| Rheotanytarsus pellucidus | Chironomidae | Rheotanytarsus | |
| Scirtes | Scirtidae | Scirtes | Ora/scirtes |
| Scirtidae | Scirtidae | Scirtidae | |
| Serratella deficiens | Ephemerellidae | Teloganopsis | Teloganopsis deficiens |
| Sialis | Sialidae | Sialis | |
| Silvius | Tabanidae | Silvius | |



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|---|---|---|---|
| Simuliidae | Simuliidae | Simuliidae | |
| Simulium | Simuliidae | Simulium | |
| Slavina appendiculata | Naididae | Slavina | |
| Somatogyrus walkerianus | Hydrobiidae | Somatogyrus | |
| Sperchon | Sperchonidae | Sperchon | |
| Sperchonopsis | Sperchonidae | Sperchonopsis | |
| Sperchopsis | Hydrophilidae | Sperchopsis | |
| Sphaeriidae | Sphaeriidae | Sphaeriidae | Sphaeriidae(mollusca) |
| Sphaeriidae(mollusca) | Sphaeriidae(mollusca) | Sphaeriidae(mollusca) | |
| Sphaeroma | Sphaeromatidae | Sphaeroma | |
| Sphaeromias | Ceratopogonidae | Sphaeromias | |
| Spirosperma | Tubificidae | Spirosperma | |
| Spirosperma ferox | Tubificidae | Spirosperma | |
| Stelechomyia perpulchra | Chironomidae | Stelechomyia | |
| Stempellina | Chironomidae | Stempellina | |
| Stempellina sp. a epler | Chironomidae | Stempellina | |
| Stempellinella | Chironomidae | Stempellinella | |
| Stenacron | Heptageniidae | Stenacron | |
| Stenacron floridense | Heptageniidae | Stenacron | |
| Stenacron interpunctatum | Heptageniidae | Stenacron | |
| Stenelmis | Elmidae | Stenelmis | |
| Stenelmis decorata | Elmidae | Stenelmis | |
| Stenelmis hungerfordi | Elmidae | Stenelmis | |
| Stenochironomus | Chironomidae | Stenochironomus | |
| Stenonema | Heptageniidae | Stenonema | Maccaffertium |
| Stenonema exiguum | Heptageniidae | Maccaffertium | Maccaffertium exiguum |
| Stenonema smithae | Heptageniidae | Maccaffertium | Maccaffertium smithae |
| Stratiomyidae | Stratiomyidae | Stratiomyidae | |
| Stylaria lacustris | Naididae | Stylaria | |
| Synorthocladius | Chironomidae | Synorthocladius | |
| Tabanus | Tabanidae | Tabanus | |
| Taeniopteryx lita | Taeniopterygidae | Taeniopteryx | |
| Tanytarsus | Chironomidae | Tanytarsus | |
| Tanytarsus sp. a epler | Chironomidae | Tanytarsus | |
| Tanytarsus sp. c epler | Chironomidae | Tanytarsus | |
| Tanytarsus sp. d epler | Chironomidae | Tanytarsus | |
| Tanytarsus sp. e epler | Chironomidae | Tanytarsus | |
| Tanytarsus sp. g epler | Chironomidae | Tanytarsus | |
| Tanytarsus sp. l epler | Chironomidae | Tanytarsus | |
| Tanytarsus sp. m epler | Chironomidae | Tanytarsus | |
| Tanytarsus sp. o epler | Chironomidae | Tanytarsus | |
| Tanytarsus sp. r epler | Chironomidae | Tanytarsus | |
| Tanytarsus sp. s epler | Chironomidae | Tanytarsus | |
| Tanytarsus sp. t epler | Chironomidae | Tanytarsus | |
| Tanytarsus sp. u epler | Chironomidae | Tanytarsus | |
| Taphromysis bowmani | Mysidae | Taphromysis | |



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| Taxon Name / SampleID/BenID -> | Family | Genus | Current Name |
|---|---|---|---|
| Thienemanniella | Chironomidae | Thienemanniella | |
| Thienemanniella lobapodema | Chironomidae | Thienemanniella | |
| Thienemanniella similis | Chironomidae | Thienemanniella | |
| Thienemanniella sp. a epler | Chironomidae | Thienemanniella | Thienemanniella lobapodema |
| Thienemannimyia grp. | Chironomidae | Thienemannimyia grp. | |
| Tipula | Tipulidae | Tipula | |
| Tipulidae | Tipulidae | Tipulidae | |
| Torrenticola | Torrenticolidae | Torrenticola | |
| Triaenodes | Leptoceridae | Triaenodes | |
| Triaenodes ignitus | Leptoceridae | Triaenodes | |
| Triaenodes perna | Leptoceridae | Triaenodes | |
| Tribelos | Chironomidae | Tribelos | |
| Tribelos atrum | Chironomidae | Tribelos | |
| Tribelos fuscicornis | Chironomidae | Tribelos | |
| Tribelos jucundum | Chironomidae | Tribelos | |
| Tricorythodes albilineatus | Leptohyphidae | Tricorythodes | |
| Tubificidae | Tubificidae | Tubificidae | |
| Turbellaria | Turbellaria | Turbellaria | |
| Tvetenia | Chironomidae | Tvetenia | |
| Tvetenia discoloripes grp. | Chironomidae | Tvetenia | |
| Unionicola | Unionicolidae | Unionicola | |
| Unniella multivirga | Chironomidae | Unniella | |
| Veliidae | Veliidae | Veliidae | |
| Xenochironomus xenolabis | Chironomidae | Xenochironomus | |
| Xestochironomus | Chironomidae | Xestochironomus | |
| Xylotopus par | Chironomidae | Xylotopus | |
| Zygoptera | Zygoptera | Zygoptera | |

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|---|
| Ablabesmyia (karelia) grp. |
| Ablabesmyia hauberi |
| Ablabesmyia mallochi |
| Ablabesmyia rhamphe grp. |
| Acentrella parvula |
| Acerpenna pygmaea |
| Acroneuria |
| Acroneuria abnormis |
| Acroneuria arenosa |
| Acroneuria arenosa/evoluta |
| Acroneuria lycorias |
| Agarodes libalis |
| Alluaudomyia |
| Amnicola |
| Amnicola dalli |
| Amnicola dalli johnsoni |
| Amphipoda |
| Ancylidae |
| Ancyronyx |
| Ancyronyx variegatus |
| Anisocentropus pyraloides |
| Anopheles |
| Apsectrotanypus johnsoni |
| Argia |
| Argia fumipennis |
| Argia moesta |
| Argia sedula |
| Argia tibialis |
| Arrenurus |
| Arrenurus problecornis |
| Astacidae |
| Atherix |
| Atractides |
| Atrichopogon |
| Aulodrilus pigueti |
| Aulodrilus pluriseta |
| Baetidae |
| Baetis |
| Baetis intercalaris |
| Baetisca rogersi |
| Beardius truncatus |
| Belostoma |
| Belostomatidae |
| Bivalvia |
| Bourletiella |
| Boyeria vinosa |
| Brachycentrus |
| Brachycentrus chelatus |
| Brachycentrus numerosus |

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Brachycercus maculatus
Caecidotea
Caecidotea racovitzai
Caenis
Caenis diminuta
Caenis hilaris
Callibaetis floridanus
Calopteryx
Calopteryx maculata
Cambaridae
Campeloma
Campeloma limum
Cassidinidea ovalis
Cecidomyiidae
Ceratopogonidae

Cernotina
Chaoborus
Chaoborus albatus
Chauliodes
Chelifera
Cheumatopsyche
Chimarra
Chironomus
Choroterpes basalis

Choroterpes hubbelli
Cladotanytarsus
Cladotanytarsus cf. daviesi
Cladotanytarsus sp. i epler

Clathrosperchon
Climacea areolaris
Clinotanypus
Coelotanypus
Coelotanypus scapularis
Coenagrionidae
Collembola
Conchapelopia
Corbicula fluminea
Corduliidae
Corydalus

Corydalus cornuta
Corydalus cornutus
Corynoneura
Corynoneura sp. b epler
Corynoneura sp. c epler
Corynoneura taris



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|---|
| Crangonyx |
| Cricotopus |
| Cricotopus bicinctus |
| Cricotopus bicinctus grp. |
| Cricotopus or orthocladius |
| Cryptochironomus |
| Cryptotendipes |
| Curculionidae |
| Cyrnellus fraternus |
| Demicryptochironomus |
| Dero digitata |
| Dero digitata complex |
| Dero lodeni |
| Dero pectinata |
| Dero trifida |
| Dero vaga |
| Dicrotendipes |
| Dicrotendipes modestus |
| Dicrotendipes neomodestus |
| Dicrotendipes simpsoni |
| Dicrotendipes sp. a epler |
| Dineutus |
| Dineutus discolor |
| Dineutus serrulatus |
| Diplectrona modesta |
| Dixa |
| Dixella |
| Djalmabatista pulcher |
| Dolichopodidae |
| Dromogomphus armatus |
| Dromogomphus spinosus |
| Dryopidae |
| Dubiraphia |
| Dubiraphia quadrinotata |
| Dubiraphia vittata |
| Dugesia |
| Dugesia tigrina |
| Eclipidrilus |
| Eclipidrilus palustris |
| Ectopria |
| Elimia |
| Elimia floridensis |
| Empididae |
| Enallagma |



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Enallagma cardenium
Enchytraeidae
Endotribelos hesperium
Enochrus
Ephemerellidae
Ephydridae
Epitheca
Epitheca princeps regina
Eurylophella doris
Eurylophella temporalis
Ferrissia
Gammaridae
Gammarus

Gammarus tigrinus
Gastropoda
Geayia
Gerridae
Gloiobdella elongata
Goeldichironomus fluctuans
Gomphidae
Gomphus
Gomphus minutus
Gonielmis
Gonielmis dietrichi
Grandidierella bonnieroides
Gyretes iricolor
Haber speciosus
Hagenius brevistylus
Hebetancylus excentricus
Helobdella stagnalis
Helobdella triserialis
Helopelopia
Hemerodromia
Hemiptera
Heptageniidae
Hetaerina
Hetaerina titia
Heteroplectron americanum
Hexagenia
Hexagenia bilineata
Hexagenia limbata
Hexagenia munda orlando
Hexatoma
Hyalella azteca
Hydra
Hydrachna
Hydraena marginicollis
Hydraenidae



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| Taxon Name / SampleID/BenID -> |
|---|
| Hydrobiidae |
| Hydrodroma |
| Hydrophilidae |
| Hydroporus |
| Hydropsyche |
| Hydropsyche decalda |
| Hydropsychidae |
| Hydroptila |
| Hydroptilidae |
| Hygrobates |
| Hygrotus |
| Ischnura |
| Ischnura hastata |
| Isonychia |
| Isoperla |
| Isopoda |
| Isotomurus |
| Isotomurus tricolor |
| Kiefferulus |
| Krendowskia |
| Labiobaetis |
| Labrundinia |
| Labrundinia becki |
| Labrundinia johannseni |
| Labrundinia neopilosella |
| Labrundinia pilosella |
| Laevapex |
| Laevapex peninsulae |
| Larsia berneri |
| Larsia decolorata |
| Lauterborniella agrayloides |
| Lebertia |
| Lepidoptera |
| Leptoceridae |
| Leptophlebia |
| Leptophlebiidae |
| Leuctra |
| Libellulidae |
| Limnesia |
| Limnodrilus hoffmeisteri |
| Limnophila |
| Limonia |
| Liodessus |
| Liodessus affinis |
| Lioporeus |
| Lirceus |
| Littoridinops monroensis |
| Lumbriculidae |
| Lumbriculus variegatus |

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|---|
| Lype diversa |
| Maccaffertium |
| Maccaffertium smithae |
| Macromia |
| Macromia taeniolata |
| Macromiidae |
| Macronychus glabratus |
| Macrostemum carolina |
| Mayatrichia |
| Mayatrichia ayama |
| Meropelopia |
| Mesosmittia |
| Metrobates |
| Micrasema |
| Micrasema rusticum |
| Micrasema wataga |
| Microcylloepus |
| Microcylloepus pusillus |
| Micromenetus |
| Micromenetus dilatatus |
| Microtendipes pedellus |
| Microtendipes pedellus grp. |
| Microtendipes rydalensis |
| Microtendipes rydalensis grp. |
| Mideopsis |
| Molanna |
| Mooreobdella |
| Mooreobdella tetragon |
| Muscidae |
| Naididae |
| Nais behningi |
| Nais communis |
| Nais communis complex |
| Nais pardalis |
| Nais simplex |
| Nais variabilis |
| Nanocladius |
| Nectopsyche |
| Nectopsyche candida |
| Nectopsyche exquisita |
| Nectopsyche pavida |
| Nemertea |
| Neoperla |
| Neoperla clymene |
| Neoporus |
| Neotrichia |
| Neumania |



US EPA ARCHIVE DOCUMENT

As Calculated / STORET station ->
Sample date ->

Taxon Name / SampleID/BenID ->

Neumania distincta

Neureclipsis

Neureclipsis crepuscularis
Neurocordulia
Neurocordulia alabamensis
Neurocordulia virginiensis
Nigronia
Nigronia fasciatus
Nigronia serricornis
Nilotanypus
Nilothauma
Notogillia wetherbyi

Nyctiophylax
Odonata
Odontomyia
Oecetis
Oecetis cinerascens
Oecetis georgia
Oecetis inconspicua cmplx.

Oecetis morsei or sphyra
Oecetis parva
Oecetis persimilis
Oecetis sp. a floyd
Oecetis sp. e floyd
Ora/scirtes
Oribatei
Orthocladiinae

Orthocladiinae gen. c epler

Orthocladiinae gen. f epler
Orthocladius annectens
Orthotrichia
Oxyethira
Pachydiplax longipennis
Pagastiella
Palaemonetes
Palaemonetes kadiakensis
Palaemonetes paludosus

Palpomyia/bezzia grp.
Paracladopelma
Paracladopelma loganae
Paracladopelma undine
Paragnetina
Paragnetina fumosa



US EPA ARCHIVE DOCUMENT

As Calculated / STORET station ->
Sample date ->

Taxon Name / SampleID/BenID ->

Parakiefferiella

Paralauterborniella nigrohalterale
Paraleptophlebia volitans

Parametriocnemus

Parametriocnemus sp. f epler

Paranyctiophylax
Paraplea
Paraponyx
Paratanytarsus sp. a epler
Paratanytarsus sp. c epler
Paratendipes subaequalis
Pelecypoda
Pelonomus obscurus
Peltodytes
Pentaneura inconspicua
Perlesta
Perlesta placida
Perlesta placida complex
Perlinella
Petrophila
Phaenopsectra obediens grp.
Phaenopsectra punctipes grp.
Phylocentropus
Physella
Physella cubensis
Piona

Pisidiidae
Pisidium
Planariidae
Planorbella duryi
Planorbella scalaris
Planorbidae
Platyhelminthes
Plecoptera
Plumulariidae

Polycentropodidae

Polycentropus
Polypedilum
Polypedilum aviceps

Polypedilum convictum grp.
Polypedilum fallax
Polypedilum flavum



US EPA ARCHIVE DOCUMENT

As Calculated / STORET station ->
Sample date ->

Taxon Name / SampleID/BenID ->

Polypedilum halterale grp.

Polypedilum illinoense
Polypedilum illinoense grp.

Polypedilum scalaenum
Polypedilum scalaenum grp.
Polypedilum sp. a epler
Polypedilum tritum
Pomacea paludosa
Pristina aequiseta
Pristina synclites
Pristinella jenkinae
Probezzia
Procambarus
Procladius

Procladius (holotanypus)
Procloeon viridocularis
Progomphus
Progomphus obscurus
Promoresia tardella

Prostoma rubrum
Psammoryctides convolutus

Pseudochironomus
Pseudocloeon
Psychodidae
Pycnopsyche
Pyralidae
Pyrgophorus platyrachis
Ranatra kirkaldyi
Rhagovelia
Rheocricotopus
Rheocricotopus robacki
Rheocricotopus tuberculatus
Rheotanytarsus

Rheotanytarsus distinctissimus grp.

Rheotanytarsus exiguus
Rheotanytarsus exiguus grp.
Rheotanytarsus pellucidus
Scirtes
Scirtidae

Serratella deficiens
Sialis
Silvius



US EPA ARCHIVE DOCUMENT

As Calculated / STORET station ->
Sample date ->

| Taxon Name / SampleID/BenID -> |
|---|
| Simuliidae |
| Simulium |
| Slavina appendiculata |
| Somatogyrus walkerianus |
| Sperchon |
| Sperchonopsis |
| Sperchopsis |
| |
| Sphaeriidae |
| |
| Sphaeriidae(mollusca) |
| Sphaeroma |
| Sphaeromias |
| Spirosperma |
| Spirosperma ferox |
| Stelechomyia perpulchra |
| Stempellina |
| Stempellina sp. a epler |
| Stempellinella |
| Stenacron |
| Stenacron floridense |
| Stenacron interpunctatum |
| Stenelmis |
| Stenelmis decorata |
| Stenelmis hungerfordi |
| Stenochironomus |
| Stenonema |
| |
| Stenonema exiguum |
| |
| Stenonema smithae |
| Stratiomyidae |
| Stylaria lacustris |
| Synorthocladius |
| Tabanus |
| Taeniopteryx lita |
| Tanytarsus |
| Tanytarsus sp. a epler |
| Tanytarsus sp. c epler |
| Tanytarsus sp. d epler |
| Tanytarsus sp. e epler |
| Tanytarsus sp. g epler |
| Tanytarsus sp. l epler |
| Tanytarsus sp. m epler |
| Tanytarsus sp. o epler |
| Tanytarsus sp. r epler |
| Tanytarsus sp. s epler |
| Tanytarsus sp. t epler |
| Tanytarsus sp. u epler |
| Taphromysis bowmani |



US EPA ARCHIVE DOCUMENT

As Calculated / STORET station ->
Sample date ->

| Taxon Name / SampleID/BenID -> |
|---|
| Thienemanniella |
| Thienemanniella lobapodema |
| Thienemanniella similis |
| |
| Thienemanniella sp. a epler |
| |
| Thienemannimyia grp. |
| Tipula |
| Tipulidae |
| Torrenticola |
| Triaenodes |
| Triaenodes ignitus |
| Triaenodes perna |
| Tribelos |
| Tribelos atrum |
| Tribelos fuscicornis |
| Tribelos jucundum |
| Tricorythodes albilineatus |
| Tubificidae |
| Turbellaria |
| Tvetenia |
| Tvetenia discoloripes grp. |
| Unionicola |
| Unniella multivirga |
| Veliidae |
| Xenochironomus xenolabis |
| Xestochironomus |
| Xylotopus par |
| Zygoptera |

US EPA ARCHIVE DOCUMENT

| SampleID | Benth_IDs | STORET | Station Nickname | Station Description | Bioregion | WBID | Latitude |
|---|---|---|---|---|---|---|---|
| 3105 | 3980 | 22030062 | MCBRIREF | MCBRIDE SLOUGH HWY.267 WAKULLA CO. | Panhandle East | 1028 | 30.236111 |
| 3682 | 4628 | 19010042 | CAULKREF | Calkins Ck, off Hamp Register Rd. | Northeast | 2264 | 30.330819 |
| 3797 | 4802 | 28020221 | TLGRPHREF | TELEGRAPH CREEK AT BABCOCK RANCH | Peninsula | 3236A | 26.748444 |
| 3952 | 5024 | 25020111 | HORSEREF | Horse Creek @ SR 72 Bridge | Peninsula | 1787A | 27.199975 |
| 6810 | 7823 | 20010454 | JUNIPREF | JUNIPER CREEK AT HIGHWAY 19 | Peninsula | 2905 | 29.213725 |
| 7183 | 8268 | 31010050 | CRKREF | CROOKED CREEK HWY.270 GADSDEN CO. | Panhandle West | 504 | 30.583275 |
| 7224 | 8306 | 33010065 | RSTAREARUN | Rest Area Run Creek below I 10 | Panhandle West | 542 | 30.568167 |
| 7776 | 8853 | 20030265 | CECFLD5 | Sal Taylor Creek below Rowell Creek | Northeast | 2327 | 30.199722 |
| 7778 | 8855 | 20030341 | CECFLD7 | Yellow Water Creek above Sal Taylor Creek | Northeast | 2323 | 30.200889 |
| 7779 | 8856 | 20030342 | CECFLD8 | Yellow Water Creek below Sal Taylor Creek | Northeast | 2323 | 30.195681 |
| 9179 | 10164 | 33010065 | RSTAREARUN | Rest Area Run Creek below I 10 | Panhandle West | 542 | 30.568167 |
| 9196 | 10181 | 21030064 | CEDHEADREF | Cedar Head Run, above Ichetucknee River | Panhandle East | 3519 | 29.980611 |
| 9206 | 10191 | 20010454 | JUNIPREF | JUNIPER CREEK AT HIGHWAY 19 | Peninsula | 2905 | 29.213725 |
| 9395 | 10288 | 20030341 | CECFLD7 | Yellow Water Creek above Sal Taylor Creek | Northeast | 2323 | 30.200889 |
| 9396 | 10289 | 20030265 | CECFLD5 | Sal Taylor Creek below Rowell Creek | Northeast | 2327 | 30.199722 |
| 9399 | 10292 | 20030342 | CECFLD8 | Yellow Water Creek below Sal Taylor Creek | Northeast | 2323 | 30.195681 |
| 10131 | 10723 | 31010050 | CRKREF | CROOKED CREEK HWY.270 GADSDEN CO. | Panhandle West | 504 | 30.583275 |
| 10591 | 11209 | 19010099 | PIGEONREF | Pigeon Creek at US 1 St. Marys-Nassau River | Northeast | 2105 | 30.761314 |
| 10633 | 11325 | 32020063 | LTCRKCKREF | LITTLE CROOKED CREEK S.R.79 BAY CO. | Panhandle West | 907 | 30.413444 |
| 10785 | 11544 | 28020221 | TLGRPHREF | TELEGRAPH CREEK AT BABCOCK RANCH | Peninsula | 3236A | 26.748444 |



US EPA ARCHIVE DOCUMENT

| SampleID | Benth_IDs | STORET | Station Nickname | Station Description | Bioregion | WBID | Latitude |
|---|---|---|---|---|---|---|---|
| 10844 | 11554 | 20020317 | SILRUNREF | SILVER RUN AT CONFLUENCE WITH BOAT RAMP CANAL | Peninsula | 2772 | 29.209917 |
| 11464 | 11963 | 22030062 | MCBRIREF | MCBRIDE SLOUGH HWY.267 WAKULLA CO. | Panhandle East | 1028 | 30.236111 |
| 11607 | 12057 | 33040064 | JACKSREFB | Jacks Branch, Forestry BMP Study Ref Site B | Panhandle West | 161 | 30.869528 |
| 12089 | 12197 | 26011019 | LVNGSTNREF | LIVINGSTON CREEK AT RUCKS DAIRY RD. | Peninsula | 1685B | 27.7 |
| 12092 | 12201 | 31020040 | TENMILEREF | TEN MILE CREEK S.R.73 CALHOUN CO. | Panhandle West | 569 | 30.500353 |
| 12224 | 12340 | 26011020 | TIGERREF | TIGER CREEK AT WALKING WATERS RD. | Peninsula | 1619 | 27.812092 |
| 12401 | 12463 | 20030456 | THOMASREFB | Thomas Ck, Forestry BMP Study Ref Site B | Northeast | 2498 | 29.916 |
| 12436 | 12486 | 33010054 | MCDAVREF | MCDAVID CREEK AT SR 99 | Panhandle West | 149 | 30.739333 |
| 12450 | 12500 | 21010018 | FALLNGREF | Falling Creek @ CR 131, above falls Suwannee R. | Northeast | 3477 | 30.260964 |
| 12600 | 12548 | 26010972 | DAVENPOREF | DAVENPORT CR AT SR 545 BRIDGE | Peninsula | 3170K | 28.270889 |
| 12609 | 12557 | 22020062 | OKLREF | Oklawaha Ck, SR 267, S of Quincy | Panhandle West | 811 | 30.450606 |
| 13475 | 12867 | 31020040 | TENMILEREF | TEN MILE CREEK S.R.73 CALHOUN CO. | Panhandle West | 569 | 30.500353 |
| 13535 | 12898 | 20030414 | GLDHEADREF | GOLD HEAD BR. IN STATE PARK | Peninsula | 2528 | 29.832231 |
| 14213 | 13118 | 33040064 | JACKSREFB | Jacks Branch, Forestry BMP Study Ref Site B | Panhandle West | 161 | 30.869528 |
| 14231 | 13136 | 20030456 | THOMASREFB | Thomas Ck, Forestry BMP Study Ref Site B | Northeast | 2498 | 29.916 |
| 14930 | 13379 | 20020012 | OKLRIVREF | OKLAWAHA RIVER AT SR 316 | Peninsula | 2740C | 29.373428 |
| 14965 | 13401 | 33040014 | BIGHORSREF | BIG HORSE CREEK S.R.2 OKA.CO. | Panhandle West | 28 | 30.922028 |
| 14966 | 13403 | 22020062 | OKLREF | Oklawaha Ck, SR 267, S of Quincy | Panhandle West | 811 | 30.450606 |
| 15951 | 14187 | 25020111 | HORSEREF | Horse Creek @ SR 72 Bridge | Peninsula | 1787A | 27.199975 |
| 16636 | 14709 | 28010223 | NFORLOXREF | N FK LOXAHATCHEE RIVER REF BIO STATION | Peninsula | 3224A | 27 |
| 16643 | 14716 | 32020063 | LTCRKCKREF | LITTLE CROOKED CREEK S.R.79 BAY CO. | Panhandle West | 907 | 30.413444 |



US EPA ARCHIVE DOCUMENT

| SampleID | Benth_IDs | STORET | Station Nickname | Station Description | Bioregion | WBID | Latitude |
|---|---|---|---|---|---|---|---|
| 18076 | 15790 | 21010018 | FALLNGREF | Falling Creek @ CR 131, above falls Suwannee R. | Northeast | 3477 | 30.260964 |
| 18372 | 15965 | 26011020 | TIGERREF | TIGER CREEK AT WALKING WATERS RD. | Peninsula | 1619 | 27.812092 |
| 18594 | 16087 | 28010223 | NFORLOXREF | N FK LOXAHATCHEE RIVER REF BIO STATION | Peninsula | 3224A | 27 |
| 20471 | 17104 | 20030414 | GLDHEADREF | GOLD HEAD BR. IN STATE PARK | Peninsula | 2528 | 29.832231 |
| 20474 | 17107 | 19010099 | PIGEONREF | Pigeon Creek at US 1 St. Marys-Nassau River | Northeast | 2105 | 30.761314 |
| 20479 | 17112 | 21030064 | CEDHEADREF | Cedar Head Run, above Ichetucknee River | Panhandle East | 3519 | 29.980611 |
| 20480 | 17113 | 26010972 | DAVENPOREF | DAVENPORT CR AT SR 545 BRIDGE | Peninsula | 3170K | 28.270889 |
| 21571 | 17864 | 20020012 | OKLRIVREF | OKLAWAHA RIVER AT SR 316 | Peninsula | 2740C | 29.373428 |
| 22114 | 18267 | 22030010 | STMARKSREF | St. Marks R approx 4 mi N of Hwy 98 (@ "rapids") | Panhandle East | 793B | 30.240222 |
| 24523 | 19456 | 33010054 | MCDAVREF | MCDAVID CREEK AT SR 99 | Panhandle West | 149 | 30.739333 |
| 24524 | 19457 | 33040014 | BIGHORSREF | BIG HORSE CREEK S.R.2 OKA.CO. | Panhandle West | 28 | 30.922028 |
| 25672 | 19985 | 22030010 | STMARKSREF | St. Marks R approx 4 mi N of Hwy 98 (@ "rapids") | Panhandle East | 793B | 30.240222 |
| 26863 | 20697 | 20020317 | SILRUNREF | SILVER RUN AT CONFLUENCE WITH BOAT RAMP CANAL | Peninsula | 2772 | 29.209917 |
| 26865 | 20699 | 26011019 | LVNGSTNREF | LIVINGSTON CREEK AT RUCKS DAIRY RD. | Peninsula | 1685B | 27.7 |
| 26868 | 20702 | 19010042 | CAULKREF | Calkins Ck, off Hamp Register Rd. | Northeast | 2264 | 30.330819 |
| 47698 | 32249 | BAK210GS | BAK210GS | St. Mary's River - BAK210GS | Northeast | 2211 | 30.435664 |
| 48420 | 33507 | 32030023 | ECONSCTREF | ECONFINA CREEK AT SCOTT RD | Panhandle West | 553 | 30.555361 |
| 50131 | 33604 | CLA254LR | CLA254LR | Black Creek - CLA254LR | Northeast | 2415C | 29.979571 |
| 52996 | 33624 | CLA243LV | CLA243LV | Black Creek - CLA243LV | Northeast | 2498 | 29.910805 |
| 52471 | 34244 | LEV502GS | LEV502GS | Waccasassa River - LEV502GS | Peninsula | 3699 | 29.275903 |
| 52912 | 34645 | PUT308GS | PUT308GS | Little Orange Creek - PUT308GS | Peninsula | 2713 | 29.541246 |



US EPA ARCHIVE DOCUMENT

| SampleID | Benth_IDs | STORET | Station Nickname | Station Description | Bioregion | WBID | Latitude |
|---|---|---|---|---|---|---|---|
| 53274 | 34807 | 21010008 | HAMIL6 | ALAPAHA RIVER 1 SR 150 HAMILTON | Panhandle East | 3324 | 30.599861 |
| 53732 | 35065 | BAK210GS | BAK210GS | St. Mary's River - BAK210GS | Northeast | 2211 | 30.435664 |
| 53951 | 35284 | GLA630GS | GLA630GS | Cypress Branch - GLA630GS | Peninsula | 3235G | 26.813874 |
| 52834 | 35565 | 27311650820 | EFM02 | East Fork Manatee R. S of US62 on Duette Park. Myakka DOSSAC study | Peninsula | 1811 | 27.521261 |
| 49652 | 35784 | GAD104US | GAD104US | Quincy Creek At Sr267 - GAD104US | Panhandle West | 1303 | 30.600524 |
| 53059 | 36666 | UNI234LV | UNI234LV | Olustee Creek - UNI234LV | Northeast | 3504 | 30.095941 |
| 49677 | 36688 | LIB104LV | LIB104LV | Mule Creek - LIB104LV | Panhandle West | 684 | 30.511395 |
| 57322 | 36904 | LEV502GS | LEV502GS | Waccasassa River - LEV502GS | Peninsula | 3699 | 29.275903 |
| 57322 | 36904 | LEV502GS | LEV502GS | Waccasassa River - LEV502GS | Peninsula | 3699 | 29.275903 |
| 57324 | 36989 | 3513 | FLO521150 | Withlacoochee River @ Stokes Ferry | Peninsula | 1329C | 28.988548 |
| 57324 | 36989 | 3513 | FLO521150 | Withlacoochee River @ Stokes Ferry | Peninsula | 1329C | 28.988548 |
| 57431 | 36987 | PUT308GS | PUT308GS | Little Orange Creek - PUT308GS | Peninsula | 2713 | 29.541246 |
| 57431 | 36987 | PUT308GS | PUT308GS | Little Orange Creek - PUT308GS | Peninsula | 2713 | 29.541246 |
| 59773 | 38075 | 3545 | S360 | S360 Blackwater River @ Hwy 4 | Panhandle West | 24C | 30.833395 |
| 59773 | 38075 | 3545 | S360 | S360 Blackwater River @ Hwy 4 | Panhandle West | 24C | 30.833395 |
| 60301 | 38292 | 21202 | OR006 | Orange Creek | Peninsula | 2747 | 29.509568 |
| 60301 | 38292 | 21202 | OR006 | Orange Creek | Peninsula | 2747 | 29.509568 |
| 60308 | 38307 | 3535 | SUW010 | SUW010 Suwannee River | Northeast | 3341B | 30.508115 |
| 60308 | 38307 | 3535 | SUW010 | SUW010 Suwannee River | Northeast | 3341B | 30.508115 |
| 60639 | 38485 | 3546 | S365 | S365 Yellow River @ Hwy 2 | Panhandle West | 30 | 30.925354 |
| 60639 | 38485 | 3546 | S365 | S365 Yellow River @ Hwy 2 | Panhandle West | 30 | 30.925354 |
| 60751 | 38544 | 24010002 | MANAREF | Manatee R 20 m below SR64 bridge (TP1) | Peninsula | 1807C | 27.473372 |
| 60751 | 38544 | 24010002 | MANAREF | Manatee R 20 m below SR64 bridge (TP1) | Peninsula | 1807C | 27.473372 |
| 62733 | 39186 | 3549 | S377 | S377 Escambia River @ HWY 4 Bridge | Panhandle West | 10C | 30.964065 |
| 62733 | 39186 | 3549 | S377 | S377 Escambia River @ HWY 4 Bridge | Panhandle West | 10C | 30.964065 |



US EPA ARCHIVE DOCUMENT

| SampleID | Benth_IDs | STORET | Station Nickname | Station Description | Bioregion | WBID | Latitude |
|---|---|---|---|---|---|---|---|
| 63694 | 39707 | 3513 | FLO521150 | Withlacoochee River @ Stokes Ferry | Peninsula | 1329C | 28.988548 |
| 63694 | 39707 | 3513 | FLO521150 | Withlacoochee River @ Stokes Ferry | Peninsula | 1329C | 28.988548 |
| 64191 | 40004 | 3535 | SUW010 | SUW010 Suwannee River | Northeast | 3341B | 30.508115 |
| 64191 | 40004 | 3535 | SUW010 | SUW010 Suwannee River | Northeast | 3341B | 30.508115 |
| 64546 | 40384 | 23010464 | WITHREF | Withlacoochee R @ county park off Auton Rd (TP3) | Peninsula | 1329F | 28.3 |
| 64546 | 40384 | 23010464 | WITHREF | Withlacoochee R @ county park off Auton Rd (TP3) | Peninsula | 1329F | 28.3 |
| 65025 | 40260 | LIB104LV | LIB104LV | Mule Creek - LIB104LV | Panhandle West | 684 | 30.511395 |
| 65025 | 40260 | LIB104LV | LIB104LV | Mule Creek - LIB104LV | Panhandle West | 684 | 30.511395 |
| 65026 | 40261 | 22020093 | FLRQUINREF | Quincy Creek above SR267 bridge | Panhandle West | 1303 | 30.599722 |
| 65026 | 40261 | 22020093 | FLRQUINREF | Quincy Creek above SR267 bridge | Panhandle West | 1303 | 30.599722 |
| 65028 | 40263 | GAD106GS | GAD106GS | Yon Creek - GAD106GS | Panhandle West | 626 | 30.534545 |
| 65028 | 40263 | GAD106GS | GAD106GS | Yon Creek - GAD106GS | Panhandle West | 626 | 30.534545 |
| 65029 | 40264 | NUTREF001 | TELOG1641 | Telogia Creek at CR 1641 | Panhandle West | 1300 | 30.450144 |
| 65029 | 40264 | NUTREF001 | TELOG1641 | Telogia Creek at CR 1641 | Panhandle West | 1300 | 30.450144 |
| 65250 | 40368 | CLA246GS | CLA246GS | Peters Creek - CLA246GS | Northeast | 2444 | 30.007483 |
| 65250 | 40368 | CLA246GS | CLA246GS | Peters Creek - CLA246GS | Northeast | 2444 | 30.007483 |
| 65291 | 40343 | 3545 | S360 | S360 Blackwater River @ Hwy 4 | Panhandle West | 24C | 30.833395 |
| 65291 | 40343 | 3545 | S360 | S360 Blackwater River @ Hwy 4 | Panhandle West | 24C | 30.833395 |
| 65292 | 40344 | 32030023 | ECONSCTREF | ECONFINA CREEK AT SCOTT RD | Panhandle West | 553 | 30.555361 |
| 65292 | 40344 | 32030023 | ECONSCTREF | ECONFINA CREEK AT SCOTT RD | Panhandle West | 553 | 30.555361 |
| 65293 | 40345 | 21010008 | HAMIL6 | ALAPAHA RIVER 1 SR 150 HAMILTON | Panhandle East | 3324 | 30.599861 |
| 65293 | 40345 | 21010008 | HAMIL6 | ALAPAHA RIVER 1 SR 150 HAMILTON | Panhandle East | 3324 | 30.599861 |
| 65296 | 40348 | 3546 | S365 | S365 Yellow River @ Hwy 2 | Panhandle West | 30 | 30.925354 |
| 65296 | 40348 | 3546 | S365 | S365 Yellow River @ Hwy 2 | Panhandle West | 30 | 30.925354 |
| 65306 | 40406 | BAK208GS | BAK208GS | St. Mary's River - BAK208GS | Northeast | 2097K | 30.517903 |



US EPA ARCHIVE DOCUMENT

| SampleID | Benth_IDs | STORET | Station Nickname | Station Description | Bioregion | WBID | Latitude |
|---|---|---|---|---|---|---|---|
| 65306 | 40406 | BAK208GS | BAK208GS | St. Mary's River - BAK208GS | Northeast | 2097K | 30.517903 |
| 65316 | 40349 | 3549 | S377 | S377 Escambia River @ HWY 4 Bridge | Panhandle West | 10C | 30.964065 |
| 65316 | 40349 | 3549 | S377 | S377 Escambia River @ HWY 4 Bridge | Panhandle West | 10C | 30.964065 |
| 65379 | 40364 | 22050083 | STEINCANAL | Steinhatchee @ Canal Road | Panhandle East | 3573A | 29.828806 |
| 65379 | 40364 | 22050083 | STEINCANAL | Steinhatchee @ Canal Road | Panhandle East | 3573A | 29.828806 |
| 65382 | 40367 | 22050040 | LAFAY1 | STEINHATCHEE RIVER I SR357 | Panhandle East | 3573B | 29.890278 |
| 65382 | 40367 | 22050040 | LAFAY1 | STEINHATCHEE RIVER I SR357 | Panhandle East | 3573B | 29.890278 |
| 65414 | 40405 | WAK158LR | WAK158LR | Sopchoppy River - WAK158LR | Panhandle West | 998 | 30.130119 |
| 65414 | 40405 | WAK158LR | WAK158LR | Sopchoppy River - WAK158LR | Panhandle West | 998 | 30.130119 |
| 65567 | 40448 | 23010464 | WITHREF | Withlacoochee R @ county park off Auton Rd (TP3) | Peninsula | 1329F | 28.3 |
| 65567 | 40448 | 23010464 | WITHREF | Withlacoochee R @ county park off Auton Rd (TP3) | Peninsula | 1329F | 28.3 |
| 65636 | 40430 | CLA246GS | CLA246GS | Peters Creek - CLA246GS | Northeast | 2444 | 30.007483 |
| 65636 | 40430 | CLA246GS | CLA246GS | Peters Creek - CLA246GS | Northeast | 2444 | 30.007483 |
| 65637 | 40431 | UNI234LV | UNI234LV | Olustee Creek - UNI234LV | Northeast | 3504 | 30.095941 |
| 65637 | 40431 | UNI234LV | UNI234LV | Olustee Creek - UNI234LV | Northeast | 3504 | 30.095941 |
| 65715 | 40524 | WAK158LR | WAK158LR | Sopchoppy River - WAK158LR | Panhandle West | 998 | 30.130119 |
| 65715 | 40524 | WAK158LR | WAK158LR | Sopchoppy River - WAK158LR | Panhandle West | 998 | 30.130119 |
| 65731 | 40476 | 19010006 | STMAR2REF | ST MARYS RIVER AT SR #2 | Northeast | 2097K | 30.51785 |
| 65731 | 40476 | 19010006 | STMAR2REF | ST MARYS RIVER AT SR #2 | Northeast | 2097K | 30.51785 |
| 65736 | 40479 | CLA254LR | CLA254LR | Black Creek - CLA254LR | Northeast | 2415C | 29.979571 |
| 65736 | 40479 | CLA254LR | CLA254LR | Black Creek - CLA254LR | Northeast | 2415C | 29.979571 |
| 65737 | 40481 | CLA243LV | CLA243LV | Black Creek - CLA243LV | Northeast | 2498 | 29.910805 |
| 65737 | 40481 | CLA243LV | CLA243LV | Black Creek - CLA243LV | Northeast | 2498 | 29.910805 |
| 65739 | 40534 | NUTREF001 | TELOG1641 | Telogia Creek at CR 1641 | Panhandle West | 1300 | 30.450144 |
| 65739 | 40534 | NUTREF001 | TELOG1641 | Telogia Creek at CR 1641 | Panhandle West | 1300 | 30.450144 |



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| SampleID | Benth_IDs | STORET | Station Nickname | Station Description | Bioregion | WBID | Latitude |
|---|---|---|---|---|---|---|---|
| 65741 | 40537 | GAD106GS | GAD106GS | Yon Creek - GAD106GS | Panhandle West | 626 | 30.534545 |
| 65741 | 40537 | GAD106GS | GAD106GS | Yon Creek - GAD106GS | Panhandle West | 626 | 30.534545 |
| 65891 | 40544 | GLA630GS | GLA630GS | Cypress Branch - GLA630GS | Peninsula | 3235G | 26.813874 |
| 65891 | 40544 | GLA630GS | GLA630GS | Cypress Branch - GLA630GS | Peninsula | 3235G | 26.813874 |
| 65900 | 40550 | 24010002 | MANAREF | Manatee R 20 m below SR64 bridge (TP1) | Peninsula | 1807C | 27.473372 |
| 65900 | 40550 | 24010002 | MANAREF | Manatee R 20 m below SR64 bridge (TP1) | Peninsula | 1807C | 27.473372 |
| 65907 | 40552 | 27311650820 | EFM02 | East Fork Manatee R. S of US62 on Duette Park. Myakka DOSSAC study | Peninsula | 1811 | 27.521261 |
| 65907 | 40552 | 27311650820 | EFM02 | East Fork Manatee R. S of US62 on Duette Park. Myakka DOSSAC study | Peninsula | 1811 | 27.521261 |
| 65931 | 40577 | 22050083 | STEINCANAL | Steinhatchee @ Canal Road | Panhandle East | 3573A | 29.828806 |
| 65931 | 40577 | 22050083 | STEINCANAL | Steinhatchee @ Canal Road | Panhandle East | 3573A | 29.828806 |
| 65932 | 40564 | 22050040 | LAFAY1 | STEINHATCHEE RIVER I SR357 | Panhandle East | 3573B | 29.890278 |
| 65932 | 40564 | 22050040 | LAFAY1 | STEINHATCHEE RIVER I SR357 | Panhandle East | 3573B | 29.890278 |
| 66028 | 40571 | 21202 | OR006 | Orange Creek | Peninsula | 2747 | 29.509568 |
| 66028 | 40571 | 21202 | OR006 | Orange Creek | Peninsula | 2747 | 29.509568 |

US EPA ARCHIVE DOCUMENT

| SampleID | Benth_IDs | Longitude | Sample Date | Nreps | Gear | Amphipod Pct | ChironPct | Chiron Taxa | Clinger Taxa | Coleoptera Pct |
|---|---|---|---|---|---|---|---|---|---|---|
| 3105 | 3980 | -84.272222 | 3/21/1994 | 1 | D-FrameX20 | 6.52 | 51.45 | 17 | 7 | 3.62 |
| 3682 | 4628 | -82.241797 | 11/1/1994 | 1 | D-FrameX20 | 3.7 | 29.63 | 14 | 7 | 13.89 |
| 3797 | 4802 | -81.670333 | 7/27/1994 | 1 | D-FrameX20 | 0 | 16.44 | 8 | 4 | 25.34 |
| 3952 | 5024 | -81.987578 | 10/24/1994 | 1 | D-FrameX20 | 0.68 | 29.25 | 9 | 5 | 12.93 |
| 6810 | 7823 | -81.654861 | 1/31/1995 | 1 | D-FrameX20 | 15.45 | 23.64 | 12 | 4 | 0 |
| 7183 | 8268 | -84.880969 | 2/13/1995 | 1 | D-FrameX20 | 0 | 50 | 15 | 10 | 4.63 |
| 7224 | 8306 | -87.402944 | 7/12/1995 | 1 | D-FrameX20 | 1.77 | 24.78 | 14 | 12 | 17.7 |
| 7776 | 8853 | -81.913889 | 10/2/1995 | 1 | D-FrameX20 | 0 | 58.22 | 12 | 3 | 1.37 |
| 7778 | 8855 | -81.919542 | 10/2/1995 | 1 | D-FrameX20 | 0 | 31.29 | 17 | 5 | 2.04 |
| 7779 | 8856 | -81.918278 | 10/2/1995 | 1 | D-FrameX20 | 0 | 44.66 | 13 | 5 | 4.85 |
| 9179 | 10164 | -87.402944 | 2/14/1996 | 1 | D-FrameX20 | 0 | 30.61 | 14 | 6 | 3.4 |
| 9196 | 10181 | -82.758589 | 2/6/1996 | 1 | D-FrameX20 | 23.15 | 34.26 | 12 | 1 | 0 |
| 9206 | 10191 | -81.654861 | 3/4/1996 | 1 | D-FrameX20 | 21.92 | 15.75 | 8 | 6 | 4.11 |
| 9395 | 10288 | -81.919542 | 3/5/1996 | 1 | D-FrameX20 | 0 | 11.21 | 7 | 5 | 13.08 |
| 9396 | 10289 | -81.913889 | 3/5/1996 | 1 | D-FrameX20 | 1.45 | 19.57 | 8 | 6 | 7.25 |
| 9399 | 10292 | -81.918278 | 3/5/1996 | 1 | D-FrameX20 | 7.23 | 32.53 | 19 | 7 | 6.02 |
| 10131 | 10723 | -84.880969 | 7/9/1996 | 1 | D-FrameX20 | 0 | 35.76 | 20 | 12 | 7.28 |
| 10591 | 11209 | -81.967519 | 7/9/1996 | 1 | D-FrameX20 | 3.82 | 22.29 | 12 | 4 | 9.55 |
| 10633 | 11325 | -85.868472 | 7/16/1996 | 1 | D-FrameX20 | 3.92 | 16.99 | 14 | 11 | 10.46 |
| 10785 | 11544 | -81.670333 | 9/16/1996 | 1 | D-FrameX20 | 0 | 19.63 | 9 | 8 | 38.32 |



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| SampleID | Benth_IDs | Longitude | Sample Date | Nreps | Gear | Amphipod Pct | ChironPct | Chiron Taxa | Clinger Taxa | Coleoptera Pct |
|---|---|---|---|---|---|---|---|---|---|---|
| 10844 | 11554 | -81.993333 | 9/16/1996 | 1 | D-FrameX20 | 10.24 | 33.13 | 13 | 7 | 0 |
| 11464 | 11963 | -84.272222 | 2/11/1997 | 1 | D-FrameX20 | 6.12 | 34.69 | 15 | 7 | 0.68 |
| 11607 | 12057 | -86.489361 | 2/25/1997 | 1 | D-FrameX20 | 0.71 | 49.29 | 18 | 5 | 5 |
| 12089 | 12197 | -81.4 | 2/18/1997 | 1 | D-FrameX20 | 17.31 | 42.31 | 19 | 3 | 10.9 |
| 12092 | 12201 | -85.200531 | 2/4/1997 | 1 | D-FrameX20 | 0 | 20.77 | 11 | 8 | 4.62 |
| 12224 | 12340 | -81.444064 | 2/18/1997 | 1 | D-FrameX20 | 9.91 | 24.32 | 7 | 7 | 17.12 |
| 12401 | 12463 | -81.862472 | 7/2/1997 | 1 | D-FrameX20 | 0.85 | 30.51 | 17 | 7 | 4.24 |
| 12436 | 12486 | -87.448556 | 8/12/1997 | 1 | D-FrameX20 | 0 | 35.43 | 16 | 11 | 32.28 |
| 12450 | 12500 | -82.668108 | 7/17/1997 | 1 | D-FrameX20 | 3.17 | 39.68 | 11 | 10 | 7.14 |
| 12600 | 12548 | -81.591128 | 9/30/1997 | 1 | D-FrameX20 | 4.55 | 28.18 | 14 | 4 | 11.82 |
| 12609 | 12557 | -84.643581 | 8/12/1997 | 1 | D-FrameX20 | 0 | 40 | 14 | 5 | 10.48 |
| 13475 | 12867 | -85.200531 | 2/10/1998 | 1 | D-FrameX20 | 0 | 16.31 | 11 | 7 | 4.96 |
| 13535 | 12898 | -81.946289 | 3/10/1998 | 1 | D-FrameX20 | 0.83 | 52.89 | 19 | 9 | 4.13 |
| 14213 | 13118 | -86.489361 | 7/1/1998 | 1 | D-FrameX20 | 1.16 | 51.45 | 16 | 7 | 1.73 |
| 14231 | 13136 | -81.862472 | 2/12/1998 | 1 | D-FrameX20 | 1.56 | 17.19 | 11 | 10 | 8.59 |
| 14930 | 13379 | -81.901764 | 8/11/1998 | 1 | D-FrameX20 | 4.64 | 8.61 | 9 | 10 | 5.3 |
| 14965 | 13401 | -86.595167 | 7/15/1998 | 1 | D-FrameX20 | 0 | 19.08 | 18 | 16 | 15.61 |
| 14966 | 13403 | -84.643581 | 9/9/1998 | 1 | D-FrameX20 | 1 | 42 | 14 | 7 | 12 |
| 15951 | 14187 | -81.987578 | 2/17/1999 | 1 | D-FrameX20 | 0 | 29.09 | 9 | 6 | 26.36 |
| 16636 | 14709 | -80.1 | 3/22/1999 | 1 | D-FrameX20 | 15.82 | 26.58 | 7 | 1 | 10.13 |
| 16643 | 14716 | -85.868472 | 1/21/1999 | 1 | D-FrameX20 | 3 | 20 | 10 | 12 | 2 |



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| SampleID | Benth_IDs | Longitude | Sample Date | Nreps | Gear | Amphipod Pct | ChironPct | Chiron Taxa | Clinger Taxa | Coleoptera Pct |
|---|---|---|---|---|---|---|---|---|---|---|
| 18076 | 15790 | -82.668108 | 7/27/1999 | 1 | D-FrameX20 | 0.76 | 25 | 8 | 3 | 7.58 |
| 18372 | 15965 | -81.444064 | 7/20/1999 | 1 | D-FrameX20 | 19.88 | 13.04 | 7 | 7 | 19.88 |
| 18594 | 16087 | -80.1 | 10/7/1999 | 1 | D-FrameX20 | 3.23 | 43.55 | 12 | 4 | 7.26 |
| 20471 | 17104 | -81.946289 | 1/12/2000 | 1 | D-FrameX20 | 0 | 37.84 | 14 | 12 | 1.8 |
| 20474 | 17107 | -81.967519 | 2/1/2000 | 1 | D-FrameX20 | 13.51 | 28.83 | 10 | 6 | 8.11 |
| 20479 | 17112 | -82.758589 | 3/15/2000 | 1 | D-FrameX20 | 6.31 | 60.36 | 17 | 3 | 1.8 |
| 20480 | 17113 | -81.591128 | 1/10/2000 | 1 | D-FrameX20 | 5.99 | 32.93 | 9 | 7 | 9.58 |
| 21571 | 17864 | -81.901764 | 2/15/2000 | 1 | D-FrameX20 | 20.44 | 36.5 | 10 | 6 | 5.84 |
| 22114 | 18267 | -84.145389 | 8/22/2000 | 1 | D-FrameX20 | 7.41 | 31.48 | 17 | 3 | 4.63 |
| 24523 | 19456 | -87.448556 | 2/22/2001 | 1 | D-FrameX20 | 0.87 | 19.13 | 12 | 11 | 22.61 |
| 24524 | 19457 | -86.595167 | 2/8/2001 | 1 | D-FrameX20 | 0 | 28.38 | 13 | 10 | 8.78 |
| 25672 | 19985 | -84.145389 | 9/18/2001 | 1 | D-FrameX20 | 11 | 16 | 4 | 2 | 12 |
| 26863 | 20697 | -81.993333 | 9/4/2001 | 1 | D-FrameX20 | 11.27 | 35.91 | 9 | 4 | 1.41 |
| 26865 | 20699 | -81.4 | 9/5/2001 | 1 | D-FrameX20 | 1.69 | 26.27 | 11 | 5 | 20.34 |
| 26868 | 20702 | -82.241797 | 7/10/2001 | 1 | D-FrameX20 | 3.51 | 18.42 | 10 | 4 | 7.02 |
| 47698 | 32249 | -82.287764 | 11/1/2005 | 1 | D-FrameX20 | 0 | 25.47 | 5 | 6 | 6.6 |
| 48420 | 33507 | -85.435 | 2/15/2006 | 1 | D-FrameX20 | 0 | 40.2 | 15 | 12 | 6.86 |
| 50131 | 33604 | -81.852289 | 11/14/2005 | 1 | D-FrameX20 | 4.76 | 42.86 | 9 | 8 | 24.76 |
| 52996 | 33624 | -81.884868 | 11/14/2005 | 1 | D-FrameX20 | 0.94 | 51.89 | 15 | 7 | 3.77 |
| 52471 | 34244 | -82.736663 | 12/6/2005 | 1 | D-FrameX20 | 1.96 | 16.67 | 6 | 7 | 10.78 |
| 52912 | 34645 | -81.953277 | 12/13/2005 | 1 | D-FrameX20 | 1.82 | 21.82 | 9 | 9 | 20 |



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| SampleID | Benth_IDs | Longitude | Sample Date | Nreps | Gear | Amphipod Pct | ChironPct | Chiron Taxa | Clinger Taxa | Coleoptera Pct |
|---|---|---|---|---|---|---|---|---|---|---|
| 53274 | 34807 | -83.073417 | 4/24/2006 | 1 | D-FrameX20 | 0 | 50 | 13 | 7 | 23 |
| 53732 | 35065 | -82.287764 | 3/20/2006 | 1 | D-FrameX20 | 0.91 | 25.45 | 7 | 6 | 0.91 |
| 53951 | 35284 | -81.335414 | 1/23/2006 | 1 | D-FrameX20 | 4.55 | 25.45 | 8 | 1 | 30 |
| 52834 | 35565 | -82.137561 | 6/21/2006 | 1 | D-FrameX20 | 0 | 29.52 | 10 | 3 | 33.33 |
| 49652 | 35784 | -84.580759 | 11/14/2005 | 1 | D-FrameX20 | 0 | 25.23 | 4 | 6 | 7.48 |
| 53059 | 36666 | -82.472863 | 11/15/2005 | 1 | D-FrameX20 | 2 | 24 | 7 | 4 | 30 |
| 49677 | 36688 | -84.827906 | 11/21/2005 | 1 | D-FrameX20 | 0 | 22.43 | 6 | 7 | 15.89 |
| 57322 | 36904 | -82.736663 | 2/21/2007 | 1 | D-FrameX20 | 0 | 13.38 | 3 | 6 | 4.46 |
| 57322 | 36904 | -82.736663 | 2/21/2007 | 2 | D-FrameX20 | 0 | 8.81 | 5 | 7 | 7.55 |
| 57324 | 36989 | -82.349844 | 2/20/2007 | 1 | D-FrameX20 | 2.03 | 38.51 | 14 | 5 | 6.08 |
| 57324 | 36989 | -82.349844 | 2/20/2007 | 2 | D-FrameX20 | 3.95 | 42.76 | 17 | 6 | 3.29 |
| 57431 | 36987 | -81.953277 | 2/26/2007 | 1 | D-FrameX20 | 0 | 34.25 | 12 | 7 | 10.96 |
| 57431 | 36987 | -81.953277 | 2/26/2007 | 2 | D-FrameX20 | 0 | 31.33 | 7 | 7 | 20 |
| 59773 | 38075 | -86.733732 | 3/26/2007 | 1 | D-FrameX20 | 0 | 44.94 | 14 | 7 | 10.76 |
| 59773 | 38075 | -86.733732 | 3/26/2007 | 2 | D-FrameX20 | 0 | 49.66 | 11 | 6 | 10.34 |
| 60301 | 38292 | -81.94617 | 3/1/2007 | 1 | D-FrameX20 | 4.76 | 51.02 | 19 | 6 | 7.48 |
| 60301 | 38292 | -81.94617 | 3/1/2007 | 2 | D-FrameX20 | 2.1 | 48.25 | 15 | 5 | 6.99 |
| 60308 | 38307 | -82.716569 | 10/10/2006 | 1 | D-FrameX20 | 0 | 81.38 | 11 | 6 | 4.14 |
| 60308 | 38307 | -82.716569 | 10/10/2006 | 2 | D-FrameX20 | 0 | 85.82 | 11 | 5 | 0 |
| 60639 | 38485 | -86.559172 | 5/15/2007 | 1 | D-FrameX20 | 2.08 | 17.36 | 13 | 4 | 4.86 |
| 60639 | 38485 | -86.559172 | 5/15/2007 | 2 | D-FrameX20 | 1.4 | 18.88 | 9 | 7 | 6.99 |
| 60751 | 38544 | -82.210967 | 5/16/2007 | 1 | D-FrameX20 | 0 | 53.85 | 13 | 7 | 11.89 |
| 60751 | 38544 | -82.210967 | 5/16/2007 | 2 | D-FrameX20 | 0 | 49.06 | 11 | 8 | 14.47 |
| 62733 | 39186 | -87.235993 | 9/19/2007 | 1 | D-FrameX20 | 0 | 51.95 | 14 | 5 | 1.3 |
| 62733 | 39186 | -87.235993 | 9/19/2007 | 2 | D-FrameX20 | 0 | 44.59 | 11 | 5 | 5.1 |



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| SampleID | Benth_IDs | Longitude | Sample Date | Nreps | Gear | Amphipod Pct | ChironPct | Chiron Taxa | Clinger Taxa | Coleoptera Pct |
|---|---|---|---|---|---|---|---|---|---|---|
| 63694 | 39707 | -82.349844 | 11/7/2007 | 1 | D-FrameX20 | 33.75 | 39.38 | 17 | 0 | 0 |
| 63694 | 39707 | -82.349844 | 11/7/2007 | 2 | D-FrameX20 | 22.08 | 47.4 | 17 | 0 | 0 |
| 64191 | 40004 | -82.716569 | 12/12/2007 | 1 | D-FrameX20 | 0 | 51.25 | 7 | 5 | 0.63 |
| 64191 | 40004 | -82.716569 | 12/12/2007 | 2 | D-FrameX20 | 0 | 61.39 | 7 | 6 | 0.63 |
| 64546 | 40384 | -82.1 | 5/7/2008 | 1 | D-FrameX20 | 35.66 | 6.99 | 7 | 4 | 0 |
| 64546 | 40384 | -82.1 | 5/7/2008 | 2 | D-FrameX20 | 45.03 | 10.6 | 6 | 3 | 1.32 |
| 65025 | 40260 | -84.827906 | 6/10/2008 | 1 | D-FrameX20 | 0 | 40.82 | 11 | 5 | 17.01 |
| 65025 | 40260 | -84.827906 | 6/10/2008 | 2 | D-FrameX20 | 0 | 42.07 | 17 | 7 | 22.07 |
| 65026 | 40261 | -84.581917 | 6/13/2008 | 1 | D-FrameX20 | 0 | 43.84 | 14 | 8 | 9.59 |
| 65026 | 40261 | -84.581917 | 6/13/2008 | 2 | D-FrameX20 | 0.7 | 36.36 | 8 | 6 | 10.49 |
| 65028 | 40263 | -84.771164 | 6/13/2008 | 1 | D-FrameX20 | 0 | 19.86 | 12 | 11 | 4.96 |
| 65028 | 40263 | -84.771164 | 6/13/2008 | 2 | D-FrameX20 | 0 | 15.49 | 7 | 13 | 10.56 |
| 65029 | 40264 | -84.861232 | 6/10/2008 | 1 | D-FrameX20 | 0 | 23.84 | 14 | 9 | 21.19 |
| 65029 | 40264 | -84.861232 | 6/10/2008 | 2 | D-FrameX20 | 0 | 11.56 | 8 | 7 | 27.21 |
| 65250 | 40368 | -81.748227 | 5/28/2008 | 1 | D-FrameX20 | 0 | 47.71 | 20 | 11 | 9.15 |
| 65250 | 40368 | -81.748227 | 5/28/2008 | 2 | D-FrameX20 | 0 | 40.71 | 19 | 9 | 8.57 |
| 65291 | 40343 | -86.733732 | 7/9/2008 | 1 | D-FrameX20 | 0 | 20.55 | 11 | 9 | 9.59 |
| 65291 | 40343 | -86.733732 | 7/9/2008 | 2 | D-FrameX20 | 2.68 | 20.13 | 10 | 9 | 6.71 |
| 65292 | 40344 | -85.435 | 7/24/2008 | 1 | D-FrameX20 | 0 | 31.91 | 11 | 11 | 24.11 |
| 65292 | 40344 | -85.435 | 7/24/2008 | 2 | D-FrameX20 | 0 | 34.72 | 16 | 10 | 11.11 |
| 65293 | 40345 | -83.073417 | 7/16/2008 | 1 | D-FrameX20 | 0 | 26.95 | 10 | 7 | 4.26 |
| 65293 | 40345 | -83.073417 | 7/16/2008 | 2 | D-FrameX20 | 0.63 | 21.25 | 11 | 8 | 4.38 |
| 65296 | 40348 | -86.559172 | 7/9/2008 | 1 | D-FrameX20 | 0 | 34.23 | 20 | 10 | 8.05 |
| 65296 | 40348 | -86.559172 | 7/9/2008 | 2 | D-FrameX20 | 0 | 38.3 | 20 | 10 | 12.06 |
| 65306 | 40406 | -82.23048 | 6/18/2008 | 1 | D-FrameX20 | 0 | 32.03 | 11 | 3 | 22.88 |



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| SampleID | Benth_IDs | Longitude | Sample Date | Nreps | Gear | Amphipod Pct | ChironPct | Chiron Taxa | Clinger Taxa | Coleoptera Pct |
|---|---|---|---|---|---|---|---|---|---|---|
| 65306 | 40406 | -82.23048 | 6/18/2008 | 2 | D-FrameX20 | 0 | 34.21 | 11 | 3 | 18.42 |
| 65316 | 40349 | -87.235993 | 7/10/2008 | 1 | D-FrameX20 | 0 | 9.29 | 6 | 9 | 2.14 |
| 65316 | 40349 | -87.235993 | 7/10/2008 | 2 | D-FrameX20 | 0 | 21.05 | 8 | 7 | 1.32 |
| 65379 | 40364 | -83.308472 | 8/12/2008 | 1 | D-FrameX20 | 1.94 | 10.97 | 10 | 5 | 9.68 |
| 65379 | 40364 | -83.308472 | 8/12/2008 | 2 | D-FrameX20 | 2.61 | 10.46 | 10 | 4 | 8.5 |
| 65382 | 40367 | -83.252778 | 8/12/2008 | 1 | D-FrameX20 | 0 | 7.5 | 7 | 1 | 20 |
| 65382 | 40367 | -83.252778 | 8/12/2008 | 2 | D-FrameX20 | 0 | 8.51 | 7 | 0 | 23.4 |
| 65414 | 40405 | -84.493937 | 6/19/2008 | 1 | D-FrameX20 | 0 | 21.53 | 11 | 4 | 9.03 |
| 65414 | 40405 | -84.493937 | 6/19/2008 | 2 | D-FrameX20 | 0.71 | 27.66 | 12 | 4 | 11.35 |
| 65567 | 40448 | -82.1 | 10/8/2008 | 1 | D-FrameX20 | 14.97 | 36.05 | 8 | 1 | 6.12 |
| 65567 | 40448 | -82.1 | 10/8/2008 | 2 | D-FrameX20 | 12.14 | 35.71 | 8 | 2 | 4.29 |
| 65636 | 40430 | -81.748227 | 10/28/2008 | 1 | D-FrameX20 | 0 | 56.21 | 14 | 6 | 5.23 |
| 65636 | 40430 | -81.748227 | 10/28/2008 | 2 | D-FrameX20 | 1.38 | 44.83 | 14 | 6 | 11.03 |
| 65637 | 40431 | -82.472863 | 10/16/2008 | 1 | D-FrameX20 | 0.63 | 21.38 | 9 | 5 | 5.03 |
| 65637 | 40431 | -82.472863 | 10/16/2008 | 2 | D-FrameX20 | 2.13 | 21.99 | 7 | 3 | 0.71 |
| 65715 | 40524 | -84.493937 | 11/13/2008 | 1 | D-FrameX20 | 0 | 28.03 | 14 | 5 | 12.1 |
| 65715 | 40524 | -84.493937 | 11/13/2008 | 2 | D-FrameX20 | 1.35 | 24.32 | 15 | 7 | 12.84 |
| 65731 | 40476 | -82.230314 | 11/12/2008 | 1 | D-FrameX20 | 0.63 | 30.63 | 11 | 10 | 9.38 |
| 65731 | 40476 | -82.230314 | 11/12/2008 | 2 | D-FrameX20 | 0.65 | 21.43 | 13 | 11 | 3.9 |
| 65736 | 40479 | -81.852289 | 11/6/2008 | 1 | D-FrameX20 | 0 | 25.17 | 12 | 10 | 25.17 |
| 65736 | 40479 | -81.852289 | 11/6/2008 | 2 | D-FrameX20 | 0 | 30.71 | 11 | 10 | 16.43 |
| 65737 | 40481 | -81.884868 | 11/6/2008 | 1 | D-FrameX20 | 3.29 | 26.32 | 7 | 7 | 13.82 |
| 65737 | 40481 | -81.884868 | 11/6/2008 | 2 | D-FrameX20 | 5.3 | 25.17 | 9 | 11 | 18.54 |
| 65739 | 40534 | -84.861232 | 11/20/2008 | 1 | D-FrameX20 | 0 | 6.85 | 4 | 6 | 6.85 |
| 65739 | 40534 | -84.861232 | 11/20/2008 | 2 | D-FrameX20 | 0 | 7.53 | 5 | 8 | 9.59 |



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| SampleID | Benth_IDs | Longitude | Sample Date | Nreps | Gear | Amphipod Pct | ChironPct | Chiron Taxa | Clinger Taxa | Coleoptera Pct |
|---|---|---|---|---|---|---|---|---|---|---|
| 65741 | 40537 | -84.771164 | 11/20/2008 | 1 | D-FrameX20 | 0 | 17.01 | 8 | 9 | 8.84 |
| 65741 | 40537 | -84.771164 | 11/20/2008 | 2 | D-FrameX20 | 0 | 18.49 | 11 | 7 | 10.27 |
| 65891 | 40544 | -81.335414 | 12/16/2008 | 1 | D-FrameX20 | 0 | 33.12 | 7 | 6 | 18.18 |
| 65891 | 40544 | -81.335414 | 12/16/2008 | 2 | D-FrameX20 | 1.27 | 33.12 | 5 | 5 | 14.65 |
| 65900 | 40550 | -82.210967 | 12/17/2008 | 1 | D-FrameX20 | 0 | 49.66 | 7 | 7 | 6.71 |
| 65900 | 40550 | -82.210967 | 12/17/2008 | 2 | D-FrameX20 | 0 | 50.64 | 7 | 7 | 6.41 |
| 65907 | 40552 | -82.137561 | 12/17/2008 | 1 | D-FrameX20 | 0.66 | 44.74 | 9 | 4 | 31.58 |
| 65907 | 40552 | -82.137561 | 12/17/2008 | 2 | D-FrameX20 | 0.66 | 44.37 | 12 | 6 | 32.45 |
| 65931 | 40577 | -83.308472 | 1/14/2009 | 1 | D-FrameX20 | 6.25 | 45 | 15 | 6 | 9.38 |
| 65931 | 40577 | -83.308472 | 1/14/2009 | 2 | D-FrameX20 | 9.15 | 41.83 | 10 | 8 | 9.8 |
| 65932 | 40564 | -83.252778 | 1/14/2009 | 1 | D-FrameX20 | 0 | 53.21 | 14 | 4 | 8.97 |
| 65932 | 40564 | -83.252778 | 1/14/2009 | 2 | D-FrameX20 | 0 | 33.78 | 12 | 3 | 12.16 |
| 66028 | 40571 | -81.94617 | 5/1/2008 | 1 | D-FrameX20 | 0 | 15.6 | 10 | 5 | 31.91 |
| 66028 | 40571 | -81.94617 | 5/1/2008 | 2 | D-FrameX20 | 0 | 13.89 | 9 | 5 | 33.33 |

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| SampleID | Benth_IDs | Decapoda Pct | Diptera Pct | Dominant Pct | DominantPct Word | Ephem Pct | EphemTaxa | EPTTaxa | FFBrowGrazPct | FFEpiColDepPct |
|---|---|---|---|---|---|---|---|---|---|---|
| 3105 | 3980 | 1.45 | 52.17 | 17.39 | Polypedilum illinoense grp. | 5.8 | 3 | 8 | 2.17 | 25.72 |
| 3682 | 4628 | 0 | 37.04 | 11.11 | Microcylloepus pusillus | 12.96 | 4 | 10 | 0 | 27.78 |
| 3797 | 4802 | 0.68 | 18.49 | 9.59 | Dubiraphia quadrinotata | 19.18 | 4 | 10 | 0 | 36.3 |
| 3952 | 5024 | 3.4 | 30.61 | 21.77 | Polypedilum flavum | 15.65 | 3 | 8 | 1.7 | 29.59 |
| 6810 | 7823 | 4.55 | 29.09 | 14.55 | Limnodrilus hoffmeisteri | 3.64 | 2 | 5 | 3.18 | 25 |
| 7183 | 8268 | 0.93 | 55.56 | 19.44 | Rheotanytarsus exiguus grp. | 0 | 0 | 8 | 0 | 19.44 |
| 7224 | 8306 | 0.88 | 28.32 | 12.39 | Stenelmis | 7.96 | 3 | 13 | 0 | 26.99 |
| 7776 | 8853 | 0 | 62.33 | 41.1 | Polypedilum illinoense grp. | 6.16 | 2 | 3 | 0 | 37.33 |
| 7778 | 8855 | 1.36 | 46.26 | 13.61 | Palpomyia/bezzia grp. | 4.08 | 3 | 6 | 0 | 28.57 |
| 7779 | 8856 | 0 | 46.6 | 23.3 | Sphaeriidae(mollusca) | 0 | 0 | 3 | 0 | 26.7 |
| 9179 | 10164 | 1.36 | 79.59 | 47.62 | Simulium | 6.12 | 2 | 4 | 0.34 | 17.35 |
| 9196 | 10181 | 3.7 | 39.81 | 16.67 | Polypedilum illinoense grp. | 1.85 | 1 | 4 | 6.48 | 29.63 |
| 9206 | 10191 | 0.68 | 20.55 | 12.33 | Hydroptila | 11.64 | 2 | 9 | 6.85 | 25.68 |
| 9395 | 10288 | 2.8 | 25.23 | 12.15 | Bivalvia | 27.1 | 6 | 9 | 0.93 | 35.98 |
| 9396 | 10289 | 0 | 22.46 | 28.26 | Sphaeriidae(mollusca) | 19.57 | 4 | 7 | 0.72 | 23.55 |
| 9399 | 10292 | 0.6 | 34.94 | 16.87 | Sphaeriidae(mollusca) | 2.41 | 3 | 5 | 0.9 | 27.41 |
| 10131 | 10723 | 1.32 | 39.74 | 11.26 | Cheumatopsyche | 8.61 | 7 | 15 | 0 | 24.5 |
| 10591 | 11209 | 0 | 24.2 | 14.01 | Ancylidae | 0 | 0 | 3 | 0 | 21.02 |
| 10633 | 11325 | 0.65 | 26.14 | 15.69 | Chimarra | 8.5 | 2 | 9 | 0 | 21.9 |
| 10785 | 11544 | 0.93 | 28.04 | 17.76 | Microcylloepus pusillus | 14.02 | 6 | 10 | 0.47 | 37.38 |



US EPA ARCHIVE DOCUMENT

| SampleID | Benth_IDs | Decapoda Pct | Diptera Pct | Dominant Pct | DominantPct Word | Ephem Pct | EphemTaxa | EPTTaxa | FFBrowGrazPct | FFEpiColDepPct |
|---|---|---|---|---|---|---|---|---|---|---|
| 10844 | 11554 | 1.81 | 36.75 | 15.06 | Hydropsyche | 4.82 | 3 | 8 | 2.41 | 27.11 |
| 11464 | 11963 | 0 | 38.1 | 19.05 | Cheumatopsyche | 4.76 | 2 | 10 | 0 | 24.15 |
| 11607 | 12057 | 0 | 54.29 | 21.43 | Enchytraeidae | 8.57 | 4 | 9 | 0.36 | 32.5 |
| 12089 | 12197 | 0 | 42.95 | 17.31 | Hyalella azteca | 1.92 | 1 | 5 | 0 | 38.14 |
| 12092 | 12201 | 1.54 | 26.15 | 16.15 | Perlesta | 18.46 | 3 | 10 | 0 | 37.31 |
| 12224 | 12340 | 0 | 32.43 | 12.61 | Microcylloepus pusillus | 2.7 | 2 | 8 | 0 | 26.13 |
| 12401 | 12463 | 1.69 | 46.61 | 16.95 | Leuctra | 8.47 | 5 | 9 | 0.42 | 24.15 |
| 12436 | 12486 | 0 | 40.16 | 14.96 | Stenelmis decorata | 1.57 | 2 | 10 | 0 | 33.07 |
| 12450 | 12500 | 0 | 45.24 | 26.19 | Cheumatopsyche | 0.79 | 1 | 8 | 0 | 30.56 |
| 12600 | 12548 | 0 | 40.91 | 9.09 | Microcylloepus pusillus | 6.36 | 3 | 6 | 0 | 26.82 |
| 12609 | 12557 | 0 | 46.67 | 30.48 | Enchytraeidae | 2.86 | 2 | 5 | 0 | 13.33 |
| 13475 | 12867 | 6.38 | 60.99 | 42.55 | Simulium | 2.84 | 2 | 5 | 0 | 9.57 |
| 13535 | 12898 | 0.83 | 63.64 | 14.88 | Orthocladius annectens | 3.31 | 1 | 10 | 0 | 30.58 |
| 14213 | 13118 | 0 | 52.6 | 22.54 | Leuctra | 3.47 | 2 | 11 | 0.58 | 16.18 |
| 14231 | 13136 | 0.78 | 42.97 | 13.28 | Simulium | 11.72 | 2 | 10 | 0 | 21.48 |
| 14930 | 13379 | 0 | 25.83 | 14.57 | Simulium | 17.88 | 4 | 11 | 0.99 | 21.52 |
| 14965 | 13401 | 1.16 | 30.64 | 20.23 | Cheumatopsyche | 4.62 | 5 | 16 | 0 | 19.94 |
| 14966 | 13403 | 5 | 44 | 11 | Enchytraeidae/Stenochironomus | 10 | 4 | 10 | 0.5 | 31 |
| 15951 | 14187 | 0 | 31.82 | 13.64 | Dubiraphia vittata | 9.09 | 5 | 11 | 0 | 34.55 |
| 16636 | 14709 | 4.43 | 31.65 | 15.82 | Hyalella azteca | 15.82 | 2 | 2 | 2.22 | 32.59 |
| 16643 | 14716 | 1 | 44 | 18 | Simulium | 13 | 4 | 12 | 0 | 24.5 |



US EPA ARCHIVE DOCUMENT

| SampleID | Benth_IDs | Decapoda Pct | Diptera Pct | Dominant Pct | DominantPct Word | Ephem Pct | EphemTaxa | EPTTaxa | FFBrowGrazPct | FFEpiColDepPct |
|---|---|---|---|---|---|---|---|---|---|---|
| 18076 | 15790 | 0 | 25.76 | 28.79 | Planorbidae | 18.18 | 4 | 6 | 0 | 23.86 |
| 18372 | 15965 | 0 | 16.15 | 19.88 | Hyalella azteca | 6.21 | 3 | 8 | 0 | 31.68 |
| 18594 | 16087 | 0.81 | 56.45 | 13.71 | Polypedilum illinoense grp. | 25 | 3 | 3 | 0.4 | 32.26 |
| 20471 | 17104 | 0 | 41.44 | 9.91 | Tanytarsus sp. a epler | 13.51 | 3 | 14 | 0 | 21.62 |
| 20474 | 17107 | 0 | 29.73 | 13.51 | Hyalella azteca | 16.22 | 5 | 6 | 0 | 31.98 |
| 20479 | 17112 | 0.9 | 66.67 | 13.51 | Paratanytarsus sp. c epler | 0.9 | 1 | 6 | 1.8 | 30.18 |
| 20480 | 17113 | 0.6 | 43.11 | 19.16 | Polypedilum flavum | 9.58 | 5 | 10 | 0 | 29.34 |
| 21571 | 17864 | 2.92 | 43.07 | 20.44 | Hyalella azteca | 10.22 | 3 | 7 | 1.46 | 35.04 |
| 22114 | 18267 | 1.85 | 37.96 | 9.26 | Tricorythodes albilineatus | 17.59 | 4 | 7 | 1.39 | 39.81 |
| 24523 | 19456 | 1.74 | 27.83 | 12.17 | Eurylophella doris | 20 | 4 | 12 | 0.43 | 38.7 |
| 24524 | 19457 | 0 | 38.51 | 17.57 | Cheumatopsyche | 10.81 | 4 | 12 | 0 | 24.32 |
| 25672 | 19985 | 6 | 16 | 11 | Hyalella azteca/Polypedilum illinoense grp. | 11 | 3 | 5 | 1 | 30.5 |
| 26863 | 20697 | 0.7 | 35.92 | 24.65 | Cheumatopsyche | 8.45 | 3 | 7 | 2.82 | 29.23 |
| 26865 | 20699 | 0 | 26.27 | 14.41 | Caenis | 20.34 | 4 | 8 | 0 | 32.2 |
| 26868 | 20702 | 0 | 41.23 | 22.81 | Simulium | 0 | 0 | 1 | 0 | 14.04 |
| 47698 | 32249 | 0 | 28.3 | 38.68 | Maccaffertium smithae | 38.68 | 1 | 4 | 0 | 30.66 |
| 48420 | 33507 | 0 | 57.84 | 15.69 | Simulium | 13.73 | 5 | 12 | 0 | 39.22 |
| 50131 | 33604 | 0 | 43.81 | 27.62 | Polypedilum flavum | 4.76 | 3 | 8 | 0 | 35.71 |
| 52996 | 33624 | 0 | 53.77 | 17.92 | Rheotanytarsus exiguus grp. | 16.98 | 3 | 5 | 0 | 30.19 |
| 52471 | 34244 | 0 | 25.49 | 17.65 | Lirceus | 17.65 | 6 | 10 | 8.82 | 22.55 |
| 52912 | 34645 | 0 | 29.09 | 10.91 | Microcylloepus pusillus | 14.55 | 3 | 6 | 0.91 | 24.09 |



US EPA ARCHIVE DOCUMENT

| SampleID | Benth_IDs | Decapoda Pct | Diptera Pct | Dominant Pct | DominantPct Word | Ephem Pct | EphemTaxa | EPTTaxa | FFBrowGrazPct | FFEpiColDepPct |
|---|---|---|---|---|---|---|---|---|---|---|
| 53274 | 34807 | 0 | 50 | 23 | Stenelmis | 10 | 4 | 8 | 0 | 34 |
| 53732 | 35065 | 0 | 76.36 | 50 | Simulium | 2.73 | 1 | 4 | 0 | 6.82 |
| 53951 | 35284 | 0 | 25.45 | 28.18 | Caenis diminuta | 28.18 | 1 | 3 | 0.45 | 45.45 |
| 52834 | 35565 | 0 | 30.48 | 17.14 | Dubiraphia vittata | 1.9 | 2 | 5 | 0 | 32.38 |
| 49652 | 35784 | 0 | 48.6 | 21.5 | Simulium | 26.17 | 3 | 5 | 0 | 25.7 |
| 53059 | 36666 | 0 | 24 | 18 | Argia tibialis | 4 | 1 | 4 | 0 | 23.5 |
| 49677 | 36688 | 0 | 32.71 | 14.02 | Stenochironomus | 27.1 | 3 | 9 | 0 | 38.79 |
| 57322 | 36904 | 0 | 57.32 | 43.31 | Simulium | 13.38 | 4 | 6 | 4.78 | 15.92 |
| 57322 | 36904 | 0 | 50.31 | 41.51 | Simulium | 11.95 | 5 | 10 | 4.4 | 14.15 |
| 57324 | 36989 | 0 | 39.19 | 20.95 | Tricorythodes albilineatus | 25 | 5 | 10 | 0 | 47.64 |
| 57324 | 36989 | 1.32 | 44.74 | 27.63 | Tricorythodes albilineatus | 32.24 | 2 | 7 | 0.33 | 54.61 |
| 57431 | 36987 | 0 | 50.68 | 21.23 | Cheumatopsyche | 8.22 | 4 | 7 | 0 | 25 |
| 57431 | 36987 | 0 | 43.33 | 20.67 | Polypedilum flavum | 8.67 | 3 | 8 | 0 | 28 |
| 59773 | 38075 | 0 | 52.53 | 18.99 | Pseudochironomus | 10.13 | 4 | 9 | 0 | 39.87 |
| 59773 | 38075 | 0 | 57.24 | 25.52 | Pseudochironomus | 3.45 | 3 | 9 | 0 | 42.07 |
| 60301 | 38292 | 0 | 52.38 | 14.29 | Polypedilum flavum | 12.24 | 6 | 10 | 0 | 38.78 |
| 60301 | 38292 | 0 | 51.05 | 9.79 | Polypedilum illinoense grp./Micromenetus | 9.79 | 4 | 6 | 0 | 29.37 |
| 60308 | 38307 | 0 | 81.38 | 26.9 | Tvetenia vitracies | 5.52 | 3 | 8 | 0 | 26.9 |
| 60308 | 38307 | 0 | 89.36 | 38.3 | Tvetenia vitracies | 2.13 | 2 | 6 | 0 | 25.18 |
| 60639 | 38485 | 0 | 18.75 | 21.53 | Tricorythodes albilineatus | 34.72 | 5 | 8 | 0 | 46.18 |
| 60639 | 38485 | 1.4 | 19.58 | 18.88 | Tricorythodes albilineatus | 37.76 | 5 | 9 | 0 | 46.5 |
| 60751 | 38544 | 0 | 53.85 | 25.17 | Rheotanytarsus | 6.29 | 3 | 8 | 0.35 | 23.78 |
| 60751 | 38544 | 0 | 49.69 | 20.75 | Rheotanytarsus | 6.29 | 5 | 10 | 1.26 | 25.16 |
| 62733 | 39186 | 0 | 53.25 | 16.23 | Dicrotendipes neomodestus | 21.43 | 5 | 10 | 0 | 44.48 |
| 62733 | 39186 | 0 | 45.86 | 16.56 | Caenis eglinensis | 29.3 | 5 | 10 | 0 | 49.68 |



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| SampleID | Benth_IDs | Decapoda Pct | Diptera Pct | Dominant Pct | DominantPct Word | Ephem Pct | EphemTaxa | EPTTaxa | FFBrowGrazPct | FFEpiColDepPct |
|---|---|---|---|---|---|---|---|---|---|---|
| 63694 | 39707 | 0 | 43.13 | 33.75 | Hyalella azteca | 12.5 | 4 | 5 | 0 | 55 |
| 63694 | 39707 | 0.65 | 51.3 | 22.08 | Hyalella azteca | 11.04 | 4 | 5 | 0.32 | 49.35 |
| 64191 | 40004 | 0 | 55.63 | 37.5 | Hydropsyche | 0 | 0 | 3 | 0 | 28.13 |
| 64191 | 40004 | 0 | 68.99 | 30.38 | Tvetenia vitracies | 0 | 0 | 4 | 0 | 26.9 |
| 64546 | 40384 | 2.1 | 7.69 | 35.66 | Hyalella azteca | 35.66 | 4 | 7 | 0.35 | 39.16 |
| 64546 | 40384 | 0.66 | 11.92 | 45.03 | Hyalella azteca | 24.5 | 2 | 4 | 0.33 | 36.42 |
| 65025 | 40260 | 0.68 | 41.5 | 19.73 | Leuctra | 6.8 | 4 | 11 | 0 | 27.89 |
| 65025 | 40260 | 3.45 | 44.14 | 16.55 | Leuctra | 6.21 | 3 | 9 | 0 | 32.07 |
| 65026 | 40261 | 0.68 | 44.52 | 24.66 | Ancylidae | 7.53 | 2 | 4 | 0 | 21.92 |
| 65026 | 40261 | 0 | 38.46 | 23.08 | Ancylidae | 5.59 | 2 | 4 | 0 | 21.68 |
| 65028 | 40263 | 0.71 | 36.17 | 9.22 | Maccaffertium | 13.48 | 5 | 17 | 0 | 24.11 |
| 65028 | 40263 | 0 | 30.99 | 10.56 | Maccaffertium | 12.68 | 2 | 12 | 0 | 22.89 |
| 65029 | 40264 | 0 | 25.83 | 17.88 | Stenelmis | 15.89 | 6 | 15 | 0.99 | 27.15 |
| 65029 | 40264 | 0.68 | 14.29 | 18.37 | Stenelmis | 21.09 | 5 | 13 | 0.34 | 28.91 |
| 65250 | 40368 | 0 | 50.98 | 27.45 | Polypedilum flavum | 3.27 | 3 | 11 | 0 | 27.78 |
| 65250 | 40368 | 0.71 | 44.29 | 16.43 | Polypedilum flavum | 5 | 3 | 11 | 0 | 25.36 |
| 65291 | 40343 | 1.37 | 20.55 | 21.92 | Hydroptila | 13.7 | 5 | 16 | 4.79 | 17.12 |
| 65291 | 40343 | 1.34 | 22.82 | 25.5 | Hydroptila | 18.12 | 6 | 15 | 5.03 | 20.13 |
| 65292 | 40344 | 2.13 | 35.46 | 9.93 | Rheotanytarsus exiguus grp. | 7.09 | 4 | 13 | 0 | 23.4 |
| 65292 | 40344 | 3.47 | 39.58 | 9.03 | Polypedilum flavum | 4.86 | 4 | 13 | 0 | 23.26 |
| 65293 | 40345 | 0 | 31.91 | 26.24 | Hydropsyche | 6.38 | 3 | 9 | 0.35 | 19.15 |
| 65293 | 40345 | 0 | 22.5 | 33.75 | Hydropsyche | 7.5 | 4 | 8 | 1.25 | 17.19 |
| 65296 | 40348 | 0 | 40.94 | 11.41 | Polypedilum flavum | 22.15 | 9 | 14 | 0 | 31.88 |
| 65296 | 40348 | 1.42 | 46.81 | 16.31 | Polypedilum flavum | 14.89 | 7 | 14 | 0 | 31.21 |
| 65306 | 40406 | 0 | 32.68 | 22.22 | Oecetis georgia | 1.96 | 1 | 4 | 0 | 22.88 |



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| SampleID | Benth_IDs | Decapoda Pct | Diptera Pct | Dominant Pct | DominantPct Word | Ephem Pct | EphemTaxa | EPTTaxa | FFBrowGrazPct | FFEpiColDepPct |
|---|---|---|---|---|---|---|---|---|---|---|
| 65306 | 40406 | 0 | 36.18 | 23.03 | Oecetis georgia | 1.32 | 1 | 5 | 0 | 18.09 |
| 65316 | 40349 | 0 | 11.43 | 62.14 | Hydropsyche incommoda | 6.43 | 3 | 8 | 0 | 11.07 |
| 65316 | 40349 | 0 | 22.37 | 44.74 | Hydropsyche incommoda | 11.84 | 4 | 9 | 0 | 19.41 |
| 65379 | 40364 | 0 | 11.61 | 32.9 | Tricorythodes albilineatus | 36.77 | 2 | 7 | 0 | 51.29 |
| 65379 | 40364 | 0 | 11.11 | 33.33 | Tricorythodes albilineatus | 37.25 | 3 | 6 | 0 | 52.29 |
| 65382 | 40367 | 0 | 8.13 | 40 | Caenis | 42.5 | 2 | 2 | 0 | 45 |
| 65382 | 40367 | 0 | 9.93 | 28.37 | Caenis | 29.79 | 2 | 2 | 0 | 47.16 |
| 65414 | 40405 | 0 | 23.61 | 23.61 | Micromenetus | 9.72 | 3 | 7 | 6.94 | 18.4 |
| 65414 | 40405 | 0 | 30.5 | 12.06 | Cernotina/Caecidotea | 10.64 | 3 | 5 | 6.03 | 20.57 |
| 65567 | 40448 | 2.04 | 37.41 | 14.97 | Hyalella azteca | 2.04 | 2 | 3 | 1.02 | 34.35 |
| 65567 | 40448 | 2.14 | 37.86 | 15.71 | Tanytarsus sp. f epler | 1.43 | 1 | 2 | 1.43 | 30 |
| 65636 | 40430 | 0.65 | 56.86 | 13.73 | Polypedilum illinoense grp. | 5.23 | 5 | 9 | 3.92 | 34.31 |
| 65636 | 40430 | 0.69 | 46.21 | 10.34 | Caecidotea | 11.03 | 3 | 7 | 5.17 | 31.03 |
| 65637 | 40431 | 0 | 27.04 | 40.25 | Leptophlebiidae | 42.77 | 3 | 5 | 9.43 | 35.53 |
| 65637 | 40431 | 0 | 29.08 | 48.94 | Leptophlebiidae | 49.65 | 2 | 2 | 6.03 | 35.46 |
| 65715 | 40524 | 0 | 30.57 | 8.92 | Leptophlebiidae/Nectopsyche exquisita | 15.29 | 3 | 10 | 1.59 | 39.49 |
| 65715 | 40524 | 2.03 | 26.35 | 10.14 | Nectopsyche exquisita | 11.49 | 4 | 10 | 1.69 | 34.12 |
| 65731 | 40476 | 2.5 | 35 | 15.63 | Hydropsyche | 12.5 | 3 | 11 | 0.94 | 19.38 |
| 65731 | 40476 | 1.95 | 30.52 | 15.58 | Hydropsyche | 11.69 | 4 | 12 | 1.3 | 16.88 |
| 65736 | 40479 | 0 | 26.53 | 16.33 | Microcylloepus pusillus | 12.24 | 5 | 14 | 0.34 | 31.29 |
| 65736 | 40479 | 0.71 | 33.57 | 19.29 | Polypedilum flavum | 7.86 | 4 | 14 | 0.36 | 28.57 |
| 65737 | 40481 | 0.66 | 28.95 | 13.16 | Triaenodes | 5.26 | 3 | 10 | 0.66 | 19.74 |
| 65737 | 40481 | 0 | 28.48 | 16.56 | Triaenodes | 3.31 | 3 | 13 | 0.33 | 20.2 |
| 65739 | 40534 | 2.05 | 10.27 | 48.63 | Eurylophella doris | 60.27 | 7 | 13 | 3.08 | 37.67 |
| 65739 | 40534 | 2.05 | 8.22 | 41.78 | Eurylophella doris | 57.53 | 6 | 14 | 1.71 | 41.78 |



US EPA ARCHIVE DOCUMENT

| SampleID | Benth_IDs | Decapoda Pct | Diptera Pct | Dominant Pct | DominantPct Word | Ephem Pct | EphemTaxa | EPTTaxa | FFBrowGrazPct | FFEpiColDepPct |
|---|---|---|---|---|---|---|---|---|---|---|
| 65741 | 40537 | 1.36 | 20.41 | 17.69 | Taeniopteryx | 21.09 | 6 | 16 | 0 | 32.31 |
| 65741 | 40537 | 1.37 | 23.97 | 25.34 | Taeniopteryx | 15.75 | 3 | 11 | 0 | 38.01 |
| 65891 | 40544 | 0 | 35.06 | 26.62 | Cheumatopsyche/Rheotanytarsus exiguus grp. | 9.74 | 4 | 7 | 0 | 20.78 |
| 65891 | 40544 | 0 | 33.76 | 29.94 | Rheotanytarsus exiguus grp. | 14.65 | 3 | 5 | 0 | 19.43 |
| 65900 | 40550 | 0 | 51.01 | 33.56 | Polypedilum flavum | 26.17 | 4 | 8 | 0 | 35.23 |
| 65900 | 40550 | 0 | 52.56 | 35.9 | Polypedilum flavum | 20.51 | 2 | 7 | 0.32 | 33.65 |
| 65907 | 40552 | 1.32 | 45.39 | 29.61 | Polypedilum flavum | 5.92 | 4 | 8 | 0.66 | 35.86 |
| 65907 | 40552 | 1.32 | 45.03 | 25.83 | Polypedilum flavum | 4.64 | 3 | 7 | 0 | 35.43 |
| 65931 | 40577 | 0 | 50.63 | 22.5 | Polypedilum flavum | 16.88 | 9 | 11 | 0.94 | 35.63 |
| 65931 | 40577 | 0 | 47.06 | 24.84 | Polypedilum flavum | 15.03 | 8 | 14 | 0 | 35.29 |
| 65932 | 40564 | 0 | 55.77 | 26.28 | Paratanytarsus | 29.49 | 7 | 8 | 0.32 | 41.03 |
| 65932 | 40564 | 0 | 36.49 | 27.7 | Caenis | 43.24 | 5 | 6 | 0 | 39.86 |
| 66028 | 40571 | 1.42 | 17.02 | 17.02 | Microcylloepus pusillus | 6.38 | 4 | 9 | 0.71 | 23.4 |
| 66028 | 40571 | 1.39 | 18.06 | 19.44 | Microcylloepus pusillus | 6.25 | 5 | 10 | 1.04 | 24.65 |

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| SampleID | Benth_IDs | FFParasite Pct | FFPlPierce Pct | FFPredCarnPct | FFScav Pct | FFScrape Pct | FFShred Pct | FFSubColDepPct | FFSuspFiltPct | FFUnknownPct |
|---|---|---|---|---|---|---|---|---|---|---|
| 3105 | 3980 | 0 | 0.72 | 5.8 | 3.26 | 13.41 | 13.41 | 14.49 | 21.01 | 0 |
| 3682 | 4628 | 0 | 0 | 19.44 | 0 | 12.96 | 11.11 | 5.56 | 23.15 | 0 |
| 3797 | 4802 | 0 | 0.68 | 18.15 | 1.71 | 21.58 | 7.88 | 0 | 13.01 | 0.68 |
| 3952 | 5024 | 0 | 0 | 19.05 | 1.7 | 14.63 | 13.61 | 0 | 19.73 | 0 |
| 6810 | 7823 | 0 | 0 | 17.73 | 3.64 | 11.82 | 15.45 | 15.45 | 5 | 2.73 |
| 7183 | 8268 | 0 | 0 | 18.98 | 0.93 | 1.85 | 10.65 | 2.78 | 43.52 | 1.85 |
| 7224 | 8306 | 0 | 0 | 19.03 | 1.33 | 11.95 | 17.7 | 5.31 | 16.81 | 0.88 |
| 7776 | 8853 | 0 | 0 | 5.48 | 0 | 8.22 | 25.68 | 9.59 | 13.7 | 0 |
| 7778 | 8855 | 0 | 0 | 13.95 | 0.68 | 3.06 | 8.84 | 20.41 | 16.33 | 8.16 |
| 7779 | 8856 | 0 | 0 | 8.25 | 0 | 7.28 | 16.99 | 5.83 | 34.95 | 0 |
| 9179 | 10164 | 0 | 0 | 15.99 | 1.36 | 4.76 | 4.76 | 2.04 | 53.4 | 0 |
| 9196 | 10181 | 0 | 0 | 9.72 | 6.48 | 16.67 | 20.83 | 1.85 | 7.41 | 0.93 |
| 9206 | 10191 | 0 | 12.33 | 8.56 | 7.19 | 9.59 | 11.64 | 3.42 | 13.36 | 1.37 |
| 9395 | 10288 | 0 | 0 | 9.81 | 1.4 | 12.62 | 12.15 | 1.87 | 18.69 | 6.54 |
| 9396 | 10289 | 0 | 0 | 3.26 | 2.17 | 21.38 | 6.52 | 3.62 | 38.77 | 0 |
| 9399 | 10292 | 0 | 0 | 6.33 | 13.55 | 6.33 | 12.95 | 7.83 | 24.7 | 0 |
| 10131 | 10723 | 0 | 0 | 18.54 | 1.99 | 6.29 | 12.91 | 9.27 | 19.87 | 6.62 |
| 10591 | 11209 | 0 | 0 | 21.34 | 4.14 | 26.11 | 3.82 | 14.01 | 8.28 | 1.27 |
| 10633 | 11325 | 0 | 0 | 15.03 | 0.65 | 10.78 | 8.82 | 13.07 | 29.08 | 0.65 |
| 10785 | 11544 | 0 | 0 | 14.02 | 0.93 | 25.7 | 4.67 | 0.93 | 15.89 | 0 |



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| SampleID | Benth_IDs | FFParasite Pct | FFPlPierce Pct | FFPredCarnPct | FFScav Pct | FFScrape Pct | FFShred Pct | FFSubColDepPct | FFSuspFiltPct | FFUnknownPct |
|---|---|---|---|---|---|---|---|---|---|---|
| 10844 | 11554 | 0 | 1.2 | 10.84 | 2.71 | 1.2 | 15.66 | 11.45 | 27.41 | 0 |
| 11464 | 11963 | 0 | 5.44 | 7.48 | 0 | 17.35 | 15.99 | 0.68 | 27.55 | 1.36 |
| 11607 | 12057 | 0 | 0 | 15.36 | 0.36 | 6.07 | 4.64 | 24.29 | 16.43 | 0 |
| 12089 | 12197 | 0 | 1.92 | 12.82 | 0 | 6.09 | 25.32 | 3.21 | 12.5 | 0 |
| 12092 | 12201 | 0 | 0 | 29.62 | 0.77 | 8.46 | 6.54 | 1.54 | 14.23 | 1.54 |
| 12224 | 12340 | 0 | 3.6 | 13.06 | 0 | 12.61 | 12.16 | 4.5 | 27.93 | 0 |
| 12401 | 12463 | 0 | 0 | 21.61 | 1.27 | 8.9 | 23.31 | 1.69 | 16.95 | 1.69 |
| 12436 | 12486 | 0 | 0 | 8.66 | 0 | 18.11 | 14.96 | 3.15 | 22.05 | 0 |
| 12450 | 12500 | 0 | 0 | 9.92 | 0 | 4.76 | 14.29 | 0 | 40.48 | 0 |
| 12600 | 12548 | 0 | 0 | 14.09 | 0 | 17.73 | 12.27 | 14.55 | 14.55 | 0 |
| 12609 | 12557 | 0 | 0 | 10 | 0.48 | 6.19 | 5.71 | 31.43 | 14.76 | 18.1 |
| 13475 | 12867 | 0 | 0 | 24.47 | 3.55 | 3.55 | 2.13 | 5.67 | 46.81 | 4.26 |
| 13535 | 12898 | 0 | 0 | 24.38 | 0.41 | 11.16 | 7.44 | 1.65 | 16.12 | 8.26 |
| 14213 | 13118 | 0 | 0 | 26.59 | 0.58 | 1.16 | 28.32 | 0.58 | 17.92 | 8.09 |
| 14231 | 13136 | 0 | 0 | 21.48 | 0.39 | 10.94 | 11.33 | 0 | 28.13 | 6.25 |
| 14930 | 13379 | 0 | 13.25 | 4.97 | 0.99 | 11.26 | 4.3 | 9.27 | 33.44 | 0 |
| 14965 | 13401 | 0 | 2.31 | 15.9 | 0.58 | 9.83 | 5.2 | 0 | 43.93 | 2.31 |
| 14966 | 13403 | 0 | 0 | 18 | 5 | 13 | 18 | 11 | 2.5 | 1 |
| 15951 | 14187 | 0.91 | 0 | 10 | 0 | 24.09 | 12.27 | 0 | 18.18 | 0 |
| 16636 | 14709 | 0 | 0.63 | 32.28 | 4.11 | 13.29 | 9.18 | 1.9 | 3.8 | 0 |
| 16643 | 14716 | 0 | 1 | 20.5 | 2.5 | 5.5 | 5.5 | 5 | 34.5 | 1 |



US EPA ARCHIVE DOCUMENT

| SampleID | Benth_IDs | FFParasite Pct | FFPlPierce Pct | FFPredCarnPct | FFScav Pct | FFScrape Pct | FFShred Pct | FFSubColDepPct | FFSuspFiltPct | FFUnknownPct |
|---|---|---|---|---|---|---|---|---|---|---|
| 18076 | 15790 | 0 | 0 | 10.98 | 3.79 | 45.45 | 11.36 | 0 | 4.55 | 0 |
| 18372 | 15965 | 0 | 1.86 | 14.6 | 0 | 12.73 | 18.63 | 3.73 | 16.77 | 0 |
| 18594 | 16087 | 0 | 0 | 11.29 | 1.21 | 16.53 | 9.27 | 0.81 | 28.23 | 0 |
| 20471 | 17104 | 0 | 0 | 17.57 | 0 | 12.16 | 8.56 | 4.5 | 30.18 | 5.41 |
| 20474 | 17107 | 0 | 0 | 13.96 | 7.21 | 22.52 | 13.06 | 0.9 | 6.76 | 3.6 |
| 20479 | 17112 | 0 | 0 | 19.37 | 7.21 | 5.86 | 10.36 | 1.8 | 23.42 | 0 |
| 20480 | 17113 | 0 | 0 | 14.07 | 0.3 | 8.98 | 19.76 | 12.57 | 14.97 | 0 |
| 21571 | 17864 | 0 | 0 | 6.57 | 1.46 | 9.85 | 20.07 | 5.84 | 19.71 | 0 |
| 22114 | 18267 | 0 | 0 | 22.69 | 3.24 | 10.65 | 16.2 | 0.93 | 5.09 | 0 |
| 24523 | 19456 | 0 | 1.74 | 18.7 | 1.3 | 14.78 | 5.22 | 4.35 | 14.78 | 0 |
| 24524 | 19457 | 0 | 1.35 | 23.99 | 1.01 | 7.09 | 8.78 | 1.35 | 30.07 | 2.03 |
| 25672 | 19985 | 0 | 0 | 19.5 | 7 | 24.5 | 14 | 1 | 2.5 | 0 |
| 26863 | 20697 | 0 | 2.11 | 6.69 | 3.17 | 3.17 | 16.9 | 2.82 | 33.1 | 0 |
| 26865 | 20699 | 0 | 0 | 16.1 | 0 | 23.31 | 6.78 | 7.63 | 13.98 | 0 |
| 26868 | 20702 | 0 | 0.44 | 10.09 | 12.28 | 11.4 | 2.63 | 7.89 | 41.23 | 0 |
| 47698 | 32249 | 0 | 0 | 12.26 | 0 | 22.64 | 7.08 | 0 | 27.36 | 0 |
| 48420 | 33507 | 0 | 0 | 9.8 | 0 | 3.43 | 8.33 | 2.94 | 25.49 | 10.78 |
| 50131 | 33604 | 0 | 0 | 8.1 | 0 | 13.81 | 17.14 | 2.86 | 17.62 | 4.76 |
| 52996 | 33624 | 0 | 0 | 5.19 | 9.43 | 13.68 | 8.02 | 4.72 | 26.89 | 1.89 |
| 52471 | 34244 | 0 | 0.49 | 8.33 | 8.82 | 16.67 | 7.84 | 2.94 | 23.53 | 0 |
| 52912 | 34645 | 0 | 0 | 13.18 | 8.18 | 17.27 | 5 | 3.64 | 23.18 | 4.55 |



US EPA ARCHIVE DOCUMENT

| SampleID | Benth_IDs | FFParasite Pct | FFPlPierce Pct | FFPredCarnPct | FFScav Pct | FFScrape Pct | FFShred Pct | FFSubColDepPct | FFSuspFiltPct | FFUnknownPct |
|---|---|---|---|---|---|---|---|---|---|---|
| 53274 | 34807 | 0 | 0 | 14 | 0 | 16.5 | 12 | 2 | 21.5 | 0 |
| 53732 | 35065 | 0 | 0 | 5.91 | 0 | 1.82 | 3.64 | 12.73 | 69.09 | 0 |
| 53951 | 35284 | 0 | 0 | 6.82 | 0.45 | 29.09 | 9.55 | 3.64 | 4.55 | 0 |
| 52834 | 35565 | 0 | 0 | 9.05 | 0 | 18.57 | 3.33 | 13.33 | 18.57 | 4.76 |
| 49652 | 35784 | 0 | 0 | 2.8 | 0 | 16.82 | 7.48 | 1.87 | 44.39 | 0.93 |
| 53059 | 36666 | 0 | 0 | 34 | 0 | 17 | 4.5 | 4 | 17 | 0 |
| 49677 | 36688 | 0 | 0 | 11.68 | 0.47 | 18.22 | 21.03 | 0.93 | 8.88 | 0 |
| 57322 | 36904 | 0 | 0 | 4.46 | 4.78 | 14.65 | 6.69 | 0.64 | 46.82 | 1.27 |
| 57322 | 36904 | 0 | 0 | 8.18 | 4.4 | 12.26 | 5.66 | 0 | 50.31 | 0.63 |
| 57324 | 36989 | 0 | 8.78 | 2.36 | 0 | 10.81 | 10.14 | 0.68 | 15.54 | 4.05 |
| 57324 | 36989 | 0 | 5.26 | 7.57 | 0.66 | 2.3 | 12.83 | 1.97 | 8.55 | 5.92 |
| 57431 | 36987 | 0 | 0 | 4.79 | 0 | 10.27 | 13.36 | 0 | 46.58 | 0 |
| 57431 | 36987 | 0 | 0 | 5.67 | 0 | 13.67 | 16 | 0 | 36.67 | 0 |
| 59773 | 38075 | 0 | 16.46 | 17.72 | 0 | 9.49 | 2.53 | 1.27 | 6.33 | 6.33 |
| 59773 | 38075 | 0 | 20.69 | 19.66 | 0.69 | 5.86 | 1.03 | 0.69 | 5.17 | 4.14 |
| 60301 | 38292 | 0 | 0 | 12.59 | 2.04 | 13.61 | 14.63 | 0.68 | 17.01 | 0.68 |
| 60301 | 38292 | 0.7 | 0 | 8.04 | 4.9 | 19.93 | 12.59 | 1.4 | 20.28 | 2.8 |
| 60308 | 38307 | 0 | 3.45 | 12.76 | 0 | 6.9 | 3.45 | 0 | 19.66 | 26.9 |
| 60308 | 38307 | 0 | 3.55 | 8.16 | 0 | 4.26 | 0.71 | 0 | 19.86 | 38.3 |
| 60639 | 38485 | 0 | 2.78 | 3.13 | 0 | 35.76 | 4.51 | 0 | 6.94 | 0.69 |
| 60639 | 38485 | 0 | 4.2 | 3.5 | 1.05 | 30.77 | 2.1 | 0 | 11.89 | 0 |
| 60751 | 38544 | 0 | 0.7 | 6.99 | 0.35 | 11.19 | 4.55 | 2.1 | 49.3 | 0.7 |
| 60751 | 38544 | 0.31 | 1.26 | 9.43 | 1.26 | 14.78 | 3.77 | 1.26 | 41.51 | 0 |
| 62733 | 39186 | 0 | 9.09 | 5.19 | 0 | 5.19 | 8.44 | 0 | 21.75 | 5.84 |
| 62733 | 39186 | 0 | 7.64 | 2.23 | 0 | 5.41 | 12.1 | 0 | 17.83 | 5.1 |



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| SampleID | Benth_IDs | FFParasite Pct | FFPlPierce Pct | FFPredCarnPct | FFScav Pct | FFScrape Pct | FFShred Pct | FFSubColDepPct | FFSuspFiltPct | FFUnknownPct |
|---|---|---|---|---|---|---|---|---|---|---|
| 63694 | 39707 | 0 | 0 | 9.06 | 0 | 4.38 | 20.94 | 0 | 10 | 0.63 |
| 63694 | 39707 | 0 | 0 | 12.01 | 0.32 | 9.74 | 16.88 | 0 | 6.82 | 4.55 |
| 64191 | 40004 | 0 | 0 | 0.63 | 0 | 0.31 | 1.88 | 0.63 | 48.44 | 20 |
| 64191 | 40004 | 0 | 0 | 0.63 | 0 | 0.63 | 2.85 | 0 | 38.61 | 30.38 |
| 64546 | 40384 | 0 | 0 | 10.49 | 1.05 | 18.18 | 18.88 | 4.9 | 6.99 | 0 |
| 64546 | 40384 | 0.66 | 0.33 | 11.92 | 0.66 | 12.58 | 24.17 | 2.65 | 10.26 | 0 |
| 65025 | 40260 | 0 | 0 | 13.61 | 0.68 | 11.22 | 27.55 | 0.68 | 17.69 | 0.68 |
| 65025 | 40260 | 0 | 0 | 11.03 | 1.72 | 14.14 | 22.76 | 0 | 15.52 | 2.76 |
| 65026 | 40261 | 0 | 0 | 9.25 | 0.34 | 33.9 | 7.53 | 0 | 25.68 | 1.37 |
| 65026 | 40261 | 0 | 0 | 7.34 | 0.7 | 27.62 | 10.84 | 1.4 | 29.72 | 0.7 |
| 65028 | 40263 | 0 | 0 | 27.66 | 0.35 | 13.48 | 11.7 | 4.26 | 17.73 | 0.71 |
| 65028 | 40263 | 0 | 0 | 24.65 | 0 | 14.44 | 15.49 | 0.7 | 20.42 | 1.41 |
| 65029 | 40264 | 0 | 0 | 13.91 | 0.99 | 20.2 | 18.21 | 1.32 | 16.56 | 0.66 |
| 65029 | 40264 | 0 | 0 | 10.54 | 0.68 | 23.47 | 19.73 | 0.68 | 15.65 | 0 |
| 65250 | 40368 | 0 | 0.65 | 10.78 | 0.33 | 12.75 | 25.82 | 1.31 | 19.93 | 0.65 |
| 65250 | 40368 | 0 | 0.71 | 12.5 | 0.36 | 15 | 20 | 2.14 | 23.93 | 0 |
| 65291 | 40343 | 0.68 | 21.92 | 15.07 | 5.48 | 7.53 | 6.85 | 1.37 | 9.59 | 9.59 |
| 65291 | 40343 | 0 | 25.5 | 16.44 | 5.7 | 6.38 | 5.03 | 0 | 6.38 | 9.4 |
| 65292 | 40344 | 0 | 4.26 | 18.44 | 1.42 | 17.02 | 13.12 | 0.71 | 18.79 | 2.84 |
| 65292 | 40344 | 0 | 7.64 | 23.96 | 1.74 | 8.33 | 16.67 | 0.69 | 12.15 | 5.56 |
| 65293 | 40345 | 0 | 12.77 | 7.8 | 0.35 | 2.84 | 9.22 | 0 | 46.1 | 1.42 |
| 65293 | 40345 | 0 | 16.25 | 4.69 | 1.25 | 2.19 | 6.25 | 0.63 | 48.44 | 1.88 |
| 65296 | 40348 | 0 | 9.4 | 10.74 | 0 | 13.42 | 10.07 | 0.67 | 22.48 | 1.34 |
| 65296 | 40348 | 0 | 4.26 | 10.99 | 1.06 | 13.12 | 14.89 | 2.84 | 20.21 | 1.42 |
| 65306 | 40406 | 0 | 0 | 36.6 | 0 | 12.75 | 21.24 | 1.96 | 4.58 | 0 |



US EPA ARCHIVE DOCUMENT

| SampleID | Benth_IDs | FFParasite Pct | FFPlPierce Pct | FFPredCarnPct | FFScav Pct | FFScrape Pct | FFShred Pct | FFSubColDepPct | FFSuspFiltPct | FFUnknownPct |
|---|---|---|---|---|---|---|---|---|---|---|
| 65306 | 40406 | 0 | 0.66 | 42.43 | 0 | 11.18 | 17.76 | 3.29 | 6.58 | 0 |
| 65316 | 40349 | 0 | 6.43 | 2.86 | 0 | 2.5 | 3.57 | 0.71 | 72.86 | 0 |
| 65316 | 40349 | 0 | 5.92 | 3.29 | 0 | 3.62 | 6.58 | 0 | 61.18 | 0 |
| 65379 | 40364 | 0 | 1.29 | 5.48 | 0 | 21.94 | 2.9 | 0 | 15.16 | 1.94 |
| 65379 | 40364 | 0 | 5.23 | 7.84 | 0 | 20.26 | 4.58 | 0 | 8.5 | 1.31 |
| 65382 | 40367 | 0 | 0 | 15.94 | 0 | 36.88 | 0 | 0 | 2.19 | 0 |
| 65382 | 40367 | 0 | 0 | 11.7 | 0 | 30.85 | 1.42 | 2.84 | 6.03 | 0 |
| 65414 | 40405 | 0 | 0 | 15.28 | 7.29 | 34.03 | 2.78 | 0.69 | 4.86 | 9.72 |
| 65414 | 40405 | 0 | 0 | 30.5 | 6.03 | 18.79 | 3.19 | 0 | 4.26 | 10.64 |
| 65567 | 40448 | 0 | 1.02 | 6.12 | 2.04 | 8.5 | 9.52 | 23.13 | 14.29 | 0 |
| 65567 | 40448 | 0 | 0 | 4.64 | 1.79 | 3.57 | 9.64 | 30 | 14.64 | 4.29 |
| 65636 | 40430 | 0 | 0.65 | 15.03 | 4.25 | 16.99 | 16.01 | 0 | 8.82 | 0 |
| 65636 | 40430 | 0.34 | 0 | 16.55 | 5.52 | 21.03 | 14.48 | 0 | 3.79 | 2.07 |
| 65637 | 40431 | 0 | 0.31 | 8.81 | 9.43 | 22.01 | 2.52 | 0.63 | 11.32 | 0 |
| 65637 | 40431 | 0 | 0 | 8.16 | 6.03 | 24.82 | 1.77 | 2.13 | 15.6 | 0 |
| 65715 | 40524 | 0 | 0.64 | 20.06 | 1.59 | 13.06 | 16.24 | 0 | 4.14 | 3.18 |
| 65715 | 40524 | 0 | 0 | 21.62 | 2.7 | 13.85 | 13.85 | 0 | 5.41 | 6.76 |
| 65731 | 40476 | 0 | 0 | 12.5 | 2.19 | 12.5 | 10.94 | 0 | 41.56 | 0 |
| 65731 | 40476 | 0 | 0 | 21.1 | 1.95 | 8.44 | 7.14 | 0.65 | 42.53 | 0 |
| 65736 | 40479 | 0 | 0.68 | 11.56 | 0.34 | 22.11 | 14.63 | 2.04 | 13.61 | 3.4 |
| 65736 | 40479 | 0 | 4.29 | 15.36 | 0.71 | 14.64 | 22.14 | 0 | 11.79 | 2.14 |
| 65737 | 40481 | 0 | 0 | 18.75 | 1.64 | 11.18 | 25.33 | 1.97 | 20.72 | 0 |
| 65737 | 40481 | 0 | 0 | 17.88 | 0.33 | 15.56 | 25.17 | 0.66 | 19.21 | 0.66 |
| 65739 | 40534 | 0 | 0 | 5.48 | 4.11 | 31.51 | 5.14 | 0 | 13.01 | 0 |
| 65739 | 40534 | 0 | 0 | 3.08 | 2.74 | 30.48 | 6.51 | 0 | 10.96 | 2.74 |



US EPA ARCHIVE DOCUMENT

| SampleID | Benth_IDs | FFParasite Pct | FFPlPierce Pct | FFPredCarnPct | FFScav Pct | FFScrape Pct | FFShred Pct | FFSubColDepPct | FFSuspFiltPct | FFUnknownPct |
|---|---|---|---|---|---|---|---|---|---|---|
| 65741 | 40537 | 0 | 0 | 10.88 | 1.02 | 16.33 | 22.11 | 0 | 17.35 | 0 |
| 65741 | 40537 | 0 | 0 | 11.64 | 1.03 | 13.36 | 20.55 | 0 | 15.41 | 0 |
| 65891 | 40544 | 0 | 0 | 3.25 | 0 | 14.61 | 6.17 | 0 | 55.19 | 0 |
| 65891 | 40544 | 0 | 0 | 2.87 | 0 | 14.65 | 4.46 | 0 | 58.6 | 0 |
| 65900 | 40550 | 0 | 0 | 1.01 | 0 | 18.79 | 19.46 | 0 | 25.5 | 0 |
| 65900 | 40550 | 0 | 0 | 2.24 | 0.32 | 16.67 | 19.87 | 0 | 26.92 | 0 |
| 65907 | 40552 | 0 | 0 | 4.28 | 0.99 | 21.38 | 19.08 | 1.32 | 15.79 | 0.66 |
| 65907 | 40552 | 0 | 0 | 3.31 | 0.66 | 20.2 | 22.52 | 1.99 | 15.89 | 0 |
| 65931 | 40577 | 0 | 0 | 8.13 | 1.56 | 13.75 | 18.44 | 0.63 | 20.31 | 0.63 |
| 65931 | 40577 | 0 | 0.65 | 9.15 | 0.65 | 11.11 | 20.92 | 0 | 20.92 | 1.31 |
| 65932 | 40564 | 0 | 0 | 5.13 | 0.64 | 18.59 | 4.81 | 1.28 | 26.92 | 1.28 |
| 65932 | 40564 | 0 | 0 | 6.08 | 0 | 30.07 | 1.35 | 2.03 | 19.26 | 1.35 |
| 66028 | 40571 | 0.71 | 0.35 | 14.54 | 0.71 | 30.5 | 5.67 | 0 | 23.4 | 0 |
| 66028 | 40571 | 0 | 0.69 | 19.44 | 1.04 | 27.43 | 3.47 | 0.69 | 20.83 | 0.69 |

US EPA ARCHIVE DOCUMENT

| SampleID | Benth_IDs | Gastropoda Pct | Isopoda Pct | LongLivedTaxa | Odonata Pct | Oligoc Pct | Oligoc Taxa | PelecypodaPct | Plecop Pct | Polychaete Pct | Polychaete Taxa |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3105 | 3980 | 9.42 | 0 | 3 | 2.17 | 14.49 | 2 | 0.72 | 0 | 0 | 0 |
| 3682 | 4628 | 0 | 0 | 1 | 3.71 | 5.56 | 2 | 0 | 1.85 | 0 | 0 |
| 3797 | 4802 | 0.68 | 0 | 4 | 10.27 | 0 | 0 | 6.16 | 0 | 0 | 0 |
| 3952 | 5024 | 1.36 | 0 | 5 | 11.56 | 0 | 0 | 1.36 | 0 | 0 | 0 |
| 6810 | 7823 | 11.82 | 1.82 | 3 | 10.91 | 15.45 | 2 | 0 | 0 | 0 | 0 |
| 7183 | 8268 | 0 | 0 | 4 | 1.85 | 2.78 | 2 | 0 | 13.89 | 0 | 0 |
| 7224 | 8306 | 0 | 0 | 9 | 8.84 | 5.31 | 4 | 0.88 | 11.5 | 0 | 0 |
| 7776 | 8853 | 4.79 | 0 | 1 | 0.68 | 9.59 | 5 | 13.01 | 0 | 0 | 0 |
| 7778 | 8855 | 8.16 | 0 | 2 | 2.04 | 20.41 | 4 | 11.56 | 0 | 0 | 0 |
| 7779 | 8856 | 6.8 | 0 | 1 | 0.97 | 5.83 | 3 | 23.3 | 0 | 0 | 0 |
| 9179 | 10164 | 0 | 0.68 | 4 | 1.36 | 2.04 | 2 | 2.04 | 0.68 | 0 | 0 |
| 9196 | 10181 | 16.67 | 1.85 | 1 | 2.78 | 1.85 | 1 | 2.78 | 0 | 0 | 0 |
| 9206 | 10191 | 6.16 | 2.05 | 1 | 1.37 | 3.42 | 3 | 0 | 0 | 0 | 0 |
| 9395 | 10288 | 6.54 | 0 | 2 | 0.93 | 1.87 | 1 | 12.15 | 0 | 0 | 0 |
| 9396 | 10289 | 7.97 | 1.45 | 1 | 0.72 | 3.62 | 2 | 30.43 | 0 | 0 | 0 |
| 9399 | 10292 | 2.41 | 12.65 | 2 | 0.6 | 7.83 | 4 | 16.87 | 0 | 0 | 0 |
| 10131 | 10723 | 0 | 1.32 | 5 | 1.32 | 9.27 | 3 | 0 | 1.99 | 0 | 0 |
| 10591 | 11209 | 21.66 | 3.82 | 2 | 7.64 | 14.01 | 7 | 7.64 | 0 | 0 | 0 |
| 10633 | 11325 | 1.96 | 0 | 6 | 3.27 | 13.07 | 4 | 2.61 | 1.96 | 0 | 0 |
| 10785 | 11544 | 0 | 0 | 4 | 7.48 | 0.93 | 1 | 4.67 | 0 | 0 | 0 |



US EPA ARCHIVE DOCUMENT

| SampleID | Benth_IDs | Gastropoda Pct | Isopoda Pct | LongLivedTaxa | Odonata Pct | Oligoc Pct | Oligoc Taxa | PelecypodaPct | Plecop Pct | Polychaete Pct | Polychaete Taxa |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10844 | 11554 | 0 | 0 | 4 | 1.81 | 11.45 | 3 | 1.2 | 0 | 0 | 0 |
| 11464 | 11963 | 14.29 | 0 | 1 | 2.04 | 0.68 | 1 | 0 | 0 | 0 | 0 |
| 11607 | 12057 | 1.43 | 0 | 2 | 0.71 | 24.29 | 2 | 0 | 0.71 | 0 | 0 |
| 12089 | 12197 | 0 | 0 | 2 | 5.77 | 3.21 | 2 | 5.77 | 0 | 0 | 0 |
| 12092 | 12201 | 0 | 0 | 3 | 0.77 | 1.54 | 2 | 0 | 41.54 | 0 | 0 |
| 12224 | 12340 | 0.9 | 0 | 1 | 0.9 | 4.5 | 4 | 10.81 | 0 | 0 | 0 |
| 12401 | 12463 | 3.39 | 0 | 2 | 5.08 | 1.69 | 2 | 0 | 16.95 | 0 | 0 |
| 12436 | 12486 | 0 | 0 | 6 | 0.79 | 3.15 | 2 | 0 | 7.87 | 0 | 0 |
| 12450 | 12500 | 0 | 0 | 1 | 0.79 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12600 | 12548 | 1.82 | 0 | 1 | 4.55 | 14.55 | 6 | 5.45 | 0 | 0 | 0 |
| 12609 | 12557 | 0 | 0 | 1 | 0 | 31.43 | 2 | 0 | 0.95 | 0 | 0 |
| 13475 | 12867 | 0 | 0 | 3 | 0 | 5.67 | 3 | 0 | 14.18 | 0 | 0 |
| 13535 | 12898 | 0.83 | 0 | 4 | 3.31 | 1.65 | 2 | 0 | 4.13 | 0 | 0 |
| 14213 | 13118 | 0 | 0 | 5 | 2.31 | 0.58 | 1 | 0 | 22.54 | 0 | 0 |
| 14231 | 13136 | 0 | 0 | 6 | 5.47 | 0 | 0 | 0 | 11.72 | 0 | 0 |
| 14930 | 13379 | 1.99 | 0 | 2 | 1.32 | 9.27 | 5 | 10.6 | 0 | 0 | 0 |
| 14965 | 13401 | 0 | 0 | 8 | 1.74 | 0 | 0 | 0 | 2.89 | 0 | 0 |
| 14966 | 13403 | 2 | 2 | 3 | 0 | 11 | 1 | 0 | 8 | 0 | 0 |
| 15951 | 14187 | 9.09 | 0 | 1 | 4.55 | 0 | 0 | 1.82 | 0 | 0 | 0 |
| 16636 | 14709 | 0.63 | 1.9 | 1 | 15.82 | 1.9 | 3 | 0.63 | 0 | 0 | 0 |
| 16643 | 14716 | 0 | 2 | 2 | 3 | 5 | 3 | 0 | 4 | 0 | 0 |



US EPA ARCHIVE DOCUMENT

| SampleID | Benth_IDs | Gastropoda Pct | Isopoda Pct | LongLivedTaxa | Odonata Pct | Oligoc Pct | Oligoc Taxa | PelecypodaPct | Plecop Pct | Polychaete Pct | Polychaete Taxa |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 18076 | 15790 | 32.58 | 3.79 | 0 | 3.79 | 0 | 0 | 3.03 | 0 | 0 | 0 |
| 18372 | 15965 | 0 | 0 | 1 | 7.45 | 3.73 | 4 | 9.32 | 0 | 0 | 0 |
| 18594 | 16087 | 2.42 | 0 | 2 | 0.81 | 0.81 | 1 | 0 | 0 | 0 | 0 |
| 20471 | 17104 | 2.7 | 0 | 3 | 4.5 | 4.5 | 3 | 0 | 0.9 | 0 | 0 |
| 20474 | 17107 | 12.61 | 7.21 | 0 | 2.7 | 0.9 | 1 | 3.6 | 0 | 0 | 0 |
| 20479 | 17112 | 3.6 | 5.41 | 2 | 0.9 | 1.8 | 2 | 0 | 0 | 0 | 0 |
| 20480 | 17113 | 0 | 0 | 1 | 4.19 | 12.57 | 6 | 0 | 0 | 0 | 0 |
| 21571 | 17864 | 2.19 | 0 | 2 | 0.73 | 5.84 | 3 | 0.73 | 0 | 0 | 0 |
| 22114 | 18267 | 9.26 | 1.85 | 1 | 8.33 | 0.93 | 1 | 0 | 0 | 0 | 0 |
| 24523 | 19456 | 0 | 0 | 4 | 3.48 | 4.35 | 3 | 0 | 5.22 | 0 | 0 |
| 24524 | 19457 | 0 | 0 | 5 | 0.68 | 1.35 | 2 | 0.68 | 13.51 | 0 | 0 |
| 25672 | 19985 | 18 | 4 | 3 | 6 | 1 | 1 | 0 | 0 | 0 | 0 |
| 26863 | 20697 | 0 | 1.41 | 1 | 0 | 2.82 | 2 | 0 | 0 | 0 | 0 |
| 26865 | 20699 | 3.39 | 0 | 2 | 8.47 | 7.63 | 3 | 0 | 0 | 0 | 0 |
| 26868 | 20702 | 7.89 | 12.28 | 0 | 1.75 | 7.89 | 6 | 14.04 | 0 | 0 | 0 |
| 47698 | 32249 | 0 | 0 | 1 | 3.77 | 0 | 0 | 0 | 0 | 0 | 0 |
| 48420 | 33507 | 0 | 0 | 2 | 1.96 | 2.94 | 2 | 0 | 5.88 | 0 | 0 |
| 50131 | 33604 | 0 | 0 | 4 | 0 | 2.86 | 2 | 0 | 2.86 | 0 | 0 |
| 52996 | 33624 | 3.77 | 9.43 | 0 | 4.72 | 4.72 | 2 | 0 | 0 | 0 | 0 |
| 52471 | 34244 | 4.9 | 17.65 | 1 | 1.96 | 2.94 | 1 | 0.98 | 0 | 0 | 0 |
| 52912 | 34645 | 0 | 7.27 | 4 | 9.09 | 3.64 | 2 | 0.91 | 0 | 0 | 0 |



US EPA ARCHIVE DOCUMENT

| SampleID | Benth_IDs | Gastropoda Pct | Isopoda Pct | LongLivedTaxa | Odonata Pct | Oligoc Pct | Oligoc Taxa | PelecypodaPct | Plecop Pct | Polychaete Pct | Polychaete Taxa |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 53274 | 34807 | 0 | 0 | 3 | 1 | 2 | 2 | 1 | 4 | 0 | 0 |
| 53732 | 35065 | 0 | 0 | 0 | 0.91 | 12.73 | 2 | 0 | 0 | 0 | 0 |
| 53951 | 35284 | 0 | 0.91 | 0 | 0.91 | 3.64 | 3 | 0 | 0 | 0 | 0 |
| 52834 | 35565 | 0.95 | 0 | 1 | 1.9 | 13.33 | 5 | 5.71 | 0 | 0 | 0 |
| 49652 | 35784 | 0 | 0 | 0 | 0.93 | 1.87 | 1 | 0 | 0.93 | 0 | 0 |
| 53059 | 36666 | 0 | 0 | 0 | 22 | 4 | 2 | 0 | 0 | 0 | 0 |
| 49677 | 36688 | 0 | 0 | 3 | 1.87 | 0.93 | 1 | 0 | 14.02 | 0 | 0 |
| 57322 | 36904 | 5.73 | 9.55 | 3 | 3.18 | 0.64 | 1 | 1.27 | 0 | 0 | 0 |
| 57322 | 36904 | 2.52 | 8.81 | 3 | 6.29 | 0 | 0 | 5.03 | 0 | 0 | 0 |
| 57324 | 36989 | 4.73 | 0 | 1 | 0 | 0.68 | 1 | 4.05 | 0 | 0 | 0 |
| 57324 | 36989 | 0 | 0 | 3 | 1.32 | 1.97 | 1 | 0.66 | 0 | 0 | 0 |
| 57431 | 36987 | 0.68 | 0 | 0 | 1.37 | 0 | 0 | 0 | 0 | 0 | 0 |
| 57431 | 36987 | 0 | 0 | 1 | 2.67 | 0 | 0 | 0 | 0 | 0 | 0 |
| 59773 | 38075 | 0 | 0 | 1 | 1.27 | 1.27 | 1 | 0 | 0.63 | 0 | 0 |
| 59773 | 38075 | 0 | 0.69 | 1 | 0 | 0.69 | 1 | 0 | 1.38 | 0 | 0 |
| 60301 | 38292 | 6.12 | 2.04 | 1 | 1.36 | 0.68 | 1 | 2.04 | 0 | 0 | 0 |
| 60301 | 38292 | 14.69 | 4.9 | 1 | 0.7 | 1.4 | 1 | 2.1 | 0 | 0 | 0 |
| 60308 | 38307 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 60308 | 38307 | 0 | 0 | 1 | 0.71 | 0 | 0 | 0 | 0 | 0 | 0 |
| 60639 | 38485 | 32.64 | 0 | 2 | 0.69 | 0 | 0 | 0.69 | 0 | 0 | 0 |
| 60639 | 38485 | 23.08 | 0 | 3 | 0.7 | 0 | 0 | 0.7 | 0 | 0 | 0 |
| 60751 | 38544 | 0.7 | 0.7 | 1 | 2.8 | 2.1 | 2 | 6.29 | 0 | 0 | 0 |
| 60751 | 38544 | 2.52 | 2.52 | 1 | 5.66 | 1.26 | 1 | 3.14 | 0 | 0 | 0 |
| 62733 | 39186 | 3.25 | 0 | 2 | 0 | 0 | 0 | 0.65 | 0 | 0 | 0 |
| 62733 | 39186 | 1.91 | 0 | 1 | 0 | 0 | 0 | 0.64 | 0 | 0 | 0 |



US EPA ARCHIVE DOCUMENT

| SampleID | Benth_IDs | Gastropoda Pct | Isopoda Pct | LongLivedTaxa | Odonata Pct | Oligoc Pct | Oligoc Taxa | PelecypodaPct | Plecop Pct | Polychaete Pct | Polychaete Taxa |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 63694 | 39707 | 3.75 | 0 | 1 | 0.63 | 0 | 0 | 0.63 | 0 | 0 | 0 |
| 63694 | 39707 | 6.49 | 0 | 1 | 1.95 | 0 | 0 | 0 | 0 | 0 | 0 |
| 64191 | 40004 | 0 | 0 | 2 | 0 | 0.63 | 1 | 0 | 0 | 0 | 0 |
| 64191 | 40004 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 64546 | 40384 | 0.7 | 0 | 2 | 4.2 | 4.9 | 3 | 0 | 0 | 0 | 0 |
| 64546 | 40384 | 0.66 | 0.66 | 1 | 3.31 | 2.65 | 1 | 0.66 | 0 | 0 | 0 |
| 65025 | 40260 | 0 | 0 | 3 | 0 | 0.68 | 1 | 0 | 22.45 | 0 | 0 |
| 65025 | 40260 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 16.55 | 0 | 0 |
| 65026 | 40261 | 25.34 | 0 | 3 | 0.68 | 0 | 0 | 1.37 | 0 | 0 | 0 |
| 65026 | 40261 | 23.08 | 0 | 2 | 4.2 | 1.4 | 2 | 0.7 | 0 | 0 | 0 |
| 65028 | 40263 | 1.42 | 0 | 6 | 7.09 | 4.26 | 2 | 1.42 | 2.84 | 0 | 0 |
| 65028 | 40263 | 0.7 | 0 | 5 | 4.23 | 1.41 | 2 | 3.52 | 3.52 | 0 | 0 |
| 65029 | 40264 | 1.32 | 1.99 | 4 | 0 | 1.32 | 2 | 1.32 | 5.96 | 0 | 0 |
| 65029 | 40264 | 0 | 0.68 | 6 | 0.68 | 0.68 | 1 | 0.68 | 7.48 | 0 | 0 |
| 65250 | 40368 | 5.23 | 0 | 1 | 1.96 | 1.31 | 1 | 0 | 3.27 | 0 | 0 |
| 65250 | 40368 | 6.43 | 0 | 3 | 2.86 | 2.14 | 2 | 0.71 | 1.43 | 0 | 0 |
| 65291 | 40343 | 0 | 9.59 | 2 | 2.05 | 1.37 | 2 | 0 | 2.05 | 0 | 0 |
| 65291 | 40343 | 0 | 10.07 | 2 | 4.03 | 0 | 0 | 0 | 0 | 0 | 0 |
| 65292 | 40344 | 0.71 | 0 | 6 | 4.26 | 0.71 | 1 | 0 | 6.38 | 0 | 0 |
| 65292 | 40344 | 0.69 | 0 | 6 | 4.17 | 0.69 | 1 | 0 | 8.33 | 0 | 0 |
| 65293 | 40345 | 0 | 0.71 | 1 | 0 | 0 | 0 | 0.71 | 0 | 0 | 0 |
| 65293 | 40345 | 0 | 1.88 | 1 | 0.63 | 0.63 | 1 | 0 | 0 | 0 | 0 |
| 65296 | 40348 | 2.68 | 0 | 3 | 1.34 | 0.67 | 1 | 3.36 | 0.67 | 0 | 0 |
| 65296 | 40348 | 1.42 | 0 | 3 | 1.42 | 2.84 | 3 | 0 | 0 | 0 | 0 |
| 65306 | 40406 | 0.65 | 0 | 0 | 7.19 | 1.96 | 2 | 0 | 0 | 0 | 0 |



US EPA ARCHIVE DOCUMENT

| SampleID | Benth_IDs | Gastropoda Pct | Isopoda Pct | LongLivedTaxa | Odonata Pct | Oligoc Pct | Oligoc Taxa | PelecypodaPct | Plecop Pct | Polychaete Pct | Polychaete Taxa |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 65306 | 40406 | 1.97 | 0 | 0 | 8.55 | 3.29 | 2 | 0 | 0 | 0 | 0 |
| 65316 | 40349 | 0 | 0 | 0 | 0.71 | 0.71 | 1 | 0 | 0 | 0 | 0 |
| 65316 | 40349 | 0 | 0 | 0 | 0.66 | 0 | 0 | 0 | 0 | 0 | 0 |
| 65379 | 40364 | 22.58 | 0 | 1 | 1.94 | 0 | 0 | 1.94 | 0 | 0 | 0 |
| 65379 | 40364 | 22.22 | 0 | 0 | 3.92 | 0 | 0 | 0 | 0 | 0 | 0 |
| 65382 | 40367 | 18.75 | 0 | 1 | 7.5 | 0 | 0 | 1.25 | 0 | 0 | 0 |
| 65382 | 40367 | 22.7 | 0 | 1 | 5.67 | 2.84 | 1 | 4.26 | 0 | 0 | 0 |
| 65414 | 40405 | 29.17 | 13.89 | 0 | 4.86 | 0.69 | 1 | 1.39 | 0 | 0 | 0 |
| 65414 | 40405 | 12.06 | 12.06 | 0 | 4.96 | 0 | 0 | 2.13 | 0 | 0 | 0 |
| 65567 | 40448 | 7.48 | 0 | 1 | 1.36 | 23.13 | 7 | 4.76 | 0 | 0 | 0 |
| 65567 | 40448 | 2.14 | 0.71 | 1 | 1.43 | 30 | 9 | 3.57 | 0 | 0 | 0 |
| 65636 | 40430 | 11.76 | 7.84 | 2 | 3.92 | 0 | 0 | 0 | 0 | 0 | 0 |
| 65636 | 40430 | 10.34 | 10.34 | 1 | 2.76 | 0 | 0 | 0 | 0 | 0 | 0 |
| 65637 | 40431 | 0 | 18.87 | 0 | 0 | 0.63 | 1 | 2.52 | 0 | 0 | 0 |
| 65637 | 40431 | 0 | 12.06 | 0 | 0 | 2.13 | 2 | 4.26 | 0 | 0 | 0 |
| 65715 | 40524 | 0.64 | 3.18 | 0 | 8.92 | 0 | 0 | 0.64 | 3.18 | 0 | 0 |
| 65715 | 40524 | 0 | 3.38 | 2 | 12.16 | 0 | 0 | 0 | 0.68 | 0 | 0 |
| 65731 | 40476 | 1.88 | 1.88 | 3 | 4.38 | 0 | 0 | 0 | 0 | 0 | 0 |
| 65731 | 40476 | 0.65 | 1.95 | 4 | 8.44 | 0.65 | 1 | 0 | 0 | 0 | 0 |
| 65736 | 40479 | 0.68 | 0.68 | 2 | 4.08 | 2.04 | 1 | 0 | 4.76 | 0 | 0 |
| 65736 | 40479 | 0.71 | 0.71 | 5 | 4.29 | 0 | 0 | 0.71 | 3.57 | 0 | 0 |
| 65737 | 40481 | 1.97 | 1.32 | 3 | 11.84 | 1.97 | 1 | 0 | 3.95 | 0 | 0 |
| 65737 | 40481 | 1.99 | 0.66 | 2 | 9.27 | 0.66 | 1 | 0 | 0.66 | 0 | 0 |
| 65739 | 40534 | 0 | 6.16 | 1 | 0 | 0 | 0 | 0 | 2.05 | 0 | 0 |
| 65739 | 40534 | 2.05 | 3.42 | 3 | 0.68 | 0 | 0 | 0.68 | 2.05 | 0 | 0 |



US EPA ARCHIVE DOCUMENT

| SampleID | Benth_IDs | Gastropoda Pct | Isopoda Pct | LongLivedTaxa | Odonata Pct | Oligoc Pct | Oligoc Taxa | PelecypodaPct | Plecop Pct | Polychaete Pct | Polychaete Taxa |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 65741 | 40537 | 0 | 0 | 6 | 2.72 | 0 | 0 | 0 | 19.73 | 0 | 0 |
| 65741 | 40537 | 0 | 0 | 4 | 1.37 | 0 | 0 | 0 | 26.71 | 0 | 0 |
| 65891 | 40544 | 0 | 0 | 0 | 1.3 | 0 | 0 | 0 | 0 | 0 | 0 |
| 65891 | 40544 | 0 | 0 | 0 | 1.27 | 0 | 0 | 0.64 | 0 | 0 | 0 |
| 65900 | 40550 | 2.01 | 0 | 1 | 0 | 0 | 0 | 2.68 | 0 | 0 | 0 |
| 65900 | 40550 | 1.92 | 0.64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 65907 | 40552 | 2.63 | 0.66 | 3 | 1.32 | 1.32 | 1 | 2.63 | 0 | 0 | 0 |
| 65907 | 40552 | 2.65 | 0 | 2 | 0.66 | 1.99 | 2 | 2.65 | 0 | 0 | 0 |
| 65931 | 40577 | 3.75 | 1.88 | 1 | 0 | 0.63 | 1 | 0 | 0 | 0 | 0 |
| 65931 | 40577 | 1.96 | 0 | 0 | 1.96 | 0 | 0 | 0 | 0 | 0 | 0 |
| 65932 | 40564 | 0.64 | 0.64 | 0 | 0.64 | 1.28 | 1 | 0 | 0 | 0 | 0 |
| 65932 | 40564 | 3.38 | 0 | 0 | 0 | 2.03 | 1 | 0.68 | 0 | 0 | 0 |
| 66028 | 40571 | 12.06 | 0 | 4 | 3.55 | 0 | 0 | 15.6 | 0 | 0 | 0 |
| 66028 | 40571 | 7.64 | 0.69 | 5 | 6.25 | 0.69 | 1 | 11.11 | 0 | 0 | 0 |

US EPA ARCHIVE DOCUMENT

| SampleID | Benth_IDs | SCI_1992 | SCI_1992 Word | SCI_2004 | SCI_2004 Word | SCI_2007 | SCI_2007 Word | SCI_2007 Qualifier | Sensitive Taxa |
|---|---|---|---|---|---|---|---|---|---|
| 3105 | 3980 | 33 | Excellent | | | | | | 5 |
| 3682 | 4628 | 29 | Excellent | | | | | | 12 |
| 3797 | 4802 | 31 | Excellent | | | | | | 4 |
| 3952 | 5024 | 31 | Excellent | | | | | | 3 |
| 6810 | 7823 | 29 | Excellent | | | | | | 4 |
| 7183 | 8268 | 33 | Excellent | | | | | | 10 |
| 7224 | 8306 | 33 | Excellent | | | | | | 19 |
| 7776 | 8853 | 25 | Excellent | | | | | | 3 |
| 7778 | 8855 | 29 | Excellent | | | | | | 6 |
| 7779 | 8856 | 29 | Excellent | | | | | | 3 |
| 9179 | 10164 | 27 | Excellent | | | | | | 11 |
| 9196 | 10181 | 27 | Excellent | | | | | | 5 |
| 9206 | 10191 | 29 | Excellent | | | | | | 8 |
| 9395 | 10288 | 29 | Excellent | | | | | | 9 |
| 9396 | 10289 | 31 | Excellent | | | | | | 6 |
| 9399 | 10292 | 31 | Excellent | | | | | | 9 |
| 10131 | 10723 | 33 | Excellent | | | | | | 19 |
| 10591 | 11209 | 29 | Excellent | | | | | | 8 |
| 10633 | 11325 | 33 | Excellent | | | | | | 16 |
| 10785 | 11544 | 31 | Excellent | | | | | | 10 |



US EPA ARCHIVE DOCUMENT

| SampleID | Benth_IDs | SCI_1992 | SCI_1992 Word | SCI_2004 | SCI_2004 Word | SCI_2007 | SCI_2007 Word | SCI_2007 Qualifier | Sensitive Taxa |
|---|---|---|---|---|---|---|---|---|---|
| 10844 | 11554 | 31 | Excellent | | | | | | 4 |
| 11464 | 11963 | 33 | Excellent | | | | | | 8 |
| 11607 | 12057 | 33 | Excellent | | | | | | 9 |
| 12089 | 12197 | 31 | Excellent | | | | | | 4 |
| 12092 | 12201 | 33 | Excellent | | | | | | 14 |
| 12224 | 12340 | 31 | Excellent | | | | | | 6 |
| 12401 | 12463 | 29 | Excellent | | | | | | 10 |
| 12436 | 12486 | 33 | Excellent | | | | | | 14 |
| 12450 | 12500 | 29 | Excellent | | | | | | 9 |
| 12600 | 12548 | 29 | Excellent | | | | | | 7 |
| 12609 | 12557 | 29 | Excellent | | | | | | 12 |
| 13475 | 12867 | 27 | Excellent | | | | | | 12 |
| 13535 | 12898 | 31 | Excellent | | | | | | 10 |
| 14213 | 13118 | 29 | Excellent | | | | | | 10 |
| 14231 | 13136 | 31 | Excellent | | | | | | 12 |
| 14930 | 13379 | 31 | Excellent | | | | | | 8 |
| 14965 | 13401 | 33 | Excellent | | | | | | 20 |
| 14966 | 13403 | 29 | Excellent | | | | | | 11 |
| 15951 | 14187 | 33 | Excellent | | | | | | 3 |
| 16636 | 14709 | 21 | Good | | | | | | 2 |
| 16643 | 14716 | 33 | Excellent | | | | | | 14 |



US EPA ARCHIVE DOCUMENT

| SampleID | Benth_IDs | SCI_1992 | SCI_1992 Word | SCI_2004 | SCI_2004 Word | SCI_2007 | SCI_2007 Word | SCI_2007 Qualifier | Sensitive Taxa |
|---|---|---|---|---|---|---|---|---|---|
| 18076 | 15790 | 27 | Excellent | | | | | | 6 |
| 18372 | 15965 | 31 | Excellent | | | | | | 5 |
| 18594 | 16087 | 27 | Excellent | | | | | | 3 |
| 20471 | 17104 | 33 | Excellent | | | | | | 11 |
| 20474 | 17107 | 27 | Excellent | | | | | | 10 |
| 20479 | 17112 | 31 | Excellent | | | | | | 3 |
| 20480 | 17113 | 33 | Excellent | | | | | | 8 |
| 21571 | 17864 | 33 | Excellent | | | | | | 5 |
| 22114 | 18267 | 27 | Excellent | | | | | | 5 |
| 24523 | 19456 | 33 | Excellent | | | | | | 13 |
| 24524 | 19457 | 33 | Excellent | | | | | | 13 |
| 25672 | 19985 | 19 | Poor | | | | | | 4 |
| 26863 | 20697 | 29 | Excellent | | | | | | 3 |
| 26865 | 20699 | 31 | Excellent | | | | | | 4 |
| 26868 | 20702 | 27 | Excellent | | | | | | 6 |
| 47698 | 32249 | | | 55 | Fair | | | | 6 |
| 48420 | 33507 | | | 76 | Good | | | | 18 |
| 50131 | 33604 | | | 73 | Good | | | | 10 |
| 52996 | 33624 | | | 71 | Fair | | | | 10 |
| 52471 | 34244 | | | 76 | Good | | | | 9 |
| 52912 | 34645 | | | 82 | Good | | | | 11 |



US EPA ARCHIVE DOCUMENT

| SampleID | Benth_IDs | SCI_1992 | SCI_1992 Word | SCI_2004 | SCI_2004 Word | SCI_2007 | SCI_2007 Word | SCI_2007 Qualifier | Sensitive Taxa |
|---|---|---|---|---|---|---|---|---|---|
| 53274 | 34807 | | | 59 | Fair | | | | 6 |
| 53732 | 35065 | | | 53 | Fair | | | | 5 |
| 53951 | 35284 | | | 28 | Poor | | | | 1 |
| 52834 | 35565 | | | 57 | Fair | | | | 3 |
| 49652 | 35784 | | | 49 | Fair | | | | 5 |
| 53059 | 36666 | | | 52 | Fair | | | | 5 |
| 49677 | 36688 | | | 57 | Fair | | | | 11 |
| 57322 | 36904 | | | | | 69 | Category 1 | A | 6 |
| 57322 | 36904 | | | | | 69 | Category 1 | A | 8 |
| 57324 | 36989 | | | | | 68 | Category 1 | A | 5 |
| 57324 | 36989 | | | | | 68 | Category 1 | A | 6 |
| 57431 | 36987 | | | | | 75 | Category 1 | A | 8 |
| 57431 | 36987 | | | | | 75 | Category 1 | A | 7 |
| 59773 | 38075 | | | | | 56 | Category 2 | A | 10 |
| 59773 | 38075 | | | | | 56 | Category 2 | A | 11 |
| 60301 | 38292 | | | | | 74 | Category 1 | A | 9 |
| 60301 | 38292 | | | | | 74 | Category 1 | A | 7 |
| 60308 | 38307 | | | | | 53 | Category 2 | A | 3 |
| 60308 | 38307 | | | | | 53 | Category 2 | A | 4 |
| 60639 | 38485 | | | | | 54 | Category 2 | A | 7 |
| 60639 | 38485 | | | | | 54 | Category 2 | A | 11 |
| 60751 | 38544 | | | | | 81 | Category 1 | A | 4 |
| 60751 | 38544 | | | | | 81 | Category 1 | A | 6 |
| 62733 | 39186 | | | | | 57 | Category 2 | A | 5 |
| 62733 | 39186 | | | | | 57 | Category 2 | A | 5 |



US EPA ARCHIVE DOCUMENT

| SampleID | Benth_IDs | SCI_1992 | SCI_1992 Word | SCI_2004 | SCI_2004 Word | SCI_2007 | SCI_2007 Word | SCI_2007 Qualifier | Sensitive Taxa |
|---|---|---|---|---|---|---|---|---|---|
| 63694 | 39707 | | | | | 47 | Category 2 | A | 1 |
| 63694 | 39707 | | | | | 47 | Category 2 | A | 2 |
| 64191 | 40004 | | | | | 51 | Category 2 | A | 4 |
| 64191 | 40004 | | | | | 51 | Category 2 | A | 4 |
| 64546 | 40384 | | | | | 44 | Category 2 | A | 2 |
| 64546 | 40384 | | | | | 44 | Category 2 | A | 2 |
| 65025 | 40260 | | | | | 67 | Category 2 | A | 13 |
| 65025 | 40260 | | | | | 67 | Category 2 | A | 14 |
| 65026 | 40261 | | | | | 57 | Category 2 | A | 5 |
| 65026 | 40261 | | | | | 57 | Category 2 | A | 6 |
| 65028 | 40263 | | | | | 81 | Category 1 | A | 16 |
| 65028 | 40263 | | | | | 81 | Category 1 | A | 14 |
| 65029 | 40264 | | | | | 78 | Category 1 | A | 15 |
| 65029 | 40264 | | | | | 78 | Category 1 | A | 14 |
| 65250 | 40368 | | | | | 92 | Category 1 | A | 16 |
| 65250 | 40368 | | | | | 92 | Category 1 | A | 13 |
| 65291 | 40343 | | | | | 70 | Category 1 | A | 15 |
| 65291 | 40343 | | | | | 70 | Category 1 | A | 12 |
| 65292 | 40344 | | | | | 82 | Category 1 | A | 12 |
| 65292 | 40344 | | | | | 82 | Category 1 | A | 13 |
| 65293 | 40345 | | | | | 59 | Category 2 | A | 8 |
| 65293 | 40345 | | | | | 59 | Category 2 | A | 7 |
| 65296 | 40348 | | | | | 79 | Category 1 | A | 13 |
| 65296 | 40348 | | | | | 79 | Category 1 | A | 9 |
| 65306 | 40406 | | | | | 50 | Category 2 | A | 5 |



US EPA ARCHIVE DOCUMENT

| SampleID | Benth_IDs | SCI_1992 | SCI_1992 Word | SCI_2004 | SCI_2004 Word | SCI_2007 | SCI_2007 Word | SCI_2007 Qualifier | Sensitive Taxa |
|---|---|---|---|---|---|---|---|---|---|
| 65306 | 40406 | | | | | 50 | Category 2 | A | 6 |
| 65316 | 40349 | | | | | 51 | Category 2 | A | 9 |
| 65316 | 40349 | | | | | 51 | Category 2 | A | 8 |
| 65379 | 40364 | | | | | 41 | Category 2 | A | 3 |
| 65379 | 40364 | | | | | 41 | Category 2 | A | 3 |
| 65382 | 40367 | | | | | 20 | Category 3 | A | 1 |
| 65382 | 40367 | | | | | 20 | Category 3 | A | 1 |
| 65414 | 40405 | | | | | 41 | Category 2 | A | 8 |
| 65414 | 40405 | | | | | 41 | Category 2 | A | 6 |
| 65567 | 40448 | | | | | 42 | Category 2 | A | 1 |
| 65567 | 40448 | | | | | 42 | Category 2 | A | 2 |
| 65636 | 40430 | | | | | 73 | Category 1 | A | 13 |
| 65636 | 40430 | | | | | 73 | Category 1 | A | 11 |
| 65637 | 40431 | | | | | 44 | Category 2 | A | 8 |
| 65637 | 40431 | | | | | 44 | Category 2 | A | 6 |
| 65715 | 40524 | | | | | 64 | Category 2 | A | 9 |
| 65715 | 40524 | | | | | 64 | Category 2 | A | 12 |
| 65731 | 40476 | | | | | 103 | Category 1 | A | 12 |
| 65731 | 40476 | | | | | 103 | Category 1 | A | 11 |
| 65736 | 40479 | | | | | 91 | Category 1 | A | 14 |
| 65736 | 40479 | | | | | 91 | Category 1 | A | 14 |
| 65737 | 40481 | | | | | 91 | Category 1 | A | 11 |
| 65737 | 40481 | | | | | 91 | Category 1 | A | 14 |
| 65739 | 40534 | | | | | 58 | Category 2 | A | 8 |
| 65739 | 40534 | | | | | 58 | Category 2 | A | 11 |



US EPA ARCHIVE DOCUMENT

| SampleID | Benth_IDs | SCI_1992 | SCI_1992 Word | SCI_2004 | SCI_2004 Word | SCI_2007 | SCI_2007 Word | SCI_2007 Qualifier | Sensitive Taxa |
|---|---|---|---|---|---|---|---|---|---|
| 65741 | 40537 | | | | | 74 | Category 1 | A | 12 |
| 65741 | 40537 | | | | | 74 | Category 1 | A | 16 |
| 65891 | 40544 | | | | | 63 | Category 2 | A | 3 |
| 65891 | 40544 | | | | | 63 | Category 2 | A | 2 |
| 65900 | 40550 | | | | | 64 | Category 2 | A | 5 |
| 65900 | 40550 | | | | | 64 | Category 2 | A | 5 |
| 65907 | 40552 | | | | | 71 | Category 1 | A | 6 |
| 65907 | 40552 | | | | | 71 | Category 1 | A | 7 |
| 65931 | 40577 | | | | | 62 | Category 2 | A | 9 |
| 65931 | 40577 | | | | | 62 | Category 2 | A | 6 |
| 65932 | 40564 | | | | | 53 | Category 2 | A | 9 |
| 65932 | 40564 | | | | | 53 | Category 2 | A | 4 |
| 66028 | 40571 | | | | | 82 | Category 1 | A | 6 |
| 66028 | 40571 | | | | | 82 | Category 1 | A | 8 |

US EPA ARCHIVE DOCUMENT

| SampleID | Benth_IDs | Tanytarsini Pct | TotalNind | Total Taxa | Trichop Pct | Trichop Taxa | Trombid Pct | VeryTolerant Pct | Sample Comments | Ben/Per/Phy/MacPhy Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 3105 | 3980 | 22.46 | 138 | 40 | 3.62 | 5 | 0 | 36.96 | DipNet MultFactor=.08 | |
| 3682 | 4628 | 10.19 | 108 | 37 | 19.44 | 5 | 0.93 | 3.7 | DipNet GearFactor = .03 | |
| 3797 | 4802 | 9.59 | 146 | 37 | 15.75 | 6 | 2.74 | 2.05 | | |
| 3952 | 5024 | 1.36 | 147 | 34 | 20.41 | 5 | 0 | 10.2 | | |
| 6810 | 7823 | 3.64 | 110 | 37 | 3.64 | 3 | 3.64 | 25.45 | Dipnet gear factor = 0.042; H | |
| 7183 | 8268 | 25.93 | 108 | 34 | 19.44 | 4 | 0.93 | 1.85 | | |
| 7224 | 8306 | 5.31 | 113 | 52 | 15.93 | 6 | 0.88 | 3.54 | | |
| 7776 | 8853 | 0 | 146 | 35 | 0.68 | 1 | 0 | 47.95 | | |
| 7778 | 8855 | 2.04 | 147 | 39 | 3.4 | 3 | 0.68 | 14.29 | | |
| 7779 | 8856 | 0.97 | 103 | 28 | 11.65 | 3 | 0 | 20.39 | | |
| 9179 | 10164 | 6.8 | 147 | 35 | 0.68 | 1 | 2.04 | 4.08 | | |
| 9196 | 10181 | 8.33 | 108 | 31 | 3.7 | 3 | 0.93 | 19.44 | | |
| 9206 | 10191 | 6.16 | 146 | 39 | 22.6 | 7 | 4.11 | 3.42 | | |
| 9395 | 10288 | 0 | 107 | 34 | 5.61 | 3 | 1.86 | 0.93 | | |
| 9396 | 10289 | 4.35 | 138 | 32 | 3.62 | 3 | 0.72 | 10.87 | | |
| 9399 | 10292 | 7.23 | 166 | 48 | 1.2 | 2 | 2.41 | 13.25 | | |
| 10131 | 10723 | 3.31 | 151 | 55 | 23.18 | 6 | 3.31 | 4.64 | | |
| 10591 | 11209 | 1.27 | 157 | 48 | 2.55 | 3 | 3.19 | 23.57 | | |
| 10633 | 11325 | 5.88 | 153 | 46 | 25.49 | 5 | 0 | 1.96 | | |
| 10785 | 11544 | 7.48 | 107 | 34 | 4.67 | 4 | 0 | 6.54 | | |



US EPA ARCHIVE DOCUMENT

| SampleID | Benth_IDs | Tanytarsini Pct | TotalNind | Total Taxa | Trichop Pct | Trichop Taxa | Trombid Pct | VeryTolerant Pct | Sample Comments | Ben/Per/Phy/MacPhy Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 10844 | 11554 | 3.61 | 166 | 37 | 26.51 | 5 | 3.01 | 13.25 | | |
| 11464 | 11963 | 10.2 | 147 | 36 | 30.61 | 8 | 2.04 | 10.88 | | |
| 11607 | 12057 | 17.86 | 140 | 39 | 2.86 | 4 | 1.43 | 0 | | |
| 12089 | 12197 | 10.9 | 156 | 41 | 10.9 | 4 | 0 | 10.26 | | |
| 12092 | 12201 | 6.92 | 130 | 30 | 5.38 | 4 | 0 | 0 | | |
| 12224 | 12340 | 16.22 | 111 | 32 | 16.22 | 6 | 2.7 | 9.01 | | |
| 12401 | 12463 | 15.25 | 118 | 38 | 10.17 | 3 | 0.85 | 3.39 | reference site b | |
| 12436 | 12486 | 12.6 | 127 | 40 | 12.6 | 5 | 1.57 | 3.15 | Westbank @ SR 99 | |
| 12450 | 12500 | 5.56 | 126 | 29 | 40.48 | 7 | 0.79 | 0 | @ CR 131 | |
| 12600 | 12548 | 4.55 | 110 | 39 | 10 | 3 | 0 | 3.64 | Davenport @ hywy 545 | |
| 12609 | 12557 | 5.71 | 105 | 31 | 4.76 | 2 | 1.9 | 0.95 | Oklawaha | |
| 13475 | 12867 | 0.71 | 141 | 28 | 3.55 | 1 | 0.71 | 0.71 | ten mile crk | |
| 13535 | 12898 | 12.4 | 121 | 43 | 16.53 | 8 | 0.83 | 0.83 | Goldenhead branch @ oldmill | |
| 14213 | 13118 | 13.29 | 173 | 36 | 14.45 | 8 | 0 | 1.16 | | |
| 14231 | 13136 | 3.13 | 128 | 31 | 17.19 | 5 | 0 | 2.34 | | |
| 14930 | 13379 | 3.31 | 151 | 38 | 22.52 | 7 | 0 | 8.61 | Oklawaha Basin Study | |
| 14965 | 13401 | 5.78 | 173 | 54 | 40.46 | 8 | 0 | 1.16 | Bighorse crk @SR2 | |
| 14966 | 13403 | 1 | 100 | 34 | 5 | 3 | 0 | 3 | Oklawaha -SCI | |
| 15951 | 14187 | 9.09 | 110 | 30 | 16.36 | 6 | 0 | 16.36 | SCI, BR, and qual | |
| 16636 | 14709 | 2.53 | 158 | 25 | 0 | 0 | 0 | 13.29 | N Frk. Loxahatchee river | |
| 16643 | 14716 | 6 | 100 | 36 | 23 | 7 | 0 | 1 | Little Crooked Creek | |



US EPA ARCHIVE DOCUMENT

| SampleID | Benth_IDs | Tanytarsini Pct | TotalNind | Total Taxa | Trichop Pct | Trichop Taxa | Trombid Pct | VeryTolerant Pct | Sample Comments | Ben/Per/Phy/MacPhy Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 18076 | 15790 | 0 | 132 | 25 | 4.55 | 2 | 0 | 29.55 | | |
| 18372 | 15965 | 6.21 | 161 | 34 | 15.53 | 5 | 1.86 | 3.11 | Tiger Creek@ Walk-in-water R | |
| 18594 | 16087 | 22.58 | 124 | 30 | 0 | 0 | 0 | 17.74 | | |
| 20471 | 17104 | 18.92 | 111 | 40 | 28.83 | 10 | 1.8 | 0.9 | LIMS427458? | |
| 20474 | 17107 | 2.7 | 111 | 33 | 1.8 | 1 | 3.6 | 11.71 | LIMS432049? | |
| 20479 | 17112 | 27.93 | 111 | 38 | 9.01 | 5 | 2.7 | 9.01 | LIMS442455? | |
| 20480 | 17113 | 8.38 | 167 | 42 | 11.38 | 5 | 1.2 | 4.79 | LIMS426240? | |
| 21571 | 17864 | 14.6 | 137 | 34 | 6.57 | 4 | 0 | 8.03 | lims435364? | |
| 22114 | 18267 | 4.63 | 108 | 42 | 4.63 | 3 | 3.7 | 16.67 | LIMS476051? | |
| 24523 | 19456 | 3.48 | 115 | 43 | 12.17 | 6 | 0.87 | 1.74 | LIMS510623? | |
| 24524 | 19457 | 4.05 | 148 | 37 | 22.97 | 7 | 2.03 | 0.68 | LIMS508333? | |
| 25672 | 19985 | 4 | 100 | 28 | 2 | 2 | 11 | 14 | lims547453? | |
| 26863 | 20697 | 1.41 | 142 | 25 | 35.92 | 4 | 0.7 | 12.68 | | |
| 26865 | 20699 | 12.71 | 118 | 36 | 8.47 | 4 | 2.54 | 5.93 | | |
| 26868 | 20702 | 6.14 | 114 | 32 | 0.88 | 1 | 1.75 | 16.67 | 532576 = Duplicate | |
| 47698 | 32249 | 7.55 | 106 | 17 | 21.7 | 3 | 0 | 0 | SID-55672 | |
| 48420 | 33507 | 12.75 | 102 | 36 | 10.78 | 3 | 0 | 1.96 | Ref SCI,Biorecon,water,Periph | |
| 50131 | 33604 | 3.81 | 105 | 24 | 14.29 | 2 | 0 | 0.95 | SID-53033 | |
| 52996 | 33624 | 28.3 | 106 | 31 | 1.89 | 2 | 0 | 7.55 | SID-52997 | |
| 52471 | 34244 | 2.94 | 102 | 35 | 12.75 | 4 | 0 | 4.9 | SID-54263 | |
| 52912 | 34645 | 4.55 | 110 | 32 | 11.82 | 3 | 0 | 2.73 | SID-54275 | |



US EPA ARCHIVE DOCUMENT

| SampleID | Benth_IDs | Tanytarsini Pct | TotalNind | Total Taxa | Trichop Pct | Trichop Taxa | Trombid Pct | VeryTolerant Pct | Sample Comments | Ben/Per/Phy/MacPhy Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 53274 | 34807 | 17 | 100 | 27 | 6 | 3 | 3 | 4 | | |
| 53732 | 35065 | 16.36 | 110 | 18 | 5.45 | 3 | 0 | 0.91 | SID-55852 | |
| 53951 | 35284 | 4.55 | 110 | 21 | 1.82 | 2 | 0 | 11.82 | SID-55073 | |
| 52834 | 35565 | 23.81 | 105 | 31 | 5.71 | 3 | 1.9 | 8.57 | not enough leaves to sample. | |
| 49652 | 35784 | 9.35 | 107 | 17 | 14.02 | 1 | 0 | 1.87 | 57811?? | |
| 53059 | 36666 | 12 | 100 | 21 | 14 | 3 | 0 | 1 | SID-53060 | |
| 49677 | 36688 | 0.93 | 107 | 28 | 7.48 | 4 | 0 | 0.93 | 49678? | gear factor info |
| 57322 | 36904 | 0 | 157 | 25 | 2.55 | 2 | 0.64 | 3.82 | | |
| 57322 | 36904 | 0.63 | 159 | 29 | 6.92 | 5 | 0 | 2.52 | | |
| 57324 | 36989 | 10.81 | 148 | 35 | 17.57 | 5 | 0.68 | 11.49 | | |
| 57324 | 36989 | 12.5 | 152 | 36 | 7.89 | 5 | 0.66 | 9.21 | | |
| 57431 | 36987 | 7.53 | 146 | 28 | 26.03 | 3 | 2.05 | 1.37 | | |
| 57431 | 36987 | 5.33 | 150 | 25 | 24 | 5 | 1.33 | 0 | | |
| 59773 | 38075 | 5.06 | 158 | 33 | 20.25 | 4 | 3.16 | 0.63 | | |
| 59773 | 38075 | 4.14 | 145 | 27 | 24.83 | 5 | 1.38 | 0 | | |
| 60301 | 38292 | 14.97 | 147 | 45 | 8.84 | 4 | 1.36 | 12.24 | | LIMS # is chem |
| 60301 | 38292 | 18.18 | 143 | 39 | 4.2 | 2 | 0 | 22.38 | | LIMS # is chem |
| 60308 | 38307 | 6.9 | 145 | 20 | 8.97 | 5 | 0 | 24.14 | | LIMS # is chem |
| 60308 | 38307 | 13.48 | 141 | 20 | 7.8 | 4 | 0 | 18.44 | | LIMS # is chem |
| 60639 | 38485 | 4.86 | 144 | 30 | 5.56 | 3 | 0 | 11.81 | | LIMS # is chem |
| 60639 | 38485 | 9.09 | 143 | 30 | 8.39 | 4 | 0 | 9.79 | | LIMS # is chem |
| 60751 | 38544 | 39.86 | 143 | 33 | 13.99 | 5 | 1.4 | 4.9 | | |
| 60751 | 38544 | 39.62 | 159 | 37 | 11.95 | 5 | 1.26 | 5.66 | | |
| 62733 | 39186 | 14.94 | 154 | 31 | 18.83 | 5 | 0.65 | 18.83 | | |
| 62733 | 39186 | 10.83 | 157 | 28 | 17.2 | 5 | 0 | 10.19 | | |



US EPA ARCHIVE DOCUMENT

| SampleID | Benth_IDs | Tanytarsini Pct | TotalNind | Total Taxa | Trichop Pct | Trichop Taxa | Trombid Pct | VeryTolerant Pct | Sample Comments | Ben/Per/Phy/MacPhy Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 63694 | 39707 | 19.38 | 160 | 33 | 3.13 | 1 | 1.25 | 6.25 | | |
| 63694 | 39707 | 21.43 | 154 | 31 | 3.25 | 1 | 3.25 | 8.44 | | |
| 64191 | 40004 | 2.5 | 160 | 14 | 42.5 | 3 | 0 | 1.25 | | |
| 64191 | 40004 | 1.27 | 158 | 13 | 30.38 | 4 | 0 | 1.27 | | |
| 64546 | 40384 | 3.5 | 143 | 27 | 4.9 | 3 | 0 | 6.99 | Habitats have alot of sponge o | |
| 64546 | 40384 | 7.28 | 151 | 25 | 3.31 | 2 | 1.32 | 5.96 | Habitats have alot of sponge o | |
| 65025 | 40260 | 23.13 | 147 | 34 | 7.48 | 5 | 2.72 | 5.44 | | |
| 65025 | 40260 | 22.07 | 145 | 33 | 7.59 | 5 | 0 | 6.21 | | |
| 65026 | 40261 | 19.86 | 146 | 32 | 8.22 | 2 | 1.37 | 2.05 | | |
| 65026 | 40261 | 16.08 | 143 | 31 | 13.99 | 2 | 0.7 | 1.4 | | |
| 65028 | 40263 | 4.26 | 141 | 47 | 21.28 | 9 | 0 | 3.55 | | |
| 65028 | 40263 | 0.7 | 142 | 39 | 26.76 | 7 | 0 | 2.11 | | |
| 65029 | 40264 | 3.97 | 151 | 42 | 24.5 | 5 | 0 | 0.66 | | |
| 65029 | 40264 | 2.72 | 147 | 36 | 25.17 | 5 | 0.68 | 0 | | |
| 65250 | 40368 | 9.8 | 153 | 46 | 22.88 | 7 | 0 | 1.31 | | |
| 65250 | 40368 | 10.71 | 140 | 43 | 27.86 | 7 | 0 | 2.86 | | |
| 65291 | 40343 | 2.05 | 146 | 41 | 38.36 | 10 | 0.68 | 0.68 | | |
| 65291 | 40343 | 2.01 | 149 | 39 | 32.89 | 9 | 0 | 0 | | |
| 65292 | 40344 | 12.06 | 141 | 44 | 15.6 | 6 | 0.71 | 1.42 | | |
| 65292 | 40344 | 4.86 | 144 | 43 | 19.44 | 6 | 2.08 | 2.78 | | |
| 65293 | 40345 | 5.67 | 141 | 27 | 51.06 | 6 | 2.13 | 1.42 | | |
| 65293 | 40345 | 3.13 | 160 | 31 | 60 | 4 | 1.25 | 3.13 | | |
| 65296 | 40348 | 8.05 | 149 | 53 | 14.77 | 4 | 2.01 | 4.7 | | |
| 65296 | 40348 | 6.38 | 141 | 53 | 17.02 | 7 | 0.71 | 3.55 | | |
| 65306 | 40406 | 7.19 | 153 | 28 | 30.07 | 3 | 0 | 1.31 | | |



US EPA ARCHIVE DOCUMENT

| SampleID | Benth_IDs | Tanytarsini Pct | TotalNind | Total Taxa | Trichop Pct | Trichop Taxa | Trombid Pct | VeryTolerant Pct | Sample Comments | Ben/Per/Phy/MacPhy Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 65306 | 40406 | 8.55 | 152 | 29 | 29.61 | 4 | 0 | 0.66 | | |
| 65316 | 40349 | 0.71 | 140 | 21 | 78.57 | 5 | 0 | 0.71 | | |
| 65316 | 40349 | 4.61 | 152 | 22 | 63.16 | 5 | 0.66 | 0.66 | | |
| 65379 | 40364 | 5.16 | 155 | 32 | 12.26 | 5 | 1.29 | 3.87 | | |
| 65379 | 40364 | 3.27 | 153 | 30 | 11.76 | 3 | 1.96 | 1.31 | | |
| 65382 | 40367 | 0.63 | 160 | 24 | 0 | 0 | 1.88 | 3.75 | | |
| 65382 | 40367 | 0.71 | 141 | 22 | 0 | 0 | 1.42 | 5.67 | | |
| 65414 | 40405 | 6.25 | 144 | 34 | 6.94 | 4 | 0.69 | 25 | | |
| 65414 | 40405 | 4.26 | 141 | 33 | 12.77 | 2 | 2.13 | 9.22 | | |
| 65567 | 40448 | 16.33 | 147 | 30 | 0.68 | 1 | 0 | 49.66 | | |
| 65567 | 40448 | 17.86 | 140 | 34 | 0.71 | 1 | 0 | 53.57 | | |
| 65636 | 40430 | 9.8 | 153 | 37 | 6.54 | 4 | 0 | 15.03 | | |
| 65636 | 40430 | 2.76 | 145 | 35 | 5.52 | 4 | 0 | 6.9 | | |
| 65637 | 40431 | 5.03 | 159 | 26 | 1.89 | 2 | 0 | 1.89 | | |
| 65637 | 40431 | 4.96 | 141 | 16 | 0 | 0 | 0 | 2.84 | | |
| 65715 | 40524 | 5.73 | 157 | 41 | 18.47 | 6 | 6.37 | 1.91 | | |
| 65715 | 40524 | 6.08 | 148 | 42 | 22.3 | 5 | 6.76 | 0.68 | | |
| 65731 | 40476 | 17.5 | 160 | 38 | 30 | 8 | 1.25 | 1.88 | | |
| 65731 | 40476 | 11.04 | 154 | 41 | 38.31 | 8 | 0.65 | 1.95 | | |
| 65736 | 40479 | 2.72 | 147 | 39 | 20.41 | 7 | 3.4 | 1.36 | | |
| 65736 | 40479 | 2.14 | 140 | 42 | 27.14 | 8 | 1.43 | 0 | | |
| 65737 | 40481 | 11.84 | 152 | 34 | 26.32 | 6 | 0 | 3.29 | | |
| 65737 | 40481 | 11.26 | 151 | 37 | 30.46 | 9 | 0.66 | 0.66 | | |
| 65739 | 40534 | 4.11 | 146 | 26 | 11.64 | 5 | 0 | 0.68 | | |
| 65739 | 40534 | 4.79 | 146 | 31 | 13.01 | 6 | 0.68 | 0 | | |



US EPA ARCHIVE DOCUMENT

| SampleID | Benth_IDs | Tanytarsini Pct | TotalNind | Total Taxa | Trichop Pct | Trichop Taxa | Trombid Pct | VeryTolerant Pct | Sample Comments | Ben/Per/Phy/MacPhy Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 65741 | 40537 | 4.08 | 147 | 36 | 23.81 | 8 | 2.04 | 0 | | |
| 65741 | 40537 | 1.37 | 146 | 36 | 18.49 | 6 | 2.05 | 2.05 | | |
| 65891 | 40544 | 27.27 | 154 | 20 | 35.71 | 3 | 0 | 0.65 | | |
| 65891 | 40544 | 30.57 | 157 | 17 | 33.12 | 2 | 0 | 0 | | |
| 65900 | 40550 | 12.08 | 149 | 23 | 10.74 | 4 | 0.67 | 1.34 | | |
| 65900 | 40550 | 12.18 | 156 | 20 | 17.95 | 5 | 0 | 0 | | |
| 65907 | 40552 | 9.87 | 152 | 33 | 5.92 | 4 | 0 | 2.63 | | |
| 65907 | 40552 | 9.93 | 151 | 35 | 6.62 | 4 | 1.32 | 1.99 | | |
| 65931 | 40577 | 6.88 | 160 | 39 | 10 | 2 | 0 | 4.38 | | |
| 65931 | 40577 | 7.19 | 153 | 40 | 13.07 | 6 | 0 | 1.31 | | |
| 65932 | 40564 | 40.38 | 156 | 38 | 0.64 | 1 | 0.64 | 1.28 | | |
| 65932 | 40564 | 22.97 | 148 | 30 | 0.68 | 1 | 0.68 | 4.73 | | |
| 66028 | 40571 | 2.13 | 141 | 39 | 11.35 | 5 | 0 | 6.38 | | |
| 66028 | 40571 | 4.17 | 144 | 42 | 12.5 | 5 | 0.69 | 2.78 | | |

US EPA ARCHIVE DOCUMENT

| SampleID | Benth_IDs | LIMS ID |
|---|---|---|
| 3105 | 3980 | |
| 3682 | 4628 | |
| 3797 | 4802 | |
| 3952 | 5024 | |
| 6810 | 7823 | abitat Assessment score = 141 |
| 7183 | 8268 | |
| 7224 | 8306 | |
| 7776 | 8853 | |
| 7778 | 8855 | |
| 7779 | 8856 | |
| 9179 | 10164 | |
| 9196 | 10181 | |
| 9206 | 10191 | |
| 9395 | 10288 | |
| 9396 | 10289 | |
| 9399 | 10292 | |
| 10131 | 10723 | |
| 10591 | 11209 | |
| 10633 | 11325 | |
| 10785 | 11544 | |



US EPA ARCHIVE DOCUMENT

| SampleID | Benth_IDs | LIMS ID |
|---|---|---|
| 10844 | 11554 | |
| 11464 | 11963 | |
| 11607 | 12057 | |
| 12089 | 12197 | |
| 12092 | 12201 | |
| 12224 | 12340 | |
| 12401 | 12463 | |
| 12436 | 12486 | |
| 12450 | 12500 | |
| 12600 | 12548 | |
| 12609 | 12557 | |
| 13475 | 12867 | |
| 13535 | 12898 | |
| 14213 | 13118 | |
| 14231 | 13136 | |
| 14930 | 13379 | |
| 14965 | 13401 | |
| 14966 | 13403 | |
| 15951 | 14187 | |
| 16636 | 14709 | |
| 16643 | 14716 | |

US EPA ARCHIVE DOCUMENT

| SampleID | Benth_IDs | LIMS ID |
|---|---|---|
| 18076 | 15790 | |
| 18372 | 15965 | Rd. |
| 18594 | 16087 | |
| 20471 | 17104 | 427458 |
| 20474 | 17107 | 432049 |
| 20479 | 17112 | 442455 |
| 20480 | 17113 | 426240 |
| 21571 | 17864 | 435364 |
| 22114 | 18267 | 476051 |
| 24523 | 19456 | 510623 |
| 24524 | 19457 | 508333 |
| 25672 | 19985 | 547453 |
| 26863 | 20697 | 545320 |
| 26865 | 20699 | 545321 |
| 26868 | 20702 | 532576 |
| 47698 | 32249 | |
| 48420 | 33507 | 901033 |
| 50131 | 33604 | |
| 52996 | 33624 | |
| 52471 | 34244 | |
| 52912 | 34645 | |

US EPA ARCHIVE DOCUMENT

| SampleID | Benth_IDs | LIMS ID |
|---|---|---|
| 53274 | 34807 | 921183 |
| 53732 | 35065 | |
| 53951 | 35284 | |
| 52834 | 35565 | 931187 |
| 49652 | 35784 | |
| 53059 | 36666 | |
| 49677 | 36688 | not provided |
| 57322 | 36904 | 987267 |
| 57322 | 36904 | 987267 |
| 57324 | 36989 | 987265 |
| 57324 | 36989 | 987265 |
| 57431 | 36987 | 988483 |
| 57431 | 36987 | 988483 |
| 59773 | 38075 | 996284 |
| 59773 | 38075 | 996284 |
| 60301 | 38292 | 989694 |
| 60301 | 38292 | 989694 |
| 60308 | 38307 | 957916 |
| 60308 | 38307 | 957916 |
| 60639 | 38485 | 1009773 |
| 60639 | 38485 | 1009773 |
| 60751 | 38544 | |
| 60751 | 38544 | |
| 62733 | 39186 | 1047271 |
| 62733 | 39186 | 1047271 |



US EPA ARCHIVE DOCUMENT

| SampleID | Benth_IDs | LIMS ID |
|---|---|---|
| 63694 | 39707 | 1062029 |
| 63694 | 39707 | 1062029 |
| 64191 | 40004 | 1073771 |
| 64191 | 40004 | 1073771 |
| 64546 | 40384 | 1101305 |
| 64546 | 40384 | 1101305 |
| 65025 | 40260 | 1107319 |
| 65025 | 40260 | 1107319 |
| 65026 | 40261 | 1108241 |
| 65026 | 40261 | 1108241 |
| 65028 | 40263 | 1108242 |
| 65028 | 40263 | 1108242 |
| 65029 | 40264 | 1107318 |
| 65029 | 40264 | 1107318 |
| 65250 | 40368 | 1104532 |
| 65250 | 40368 | 1104532 |
| 65291 | 40343 | 1114484 |
| 65291 | 40343 | 1114484 |
| 65292 | 40344 | 1118005 |
| 65292 | 40344 | 1118005 |
| 65293 | 40345 | 1115662 |
| 65293 | 40345 | 1115662 |
| 65296 | 40348 | 1114483 |
| 65296 | 40348 | 1114483 |
| 65306 | 40406 | 1109444 |



US EPA ARCHIVE DOCUMENT

| SampleID | Benth_IDs | LIMS ID |
|---|---|---|
| 65306 | 40406 | 1109444 |
| 65316 | 40349 | 1114486 |
| 65316 | 40349 | 1114486 |
| 65379 | 40364 | 1123221 |
| 65379 | 40364 | 1123221 |
| 65382 | 40367 | 1123224 |
| 65382 | 40367 | 1123224 |
| 65414 | 40405 | 1109703 |
| 65414 | 40405 | 1109703 |
| 65567 | 40448 | 1138258 |
| 65567 | 40448 | 1138258 |
| 65636 | 40430 | 1143072 |
| 65636 | 40430 | 1143072 |
| 65637 | 40431 | 1140202 |
| 65637 | 40431 | 1140202 |
| 65715 | 40524 | 1147711 |
| 65715 | 40524 | 1147711 |
| 65731 | 40476 | 1147752 |
| 65731 | 40476 | 1147752 |
| 65736 | 40479 | 1146451 |
| 65736 | 40479 | 1146451 |
| 65737 | 40481 | 1146453 |
| 65737 | 40481 | 1146453 |
| 65739 | 40534 | 1149470 |
| 65739 | 40534 | 1149470 |



US EPA ARCHIVE DOCUMENT

| SampleID | Benth_IDs | LIMS ID |
|---|---|---|
| 65741 | 40537 | 1149472 |
| 65741 | 40537 | 1149472 |
| 65891 | 40544 | 1154331 |
| 65891 | 40544 | 1154331 |
| 65900 | 40550 | 1154417 |
| 65900 | 40550 | 1154417 |
| 65907 | 40552 | 1154418 |
| 65907 | 40552 | 1154418 |
| 65931 | 40577 | 1159028 |
| 65931 | 40577 | 1159028 |
| 65932 | 40564 | 1159029 |
| 65932 | 40564 | 1159029 |
| 66028 | 40571 | 1101419 |
| 66028 | 40571 | 1101419 |

US EPA ARCHIVE DOCUMENT

| SampleID | HA_IDs | STORET | Station Nickname | Station Description | Bioregion | WBID | Latitude | Longitude | Sample Date |
|---|---|---|---|---|---|---|---|---|---|
| 14965 | 646 | 33040014 | BIGHORSREF | BIG HORSE CREEK S.R.2 OKA.CO. | Panhandle West | 28 | 30.922028 | -86.595167 | 7/15/1998 |
| 26868 | 683 | 19010042 | CAULKREF | Calkins Ck, off Hamp Register Rd. | Northeast | 2264 | 30.330819 | -82.241797 | 7/10/2001 |
| 16643 | 723 | 32020063 | LTCRKCKREF | LITTLE CROOKED CREEK S.R.79 BAY CO. | Panhandle West | 907 | 30.413444 | -85.868472 | 1/21/1999 |
| 18594 | 763 | 28010223 | NFORLOXREF | N FK LOXAHATCHEE RIVER REF BIO STATION | Peninsula | 3224A | 27 | -80.1 | 10/7/1999 |
| 26865 | 5020 | 26011019 | LVNGSTNREF | LIVINGSTON CREEK AT RUCKS DAIRY RD. | Peninsula | 1685B | 27.7 | -81.4 | 9/5/2001 |
| 26863 | 5022 | 20020317 | SILRUNREF | SILVER RUN AT CONFLUENCE WITH BOAT RAMP CANAL | Peninsula | 2772 | 29.209917 | -81.993333 | 9/4/2001 |
| 57324 | 5088 | 3513 | FLO521150 | Withlacoochee River @ Stokes Ferry | Peninsula | 1329C | 28.988548 | -82.349844 | 2/20/2007 |
| 57322 | 5089 | LEV502GS | LEV502GS | Waccasassa River - LEV502GS | Peninsula | 3699 | 29.275903 | -82.736663 | 2/21/2007 |
| 57431 | 5097 | PUT308GS | PUT308GS | Little Orange Creek - PUT308GS | Peninsula | 2713 | 29.541246 | -81.953277 | 2/26/2007 |
| 64546 | 5552 | 23010464 | WITHREF | Withlacoochee R @ county park off Auton Rd (TP3) | Peninsula | 1329F | 28.3 | -82.1 | 5/7/2008 |
| 60751 | 5728 | 24010002 | MANAREF | Manatee R 20 m below SR64 bridge (TP1) | Peninsula | 1807C | 27.473372 | -82.210967 | 5/16/2007 |
| 65026 | 5733 | 22020093 | FLRQUINREF | Quincy Creek above SR267 bridge | Panhandle West | 1303 | 30.599722 | -84.581917 | 6/13/2008 |
| 65296 | 5755 | 3546 | S365 | S365 Yellow River @ Hwy 2 | Panhandle West | 30 | 30.925354 | -86.559172 | 7/9/2008 |
| 65291 | 5756 | 3545 | S360 | S360 Blackwater River @ Hwy 4 | Panhandle West | 24C | 30.833395 | -86.733732 | 7/9/2008 |
| 65293 | 5757 | 21010008 | HAMIL6 | ALAPAHA RIVER 1 SR 150 HAMILTON | Panhandle East | 3324 | 30.599861 | -83.073417 | 7/16/2008 |
| 65292 | 5759 | 32030023 | ECONSCTREF | ECONFINA CREEK AT SCOTT RD | Panhandle West | 553 | 30.555361 | -85.435 | 7/24/2008 |
| 65029 | 5764 | NUTREF001 | TELOG1641 | Telogia Creek at CR 1641 | Panhandle West | 1300 | 30.450144 | -84.861232 | 6/10/2008 |
| 65316 | 5824 | 3549 | S377 | S377 Escambia River @ HWY 4 Bridge | Panhandle West | 10C | 30.964065 | -87.235993 | 7/10/2008 |
| 65028 | 5825 | GAD106GS | GAD106GS | Yon Creek - GAD106GS | Panhandle West | 626 | 30.534545 | -84.771164 | 6/13/2008 |
| 65025 | 5826 | LIB104LV | LIB104LV | Mule Creek - LIB104LV | Panhandle West | 684 | 30.511395 | -84.827906 | 6/10/2008 |
| 65379 | 5830 | 22050083 | STEINCANAL | Steinhatchee @ Canal Road | Panhandle East | 3573A | 29.828806 | -83.308472 | 8/12/2008 |
| 65382 | 5831 | 22050040 | LAFAY1 | STEINHATCHEE RIVER I SR357 | Panhandle East | 3573B | 29.890278 | -83.252778 | 8/12/2008 |
| 65414 | 5834 | WAK158LR | WAK158LR | Sopchoppy River - WAK158LR | Panhandle West | 998 | 30.130119 | -84.493937 | 6/19/2008 |



US EPA ARCHIVE DOCUMENT

| SampleID | HA_IDs | STORET | Station Nickname | Station Description | Bioregion | WBID | Latitude | Longitude | Sample Date |
|---|---|---|---|---|---|---|---|---|---|
| 65567 | 5857 | 23010464 | WITHREF | Withlacoochee R @ county park off Auton Rd (TP3) | Peninsula | 1329F | 28.3 | -82.1 | 10/8/2008 |
| 65636 | 5927 | CLA246GS | CLA246GS | Peters Creek - CLA246GS | Northeast | 2444 | 30.007483 | -81.748227 | 10/28/2008 |
| 65737 | 5929 | CLA243LV | CLA243LV | Black Creek - CLA243LV | Northeast | 2498 | 29.910805 | -81.884868 | 11/6/2008 |
| 65736 | 5930 | CLA254LR | CLA254LR | Black Creek - CLA254LR | Northeast | 2415C | 29.979571 | -81.852289 | 11/6/2008 |
| 65637 | 5939 | UNI234LV | UNI234LV | Olustee Creek - UNI234LV | Northeast | 3504 | 30.095941 | -82.472863 | 10/16/2008 |
| 65731 | 5946 | 19010006 | STMAR2REF | ST MARYS RIVER AT SR #2 | Northeast | 2097K | 30.51785 | -82.230314 | 11/12/2008 |
| 65900 | 6011 | 24010002 | MANAREF | Manatee R 20 m below SR64 bridge (TP1) | Peninsula | 1807C | 27.473372 | -82.210967 | 12/17/2008 |
| 65907 | 6013 | 27311650820 | EFM02 | East Fork Manatee R. S of US62 on Duette Park. Myakka DOSSAC study | Peninsula | 1811 | 27.521261 | -82.137561 | 12/17/2008 |
| 65891 | 6022 | GLA630GS | GLA630GS | Cypress Branch - GLA630GS | Peninsula | 3235G | 26.813874 | -81.335414 | 12/16/2008 |
| 65932 | 6024 | 22050040 | LAFAY1 | STEINHATCHEE RIVER I SR357 | Panhandle East | 3573B | 29.890278 | -83.252778 | 1/14/2009 |
| 66028 | 6026 | 21202 | OR006 | Orange Creek | Peninsula | 2747 | 29.509568 | -81.94617 | 5/1/2008 |
| 65250 | 6036 | CLA246GS | CLA246GS | Peters Creek - CLA246GS | Northeast | 2444 | 30.007483 | -81.748227 | 5/28/2008 |
| 65306 | 6037 | BAK208GS | BAK208GS | St. Mary's River - BAK208GS | Northeast | 2097K | 30.517903 | -82.23048 | 6/18/2008 |
| 65931 | 6056 | 22050083 | STEINCANAL | Steinhatchee @ Canal Road | Panhandle East | 3573A | 29.828806 | -83.308472 | 1/14/2009 |
| 65741 | 6063 | GAD106GS | GAD106GS | Yon Creek - GAD106GS | Panhandle West | 626 | 30.534545 | -84.771164 | 11/20/2008 |
| 65715 | 6064 | WAK158LR | WAK158LR | Sopchoppy River - WAK158LR | Panhandle West | 998 | 30.130119 | -84.493937 | 11/13/2008 |
| 65739 | 6066 | NUTREF001 | TELOG1641 | Telogia Creek at CR 1641 | Panhandle West | 1300 | 30.450144 | -84.861232 | 11/20/2008 |
| 48420 | 7144 | 32030023 | ECONSCTREF | ECONFINA CREEK AT SCOTT RD | Panhandle West | 553 | 30.555361 | -85.435 | 2/15/2006 |
| 52834 | 7254 | 27311650820 | EFM02 | East Fork Manatee R. S of US62 on Duette Park. Myakka DOSSAC study | Peninsula | 1811 | 27.521261 | -82.137561 | 6/21/2006 |
| 60301 | 7531 | 21202 | OR006 | Orange Creek | Peninsula | 2747 | 29.509568 | -81.94617 | 3/1/2007 |
| 64191 | 7638 | 3535 | SUW010 | SUW010 Suwannee River | Northeast | 3341B | 30.508115 | -82.716569 | 12/12/2007 |
| 59773 | 7701 | 3545 | S360 | S360 Blackwater River @ Hwy 4 | Panhandle West | 24C | 30.833395 | -86.733732 | 3/26/2007 |
| 63694 | 7751 | 3513 | FLO521150 | Withlacoochee River @ Stokes Ferry | Peninsula | 1329C | 28.988548 | -82.349844 | 11/7/2007 |

US EPA ARCHIVE DOCUMENT

| SampleID | HA_IDs | Artificial Channelization | Bank Stability - left bank | Bank Stability - right bank | Habitat Score | Habitat Smothering | Primary Score | Riparian Buffer Zone Width - left bank | Riparian Buffer Zone Width - right bank | Riparian Zone Vegetation Quality - left bank | Riparian Zone Vegetation Quality - right bank |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 14965 | 646 | 19 | 9 | 9 | 132 | 7 | 55 | 10 | 10 | 10 | 10 |
| 26868 | 683 | 20 | 5 | 5 | 102 | 15 | 48 | 3 | 3 | 9 | 9 |
| 16643 | 723 | 20 | 10 | 10 | 143 | 16 | 70 | 10 | 5 | 9 | 9 |
| 18594 | 763 | 20 | 10 | 10 | 160 | 20 | 80 | 10 | 10 | 10 | 10 |
| 26865 | 5020 | 20 | 9 | 7 | 128 | 14 | 57 | 10 | 7 | 9 | 9 |
| 26863 | 5022 | 20 | 9 | 9 | 146 | 17 | 68 | 10 | 10 | 10 | 10 |
| 57324 | 5088 | 20 | 10 | 10 | 153 | 18 | 74 | 10 | 9 | 10 | 10 |
| 57322 | 5089 | 20 | 9 | 10 | 138 | 17 | 59 | 10 | 10 | 10 | 10 |
| 57431 | 5097 | 20 | 6 | 6 | 131 | 12 | 59 | 10 | 10 | 10 | 10 |
| 64546 | 5552 | 20 | 10 | 10 | 151 | 20 | 71 | 10 | 10 | 10 | 10 |
| 60751 | 5728 | 14 | 7 | 7 | 106 | 11 | 42 | 9 | 9 | 9 | 9 |
| 65026 | 5733 | 20 | 8 | 8 | 122 | 13 | 50 | 10 | 10 | 8 | 8 |
| 65296 | 5755 | 20 | 8 | 9 | 137 | 18 | 60 | 10 | 10 | 10 | 10 |
| 65291 | 5756 | 20 | 8 | 8 | 128 | 15 | 52 | 10 | 10 | 10 | 10 |
| 65293 | 5757 | 20 | 8 | 10 | 138 | 16 | 60 | 10 | 10 | 10 | 10 |
| 65292 | 5759 | 20 | 8 | 5 | 130 | 16 | 57 | 10 | 10 | 10 | 10 |
| 65029 | 5764 | 20 | 10 | 8 | 131 | 16 | 53 | 10 | 10 | 10 | 10 |
| 65316 | 5824 | 20 | 9 | 5 | 120 | 17 | 46 | 10 | 10 | 10 | 10 |
| 65028 | 5825 | 20 | 9 | 9 | 137 | 18 | 59 | 10 | 10 | 10 | 10 |
| 65025 | 5826 | 20 | 9 | 9 | 132 | 13 | 54 | 10 | 10 | 10 | 10 |
| 65379 | 5830 | 20 | 10 | 10 | 151 | 17 | 71 | 10 | 10 | 10 | 10 |
| 65382 | 5831 | 20 | 7 | 7 | 130 | 17 | 56 | 10 | 10 | 10 | 10 |
| 65414 | 5834 | 20 | 8 | 8 | 128 | 13 | 52 | 10 | 10 | 10 | 10 |



US EPA ARCHIVE DOCUMENT

| SampleID | HA_IDs | Artificial Channelization | Bank Stability - left bank | Bank Stability - right bank | Habitat Score | Habitat Smothering | Primary Score | Riparian Buffer Zone Width - left bank | Riparian Buffer Zone Width - right bank | Riparian Zone Vegetation Quality - left bank | Riparian Zone Vegetation Quality - right bank |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 65567 | 5857 | 19 | 10 | 9 | 137 | 17 | 59 | 10 | 10 | 10 | 10 |
| 65636 | 5927 | 20 | 10 | 10 | 148 | 15 | 68 | 10 | 10 | 10 | 10 |
| 65737 | 5929 | 19 | 8 | 7 | 144 | 19 | 70 | 10 | 10 | 10 | 10 |
| 65736 | 5930 | 20 | 7 | 7 | 133 | 17 | 59 | 10 | 10 | 10 | 10 |
| 65637 | 5939 | 20 | 8 | 8 | 118 | 19 | 42 | 10 | 10 | 10 | 10 |
| 65731 | 5946 | 20 | 8 | 10 | 124 | 17 | 48 | 10 | 10 | 9 | 9 |
| 65900 | 6011 | 20 | 6 | 7 | 109 | 11 | 38 | 10 | 10 | 9 | 9 |
| 65907 | 6013 | 20 | 9 | 9 | 128 | 16 | 52 | 10 | 10 | 9 | 9 |
| 65891 | 6022 | 20 | 9 | 9 | 134 | 19 | 58 | 10 | 10 | 9 | 9 |
| 65932 | 6024 | 20 | 10 | 10 | 126 | 14 | 46 | 10 | 10 | 10 | 10 |
| 66028 | 6026 | 20 | 7 | 8 | 127 | 16 | 52 | 10 | 10 | 10 | 10 |
| 65250 | 6036 | 20 | 8 | 8 | 143 | 19 | 67 | 10 | 10 | 10 | 10 |
| 65306 | 6037 | 19 | 6 | 6 | 114 | 18 | 43 | 10 | 10 | 10 | 10 |
| 65931 | 6056 | 20 | 10 | 10 | 145 | 14 | 65 | 10 | 10 | 10 | 10 |
| 65741 | 6063 | 20 | 9 | 9 | 133 | 17 | 55 | 10 | 10 | 10 | 10 |
| 65715 | 6064 | 20 | 8 | 8 | 121 | 16 | 46 | 10 | 9 | 10 | 10 |
| 65739 | 6066 | 20 | 10 | 9 | 134 | 15 | 55 | 10 | 10 | 10 | 10 |
| 48420 | 7144 | 20 | 8 | 8 | 125 | 7 | 49 | 10 | 10 | 10 | 10 |
| 52834 | 7254 | 20 | 9 | 9 | 128 | 15 | 52 | 10 | 10 | 9 | 9 |
| 60301 | 7531 | 20 | 7 | 7 | 110 | 11 | 40 | 10 | 10 | 8 | 8 |
| 64191 | 7638 | 20 | 10 | 10 | 144 | 18 | 66 | 10 | 10 | 9 | 9 |
| 59773 | 7701 | 19 | 3 | 9 | 103 | 11 | 40 | 9 | 8 | 8 | 7 |
| 63694 | 7751 | 19 | 9 | 9 | 114 | 11 | 45 | 8 | 8 | 8 | 8 |

US EPA ARCHIVE DOCUMENT

| SampleID | HA_IDs | Secondary Score | Substrate Availability | Substrate Diversity | Water Velocity |
|---|---|---|---|---|---|
| 14965 | 646 | 77 | 15 | 15 | 18 |
| 26868 | 683 | 54 | 10 | 13 | 10 |
| 16643 | 723 | 73 | 19 | 15 | 20 |
| 18594 | 763 | 80 | 20 | 20 | 20 |
| 26865 | 5020 | 71 | 16 | 12 | 15 |
| 26863 | 5022 | 78 | 18 | 14 | 19 |
| 57324 | 5088 | 79 | 19 | 19 | 18 |
| 57322 | 5089 | 79 | 9 | 15 | 18 |
| 57431 | 5097 | 72 | 15 | 17 | 15 |
| 64546 | 5552 | 80 | 20 | 18 | 13 |
| 60751 | 5728 | 64 | 4 | 10 | 17 |
| 65026 | 5733 | 72 | 8 | 13 | 16 |
| 65296 | 5755 | 77 | 8 | 14 | 20 |
| 65291 | 5756 | 76 | 8 | 9 | 20 |
| 65293 | 5757 | 78 | 18 | 9 | 17 |
| 65292 | 5759 | 73 | 9 | 14 | 18 |
| 65029 | 5764 | 78 | 7 | 12 | 18 |
| 65316 | 5824 | 74 | 4 | 5 | 20 |
| 65028 | 5825 | 78 | 10 | 13 | 18 |
| 65025 | 5826 | 78 | 9 | 14 | 18 |
| 65379 | 5830 | 80 | 20 | 19 | 15 |
| 65382 | 5831 | 74 | 18 | 17 | 4 |
| 65414 | 5834 | 76 | 8 | 17 | 14 |



US EPA ARCHIVE DOCUMENT

| SampleID | HA_IDs | Secondary Score | Substrate Availability | Substrate Diversity | Water Velocity |
|---|---|---|---|---|---|
| 65567 | 5857 | 78 | 12 | 18 | 12 |
| 65636 | 5927 | 80 | 18 | 18 | 17 |
| 65737 | 5929 | 74 | 18 | 18 | 15 |
| 65736 | 5930 | 74 | 9 | 15 | 18 |
| 65637 | 5939 | 76 | 8 | 13 | 2 |
| 65731 | 5946 | 76 | 7 | 10 | 14 |
| 65900 | 6011 | 71 | 5 | 8 | 14 |
| 65907 | 6013 | 76 | 9 | 13 | 14 |
| 65891 | 6022 | 76 | 14 | 15 | 10 |
| 65932 | 6024 | 80 | 13 | 13 | 6 |
| 66028 | 6026 | 75 | 7 | 14 | 15 |
| 65250 | 6036 | 76 | 11 | 19 | 18 |
| 65306 | 6037 | 71 | 4 | 10 | 11 |
| 65931 | 6056 | 80 | 18 | 14 | 19 |
| 65741 | 6063 | 78 | 8 | 13 | 17 |
| 65715 | 6064 | 75 | 10 | 16 | 4 |
| 65739 | 6066 | 79 | 8 | 14 | 18 |
| 48420 | 7144 | 76 | 7 | 15 | 20 |
| 52834 | 7254 | 76 | 8 | 14 | 15 |
| 60301 | 7531 | 70 | 3 | 13 | 13 |
| 64191 | 7638 | 78 | 16 | 12 | 20 |
| 59773 | 7701 | 63 | 3 | 8 | 18 |
| 63694 | 7751 | 69 | 11 | 8 | 15 |



US EPA ARCHIVE DOCUMENT

| SampleID | HA_IDs | Sample Comments |
|---|---|---|
| 14965 | 646 | Bighorse crk @SR2 |
| 26868 | 683 | 532576 = Duplicate |
| 16643 | 723 | Little Crooked Creek |
| 18594 | 763 | |
| 26865 | 5020 | |
| 26863 | 5022 | |
| 57324 | 5088 | |
| 57322 | 5089 | |
| 57431 | 5097 | |
| 64546 | 5552 | Habitats have alot of sponge on them |
| 60751 | 5728 | |
| 65026 | 5733 | |
| 65296 | 5755 | |
| 65291 | 5756 | |
| 65293 | 5757 | |
| 65292 | 5759 | |
| 65029 | 5764 | |
| 65316 | 5824 | |
| 65028 | 5825 | |
| 65025 | 5826 | |
| 65379 | 5830 | |
| 65382 | 5831 | |
| 65414 | 5834 | |



US EPA ARCHIVE DOCUMENT

| SampleID | HA_IDs | Sample Comments |
|---|---|---|
| 65567 | 5857 | |
| 65636 | 5927 | |
| 65737 | 5929 | |
| 65736 | 5930 | |
| 65637 | 5939 | |
| 65731 | 5946 | |
| 65900 | 6011 | |
| 65907 | 6013 | |
| 65891 | 6022 | |
| 65932 | 6024 | |
| 66028 | 6026 | |
| 65250 | 6036 | |
| 65306 | 6037 | |
| 65931 | 6056 | |
| 65741 | 6063 | |
| 65715 | 6064 | |
| 65739 | 6066 | |
| 48420 | 7144 | Ref SCI,Biorecon,water,Periphyton samples taken,SCI shipped to Tall.,Turb. viola |
| 52834 | 7254 | not enough leaves to sample. Neoperla observed |
| 60301 | 7531 | |
| 64191 | 7638 | |
| 59773 | 7701 | |
| 63694 | 7751 | |

US EPA ARCHIVE DOCUMENT

| SampleID | HA_IDs | Ben/Per/Phy/MacPhy Comments | LIMS ID | FieldComment1 | FieldComment2 |
|---|---|---|---|---|---|
| 14965 | 646 | | | | |
| 26868 | 683 | | | | |
| 16643 | 723 | | | | |
| 18594 | 763 | | | | |
| 26865 | 5020 | | | | |
| 26863 | 5022 | | | | |
| 57324 | 5088 | | | | |
| 57322 | 5089 | | | | |
| 57431 | 5097 | | | | |
| 64546 | 5552 | | | | |
| 60751 | 5728 | | | | |
| 65026 | 5733 | | | | |
| 65296 | 5755 | | | | |
| 65291 | 5756 | | | | |
| 65293 | 5757 | | | | |
| 65292 | 5759 | | | | |
| 65029 | 5764 | | | | |
| 65316 | 5824 | | | | |
| 65028 | 5825 | | | | |
| 65025 | 5826 | | | | |
| 65379 | 5830 | | | | |
| 65382 | 5831 | | | | |
| 65414 | 5834 | | | | |



US EPA ARCHIVE DOCUMENT

| SampleID | HA_IDs | Ben/Per/Phy/MacPhy Comments | LIMS ID | FieldComment1 | FieldComment2 |
|---|---|---|---|---|---|
| 65567 | 5857 | | | | |
| 65636 | 5927 | | | | |
| 65737 | 5929 | | | | |
| 65736 | 5930 | | | | |
| 65637 | 5939 | | | | |
| 65731 | 5946 | | | | |
| 65900 | 6011 | | | | |
| 65907 | 6013 | | | | |
| 65891 | 6022 | | | | |
| 65932 | 6024 | | | | |
| 66028 | 6026 | | | | |
| 65250 | 6036 | | | | |
| 65306 | 6037 | | | | |
| 65931 | 6056 | | | | |
| 65741 | 6063 | | | | |
| 65715 | 6064 | | | | |
| 65739 | 6066 | | | | |
| 48420 | 7144 | | | | |
| 52834 | 7254 | | | | |
| 60301 | 7531 | | | | |
| 64191 | 7638 | | | both banks sand/rock. Stream bed limestone. | |
| 59773 | 7701 | | | | |
| 63694 | 7751 | | | | |

US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | 22030010 | 22030010 | 32030023 | |
|---|---|---|---|---|
| Sample date -> | 8/22/2000 | 9/18/2001 | 2/15/2006 | |
| | Sampleid 22114/PerID | Sampleid 25672/PerID | Sampleid 48420/PerID | |
| Taxon Name / SampleID/PerID -> | 8421 (# counted) | 10528 (# counted) | 18531 (# counted) | Phylum |
| Achnanthes | 1 | - | 3 | Bacillariophyta |
| Achnanthes clevei | - | 19 | - | Bacillariophyta |
| Achnanthes exigua | 3 | 3 | - | Bacillariophyta |
| Achnanthes hungarica | - | 2 | 1 | Bacillariophyta |
| Achnanthes lanceolata | 64 | 5 | - | Bacillariophyta |
| Achnanthes lanceolata apiculata | - | - | 1 | Bacillariophyta |
| Achnanthes minutissima | - | - | 6 | Bacillariophyta |
| Amphipleura pellucida pellucida | 3 | - | - | Bacillariophyta |
| Amphora | 1 | 2 | - | Bacillariophyta |
| Ankistrodesmus falcatus | 1 | - | - | Chlorophycota |
| Bacillaria paradoxa | 1 | 3 | - | Bacillariophyta |
| Bacillariophyceae | - | - | 1 | Bacillariophyta |
| Chlorella | - | 2 | 3 | Chlorophycota |
| Cocconeis disculus | - | 2 | - | Bacillariophyta |
| Cocconeis fluviatilis | 10 | - | - | Bacillariophyta |
| Cocconeis placentula | 58 | 195 | 1 | Bacillariophyta |
| Coscinodiscus | - | 2 | - | Bacillariophyta |
| Cosmarium | - | - | 2 | Chlorophycota |
| Cyanobium parvum | - | 3 | - | Cyanophycota |
| Cyanobium plancticum | - | 3 | - | Cyanophycota |
| Cyclotella | 4 | 1 | - | Bacillariophyta |
| Cymbella | - | 12 | - | Bacillariophyta |
| Cymbella tumida tumida | 10 | - | - | Bacillariophyta |
| Cymbellaceae | - | - | 7 | Bacillariophyta |
| Desmococcus | - | - | 4 | Chlorophycota |
| Diadesmis contenta | - | - | 1 | Bacillariophyta |
| Diatoma | - | 2 | - | Bacillariophyta |
| Encyonema | - | - | 3 | Bacillariophyta |
| Encyonema evergladianum | - | 5 | - | Bacillariophyta |
| Eunotia | 135 | 8 | 191 | Bacillariophyta |
| Fragilaria | - | - | 1 | Bacillariophyta |
| Fragilaria pinnata | - | 15 | - | Bacillariophyta |
| Fragilariaceae | - | 13 | - | Bacillariophyta |
| Frustulia rhomboides | - | - | 18 | Bacillariophyta |
| Gomphonema | 7 | 8 | 5 | Bacillariophyta |
| Gomphonema gracile | - | - | 1 | Bacillariophyta |
| Gomphonema parvulum | 9 | 5 | - | Bacillariophyta |
| Gomphonema subclavatum | 4 | - | - | Bacillariophyta |
| Gomphonema truncatum | - | 7 | - | Bacillariophyta |
| Gomphonema truncatum truncatum | 1 | - | - | Bacillariophyta |
| Hydrosera whampoensis | 11 | - | - | Bacillariophyta |
| Jaaginema | - | - | 5 | Cyanophycota |
| Kephyrion | - | 1 | - | Chrysophyta |
| Komvophoron schmidlei | - | - | 1 | Cyanophycota |
| Lyngbya | 4 | 2 | - | Cyanophycota |
| Melosira | 24 | - | - | Bacillariophyta |
| Microthamnion kuetzingianum | - | - | 2 | Chlorophycota |
| Navicula | 1 | - | 3 | Bacillariophyta |
| Navicula constans | - | 1 | - | Bacillariophyta |
| Navicula cryptocephala | 12 | 9 | 4 | Bacillariophyta |
| Navicula cryptotenella | - | 12 | 2 | Bacillariophyta |



US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | 22030010 | 22030010 | 32030023 | |
|---|---|---|---|---|
| Sample date -> | 8/22/2000 | 9/18/2001 | 2/15/2006 | |
| | Sampleid 22114/PerID | Sampleid 25672/PerID | Sampleid 48420/PerID | |
| Taxon Name / SampleID/PerID -> | 8421 (# counted) | 10528 (# counted) | 18531 (# counted) | Phylum |
| Navicula minima | 6 | 42 | 1 | Bacillariophyta |
| Navicula pupula | - | 7 | - | Bacillariophyta |
| Navicula radiosa | 1 | - | - | Bacillariophyta |
| Nitzschia | 4 | - | 6 | Bacillariophyta |
| Nitzschia amphibia | 29 | 32 | - | Bacillariophyta |
| Nitzschia palea | 7 | 9 | 1 | Bacillariophyta |
| Oscillatoria | 6 | 7 | - | Cyanophycota |
| Pinnularia | - | - | 6 | Bacillariophyta |
| Planktolyngbya | - | - | 3 | Cyanophycota |
| Planktothrix | - | - | 1 | Cyanophycota |
| Pleurocapsa | - | - | 1 | Cyanophycota |
| Pseudanabaena | - | - | 8 | Cyanophycota |
| Scenedesmus acutiformis | - | - | 1 | Chlorophycota |
| Scenedesmus bijuga | - | - | 1 | Chlorophycota |
| Staurastrum | - | - | 2 | Chlorophycota |
| Stauroneis | - | - | 2 | Bacillariophyta |
| Stigeoclonium | - | - | 1 | Chlorophycota |
| Surirella | - | - | 5 | Bacillariophyta |
| Synechococcus | 3 | - | - | Cyanophycota |
| Synechocystis | - | - | 3 | Cyanophycota |
| Synedra | 98 | 18 | - | Bacillariophyta |
| Synedra ulna | - | 41 | - | Bacillariophyta |
| Synedra ulna ramesi | 19 | - | - | Bacillariophyta |
| Thalassiosira | - | - | 1 | Bacillariophyta |

US EPA ARCHIVE DOCUMENT

As Entered / STORET station ->
Sample date ->

| Taxon Name / SampleID/PerID -> | Class | Order | Family | Genus |
|---|---|---|---|---|
| Achnanthes | Bacillariophyceae | Achnanthales | Achnanthaceae | Achnanthes |
| Achnanthes clevei | Bacillariophyceae | Achnanthales | Achnanthidiaceae | Karayevia |
| Achnanthes exigua | Bacillariophyceae | Achnanthales | Achnanthaceae | Achnanthes |
| Achnanthes hungarica | Bacillariophyceae | Achnanthales | Achnanthidiaceae | Lemnicola |
| Achnanthes lanceolata | Bacillariophyceae | Achnanthales | Achnanthidiaceae | Planothidium |
| Achnanthes lanceolata apiculata | Bacillariophyceae | Achnanthales | Achnanthidiaceae | Planothidium |
| Achnanthes minutissima | Bacillariophyceae | Achnanthales | Achnanthidiaceae | Achnanthidium |
| Amphipleura pellucida pellucida | Bacillariophyceae | Naviculales | Amphipleuraceae | Amphipleura |
| Amphora | Bacillariophyceae | Thalassiophysales | Catenulaceae | Amphora |
| Ankistrodesmus falcatus | Chlorophyceae | Chlorococcales | Oocystaceae | Ankistrodesmus |
| Bacillaria paradoxa | Bacillariophyceae | Bacillariales | Bacillariaceae | Bacillaria |
| Bacillariophyceae | Bacillariophyceae | Bacillariophyceae | Bacillariophyceae | Bacillariophyceae |
| Chlorella | Chlorophyceae | Chlorococcales | Oocystaceae | Chlorella |
| Cocconeis disculus | Bacillariophyceae | Achnanthales | Cocconeidaceae | Cocconeis |
| Cocconeis fluviatilis | Bacillariophyceae | Achnanthales | Cocconeidaceae | Cocconeis |
| Cocconeis placentula | Bacillariophyceae | Achnanthales | Cocconeidaceae | Cocconeis |
| Coscinodiscus | Coscinodiscophyceae | Coscinodiscales | Coscinodiscaceae | Coscinodiscus |
| Cosmarium | Chlorophyceae | Zygnematales | Desmidiaceae | Cosmarium |
| Cyanobium parvum | Cyanophyceae | Chroococcales | Synechococcaceae | Cyanobium |
| Cyanobium plancticum | Cyanophyceae | Chroococcales | Synechococcaceae | Cyanobium |
| Cyclotella | Coscinodiscophyceae | Thalassiosirales | Stephanodiscaceae | Cyclotella |
| Cymbella | Bacillariophyceae | Cymbellales | Cymbellaceae | Cymbella |
| Cymbella tumida tumida | Bacillariophyceae | Cymbellales | Cymbellaceae | Cymbella |
| Cymbellaceae | Bacillariophyceae | Cymbellales | Cymbellaceae | Cymbellaceae |
| Desmococcus | Chlorophyceae | Chaetophorales | Chaetophoraceae | Desmococcus |
| Diadesmis contenta | Bacillariophyceae | Naviculales | Diadesmidaceae | Diadesmis |
| Diatoma | Fragilariophyceae | Fragilariales | Fragilariaceae | Diatoma |
| Encyonema | Bacillariophyceae | Cymbellales | Cymbellaceae | Encyonema |
| Encyonema evergladianum | Bacillariophyceae | Cymbellales | Cymbellaceae | Encyonema |
| Eunotia | Bacillariophyceae | Eunotiales | Eunotiaceae | Eunotia |
| Fragilaria | Fragilariophyceae | Fragilariales | Fragilariaceae | Fragilaria |
| Fragilaria pinnata | Fragilariophyceae | Fragilariales | Fragilariaceae | Staurosirella |
| Fragilariaceae | Fragilariophyceae | Fragilariales | Fragilariaceae | Fragilariaceae |
| Frustulia rhomboides | Bacillariophyceae | Naviculales | Amphipleuraceae | Frustulia |
| Gomphonema | Bacillariophyceae | Cymbellales | Gomphonemataceae | Gomphonema |
| Gomphonema gracile | Bacillariophyceae | Cymbellales | Gomphonemataceae | Gomphonema |
| Gomphonema parvulum | Bacillariophyceae | Cymbellales | Gomphonemataceae | Gomphonema |
| Gomphonema subclavatum | Bacillariophyceae | Cymbellales | Gomphonemataceae | Gomphonema |
| Gomphonema truncatum | Bacillariophyceae | Cymbellales | Gomphonemataceae | Gomphonema |
| Gomphonema truncatum truncatum | Bacillariophyceae | Cymbellales | Gomphonemataceae | Gomphonema |
| Hydrosera whampoensis | Coscinodiscophyceae | Biddulphiales | Biddulphiaceae | Hydrosera |
| Jaaginema | Cyanophyceae | Oscillatoriales | Pseudanabaenaceae | Jaaginema |
| Kephyrion | Chrysophyceae | Chromalinales | Chrysococcaceae | Kephyrion |
| Komvophoron schmidlei | Cyanophyceae | Oscillatoriales | Borziaceae | Komvophoron |
| Lyngbya | Cyanophyceae | Oscillatoriales | Oscillatoriaceae | Lyngbya |
| Melosira | Coscinodiscophyceae | Melosirales | Melosiraceae | Melosira |
| Microthamnion kuetzingianum | Chlorophyceae | Chaetophorales | Chaetophoraceae | Microthamnion |
| Navicula | Bacillariophyceae | Naviculales | Naviculaceae | Navicula |
| Navicula constans | Bacillariophyceae | Naviculales | Naviculaceae | Navicula |
| Navicula cryptocephala | Bacillariophyceae | Naviculales | Naviculaceae | Navicula |
| Navicula cryptotenella | Bacillariophyceae | Naviculales | Naviculaceae | Navicula |



US EPA ARCHIVE DOCUMENT

As Entered / STORET station ->
Sample date ->

| Taxon Name / SampleID/PerID -> | Class | Order | Family | Genus |
|---|---|---|---|---|
| Navicula minima | Bacillariophyceae | Naviculales | Naviculaceae | Navicula |
| Navicula pupula | Bacillariophyceae | Naviculales | Naviculaceae | Navicula |
| Navicula radiosa | Bacillariophyceae | Naviculales | Naviculaceae | Navicula |
| Nitzschia | Bacillariophyceae | Bacillariales | Bacillariaceae | Nitzschia |
| Nitzschia amphibia | Bacillariophyceae | Bacillariales | Bacillariaceae | Nitzschia |
| Nitzschia palea | Bacillariophyceae | Bacillariales | Bacillariaceae | Nitzschia |
| Oscillatoria | Cyanophyceae | Oscillatoriales | Oscillatoriaceae | Oscillatoria |
| Pinnularia | Bacillariophyceae | Naviculales | Pinnulariaceae | Pinnularia |
| Planktolyngbya | Cyanophyceae | Oscillatoriales | Pseudanabaenaceae | Planktolyngbya |
| Planktothrix | Cyanophyceae | Oscillatoriales | Phormidiaceae | Planktothrix |
| Pleurocapsa | Cyanophyceae | Pleurocapsales | Pleurocapsaceae | Pleurocapsa |
| Pseudanabaena | Cyanophyceae | Oscillatoriales | Pseudanabaenaceae | Pseudanabaena |
| Scenedesmus acutiformis | Chlorophyceae | Chlorococcales | Scenedesmaceae | Scenedesmus |
| Scenedesmus bijuga | Chlorophyceae | Chlorococcales | Scenedesmaceae | Scenedesmus |
| Staurastrum | Chlorophyceae | Zygnematales | Desmidiaceae | Staurastrum |
| Stauroneis | Bacillariophyceae | Naviculales | Stauroneidaceae | Stauroneis |
| Stigeoclonium | Chlorophyceae | Chaetophorales | Chaetophoraceae | Stigeoclonium |
| Surirella | Bacillariophyceae | Surirellales | Surirellaceae | Surirella |
| Synechococcus | Cyanophyceae | Chroococcales | Chroococcaceae | Synechococcus |
| Synechocystis | Cyanophyceae | Chroococcales | Chroococcaceae | Synechocystis |
| Synedra | Fragilariophyceae | Fragilariales | Fragilariaceae | Synedra |
| Synedra ulna | Fragilariophyceae | Fragilariales | Fragilariaceae | Synedra |
| Synedra ulna ramesi | Fragilariophyceae | Fragilariales | Fragilariaceae | Synedra |
| Thalassiosira | Coscinodiscophyceae | Thalassiosirales | Thalassiosiraceae | Thalassiosira |

US EPA ARCHIVE DOCUMENT

As Entered / STORET station ->
Sample date ->

| Taxon Name / SampleID/PerID -> | Current Name |
|---|---|
| Achnanthes | |
| Achnanthes clevei | Karayevia clevei |
| Achnanthes exigua | Achnanthidium exiguum |
| Achnanthes hungarica | Lemnicola hungarica |
| Achnanthes lanceolata | Planothidium lanceolatum |
| Achnanthes lanceolata apiculata | Planothidium apiculatum |
| Achnanthes minutissima | Achnanthidium minutissimum |
| Amphipleura pellucida pellucida | |
| Amphora | |
| Ankistrodesmus falcatus | |
| Bacillaria paradoxa | Bacillaria paxillifer |
| Bacillariophyceae | |
| Chlorella | |
| Cocconeis disculus | |
| Cocconeis fluviatilis | |
| Cocconeis placentula | |
| Coscinodiscus | |
| Cosmarium | |
| Cyanobium parvum | |
| Cyanobium plancticum | |
| Cyclotella | |
| Cymbella | |
| Cymbella tumida tumida | |
| Cymbellaceae | |
| Desmococcus | |
| Diadesmis contenta | |
| Diatoma | |
| Encyonema | |
| Encyonema evergladianum | |
| Eunotia | |
| Fragilaria | |
| Fragilaria pinnata | Staurosirella pinnata |
| Fragilariaceae | |
| Frustulia rhomboides | |
| Gomphonema | |
| Gomphonema gracile | |
| Gomphonema parvulum | |
| Gomphonema subclavatum | |
| Gomphonema truncatum | |
| Gomphonema truncatum truncatum | |
| Hydrosera whampoensis | |
| Jaaginema | |
| Kephyrion | |
| Komvophoron schmidlei | |
| Lyngbya | |
| Melosira | |
| Microthamnion kuetzingianum | |
| Navicula | |
| Navicula constans | |
| Navicula cryptocephala | |
| Navicula cryptotenella | |



US EPA ARCHIVE DOCUMENT

As Entered / STORET station ->
Sample date ->

| Taxon Name / SampleID/PerID -> | Current Name |
|---|---|
| Navicula minima | |
| Navicula pupula | Sellaphora pupula |
| Navicula radiosa | |
| Nitzschia | |
| Nitzschia amphibia | |
| Nitzschia palea | |
| Oscillatoria | |
| Pinnularia | |
| Planktolyngbya | |
| Planktothrix | |
| Pleurocapsa | |
| Pseudanabaena | |
| Scenedesmus acutiformis | |
| Scenedesmus bijuga | |
| Staurastrum | |
| Stauroneis | |
| Stigeoclonium | |
| Surirella | |
| Synechococcus | |
| Synechocystis | |
| Synedra | |
| Synedra ulna | |
| Synedra ulna ramesi | |
| Thalassiosira | |

US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> Sample date -> Taxon Name / SampleID/PerID -> | GAD104US 11/14/2005 Sampleid 49652/PerID 18430 (# counted) | LIB104LV 11/21/2005 Sampleid 49677/PerID 18448 (# counted) | CLA243LV 11/14/2005 Sampleid 52996/PerID 19568 (# counted) | CLA254LR 11/14/2005 Sampleid 50131/PerID 19608 (# counted) | UNI234LV 11/15/2005 Sampleid 53059/PerID 19639 (# counted) | LEV502GS 12/6/2005 Sampleid 52471/PerID 20006 (# counted) |
|---|---|---|---|---|---|---|
| Actinotaenium | - | - | - | - | - | - |
| Actinotaenium perminutum | - | - | - | - | - | - |
| Anabaena | - | - | - | - | - | - |
| Anabaena subcylindrica | - | - | - | - | - | - |
| Ankistrodesmus | - | - | 1 | - | - | - |
| Ankistrodesmus falcatus | - | 5 | - | - | - | - |
| Aphanocapsa | - | 1 | - | - | - | - |
| Bacillariophyta | 262 | 213 | 283 | 247 | 295 | 269 |
| Batrachospermum | - | - | - | - | - | - |
| Bumilleriopsis brevis | - | - | - | - | - | - |
| Calothrix | - | - | - | - | - | - |
| Chlamydomonas | - | - | - | - | - | 1 |
| Chlorella | - | 6 | - | - | - | 3 |
| Chlorella vulgaris | - | - | - | - | - | - |
| Chlorococcum | - | 2 | 1 | - | - | 2 |
| Chlorococcum humicola | - | - | - | - | - | - |
| Chlorogonium | - | - | - | - | - | - |
| Chlorophyceae | - | 4 | - | - | - | - |
| Chroococcus | - | - | - | - | - | - |
| Chroococcus minutus | - | - | - | - | - | - |
| Chroococcus turgidus | - | - | - | - | - | - |
| Chrysophyceae | - | - | - | - | - | - |
| Cladophora | - | 4 | - | - | - | - |
| Closterium | - | - | - | - | 1 | - |
| Closterium gracile gracile | - | - | - | - | - | - |
| Closterium lanceolatum lanceolatum | - | - | - | - | - | - |
| Closterium moniliferum moniliferum | - | - | - | - | - | - |
| Closterium parvulum obtusum | - | - | - | - | - | - |
| Closterium peracerosum | - | - | - | - | - | - |
| Closterium venus venus | - | - | - | - | - | - |
| Cosmarium | 3 | 1 | - | - | - | - |
| Crucigenia tetrapedia | - | - | - | - | - | - |
| Cryptomonas | - | - | - | - | - | - |
| Cyanobium | - | - | - | - | - | - |
| Cyanobium parvum | - | 9 | - | - | - | - |
| Cyanobium plancticum | - | - | - | - | - | - |
| Cyanophyceae | - | - | - | - | - | - |
| Cyanothece | - | - | - | - | - | - |
| Cyanothece aeruginosa | - | - | - | - | - | - |
| Derepyxis | - | - | - | - | - | - |
| Desmidium | - | - | - | - | - | - |
| Dinobryon | - | - | - | - | - | - |
| Euglena | - | 1 | - | - | - | - |
| Euglena polymorpha | - | - | - | - | - | - |
| Euglenophyceae | - | - | - | - | - | - |
| Geitlerinema | - | - | - | - | - | - |
| Geitlerinema acutissimum | - | - | - | - | - | - |
| Glenodinium | - | - | - | - | - | - |



US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> Sample date -> Taxon Name / SampleID/PerID -> | GAD104US 11/14/2005 Sampleid 49652/PerID 18430 (# counted) | LIB104LV 11/21/2005 Sampleid 49677/PerID 18448 (# counted) | CLA243LV 11/14/2005 Sampleid 52996/PerID 19568 (# counted) | CLA254LR 11/14/2005 Sampleid 50131/PerID 19608 (# counted) | UNI234LV 11/15/2005 Sampleid 53059/PerID 19639 (# counted) | LEV502GS 12/6/2005 Sampleid 52471/PerID 20006 (# counted) |
|---|---|---|---|---|---|---|
| Gomontiella | - | - | - | - | - | - |
| Hapalosiphon | - | - | - | - | - | - |
| Hapalosiphon hibernicus | - | - | - | - | - | 3 |
| Heteroleibleinia | - | - | - | - | - | - |
| Heteroleibleinia kuetzingii | - | - | - | - | - | - |
| Jaaginema | - | 19 | - | - | 5 | 1 |
| Komvophoron schmidlei | - | - | - | - | - | - |
| Lepocinclis | - | - | - | - | - | - |
| Leptolyngbya | - | - | - | 3 | - | - |
| Lyngbya martensiana | - | - | - | - | - | - |
| Merismopedia glauca | 1 | - | - | - | - | - |
| Merismopedia warmingiana | - | - | - | - | - | - |
| Micrasterias | - | - | - | - | - | - |
| Microcystis | - | - | - | - | - | - |
| Microspora | - | - | - | - | - | - |
| Microthamnion kuetzingianum | - | 3 | - | - | - | - |
| Mougeotia | - | - | 3 | - | - | - |
| Oedogonium | - | - | 1 | - | - | 1 |
| Oocystis | - | - | - | - | - | - |
| Ophiocytium capitatum | - | - | - | - | - | - |
| Oscillatoria | - | - | - | 13 | - | - |
| Oscillatoria acutissima | - | - | - | - | - | - |
| Oscillatoria limosa | - | - | - | - | - | - |
| Oscillatoria princeps | - | - | - | - | - | - |
| Oscillatoria tenuis | - | - | - | - | - | - |
| Phacus | - | - | - | - | - | - |
| Phacus megalopsis | - | - | - | - | - | - |
| Phormidium | - | - | - | - | - | - |
| Phormidium aerugineo-caeruleum | - | - | - | - | - | - |
| Planktolyngbya | 8 | 7 | 3 | 7 | - | 2 |
| Planktosphaeria | - | - | - | - | - | - |
| Planktothrix | - | 2 | - | 1 | - | 3 |
| Pleurocapsa | - | - | - | - | - | 1 |
| Protococcus | - | - | - | - | - | - |
| Pseudanabaena | 8 | 2 | 5 | 12 | 2 | 1 |
| Pseudanabaena mucicola | - | - | - | - | - | - |
| Rhabdogloea | - | - | - | - | - | - |
| Scenedesmus | - | - | 1 | - | - | - |
| Scenedesmus abundans | - | - | - | - | - | - |
| Scenedesmus acuminatus | - | - | - | - | - | - |
| Scenedesmus bicaudatus | - | - | - | - | - | - |
| Scenedesmus bijuga | - | - | - | - | - | - |
| Scenedesmus dimorphus | 1 | - | - | - | - | - |
| Scenedesmus quadricauda | 7 | - | - | 1 | - | - |
| Schizothrix calcicola | 3 | - | - | 14 | - | 13 |
| Scytonema | - | - | - | - | - | - |
| Selenastrum | - | 2 | - | - | - | - |
| Spirogyra | - | - | 4 | - | - | - |



US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | GAD104US | LIB104LV | CLA243LV | CLA254LR | UNI234LV | LEV502GS |
|---|---|---|---|---|---|---|
| Sample date -> | 11/14/2005 | 11/21/2005 | 11/14/2005 | 11/14/2005 | 11/15/2005 | 12/6/2005 |
| Taxon Name / SampleID/PerID -> | Sampleid 49652/PerID 18430 (# counted) | Sampleid 49677/PerID 18448 (# counted) | Sampleid 52996/PerID 19568 (# counted) | Sampleid 50131/PerID 19608 (# counted) | Sampleid 53059/PerID 19639 (# counted) | Sampleid 52471/PerID 20006 (# counted) |
| Staurastrum | 4 | - | - | - | - | - |
| Staurastrum illusum illusum | - | - | - | - | - | - |
| Staurastrum lapponicum lapponicum | - | - | - | - | - | - |
| Stigeoclonium | - | - | 1 | - | - | - |
| Synechococcus | - | - | - | - | - | - |
| Synechocystis | - | 14 | - | - | - | - |
| Tetraedron minimum | - | - | - | - | - | - |
| Tetraedron trigonum | 3 | - | - | - | - | - |
| Trachelomonas | - | - | - | - | - | - |
| Ulothrix | - | - | - | 2 | - | - |

US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | PUT308GS | GLA630GS | BAK210GS | BAK210GS | 27311650820 8152 | LEV502GS |
|---|---|---|---|---|---|---|
| Sample date -> | 12/13/2005 | 1/23/2006 | 11/1/2005 | 3/20/2006 | 6/21/2006 | 2/21/2007 |
| Taxon Name / SampleID/PerID -> | Sampleid 52912/PerID 20031 (# counted) | Sampleid 53951/PerID 20328 (# counted) | Sampleid 47698/PerID 20630 (# counted) | Sampleid 53732/PerID 20850 (# counted) | Sampleid 52834/PerID 21128 (# counted) | Sampleid 57322/PerID 21789 (# counted) |
| Actinotaenium | 1 | - | - | - | - | - |
| Actinotaenium perminutum | - | - | - | - | - | - |
| Anabaena | - | - | - | - | - | - |
| Anabaena subcylindrica | - | - | - | - | - | - |
| Ankistrodesmus | - | - | 1 | - | - | - |
| Ankistrodesmus falcatus | - | - | - | - | - | - |
| Aphanocapsa | - | - | 1 | - | - | - |
| Bacillariophyta | 286 | 186 | 247 | 261 | 175 | 251 |
| Batrachospermum | - | - | - | - | - | - |
| Bumilleriopsis brevis | - | - | - | - | - | - |
| Calothrix | - | - | - | - | - | - |
| Chlamydomonas | - | 2 | - | - | - | - |
| Chlorella | 2 | 7 | 6 | 3 | 3 | 1 |
| Chlorella vulgaris | - | - | - | - | - | - |
| Chlorococcum | - | 1 | 2 | - | - | - |
| Chlorococcum humicola | - | - | - | - | - | - |
| Chlorogonium | - | 1 | - | - | - | - |
| Chlorophyceae | - | - | 6 | - | - | - |
| Chroococcus | - | - | - | - | - | - |
| Chroococcus minutus | - | - | - | - | - | - |
| Chroococcus turgidus | - | - | - | - | - | - |
| Chrysophyceae | - | 2 | 1 | - | - | - |
| Cladophora | - | - | - | - | - | - |
| Closterium | - | 4 | - | - | - | - |
| Closterium gracile gracile | 1 | - | - | - | - | - |
| Closterium lanceolatum lanceolatum | - | - | - | - | - | - |
| Closterium moniliferum moniliferum | - | - | - | - | - | - |
| Closterium parvulum obtusum | - | - | - | - | - | - |
| Closterium peracerosum | - | - | - | - | - | - |
| Closterium venus venus | - | - | - | - | - | - |
| Cosmarium | 1 | - | - | - | - | - |
| Crucigenia tetrapedia | - | - | 1 | - | - | - |
| Cryptomonas | - | 1 | - | - | - | - |
| Cyanobium | - | - | - | - | - | - |
| Cyanobium parvum | 3 | 3 | 5 | 3 | 7 | - |
| Cyanobium plancticum | - | - | - | 6 | 7 | - |
| Cyanophyceae | - | - | - | - | - | - |
| Cyanothece | - | - | - | - | - | - |
| Cyanothece aeruginosa | - | - | - | - | - | - |
| Derepyxis | - | - | - | - | - | - |
| Desmidium | - | - | - | - | - | - |
| Dinobryon | - | - | - | - | - | - |
| Euglena | - | 2 | - | - | 3 | - |
| Euglena polymorpha | - | - | - | - | - | - |
| Euglenophyceae | - | - | 1 | - | - | - |
| Geitlerinema | - | - | 1 | - | - | - |
| Geitlerinema acutissimum | - | - | - | - | - | - |
| Glenodinium | - | - | - | - | - | - |



US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | PUT308GS | GLA630GS | BAK210GS | BAK210GS | 27311650820 8152 | LEV502GS |
|---|---|---|---|---|---|---|
| Sample date -> | 12/13/2005 | 1/23/2006 | 11/1/2005 | 3/20/2006 | 6/21/2006 | 2/21/2007 |
| Taxon Name / SampleID/PerID -> | Sampleid 52912/PerID 20031 (# counted) | Sampleid 53951/PerID 20328 (# counted) | Sampleid 47698/PerID 20630 (# counted) | Sampleid 53732/PerID 20850 (# counted) | Sampleid 52834/PerID 21128 (# counted) | Sampleid 57322/PerID 21789 (# counted) |
| Gomontiella | - | - | - | - | - | - |
| Hapalosiphon | - | - | - | - | - | - |
| Hapalosiphon hibernicus | - | - | - | - | - | - |
| Heteroleibleinia | - | - | - | - | 9 | - |
| Heteroleibleinia kuetzingii | - | - | - | - | - | - |
| Jaaginema | 1 | 21 | 6 | 7 | 51 | 5 |
| Komvophoron schmidlei | - | 1 | - | - | - | - |
| Lepocinclis | - | 5 | - | - | - | - |
| Leptolyngbya | - | - | - | - | - | - |
| Lyngbya martensiana | - | - | - | - | - | - |
| Merismopedia glauca | - | - | - | - | - | - |
| Merismopedia warmingiana | - | 2 | - | - | - | - |
| Micrasterias | - | - | 1 | - | - | - |
| Microcystis | - | - | - | 1 | - | - |
| Microspora | - | - | - | - | - | - |
| Microthamnion kuetzingianum | - | - | - | - | - | - |
| Mougeotia | - | 4 | - | - | - | - |
| Oedogonium | - | - | - | - | - | - |
| Oocystis | - | - | - | - | - | - |
| Ophiocytium capitatum | - | - | - | - | - | - |
| Oscillatoria | - | - | - | - | 1 | - |
| Oscillatoria acutissima | - | - | - | - | - | - |
| Oscillatoria limosa | - | - | - | - | - | - |
| Oscillatoria princeps | - | - | - | - | - | - |
| Oscillatoria tenuis | - | - | - | - | - | 3 |
| Phacus | - | 1 | - | - | - | - |
| Phacus megalopsis | - | - | - | - | - | - |
| Phormidium | - | - | - | - | - | - |
| Phormidium aerugineo-caeruleum | - | - | - | - | - | - |
| Planktolyngbya | 1 | 2 | - | - | 5 | - |
| Planktosphaeria | - | - | - | - | - | - |
| Planktothrix | - | - | 6 | - | 1 | - |
| Pleurocapsa | - | - | - | - | - | - |
| Protococcus | - | - | - | - | - | - |
| Pseudanabaena | 3 | 15 | - | - | - | - |
| Pseudanabaena mucicola | - | - | - | - | - | - |
| Rhabdogloea | - | 2 | - | - | - | - |
| Scenedesmus | - | 2 | - | - | 1 | - |
| Scenedesmus abundans | - | - | - | - | - | - |
| Scenedesmus acuminatus | - | - | - | - | - | - |
| Scenedesmus bicaudatus | - | - | - | - | - | - |
| Scenedesmus bijuga | - | - | - | - | 1 | - |
| Scenedesmus dimorphus | - | 2 | - | - | - | - |
| Scenedesmus quadricauda | - | 1 | - | - | 1 | - |
| Schizothrix calcicola | - | 3 | - | - | 13 | 40 |
| Scytonema | - | - | - | 1 | - | - |
| Selenastrum | - | - | - | 1 | 2 | - |
| Spirogyra | - | 3 | - | - | - | - |



US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | PUT308GS | GLA630GS | BAK210GS | BAK210GS | 27311650820<br>8152 | LEV502GS |
|---|---|---|---|---|---|---|
| Sample date -> | 12/13/2005 | 1/23/2006 | 11/1/2005 | 3/20/2006 | 6/21/2006 | 2/21/2007 |
| Taxon Name / SampleID/PerID -> | Sampleid 52912/PerID 20031 (# counted) | Sampleid 53951/PerID 20328 (# counted) | Sampleid 47698/PerID 20630 (# counted) | Sampleid 53732/PerID 20850 (# counted) | Sampleid 52834/PerID 21128 (# counted) | Sampleid 57322/PerID 21789 (# counted) |
| Staurastrum | - | - | - | - | - | - |
| Staurastrum illusum illusum | - | - | - | - | - | - |
| Staurastrum lapponicum lapponicum | - | - | - | - | - | - |
| Stigeoclonium | - | - | - | - | - | - |
| Synechococcus | - | - | - | - | - | - |
| Synechocystis | 1 | 17 | 9 | 12 | 15 | - |
| Tetraedron minimum | - | 1 | - | - | - | - |
| Tetraedron trigonum | - | - | - | - | - | - |
| Trachelomonas | - | 4 | 1 | - | - | - |
| Ulothrix | - | - | - | - | - | - |

US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | 3513 | PUT308GS | NUTREF001 | LIB104LV | 23010464 | CLA246GS |
|---|---|---|---|---|---|---|
| Sample date -> | 2/20/2007 | 2/26/2007 | 6/10/2008 | 6/10/2008 | 5/7/2008 | 5/28/2008 |
| Taxon Name / SampleID/PerID -> | Sampleid 57324/PerID 21790 (# counted) | Sampleid 57431/PerID 21831 (# counted) | Sampleid 65029/PerID 24392 (# counted) | Sampleid 65025/PerID 24393 (# counted) | Sampleid 64546/PerID 24394 (# counted) | Sampleid 65250/PerID 24411 (# counted) |
| Actinotaenium | - | - | - | - | - | - |
| Actinotaenium perminutum | - | - | - | - | - | - |
| Anabaena | - | - | - | - | - | - |
| Anabaena subcylindrica | - | - | - | - | - | - |
| Ankistrodesmus | - | - | - | - | - | - |
| Ankistrodesmus falcatus | - | 1 | - | - | - | 1 |
| Aphanocapsa | - | 1 | - | - | - | 1 |
| Bacillariophyta | 274 | 260 | 255 | 297 | 217 | 290 |
| Batrachospermum | - | - | - | - | - | - |
| Bumilleriopsis brevis | - | - | - | - | - | - |
| Calothrix | - | - | - | - | - | - |
| Chlamydomonas | - | 2 | - | - | - | 1 |
| Chlorella | - | 5 | - | - | 3 | 3 |
| Chlorella vulgaris | - | - | - | - | - | - |
| Chlorococcum | 1 | - | - | - | - | - |
| Chlorococcum humicola | - | - | - | - | - | - |
| Chlorogonium | - | - | - | - | - | - |
| Chlorophyceae | - | - | - | - | - | - |
| Chroococcus | - | - | - | - | - | - |
| Chroococcus minutus | 2 | - | - | - | - | - |
| Chroococcus turgidus | - | - | - | - | - | - |
| Chrysophyceae | - | - | - | - | - | - |
| Cladophora | - | - | - | - | - | - |
| Closterium | - | - | - | - | - | - |
| Closterium gracile gracile | - | - | - | - | - | - |
| Closterium lanceolatum lanceolatum | - | - | - | - | - | - |
| Closterium moniliferum moniliferum | - | - | - | - | - | - |
| Closterium parvulum obtusum | - | - | - | - | - | - |
| Closterium peracerosum | - | - | - | - | - | - |
| Closterium venus venus | - | - | - | - | - | - |
| Cosmarium | - | 2 | 1 | - | - | - |
| Crucigenia tetrapedia | - | - | - | - | - | - |
| Cryptomonas | - | - | - | - | - | 2 |
| Cyanobium | - | - | - | - | - | - |
| Cyanobium parvum | 3 | 1 | - | - | - | - |
| Cyanobium plancticum | - | - | - | - | - | - |
| Cyanophyceae | - | - | - | - | - | - |
| Cyanothece | - | - | - | - | - | - |
| Cyanothece aeruginosa | - | - | - | - | - | - |
| Derepyxis | - | - | - | - | - | - |
| Desmidium | - | - | - | - | - | - |
| Dinobryon | - | - | - | - | - | - |
| Euglena | - | 1 | - | - | - | 1 |
| Euglena polymorpha | - | - | - | - | 1 | - |
| Euglenophyceae | - | - | - | - | - | - |
| Geitlerinema | - | - | - | - | - | - |
| Geitlerinema acutissimum | - | - | - | - | - | - |
| Glenodinium | - | - | - | - | - | 1 |



US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | 3513 | PUT308GS | NUTREF001 | LIB104LV | 23010464 | CLA246GS |
|---|---|---|---|---|---|---|
| Sample date -> | 2/20/2007 | 2/26/2007 | 6/10/2008 | 6/10/2008 | 5/7/2008 | 5/28/2008 |
| Taxon Name / SampleID/PerID -> | Sampleid 57324/PerID 21790 (# counted) | Sampleid 57431/PerID 21831 (# counted) | Sampleid 65029/PerID 24392 (# counted) | Sampleid 65025/PerID 24393 (# counted) | Sampleid 64546/PerID 24394 (# counted) | Sampleid 65250/PerID 24411 (# counted) |
| Gomontiella | - | - | - | - | - | - |
| Hapalosiphon | - | - | - | - | - | - |
| Hapalosiphon hibernicus | - | - | - | - | - | - |
| Heteroleibleinia | - | - | - | - | - | - |
| Heteroleibleinia kuetzingii | - | - | 11 | - | - | - |
| Jaaginema | 4 | 9 | 1 | 3 | 17 | - |
| Komvophoron schmidlei | 1 | - | - | - | 2 | - |
| Lepocinclis | - | - | - | - | - | - |
| Leptolyngbya | - | - | - | - | - | - |
| Lyngbya martensiana | 1 | - | - | - | - | - |
| Merismopedia glauca | - | - | - | - | - | - |
| Merismopedia warmingiana | - | - | - | - | - | - |
| Micrasterias | - | - | - | - | - | - |
| Microcystis | 1 | - | - | - | - | - |
| Microspora | - | - | - | - | - | - |
| Microthamnion kuetzingianum | - | 3 | - | - | - | - |
| Mougeotia | - | - | - | - | - | - |
| Oedogonium | 1 | - | - | - | - | - |
| Oocystis | - | - | - | - | - | - |
| Ophiocytium capitatum | - | - | - | - | - | - |
| Oscillatoria | - | - | - | - | - | - |
| Oscillatoria acutissima | - | 1 | - | - | - | - |
| Oscillatoria limosa | 1 | - | - | - | - | - |
| Oscillatoria princeps | - | - | - | - | - | - |
| Oscillatoria tenuis | 7 | - | - | - | - | - |
| Phacus | - | - | - | - | - | - |
| Phacus megalopsis | - | - | - | - | - | - |
| Phormidium | - | - | - | - | - | - |
| Phormidium aerugineo-caeruleum | - | - | - | - | - | - |
| Planktolyngbya | 3 | - | - | - | - | - |
| Planktosphaeria | - | 1 | - | - | - | - |
| Planktothrix | - | 3 | - | - | 3 | - |
| Pleurocapsa | - | - | - | - | - | - |
| Protococcus | - | - | - | - | - | - |
| Pseudanabaena | 3 | - | - | - | 4 | - |
| Pseudanabaena mucicola | - | - | - | - | - | - |
| Rhabdogloea | - | - | - | - | - | - |
| Scenedesmus | - | - | - | - | - | - |
| Scenedesmus abundans | - | - | - | - | - | - |
| Scenedesmus acuminatus | - | - | - | - | - | - |
| Scenedesmus bicaudatus | - | - | - | - | - | - |
| Scenedesmus bijuga | - | - | - | - | - | - |
| Scenedesmus dimorphus | - | - | - | - | - | - |
| Scenedesmus quadricauda | - | - | - | - | - | - |
| Schizothrix calcicola | - | - | 32 | - | 48 | - |
| Scytonema | - | - | - | - | - | - |
| Selenastrum | - | 2 | - | - | - | - |
| Spirogyra | - | - | - | - | - | - |



US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | 3513 | PUT308GS | NUTREF001 | LIB104LV | 23010464 | CLA246GS |
|---|---|---|---|---|---|---|
| Sample date -> | 2/20/2007 | 2/26/2007 | 6/10/2008 | 6/10/2008 | 5/7/2008 | 5/28/2008 |
| Taxon Name / SampleID/PerID -> | Sampleid 57324/PerID 21790 (# counted) | Sampleid 57431/PerID 21831 (# counted) | Sampleid 65029/PerID 24392 (# counted) | Sampleid 65025/PerID 24393 (# counted) | Sampleid 64546/PerID 24394 (# counted) | Sampleid 65250/PerID 24411 (# counted) |
| Staurastrum | - | 1 | - | - | - | - |
| Staurastrum illusum illusum | - | - | - | - | - | - |
| Staurastrum lapponicum lapponicum | - | - | - | - | - | - |
| Stigeoclonium | - | - | - | - | - | - |
| Synechococcus | - | - | - | - | - | - |
| Synechocystis | - | 7 | - | - | 6 | - |
| Tetraedron minimum | - | - | - | - | - | - |
| Tetraedron trigonum | - | - | - | - | - | - |
| Trachelomonas | - | - | - | - | - | - |
| Ulothrix | - | - | - | - | - | - |

US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | 22020093 | GAD106GS | BAK208GS | 3545 | 3546 | 3549 |
|---|---|---|---|---|---|---|
| Sample date -> | 6/13/2008 | 6/13/2008 | 6/18/2008 | 7/9/2008 | 7/9/2008 | 7/10/2008 |
| | Sampleid 65026/PerID 24416 (# | Sampleid 65028/PerID 24417 (# | Sampleid 65306/PerID 24430 (# | Sampleid 65291/PerID 24441 (# | Sampleid 65296/PerID 24444 (# | Sampleid 65316/PerID 24445 (# |
| Taxon Name / SampleID/PerID -> | counted) | counted) | counted) | counted) | counted) | counted) |
| Actinotaenium | - | - | - | - | - | - |
| Actinotaenium perminutum | - | - | - | - | - | - |
| Anabaena | - | - | - | - | - | - |
| Anabaena subcylindrica | - | - | - | - | - | - |
| Ankistrodesmus | - | - | - | - | - | - |
| Ankistrodesmus falcatus | - | - | - | - | 1 | - |
| Aphanocapsa | - | - | - | - | 1 | - |
| Bacillariophyta | 279 | 294 | 272 | 268 | 272 | 255 |
| Batrachospermum | - | - | - | 20 | - | - |
| Bumilleriopsis brevis | - | - | - | - | - | - |
| Calothrix | - | - | - | - | - | - |
| Chlamydomonas | - | - | 4 | 2 | - | - |
| Chlorella | - | - | 3 | 2 | 3 | 3 |
| Chlorella vulgaris | - | - | - | - | - | - |
| Chlorococcum | - | - | - | - | - | - |
| Chlorococcum humicola | 1 | - | - | - | - | - |
| Chlorogonium | - | - | - | - | - | - |
| Chlorophyceae | - | - | - | - | - | - |
| Chroococcus | - | - | - | - | - | - |
| Chroococcus minutus | - | - | - | - | - | - |
| Chroococcus turgidus | - | - | - | - | - | 1 |
| Chrysophyceae | - | - | - | - | - | - |
| Cladophora | - | - | 3 | - | - | - |
| Closterium | - | - | - | 1 | - | - |
| Closterium gracile gracile | - | - | - | - | - | - |
| Closterium lanceolatum lanceolatum | - | - | - | - | - | - |
| Closterium moniliferum moniliferum | - | - | - | - | - | - |
| Closterium parvulum obtusum | - | - | - | 1 | - | - |
| Closterium peracerosum | - | - | - | - | - | - |
| Closterium venus venus | - | - | - | - | - | - |
| Cosmarium | - | - | - | - | - | 1 |
| Crucigenia tetrapedia | - | - | - | - | - | - |
| Cryptomonas | - | - | - | - | - | - |
| Cyanobium | - | - | - | - | - | - |
| Cyanobium parvum | - | - | - | - | 1 | - |
| Cyanobium plancticum | - | - | - | - | - | - |
| Cyanophyceae | - | - | - | - | - | - |
| Cyanothece | - | - | - | - | - | 1 |
| Cyanothece aeruginosa | - | - | - | - | 2 | - |
| Derepyxis | - | - | - | - | - | - |
| Desmidium | - | - | - | 1 | - | - |
| Dinobryon | - | - | - | - | - | - |
| Euglena | - | - | - | - | - | - |
| Euglena polymorpha | - | - | - | - | - | - |
| Euglenophyceae | - | - | - | - | - | - |
| Geitlerinema | - | 1 | - | - | - | - |
| Geitlerinema acutissimum | - | - | - | - | - | - |
| Glenodinium | - | - | - | - | - | - |



US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | 22020093 | GAD106GS | BAK208GS | 3545 | 3546 | 3549 |
|---|---|---|---|---|---|---|
| Sample date -> | 6/13/2008 | 6/13/2008 | 6/18/2008 | 7/9/2008 | 7/9/2008 | 7/10/2008 |
| | Sampleid 65026/PerID 24416 (# | Sampleid 65028/PerID 24417 (# | Sampleid 65306/PerID 24430 (# | Sampleid 65291/PerID 24441 (# | Sampleid 65296/PerID 24444 (# | Sampleid 65316/PerID 24445 (# |
| Taxon Name / SampleID/PerID -> | counted) | counted) | counted) | counted) | counted) | counted) |
| Gomontiella | - | 1 | - | - | - | - |
| Hapalosiphon | - | - | - | - | - | - |
| Hapalosiphon hibernicus | - | - | - | - | - | - |
| Heteroleibleinia | - | - | - | - | - | - |
| Heteroleibleinia kuetzingii | - | - | - | - | - | - |
| Jaaginema | 4 | - | 1 | 2 | 4 | - |
| Komvophoron schmidlei | - | - | - | - | - | - |
| Lepocinclis | - | - | - | - | - | - |
| Leptolyngbya | - | - | - | - | - | - |
| Lyngbya martensiana | - | - | - | - | - | 1 |
| Merismopedia glauca | - | - | - | - | - | - |
| Merismopedia warmingiana | - | - | - | - | - | - |
| Micrasterias | - | - | - | - | - | - |
| Microcystis | - | - | - | - | - | - |
| Microspora | - | - | - | - | - | - |
| Microthamnion kuetzingianum | - | - | - | - | - | - |
| Mougeotia | - | - | 14 | - | - | - |
| Oedogonium | - | - | - | - | - | - |
| Oocystis | - | - | - | - | - | - |
| Ophiocytium capitatum | - | - | - | - | - | - |
| Oscillatoria | - | - | - | - | - | - |
| Oscillatoria acutissima | - | - | - | - | - | - |
| Oscillatoria limosa | - | - | - | - | - | - |
| Oscillatoria princeps | - | - | - | - | - | - |
| Oscillatoria tenuis | - | - | - | - | - | 6 |
| Phacus | - | - | - | - | - | - |
| Phacus megalopsis | - | - | - | - | - | - |
| Phormidium | - | - | - | - | - | 8 |
| Phormidium aerugineo-caeruleum | - | - | - | - | - | - |
| Planktolyngbya | 2 | 4 | - | 1 | 5 | - |
| Planktosphaeria | - | - | - | - | - | - |
| Planktothrix | 4 | - | - | 1 | 1 | - |
| Pleurocapsa | - | - | - | - | - | - |
| Protococcus | - | - | - | - | - | 9 |
| Pseudanabaena | - | - | - | - | 1 | - |
| Pseudanabaena mucicola | - | - | - | - | - | - |
| Rhabdogloea | - | - | - | - | - | - |
| Scenedesmus | - | - | - | - | - | - |
| Scenedesmus abundans | - | - | - | - | - | - |
| Scenedesmus acuminatus | - | - | - | - | 1 | - |
| Scenedesmus bicaudatus | 2 | - | - | - | - | - |
| Scenedesmus bijuga | 1 | - | - | - | - | - |
| Scenedesmus dimorphus | - | - | - | - | - | - |
| Scenedesmus quadricauda | 2 | - | - | - | 1 | 5 |
| Schizothrix calcicola | 1 | - | - | - | 2 | 6 |
| Scytonema | - | - | - | - | - | - |
| Selenastrum | - | - | - | - | - | - |
| Spirogyra | - | - | - | - | - | - |



US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | 22020093 | GAD106GS | BAK208GS | 3545 | 3546 | 3549 |
|---|---|---|---|---|---|---|
| Sample date -> | 6/13/2008 | 6/13/2008 | 6/18/2008 | 7/9/2008 | 7/9/2008 | 7/10/2008 |
| Taxon Name / SampleID/PerID -> | Sampleid 65026/PerID 24416 (# counted) | Sampleid 65028/PerID 24417 (# counted) | Sampleid 65306/PerID 24430 (# counted) | Sampleid 65291/PerID 24441 (# counted) | Sampleid 65296/PerID 24444 (# counted) | Sampleid 65316/PerID 24445 (# counted) |
| Staurastrum | - | - | - | - | - | - |
| Staurastrum illusum illusum | - | - | - | - | - | - |
| Staurastrum lapponicum lapponicum | - | - | - | - | - | - |
| Stigeoclonium | - | - | 3 | - | - | - |
| Synechococcus | - | - | - | - | - | - |
| Synechocystis | 4 | - | - | 3 | 7 | 5 |
| Tetraedron minimum | - | - | - | - | - | - |
| Tetraedron trigonum | - | - | - | - | - | - |
| Trachelomonas | - | - | - | 1 | - | - |
| Ulothrix | - | - | - | - | - | - |

US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | 32030023 | 21010008 | WAK158LR | 22050083 | 22050040 | 23010464 |
|---|---|---|---|---|---|---|
| Sample date -> | 7/24/2008 | 7/16/2008 | 6/19/2008 | 8/12/2008 | 8/12/2008 | 10/8/2008 |
| | Sampleid 65292/PerID 24452 (# | Sampleid 65293/PerID 24458 (# | Sampleid 65414/PerID 24471 (# | Sampleid 65379/PerID 24479 (# | Sampleid 65382/PerID 24482 (# | Sampleid 65567/PerID 24491 (# |
| Taxon Name / SampleID/PerID -> | counted) | counted) | counted) | counted) | counted) | counted) |
| Actinotaenium | - | - | - | - | - | - |
| Actinotaenium perminutum | 4 | - | - | - | - | - |
| Anabaena | - | 1 | 40 | - | - | - |
| Anabaena subcylindrica | - | - | - | 62 | - | - |
| Ankistrodesmus | - | - | - | - | - | - |
| Ankistrodesmus falcatus | - | - | - | - | - | - |
| Aphanocapsa | - | 2 | - | - | 1 | - |
| Bacillariophyta | 270 | 257 | 245 | 181 | 239 | 258 |
| Batrachospermum | - | - | - | - | - | - |
| Bumilleriopsis brevis | - | - | - | - | - | - |
| Calothrix | - | - | - | 1 | - | - |
| Chlamydomonas | - | - | - | - | - | - |
| Chlorella | 2 | 1 | 3 | 7 | - | - |
| Chlorella vulgaris | - | - | - | - | - | 1 |
| Chlorococcum | - | - | - | - | - | - |
| Chlorococcum humicola | - | - | - | 1 | 4 | 1 |
| Chlorogonium | - | - | - | - | - | - |
| Chlorophyceae | - | - | - | - | - | - |
| Chroococcus | - | - | - | - | - | - |
| Chroococcus minutus | - | - | - | - | - | - |
| Chroococcus turgidus | - | - | 1 | - | - | - |
| Chrysophyceae | - | - | - | - | - | - |
| Cladophora | - | - | - | - | - | - |
| Closterium | - | - | 2 | - | - | 1 |
| Closterium gracile gracile | - | - | - | - | - | - |
| Closterium lanceolatum lanceolatum | - | - | - | - | - | 1 |
| Closterium moniliferum moniliferum | - | - | - | - | - | - |
| Closterium parvulum obtusum | - | - | - | - | - | - |
| Closterium peracerosum | - | - | - | - | - | 1 |
| Closterium venus venus | 3 | - | - | - | - | - |
| Cosmarium | 2 | 1 | 1 | - | - | - |
| Crucigenia tetrapedia | - | - | - | - | - | - |
| Cryptomonas | - | - | - | - | - | - |
| Cyanobium | - | - | - | - | - | - |
| Cyanobium parvum | - | - | - | - | - | 7 |
| Cyanobium plancticum | - | - | - | - | - | - |
| Cyanophyceae | - | - | - | - | - | - |
| Cyanothece | - | - | - | - | - | - |
| Cyanothece aeruginosa | - | - | - | - | - | - |
| Derepyxis | - | - | - | - | - | - |
| Desmidium | - | - | - | - | - | - |
| Dinobryon | - | - | - | - | - | - |
| Euglena | 1 | - | - | - | - | - |
| Euglena polymorpha | - | - | - | - | - | - |
| Euglenophyceae | - | - | - | - | - | - |
| Geitlerinema | - | - | - | - | - | - |
| Geitlerinema acutissimum | - | - | - | - | 3 | - |
| Glenodinium | - | - | - | - | - | - |



US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | 32030023 | 21010008 | WAK158LR | 22050083 | 22050040 | 23010464 |
|---|---|---|---|---|---|---|
| Sample date -> | 7/24/2008 | 7/16/2008 | 6/19/2008 | 8/12/2008 | 8/12/2008 | 10/8/2008 |
| | Sampleid 65292/PerID 24452 (# | Sampleid 65293/PerID 24458 (# | Sampleid 65414/PerID 24471 (# | Sampleid 65379/PerID 24479 (# | Sampleid 65382/PerID 24482 (# | Sampleid 65567/PerID 24491 (# |
| Taxon Name / SampleID/PerID -> | counted) | counted) | counted) | counted) | counted) | counted) |
| Gomontiella | - | - | - | - | - | - |
| Hapalosiphon | - | - | - | - | - | - |
| Hapalosiphon hibernicus | - | - | - | - | - | - |
| Heteroleibleinia | - | - | - | - | - | - |
| Heteroleibleinia kuetzingii | - | - | - | - | - | - |
| Jaaginema | 3 | 13 | - | 13 | 11 | 12 |
| Komvophoron schmidlei | - | 2 | - | - | - | 1 |
| Lepocinclis | 1 | - | - | - | - | 2 |
| Leptolyngbya | - | - | - | - | - | - |
| Lyngbya martensiana | - | - | - | - | - | - |
| Merismopedia glauca | - | - | - | - | - | - |
| Merismopedia warmingiana | - | - | - | - | - | - |
| Micrasterias | - | - | - | - | - | - |
| Microcystis | - | - | - | - | - | - |
| Microspora | - | - | - | - | - | - |
| Microthamnion kuetzingianum | 2 | - | - | - | - | - |
| Mougeotia | 2 | - | 4 | - | - | - |
| Oedogonium | 1 | - | - | 1 | 6 | - |
| Oocystis | - | - | - | 2 | - | - |
| Ophiocytium capitatum | - | - | - | - | - | - |
| Oscillatoria | - | - | - | - | - | 1 |
| Oscillatoria acutissima | - | - | - | - | - | - |
| Oscillatoria limosa | - | - | - | - | 3 | - |
| Oscillatoria princeps | - | - | - | - | 9 | - |
| Oscillatoria tenuis | 1 | 1 | - | - | 3 | - |
| Phacus | - | - | - | - | - | - |
| Phacus megalopsis | - | - | - | - | - | 1 |
| Phormidium | - | - | - | - | - | 3 |
| Phormidium aerugineo-caeruleum | - | - | - | - | 3 | - |
| Planktolyngbya | 1 | 3 | - | - | 8 | - |
| Planktosphaeria | - | - | - | - | - | - |
| Planktothrix | 1 | 1 | - | 4 | 2 | - |
| Pleurocapsa | - | - | - | - | - | - |
| Protococcus | - | - | - | - | - | - |
| Pseudanabaena | - | 2 | - | 4 | - | 3 |
| Pseudanabaena mucicola | - | - | - | - | - | - |
| Rhabdogloea | - | - | - | - | - | - |
| Scenedesmus | - | - | - | - | - | - |
| Scenedesmus abundans | - | - | - | - | - | - |
| Scenedesmus acuminatus | - | - | - | - | - | - |
| Scenedesmus bicaudatus | - | - | - | - | - | - |
| Scenedesmus bijuga | - | - | 1 | - | - | 1 |
| Scenedesmus dimorphus | - | 3 | - | - | - | 3 |
| Scenedesmus quadricauda | - | 1 | - | - | 1 | - |
| Schizothrix calcicola | - | - | - | 23 | 4 | 7 |
| Scytonema | - | - | - | - | - | - |
| Selenastrum | - | - | - | - | - | - |
| Spirogyra | - | 1 | - | - | - | - |



US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | 32030023 | 21010008 | WAK158LR | 22050083 | 22050040 | 23010464 |
|---|---|---|---|---|---|---|
| Sample date -> | 7/24/2008 | 7/16/2008 | 6/19/2008 | 8/12/2008 | 8/12/2008 | 10/8/2008 |
| Taxon Name / SampleID/PerID -> | Sampleid 65292/PerID 24452 (# counted) | Sampleid 65293/PerID 24458 (# counted) | Sampleid 65414/PerID 24471 (# counted) | Sampleid 65379/PerID 24479 (# counted) | Sampleid 65382/PerID 24482 (# counted) | Sampleid 65567/PerID 24491 (# counted) |
| Staurastrum | - | - | - | - | - | - |
| Staurastrum illusum illusum | - | - | - | - | - | - |
| Staurastrum lapponicum lapponicum | 1 | - | - | - | - | - |
| Stigeoclonium | - | - | - | - | 2 | - |
| Synechococcus | - | - | - | - | - | - |
| Synechocystis | 5 | 16 | 3 | 2 | 1 | 1 |
| Tetraedron minimum | - | - | - | - | - | - |
| Tetraedron trigonum | - | - | - | - | - | - |
| Trachelomonas | 1 | 1 | - | - | - | - |
| Ulothrix | - | 2 | - | - | - | - |

US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | UNI234LV | CLA246GS | WAK158LR | 19010006 | CLA254LR | CLA243LV |
|---|---|---|---|---|---|---|
| Sample date -> | 10/16/2008 | 10/28/2008 | 11/13/2008 | 11/12/2008 | 11/6/2008 | 11/6/2008 |
| Taxon Name / SampleID/PerID -> | Sampleid 65637/PerID 24513 (# counted) | Sampleid 65636/PerID 24518 (# counted) | Sampleid 65715/PerID 24541 (# counted) | Sampleid 65731/PerID 24544 (# counted) | Sampleid 65736/PerID 24548 (# counted) | Sampleid 65737/PerID 24549 (# counted) |
| Actinotaenium | - | - | - | - | - | - |
| Actinotaenium perminutum | - | - | - | - | - | - |
| Anabaena | - | - | 9 | - | - | - |
| Anabaena subcylindrica | - | - | - | - | - | - |
| Ankistrodesmus | - | - | - | - | - | - |
| Ankistrodesmus falcatus | - | - | - | - | - | - |
| Aphanocapsa | - | 1 | - | 1 | - | - |
| Bacillariophyta | 68 | 282 | 225 | 280 | 284 | 294 |
| Batrachospermum | - | - | - | - | - | - |
| Bumilleriopsis brevis | - | - | - | - | - | 1 |
| Calothrix | - | - | - | - | - | - |
| Chlamydomonas | - | - | - | 2 | - | - |
| Chlorella | - | 3 | 5 | 1 | - | 2 |
| Chlorella vulgaris | - | - | - | - | - | - |
| Chlorococcum | - | - | - | - | 2 | - |
| Chlorococcum humicola | - | - | - | 3 | - | - |
| Chlorogonium | - | - | - | - | - | - |
| Chlorophyceae | - | - | - | - | - | - |
| Chroococcus | - | - | 1 | - | - | - |
| Chroococcus minutus | - | - | - | - | - | - |
| Chroococcus turgidus | - | - | - | - | - | - |
| Chrysophyceae | - | - | - | - | - | - |
| Cladophora | - | - | - | - | - | - |
| Closterium | - | - | - | - | - | - |
| Closterium gracile gracile | - | - | - | - | - | - |
| Closterium lanceolatum lanceolatum | - | - | - | - | - | - |
| Closterium moniliferum moniliferum | - | - | 1 | - | - | - |
| Closterium parvulum obtusum | - | - | - | - | - | - |
| Closterium peracerosum | - | - | - | - | - | - |
| Closterium venus venus | - | - | 2 | - | 1 | - |
| Cosmarium | - | - | - | - | - | 1 |
| Crucigenia tetrapedia | - | - | - | - | - | - |
| Cryptomonas | - | - | - | - | - | - |
| Cyanobium | - | - | - | - | - | - |
| Cyanobium parvum | - | - | 1 | - | - | - |
| Cyanobium plancticum | - | - | - | - | - | - |
| Cyanophyceae | - | - | - | - | - | - |
| Cyanothece | - | - | - | - | - | - |
| Cyanothece aeruginosa | - | - | - | - | - | - |
| Derepyxis | - | - | - | - | - | - |
| Desmidium | - | - | - | - | - | - |
| Dinobryon | - | - | - | - | - | - |
| Euglena | - | - | - | - | - | - |
| Euglena polymorpha | - | - | - | - | - | - |
| Euglenophyceae | - | - | - | - | - | - |
| Geitlerinema | - | - | - | - | - | - |
| Geitlerinema acutissimum | - | - | - | - | - | - |
| Glenodinium | - | - | - | - | - | - |



US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | UNI234LV | CLA246GS | WAK158LR | 19010006 | CLA254LR | CLA243LV |
|---|---|---|---|---|---|---|
| Sample date -> | 10/16/2008 | 10/28/2008 | 11/13/2008 | 11/12/2008 | 11/6/2008 | 11/6/2008 |
| Taxon Name / SampleID/PerID -> | Sampleid 65637/PerID 24513 (# counted) | Sampleid 65636/PerID 24518 (# counted) | Sampleid 65715/PerID 24541 (# counted) | Sampleid 65731/PerID 24544 (# counted) | Sampleid 65736/PerID 24548 (# counted) | Sampleid 65737/PerID 24549 (# counted) |
| Gomontiella | - | - | - | - | - | - |
| Hapalosiphon | - | - | - | - | - | - |
| Hapalosiphon hibernicus | - | - | - | - | - | - |
| Heteroleibleinia | - | - | - | - | - | - |
| Heteroleibleinia kuetzingii | - | - | - | - | - | - |
| Jaaginema | 1 | 4 | 16 | 3 | 3 | 1 |
| Komvophoron schmidlei | - | - | 2 | - | - | - |
| Lepocinclis | - | - | - | - | - | - |
| Leptolyngbya | - | - | - | - | - | - |
| Lyngbya martensiana | - | - | - | - | - | - |
| Merismopedia glauca | - | - | - | - | - | - |
| Merismopedia warmingiana | - | - | - | - | - | - |
| Micrasterias | - | - | - | - | - | - |
| Microcystis | - | - | - | - | - | - |
| Microspora | - | - | - | - | - | - |
| Microthamnion kuetzingianum | - | - | - | - | - | - |
| Mougeotia | - | 4 | 1 | - | - | - |
| Oedogonium | 2 | - | - | - | - | - |
| Oocystis | - | - | - | - | - | - |
| Ophiocytium capitatum | - | - | - | - | - | 1 |
| Oscillatoria | - | - | - | - | - | - |
| Oscillatoria acutissima | - | - | - | - | - | - |
| Oscillatoria limosa | - | - | - | - | - | - |
| Oscillatoria princeps | - | - | - | - | - | - |
| Oscillatoria tenuis | - | - | - | - | - | - |
| Phacus | - | 2 | - | 1 | - | - |
| Phacus megalopsis | - | - | - | - | - | - |
| Phormidium | - | - | - | - | - | - |
| Phormidium aerugineo-caeruleum | - | - | - | - | - | - |
| Planktolyngbya | - | 3 | 9 | - | - | - |
| Planktosphaeria | - | - | - | - | - | - |
| Planktothrix | - | - | - | - | - | - |
| Pleurocapsa | - | - | - | - | - | - |
| Protococcus | - | - | - | - | - | - |
| Pseudanabaena | - | - | 4 | - | - | - |
| Pseudanabaena mucicola | - | - | - | - | - | - |
| Rhabdogloea | - | - | - | - | - | - |
| Scenedesmus | - | - | 1 | - | - | - |
| Scenedesmus abundans | - | - | - | 2 | - | - |
| Scenedesmus acuminatus | - | - | - | - | - | - |
| Scenedesmus bicaudatus | - | - | - | - | - | - |
| Scenedesmus bijuga | - | - | - | 2 | - | - |
| Scenedesmus dimorphus | - | - | - | - | - | - |
| Scenedesmus quadricauda | - | - | - | 2 | - | - |
| Schizothrix calcicola | - | - | 20 | - | 9 | - |
| Scytonema | - | - | - | - | - | - |
| Selenastrum | - | - | - | - | - | - |
| Spirogyra | - | - | - | - | - | - |



US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | UNI234LV | CLA246GS | WAK158LR | 19010006 | CLA254LR | CLA243LV |
|---|---|---|---|---|---|---|
| Sample date -> | 10/16/2008 | 10/28/2008 | 11/13/2008 | 11/12/2008 | 11/6/2008 | 11/6/2008 |
| Taxon Name / SampleID/PerID -> | Sampleid 65637/PerID 24513 (# counted) | Sampleid 65636/PerID 24518 (# counted) | Sampleid 65715/PerID 24541 (# counted) | Sampleid 65731/PerID 24544 (# counted) | Sampleid 65736/PerID 24548 (# counted) | Sampleid 65737/PerID 24549 (# counted) |
| Staurastrum | - | - | 1 | - | - | - |
| Staurastrum illusum illusum | - | - | - | - | 1 | - |
| Staurastrum lapponicum lapponicum | - | - | - | - | - | - |
| Stigeoclonium | - | 1 | - | - | - | - |
| Synechococcus | - | - | - | - | - | - |
| Synechocystis | - | - | 7 | 3 | - | - |
| Tetraedron minimum | - | - | - | - | - | - |
| Tetraedron trigonum | - | - | - | - | - | - |
| Trachelomonas | - | - | - | - | - | - |
| Ulothrix | - | - | 3 | - | - | - |

US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | NUTREF001 | GAD106GS | GLA630GS | 24010002 | 27311650820 8152 | 22050083 |
|---|---|---|---|---|---|---|
| Sample date -> | 11/20/2008 | 11/20/2008 | 12/16/2008 | 12/17/2008 | 12/17/2008 | 1/14/2009 |
| | Sampleid 65739/PerID 24551 (# | Sampleid 65741/PerID 24553 (# | Sampleid 65891/PerID 24591 (# | Sampleid 65900/PerID 24599 (# | Sampleid 65907/PerID 24600 (# | Sampleid 65931/PerID 24605 (# |
| Taxon Name / SampleID/PerID -> | counted) | counted) | counted) | counted) | counted) | counted) |
| Actinotaenium | - | - | - | - | - | - |
| Actinotaenium perminutum | - | - | - | - | - | - |
| Anabaena | 1 | - | - | - | - | - |
| Anabaena subcylindrica | - | - | - | - | - | - |
| Ankistrodesmus | - | - | - | - | - | - |
| Ankistrodesmus falcatus | - | - | - | - | - | - |
| Aphanocapsa | - | - | - | - | - | 5 |
| Bacillariophyta | 171 | 264 | 274 | 270 | 228 | 201 |
| Batrachospermum | - | - | - | - | - | - |
| Bumilleriopsis brevis | - | - | - | - | - | - |
| Calothrix | - | - | - | - | - | 2 |
| Chlamydomonas | 3 | 3 | - | - | - | 2 |
| Chlorella | 2 | 1 | - | - | - | 22 |
| Chlorella vulgaris | - | - | - | - | - | - |
| Chlorococcum | - | - | - | - | - | 5 |
| Chlorococcum humicola | - | - | - | - | - | - |
| Chlorogonium | - | - | - | - | - | - |
| Chlorophyceae | - | - | - | - | - | - |
| Chroococcus | - | - | - | - | - | - |
| Chroococcus minutus | - | - | - | - | - | - |
| Chroococcus turgidus | - | - | - | - | - | - |
| Chrysophyceae | - | - | - | - | - | - |
| Cladophora | - | - | - | - | - | - |
| Closterium | - | 1 | - | - | - | - |
| Closterium gracile gracile | - | - | - | - | - | - |
| Closterium lanceolatum lanceolatum | - | - | - | - | - | - |
| Closterium moniliferum moniliferum | - | - | - | - | - | - |
| Closterium parvulum obtusum | - | - | - | - | - | - |
| Closterium peracerosum | - | - | - | - | - | - |
| Closterium venus venus | - | - | - | - | - | - |
| Cosmarium | - | - | - | - | - | - |
| Crucigenia tetrapedia | - | - | - | - | - | - |
| Cryptomonas | - | - | - | - | - | 1 |
| Cyanobium | - | - | - | - | - | 1 |
| Cyanobium parvum | - | 4 | - | - | - | 1 |
| Cyanobium plancticum | - | - | - | - | - | - |
| Cyanophyceae | - | - | - | - | - | 1 |
| Cyanothece | - | - | - | - | - | - |
| Cyanothece aeruginosa | - | - | - | - | 1 | - |
| Derepyxis | - | - | - | - | - | 1 |
| Desmidium | - | - | - | - | - | - |
| Dinobryon | - | - | - | - | - | 2 |
| Euglena | - | - | - | - | - | - |
| Euglena polymorpha | - | - | - | - | - | - |
| Euglenophyceae | - | - | - | - | - | - |
| Geitlerinema | - | - | - | - | - | - |
| Geitlerinema acutissimum | - | - | - | - | - | - |
| Glenodinium | - | - | - | - | - | - |



US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | NUTREF001 | GAD106GS | GLA630GS | 24010002 | 27311650820 8152 | 22050083 |
|---|---|---|---|---|---|---|
| Sample date -> | 11/20/2008 | 11/20/2008 | 12/16/2008 | 12/17/2008 | 12/17/2008 | 1/14/2009 |
| | Sampleid 65739/PerID 24551 (# | Sampleid 65741/PerID 24553 (# | Sampleid 65891/PerID 24591 (# | Sampleid 65900/PerID 24599 (# | Sampleid 65907/PerID 24600 (# | Sampleid 65931/PerID 24605 (# |
| Taxon Name / SampleID/PerID -> | counted) | counted) | counted) | counted) | counted) | counted) |
| Gomontiella | - | - | - | - | - | - |
| Hapalosiphon | - | - | 1 | - | - | - |
| Hapalosiphon hibernicus | - | - | - | - | - | - |
| Heteroleibleinia | - | - | - | - | - | - |
| Heteroleibleinia kuetzingii | - | - | - | - | - | - |
| Jaaginema | 4 | 9 | 3 | 15 | 3 | 1 |
| Komvophoron schmidlei | - | - | - | - | - | - |
| Lepocinclis | - | - | - | - | - | - |
| Leptolyngbya | - | - | - | - | - | - |
| Lyngbya martensiana | - | - | - | - | - | - |
| Merismopedia glauca | - | - | - | - | - | - |
| Merismopedia warmingiana | - | - | - | - | - | - |
| Micrasterias | - | - | - | - | - | - |
| Microcystis | - | - | - | - | - | - |
| Microspora | - | - | - | - | - | 9 |
| Microthamnion kuetzingianum | - | - | - | - | - | - |
| Mougeotia | - | - | - | - | - | - |
| Oedogonium | - | - | - | - | - | 1 |
| Oocystis | - | - | - | - | - | - |
| Ophiocytium capitatum | - | - | - | - | - | - |
| Oscillatoria | - | - | - | - | - | - |
| Oscillatoria acutissima | - | - | - | - | - | - |
| Oscillatoria limosa | - | - | - | - | - | - |
| Oscillatoria princeps | - | - | - | - | - | - |
| Oscillatoria tenuis | - | - | - | 8 | - | - |
| Phacus | - | - | - | - | - | - |
| Phacus megalopsis | - | - | - | - | - | - |
| Phormidium | - | - | - | 1 | - | - |
| Phormidium aerugineo-caeruleum | - | - | - | - | - | - |
| Planktolyngbya | 1 | 1 | 3 | - | 4 | 9 |
| Planktosphaeria | - | - | - | - | - | - |
| Planktothrix | - | - | 1 | 1 | - | - |
| Pleurocapsa | - | 1 | - | - | - | - |
| Protococcus | - | - | - | - | - | - |
| Pseudanabaena | 4 | 6 | - | - | - | 1 |
| Pseudanabaena mucicola | 1 | - | - | - | - | - |
| Rhabdogloea | - | - | - | - | - | - |
| Scenedesmus | - | - | - | - | - | - |
| Scenedesmus abundans | - | - | - | - | - | - |
| Scenedesmus acuminatus | - | - | - | - | - | - |
| Scenedesmus bicaudatus | - | - | - | - | - | - |
| Scenedesmus bijuga | - | - | - | - | - | - |
| Scenedesmus dimorphus | - | - | - | - | - | - |
| Scenedesmus quadricauda | - | - | - | - | 1 | - |
| Schizothrix calcicola | 7 | 3 | 18 | 3 | 63 | 7 |
| Scytonema | - | - | - | - | - | - |
| Selenastrum | - | - | - | - | - | - |
| Spirogyra | - | - | - | - | - | - |



US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | NUTREF001 | GAD106GS | GLA630GS | 24010002 | 27311650820 8152 | 22050083 |
|---|---|---|---|---|---|---|
| Sample date -> | 11/20/2008 | 11/20/2008 | 12/16/2008 | 12/17/2008 | 12/17/2008 | 1/14/2009 |
| | Sampleid 65739/PerID 24551 (# | Sampleid 65741/PerID 24553 (# | Sampleid 65891/PerID 24591 (# | Sampleid 65900/PerID 24599 (# | Sampleid 65907/PerID 24600 (# | Sampleid 65931/PerID 24605 (# |
| Taxon Name / SampleID/PerID -> | counted) | counted) | counted) | counted) | counted) | counted) |
| Staurastrum | - | 1 | - | - | - | - |
| Staurastrum illusum illusum | - | - | - | - | - | - |
| Staurastrum lapponicum lapponicum | - | - | - | - | - | - |
| Stigeoclonium | - | - | - | - | - | 5 |
| Synechococcus | 1 | - | - | - | - | - |
| Synechocystis | - | 6 | - | - | - | 21 |
| Tetraedron minimum | - | - | - | - | - | - |
| Tetraedron trigonum | - | - | - | - | - | - |
| Trachelomonas | - | - | - | 2 | - | - |
| Ulothrix | - | - | - | - | - | - |

US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | 22050040 | | | |
|---|---|---|---|---|
| Sample date -> | 1/14/2009 | | | |
| Taxon Name / SampleID/PerID -> | Sampleid 65932/PerID 24606 (# counted) | Phylum | Class | Order |
| Actinotaenium | - | Chlorophycota | Chlorophyceae | Zygnematales |
| Actinotaenium perminutum | - | Chlorophycota | Chlorophyceae | Zygnematales |
| Anabaena | - | Cyanophycota | Cyanophyceae | Nostocales |
| Anabaena subcylindrica | - | Cyanophycota | Cyanophyceae | Nostocales |
| Ankistrodesmus | - | Chlorophycota | Chlorophyceae | Chlorococcales |
| Ankistrodesmus falcatus | - | Chlorophycota | Chlorophyceae | Chlorococcales |
| Aphanocapsa | 4 | Cyanophycota | Cyanophyceae | Chroococcales |
| Bacillariophyta | 220 | Bacillariophyta | Bacillariophyta | Bacillariophyta |
| Batrachospermum | - | Rhodophycota | Rhodophyceae | Nemaliales |
| Bumilleriopsis brevis | - | Xanthophyta | Xanthophyceae | Mischococcales |
| Calothrix | - | Cyanophycota | Cyanophyceae | Nostocales |
| Chlamydomonas | - | Chlorophycota | Chlorophyceae | Volvocales |
| Chlorella | 15 | Chlorophycota | Chlorophyceae | Chlorococcales |
| Chlorella vulgaris | - | Chlorophycota | Chlorophyceae | Chlorococcales |
| Chlorococcum | 3 | Chlorophycota | Chlorophyceae | Chlorococcales |
| Chlorococcum humicola | - | Chlorophycota | Chlorophyceae | Chlorococcales |
| Chlorogonium | - | Chlorophycota | Chlorophyceae | Volvocales |
| Chlorophyceae | 1 | Chlorophycota | Chlorophyceae | Chlorophyceae |
| Chroococcus | - | Cyanophycota | Cyanophyceae | Chroococcales |
| Chroococcus minutus | 1 | Cyanophycota | Cyanophyceae | Chroococcales |
| Chroococcus turgidus | - | Cyanophycota | Cyanophyceae | Chroococcales |
| Chrysophyceae | - | Chrysophyta | Chrysophyceae | Chrysophyceae |
| Cladophora | - | Chlorophycota | Chlorophyceae | Cladophorales |
| Closterium | - | Chlorophycota | Chlorophyceae | Zygnematales |
| Closterium gracile gracile | - | Chlorophycota | Chlorophyceae | Zygnematales |
| Closterium lanceolatum lanceolatum | - | Chlorophycota | Chlorophyceae | Zygnematales |
| Closterium moniliferum moniliferum | - | Chlorophycota | Chlorophyceae | Zygnematales |
| Closterium parvulum obtusum | - | Chlorophycota | Chlorophyceae | Zygnematales |
| Closterium peracerosum | - | Chlorophycota | Chlorophyceae | Zygnematales |
| Closterium venus venus | - | Chlorophycota | Chlorophyceae | Zygnematales |
| Cosmarium | - | Chlorophycota | Chlorophyceae | Zygnematales |
| Crucigenia tetrapedia | - | Chlorophycota | Chlorophyceae | Chlorococcales |
| Cryptomonas | - | Cryptophycophyta | Cryptophyceae | Cryptomonadales |
| Cyanobium | - | Cyanophycota | Cyanophyceae | Chroococcales |
| Cyanobium parvum | 8 | Cyanophycota | Cyanophyceae | Chroococcales |
| Cyanobium plancticum | - | Cyanophycota | Cyanophyceae | Chroococcales |
| Cyanophyceae | - | Cyanophycota | Cyanophyceae | Cyanophyceae |
| Cyanothece | - | Cyanophycota | Cyanophyceae | Chroococcales |
| Cyanothece aeruginosa | - | Cyanophycota | Cyanophyceae | Chroococcales |
| Derepyxis | - | Haptophyta | Prymnesiophyceae | Isochrysidales |
| Desmidium | - | Chlorophycota | Chlorophyceae | Zygnematales |
| Dinobryon | - | Chrysophyta | Chrysophyceae | Ochromonadales |
| Euglena | - | Euglenophycota | Euglenophyceae | Euglenales |
| Euglena polymorpha | - | Euglenophycota | Euglenophyceae | Euglenales |
| Euglenophyceae | - | Euglenophycota | Euglenophyceae | Euglenophyceae |
| Geitlerinema | - | Cyanophycota | Cyanophyceae | Oscillatoriales |
| Geitlerinema acutissimum | - | Cyanophycota | Cyanophyceae | Oscillatoriales |
| Glenodinium | - | Pyrrophycophyta | Dinophyceae | Peridiniales |



US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | 22050040 | | | |
|---|---|---|---|---|
| Sample date -> | 1/14/2009 | | | |
| Taxon Name / SampleID/PerID -> | Sampleid 65932/PerID 24606 (# counted) | Phylum | Class | Order |
| Gomontiella | - | Cyanophycota | Cyanophyceae | Oscillatoriales |
| Hapalosiphon | - | Cyanophycota | Cyanophyceae | Stigonematales |
| Hapalosiphon hibernicus | - | Cyanophycota | Cyanophyceae | Stigonematales |
| Heteroleibleinia | - | Cyanophycota | Cyanophyceae | Oscillatoriales |
| Heteroleibleinia kuetzingii | - | Cyanophycota | Cyanophyceae | Oscillatoriales |
| Jaaginema | - | Cyanophycota | Cyanophyceae | Oscillatoriales |
| Komvophoron schmidlei | - | Cyanophycota | Cyanophyceae | Oscillatoriales |
| Lepocinclis | - | Euglenophycota | Euglenophyceae | Euglenales |
| Leptolyngbya | - | Cyanophycota | Cyanophyceae | Oscillatoriales |
| Lyngbya martensiana | - | Cyanophycota | Cyanophyceae | Oscillatoriales |
| Merismopedia glauca | - | Cyanophycota | Cyanophyceae | Chroococcales |
| Merismopedia warmingiana | - | Cyanophycota | Cyanophyceae | Chroococcales |
| Micrasterias | - | Chlorophycota | Chlorophyceae | Zygnematales |
| Microcystis | - | Cyanophycota | Cyanophyceae | Chroococcales |
| Microspora | - | Chlorophycota | Chlorophyceae | Microsporales |
| Microthamnion kuetzingianum | 1 | Chlorophycota | Chlorophyceae | Chaetophorales |
| Mougeotia | - | Chlorophycota | Chlorophyceae | Zygnematales |
| Oedogonium | - | Chlorophycota | Chlorophyceae | Oedogoniales |
| Oocystis | - | Chlorophycota | Chlorophyceae | Chlorococcales |
| Ophiocytium capitatum | - | Xanthophyta | Xanthophyceae | Mischococcales |
| Oscillatoria | - | Cyanophycota | Cyanophyceae | Oscillatoriales |
| Oscillatoria acutissima | - | Cyanophycota | Cyanophyceae | Oscillatoriales |
| Oscillatoria limosa | - | Cyanophycota | Cyanophyceae | Oscillatoriales |
| Oscillatoria princeps | - | Cyanophycota | Cyanophyceae | Oscillatoriales |
| Oscillatoria tenuis | - | Cyanophycota | Cyanophyceae | Oscillatoriales |
| Phacus | - | Euglenophycota | Euglenophyceae | Euglenales |
| Phacus megalopsis | - | Euglenophycota | Euglenophyceae | Euglenales |
| Phormidium | - | Cyanophycota | Cyanophyceae | Oscillatoriales |
| Phormidium aerugineo-caeruleum | - | Cyanophycota | Cyanophyceae | Oscillatoriales |
| Planktolyngbya | 16 | Cyanophycota | Cyanophyceae | Oscillatoriales |
| Planktosphaeria | - | Chlorophycota | Chlorophyceae | Chlorococcales |
| Planktothrix | 2 | Cyanophycota | Cyanophyceae | Oscillatoriales |
| Pleurocapsa | - | Cyanophycota | Cyanophyceae | Pleurocapsales |
| Protococcus | - | Chlorophycota | Chlorophyceae | Ctenocladales |
| Pseudanabaena | 1 | Cyanophycota | Cyanophyceae | Oscillatoriales |
| Pseudanabaena mucicola | - | Cyanophycota | Cyanophyceae | Oscillatoriales |
| Rhabdogloea | - | Cyanophycota | Cyanophyceae | Chroococcales |
| Scenedesmus | - | Chlorophycota | Chlorophyceae | Chlorococcales |
| Scenedesmus abundans | - | Chlorophycota | Chlorophyceae | Chlorococcales |
| Scenedesmus acuminatus | - | Chlorophycota | Chlorophyceae | Chlorococcales |
| Scenedesmus bicaudatus | - | Chlorophycota | Chlorophyceae | Chlorococcales |
| Scenedesmus bijuga | - | Chlorophycota | Chlorophyceae | Chlorococcales |
| Scenedesmus dimorphus | - | Chlorophycota | Chlorophyceae | Chlorococcales |
| Scenedesmus quadricauda | - | Chlorophycota | Chlorophyceae | Chlorococcales |
| Schizothrix calcicola | 7 | Cyanophycota | Cyanophyceae | Oscillatoriales |
| Scytonema | - | Cyanophycota | Cyanophyceae | Nostocales |
| Selenastrum | - | Chlorophycota | Chlorophyceae | Chlorococcales |
| Spirogyra | - | Chlorophycota | Chlorophyceae | Zygnematales |



US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | 22050040 | | | |
|---|---|---|---|---|
| Sample date -> | 1/14/2009 | | | |
| Taxon Name / SampleID/PerID -> | Sampleid 65932/PerID 24606 (# counted) | Phylum | Class | Order |
| Staurastrum | - | Chlorophycota | Chlorophyceae | Zygnematales |
| Staurastrum illusum illusum | - | Chlorophycota | Chlorophyceae | Zygnematales |
| Staurastrum lapponicum lapponicum | - | Chlorophycota | Chlorophyceae | Zygnematales |
| Stigeoclonium | 1 | Chlorophycota | Chlorophyceae | Chaetophorales |
| Synechococcus | - | Cyanophycota | Cyanophyceae | Chroococcales |
| Synechocystis | 19 | Cyanophycota | Cyanophyceae | Chroococcales |
| Tetraedron minimum | - | Chlorophycota | Chlorophyceae | Chlorococcales |
| Tetraedron trigonum | - | Chlorophycota | Chlorophyceae | Chlorococcales |
| Trachelomonas | 1 | Euglenophycota | Euglenophyceae | Euglenales |
| Ulothrix | - | Chlorophycota | Chlorophyceae | Ulotrichales |

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As Entered / STORET station ->
Sample date ->

| Taxon Name / SampleID/PerID -> | Family | Genus | Current Name |
|---|---|---|---|
| Actinotaenium | Desmidiaceae | Actinotaenium | |
| Actinotaenium perminutum | Desmidiaceae | Actinotaenium | |
| Anabaena | Nostocaceae | Anabaena | |
| Anabaena subcylindrica | Nostocaceae | Anabaena | |
| Ankistrodesmus | Oocystaceae | Ankistrodesmus | |
| Ankistrodesmus falcatus | Oocystaceae | Ankistrodesmus | |
| Aphanocapsa | Merismopediaceae | Aphanocapsa | |
| Bacillariophyta | Bacillariophyta | Bacillariophyta | |
| Batrachospermum | Batrachospermaceae | Batrachospermum | |
| Bumilleriopsis brevis | Centritractaceae | Bumilleriopsis | |
| Calothrix | Rivulariaceae | Calothrix | |
| Chlamydomonas | Chlamydomonadaceae | Chlamydomonas | |
| Chlorella | Oocystaceae | Chlorella | |
| Chlorella vulgaris | Oocystaceae | Chlorella | |
| Chlorococcum | Chlorococcaceae | Chlorococcum | |
| Chlorococcum humicola | Chlorococcaceae | Chlorococcum | |
| Chlorogonium | Chlamydomonadaceae | Chlorogonium | |
| Chlorophyceae | Chlorophyceae | Chlorophyceae | |
| Chroococcus | Chroococcaceae | Chroococcus | |
| Chroococcus minutus | Chroococcaceae | Chroococcus | |
| Chroococcus turgidus | Chroococcaceae | Chroococcus | |
| Chrysophyceae | Chrysophyceae | Chrysophyceae | |
| Cladophora | Cladophoraceae | Cladophora | |
| Closterium | Desmidiaceae | Closterium | |
| Closterium gracile gracile | Desmidiaceae | Closterium | |
| Closterium lanceolatum lanceolatum | Desmidiaceae | Closterium | |
| Closterium moniliferum moniliferum | Desmidiaceae | Closterium | |
| Closterium parvulum obtusum | Desmidiaceae | Closterium | |
| Closterium peracerosum | Desmidiaceae | Closterium | |
| Closterium venus venus | Desmidiaceae | Closterium | |
| Cosmarium | Desmidiaceae | Cosmarium | |
| Crucigenia tetrapedia | Scenedesmaceae | Crucigenia | |
| Cryptomonas | Cryptomonadaceae | Cryptomonas | |
| Cyanobium | Synechococcaceae | Cyanobium | |
| Cyanobium parvum | Synechococcaceae | Cyanobium | |
| Cyanobium plancticum | Synechococcaceae | Cyanobium | |
| Cyanophyceae | Cyanophyceae | Cyanophyceae | |
| Cyanothece | Synechococcaceae | Cyanothece | |
| Cyanothece aeruginosa | Synechococcaceae | Cyanothece | |
| Derepyxis | Derepyxidaceae | Derepyxis | |
| Desmidium | Desmidiaceae | Desmidium | |
| Dinobryon | Dinobryaceae | Dinobryon | |
| Euglena | Euglenaceae | Euglena | |
| Euglena polymorpha | Euglenaceae | Euglena | |
| Euglenophyceae | Euglenophyceae | Euglenophyceae | |
| Geitlerinema | Pseudanabaenaceae | Geitlerinema | |
| Geitlerinema acutissimum | Pseudanabaenaceae | Geitlerinema | |
| Glenodinium | Glenodiniaceae | Glenodinium | |



US EPA ARCHIVE DOCUMENT

As Entered / STORET station ->
Sample date ->

| Taxon Name / SampleID/PerID -> | Family | Genus | Current Name |
|---|---|---|---|
| Gomontiella | Gomontiellaceae | Gomontiella | |
| Hapalosiphon | Stigonemataceae | Hapalosiphon | |
| Hapalosiphon hibernicus | Stigonemataceae | Hapalosiphon | |
| Heteroleibleinia | Pseudanabaenaceae | Heteroleibleinia | |
| Heteroleibleinia kuetzingii | Pseudanabaenaceae | Heteroleibleinia | |
| Jaaginema | Pseudanabaenaceae | Jaaginema | |
| Komvophoron schmidlei | Borziaceae | Komvophoron | |
| Lepocinclis | Euglenaceae | Lepocinclis | |
| Leptolyngbya | Pseudanabaenaceae | Leptolyngbya | |
| Lyngbya martensiana | Oscillatoriaceae | Lyngbya | |
| Merismopedia glauca | Merismopediaceae | Merismopedia | |
| Merismopedia warmingiana | Merismopediaceae | Merismopedia | |
| Micrasterias | Desmidiaceae | Micrasterias | |
| Microcystis | Microcystaceae | Microcystis | |
| Microspora | Microsporaceae | Microspora | |
| Microthamnion kuetzingianum | Chaetophoraceae | Microthamnion | |
| Mougeotia | Zygnemataceae | Mougeotia | |
| Oedogonium | Oedogoniaceae | Oedogonium | |
| Oocystis | Oocystaceae | Oocystis | |
| Ophiocytium capitatum | Ophiocytaceae | Ophiocytium | |
| Oscillatoria | Oscillatoriaceae | Oscillatoria | |
| Oscillatoria acutissima | Pseudanabaenaceae | Geitlerinema | Geitlerinema acutissimum |
| Oscillatoria limosa | Oscillatoriaceae | Oscillatoria | |
| Oscillatoria princeps | Oscillatoriaceae | Oscillatoria | |
| Oscillatoria tenuis | Oscillatoriaceae | Oscillatoria | |
| Phacus | Euglenaceae | Phacus | |
| Phacus megalopsis | Euglenaceae | Phacus | |
| Phormidium | Phormidiaceae | Phormidium | |
| Phormidium aerugineo-caeruleum | Phormidiaceae | Phormidium | |
| Planktolyngbya | Pseudanabaenaceae | Planktolyngbya | |
| Planktosphaeria | Oocystaceae | Planktosphaeria | |
| Planktothrix | Phormidiaceae | Planktothrix | |
| Pleurocapsa | Pleurocapsaceae | Pleurocapsa | |
| Protococcus | Protococcaceae | Protococcus | |
| Pseudanabaena | Pseudanabaenaceae | Pseudanabaena | |
| Pseudanabaena mucicola | Pseudanabaenaceae | Pseudanabaena | |
| Rhabdogloea | Synechococcaceae | Rhabdogloea | |
| Scenedesmus | Scenedesmaceae | Scenedesmus | |
| Scenedesmus abundans | Scenedesmaceae | Scenedesmus | |
| Scenedesmus acuminatus | Scenedesmaceae | Scenedesmus | |
| Scenedesmus bicaudatus | Scenedesmaceae | Scenedesmus | |
| Scenedesmus bijuga | Scenedesmaceae | Scenedesmus | |
| Scenedesmus dimorphus | Scenedesmaceae | Scenedesmus | |
| Scenedesmus quadricauda | Scenedesmaceae | Scenedesmus | |
| Schizothrix calcicola | Oscillatoriaceae | Schizothrix | |
| Scytonema | Scytonemataceae | Scytonema | |
| Selenastrum | Scenedesmaceae | Selenastrum | |
| Spirogyra | Zygnemataceae | Spirogyra | |



US EPA ARCHIVE DOCUMENT

As Entered / STORET station ->
Sample date ->

| Taxon Name / SampleID/PerID -> | Family | Genus | Current Name |
|---|---|---|---|
| Staurastrum | Desmidiaceae | Staurastrum | |
| Staurastrum illusum illusum | Desmidiaceae | Staurastrum | |
| Staurastrum lapponicum lapponicum | Desmidiaceae | Staurastrum | |
| Stigeoclonium | Chaetophoraceae | Stigeoclonium | |
| Synechococcus | Chroococcaceae | Synechococcus | |
| Synechocystis | Chroococcaceae | Synechocystis | |
| Tetraedron minimum | Chlorococcaceae | Tetraedron | |
| Tetraedron trigonum | Chlorococcaceae | Tetraedron | |
| Trachelomonas | Euglenaceae | Trachelomonas | |
| Ulothrix | Ulotrichaceae | Ulothrix | |

US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | 273116508208152 | LEV502GS | 3513 | PUT308GS |
|---|---|---|---|---|
| Sample date -> | 6/21/2006 | 2/21/2007 | 2/20/2007 | 2/26/2007 |
| | Sampleid 52834/PerDiaID | Sampleid 57322/PerDiaID | Sampleid 57324/PerDiaID | Sampleid 57431/PerDiaID |
| Taxon Name / SampleID/PerDiaID -> | 21128 (# counted) | 21789 (# counted) | 21790 (# counted) | 21831 (# counted) |
| Achnanthaceae | - | - | - | - |
| Achnanthales | - | - | - | - |
| Achnanthes | - | 7 | 70 | 12 |
| Achnanthes clevei | 14 | 2 | 31 | - |
| Achnanthes exigua | 24 | 1 | 3 | 5 |
| Achnanthes fluviatilis | - | - | - | - |
| Achnanthes hungarica | - | - | - | - |
| Achnanthes lanceolata | - | 3 | 7 | 4 |
| Achnanthes lanceolata apiculata | 68 | 3 | - | 9 |
| Achnanthes lanceolata frequentissima | 13 | - | - | - |
| Achnanthes lanceolata rostrata | 2 | 4 | - | - |
| Achnanthes minutissima | - | - | 1 | - |
| Achnanthes peragalli | - | - | - | - |
| Achnanthes rupestoides | - | 91 | 4 | - |
| Achnanthidiaceae | - | - | - | - |
| Achnanthidium | - | - | - | - |
| Achnanthidium exiguum | - | - | - | - |
| Achnanthidium microcephalum | - | - | - | - |
| Achnanthidium minutissimum | - | - | - | - |
| Actinella | - | - | - | - |
| Amphipleura pellucida | - | 2 | - | - |
| Amphora | 4 | 17 | 6 | - |
| Amphora copulata | - | - | - | - |
| Amphora libyca | - | 2 | - | - |
| Amphora veneta | - | 1 | - | - |
| Anorthoneis | - | - | - | - |
| Asterionella | - | - | - | - |
| Aulacoseira | 4 | - | - | 3 |
| Aulacoseira granulata | - | - | - | - |
| Aulacoseira herzogii | - | - | - | - |
| Bacillaria paxillifer | 12 | - | - | - |
| Bacillariophyceae | - | 19 | 28 | 11 |
| Bacillariophyta | - | - | - | - |
| Brachysira | - | - | - | - |
| Brachysira brebissonii | - | - | - | - |
| Brachysira microcephala | - | - | - | - |
| Brachysira vitrea | 3 | - | - | - |
| Caloneis | - | - | - | - |
| Caloneis bacillum | - | - | - | - |
| Capartogramma crucicula | 11 | - | - | - |
| Cavinula | - | - | - | - |
| Cavinula cocconeiformis | - | - | - | - |
| Cavinula jaernefeltii | - | - | - | - |
| Chamaepinnularia margaritiana | - | - | - | - |
| Chamaepinnularia minutissima | - | - | - | - |
| Cocconeis | - | 5 | 4 | - |
| Cocconeis disculus | - | - | - | - |
| Cocconeis fluviatilis | 37 | 26 | - | - |



US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | 273116508208152 | LEV502GS | 3513 | PUT308GS |
|---|---|---|---|---|
| Sample date -> | 6/21/2006 | 2/21/2007 | 2/20/2007 | 2/26/2007 |
| Taxon Name / SampleID/PerDiaID -> | Sampleid 52834/PerDiaID 21128 (# counted) | Sampleid 57322/PerDiaID 21789 (# counted) | Sampleid 57324/PerDiaID 21790 (# counted) | Sampleid 57431/PerDiaID 21831 (# counted) |
| Cocconeis pediculus | - | - | - | - |
| Cocconeis placentula | - | 71 | 46 | - |
| Cocconeis pseudothumensis | - | - | - | - |
| Coscinodiscophyceae | - | - | - | - |
| Craticula | 1 | - | - | 2 |
| Craticula minusculoides | - | - | - | - |
| Cyclostephanos invisitatus | - | - | - | - |
| Cyclotella | - | - | - | - |
| Cyclotella atomus | - | - | - | - |
| Cyclotella meneghiniana | 2 | - | - | - |
| Cyclotella pseudostelligera | - | - | - | - |
| Cymbella | - | - | 3 | - |
| Cymbella aspera | - | - | - | - |
| Cymbella subcuspidata | - | - | - | - |
| Cymbellaceae | - | - | - | - |
| Cymbellales | - | - | - | - |
| Diadesmis confervacea | 33 | 4 | 71 | 10 |
| Diadesmis contenta | - | 1 | - | - |
| Diatoma | - | - | - | - |
| Diploneis | 5 | - | - | - |
| Diploneis oblongella | - | - | - | - |
| Diploneis ovalis | - | - | - | - |
| Diploneis parma | - | - | - | - |
| Diploneis pseudovalis | - | 1 | - | - |
| Encyonema | - | - | - | - |
| Encyonema evergladianum | - | 1 | - | - |
| Encyonema minutum | - | - | - | - |
| Encyonema neomesianum | - | - | - | - |
| Encyonema silesiacum | - | - | 1 | 9 |
| Encyonopsis microcephala | - | - | - | - |
| Epithemia | - | - | - | - |
| Eunotia | 19 | 17 | - | 235 |
| Eunotia bilunaris | - | 2 | - | 1 |
| Eunotia carolina | - | - | - | - |
| Eunotia exigua | - | - | - | - |
| Eunotia flexuosa | - | - | - | - |
| Eunotia formica | 1 | - | - | - |
| Eunotia implicata | - | - | - | - |
| Eunotia incisa | - | - | - | - |
| Eunotia meisteri | - | - | - | - |
| Eunotia minor | - | - | - | - |
| Eunotia naegelii | - | - | - | - |
| Eunotia paludosa | - | - | - | - |
| Eunotia pectinalis | - | - | - | 6 |
| Eunotia pectinalis undulata | - | - | - | - |
| Eunotia rhomboidea | - | - | - | - |
| Eunotia transfuga | - | - | - | - |
| Eunotia undulata | - | - | - | - |



US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | 273116508208152 | LEV502GS | 3513 | PUT308GS |
|---|---|---|---|---|
| Sample date -> | 6/21/2006 | 2/21/2007 | 2/20/2007 | 2/26/2007 |
| Taxon Name / SampleID/PerDiaID -> | Sampleid 52834/PerDiaID 21128 (# counted) | Sampleid 57322/PerDiaID 21789 (# counted) | Sampleid 57324/PerDiaID 21790 (# counted) | Sampleid 57431/PerDiaID 21831 (# counted) |
| Eunotia yanomami | - | - | - | - |
| Eunotia zygodon | - | - | - | - |
| Fragilaria | - | 2 | 6 | - |
| Fragilaria brevistriata | 15 | - | - | - |
| Fragilaria capucina | - | - | - | - |
| Fragilaria crotonensis | - | - | - | - |
| Fragilaria javanica | - | - | - | - |
| Fragilaria pinnata | 3 | 5 | 1 | - |
| Fragilaria synegrotesca | - | - | - | - |
| Fragilaria virescens | - | - | - | - |
| Fragilariaceae | 109 | 14 | 6 | - |
| Fragilariforma | - | - | - | - |
| Fragilariforma bicapitata | - | - | - | - |
| Fragilariforma virescens | - | - | - | - |
| Fragilariophyceae | - | - | 1 | 2 |
| Frustulia | - | - | - | 8 |
| Frustulia rhomboides | - | - | - | - |
| Frustulia saxonica | - | - | - | 2 |
| Frustulia vulgaris | 1 | - | - | - |
| Geissleria decussis | - | - | - | - |
| Gomphonema | 2 | 60 | 5 | 22 |
| Gomphonema affine | - | - | - | - |
| Gomphonema augur | - | - | - | - |
| Gomphonema clevei | - | - | - | - |
| Gomphonema gracile | 1 | - | - | 1 |
| Gomphonema grovei lingulatum | - | - | - | - |
| Gomphonema guaraniarum | - | - | - | - |
| Gomphonema minutum | - | - | - | - |
| Gomphonema parvulum | - | - | - | 7 |
| Gomphonema truncatum | - | - | - | - |
| Gomphonema vibrio | - | - | - | - |
| Gyrosigma | 2 | - | - | - |
| Gyrosigma obscurum | - | - | 1 | - |
| Hantzschia | 2 | - | - | - |
| Hantzschia amphioxys | - | - | - | - |
| Hippodonta | - | 8 | - | - |
| Hippodonta capitata | 17 | 1 | - | 1 |
| Hippodonta hungarica | - | 2 | - | 1 |
| Karayevia clevei | - | - | - | - |
| Kobayasiella | - | - | - | - |
| Lemnicola hungarica | - | - | - | - |
| Luticola | - | - | - | - |
| Luticola mutica | - | - | - | - |
| Melosira | 1 | - | 152 | - |
| Meridion | - | - | - | - |
| Microcostatus polonarum | - | - | - | - |
| Navicula | 4 | 38 | 17 | 4 |
| Navicula bouillantensis | - | - | - | - |



US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | 273116508208152 | LEV502GS | 3513 | PUT308GS |
|---|---|---|---|---|
| Sample date -> | 6/21/2006 | 2/21/2007 | 2/20/2007 | 2/26/2007 |
| Taxon Name / SampleID/PerDiaID -> | Sampleid 52834/PerDiaID 21128 (# counted) | Sampleid 57322/PerDiaID 21789 (# counted) | Sampleid 57324/PerDiaID 21790 (# counted) | Sampleid 57431/PerDiaID 21831 (# counted) |
| Navicula clementis | - | - | - | - |
| Navicula cocconeiformis | - | - | - | 3 |
| Navicula constans | 4 | 2 | 3 | 1 |
| Navicula cryptocephala | 6 | 7 | - | 4 |
| Navicula cryptotenella | - | - | 1 | - |
| Navicula decussis | - | - | - | - |
| Navicula elginensis | 5 | - | - | - |
| Navicula festiva | - | - | - | - |
| Navicula gastrum | 5 | - | - | - |
| Navicula germainii | 8 | - | - | - |
| Navicula heimansioides | - | - | - | - |
| Navicula ingenua | - | - | - | - |
| Navicula kotschyi | - | - | - | - |
| Navicula longicephala | - | - | - | - |
| Navicula mediocris | - | - | - | - |
| Navicula minima | - | 2 | 1 | 1 |
| Navicula occulta | - | - | - | - |
| Navicula peregrina | 11 | - | - | - |
| Navicula placenta | - | - | - | - |
| Navicula placentula | - | - | - | - |
| Navicula porifera | - | - | - | - |
| Navicula radiosa | 6 | 1 | - | - |
| Navicula rhynchocephala | - | - | - | - |
| Navicula rostellata | 1 | - | - | - |
| Navicula schroeteri | - | - | - | - |
| Navicula seminulum | 3 | - | - | 25 |
| Navicula tripunctata | - | - | - | - |
| Navicula vaneeii | - | - | - | - |
| Navicula viridulacalcis | - | 3 | - | - |
| Naviculaceae | 18 | 5 | 19 | 30 |
| Naviculales | - | - | - | - |
| Neidium | - | 2 | - | - |
| Neidium alpinum | - | - | - | - |
| Neidium alpinum quadripunctatum | - | - | - | - |
| Neidium amphigomphus | - | - | - | - |
| Neidium binodis | - | - | - | - |
| Neidium densestriatum | - | - | - | 1 |
| Neidium dubium | - | - | - | - |
| Neidium ladogensis densestriatum | - | - | - | - |
| Nitzschia | 1 | 23 | 9 | 31 |
| Nitzschia amphibia | - | - | - | - |
| Nitzschia clausii | - | - | - | - |
| Nitzschia dissipata | - | - | - | - |
| Nitzschia frustulum | - | - | - | - |
| Nitzschia gracilis | 1 | - | - | - |
| Nitzschia intermedia | - | - | - | - |
| Nitzschia linearis | - | - | - | - |
| Nitzschia nana | - | - | - | 2 |



US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | 273116508208152 | LEV502GS | 3513 | PUT308GS |
|---|---|---|---|---|
| Sample date -> | 6/21/2006 | 2/21/2007 | 2/20/2007 | 2/26/2007 |
| | Sampleid 52834/PerDiaID | Sampleid 57322/PerDiaID | Sampleid 57324/PerDiaID | Sampleid 57431/PerDiaID |
| Taxon Name / SampleID/PerDiaID -> | 21128 (# counted) | 21789 (# counted) | 21790 (# counted) | 21831 (# counted) |
| Nitzschia palea | 4 | - | - | - |
| Nitzschia paleacea | - | - | - | - |
| Nitzschia palustris | - | - | - | - |
| Nitzschia reversa | - | - | - | - |
| Nitzschia scalaris | - | - | - | - |
| Nitzschia seriata | - | - | - | - |
| Nitzschia serrata | - | - | - | - |
| Nitzschia subacicularis | - | - | - | - |
| Nupela | - | - | - | - |
| Nupela cymbelloidea | - | - | - | - |
| Nupela neotropica | - | - | - | - |
| Opephora | - | - | - | - |
| Pinnularia | - | 6 | - | 43 |
| Pinnularia acrosphaeria | - | - | - | - |
| Placoneis | - | - | - | - |
| Placoneis elginensis | - | - | - | - |
| Planothidium | - | - | - | - |
| Planothidium apiculatum | - | - | - | - |
| Planothidium delicatulum | - | - | - | - |
| Planothidium frequentissimum | - | - | - | - |
| Planothidium lanceolatum | - | - | - | - |
| Planothidium peragalli | - | - | - | - |
| Planothidium rostratum | - | - | - | - |
| Pleurosira laevis | - | - | - | - |
| Psammothidium daonense | - | - | - | - |
| Psammothidium sacculum | - | - | - | - |
| Pseudostaurosira brevistriata | - | - | - | - |
| Rhopalodia | - | - | - | - |
| Rossithidium | - | - | - | - |
| Rossithidium pusillium | - | - | - | - |
| Sellaphora | - | 2 | - | - |
| Sellaphora laevissima | - | - | - | - |
| Sellaphora pupula | 8 | - | - | 2 |
| Stauroneis | - | 1 | - | - |
| Stauroneis anceps | - | - | - | - |
| Stauroneis phoenicenteron | - | - | - | - |
| Stauroneis prominula | - | - | - | - |
| Stauroneis smithii | 6 | - | - | - |
| Staurosira construens | - | - | - | - |
| Staurosira elliptica | - | - | - | - |
| Staurosirella | - | - | - | - |
| Staurosirella leptostauron | - | - | - | - |
| Staurosirella pinnata | - | - | - | - |
| Stenopterobia | - | - | - | - |
| Stenopterobia delicatissima | - | - | - | - |
| Stephanodiscus | - | - | - | - |
| Surirella | - | - | - | 2 |
| Surirella angusta | - | - | - | - |



US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | 273116508208152 | LEV502GS | 3513 | PUT308GS |
|---|---|---|---|---|
| Sample date -> | 6/21/2006 | 2/21/2007 | 2/20/2007 | 2/26/2007 |
| | Sampleid 52834/PerDiaID | Sampleid 57322/PerDiaID | Sampleid 57324/PerDiaID | Sampleid 57431/PerDiaID |
| Taxon Name / SampleID/PerDiaID -> | 21128 (# counted) | 21789 (# counted) | 21790 (# counted) | 21831 (# counted) |
| Synedra | - | 1 | 1 | - |
| Synedra acus | - | - | - | - |
| Synedra fasciculata | - | - | 2 | - |
| Synedra ulna | - | 36 | - | - |
| Tabellaria | - | - | - | - |
| Terpsinoe musica | 3 | - | - | - |
| Thalassionema | - | - | - | - |
| Thalassiosira | - | - | - | - |
| Tryblionella | - | - | - | - |
| Tryblionella levidensis | - | - | - | - |

US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | NUTREF001 | LIB104LV | 23010464 | CLA246GS |
|---|---|---|---|---|
| Sample date -> | 6/10/2008 | 6/10/2008 | 5/7/2008 | 5/28/2008 |
| | Sampleid 65029/PerDiaID | Sampleid 65025/PerDiaID | Sampleid 64546/PerDiaID | Sampleid 65250/PerDiaID |
| Taxon Name / SampleID/PerDiaID -> | 24392 (# counted) | 24393 (# counted) | 24394 (# counted) | 24411 (# counted) |
| Achnanthaceae | - | - | - | - |
| Achnanthales | 64 | 82 | - | - |
| Achnanthes | 75 | 45 | 12 | 9 |
| Achnanthes clevei | - | - | - | - |
| Achnanthes exigua | 16 | 1 | 19 | - |
| Achnanthes fluviatilis | - | - | - | - |
| Achnanthes hungarica | - | - | 3 | - |
| Achnanthes lanceolata | - | - | - | - |
| Achnanthes lanceolata apiculata | - | - | - | - |
| Achnanthes lanceolata frequentissima | - | - | - | - |
| Achnanthes lanceolata rostrata | - | - | - | - |
| Achnanthes minutissima | - | - | - | - |
| Achnanthes peragalli | - | 1 | - | - |
| Achnanthes rupestoides | 23 | - | - | - |
| Achnanthidiaceae | - | - | - | - |
| Achnanthidium | 46 | 41 | 2 | - |
| Achnanthidium exiguum | - | - | - | 2 |
| Achnanthidium microcephalum | - | 2 | 4 | - |
| Achnanthidium minutissimum | - | 14 | - | - |
| Actinella | - | - | - | - |
| Amphipleura pellucida | 1 | - | - | - |
| Amphora | - | 2 | - | - |
| Amphora copulata | - | - | - | - |
| Amphora libyca | - | - | - | - |
| Amphora veneta | - | - | - | - |
| Anorthoneis | - | - | - | - |
| Asterionella | - | - | - | - |
| Aulacoseira | - | - | 29 | - |
| Aulacoseira granulata | - | - | - | - |
| Aulacoseira herzogii | - | - | - | - |
| Bacillaria paxillifer | - | - | - | - |
| Bacillariophyceae | 32 | 42 | 16 | 22 |
| Bacillariophyta | 1 | - | - | - |
| Brachysira | 10 | - | 4 | 2 |
| Brachysira brebissonii | - | - | - | - |
| Brachysira microcephala | - | - | - | - |
| Brachysira vitrea | - | - | 7 | 1 |
| Caloneis | - | - | - | - |
| Caloneis bacillum | 2 | - | - | - |
| Capartogramma crucicula | - | - | - | - |
| Cavinula | - | - | - | - |
| Cavinula cocconeiformis | - | - | - | - |
| Cavinula jaernefeltii | - | - | - | - |
| Chamaepinnularia margaritiana | - | - | - | - |
| Chamaepinnularia minutissima | - | - | - | - |
| Cocconeis | - | - | 15 | - |
| Cocconeis disculus | - | - | - | - |
| Cocconeis fluviatilis | - | - | - | - |



US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | NUTREF001 | LIB104LV | 23010464 | CLA246GS |
|---|---|---|---|---|
| Sample date -> | 6/10/2008 | 6/10/2008 | 5/7/2008 | 5/28/2008 |
| | Sampleid 65029/PerDiaID | Sampleid 65025/PerDiaID | Sampleid 64546/PerDiaID | Sampleid 65250/PerDiaID |
| Taxon Name / SampleID/PerDiaID -> | 24392 (# counted) | 24393 (# counted) | 24394 (# counted) | 24411 (# counted) |
| Cocconeis pediculus | - | - | - | - |
| Cocconeis placentula | - | - | 63 | - |
| Cocconeis pseudothumensis | - | - | - | - |
| Coscinodiscophyceae | 1 | - | - | - |
| Craticula | - | - | - | - |
| Craticula minusculoides | - | - | - | - |
| Cyclostephanos invisitatus | - | - | 1 | - |
| Cyclotella | 3 | - | 7 | - |
| Cyclotella atomus | - | - | 2 | - |
| Cyclotella meneghiniana | - | - | 2 | - |
| Cyclotella pseudostelligera | - | - | - | - |
| Cymbella | - | - | - | - |
| Cymbella aspera | - | - | - | - |
| Cymbella subcuspidata | - | - | - | - |
| Cymbellaceae | 2 | - | 12 | 6 |
| Cymbellales | - | - | - | - |
| Diadesmis confervacea | - | - | 3 | - |
| Diadesmis contenta | - | - | - | - |
| Diatoma | - | - | - | - |
| Diploneis | - | - | - | - |
| Diploneis oblongella | - | - | - | - |
| Diploneis ovalis | - | - | - | - |
| Diploneis parma | - | - | - | - |
| Diploneis pseudovalis | - | - | - | - |
| Encyonema | 2 | - | 1 | - |
| Encyonema evergladianum | - | - | - | - |
| Encyonema minutum | - | - | 2 | 21 |
| Encyonema neomesianum | - | - | 1 | - |
| Encyonema silesiacum | - | - | - | 3 |
| Encyonopsis microcephala | - | - | 2 | - |
| Epithemia | - | - | - | - |
| Eunotia | 73 | 145 | 21 | 278 |
| Eunotia bilunaris | 2 | - | - | - |
| Eunotia carolina | - | - | - | - |
| Eunotia exigua | - | - | - | - |
| Eunotia flexuosa | - | - | - | - |
| Eunotia formica | - | - | - | 1 |
| Eunotia implicata | - | - | - | - |
| Eunotia incisa | - | - | - | 26 |
| Eunotia meisteri | - | - | - | - |
| Eunotia minor | - | - | - | - |
| Eunotia naegelii | - | - | - | 6 |
| Eunotia paludosa | 1 | 2 | - | - |
| Eunotia pectinalis | - | - | - | - |
| Eunotia pectinalis undulata | - | - | - | - |
| Eunotia rhomboidea | - | - | - | - |
| Eunotia transfuga | - | - | - | - |
| Eunotia undulata | - | - | - | - |



US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | NUTREF001 | LIB104LV | 23010464 | CLA246GS |
|---|---|---|---|---|
| Sample date -> | 6/10/2008 | 6/10/2008 | 5/7/2008 | 5/28/2008 |
| | Sampleid 65029/PerDiaID | Sampleid 65025/PerDiaID | Sampleid 64546/PerDiaID | Sampleid 65250/PerDiaID |
| Taxon Name / SampleID/PerDiaID -> | 24392 (# counted) | 24393 (# counted) | 24394 (# counted) | 24411 (# counted) |
| Eunotia yanomami | - | - | - | - |
| Eunotia zygodon | - | - | - | - |
| Fragilaria | - | - | - | - |
| Fragilaria brevistriata | - | - | - | - |
| Fragilaria capucina | - | - | 2 | - |
| Fragilaria crotonensis | - | - | - | - |
| Fragilaria javanica | - | - | - | - |
| Fragilaria pinnata | - | - | - | - |
| Fragilaria synegrotesca | - | - | - | - |
| Fragilaria virescens | - | - | - | - |
| Fragilariaceae | 21 | - | 4 | - |
| Fragilariforma | - | - | - | - |
| Fragilariforma bicapitata | - | - | - | 11 |
| Fragilariforma virescens | - | - | - | - |
| Fragilariophyceae | - | - | - | - |
| Frustulia | 5 | 2 | - | 10 |
| Frustulia rhomboides | - | - | - | - |
| Frustulia saxonica | 2 | 4 | - | - |
| Frustulia vulgaris | - | - | - | - |
| Geissleria decussis | - | - | - | - |
| Gomphonema | 12 | 10 | 1 | - |
| Gomphonema affine | - | - | - | - |
| Gomphonema augur | - | - | - | - |
| Gomphonema clevei | - | - | - | - |
| Gomphonema gracile | - | - | - | - |
| Gomphonema grovei lingulatum | - | - | - | - |
| Gomphonema guaraniarum | - | - | - | - |
| Gomphonema minutum | - | - | - | - |
| Gomphonema parvulum | 1 | - | 11 | - |
| Gomphonema truncatum | - | - | - | - |
| Gomphonema vibrio | - | - | - | - |
| Gyrosigma | - | - | - | - |
| Gyrosigma obscurum | - | - | - | - |
| Hantzschia | - | - | - | - |
| Hantzschia amphioxys | - | - | - | - |
| Hippodonta | 1 | - | - | - |
| Hippodonta capitata | 1 | 1 | 2 | 1 |
| Hippodonta hungarica | - | - | - | - |
| Karayevia clevei | - | - | - | - |
| Kobayasiella | - | - | - | - |
| Lemnicola hungarica | - | - | - | - |
| Luticola | 2 | - | - | - |
| Luticola mutica | - | - | - | - |
| Melosira | - | - | - | - |
| Meridion | - | - | - | - |
| Microcostatus polonarum | - | - | - | - |
| Navicula | 13 | - | 18 | 9 |
| Navicula bouillantensis | - | - | - | - |



US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | NUTREF001 | LIB104LV | 23010464 | CLA246GS |
|---|---|---|---|---|
| Sample date -> | 6/10/2008 | 6/10/2008 | 5/7/2008 | 5/28/2008 |
| | Sampleid 65029/PerDiaID | Sampleid 65025/PerDiaID | Sampleid 64546/PerDiaID | Sampleid 65250/PerDiaID |
| Taxon Name / SampleID/PerDiaID -> | 24392 (# counted) | 24393 (# counted) | 24394 (# counted) | 24411 (# counted) |
| Navicula clementis | - | - | - | - |
| Navicula cocconeiformis | - | - | - | - |
| Navicula constans | - | - | - | - |
| Navicula cryptocephala | 2 | - | 5 | - |
| Navicula cryptotenella | - | - | 4 | - |
| Navicula decussis | - | - | - | - |
| Navicula elginensis | - | - | - | 2 |
| Navicula festiva | - | - | - | - |
| Navicula gastrum | - | - | - | - |
| Navicula germainii | - | - | - | - |
| Navicula heimansioides | - | - | - | - |
| Navicula ingenua | - | - | - | - |
| Navicula kotschyi | - | - | - | - |
| Navicula longicephala | - | - | - | - |
| Navicula mediocris | - | - | - | - |
| Navicula minima | - | - | 74 | 52 |
| Navicula occulta | - | - | - | - |
| Navicula peregrina | - | - | - | - |
| Navicula placenta | - | - | - | - |
| Navicula placentula | - | - | - | - |
| Navicula porifera | - | - | - | - |
| Navicula radiosa | - | - | - | - |
| Navicula rhynchocephala | - | - | - | - |
| Navicula rostellata | - | - | - | - |
| Navicula schroeteri | - | - | - | - |
| Navicula seminulum | - | - | - | - |
| Navicula tripunctata | - | - | - | - |
| Navicula vaneeii | - | - | - | - |
| Navicula viridulacalcis | - | - | - | - |
| Naviculaceae | 11 | - | 2 | 4 |
| Naviculales | - | - | - | - |
| Neidium | - | - | - | 1 |
| Neidium alpinum | - | - | - | - |
| Neidium alpinum quadripunctatum | - | - | - | - |
| Neidium amphigomphus | - | - | - | - |
| Neidium binodis | - | - | - | - |
| Neidium densestriatum | - | 3 | - | - |
| Neidium dubium | - | - | - | - |
| Neidium ladogensis densestriatum | - | - | - | - |
| Nitzschia | 27 | 12 | 103 | 9 |
| Nitzschia amphibia | 2 | - | - | - |
| Nitzschia clausii | - | - | - | - |
| Nitzschia dissipata | - | - | - | - |
| Nitzschia frustulum | - | - | - | - |
| Nitzschia gracilis | - | - | - | - |
| Nitzschia intermedia | - | - | 2 | - |
| Nitzschia linearis | - | - | - | - |
| Nitzschia nana | - | - | 7 | - |



US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | NUTREF001 | LIB104LV | 23010464 | CLA246GS |
|---|---|---|---|---|
| Sample date -> | 6/10/2008 | 6/10/2008 | 5/7/2008 | 5/28/2008 |
| | Sampleid 65029/PerDiaID | Sampleid 65025/PerDiaID | Sampleid 64546/PerDiaID | Sampleid 65250/PerDiaID |
| Taxon Name / SampleID/PerDiaID -> | 24392 (# counted) | 24393 (# counted) | 24394 (# counted) | 24411 (# counted) |
| Nitzschia palea | 2 | - | - | - |
| Nitzschia paleacea | - | 4 | - | - |
| Nitzschia palustris | - | - | - | - |
| Nitzschia reversa | - | - | 1 | - |
| Nitzschia scalaris | - | - | - | - |
| Nitzschia seriata | - | - | - | - |
| Nitzschia serrata | - | - | - | - |
| Nitzschia subacicularis | - | - | - | - |
| Nupela | - | - | - | - |
| Nupela cymbelloidea | - | - | - | - |
| Nupela neotropica | - | - | - | - |
| Opephora | - | - | 3 | - |
| Pinnularia | 16 | 83 | 2 | 16 |
| Pinnularia acrosphaeria | - | - | - | - |
| Placoneis | - | - | - | - |
| Placoneis elginensis | - | - | - | - |
| Planothidium | 13 | 3 | - | - |
| Planothidium apiculatum | - | - | - | - |
| Planothidium delicatulum | - | - | - | - |
| Planothidium frequentissimum | - | - | - | - |
| Planothidium lanceolatum | 12 | - | 15 | 1 |
| Planothidium peragalli | - | - | - | - |
| Planothidium rostratum | - | - | 6 | - |
| Pleurosira laevis | - | - | - | - |
| Psammothidium daonense | - | - | - | - |
| Psammothidium sacculum | - | - | - | - |
| Pseudostaurosira brevistriata | - | - | - | - |
| Rhopalodia | 1 | - | - | 3 |
| Rossithidium | - | - | - | - |
| Rossithidium pusillium | - | - | - | - |
| Sellaphora | - | - | - | - |
| Sellaphora laevissima | - | - | - | - |
| Sellaphora pupula | 2 | - | 5 | - |
| Stauroneis | - | 1 | - | - |
| Stauroneis anceps | - | - | - | - |
| Stauroneis phoenicenteron | - | - | - | - |
| Stauroneis prominula | - | - | - | - |
| Stauroneis smithii | - | - | - | - |
| Staurosira construens | - | - | - | - |
| Staurosira elliptica | - | - | - | - |
| Staurosirella | - | - | - | - |
| Staurosirella leptostauron | - | - | - | - |
| Staurosirella pinnata | - | - | - | - |
| Stenopterobia | - | - | - | 3 |
| Stenopterobia delicatissima | - | - | - | - |
| Stephanodiscus | - | - | - | - |
| Surirella | - | - | - | - |
| Surirella angusta | - | - | - | - |



US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | NUTREF001 | LIB104LV | 23010464 | CLA246GS |
|---|---|---|---|---|
| Sample date -> | 6/10/2008 | 6/10/2008 | 5/7/2008 | 5/28/2008 |
| | Sampleid 65029/PerDiaID | Sampleid 65025/PerDiaID | Sampleid 64546/PerDiaID | Sampleid 65250/PerDiaID |
| Taxon Name / SampleID/PerDiaID -> | 24392 (# counted) | 24393 (# counted) | 24394 (# counted) | 24411 (# counted) |
| Synedra | - | - | 2 | - |
| Synedra acus | - | - | 1 | - |
| Synedra fasciculata | - | - | - | - |
| Synedra ulna | - | - | 1 | 1 |
| Tabellaria | - | - | - | - |
| Terpsinoe musica | - | - | - | - |
| Thalassionema | - | - | 1 | - |
| Thalassiosira | - | - | - | - |
| Tryblionella | - | - | - | - |
| Tryblionella levidensis | - | - | - | - |

US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | 22020093 | GAD106GS | BAK208GS | 3545 |
|---|---|---|---|---|
| Sample date -> | 6/13/2008 | 6/13/2008 | 6/18/2008 | 7/9/2008 |
| | Sampleid 65026/PerDiaID | Sampleid 65028/PerDiaID | Sampleid 65306/PerDiaID | Sampleid 65291/PerDiaID |
| Taxon Name / SampleID/PerDiaID -> | 24416 (# counted) | 24417 (# counted) | 24430 (# counted) | 24441 (# counted) |
| Achnanthaceae | 8 | - | - | - |
| Achnanthales | - | 4 | - | - |
| Achnanthes | - | - | - | - |
| Achnanthes clevei | - | - | - | - |
| Achnanthes exigua | - | - | - | - |
| Achnanthes fluviatilis | - | - | - | - |
| Achnanthes hungarica | - | - | - | - |
| Achnanthes lanceolata | - | - | - | - |
| Achnanthes lanceolata apiculata | - | - | - | - |
| Achnanthes lanceolata frequentissima | - | - | - | - |
| Achnanthes lanceolata rostrata | - | - | - | - |
| Achnanthes minutissima | - | - | - | - |
| Achnanthes peragalli | - | - | - | - |
| Achnanthes rupestoides | - | - | - | - |
| Achnanthidiaceae | - | - | - | - |
| Achnanthidium | - | - | - | - |
| Achnanthidium exiguum | - | - | - | - |
| Achnanthidium microcephalum | - | - | - | - |
| Achnanthidium minutissimum | 16 | 1 | - | - |
| Actinella | - | - | - | - |
| Amphipleura pellucida | - | - | - | - |
| Amphora | 4 | - | - | - |
| Amphora copulata | - | - | - | - |
| Amphora libyca | - | - | - | - |
| Amphora veneta | - | - | - | - |
| Anorthoneis | - | - | - | - |
| Asterionella | - | - | - | - |
| Aulacoseira | 3 | - | - | - |
| Aulacoseira granulata | - | - | - | - |
| Aulacoseira herzogii | 2 | - | - | - |
| Bacillaria paxillifer | 2 | - | - | - |
| Bacillariophyceae | 14 | 15 | 5 | 7 |
| Bacillariophyta | - | - | - | - |
| Brachysira | - | - | - | - |
| Brachysira brebissonii | - | - | - | 3 |
| Brachysira microcephala | - | - | - | 4 |
| Brachysira vitrea | - | - | - | - |
| Caloneis | - | - | - | - |
| Caloneis bacillum | - | 1 | 1 | - |
| Capartogramma crucicula | 3 | - | - | - |
| Cavinula | - | - | - | - |
| Cavinula cocconeiformis | - | - | - | - |
| Cavinula jaernefeltii | - | - | - | - |
| Chamaepinnularia margaritiana | - | - | - | - |
| Chamaepinnularia minutissima | - | - | - | - |
| Cocconeis | 4 | - | - | - |
| Cocconeis disculus | - | - | - | - |
| Cocconeis fluviatilis | - | - | - | - |



US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | 22020093 | GAD106GS | BAK208GS | 3545 |
|---|---|---|---|---|
| Sample date -> | 6/13/2008 | 6/13/2008 | 6/18/2008 | 7/9/2008 |
| | Sampleid 65026/PerDiaID | Sampleid 65028/PerDiaID | Sampleid 65306/PerDiaID | Sampleid 65291/PerDiaID |
| Taxon Name / SampleID/PerDiaID -> | 24416 (# counted) | 24417 (# counted) | 24430 (# counted) | 24441 (# counted) |
| Cocconeis pediculus | - | - | - | - |
| Cocconeis placentula | 6 | - | - | - |
| Cocconeis pseudothumensis | - | - | - | - |
| Coscinodiscophyceae | - | - | - | - |
| Craticula | - | - | - | - |
| Craticula minusculoides | - | - | - | - |
| Cyclostephanos invisitatus | - | - | - | - |
| Cyclotella | 4 | - | - | - |
| Cyclotella atomus | - | - | - | - |
| Cyclotella meneghiniana | - | - | - | - |
| Cyclotella pseudostelligera | 12 | 1 | - | - |
| Cymbella | - | - | - | - |
| Cymbella aspera | 1 | - | - | - |
| Cymbella subcuspidata | - | - | - | - |
| Cymbellaceae | 4 | - | - | - |
| Cymbellales | - | - | - | 11 |
| Diadesmis confervacea | 1 | - | - | - |
| Diadesmis contenta | - | - | - | - |
| Diatoma | - | - | - | - |
| Diploneis | 1 | - | - | - |
| Diploneis oblongella | - | - | - | - |
| Diploneis ovalis | - | - | - | - |
| Diploneis parma | - | - | - | - |
| Diploneis pseudovalis | - | - | - | - |
| Encyonema | - | - | - | 1 |
| Encyonema evergladianum | - | - | - | - |
| Encyonema minutum | 6 | - | - | - |
| Encyonema neomesianum | - | - | - | - |
| Encyonema silesiacum | 1 | - | - | - |
| Encyonopsis microcephala | - | - | - | - |
| Epithemia | - | - | - | - |
| Eunotia | 20 | 103 | 260 | 280 |
| Eunotia bilunaris | - | 1 | - | - |
| Eunotia carolina | - | - | - | 1 |
| Eunotia exigua | - | - | 9 | 10 |
| Eunotia flexuosa | - | - | - | - |
| Eunotia formica | - | - | - | - |
| Eunotia implicata | - | - | - | - |
| Eunotia incisa | - | 5 | 8 | 11 |
| Eunotia meisteri | - | - | - | - |
| Eunotia minor | - | - | - | 4 |
| Eunotia naegelii | - | - | 1 | - |
| Eunotia paludosa | - | 2 | 3 | - |
| Eunotia pectinalis | - | - | - | - |
| Eunotia pectinalis undulata | - | - | - | 4 |
| Eunotia rhomboidea | - | - | - | - |
| Eunotia transfuga | - | - | - | - |
| Eunotia undulata | - | - | - | - |



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| | Sampleid 65026/PerDiaID | Sampleid 65028/PerDiaID | Sampleid 65306/PerDiaID | Sampleid 65291/PerDiaID |
| Taxon Name / SampleID/PerDiaID -> | 24416 (# counted) | 24417 (# counted) | 24430 (# counted) | 24441 (# counted) |
| Eunotia yanomami | - | - | - | 1 |
| Eunotia zygodon | - | - | - | - |
| Fragilaria | - | - | - | - |
| Fragilaria brevistriata | - | - | - | - |
| Fragilaria capucina | 6 | - | - | - |
| Fragilaria crotonensis | - | - | - | - |
| Fragilaria javanica | - | - | - | - |
| Fragilaria pinnata | - | - | - | - |
| Fragilaria synegrotesca | 1 | - | - | - |
| Fragilaria virescens | - | - | - | - |
| Fragilariaceae | 7 | - | - | 5 |
| Fragilariforma | - | - | - | - |
| Fragilariforma bicapitata | - | - | - | - |
| Fragilariforma virescens | - | - | - | 8 |
| Fragilariophyceae | - | - | - | - |
| Frustulia | - | 4 | 72 | 24 |
| Frustulia rhomboides | - | - | - | - |
| Frustulia saxonica | - | - | 29 | - |
| Frustulia vulgaris | - | - | - | - |
| Geissleria decussis | - | 1 | - | - |
| Gomphonema | 2 | - | - | - |
| Gomphonema affine | - | - | - | - |
| Gomphonema augur | - | - | - | - |
| Gomphonema clevei | - | - | - | - |
| Gomphonema gracile | 1 | - | - | 4 |
| Gomphonema grovei lingulatum | 10 | - | - | - |
| Gomphonema guaraniarum | - | - | - | - |
| Gomphonema minutum | - | - | - | - |
| Gomphonema parvulum | - | - | - | - |
| Gomphonema truncatum | - | - | - | - |
| Gomphonema vibrio | - | - | - | - |
| Gyrosigma | - | - | - | - |
| Gyrosigma obscurum | - | - | - | - |
| Hantzschia | - | - | - | - |
| Hantzschia amphioxys | - | - | - | - |
| Hippodonta | - | - | - | - |
| Hippodonta capitata | 2 | - | - | 2 |
| Hippodonta hungarica | 2 | - | - | - |
| Karayevia clevei | 1 | - | 2 | - |
| Kobayasiella | - | - | - | - |
| Lemnicola hungarica | - | - | - | - |
| Luticola | - | - | - | - |
| Luticola mutica | - | - | - | - |
| Melosira | - | - | 1 | - |
| Meridion | - | - | - | - |
| Microcostatus polonarum | - | - | - | - |
| Navicula | 144 | 265 | - | 17 |
| Navicula bouillantensis | - | - | - | - |



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| | Sampleid 65026/PerDiaID | Sampleid 65028/PerDiaID | Sampleid 65306/PerDiaID | Sampleid 65291/PerDiaID |
| Taxon Name / SampleID/PerDiaID -> | 24416 (# counted) | 24417 (# counted) | 24430 (# counted) | 24441 (# counted) |
| Navicula clementis | - | - | - | - |
| Navicula cocconeiformis | - | - | - | - |
| Navicula constans | - | - | - | - |
| Navicula cryptocephala | 22 | - | - | 12 |
| Navicula cryptotenella | 4 | - | - | - |
| Navicula decussis | - | - | - | - |
| Navicula elginensis | - | - | - | - |
| Navicula festiva | - | - | - | - |
| Navicula gastrum | - | - | - | - |
| Navicula germainii | - | - | - | - |
| Navicula heimansioides | - | - | - | - |
| Navicula ingenua | - | - | - | - |
| Navicula kotschyi | - | - | - | - |
| Navicula longicephala | - | - | - | - |
| Navicula mediocris | - | - | - | - |
| Navicula minima | 108 | 3 | - | - |
| Navicula occulta | - | - | - | - |
| Navicula peregrina | - | - | - | - |
| Navicula placenta | - | - | - | - |
| Navicula placentula | - | - | - | - |
| Navicula porifera | - | - | - | - |
| Navicula radiosa | - | - | - | - |
| Navicula rhynchocephala | - | - | - | - |
| Navicula rostellata | - | - | - | - |
| Navicula schroeteri | - | - | - | - |
| Navicula seminulum | - | - | - | - |
| Navicula tripunctata | - | - | - | - |
| Navicula vaneeii | - | - | - | - |
| Navicula viridulacalcis | - | - | - | - |
| Naviculaceae | 25 | 63 | - | 17 |
| Naviculales | - | - | - | 15 |
| Neidium | - | 4 | - | 40 |
| Neidium alpinum | - | - | - | - |
| Neidium alpinum quadripunctatum | - | - | - | - |
| Neidium amphigomphus | - | - | - | - |
| Neidium binodis | - | - | - | - |
| Neidium densestriatum | - | - | - | 2 |
| Neidium dubium | - | - | - | - |
| Neidium ladogensis densestriatum | - | - | - | - |
| Nitzschia | 28 | 5 | 95 | 2 |
| Nitzschia amphibia | 1 | - | - | - |
| Nitzschia clausii | - | - | - | - |
| Nitzschia dissipata | - | - | - | - |
| Nitzschia frustulum | - | - | - | - |
| Nitzschia gracilis | - | - | - | 2 |
| Nitzschia intermedia | - | - | - | - |
| Nitzschia linearis | - | - | - | - |
| Nitzschia nana | - | - | - | - |



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| | Sampleid 65026/PerDiaID | Sampleid 65028/PerDiaID | Sampleid 65306/PerDiaID | Sampleid 65291/PerDiaID |
| Taxon Name / SampleID/PerDiaID -> | 24416 (# counted) | 24417 (# counted) | 24430 (# counted) | 24441 (# counted) |
| Nitzschia palea | - | 1 | 5 | - |
| Nitzschia paleacea | - | - | - | - |
| Nitzschia palustris | - | - | - | - |
| Nitzschia reversa | - | - | - | - |
| Nitzschia scalaris | - | - | - | - |
| Nitzschia seriata | - | - | - | - |
| Nitzschia serrata | - | - | - | - |
| Nitzschia subacicularis | - | - | - | - |
| Nupela | - | - | - | - |
| Nupela cymbelloidea | - | - | - | - |
| Nupela neotropica | - | - | - | - |
| Opephora | - | - | - | - |
| Pinnularia | 2 | 13 | 9 | 1 |
| Pinnularia acrosphaeria | - | - | - | - |
| Placoneis | - | - | - | - |
| Placoneis elginensis | - | - | - | - |
| Planothidium | - | - | - | - |
| Planothidium apiculatum | - | - | - | - |
| Planothidium delicatulum | - | - | - | - |
| Planothidium frequentissimum | - | - | - | - |
| Planothidium lanceolatum | 9 | 5 | - | - |
| Planothidium peragalli | - | - | - | - |
| Planothidium rostratum | - | - | - | - |
| Pleurosira laevis | - | - | - | - |
| Psammothidium daonense | - | - | - | - |
| Psammothidium sacculum | - | - | - | - |
| Pseudostaurosira brevistriata | 1 | - | - | - |
| Rhopalodia | - | - | - | - |
| Rossithidium | - | - | - | - |
| Rossithidium pusillium | - | - | - | - |
| Sellaphora | 1 | - | - | - |
| Sellaphora laevissima | 1 | - | - | - |
| Sellaphora pupula | 6 | 3 | - | - |
| Stauroneis | - | - | - | 6 |
| Stauroneis anceps | - | - | - | - |
| Stauroneis phoenicenteron | - | - | - | - |
| Stauroneis prominula | - | - | - | - |
| Stauroneis smithii | - | - | - | - |
| Staurosira construens | 2 | - | - | - |
| Staurosira elliptica | 1 | - | - | - |
| Staurosirella | - | - | - | - |
| Staurosirella leptostauron | - | - | - | - |
| Staurosirella pinnata | - | - | - | - |
| Stenopterobia | - | - | - | - |
| Stenopterobia delicatissima | - | - | - | 6 |
| Stephanodiscus | - | - | - | - |
| Surirella | - | - | - | - |
| Surirella angusta | - | - | - | - |



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| | Sampleid 65026/PerDiaID | Sampleid 65028/PerDiaID | Sampleid 65306/PerDiaID | Sampleid 65291/PerDiaID |
| Taxon Name / SampleID/PerDiaID -> | 24416 (# counted) | 24417 (# counted) | 24430 (# counted) | 24441 (# counted) |
| Synedra | - | - | - | - |
| Synedra acus | - | - | - | - |
| Synedra fasciculata | - | - | - | - |
| Synedra ulna | 1 | - | - | - |
| Tabellaria | - | - | - | - |
| Terpsinoe musica | - | - | - | - |
| Thalassionema | - | - | - | - |
| Thalassiosira | - | - | - | - |
| Tryblionella | - | - | - | - |
| Tryblionella levidensis | - | - | - | - |

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| | Sampleid 65296/PerDiaID | Sampleid 65316/PerDiaID | Sampleid 65292/PerDiaID | Sampleid 65293/PerDiaID |
| Taxon Name / SampleID/PerDiaID -> | 24444 (# counted) | 24445 (# counted) | 24452 (# counted) | 24458 (# counted) |
| Achnanthaceae | - | - | - | - |
| Achnanthales | 23 | - | - | - |
| Achnanthes | - | - | 2 | 6 |
| Achnanthes clevei | - | - | - | - |
| Achnanthes exigua | - | - | - | 28 |
| Achnanthes fluviatilis | - | - | - | 35 |
| Achnanthes hungarica | - | - | - | - |
| Achnanthes lanceolata | - | - | - | - |
| Achnanthes lanceolata apiculata | - | - | - | - |
| Achnanthes lanceolata frequentissima | - | - | - | - |
| Achnanthes lanceolata rostrata | - | - | - | - |
| Achnanthes minutissima | - | - | - | - |
| Achnanthes peragalli | - | - | - | - |
| Achnanthes rupestoides | 2 | - | - | - |
| Achnanthidiaceae | 20 | 9 | - | - |
| Achnanthidium | 54 | 45 | - | - |
| Achnanthidium exiguum | 3 | 26 | - | - |
| Achnanthidium microcephalum | - | - | - | - |
| Achnanthidium minutissimum | 43 | 46 | 1 | - |
| Actinella | - | - | 9 | - |
| Amphipleura pellucida | - | - | - | - |
| Amphora | 1 | - | - | 5 |
| Amphora copulata | - | - | - | - |
| Amphora libyca | - | - | - | - |
| Amphora veneta | - | - | - | - |
| Anorthoneis | - | - | - | 4 |
| Asterionella | - | - | 2 | - |
| Aulacoseira | 1 | 3 | - | - |
| Aulacoseira granulata | - | - | - | - |
| Aulacoseira herzogii | - | - | - | - |
| Bacillaria paxillifer | - | 1 | - | 1 |
| Bacillariophyceae | 33 | 12 | - | - |
| Bacillariophyta | - | - | - | - |
| Brachysira | 1 | - | - | - |
| Brachysira brebissonii | - | 1 | 8 | - |
| Brachysira microcephala | - | 11 | - | - |
| Brachysira vitrea | - | - | - | - |
| Caloneis | - | - | - | - |
| Caloneis bacillum | - | - | - | - |
| Capartogramma crucicula | - | 1 | - | 1 |
| Cavinula | - | - | - | - |
| Cavinula cocconeiformis | - | - | - | - |
| Cavinula jaernefeltii | - | - | - | - |
| Chamaepinnularia margaritiana | - | - | - | - |
| Chamaepinnularia minutissima | - | - | - | - |
| Cocconeis | 12 | 21 | - | 14 |
| Cocconeis disculus | - | - | - | 1 |
| Cocconeis fluviatilis | - | - | - | 7 |



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| Taxon Name / SampleID/PerDiaID -> | Sampleid 65296/PerDiaID 24444 (# counted) | Sampleid 65316/PerDiaID 24445 (# counted) | Sampleid 65292/PerDiaID 24452 (# counted) | Sampleid 65293/PerDiaID 24458 (# counted) |
| Cocconeis pediculus | - | - | - | - |
| Cocconeis placentula | - | - | - | 23 |
| Cocconeis pseudothumensis | - | - | - | - |
| Coscinodiscophyceae | - | - | - | - |
| Craticula | - | - | 7 | 1 |
| Craticula minusculoides | - | - | - | 9 |
| Cyclostephanos invisitatus | - | - | - | - |
| Cyclotella | - | - | - | - |
| Cyclotella atomus | - | - | - | - |
| Cyclotella meneghiniana | - | 1 | - | - |
| Cyclotella pseudostelligera | 3 | - | - | - |
| Cymbella | 21 | 1 | - | - |
| Cymbella aspera | - | - | - | - |
| Cymbella subcuspidata | - | - | - | - |
| Cymbellaceae | - | 2 | - | 2 |
| Cymbellales | - | - | - | - |
| Diadesmis confervacea | - | - | 2 | 75 |
| Diadesmis contenta | - | - | - | - |
| Diatoma | 13 | - | - | - |
| Diploneis | - | - | - | - |
| Diploneis oblongella | - | - | - | - |
| Diploneis ovalis | - | - | - | - |
| Diploneis parma | - | - | - | - |
| Diploneis pseudovalis | - | - | - | 1 |
| Encyonema | - | - | 3 | - |
| Encyonema evergladianum | - | - | - | - |
| Encyonema minutum | - | - | - | 2 |
| Encyonema neomesianum | - | - | - | - |
| Encyonema silesiacum | 1 | - | - | 1 |
| Encyonopsis microcephala | - | - | - | - |
| Epithemia | - | - | - | - |
| Eunotia | 1 | 11 | 322 | - |
| Eunotia bilunaris | - | - | 4 | - |
| Eunotia carolina | - | - | - | - |
| Eunotia exigua | - | - | - | - |
| Eunotia flexuosa | - | - | 3 | - |
| Eunotia formica | - | - | - | - |
| Eunotia implicata | - | - | - | - |
| Eunotia incisa | - | - | 11 | - |
| Eunotia meisteri | - | - | - | - |
| Eunotia minor | - | - | - | - |
| Eunotia naegelii | - | - | - | - |
| Eunotia paludosa | - | - | - | - |
| Eunotia pectinalis | - | - | - | - |
| Eunotia pectinalis undulata | - | - | - | - |
| Eunotia rhomboidea | - | - | 3 | - |
| Eunotia transfuga | - | - | - | - |
| Eunotia undulata | - | - | 1 | - |



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| | Sampleid 65296/PerDiaID | Sampleid 65316/PerDiaID | Sampleid 65292/PerDiaID | Sampleid 65293/PerDiaID |
| Taxon Name / SampleID/PerDiaID -> | 24444 (# counted) | 24445 (# counted) | 24452 (# counted) | 24458 (# counted) |
| Eunotia yanomami | - | - | - | - |
| Eunotia zygodon | - | - | - | - |
| Fragilaria | - | - | - | - |
| Fragilaria brevistriata | - | - | - | - |
| Fragilaria capucina | 1 | 1 | 1 | 4 |
| Fragilaria crotonensis | - | - | - | - |
| Fragilaria javanica | - | - | - | - |
| Fragilaria pinnata | - | - | - | - |
| Fragilaria synegrotesca | - | - | - | - |
| Fragilaria virescens | - | - | - | - |
| Fragilariaceae | 25 | - | - | - |
| Fragilariforma | - | - | 1 | - |
| Fragilariforma bicapitata | - | - | - | - |
| Fragilariforma virescens | - | - | - | - |
| Fragilariophyceae | - | - | - | - |
| Frustulia | - | 3 | 36 | - |
| Frustulia rhomboides | - | - | - | - |
| Frustulia saxonica | - | - | - | - |
| Frustulia vulgaris | - | - | - | - |
| Geissleria decussis | - | - | - | - |
| Gomphonema | - | 16 | 2 | 8 |
| Gomphonema affine | - | - | - | - |
| Gomphonema augur | 3 | - | - | - |
| Gomphonema clevei | - | - | - | - |
| Gomphonema gracile | - | - | - | - |
| Gomphonema grovei lingulatum | - | - | - | - |
| Gomphonema guaraniarum | - | - | - | - |
| Gomphonema minutum | - | 10 | - | - |
| Gomphonema parvulum | - | - | - | 5 |
| Gomphonema truncatum | - | - | - | - |
| Gomphonema vibrio | - | - | - | - |
| Gyrosigma | - | 2 | - | 1 |
| Gyrosigma obscurum | - | - | - | - |
| Hantzschia | - | - | - | - |
| Hantzschia amphioxys | - | - | - | - |
| Hippodonta | - | - | - | - |
| Hippodonta capitata | - | 1 | - | 1 |
| Hippodonta hungarica | - | - | - | - |
| Karayevia clevei | 1 | - | - | - |
| Kobayasiella | - | - | - | - |
| Lemnicola hungarica | - | - | - | - |
| Luticola | - | - | 3 | 1 |
| Luticola mutica | - | - | 14 | - |
| Melosira | - | - | - | 9 |
| Meridion | - | - | - | - |
| Microcostatus polonarum | - | - | - | - |
| Navicula | 55 | 43 | 13 | 61 |
| Navicula bouillantensis | - | - | - | - |



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| | Sampleid 65296/PerDiaID | Sampleid 65316/PerDiaID | Sampleid 65292/PerDiaID | Sampleid 65293/PerDiaID |
| Taxon Name / SampleID/PerDiaID -> | 24444 (# counted) | 24445 (# counted) | 24452 (# counted) | 24458 (# counted) |
| Navicula clementis | - | - | - | - |
| Navicula cocconeiformis | - | - | - | - |
| Navicula constans | - | - | - | - |
| Navicula cryptocephala | 10 | 1 | - | 4 |
| Navicula cryptotenella | 1 | - | - | - |
| Navicula decussis | - | - | - | - |
| Navicula elginensis | - | - | - | - |
| Navicula festiva | - | - | - | - |
| Navicula gastrum | - | - | - | - |
| Navicula germainii | - | - | - | - |
| Navicula heimansioides | - | - | - | - |
| Navicula ingenua | - | - | - | - |
| Navicula kotschyi | - | - | - | - |
| Navicula longicephala | - | - | - | - |
| Navicula mediocris | - | - | - | - |
| Navicula minima | 19 | 12 | - | 63 |
| Navicula occulta | - | - | - | - |
| Navicula peregrina | - | - | - | 3 |
| Navicula placenta | - | - | - | - |
| Navicula placentula | - | - | - | - |
| Navicula porifera | - | - | - | - |
| Navicula radiosa | - | - | - | - |
| Navicula rhynchocephala | - | - | - | - |
| Navicula rostellata | - | - | - | - |
| Navicula schroeteri | - | - | - | - |
| Navicula seminulum | - | - | - | 17 |
| Navicula tripunctata | - | - | - | - |
| Navicula vaneeii | - | - | - | - |
| Navicula viridulacalcis | 12 | - | - | 3 |
| Naviculaceae | 14 | 31 | 20 | 10 |
| Naviculales | - | - | - | - |
| Neidium | - | - | - | - |
| Neidium alpinum | - | - | 4 | - |
| Neidium alpinum quadripunctatum | - | - | 2 | - |
| Neidium amphigomphus | - | - | - | - |
| Neidium binodis | - | - | - | - |
| Neidium densestriatum | - | - | 1 | - |
| Neidium dubium | - | - | - | - |
| Neidium ladogensis densestriatum | - | - | - | - |
| Nitzschia | 23 | 69 | 5 | 26 |
| Nitzschia amphibia | - | 8 | - | - |
| Nitzschia clausii | 1 | - | - | - |
| Nitzschia dissipata | - | - | - | - |
| Nitzschia frustulum | - | - | - | - |
| Nitzschia gracilis | 1 | - | - | - |
| Nitzschia intermedia | - | - | - | 3 |
| Nitzschia linearis | - | - | - | - |
| Nitzschia nana | - | - | - | - |



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| Sample date -> | 7/9/2008 | 7/10/2008 | 7/24/2008 | 7/16/2008 |
| | Sampleid 65296/PerDiaID | Sampleid 65316/PerDiaID | Sampleid 65292/PerDiaID | Sampleid 65293/PerDiaID |
| Taxon Name / SampleID/PerDiaID -> | 24444 (# counted) | 24445 (# counted) | 24452 (# counted) | 24458 (# counted) |
| Nitzschia palea | - | - | - | - |
| Nitzschia paleacea | - | - | - | - |
| Nitzschia palustris | - | - | - | - |
| Nitzschia reversa | - | - | - | - |
| Nitzschia scalaris | - | - | - | - |
| Nitzschia seriata | - | - | - | - |
| Nitzschia serrata | - | - | - | - |
| Nitzschia subacicularis | - | - | - | - |
| Nupela | - | - | 2 | 15 |
| Nupela cymbelloidea | - | - | - | - |
| Nupela neotropica | - | - | - | - |
| Opephora | 2 | - | - | - |
| Pinnularia | - | - | 2 | 1 |
| Pinnularia acrosphaeria | - | - | - | - |
| Placoneis | - | - | - | - |
| Placoneis elginensis | - | - | - | - |
| Planothidium | 51 | 74 | - | 5 |
| Planothidium apiculatum | - | - | 1 | 5 |
| Planothidium delicatulum | 3 | - | - | 1 |
| Planothidium frequentissimum | 20 | 34 | - | 2 |
| Planothidium lanceolatum | - | - | - | - |
| Planothidium peragalli | - | - | - | - |
| Planothidium rostratum | 21 | - | - | 7 |
| Pleurosira laevis | - | - | - | 2 |
| Psammothidium daonense | - | - | - | - |
| Psammothidium sacculum | - | - | - | - |
| Pseudostaurosira brevistriata | - | - | - | - |
| Rhopalodia | - | - | - | - |
| Rossithidium | - | - | - | - |
| Rossithidium pusillium | - | - | - | - |
| Sellaphora | 3 | - | - | - |
| Sellaphora laevissima | - | - | - | - |
| Sellaphora pupula | - | 1 | - | - |
| Stauroneis | - | - | 9 | - |
| Stauroneis anceps | - | - | - | - |
| Stauroneis phoenicenteron | - | - | - | - |
| Stauroneis prominula | - | - | - | - |
| Stauroneis smithii | - | - | - | - |
| Staurosira construens | - | - | - | - |
| Staurosira elliptica | - | - | - | 2 |
| Staurosirella | - | 2 | - | - |
| Staurosirella leptostauron | 1 | - | - | - |
| Staurosirella pinnata | - | - | - | - |
| Stenopterobia | - | - | - | - |
| Stenopterobia delicatissima | - | - | 4 | - |
| Stephanodiscus | - | - | - | - |
| Surirella | - | - | - | - |
| Surirella angusta | - | - | - | - |



US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | 3546 | 3549 | 32030023 | 21010008 |
|---|---|---|---|---|
| Sample date -> | 7/9/2008 | 7/10/2008 | 7/24/2008 | 7/16/2008 |
| | Sampleid 65296/PerDiaID | Sampleid 65316/PerDiaID | Sampleid 65292/PerDiaID | Sampleid 65293/PerDiaID |
| Taxon Name / SampleID/PerDiaID -> | 24444 (# counted) | 24445 (# counted) | 24452 (# counted) | 24458 (# counted) |
| Synedra | - | - | - | - |
| Synedra acus | - | - | - | - |
| Synedra fasciculata | - | - | - | - |
| Synedra ulna | 1 | 1 | - | 20 |
| Tabellaria | - | - | 2 | - |
| Terpsinoe musica | - | - | - | - |
| Thalassionema | - | - | - | - |
| Thalassiosira | - | - | - | 4 |
| Tryblionella | - | - | - | - |
| Tryblionella levidensis | - | - | - | 1 |

US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | WAK158LR | 22050083 | 22050040 | 23010464 |
|---|---|---|---|---|
| Sample date -> | 6/19/2008 | 8/12/2008 | 8/12/2008 | 10/8/2008 |
| | Sampleid 65414/PerDiaID | Sampleid 65379/PerDiaID | Sampleid 65382/PerDiaID | Sampleid 65567/PerDiaID |
| Taxon Name / SampleID/PerDiaID -> | 24471 (# counted) | 24479 (# counted) | 24482 (# counted) | 24491 (# counted) |
| Achnanthaceae | - | - | - | - |
| Achnanthales | - | - | - | - |
| Achnanthes | - | 3 | 8 | - |
| Achnanthes clevei | - | - | - | - |
| Achnanthes exigua | - | - | - | - |
| Achnanthes fluviatilis | - | 13 | 27 | - |
| Achnanthes hungarica | - | - | - | - |
| Achnanthes lanceolata | - | - | - | - |
| Achnanthes lanceolata apiculata | - | - | - | - |
| Achnanthes lanceolata frequentissima | - | - | - | - |
| Achnanthes lanceolata rostrata | - | - | - | - |
| Achnanthes minutissima | - | - | - | - |
| Achnanthes peragalli | - | - | - | - |
| Achnanthes rupestoides | - | 46 | 195 | - |
| Achnanthidiaceae | 9 | 6 | 6 | - |
| Achnanthidium | 73 | 2 | 1 | - |
| Achnanthidium exiguum | 46 | 36 | 24 | 43 |
| Achnanthidium microcephalum | - | - | - | - |
| Achnanthidium minutissimum | 12 | - | 2 | 1 |
| Actinella | - | - | - | - |
| Amphipleura pellucida | - | - | - | - |
| Amphora | 4 | 2 | 1 | - |
| Amphora copulata | - | - | - | - |
| Amphora libyca | - | - | - | - |
| Amphora veneta | - | - | - | - |
| Anorthoneis | - | - | - | - |
| Asterionella | - | - | - | - |
| Aulacoseira | 202 | - | - | 8 |
| Aulacoseira granulata | - | - | - | - |
| Aulacoseira herzogii | - | - | - | - |
| Bacillaria paxillifer | - | - | - | - |
| Bacillariophyceae | 6 | - | - | 6 |
| Bacillariophyta | - | - | - | - |
| Brachysira | 2 | - | - | - |
| Brachysira brebissonii | - | - | - | - |
| Brachysira microcephala | - | - | - | - |
| Brachysira vitrea | - | - | - | - |
| Caloneis | - | - | - | - |
| Caloneis bacillum | - | - | - | 2 |
| Capartogramma crucicula | - | - | - | 2 |
| Cavinula | - | - | - | - |
| Cavinula cocconeiformis | - | - | - | - |
| Cavinula jaernefeltii | - | - | - | - |
| Chamaepinnularia margaritiana | - | - | - | - |
| Chamaepinnularia minutissima | - | - | - | - |
| Cocconeis | 6 | 2 | - | 1 |
| Cocconeis disculus | - | - | - | - |
| Cocconeis fluviatilis | - | - | - | 1 |



US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | WAK158LR | 22050083 | 22050040 | 23010464 |
|---|---|---|---|---|
| Sample date -> | 6/19/2008 | 8/12/2008 | 8/12/2008 | 10/8/2008 |
| | Sampleid 65414/PerDiaID | Sampleid 65379/PerDiaID | Sampleid 65382/PerDiaID | Sampleid 65567/PerDiaID |
| Taxon Name / SampleID/PerDiaID -> | 24471 (# counted) | 24479 (# counted) | 24482 (# counted) | 24491 (# counted) |
| Cocconeis pediculus | - | 2 | - | - |
| Cocconeis placentula | - | 118 | 21 | 15 |
| Cocconeis pseudothumensis | - | - | - | - |
| Coscinodiscophyceae | 1 | - | - | - |
| Craticula | - | - | - | - |
| Craticula minusculoides | - | - | - | - |
| Cyclostephanos invisitatus | - | - | - | - |
| Cyclotella | - | - | - | 3 |
| Cyclotella atomus | - | - | - | 2 |
| Cyclotella meneghiniana | 7 | - | 1 | 5 |
| Cyclotella pseudostelligera | - | - | - | - |
| Cymbella | - | - | - | - |
| Cymbella aspera | - | - | - | - |
| Cymbella subcuspidata | - | - | - | - |
| Cymbellaceae | - | - | - | 2 |
| Cymbellales | - | - | - | - |
| Diadesmis confervacea | 49 | 49 | 9 | 5 |
| Diadesmis contenta | - | - | - | - |
| Diatoma | - | - | - | - |
| Diploneis | - | - | - | - |
| Diploneis oblongella | - | - | - | - |
| Diploneis ovalis | - | - | - | - |
| Diploneis parma | - | - | - | - |
| Diploneis pseudovalis | - | - | - | - |
| Encyonema | - | - | - | - |
| Encyonema evergladianum | - | - | - | - |
| Encyonema minutum | - | - | - | - |
| Encyonema neomesianum | - | - | - | - |
| Encyonema silesiacum | - | - | - | 7 |
| Encyonopsis microcephala | - | - | - | - |
| Epithemia | - | - | - | - |
| Eunotia | 11 | - | 11 | 8 |
| Eunotia bilunaris | - | - | 9 | - |
| Eunotia carolina | - | - | - | - |
| Eunotia exigua | - | - | - | - |
| Eunotia flexuosa | - | - | - | - |
| Eunotia formica | - | - | - | 2 |
| Eunotia implicata | - | - | - | - |
| Eunotia incisa | - | - | - | - |
| Eunotia meisteri | - | - | - | - |
| Eunotia minor | - | - | - | - |
| Eunotia naegelii | - | - | - | 2 |
| Eunotia paludosa | - | - | - | - |
| Eunotia pectinalis | - | - | - | - |
| Eunotia pectinalis undulata | - | - | - | - |
| Eunotia rhomboidea | - | - | - | - |
| Eunotia transfuga | - | - | - | - |
| Eunotia undulata | - | - | - | - |



US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | WAK158LR | 22050083 | 22050040 | 23010464 |
|---|---|---|---|---|
| Sample date -> | 6/19/2008 | 8/12/2008 | 8/12/2008 | 10/8/2008 |
| | Sampleid 65414/PerDiaID | Sampleid 65379/PerDiaID | Sampleid 65382/PerDiaID | Sampleid 65567/PerDiaID |
| Taxon Name / SampleID/PerDiaID -> | 24471 (# counted) | 24479 (# counted) | 24482 (# counted) | 24491 (# counted) |
| Eunotia yanomami | - | - | - | - |
| Eunotia zygodon | - | - | - | - |
| Fragilaria | - | - | - | - |
| Fragilaria brevistriata | - | - | - | - |
| Fragilaria capucina | - | - | - | 1 |
| Fragilaria crotonensis | - | - | - | - |
| Fragilaria javanica | - | - | - | - |
| Fragilaria pinnata | - | - | - | - |
| Fragilaria synegrotesca | - | - | - | - |
| Fragilaria virescens | - | - | - | - |
| Fragilariaceae | - | 4 | - | 4 |
| Fragilariforma | - | - | - | - |
| Fragilariforma bicapitata | - | - | - | - |
| Fragilariforma virescens | - | - | - | - |
| Fragilariophyceae | - | - | - | - |
| Frustulia | - | - | - | 2 |
| Frustulia rhomboides | - | - | - | - |
| Frustulia saxonica | - | - | - | - |
| Frustulia vulgaris | - | - | - | - |
| Geissleria decussis | - | - | - | - |
| Gomphonema | - | 13 | 28 | 20 |
| Gomphonema affine | - | - | - | 2 |
| Gomphonema augur | - | - | - | - |
| Gomphonema clevei | - | - | 6 | - |
| Gomphonema gracile | - | 1 | 2 | 8 |
| Gomphonema grovei lingulatum | - | - | - | - |
| Gomphonema guaraniarum | - | - | 1 | - |
| Gomphonema minutum | - | - | - | - |
| Gomphonema parvulum | - | 9 | 2 | 36 |
| Gomphonema truncatum | - | 1 | - | 1 |
| Gomphonema vibrio | - | - | - | - |
| Gyrosigma | - | 2 | - | - |
| Gyrosigma obscurum | - | - | - | - |
| Hantzschia | - | - | - | - |
| Hantzschia amphioxys | - | - | - | - |
| Hippodonta | - | 2 | - | 6 |
| Hippodonta capitata | - | - | - | 3 |
| Hippodonta hungarica | - | - | - | 1 |
| Karayevia clevei | - | 1 | 4 | - |
| Kobayasiella | - | - | - | - |
| Lemnicola hungarica | - | - | - | - |
| Luticola | - | - | - | - |
| Luticola mutica | - | - | 1 | - |
| Melosira | - | - | - | - |
| Meridion | - | - | - | - |
| Microcostatus polonarum | - | - | - | - |
| Navicula | 1 | 40 | 20 | 29 |
| Navicula bouillantensis | - | - | - | - |



US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | WAK158LR | 22050083 | 22050040 | 23010464 |
|---|---|---|---|---|
| Sample date -> | 6/19/2008 | 8/12/2008 | 8/12/2008 | 10/8/2008 |
| | Sampleid 65414/PerDiaID | Sampleid 65379/PerDiaID | Sampleid 65382/PerDiaID | Sampleid 65567/PerDiaID |
| Taxon Name / SampleID/PerDiaID -> | 24471 (# counted) | 24479 (# counted) | 24482 (# counted) | 24491 (# counted) |
| Navicula clementis | - | 1 | - | - |
| Navicula cocconeiformis | - | - | - | - |
| Navicula constans | - | - | - | - |
| Navicula cryptocephala | - | - | 3 | 2 |
| Navicula cryptotenella | - | 5 | - | 29 |
| Navicula decussis | - | - | - | - |
| Navicula elginensis | - | 1 | - | 11 |
| Navicula festiva | - | - | - | - |
| Navicula gastrum | - | - | 2 | - |
| Navicula germainii | - | - | - | - |
| Navicula heimansioides | - | - | - | - |
| Navicula ingenua | - | 1 | 4 | - |
| Navicula kotschyi | - | 1 | 7 | - |
| Navicula longicephala | - | - | 1 | - |
| Navicula mediocris | - | - | - | - |
| Navicula minima | - | 6 | 18 | 8 |
| Navicula occulta | - | - | - | - |
| Navicula peregrina | - | - | - | - |
| Navicula placenta | - | - | - | - |
| Navicula placentula | - | - | - | - |
| Navicula porifera | - | - | - | - |
| Navicula radiosa | - | 1 | - | 3 |
| Navicula rhynchocephala | - | 1 | - | - |
| Navicula rostellata | - | - | - | - |
| Navicula schroeteri | - | - | - | - |
| Navicula seminulum | - | 13 | 10 | 22 |
| Navicula tripunctata | - | - | - | - |
| Navicula vaneeii | - | - | - | - |
| Navicula viridulacalcis | - | - | 2 | - |
| Naviculaceae | - | 4 | 4 | - |
| Naviculales | 3 | - | - | 3 |
| Neidium | - | - | - | - |
| Neidium alpinum | - | - | - | - |
| Neidium alpinum quadripunctatum | - | - | - | - |
| Neidium amphigomphus | - | - | - | - |
| Neidium binodis | - | - | 1 | - |
| Neidium densestriatum | 2 | - | - | - |
| Neidium dubium | - | - | - | - |
| Neidium ladogensis densestriatum | - | - | - | - |
| Nitzschia | 27 | 57 | 20 | 127 |
| Nitzschia amphibia | - | 11 | 14 | 4 |
| Nitzschia clausii | - | - | - | - |
| Nitzschia dissipata | - | - | - | - |
| Nitzschia frustulum | - | - | - | - |
| Nitzschia gracilis | - | - | - | - |
| Nitzschia intermedia | - | - | - | 4 |
| Nitzschia linearis | - | - | - | - |
| Nitzschia nana | - | - | - | - |



US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | WAK158LR | 22050083 | 22050040 | 23010464 |
|---|---|---|---|---|
| Sample date -> | 6/19/2008 | 8/12/2008 | 8/12/2008 | 10/8/2008 |
| | Sampleid 65414/PerDiaID | Sampleid 65379/PerDiaID | Sampleid 65382/PerDiaID | Sampleid 65567/PerDiaID |
| Taxon Name / SampleID/PerDiaID -> | 24471 (# counted) | 24479 (# counted) | 24482 (# counted) | 24491 (# counted) |
| Nitzschia palea | - | - | - | - |
| Nitzschia paleacea | - | - | - | - |
| Nitzschia palustris | - | - | - | - |
| Nitzschia reversa | - | 1 | - | - |
| Nitzschia scalaris | - | - | - | - |
| Nitzschia seriata | - | - | - | - |
| Nitzschia serrata | - | - | - | - |
| Nitzschia subacicularis | - | - | - | - |
| Nupela | - | 8 | 14 | 18 |
| Nupela cymbelloidea | - | - | - | - |
| Nupela neotropica | - | - | - | 10 |
| Opephora | - | - | - | - |
| Pinnularia | 3 | 1 | - | - |
| Pinnularia acrosphaeria | - | - | - | - |
| Placoneis | - | - | - | - |
| Placoneis elginensis | - | - | - | - |
| Planothidium | 7 | - | 1 | 1 |
| Planothidium apiculatum | - | - | 1 | 6 |
| Planothidium delicatulum | 1 | - | - | - |
| Planothidium frequentissimum | 8 | 5 | 4 | 2 |
| Planothidium lanceolatum | - | - | - | - |
| Planothidium peragalli | - | - | - | - |
| Planothidium rostratum | - | 13 | 3 | 4 |
| Pleurosira laevis | - | - | - | - |
| Psammothidium daonense | - | - | - | - |
| Psammothidium sacculum | - | - | - | - |
| Pseudostaurosira brevistriata | - | - | - | - |
| Rhopalodia | 2 | 1 | - | - |
| Rossithidium | - | 1 | - | - |
| Rossithidium pusillium | - | 8 | 4 | - |
| Sellaphora | - | 1 | - | - |
| Sellaphora laevissima | - | - | - | - |
| Sellaphora pupula | - | 1 | 4 | 2 |
| Stauroneis | - | 5 | 3 | 1 |
| Stauroneis anceps | - | - | - | - |
| Stauroneis phoenicenteron | - | - | - | - |
| Stauroneis prominula | - | - | - | - |
| Stauroneis smithii | - | - | 1 | 2 |
| Staurosira construens | - | - | - | - |
| Staurosira elliptica | 18 | - | - | - |
| Staurosirella | - | - | - | - |
| Staurosirella leptostauron | - | - | - | - |
| Staurosirella pinnata | - | - | - | - |
| Stenopterobia | - | - | - | - |
| Stenopterobia delicatissima | - | - | - | - |
| Stephanodiscus | - | - | - | - |
| Surirella | - | - | - | - |
| Surirella angusta | - | - | - | - |



US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | WAK158LR | 22050083 | 22050040 | 23010464 |
|---|---|---|---|---|
| Sample date -> | 6/19/2008 | 8/12/2008 | 8/12/2008 | 10/8/2008 |
| | Sampleid 65414/PerDiaID | Sampleid 65379/PerDiaID | Sampleid 65382/PerDiaID | Sampleid 65567/PerDiaID |
| Taxon Name / SampleID/PerDiaID -> | 24471 (# counted) | 24479 (# counted) | 24482 (# counted) | 24491 (# counted) |
| Synedra | - | - | - | - |
| Synedra acus | - | - | - | - |
| Synedra fasciculata | - | - | - | - |
| Synedra ulna | - | - | - | 13 |
| Tabellaria | - | - | - | - |
| Terpsinoe musica | - | - | - | - |
| Thalassionema | - | - | - | - |
| Thalassiosira | - | - | - | - |
| Tryblionella | - | - | - | - |
| Tryblionella levidensis | - | - | - | - |

US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | UNI234LV | CLA246GS | WAK158LR | 19010006 |
|---|---|---|---|---|
| Sample date -> | 10/16/2008 | 10/28/2008 | 11/13/2008 | 11/12/2008 |
| | Sampleid 65637/PerDiaID | Sampleid 65636/PerDiaID | Sampleid 65715/PerDiaID | Sampleid 65731/PerDiaID |
| Taxon Name / SampleID/PerDiaID -> | 24513 (# counted) | 24518 (# counted) | 24541 (# counted) | 24544 (# counted) |
| Achnanthaceae | - | - | - | - |
| Achnanthales | - | - | - | - |
| Achnanthes | 2 | 25 | 16 | 1 |
| Achnanthes clevei | - | - | - | - |
| Achnanthes exigua | - | - | - | - |
| Achnanthes fluviatilis | 1 | 4 | 4 | - |
| Achnanthes hungarica | - | - | - | - |
| Achnanthes lanceolata | - | - | - | - |
| Achnanthes lanceolata apiculata | - | - | - | - |
| Achnanthes lanceolata frequentissima | - | - | - | - |
| Achnanthes lanceolata rostrata | - | - | - | - |
| Achnanthes minutissima | - | - | - | - |
| Achnanthes peragalli | - | - | - | - |
| Achnanthes rupestoides | - | - | - | - |
| Achnanthidiaceae | - | 4 | - | - |
| Achnanthidium | 1 | - | 13 | - |
| Achnanthidium exiguum | 14 | 3 | 70 | 57 |
| Achnanthidium microcephalum | - | - | - | - |
| Achnanthidium minutissimum | - | - | 9 | - |
| Actinella | - | - | - | - |
| Amphipleura pellucida | - | - | - | - |
| Amphora | - | 1 | 4 | - |
| Amphora copulata | - | - | - | - |
| Amphora libyca | - | - | - | - |
| Amphora veneta | - | - | - | - |
| Anorthoneis | - | - | - | - |
| Asterionella | - | - | - | - |
| Aulacoseira | 78 | 60 | 103 | 16 |
| Aulacoseira granulata | 3 | - | - | - |
| Aulacoseira herzogii | - | - | - | - |
| Bacillaria paxillifer | - | - | - | 1 |
| Bacillariophyceae | - | 2 | - | - |
| Bacillariophyta | - | - | - | - |
| Brachysira | - | - | - | - |
| Brachysira brebissonii | - | - | - | - |
| Brachysira microcephala | - | - | - | - |
| Brachysira vitrea | - | - | - | - |
| Caloneis | 12 | 2 | - | - |
| Caloneis bacillum | - | - | - | - |
| Capartogramma crucicula | - | - | - | 1 |
| Cavinula | - | 1 | - | - |
| Cavinula cocconeiformis | 4 | 2 | - | - |
| Cavinula jaernefeltii | - | - | - | - |
| Chamaepinnularia margaritiana | - | - | 38 | - |
| Chamaepinnularia minutissima | - | - | 10 | - |
| Cocconeis | - | - | - | 7 |
| Cocconeis disculus | - | - | - | - |
| Cocconeis fluviatilis | - | - | - | 2 |



US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | UNI234LV | CLA246GS | WAK158LR | 19010006 |
|---|---|---|---|---|
| Sample date -> | 10/16/2008 | 10/28/2008 | 11/13/2008 | 11/12/2008 |
| | Sampleid 65637/PerDiaID | Sampleid 65636/PerDiaID | Sampleid 65715/PerDiaID | Sampleid 65731/PerDiaID |
| Taxon Name / SampleID/PerDiaID -> | 24513 (# counted) | 24518 (# counted) | 24541 (# counted) | 24544 (# counted) |
| Cocconeis pediculus | - | - | - | - |
| Cocconeis placentula | - | - | - | 61 |
| Cocconeis pseudothumensis | - | 2 | - | - |
| Coscinodiscophyceae | 3 | - | - | - |
| Craticula | - | - | - | 5 |
| Craticula minusculoides | - | - | - | - |
| Cyclostephanos invisitatus | 1 | - | - | - |
| Cyclotella | 2 | - | - | - |
| Cyclotella atomus | 3 | - | - | - |
| Cyclotella meneghiniana | 7 | - | - | 3 |
| Cyclotella pseudostelligera | 1 | - | - | - |
| Cymbella | - | - | - | - |
| Cymbella aspera | - | - | - | - |
| Cymbella subcuspidata | - | - | - | - |
| Cymbellaceae | - | - | - | - |
| Cymbellales | - | - | - | - |
| Diadesmis confervacea | 14 | - | 69 | 24 |
| Diadesmis contenta | - | 2 | - | - |
| Diatoma | - | - | - | - |
| Diploneis | - | - | - | - |
| Diploneis oblongella | - | - | 1 | - |
| Diploneis ovalis | - | - | - | - |
| Diploneis parma | 1 | - | - | - |
| Diploneis pseudovalis | - | - | - | - |
| Encyonema | - | - | - | - |
| Encyonema evergladianum | - | - | - | - |
| Encyonema minutum | - | 2 | - | 1 |
| Encyonema neomesianum | - | - | 4 | - |
| Encyonema silesiacum | - | 5 | 1 | - |
| Encyonopsis microcephala | - | - | - | - |
| Epithemia | - | - | - | - |
| Eunotia | 64 | 87 | 1 | 12 |
| Eunotia bilunaris | 7 | 3 | - | 2 |
| Eunotia carolina | - | - | - | - |
| Eunotia exigua | - | - | - | - |
| Eunotia flexuosa | - | 3 | - | - |
| Eunotia formica | 3 | - | - | - |
| Eunotia implicata | - | - | - | - |
| Eunotia incisa | - | 3 | - | - |
| Eunotia meisteri | - | - | - | - |
| Eunotia minor | - | - | - | - |
| Eunotia naegelii | - | 2 | - | - |
| Eunotia paludosa | 3 | 9 | - | - |
| Eunotia pectinalis | - | - | - | - |
| Eunotia pectinalis undulata | - | - | - | - |
| Eunotia rhomboidea | 2 | 1 | - | - |
| Eunotia transfuga | - | - | - | - |
| Eunotia undulata | - | - | - | - |



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| Taxon Name / SampleID/PerDiaID -> | 24513 (# counted) | 24518 (# counted) | 24541 (# counted) | 24544 (# counted) |
| Eunotia yanomami | - | - | - | - |
| Eunotia zygodon | - | - | - | - |
| Fragilaria | - | - | - | - |
| Fragilaria brevistriata | - | - | - | - |
| Fragilaria capucina | - | 3 | - | - |
| Fragilaria crotonensis | - | - | - | - |
| Fragilaria javanica | - | - | - | - |
| Fragilaria pinnata | - | - | - | - |
| Fragilaria synegrotesca | - | - | - | - |
| Fragilaria virescens | - | - | - | - |
| Fragilariaceae | 4 | 2 | 9 | 42 |
| Fragilariforma | - | - | - | 1 |
| Fragilariforma bicapitata | - | 1 | - | - |
| Fragilariforma virescens | - | - | - | - |
| Fragilariophyceae | - | - | - | - |
| Frustulia | 4 | 19 | - | 1 |
| Frustulia rhomboides | - | - | - | - |
| Frustulia saxonica | - | - | - | - |
| Frustulia vulgaris | - | 3 | - | - |
| Geissleria decussis | - | - | - | - |
| Gomphonema | 3 | 2 | - | 3 |
| Gomphonema affine | - | - | - | - |
| Gomphonema augur | - | - | - | - |
| Gomphonema clevei | - | - | - | - |
| Gomphonema gracile | - | - | - | - |
| Gomphonema grovei lingulatum | - | - | - | - |
| Gomphonema guaraniarum | 1 | - | - | - |
| Gomphonema minutum | - | - | - | - |
| Gomphonema parvulum | 1 | 1 | - | - |
| Gomphonema truncatum | - | - | - | - |
| Gomphonema vibrio | - | - | - | - |
| Gyrosigma | - | - | - | - |
| Gyrosigma obscurum | - | - | - | - |
| Hantzschia | - | - | - | - |
| Hantzschia amphioxys | 1 | - | - | - |
| Hippodonta | - | - | - | 2 |
| Hippodonta capitata | - | - | - | - |
| Hippodonta hungarica | 3 | 4 | - | - |
| Karayevia clevei | - | - | - | - |
| Kobayasiella | 1 | 3 | - | 2 |
| Lemnicola hungarica | 1 | - | - | - |
| Luticola | 17 | 1 | - | - |
| Luticola mutica | - | - | - | 1 |
| Melosira | - | 1 | - | - |
| Meridion | 1 | - | - | - |
| Microcostatus polonarum | - | - | - | - |
| Navicula | 18 | 11 | 6 | 3 |
| Navicula bouillantensis | - | - | - | - |



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| Taxon Name / SampleID/PerDiaID -> | 24513 (# counted) | 24518 (# counted) | 24541 (# counted) | 24544 (# counted) |
| Navicula clementis | - | - | - | 4 |
| Navicula cocconeiformis | - | - | - | - |
| Navicula constans | - | - | - | - |
| Navicula cryptocephala | - | - | - | - |
| Navicula cryptotenella | - | - | - | - |
| Navicula decussis | - | - | - | - |
| Navicula elginensis | - | - | - | - |
| Navicula festiva | 3 | - | - | - |
| Navicula gastrum | 1 | - | - | 2 |
| Navicula germainii | - | 1 | - | - |
| Navicula heimansioides | - | - | - | - |
| Navicula ingenua | - | - | - | - |
| Navicula kotschyi | 1 | - | - | - |
| Navicula longicephala | 2 | 1 | - | - |
| Navicula mediocris | - | 2 | - | - |
| Navicula minima | - | 7 | 1 | 8 |
| Navicula occulta | 1 | 1 | - | - |
| Navicula peregrina | - | - | - | - |
| Navicula placenta | - | - | - | 4 |
| Navicula placentula | 1 | - | - | - |
| Navicula porifera | - | - | - | - |
| Navicula radiosa | - | - | - | - |
| Navicula rhynchocephala | - | - | - | - |
| Navicula rostellata | - | - | - | - |
| Navicula schroeteri | - | - | - | - |
| Navicula seminulum | 8 | 50 | 2 | 13 |
| Navicula tripunctata | - | - | - | - |
| Navicula vaneeii | - | - | - | - |
| Navicula viridulacalcis | - | - | - | - |
| Naviculaceae | 2 | 6 | 6 | 6 |
| Naviculales | - | - | - | - |
| Neidium | - | - | - | 7 |
| Neidium alpinum | - | 6 | - | - |
| Neidium alpinum quadripunctatum | - | 1 | - | - |
| Neidium amphigomphus | - | - | - | - |
| Neidium binodis | - | - | - | - |
| Neidium densestriatum | 3 | - | 1 | 7 |
| Neidium dubium | - | - | - | - |
| Neidium ladogensis densestriatum | - | - | - | - |
| Nitzschia | 8 | 23 | 22 | 105 |
| Nitzschia amphibia | - | - | - | - |
| Nitzschia clausii | - | - | - | - |
| Nitzschia dissipata | - | - | - | - |
| Nitzschia frustulum | - | - | - | - |
| Nitzschia gracilis | - | - | - | - |
| Nitzschia intermedia | - | - | - | - |
| Nitzschia linearis | - | - | - | - |
| Nitzschia nana | - | 1 | - | - |



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| Taxon Name / SampleID/PerDiaID -> | 24513 (# counted) | 24518 (# counted) | 24541 (# counted) | 24544 (# counted) |
| Nitzschia palea | - | 9 | - | 30 |
| Nitzschia paleacea | - | - | - | - |
| Nitzschia palustris | 13 | - | - | - |
| Nitzschia reversa | - | - | - | - |
| Nitzschia scalaris | - | - | - | - |
| Nitzschia seriata | - | - | - | - |
| Nitzschia serrata | - | - | - | 2 |
| Nitzschia subacicularis | 2 | - | - | - |
| Nupela | 103 | 64 | 37 | 5 |
| Nupela cymbelloidea | - | - | - | - |
| Nupela neotropica | - | - | 8 | - |
| Opephora | - | 1 | - | - |
| Pinnularia | 52 | 28 | 11 | 34 |
| Pinnularia acrosphaeria | - | - | - | - |
| Placoneis | - | - | - | - |
| Placoneis elginensis | - | 1 | - | - |
| Planothidium | 1 | 2 | 4 | 2 |
| Planothidium apiculatum | 2 | 5 | 11 | 5 |
| Planothidium delicatulum | - | - | - | - |
| Planothidium frequentissimum | - | - | 3 | 4 |
| Planothidium lanceolatum | - | - | - | - |
| Planothidium peragalli | - | - | - | - |
| Planothidium rostratum | 2 | - | 5 | - |
| Pleurosira laevis | - | - | - | - |
| Psammothidium daonense | - | - | - | - |
| Psammothidium sacculum | - | - | 4 | - |
| Pseudostaurosira brevistriata | - | - | 1 | - |
| Rhopalodia | - | 3 | 5 | - |
| Rossithidium | - | - | - | - |
| Rossithidium pusillium | - | 8 | 2 | 1 |
| Sellaphora | 3 | - | 1 | - |
| Sellaphora laevissima | - | - | - | - |
| Sellaphora pupula | 3 | 1 | - | 1 |
| Stauroneis | 2 | 3 | 1 | 5 |
| Stauroneis anceps | - | - | - | - |
| Stauroneis phoenicenteron | 3 | 2 | - | - |
| Stauroneis prominula | - | - | - | - |
| Stauroneis smithii | - | - | - | - |
| Staurosira construens | - | - | - | - |
| Staurosira elliptica | - | - | 9 | 1 |
| Staurosirella | - | - | - | - |
| Staurosirella leptostauron | - | - | - | - |
| Staurosirella pinnata | - | 2 | - | 6 |
| Stenopterobia | - | - | - | - |
| Stenopterobia delicatissima | - | - | 4 | - |
| Stephanodiscus | 4 | - | - | - |
| Surirella | - | - | 3 | - |
| Surirella angusta | - | - | - | - |



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| Taxon Name / SampleID/PerDiaID -> | 24513 (# counted) | 24518 (# counted) | 24541 (# counted) | 24544 (# counted) |
| Synedra | - | - | - | - |
| Synedra acus | - | - | - | - |
| Synedra fasciculata | - | - | - | - |
| Synedra ulna | - | - | - | - |
| Tabellaria | - | - | - | - |
| Terpsinoe musica | - | - | - | - |
| Thalassionema | - | - | - | - |
| Thalassiosira | - | - | 1 | - |
| Tryblionella | - | - | - | 2 |
| Tryblionella levidensis | - | - | - | - |

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| Taxon Name / SampleID/PerDiaID -> | 24548 (# counted) | 24549 (# counted) | 24551 (# counted) | 24553 (# counted) |
| Achnanthaceae | - | - | - | - |
| Achnanthales | - | - | - | - |
| Achnanthes | 11 | 4 | - | - |
| Achnanthes clevei | - | - | - | - |
| Achnanthes exigua | - | - | - | - |
| Achnanthes fluviatilis | 8 | - | 2 | 1 |
| Achnanthes hungarica | - | - | - | - |
| Achnanthes lanceolata | - | - | - | - |
| Achnanthes lanceolata apiculata | - | - | - | - |
| Achnanthes lanceolata frequentissima | - | - | - | - |
| Achnanthes lanceolata rostrata | - | - | - | - |
| Achnanthes minutissima | - | - | - | - |
| Achnanthes peragalli | - | - | - | - |
| Achnanthes rupestoides | 27 | - | 1 | 4 |
| Achnanthidiaceae | - | - | - | - |
| Achnanthidium | - | 1 | 6 | 9 |
| Achnanthidium exiguum | 5 | - | 9 | 3 |
| Achnanthidium microcephalum | - | - | - | - |
| Achnanthidium minutissimum | 1 | 1 | - | 1 |
| Actinella | - | 2 | 3 | 1 |
| Amphipleura pellucida | - | - | - | - |
| Amphora | - | - | 1 | - |
| Amphora copulata | - | - | - | - |
| Amphora libyca | - | - | - | - |
| Amphora veneta | - | - | - | - |
| Anorthoneis | - | - | - | - |
| Asterionella | - | - | - | - |
| Aulacoseira | 6 | - | 7 | 1 |
| Aulacoseira granulata | - | - | - | - |
| Aulacoseira herzogii | - | - | - | - |
| Bacillaria paxillifer | - | - | - | - |
| Bacillariophyceae | - | - | - | - |
| Bacillariophyta | - | - | - | - |
| Brachysira | - | - | - | 1 |
| Brachysira brebissonii | - | - | - | - |
| Brachysira microcephala | - | - | - | - |
| Brachysira vitrea | - | - | 1 | - |
| Caloneis | 2 | 2 | 3 | 1 |
| Caloneis bacillum | - | - | - | - |
| Capartogramma crucicula | - | - | - | - |
| Cavinula | - | - | - | - |
| Cavinula cocconeiformis | - | 10 | 3 | 1 |
| Cavinula jaernefeltii | 2 | 7 | - | - |
| Chamaepinnularia margaritiana | - | - | - | - |
| Chamaepinnularia minutissima | - | - | - | 5 |
| Cocconeis | 13 | - | - | - |
| Cocconeis disculus | - | - | - | - |
| Cocconeis fluviatilis | - | - | - | - |



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| Taxon Name / SampleID/PerDiaID -> | 24548 (# counted) | 24549 (# counted) | 24551 (# counted) | 24553 (# counted) |
| Cocconeis pediculus | - | - | - | - |
| Cocconeis placentula | 9 | - | - | - |
| Cocconeis pseudothumensis | - | - | - | - |
| Coscinodiscophyceae | - | - | - | - |
| Craticula | 7 | 1 | 15 | 18 |
| Craticula minusculoides | - | - | - | - |
| Cyclostephanos invisitatus | - | - | - | - |
| Cyclotella | - | - | - | - |
| Cyclotella atomus | - | - | 1 | - |
| Cyclotella meneghiniana | - | - | - | - |
| Cyclotella pseudostelligera | - | - | 2 | 1 |
| Cymbella | - | - | - | - |
| Cymbella aspera | - | - | - | - |
| Cymbella subcuspidata | - | - | 2 | - |
| Cymbellaceae | - | - | - | - |
| Cymbellales | - | - | - | - |
| Diadesmis confervacea | 1 | - | - | - |
| Diadesmis contenta | - | - | 7 | 2 |
| Diatoma | - | 2 | - | - |
| Diploneis | - | - | - | - |
| Diploneis oblongella | - | - | - | - |
| Diploneis ovalis | - | - | - | - |
| Diploneis parma | - | - | 1 | - |
| Diploneis pseudovalis | - | - | - | - |
| Encyonema | - | - | 1 | 1 |
| Encyonema evergladianum | - | - | - | - |
| Encyonema minutum | 2 | - | - | - |
| Encyonema neomesianum | - | - | - | - |
| Encyonema silesiacum | 3 | - | - | 2 |
| Encyonopsis microcephala | - | - | - | - |
| Epithemia | - | - | - | - |
| Eunotia | 118 | 264 | 64 | 105 |
| Eunotia bilunaris | - | 1 | 2 | 2 |
| Eunotia carolina | - | - | - | - |
| Eunotia exigua | - | - | - | - |
| Eunotia flexuosa | - | - | - | - |
| Eunotia formica | - | - | - | - |
| Eunotia implicata | - | - | - | - |
| Eunotia incisa | 2 | 2 | - | - |
| Eunotia meisteri | - | - | 1 | 1 |
| Eunotia minor | - | - | - | - |
| Eunotia naegelii | - | - | - | - |
| Eunotia paludosa | - | 3 | 3 | 1 |
| Eunotia pectinalis | - | - | - | - |
| Eunotia pectinalis undulata | - | - | - | - |
| Eunotia rhomboidea | - | - | - | 1 |
| Eunotia transfuga | - | - | - | - |
| Eunotia undulata | 1 | - | - | 2 |



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| Eunotia yanomami | - | 3 | - | - |
| Eunotia zygodon | - | - | - | - |
| Fragilaria | - | - | - | - |
| Fragilaria brevistriata | - | - | - | - |
| Fragilaria capucina | - | - | - | - |
| Fragilaria crotonensis | - | - | - | - |
| Fragilaria javanica | - | - | - | - |
| Fragilaria pinnata | - | - | - | - |
| Fragilaria synegrotesca | - | - | - | - |
| Fragilaria virescens | - | - | - | - |
| Fragilariaceae | 7 | - | - | - |
| Fragilariforma | - | 5 | - | 8 |
| Fragilariforma bicapitata | - | - | - | - |
| Fragilariforma virescens | 1 | - | - | - |
| Fragilariophyceae | - | - | - | - |
| Frustulia | 95 | 11 | 7 | 22 |
| Frustulia rhomboides | - | - | - | - |
| Frustulia saxonica | - | - | - | - |
| Frustulia vulgaris | 2 | - | 15 | 4 |
| Geissleria decussis | 1 | - | - | - |
| Gomphonema | 2 | 1 | 3 | - |
| Gomphonema affine | - | - | - | - |
| Gomphonema augur | - | - | - | - |
| Gomphonema clevei | - | - | - | - |
| Gomphonema gracile | - | - | - | - |
| Gomphonema grovei lingulatum | - | - | - | - |
| Gomphonema guaraniarum | - | - | - | - |
| Gomphonema minutum | - | - | - | - |
| Gomphonema parvulum | 4 | - | 2 | 8 |
| Gomphonema truncatum | - | - | - | - |
| Gomphonema vibrio | - | - | - | - |
| Gyrosigma | - | - | - | - |
| Gyrosigma obscurum | - | - | - | - |
| Hantzschia | - | - | - | - |
| Hantzschia amphioxys | - | - | - | - |
| Hippodonta | - | 2 | - | - |
| Hippodonta capitata | - | - | 1 | - |
| Hippodonta hungarica | 3 | - | 4 | 1 |
| Karayevia clevei | - | - | 1 | - |
| Kobayasiella | - | 1 | 9 | 4 |
| Lemnicola hungarica | - | - | - | - |
| Luticola | 2 | - | 1 | - |
| Luticola mutica | 1 | - | 1 | - |
| Melosira | - | - | - | - |
| Meridion | - | - | - | - |
| Microcostatus polonarum | - | - | 23 | 16 |
| Navicula | 14 | 1 | 13 | 17 |
| Navicula bouillantensis | - | - | - | - |



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| Taxon Name / SampleID/PerDiaID -> | 24548 (# counted) | 24549 (# counted) | 24551 (# counted) | 24553 (# counted) |
| Navicula clementis | - | 2 | - | - |
| Navicula cocconeiformis | - | - | - | - |
| Navicula constans | - | - | - | - |
| Navicula cryptocephala | 2 | - | 4 | 1 |
| Navicula cryptotenella | - | - | 1 | 2 |
| Navicula decussis | - | - | - | - |
| Navicula elginensis | - | - | - | - |
| Navicula festiva | - | - | 1 | - |
| Navicula gastrum | - | - | - | - |
| Navicula germainii | 1 | - | - | - |
| Navicula heimansioides | - | - | - | - |
| Navicula ingenua | - | - | - | - |
| Navicula kotschyi | - | - | - | - |
| Navicula longicephala | 2 | - | 2 | - |
| Navicula mediocris | - | 1 | - | 1 |
| Navicula minima | 7 | 6 | 12 | - |
| Navicula occulta | - | - | - | - |
| Navicula peregrina | - | - | - | - |
| Navicula placenta | - | - | - | - |
| Navicula placentula | - | - | - | - |
| Navicula porifera | - | - | - | - |
| Navicula radiosa | 1 | - | 1 | 3 |
| Navicula rhynchocephala | - | - | 1 | - |
| Navicula rostellata | - | - | - | - |
| Navicula schroeteri | - | - | - | - |
| Navicula seminulum | 12 | 1 | 22 | 2 |
| Navicula tripunctata | - | - | - | - |
| Navicula vaneeii | - | - | - | - |
| Navicula viridulacalcis | - | - | - | - |
| Naviculaceae | 27 | 3 | 19 | 10 |
| Naviculales | - | - | - | - |
| Neidium | - | - | 2 | 5 |
| Neidium alpinum | - | - | - | 1 |
| Neidium alpinum quadripunctatum | - | - | 3 | 2 |
| Neidium amphigomphus | 1 | - | - | - |
| Neidium binodis | - | - | - | - |
| Neidium densestriatum | - | 11 | 1 | 1 |
| Neidium dubium | - | - | - | - |
| Neidium ladogensis densestriatum | - | - | - | - |
| Nitzschia | 4 | 38 | 43 | 55 |
| Nitzschia amphibia | - | - | - | - |
| Nitzschia clausii | - | - | - | - |
| Nitzschia dissipata | 2 | - | 1 | 1 |
| Nitzschia frustulum | - | - | - | - |
| Nitzschia gracilis | - | - | - | - |
| Nitzschia intermedia | - | - | - | - |
| Nitzschia linearis | - | - | - | - |
| Nitzschia nana | - | - | - | 1 |



US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | CLA254LR | CLA243LV | NUTREF001 | GAD106GS |
|---|---|---|---|---|
| Sample date -> | 11/6/2008 | 11/6/2008 | 11/20/2008 | 11/20/2008 |
| | Sampleid 65736/PerDiaID | Sampleid 65737/PerDiaID | Sampleid 65739/PerDiaID | Sampleid 65741/PerDiaID |
| Taxon Name / SampleID/PerDiaID -> | 24548 (# counted) | 24549 (# counted) | 24551 (# counted) | 24553 (# counted) |
| Nitzschia palea | - | - | 2 | - |
| Nitzschia paleacea | - | - | - | - |
| Nitzschia palustris | - | - | - | - |
| Nitzschia reversa | - | - | - | - |
| Nitzschia scalaris | - | - | - | - |
| Nitzschia seriata | - | - | - | 1 |
| Nitzschia serrata | - | 3 | - | - |
| Nitzschia subacicularis | - | - | - | - |
| Nupela | 36 | 67 | 52 | 46 |
| Nupela cymbelloidea | - | - | - | - |
| Nupela neotropica | - | 6 | - | - |
| Opephora | - | - | - | - |
| Pinnularia | 7 | 27 | 27 | 54 |
| Pinnularia acrosphaeria | - | - | - | - |
| Placoneis | - | - | - | - |
| Placoneis elginensis | - | - | - | - |
| Planothidium | 12 | 1 | 45 | 10 |
| Planothidium apiculatum | 17 | 1 | 3 | 3 |
| Planothidium delicatulum | - | - | - | - |
| Planothidium frequentissimum | - | - | - | 22 |
| Planothidium lanceolatum | - | - | 11 | - |
| Planothidium peragalli | 2 | - | 8 | - |
| Planothidium rostratum | 6 | - | - | - |
| Pleurosira laevis | - | - | - | - |
| Psammothidium daonense | - | - | 6 | 7 |
| Psammothidium sacculum | - | - | 1 | 14 |
| Pseudostaurosira brevistriata | - | - | - | - |
| Rhopalodia | - | - | - | - |
| Rossithidium | - | - | - | - |
| Rossithidium pusillium | - | - | 5 | - |
| Sellaphora | - | - | - | 2 |
| Sellaphora laevissima | - | - | - | 1 |
| Sellaphora pupula | - | - | 3 | 3 |
| Stauroneis | 2 | 6 | 6 | 6 |
| Stauroneis anceps | 3 | - | - | - |
| Stauroneis phoenicenteron | - | - | - | 2 |
| Stauroneis prominula | - | - | - | - |
| Stauroneis smithii | - | 2 | - | - |
| Staurosira construens | - | - | - | - |
| Staurosira elliptica | - | - | - | - |
| Staurosirella | - | - | - | - |
| Staurosirella leptostauron | - | - | - | - |
| Staurosirella pinnata | 1 | - | 1 | - |
| Stenopterobia | - | - | - | - |
| Stenopterobia delicatissima | 3 | - | - | - |
| Stephanodiscus | - | - | - | - |
| Surirella | 2 | - | 1 | - |
| Surirella angusta | - | - | - | - |



US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | CLA254LR | CLA243LV | NUTREF001 | GAD106GS |
|---|---|---|---|---|
| Sample date -> | 11/6/2008 | 11/6/2008 | 11/20/2008 | 11/20/2008 |
| | Sampleid 65736/PerDiaID | Sampleid 65737/PerDiaID | Sampleid 65739/PerDiaID | Sampleid 65741/PerDiaID |
| Taxon Name / SampleID/PerDiaID -> | 24548 (# counted) | 24549 (# counted) | 24551 (# counted) | 24553 (# counted) |
| Synedra | - | - | - | - |
| Synedra acus | - | - | - | - |
| Synedra fasciculata | - | - | - | - |
| Synedra ulna | - | - | 1 | - |
| Tabellaria | - | - | - | - |
| Terpsinoe musica | - | - | - | - |
| Thalassionema | - | - | - | - |
| Thalassiosira | - | - | - | - |
| Tryblionella | - | 1 | - | - |
| Tryblionella levidensis | - | - | - | - |

US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | GLA630GS | 24010002 | 273116508208152 | 22050083 |
|---|---|---|---|---|
| Sample date -> | 12/16/2008 | 12/17/2008 | 12/17/2008 | 1/14/2009 |
| | Sampleid 65891/PerDiaID | Sampleid 65900/PerDiaID | Sampleid 65907/PerDiaID | Sampleid 65931/PerDiaID |
| Taxon Name / SampleID/PerDiaID -> | 24591 (# counted) | 24599 (# counted) | 24600 (# counted) | 24605 (# counted) |
| Achnanthaceae | - | - | - | - |
| Achnanthales | - | - | - | - |
| Achnanthes | 3 | - | - | - |
| Achnanthes clevei | - | - | - | - |
| Achnanthes exigua | - | - | - | - |
| Achnanthes fluviatilis | 3 | - | - | 7 |
| Achnanthes hungarica | - | - | - | - |
| Achnanthes lanceolata | - | - | - | - |
| Achnanthes lanceolata apiculata | - | - | - | - |
| Achnanthes lanceolata frequentissima | - | - | - | - |
| Achnanthes lanceolata rostrata | - | - | - | - |
| Achnanthes minutissima | - | - | - | - |
| Achnanthes peragalli | - | - | - | - |
| Achnanthes rupestoides | - | - | - | 177 |
| Achnanthidiaceae | - | - | - | - |
| Achnanthidium | - | - | - | - |
| Achnanthidium exiguum | - | 4 | 24 | 10 |
| Achnanthidium microcephalum | - | - | - | 1 |
| Achnanthidium minutissimum | - | - | 1 | 4 |
| Actinella | - | - | - | - |
| Amphipleura pellucida | - | - | - | 5 |
| Amphora | - | - | - | - |
| Amphora copulata | - | - | - | - |
| Amphora libyca | - | - | - | - |
| Amphora veneta | - | - | - | - |
| Anorthoneis | - | - | - | - |
| Asterionella | - | - | - | - |
| Aulacoseira | - | - | - | 3 |
| Aulacoseira granulata | - | - | - | - |
| Aulacoseira herzogii | - | - | - | - |
| Bacillaria paxillifer | - | 4 | 7 | - |
| Bacillariophyceae | - | - | - | - |
| Bacillariophyta | - | - | - | - |
| Brachysira | - | - | - | - |
| Brachysira brebissonii | - | - | - | - |
| Brachysira microcephala | - | - | - | 2 |
| Brachysira vitrea | - | - | - | - |
| Caloneis | 1 | - | - | - |
| Caloneis bacillum | - | - | - | - |
| Capartogramma crucicula | - | - | - | - |
| Cavinula | - | - | - | - |
| Cavinula cocconeiformis | - | - | - | - |
| Cavinula jaernefeltii | - | - | - | - |
| Chamaepinnularia margaritiana | - | - | - | - |
| Chamaepinnularia minutissima | - | - | - | - |
| Cocconeis | - | 3 | 4 | 2 |
| Cocconeis disculus | - | - | - | - |
| Cocconeis fluviatilis | - | - | 34 | - |



US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | GLA630GS | 24010002 | 273116508208152 | 22050083 |
|---|---|---|---|---|
| Sample date -> | 12/16/2008 | 12/17/2008 | 12/17/2008 | 1/14/2009 |
| | Sampleid 65891/PerDiaID | Sampleid 65900/PerDiaID | Sampleid 65907/PerDiaID | Sampleid 65931/PerDiaID |
| Taxon Name / SampleID/PerDiaID -> | 24591 (# counted) | 24599 (# counted) | 24600 (# counted) | 24605 (# counted) |
| Cocconeis pediculus | - | - | - | - |
| Cocconeis placentula | - | 2 | 3 | 102 |
| Cocconeis pseudothumensis | - | - | - | - |
| Coscinodiscophyceae | - | - | - | - |
| Craticula | 4 | - | 2 | - |
| Craticula minusculoides | - | - | - | - |
| Cyclostephanos invisitatus | - | - | - | - |
| Cyclotella | - | 1 | - | - |
| Cyclotella atomus | - | - | - | - |
| Cyclotella meneghiniana | - | - | - | 3 |
| Cyclotella pseudostelligera | - | - | - | - |
| Cymbella | - | - | - | - |
| Cymbella aspera | - | - | - | 1 |
| Cymbella subcuspidata | - | - | - | - |
| Cymbellaceae | - | - | - | - |
| Cymbellales | - | - | - | - |
| Diadesmis confervacea | 6 | 6 | 3 | - |
| Diadesmis contenta | 1 | - | 1 | 1 |
| Diatoma | - | - | - | - |
| Diploneis | - | - | 2 | - |
| Diploneis oblongella | - | - | - | - |
| Diploneis ovalis | - | - | - | - |
| Diploneis parma | - | - | 1 | - |
| Diploneis pseudovalis | - | - | - | - |
| Encyonema | 1 | - | - | - |
| Encyonema evergladianum | - | - | - | - |
| Encyonema minutum | - | - | 1 | - |
| Encyonema neomesianum | 5 | - | - | - |
| Encyonema silesiacum | 81 | - | - | - |
| Encyonopsis microcephala | - | - | - | 1 |
| Epithemia | - | - | - | 4 |
| Eunotia | 181 | - | 6 | 1 |
| Eunotia bilunaris | - | - | 1 | 2 |
| Eunotia carolina | - | - | - | - |
| Eunotia exigua | - | - | - | - |
| Eunotia flexuosa | - | - | - | - |
| Eunotia formica | - | - | 1 | - |
| Eunotia implicata | - | - | - | - |
| Eunotia incisa | - | - | - | - |
| Eunotia meisteri | - | - | - | - |
| Eunotia minor | - | - | - | - |
| Eunotia naegelii | - | - | - | - |
| Eunotia paludosa | - | - | - | - |
| Eunotia pectinalis | - | - | - | - |
| Eunotia pectinalis undulata | - | - | - | - |
| Eunotia rhomboidea | - | - | 1 | - |
| Eunotia transfuga | - | - | - | - |
| Eunotia undulata | - | - | - | - |



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| As Entered / STORET station -> | GLA630GS | 24010002 | 273116508208152 | 22050083 |
|---|---|---|---|---|
| Sample date -> | 12/16/2008 | 12/17/2008 | 12/17/2008 | 1/14/2009 |
| | Sampleid 65891/PerDiaID | Sampleid 65900/PerDiaID | Sampleid 65907/PerDiaID | Sampleid 65931/PerDiaID |
| Taxon Name / SampleID/PerDiaID -> | 24591 (# counted) | 24599 (# counted) | 24600 (# counted) | 24605 (# counted) |
| Eunotia yanomami | - | - | - | - |
| Eunotia zygodon | - | - | - | - |
| Fragilaria | - | - | - | - |
| Fragilaria brevistriata | - | - | - | - |
| Fragilaria capucina | - | - | - | - |
| Fragilaria crotonensis | - | - | - | - |
| Fragilaria javanica | - | - | - | - |
| Fragilaria pinnata | - | - | - | - |
| Fragilaria synegrotesca | - | - | - | - |
| Fragilaria virescens | - | - | - | - |
| Fragilariaceae | - | 22 | 98 | 2 |
| Fragilariforma | - | - | - | - |
| Fragilariforma bicapitata | - | - | - | - |
| Fragilariforma virescens | - | - | - | - |
| Fragilariophyceae | - | - | - | - |
| Frustulia | 6 | - | - | - |
| Frustulia rhomboides | - | - | - | - |
| Frustulia saxonica | - | - | - | - |
| Frustulia vulgaris | 3 | - | - | 1 |
| Geissleria decussis | - | 2 | - | - |
| Gomphonema | 1 | 4 | 1 | 2 |
| Gomphonema affine | - | - | - | 2 |
| Gomphonema augur | - | - | - | - |
| Gomphonema clevei | - | - | - | - |
| Gomphonema gracile | 2 | - | - | 1 |
| Gomphonema grovei lingulatum | - | - | - | - |
| Gomphonema guaraniarum | - | - | - | - |
| Gomphonema minutum | - | - | - | 2 |
| Gomphonema parvulum | - | - | - | 4 |
| Gomphonema truncatum | - | - | - | - |
| Gomphonema vibrio | - | - | - | - |
| Gyrosigma | - | - | - | - |
| Gyrosigma obscurum | - | - | - | - |
| Hantzschia | - | - | - | - |
| Hantzschia amphioxys | - | - | - | - |
| Hippodonta | - | 2 | 6 | - |
| Hippodonta capitata | - | 2 | 11 | - |
| Hippodonta hungarica | 1 | 1 | 11 | - |
| Karayevia clevei | - | 2 | 11 | 3 |
| Kobayasiella | 7 | - | - | 1 |
| Lemnicola hungarica | - | - | - | 7 |
| Luticola | - | - | - | - |
| Luticola mutica | - | - | - | - |
| Melosira | - | 384 | 2 | - |
| Meridion | - | - | - | - |
| Microcostatus polonarum | - | - | - | - |
| Navicula | 13 | 3 | 44 | 13 |
| Navicula bouillantensis | - | - | - | 1 |



US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | GLA630GS | 24010002 | 273116508208152 | 22050083 |
|---|---|---|---|---|
| Sample date -> | 12/16/2008 | 12/17/2008 | 12/17/2008 | 1/14/2009 |
| | Sampleid 65891/PerDiaID | Sampleid 65900/PerDiaID | Sampleid 65907/PerDiaID | Sampleid 65931/PerDiaID |
| Taxon Name / SampleID/PerDiaID -> | 24591 (# counted) | 24599 (# counted) | 24600 (# counted) | 24605 (# counted) |
| Navicula clementis | - | - | 1 | - |
| Navicula cocconeiformis | - | - | - | - |
| Navicula constans | 1 | - | 1 | - |
| Navicula cryptocephala | - | - | - | 2 |
| Navicula cryptotenella | - | - | - | 2 |
| Navicula decussis | - | - | - | - |
| Navicula elginensis | - | - | - | - |
| Navicula festiva | 1 | - | - | - |
| Navicula gastrum | 1 | - | 5 | - |
| Navicula germainii | - | 4 | 25 | - |
| Navicula heimansioides | - | - | - | 4 |
| Navicula ingenua | - | - | - | 1 |
| Navicula kotschyi | - | - | - | - |
| Navicula longicephala | - | 1 | 4 | - |
| Navicula mediocris | - | - | - | - |
| Navicula minima | 1 | - | 1 | 6 |
| Navicula occulta | - | - | - | - |
| Navicula peregrina | - | 5 | - | - |
| Navicula placenta | - | - | - | - |
| Navicula placentula | - | - | - | - |
| Navicula porifera | - | - | 1 | - |
| Navicula radiosa | - | - | 2 | - |
| Navicula rhynchocephala | - | - | - | - |
| Navicula rostellata | - | - | - | - |
| Navicula schroeteri | - | - | - | - |
| Navicula seminulum | - | - | - | 5 |
| Navicula tripunctata | - | - | 6 | - |
| Navicula vaneeii | - | 1 | - | - |
| Navicula viridulacalcis | - | - | - | - |
| Naviculaceae | - | - | 5 | 4 |
| Naviculales | - | - | - | - |
| Neidium | - | - | - | - |
| Neidium alpinum | - | - | - | - |
| Neidium alpinum quadripunctatum | 1 | - | - | - |
| Neidium amphigomphus | - | - | - | - |
| Neidium binodis | - | - | - | - |
| Neidium densestriatum | - | - | - | - |
| Neidium dubium | - | - | - | - |
| Neidium ladogensis densestriatum | - | - | - | - |
| Nitzschia | 31 | 10 | 31 | 8 |
| Nitzschia amphibia | - | - | - | 17 |
| Nitzschia clausii | - | - | 1 | - |
| Nitzschia dissipata | - | - | - | 4 |
| Nitzschia frustulum | - | - | - | - |
| Nitzschia gracilis | - | - | - | - |
| Nitzschia intermedia | - | - | - | - |
| Nitzschia linearis | - | - | - | - |
| Nitzschia nana | 5 | - | - | - |



US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | GLA630GS | 24010002 | 273116508208152 | 22050083 |
|---|---|---|---|---|
| Sample date -> | 12/16/2008 | 12/17/2008 | 12/17/2008 | 1/14/2009 |
| | Sampleid 65891/PerDiaID | Sampleid 65900/PerDiaID | Sampleid 65907/PerDiaID | Sampleid 65931/PerDiaID |
| Taxon Name / SampleID/PerDiaID -> | 24591 (# counted) | 24599 (# counted) | 24600 (# counted) | 24605 (# counted) |
| Nitzschia palea | - | - | - | - |
| Nitzschia paleacea | - | - | - | - |
| Nitzschia palustris | - | - | - | - |
| Nitzschia reversa | - | - | - | - |
| Nitzschia scalaris | - | - | - | - |
| Nitzschia seriata | - | - | - | - |
| Nitzschia serrata | - | - | - | - |
| Nitzschia subacicularis | - | - | - | - |
| Nupela | 58 | - | 6 | 6 |
| Nupela cymbelloidea | - | - | - | 4 |
| Nupela neotropica | - | - | - | - |
| Opephora | - | 3 | 4 | - |
| Pinnularia | 4 | - | 3 | 2 |
| Pinnularia acrosphaeria | - | - | - | - |
| Placoneis | - | - | - | - |
| Placoneis elginensis | 1 | 3 | 6 | - |
| Planothidium | 37 | 8 | 38 | 3 |
| Planothidium apiculatum | 6 | 7 | 12 | - |
| Planothidium delicatulum | - | - | - | - |
| Planothidium frequentissimum | - | 2 | 6 | 5 |
| Planothidium lanceolatum | 20 | - | 2 | - |
| Planothidium peragalli | - | - | - | - |
| Planothidium rostratum | - | 8 | 19 | 45 |
| Pleurosira laevis | - | - | - | - |
| Psammothidium daonense | - | - | - | - |
| Psammothidium sacculum | - | - | - | - |
| Pseudostaurosira brevistriata | - | - | 9 | - |
| Rhopalodia | - | - | - | 2 |
| Rossithidium | - | - | - | - |
| Rossithidium pusillium | 9 | - | - | 4 |
| Sellaphora | - | - | 2 | - |
| Sellaphora laevissima | - | - | - | - |
| Sellaphora pupula | - | - | 5 | 2 |
| Stauroneis | 4 | - | - | 1 |
| Stauroneis anceps | - | - | - | - |
| Stauroneis phoenicenteron | 1 | - | - | 1 |
| Stauroneis prominula | - | - | 5 | - |
| Stauroneis smithii | - | - | - | - |
| Staurosira construens | - | - | - | - |
| Staurosira elliptica | - | - | - | - |
| Staurosirella | - | - | - | - |
| Staurosirella leptostauron | - | - | - | - |
| Staurosirella pinnata | - | 6 | 20 | - |
| Stenopterobia | - | - | - | - |
| Stenopterobia delicatissima | - | - | - | - |
| Stephanodiscus | - | - | - | - |
| Surirella | - | - | - | - |
| Surirella angusta | - | 1 | 1 | 1 |



US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | GLA630GS | 24010002 | 273116508208152 | 22050083 |
|---|---|---|---|---|
| Sample date -> | 12/16/2008 | 12/17/2008 | 12/17/2008 | 1/14/2009 |
| | Sampleid 65891/PerDiaID | Sampleid 65900/PerDiaID | Sampleid 65907/PerDiaID | Sampleid 65931/PerDiaID |
| Taxon Name / SampleID/PerDiaID -> | 24591 (# counted) | 24599 (# counted) | 24600 (# counted) | 24605 (# counted) |
| Synedra | - | - | - | - |
| Synedra acus | - | - | - | - |
| Synedra fasciculata | - | - | - | - |
| Synedra ulna | - | - | - | 6 |
| Tabellaria | - | - | - | - |
| Terpsinoe musica | - | - | - | - |
| Thalassionema | - | - | - | - |
| Thalassiosira | - | - | 3 | - |
| Tryblionella | - | - | - | - |
| Tryblionella levidensis | - | - | - | - |

US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | 22050040 | LIB104LV | CLA243LV | CLA254LR |
|---|---|---|---|---|
| Sample date -> | 1/14/2009 | 11/21/2005 | 11/14/2005 | 11/14/2005 |
| | Sampleid 65932/PerDiaID | Sampleid 49678/PerID | Sampleid 52997/PerID | Sampleid 53033/PerID |
| Taxon Name / SampleID/PerDiaID -> | 24606 (# counted) | 18449 (# counted) | 19569 (# counted) | 19609 (# counted) |
| Achnanthaceae | - | - | - | - |
| Achnanthales | - | - | - | - |
| Achnanthes | - | - | 7 | 7 |
| Achnanthes clevei | - | - | - | - |
| Achnanthes exigua | - | - | - | 4 |
| Achnanthes fluviatilis | 8 | - | - | - |
| Achnanthes hungarica | - | - | - | - |
| Achnanthes lanceolata | - | - | 1 | 1 |
| Achnanthes lanceolata apiculata | - | - | - | 4 |
| Achnanthes lanceolata frequentissima | - | - | - | - |
| Achnanthes lanceolata rostrata | - | - | - | - |
| Achnanthes minutissima | - | 2 | 24 | 33 |
| Achnanthes peragalli | - | - | - | - |
| Achnanthes rupestoides | 52 | - | - | 3 |
| Achnanthidiaceae | - | - | - | - |
| Achnanthidium | 2 | - | - | - |
| Achnanthidium exiguum | 8 | - | - | - |
| Achnanthidium microcephalum | - | - | - | - |
| Achnanthidium minutissimum | - | - | - | - |
| Actinella | - | - | - | - |
| Amphipleura pellucida | - | - | - | - |
| Amphora | 1 | - | - | - |
| Amphora copulata | 1 | - | - | - |
| Amphora libyca | - | - | - | - |
| Amphora veneta | - | - | - | - |
| Anorthoneis | - | - | - | - |
| Asterionella | - | - | - | - |
| Aulacoseira | 2 | - | 2 | 2 |
| Aulacoseira granulata | - | - | - | - |
| Aulacoseira herzogii | - | - | - | - |
| Bacillaria paxillifer | - | - | - | - |
| Bacillariophyceae | - | 23 | 15 | 9 |
| Bacillariophyta | - | - | - | - |
| Brachysira | 1 | 4 | - | - |
| Brachysira brebissonii | - | - | - | - |
| Brachysira microcephala | - | - | - | - |
| Brachysira vitrea | - | - | - | - |
| Caloneis | 2 | - | - | 4 |
| Caloneis bacillum | - | - | - | - |
| Capartogramma crucicula | - | - | 1 | - |
| Cavinula | - | - | - | - |
| Cavinula cocconeiformis | - | - | - | - |
| Cavinula jaernefeltii | - | - | - | - |
| Chamaepinnularia margaritiana | 2 | - | - | - |
| Chamaepinnularia minutissima | - | - | - | - |
| Cocconeis | - | - | - | - |
| Cocconeis disculus | - | - | - | - |
| Cocconeis fluviatilis | - | - | - | - |



US EPA ARCHIVE DOCUMENT

| As Entered / STORET station -> | 22050040 | LIB104LV | CLA243LV | CLA254LR |
|---|---|---|---|---|
| Sample date -> | 1/14/2009 | 11/21/2005 | 11/14/2005 | 11/14/2005 |
| | Sampleid 65932/PerDiaID | Sampleid 49678/PerID | Sampleid 52997/PerID | Sampleid 53033/PerID |
| Taxon Name / SampleID/PerDiaID -> | 24606 (# counted) | 18449 (# counted) | 19569 (# counted) | 19609 (# counted) |
| Cocconeis pediculus | - | - | - | - |
| Cocconeis placentula | 24 | 2 | - | 2 |
| Cocconeis pseudothumensis | - | - | - | - |
| Coscinodiscophyceae | - | - | - | - |
| Craticula | - | - | - | - |
| Craticula minusculoides | - | - | - | - |
| Cyclostephanos invisitatus | - | - | - | - |
| Cyclotella | - | - | - | 6 |
| Cyclotella atomus | - | - | - | - |
| Cyclotella meneghiniana | - | 2 | - | - |
| Cyclotella pseudostelligera | - | - | - | - |
| Cymbella | - | - | - | - |
| Cymbella aspera | 1 | - | - | - |
| Cymbella subcuspidata | - | - | - | - |
| Cymbellaceae | - | - | 2 | 2 |
| Cymbellales | - | - | - | - |
| Diadesmis confervacea | 6 | - | 2 | - |
| Diadesmis contenta | 1 | 2 | - | - |
| Diatoma | - | - | - | - |
| Diploneis | - | - | - | - |
| Diploneis oblongella | - | - | - | - |
| Diploneis ovalis | - | - | - | - |
| Diploneis parma | - | - | - | - |
| Diploneis pseudovalis | - | - | - | - |
| Encyonema | - | 1 | 1 | 13 |
| Encyonema evergladianum | - | - | - | - |
| Encyonema minutum | - | - | - | - |
| Encyonema neomesianum | - | - | - | 1 |
| Encyonema silesiacum | - | - | - | - |
| Encyonopsis microcephala | - | - | - | - |
| Epithemia | - | - | - | - |
| Eunotia | 1 | 312 | 170 | 148 |
| Eunotia bilunaris | - | 3 | - | - |
| Eunotia carolina | - | - | - | - |
| Eunotia exigua | - | - | - | - |
| Eunotia flexuosa | - | - | - | - |
| Eunotia formica | - | - | - | - |
| Eunotia implicata | - | - | - | - |
| Eunotia incisa | - | 3 | - | - |
| Eunotia meisteri | - | - | - | - |
| Eunotia minor | - | - | - | - |
| Eunotia naegelii | - | - | - | - |
| Eunotia paludosa | - | - | - | - |
| Eunotia pectinalis | - | 17 | - | - |
| Eunotia pectinalis undulata | - | - | - | - |
| Eunotia rhomboidea | - | - | - | - |
| Eunotia transfuga | - | - | - | - |
| Eunotia undulata | - | - | - | - |



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| | Sampleid 65932/PerDiaID | Sampleid 49678/PerID | Sampleid 52997/PerID | Sampleid 53033/PerID |
| Taxon Name / SampleID/PerDiaID -> | 24606 (# counted) | 18449 (# counted) | 19569 (# counted) | 19609 (# counted) |
| Eunotia yanomami | - | - | - | - |
| Eunotia zygodon | - | 2 | - | - |
| Fragilaria | - | - | 18 | 1 |
| Fragilaria brevistriata | - | - | - | - |
| Fragilaria capucina | - | - | - | 2 |
| Fragilaria crotonensis | - | - | - | - |
| Fragilaria javanica | - | 2 | - | - |
| Fragilaria pinnata | - | - | - | - |
| Fragilaria synegrotesca | - | - | - | - |
| Fragilaria virescens | - | - | - | - |
| Fragilariaceae | - | - | 14 | 2 |
| Fragilariforma | - | - | - | - |
| Fragilariforma bicapitata | - | - | - | - |
| Fragilariforma virescens | - | - | - | - |
| Fragilariophyceae | - | 3 | - | - |
| Frustulia | - | 2 | - | - |
| Frustulia rhomboides | - | 14 | 90 | 96 |
| Frustulia saxonica | - | 10 | - | - |
| Frustulia vulgaris | 1 | - | - | - |
| Geissleria decussis | - | - | - | - |
| Gomphonema | 18 | 2 | - | 1 |
| Gomphonema affine | - | - | - | - |
| Gomphonema augur | - | - | - | - |
| Gomphonema clevei | - | - | - | - |
| Gomphonema gracile | - | - | - | - |
| Gomphonema grovei lingulatum | - | - | - | - |
| Gomphonema guaraniarum | - | - | - | - |
| Gomphonema minutum | - | - | - | - |
| Gomphonema parvulum | - | - | - | - |
| Gomphonema truncatum | - | - | - | - |
| Gomphonema vibrio | - | - | - | - |
| Gyrosigma | - | - | - | - |
| Gyrosigma obscurum | - | - | - | - |
| Hantzschia | - | - | - | - |
| Hantzschia amphioxys | - | - | - | - |
| Hippodonta | - | - | - | - |
| Hippodonta capitata | - | - | 1 | - |
| Hippodonta hungarica | - | - | - | - |
| Karayevia clevei | 1 | - | - | - |
| Kobayasiella | 29 | - | - | - |
| Lemnicola hungarica | - | - | - | - |
| Luticola | - | 1 | - | - |
| Luticola mutica | - | - | - | - |
| Melosira | - | - | - | - |
| Meridion | - | - | - | - |
| Microcostatus polonarum | - | - | - | - |
| Navicula | 55 | 2 | - | 5 |
| Navicula bouillantensis | - | - | - | - |



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| | Sampleid 65932/PerDiaID | Sampleid 49678/PerID | Sampleid 52997/PerID | Sampleid 53033/PerID |
| Taxon Name / SampleID/PerDiaID -> | 24606 (# counted) | 18449 (# counted) | 19569 (# counted) | 19609 (# counted) |
| Navicula clementis | - | - | - | - |
| Navicula cocconeiformis | - | - | 3 | - |
| Navicula constans | - | - | - | - |
| Navicula cryptocephala | 10 | 1 | - | 8 |
| Navicula cryptotenella | 11 | - | - | 1 |
| Navicula decussis | - | - | - | - |
| Navicula elginensis | - | 1 | - | - |
| Navicula festiva | - | - | - | - |
| Navicula gastrum | - | - | - | - |
| Navicula germainii | - | - | - | - |
| Navicula heimansioides | - | - | - | - |
| Navicula ingenua | 18 | - | - | - |
| Navicula kotschyi | - | - | - | - |
| Navicula longicephala | - | - | - | - |
| Navicula mediocris | - | - | - | - |
| Navicula minima | 56 | 13 | - | 5 |
| Navicula occulta | - | - | - | - |
| Navicula peregrina | - | - | - | - |
| Navicula placenta | - | - | - | - |
| Navicula placentula | - | - | - | - |
| Navicula porifera | - | - | - | - |
| Navicula radiosa | - | - | - | - |
| Navicula rhynchocephala | - | - | - | - |
| Navicula rostellata | - | - | - | - |
| Navicula schroeteri | - | 1 | - | - |
| Navicula seminulum | 70 | 6 | - | - |
| Navicula tripunctata | - | - | - | - |
| Navicula vaneeii | - | - | - | - |
| Navicula viridulacalcis | - | - | - | - |
| Naviculaceae | 6 | 5 | 6 | 1 |
| Naviculales | - | - | - | - |
| Neidium | - | - | 2 | - |
| Neidium alpinum | - | - | - | - |
| Neidium alpinum quadripunctatum | - | - | - | - |
| Neidium amphigomphus | - | - | - | - |
| Neidium binodis | - | - | - | - |
| Neidium densestriatum | - | - | - | - |
| Neidium dubium | - | - | - | - |
| Neidium ladogensis densestriatum | - | 3 | - | - |
| Nitzschia | 9 | 9 | 69 | 41 |
| Nitzschia amphibia | 3 | - | - | - |
| Nitzschia clausii | - | - | - | - |
| Nitzschia dissipata | 4 | - | - | - |
| Nitzschia frustulum | - | - | 17 | - |
| Nitzschia gracilis | - | - | - | - |
| Nitzschia intermedia | - | - | - | - |
| Nitzschia linearis | 2 | - | - | - |
| Nitzschia nana | - | - | - | - |



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| | Sampleid 65932/PerDiaID | Sampleid 49678/PerID | Sampleid 52997/PerID | Sampleid 53033/PerID |
| Taxon Name / SampleID/PerDiaID -> | 24606 (# counted) | 18449 (# counted) | 19569 (# counted) | 19609 (# counted) |
| Nitzschia palea | - | - | 16 | 8 |
| Nitzschia paleacea | - | - | - | - |
| Nitzschia palustris | - | - | - | - |
| Nitzschia reversa | - | - | - | - |
| Nitzschia scalaris | - | - | - | - |
| Nitzschia seriata | - | - | - | - |
| Nitzschia serrata | - | - | - | - |
| Nitzschia subacicularis | - | - | - | - |
| Nupela | 28 | - | - | - |
| Nupela cymbelloidea | 12 | - | - | - |
| Nupela neotropica | - | - | - | - |
| Opephora | - | - | - | - |
| Pinnularia | - | 50 | 43 | 71 |
| Pinnularia acrosphaeria | - | - | - | - |
| Placoneis | 1 | - | - | - |
| Placoneis elginensis | - | - | - | - |
| Planothidium | 11 | - | - | - |
| Planothidium apiculatum | - | - | - | - |
| Planothidium delicatulum | - | - | - | - |
| Planothidium frequentissimum | 2 | - | - | - |
| Planothidium lanceolatum | 3 | - | - | - |
| Planothidium peragalli | - | - | - | - |
| Planothidium rostratum | 23 | - | - | - |
| Pleurosira laevis | - | - | - | - |
| Psammothidium daonense | - | - | - | - |
| Psammothidium sacculum | 4 | - | - | - |
| Pseudostaurosira brevistriata | - | - | - | - |
| Rhopalodia | - | - | - | - |
| Rossithidium | - | - | - | - |
| Rossithidium pusillium | 7 | - | - | - |
| Sellaphora | - | - | - | - |
| Sellaphora laevissima | - | - | - | - |
| Sellaphora pupula | 2 | 1 | - | - |
| Stauroneis | 2 | 1 | 1 | 6 |
| Stauroneis anceps | - | - | - | - |
| Stauroneis phoenicenteron | - | - | - | - |
| Stauroneis prominula | - | - | - | - |
| Stauroneis smithii | - | - | - | 1 |
| Staurosira construens | - | - | - | - |
| Staurosira elliptica | - | - | - | - |
| Staurosirella | - | - | - | - |
| Staurosirella leptostauron | - | - | - | - |
| Staurosirella pinnata | - | - | - | - |
| Stenopterobia | - | - | - | - |
| Stenopterobia delicatissima | - | - | - | 10 |
| Stephanodiscus | - | - | - | - |
| Surirella | - | - | - | 2 |
| Surirella angusta | - | - | - | - |



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| | Sampleid 65932/PerDiaID | Sampleid 49678/PerID | Sampleid 52997/PerID | Sampleid 53033/PerID |
| Taxon Name / SampleID/PerDiaID -> | 24606 (# counted) | 18449 (# counted) | 19569 (# counted) | 19609 (# counted) |
| Synedra | - | - | - | - |
| Synedra acus | - | - | - | - |
| Synedra fasciculata | - | - | - | - |
| Synedra ulna | - | - | - | - |
| Tabellaria | - | - | - | - |
| Terpsinoe musica | - | - | - | - |
| Thalassionema | - | - | - | - |
| Thalassiosira | - | - | - | - |
| Tryblionella | - | - | - | - |
| Tryblionella levidensis | - | - | - | - |

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| As Entered / STORET station -> | UNI234LV | LEV502GS | PUT308GS | GLA630GS |
|---|---|---|---|---|
| Sample date -> | 11/15/2005 | 12/6/2005 | 12/13/2005 | 1/23/2006 |
| | Sampleid 53060/PerID | Sampleid 54263/PerID | Sampleid 54275/PerID | Sampleid 55073/PerID |
| Taxon Name / SampleID/PerDiaID -> | 19640 (# counted) | 20007 (# counted) | 20032 (# counted) | 20329 (# counted) |
| Achnanthaceae | - | - | - | - |
| Achnanthales | - | - | - | - |
| Achnanthes | - | 3 | - | 2 |
| Achnanthes clevei | - | - | 4 | - |
| Achnanthes exigua | 2 | 4 | - | 1 |
| Achnanthes fluviatilis | - | - | - | - |
| Achnanthes hungarica | - | 4 | - | 21 |
| Achnanthes lanceolata | - | 1 | - | - |
| Achnanthes lanceolata apiculata | 1 | - | 1 | 20 |
| Achnanthes lanceolata frequentissima | - | - | - | - |
| Achnanthes lanceolata rostrata | 2 | 2 | - | - |
| Achnanthes minutissima | - | 2 | - | - |
| Achnanthes peragalli | - | - | - | - |
| Achnanthes rupestoides | - | 155 | - | - |
| Achnanthidiaceae | - | - | - | - |
| Achnanthidium | - | - | - | - |
| Achnanthidium exiguum | - | - | - | - |
| Achnanthidium microcephalum | - | - | - | - |
| Achnanthidium minutissimum | - | - | - | - |
| Actinella | - | - | - | - |
| Amphipleura pellucida | - | 28 | - | - |
| Amphora | - | - | - | - |
| Amphora copulata | - | - | - | - |
| Amphora libyca | - | - | - | 8 |
| Amphora veneta | - | - | - | 1 |
| Anorthoneis | - | - | - | - |
| Asterionella | - | - | - | - |
| Aulacoseira | 34 | - | 2 | 7 |
| Aulacoseira granulata | - | - | 2 | - |
| Aulacoseira herzogii | - | - | - | - |
| Bacillaria paxillifer | - | 12 | - | - |
| Bacillariophyceae | 7 | 2 | 2 | 5 |
| Bacillariophyta | - | - | - | - |
| Brachysira | - | - | - | - |
| Brachysira brebissonii | - | - | - | - |
| Brachysira microcephala | - | - | - | - |
| Brachysira vitrea | - | - | - | 1 |
| Caloneis | - | - | - | - |
| Caloneis bacillum | 2 | - | - | 1 |
| Capartogramma crucicula | 1 | - | - | - |
| Cavinula | - | - | - | - |
| Cavinula cocconeiformis | - | - | - | - |
| Cavinula jaernefeltii | - | - | - | - |
| Chamaepinnularia margaritiana | - | - | - | - |
| Chamaepinnularia minutissima | - | - | - | - |
| Cocconeis | - | 1 | - | - |
| Cocconeis disculus | - | - | - | - |
| Cocconeis fluviatilis | - | 27 | - | - |



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| As Entered / STORET station -> | UNI234LV | LEV502GS | PUT308GS | GLA630GS |
|---|---|---|---|---|
| Sample date -> | 11/15/2005 | 12/6/2005 | 12/13/2005 | 1/23/2006 |
| | Sampleid 53060/PerID | Sampleid 54263/PerID | Sampleid 54275/PerID | Sampleid 55073/PerID |
| Taxon Name / SampleID/PerDiaID -> | 19640 (# counted) | 20007 (# counted) | 20032 (# counted) | 20329 (# counted) |
| Cocconeis pediculus | - | - | - | - |
| Cocconeis placentula | - | 15 | - | 1 |
| Cocconeis pseudothumensis | - | - | - | - |
| Coscinodiscophyceae | - | - | - | - |
| Craticula | - | - | - | 7 |
| Craticula minusculoides | - | - | - | - |
| Cyclostephanos invisitatus | - | - | - | - |
| Cyclotella | - | - | - | - |
| Cyclotella atomus | - | - | - | - |
| Cyclotella meneghiniana | - | - | - | 1 |
| Cyclotella pseudostelligera | - | - | - | - |
| Cymbella | - | - | - | - |
| Cymbella aspera | - | - | - | - |
| Cymbella subcuspidata | - | - | - | - |
| Cymbellaceae | - | 18 | - | - |
| Cymbellales | - | - | - | - |
| Diadesmis confervacea | 1 | 1 | 3 | 9 |
| Diadesmis contenta | - | - | 3 | - |
| Diatoma | - | - | - | - |
| Diploneis | - | - | - | - |
| Diploneis oblongella | - | - | - | - |
| Diploneis ovalis | - | 1 | - | 1 |
| Diploneis parma | - | - | - | - |
| Diploneis pseudovalis | - | - | - | - |
| Encyonema | - | - | 5 | 8 |
| Encyonema evergladianum | - | - | - | - |
| Encyonema minutum | - | - | - | 4 |
| Encyonema neomesianum | - | - | - | - |
| Encyonema silesiacum | - | - | - | - |
| Encyonopsis microcephala | - | - | - | - |
| Epithemia | - | - | - | - |
| Eunotia | 143 | 7 | 296 | 109 |
| Eunotia bilunaris | 1 | - | - | 4 |
| Eunotia carolina | - | - | - | - |
| Eunotia exigua | - | - | - | - |
| Eunotia flexuosa | - | - | - | - |
| Eunotia formica | 3 | - | - | - |
| Eunotia implicata | 3 | - | - | - |
| Eunotia incisa | - | - | 32 | 4 |
| Eunotia meisteri | - | - | - | - |
| Eunotia minor | - | - | - | - |
| Eunotia naegelii | - | - | - | - |
| Eunotia paludosa | - | - | - | - |
| Eunotia pectinalis | - | - | 16 | - |
| Eunotia pectinalis undulata | - | - | - | - |
| Eunotia rhomboidea | - | - | - | - |
| Eunotia transfuga | - | - | - | - |
| Eunotia undulata | - | - | - | - |



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| As Entered / STORET station -> | UNI234LV | LEV502GS | PUT308GS | GLA630GS |
|---|---|---|---|---|
| Sample date -> | 11/15/2005 | 12/6/2005 | 12/13/2005 | 1/23/2006 |
| | Sampleid 53060/PerID | Sampleid 54263/PerID | Sampleid 54275/PerID | Sampleid 55073/PerID |
| Taxon Name / SampleID/PerDiaID -> | 19640 (# counted) | 20007 (# counted) | 20032 (# counted) | 20329 (# counted) |
| Eunotia yanomami | - | - | - | - |
| Eunotia zygodon | - | - | - | - |
| Fragilaria | - | 1 | 4 | - |
| Fragilaria brevistriata | - | - | - | - |
| Fragilaria capucina | - | - | - | - |
| Fragilaria crotonensis | - | - | - | - |
| Fragilaria javanica | - | - | - | - |
| Fragilaria pinnata | - | 2 | 1 | - |
| Fragilaria synegrotesca | - | - | - | - |
| Fragilaria virescens | - | - | 4 | - |
| Fragilariaceae | - | 2 | 2 | - |
| Fragilariforma | - | - | - | - |
| Fragilariforma bicapitata | - | - | - | - |
| Fragilariforma virescens | - | - | - | - |
| Fragilariophyceae | - | - | - | 1 |
| Frustulia | 8 | 5 | - | - |
| Frustulia rhomboides | - | - | 1 | - |
| Frustulia saxonica | 20 | - | 36 | 16 |
| Frustulia vulgaris | - | - | - | - |
| Geissleria decussis | - | - | - | 14 |
| Gomphonema | 2 | 48 | - | 8 |
| Gomphonema affine | - | 1 | - | - |
| Gomphonema augur | - | - | - | - |
| Gomphonema clevei | - | - | - | - |
| Gomphonema gracile | - | 8 | - | 6 |
| Gomphonema grovei lingulatum | - | - | - | - |
| Gomphonema guaraniarum | - | - | - | - |
| Gomphonema minutum | - | - | - | - |
| Gomphonema parvulum | - | 4 | - | 8 |
| Gomphonema truncatum | - | - | - | - |
| Gomphonema vibrio | - | 1 | - | - |
| Gyrosigma | - | 20 | - | - |
| Gyrosigma obscurum | - | - | - | - |
| Hantzschia | 1 | - | - | - |
| Hantzschia amphioxys | - | - | - | - |
| Hippodonta | - | 2 | - | 7 |
| Hippodonta capitata | - | - | - | 4 |
| Hippodonta hungarica | - | - | - | - |
| Karayevia clevei | - | - | - | - |
| Kobayasiella | - | - | - | - |
| Lemnicola hungarica | - | - | - | - |
| Luticola | - | 1 | - | 2 |
| Luticola mutica | - | - | - | - |
| Melosira | - | 6 | 1 | - |
| Meridion | - | - | - | - |
| Microcostatus polonarum | - | - | - | - |
| Navicula | 6 | 39 | 11 | 28 |
| Navicula bouillantensis | - | - | - | - |



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| As Entered / STORET station -> | UNI234LV | LEV502GS | PUT308GS | GLA630GS |
|---|---|---|---|---|
| Sample date -> | 11/15/2005 | 12/6/2005 | 12/13/2005 | 1/23/2006 |
| | Sampleid 53060/PerID | Sampleid 54263/PerID | Sampleid 54275/PerID | Sampleid 55073/PerID |
| Taxon Name / SampleID/PerDiaID -> | 19640 (# counted) | 20007 (# counted) | 20032 (# counted) | 20329 (# counted) |
| Navicula clementis | - | - | - | - |
| Navicula cocconeiformis | 1 | - | 2 | - |
| Navicula constans | 1 | - | - | - |
| Navicula cryptocephala | - | 23 | - | 4 |
| Navicula cryptotenella | - | - | - | - |
| Navicula decussis | - | 1 | - | - |
| Navicula elginensis | - | - | - | - |
| Navicula festiva | - | - | - | - |
| Navicula gastrum | 1 | - | - | - |
| Navicula germainii | - | - | - | - |
| Navicula heimansioides | - | - | - | - |
| Navicula ingenua | - | - | - | - |
| Navicula kotschyi | - | - | - | - |
| Navicula longicephala | - | - | - | - |
| Navicula mediocris | - | - | - | - |
| Navicula minima | - | 3 | 1 | 41 |
| Navicula occulta | - | - | - | - |
| Navicula peregrina | - | - | - | - |
| Navicula placenta | - | - | - | - |
| Navicula placentula | - | - | - | - |
| Navicula porifera | - | - | - | - |
| Navicula radiosa | - | 3 | - | - |
| Navicula rhynchocephala | - | - | - | - |
| Navicula rostellata | - | - | - | - |
| Navicula schroeteri | - | - | - | - |
| Navicula seminulum | - | 1 | 1 | 3 |
| Navicula tripunctata | - | - | - | - |
| Navicula vaneeii | - | - | - | - |
| Navicula viridulacalcis | - | - | - | - |
| Naviculaceae | 1 | - | 8 | 12 |
| Naviculales | - | - | - | - |
| Neidium | - | - | 2 | 1 |
| Neidium alpinum | - | - | - | - |
| Neidium alpinum quadripunctatum | - | - | - | - |
| Neidium amphigomphus | - | - | - | - |
| Neidium binodis | - | - | - | - |
| Neidium densestriatum | - | - | - | - |
| Neidium dubium | - | - | - | 3 |
| Neidium ladogensis densestriatum | 2 | - | - | - |
| Nitzschia | 64 | 31 | 7 | 22 |
| Nitzschia amphibia | - | - | - | - |
| Nitzschia clausii | - | - | - | - |
| Nitzschia dissipata | - | - | - | - |
| Nitzschia frustulum | - | - | - | - |
| Nitzschia gracilis | 1 | - | - | - |
| Nitzschia intermedia | - | 3 | - | - |
| Nitzschia linearis | - | - | - | - |
| Nitzschia nana | - | - | - | 1 |



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| As Entered / STORET station -> | UNI234LV | LEV502GS | PUT308GS | GLA630GS |
|---|---|---|---|---|
| Sample date -> | 11/15/2005 | 12/6/2005 | 12/13/2005 | 1/23/2006 |
| | Sampleid 53060/PerID | Sampleid 54263/PerID | Sampleid 54275/PerID | Sampleid 55073/PerID |
| Taxon Name / SampleID/PerDiaID -> | 19640 (# counted) | 20007 (# counted) | 20032 (# counted) | 20329 (# counted) |
| Nitzschia palea | 23 | - | 23 | 29 |
| Nitzschia paleacea | - | - | - | - |
| Nitzschia palustris | - | - | - | - |
| Nitzschia reversa | - | - | - | - |
| Nitzschia scalaris | - | - | 2 | - |
| Nitzschia seriata | - | - | - | - |
| Nitzschia serrata | - | - | - | - |
| Nitzschia subacicularis | - | - | - | - |
| Nupela | - | - | - | - |
| Nupela cymbelloidea | - | - | - | - |
| Nupela neotropica | - | - | - | - |
| Opephora | - | - | - | - |
| Pinnularia | 155 | 9 | 27 | 27 |
| Pinnularia acrosphaeria | 2 | - | - | - |
| Placoneis | - | - | - | - |
| Placoneis elginensis | - | - | - | - |
| Planothidium | - | - | - | - |
| Planothidium apiculatum | - | - | - | - |
| Planothidium delicatulum | - | - | - | - |
| Planothidium frequentissimum | - | - | - | - |
| Planothidium lanceolatum | - | - | - | - |
| Planothidium peragalli | - | - | - | - |
| Planothidium rostratum | - | - | - | - |
| Pleurosira laevis | - | - | - | - |
| Psammothidium daonense | - | - | - | - |
| Psammothidium sacculum | - | - | - | - |
| Pseudostaurosira brevistriata | - | - | - | - |
| Rhopalodia | - | - | - | 2 |
| Rossithidium | - | - | - | - |
| Rossithidium pusillium | - | - | - | - |
| Sellaphora | - | - | - | - |
| Sellaphora laevissima | - | - | - | 13 |
| Sellaphora pupula | - | 1 | - | 11 |
| Stauroneis | 1 | - | - | 12 |
| Stauroneis anceps | - | - | 1 | - |
| Stauroneis phoenicenteron | - | - | - | 4 |
| Stauroneis prominula | - | - | - | - |
| Stauroneis smithii | - | 2 | - | 1 |
| Staurosira construens | - | - | - | - |
| Staurosira elliptica | - | - | - | - |
| Staurosirella | - | - | - | - |
| Staurosirella leptostauron | - | - | - | - |
| Staurosirella pinnata | - | - | - | - |
| Stenopterobia | - | - | - | - |
| Stenopterobia delicatissima | - | - | - | - |
| Stephanodiscus | - | - | - | - |
| Surirella | - | - | - | 4 |
| Surirella angusta | - | - | - | - |



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|---|---|---|---|---|
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| | Sampleid 53060/PerID | Sampleid 54263/PerID | Sampleid 54275/PerID | Sampleid 55073/PerID |
| Taxon Name / SampleID/PerDiaID -> | 19640 (# counted) | 20007 (# counted) | 20032 (# counted) | 20329 (# counted) |
| Synedra | - | - | - | - |
| Synedra acus | - | - | - | - |
| Synedra fasciculata | - | - | - | - |
| Synedra ulna | - | - | - | 1 |
| Tabellaria | - | - | - | - |
| Terpsinoe musica | - | - | - | - |
| Thalassionema | - | - | - | - |
| Thalassiosira | 2 | - | - | - |
| Tryblionella | 8 | - | - | - |
| Tryblionella levidensis | - | - | - | - |

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| As Entered / STORET station -> | BAK210GS | BAK210GS | GAD104US | | |
|---|---|---|---|---|---|
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| | Sampleid 55672/PerID | Sampleid 55852/PerID | Sampleid 57811/PerID | | |
| Taxon Name / SampleID/PerDiaID -> | 20631 (# counted) | 20851 (# counted) | 22009 (# counted) | Phylum | Class |
| Achnanthaceae | - | - | - | Bacillariophyt | Bacillariophyc |
| Achnanthales | - | - | - | Bacillariophyt | Bacillariophyc |
| Achnanthes | - | 2 | 9 | Bacillariophyt | Bacillariophyc |
| Achnanthes clevei | - | 2 | - | Bacillariophyt | Bacillariophyc |
| Achnanthes exigua | - | 1 | - | Bacillariophyt | Bacillariophyc |
| Achnanthes fluviatilis | - | - | - | Bacillariophyt | Bacillariophyc |
| Achnanthes hungarica | - | - | 2 | Bacillariophyt | Bacillariophyc |
| Achnanthes lanceolata | - | - | - | Bacillariophyt | Bacillariophyc |
| Achnanthes lanceolata apiculata | - | - | 2 | Bacillariophyt | Bacillariophyc |
| Achnanthes lanceolata frequentissima | - | - | - | Bacillariophyt | Bacillariophyc |
| Achnanthes lanceolata rostrata | 1 | - | 7 | Bacillariophyt | Bacillariophyc |
| Achnanthes minutissima | - | - | 10 | Bacillariophyt | Bacillariophyc |
| Achnanthes peragalli | - | - | - | Bacillariophyt | Bacillariophyc |
| Achnanthes rupestoides | - | - | - | Bacillariophyt | Bacillariophyc |
| Achnanthidiaceae | - | - | - | Bacillariophyt | Bacillariophyc |
| Achnanthidium | - | - | - | Bacillariophyt | Bacillariophyc |
| Achnanthidium exiguum | - | - | - | Bacillariophyt | Bacillariophyc |
| Achnanthidium microcephalum | - | - | - | Bacillariophyt | Bacillariophyc |
| Achnanthidium minutissimum | - | - | - | Bacillariophyt | Bacillariophyc |
| Actinella | - | - | - | Bacillariophyt | Bacillariophyc |
| Amphipleura pellucida | - | - | - | Bacillariophyt | Bacillariophyc |
| Amphora | - | - | - | Bacillariophyt | Bacillariophyc |
| Amphora copulata | - | - | - | Bacillariophyt | Bacillariophyc |
| Amphora libyca | - | - | - | Bacillariophyt | Bacillariophyc |
| Amphora veneta | - | 1 | - | Bacillariophyt | Bacillariophyc |
| Anorthoneis | - | - | - | Bacillariophyt | Bacillariophyc |
| Asterionella | - | - | - | Bacillariophyt | Fragilariophyc |
| Aulacoseira | 21 | 40 | 29 | Bacillariophyt | Coscinodisco |
| Aulacoseira granulata | - | - | - | Bacillariophyt | Coscinodisco |
| Aulacoseira herzogii | - | - | 3 | Bacillariophyt | Coscinodisco |
| Bacillaria paxillifer | - | - | - | Bacillariophyt | Bacillariophyc |
| Bacillariophyceae | 6 | 34 | 11 | Bacillariophyt | Bacillariophyc |
| Bacillariophyta | - | - | - | Bacillariophyt | Bacillariophyt |
| Brachysira | - | - | - | Bacillariophyt | Bacillariophyc |
| Brachysira brebissonii | - | - | - | Bacillariophyt | Bacillariophyc |
| Brachysira microcephala | - | - | - | Bacillariophyt | Bacillariophyc |
| Brachysira vitrea | - | - | - | Bacillariophyt | Bacillariophyc |
| Caloneis | - | 11 | - | Bacillariophyt | Bacillariophyc |
| Caloneis bacillum | - | - | - | Bacillariophyt | Bacillariophyc |
| Capartogramma crucicula | - | - | 6 | Bacillariophyt | Bacillariophyc |
| Cavinula | - | - | - | Bacillariophyt | Bacillariophyc |
| Cavinula cocconeiformis | - | - | - | Bacillariophyt | Bacillariophyc |
| Cavinula jaernefeltii | - | - | - | Bacillariophyt | Bacillariophyc |
| Chamaepinnularia margaritiana | - | - | - | Bacillariophyt | Bacillariophyc |
| Chamaepinnularia minutissima | - | - | - | Bacillariophyt | Bacillariophyc |
| Cocconeis | - | - | 1 | Bacillariophyt | Bacillariophyc |
| Cocconeis disculus | - | - | - | Bacillariophyt | Bacillariophyc |
| Cocconeis fluviatilis | - | - | 61 | Bacillariophyt | Bacillariophyc |



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| | Sampleid 55672/PerID | Sampleid 55852/PerID | Sampleid 57811/PerID | | |
| Taxon Name / SampleID/PerDiaID -> | 20631 (# counted) | 20851 (# counted) | 22009 (# counted) | Phylum | Class |
| Cocconeis pediculus | - | - | - | Bacillariophyt | Bacillariophyc |
| Cocconeis placentula | - | 3 | - | Bacillariophyt | Bacillariophyc |
| Cocconeis pseudothumensis | - | - | - | Bacillariophyt | Bacillariophyc |
| Coscinodiscophyceae | - | - | - | Bacillariophyt | Coscinodisco |
| Craticula | - | 1 | - | Bacillariophyt | Bacillariophyc |
| Craticula minusculoides | - | - | - | Bacillariophyt | Bacillariophyc |
| Cyclostephanos invisitatus | - | - | - | Bacillariophyt | Coscinodisco |
| Cyclotella | - | - | - | Bacillariophyt | Coscinodisco |
| Cyclotella atomus | - | - | - | Bacillariophyt | Coscinodisco |
| Cyclotella meneghiniana | - | - | - | Bacillariophyt | Coscinodisco |
| Cyclotella pseudostelligera | - | - | - | Bacillariophyt | Coscinodisco |
| Cymbella | - | - | - | Bacillariophyt | Bacillariophyc |
| Cymbella aspera | - | - | - | Bacillariophyt | Bacillariophyc |
| Cymbella subcuspidata | - | - | - | Bacillariophyt | Bacillariophyc |
| Cymbellaceae | - | 2 | 2 | Bacillariophyt | Bacillariophyc |
| Cymbellales | - | - | - | Bacillariophyt | Bacillariophyc |
| Diadesmis confervacea | 1 | 21 | 6 | Bacillariophyt | Bacillariophyc |
| Diadesmis contenta | - | 1 | 1 | Bacillariophyt | Bacillariophyc |
| Diatoma | - | - | - | Bacillariophyt | Fragilariophyc |
| Diploneis | - | - | - | Bacillariophyt | Bacillariophyc |
| Diploneis oblongella | - | - | - | Bacillariophyt | Bacillariophyc |
| Diploneis ovalis | - | - | - | Bacillariophyt | Bacillariophyc |
| Diploneis parma | - | - | - | Bacillariophyt | Bacillariophyc |
| Diploneis pseudovalis | - | - | - | Bacillariophyt | Bacillariophyc |
| Encyonema | - | - | - | Bacillariophyt | Bacillariophyc |
| Encyonema evergladianum | - | - | - | Bacillariophyt | Bacillariophyc |
| Encyonema minutum | - | - | - | Bacillariophyt | Bacillariophyc |
| Encyonema neomesianum | - | - | - | Bacillariophyt | Bacillariophyc |
| Encyonema silesiacum | - | - | 3 | Bacillariophyt | Bacillariophyc |
| Encyonopsis microcephala | - | - | - | Bacillariophyt | Bacillariophyc |
| Epithemia | - | - | - | Bacillariophyt | Bacillariophyc |
| Eunotia | 358 | 200 | 37 | Bacillariophyt | Bacillariophyc |
| Eunotia bilunaris | - | 9 | - | Bacillariophyt | Bacillariophyc |
| Eunotia carolina | - | - | - | Bacillariophyt | Bacillariophyc |
| Eunotia exigua | - | - | - | Bacillariophyt | Bacillariophyc |
| Eunotia flexuosa | - | - | - | Bacillariophyt | Bacillariophyc |
| Eunotia formica | - | 2 | - | Bacillariophyt | Bacillariophyc |
| Eunotia implicata | - | - | - | Bacillariophyt | Bacillariophyc |
| Eunotia incisa | 1 | 14 | - | Bacillariophyt | Bacillariophyc |
| Eunotia meisteri | - | - | - | Bacillariophyt | Bacillariophyc |
| Eunotia minor | - | 6 | - | Bacillariophyt | Bacillariophyc |
| Eunotia naegelii | - | - | - | Bacillariophyt | Bacillariophyc |
| Eunotia paludosa | - | - | - | Bacillariophyt | Bacillariophyc |
| Eunotia pectinalis | 1 | 6 | 8 | Bacillariophyt | Bacillariophyc |
| Eunotia pectinalis undulata | - | - | - | Bacillariophyt | Bacillariophyc |
| Eunotia rhomboidea | - | - | - | Bacillariophyt | Bacillariophyc |
| Eunotia transfuga | - | 12 | - | Bacillariophyt | Bacillariophyc |
| Eunotia undulata | - | - | - | Bacillariophyt | Bacillariophyc |



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| Sample date -> | 11/1/2005 | 3/20/2006 | 11/14/2005 | | |
| | Sampleid 55672/PerID | Sampleid 55852/PerID | Sampleid 57811/PerID | | |
| Taxon Name / SampleID/PerDiaID -> | 20631 (# counted) | 20851 (# counted) | 22009 (# counted) | Phylum | Class |
| Eunotia yanomami | - | - | - | Bacillariophyt | Bacillariophyc |
| Eunotia zygodon | 6 | - | - | Bacillariophyt | Bacillariophyc |
| Fragilaria | - | - | 7 | Bacillariophyt | Fragilariophyc |
| Fragilaria brevistriata | - | - | - | Bacillariophyt | Fragilariophyc |
| Fragilaria capucina | - | - | - | Bacillariophyt | Fragilariophyc |
| Fragilaria crotonensis | - | - | 2 | Bacillariophyt | Fragilariophyc |
| Fragilaria javanica | - | 5 | - | Bacillariophyt | Fragilariophyc |
| Fragilaria pinnata | - | - | - | Bacillariophyt | Fragilariophyc |
| Fragilaria synegrotesca | - | - | - | Bacillariophyt | Fragilariophyc |
| Fragilaria virescens | - | - | - | Bacillariophyt | Fragilariophyc |
| Fragilariaceae | - | 18 | 3 | Bacillariophyt | Fragilariophyc |
| Fragilariforma | - | - | - | Bacillariophyt | Fragilariophyc |
| Fragilariforma bicapitata | 1 | - | - | Bacillariophyt | Fragilariophyc |
| Fragilariforma virescens | - | - | - | Bacillariophyt | Fragilariophyc |
| Fragilariophyceae | - | - | - | Bacillariophyt | Fragilariophyc |
| Frustulia | 6 | 12 | - | Bacillariophyt | Bacillariophyc |
| Frustulia rhomboides | - | - | 26 | Bacillariophyt | Bacillariophyc |
| Frustulia saxonica | 7 | 3 | 1 | Bacillariophyt | Bacillariophyc |
| Frustulia vulgaris | - | - | - | Bacillariophyt | Bacillariophyc |
| Geissleria decussis | - | - | - | Bacillariophyt | Bacillariophyc |
| Gomphonema | 1 | 1 | 46 | Bacillariophyt | Bacillariophyc |
| Gomphonema affine | - | - | - | Bacillariophyt | Bacillariophyc |
| Gomphonema augur | - | - | - | Bacillariophyt | Bacillariophyc |
| Gomphonema clevei | - | - | - | Bacillariophyt | Bacillariophyc |
| Gomphonema gracile | - | - | 5 | Bacillariophyt | Bacillariophyc |
| Gomphonema grovei lingulatum | - | - | - | Bacillariophyt | Bacillariophyc |
| Gomphonema guaraniarum | - | - | - | Bacillariophyt | Bacillariophyc |
| Gomphonema minutum | - | - | - | Bacillariophyt | Bacillariophyc |
| Gomphonema parvulum | 1 | - | 22 | Bacillariophyt | Bacillariophyc |
| Gomphonema truncatum | - | - | - | Bacillariophyt | Bacillariophyc |
| Gomphonema vibrio | - | - | - | Bacillariophyt | Bacillariophyc |
| Gyrosigma | - | - | 3 | Bacillariophyt | Bacillariophyc |
| Gyrosigma obscurum | - | - | - | Bacillariophyt | Bacillariophyc |
| Hantzschia | - | - | - | Bacillariophyt | Bacillariophyc |
| Hantzschia amphioxys | - | - | - | Bacillariophyt | Bacillariophyc |
| Hippodonta | - | - | - | Bacillariophyt | Bacillariophyc |
| Hippodonta capitata | - | - | - | Bacillariophyt | Bacillariophyc |
| Hippodonta hungarica | - | - | 11 | Bacillariophyt | Bacillariophyc |
| Karayevia clevei | - | - | - | Bacillariophyt | Bacillariophyc |
| Kobayasiella | - | - | - | Bacillariophyt | Bacillariophyc |
| Lemnicola hungarica | - | - | - | Bacillariophyt | Bacillariophyc |
| Luticola | - | - | 3 | Bacillariophyt | Bacillariophyc |
| Luticola mutica | - | 9 | - | Bacillariophyt | Bacillariophyc |
| Melosira | - | - | - | Bacillariophyt | Coscinodisco |
| Meridion | - | - | - | Bacillariophyt | Fragilariophyc |
| Microcostatus polonarum | - | - | - | Bacillariophyt | Bacillariophyc |
| Navicula | - | - | 51 | Bacillariophyt | Bacillariophyc |
| Navicula bouillantensis | - | - | - | Bacillariophyt | Bacillariophyc |



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| | Sampleid 55672/PerID | Sampleid 55852/PerID | Sampleid 57811/PerID | | |
| Taxon Name / SampleID/PerDiaID -> | 20631 (# counted) | 20851 (# counted) | 22009 (# counted) | Phylum | Class |
| Navicula clementis | - | - | - | Bacillariophyta | Bacillariophyc |
| Navicula cocconeiformis | - | - | - | Bacillariophyta | Bacillariophyc |
| Navicula constans | - | - | - | Bacillariophyta | Bacillariophyc |
| Navicula cryptocephala | - | - | 5 | Bacillariophyta | Bacillariophyc |
| Navicula cryptotenella | - | - | - | Bacillariophyta | Bacillariophyc |
| Navicula decussis | - | - | 2 | Bacillariophyta | Bacillariophyc |
| Navicula elginensis | - | - | - | Bacillariophyta | Bacillariophyc |
| Navicula festiva | - | - | - | Bacillariophyta | Bacillariophyc |
| Navicula gastrum | - | - | - | Bacillariophyta | Bacillariophyc |
| Navicula germainii | - | - | - | Bacillariophyta | Bacillariophyc |
| Navicula heimansioides | - | - | - | Bacillariophyta | Bacillariophyc |
| Navicula ingenua | - | - | - | Bacillariophyta | Bacillariophyc |
| Navicula kotschyi | - | - | - | Bacillariophyta | Bacillariophyc |
| Navicula longicephala | - | - | - | Bacillariophyta | Bacillariophyc |
| Navicula mediocris | - | - | - | Bacillariophyta | Bacillariophyc |
| Navicula minima | - | - | 6 | Bacillariophyta | Bacillariophyc |
| Navicula occulta | - | - | - | Bacillariophyta | Bacillariophyc |
| Navicula peregrina | - | - | - | Bacillariophyta | Bacillariophyc |
| Navicula placenta | - | - | - | Bacillariophyta | Bacillariophyc |
| Navicula placentula | - | - | - | Bacillariophyta | Bacillariophyc |
| Navicula porifera | - | - | - | Bacillariophyta | Bacillariophyc |
| Navicula radiosa | - | - | - | Bacillariophyta | Bacillariophyc |
| Navicula rhynchocephala | - | - | - | Bacillariophyta | Bacillariophyc |
| Navicula rostellata | - | - | 18 | Bacillariophyta | Bacillariophyc |
| Navicula schroeteri | - | - | 20 | Bacillariophyta | Bacillariophyc |
| Navicula seminulum | - | - | 5 | Bacillariophyta | Bacillariophyc |
| Navicula tripunctata | - | - | - | Bacillariophyta | Bacillariophyc |
| Navicula vaneeii | - | - | - | Bacillariophyta | Bacillariophyc |
| Navicula viridulacalcis | - | - | 1 | Bacillariophyta | Bacillariophyc |
| Naviculaceae | - | 1 | 17 | Bacillariophyta | Bacillariophyc |
| Naviculales | - | - | - | Bacillariophyta | Bacillariophyc |
| Neidium | - | 1 | - | Bacillariophyta | Bacillariophyc |
| Neidium alpinum | - | - | - | Bacillariophyta | Bacillariophyc |
| Neidium alpinum quadripunctatum | - | - | - | Bacillariophyta | Bacillariophyc |
| Neidium amphigomphus | - | - | - | Bacillariophyta | Bacillariophyc |
| Neidium binodis | - | - | - | Bacillariophyta | Bacillariophyc |
| Neidium densestriatum | 6 | 3 | - | Bacillariophyta | Bacillariophyc |
| Neidium dubium | - | - | - | Bacillariophyta | Bacillariophyc |
| Neidium ladogensis densestriatum | - | - | - | Bacillariophyta | Bacillariophyc |
| Nitzschia | 30 | 5 | 23 | Bacillariophyta | Bacillariophyc |
| Nitzschia amphibia | - | - | - | Bacillariophyta | Bacillariophyc |
| Nitzschia clausii | - | - | - | Bacillariophyta | Bacillariophyc |
| Nitzschia dissipata | - | - | - | Bacillariophyta | Bacillariophyc |
| Nitzschia frustulum | - | - | - | Bacillariophyta | Bacillariophyc |
| Nitzschia gracilis | - | - | - | Bacillariophyta | Bacillariophyc |
| Nitzschia intermedia | - | - | - | Bacillariophyta | Bacillariophyc |
| Nitzschia linearis | - | - | - | Bacillariophyta | Bacillariophyc |
| Nitzschia nana | - | 1 | - | Bacillariophyta | Bacillariophyc |



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| | Sampleid 55672/PerID | Sampleid 55852/PerID | Sampleid 57811/PerID | | |
| Taxon Name / SampleID/PerDiaID -> | 20631 (# counted) | 20851 (# counted) | 22009 (# counted) | Phylum | Class |
| Nitzschia palea | - | 8 | - | Bacillariophyt | Bacillariophyc |
| Nitzschia paleacea | - | - | - | Bacillariophyt | Bacillariophyc |
| Nitzschia palustris | - | - | - | Bacillariophyt | Bacillariophyc |
| Nitzschia reversa | - | - | - | Bacillariophyt | Bacillariophyc |
| Nitzschia scalaris | - | - | - | Bacillariophyt | Bacillariophyc |
| Nitzschia seriata | - | - | - | Bacillariophyt | Bacillariophyc |
| Nitzschia serrata | - | - | - | Bacillariophyt | Bacillariophyc |
| Nitzschia subacicularis | - | - | - | Bacillariophyt | Bacillariophyc |
| Nupela | - | - | - | Bacillariophyt | Bacillariophyc |
| Nupela cymbelloidea | - | - | - | Bacillariophyt | Bacillariophyc |
| Nupela neotropica | - | - | - | Bacillariophyt | Bacillariophyc |
| Opephora | - | - | - | Bacillariophyt | Fragilariophyc |
| Pinnularia | 53 | 61 | 10 | Bacillariophyt | Bacillariophyc |
| Pinnularia acrosphaeria | - | - | - | Bacillariophyt | Bacillariophyc |
| Placoneis | - | - | - | Bacillariophyt | Bacillariophyc |
| Placoneis elginensis | - | - | - | Bacillariophyt | Bacillariophyc |
| Planothidium | - | - | - | Bacillariophyt | Bacillariophyc |
| Planothidium apiculatum | - | - | - | Bacillariophyt | Bacillariophyc |
| Planothidium delicatulum | - | - | - | Bacillariophyt | Bacillariophyc |
| Planothidium frequentissimum | - | - | - | Bacillariophyt | Bacillariophyc |
| Planothidium lanceolatum | - | - | - | Bacillariophyt | Bacillariophyc |
| Planothidium peragalli | - | - | - | Bacillariophyt | Bacillariophyc |
| Planothidium rostratum | - | - | - | Bacillariophyt | Bacillariophyc |
| Pleurosira laevis | - | - | - | Bacillariophyt | Coscinodisco |
| Psammothidium daonense | - | - | - | Bacillariophyt | Bacillariophyc |
| Psammothidium sacculum | - | - | - | Bacillariophyt | Bacillariophyc |
| Pseudostaurosira brevistriata | - | - | - | Bacillariophyt | Fragilariophyc |
| Rhopalodia | - | 1 | 2 | Bacillariophyt | Bacillariophyc |
| Rossithidium | - | - | - | Bacillariophyt | Bacillariophyc |
| Rossithidium pusillium | - | - | - | Bacillariophyt | Bacillariophyc |
| Sellaphora | - | - | - | Bacillariophyt | Bacillariophyc |
| Sellaphora laevissima | - | 1 | - | Bacillariophyt | Bacillariophyc |
| Sellaphora pupula | - | - | 3 | Bacillariophyt | Bacillariophyc |
| Stauroneis | - | 2 | - | Bacillariophyt | Bacillariophyc |
| Stauroneis anceps | - | - | - | Bacillariophyt | Bacillariophyc |
| Stauroneis phoenicenteron | - | - | - | Bacillariophyt | Bacillariophyc |
| Stauroneis prominula | - | - | 1 | Bacillariophyt | Bacillariophyc |
| Stauroneis smithii | - | - | - | Bacillariophyt | Bacillariophyc |
| Staurosira construens | - | - | - | Bacillariophyt | Fragilariophyc |
| Staurosira elliptica | - | - | - | Bacillariophyt | Fragilariophyc |
| Staurosirella | - | - | - | Bacillariophyt | Fragilariophyc |
| Staurosirella leptostauron | - | - | - | Bacillariophyt | Fragilariophyc |
| Staurosirella pinnata | - | - | - | Bacillariophyt | Fragilariophyc |
| Stenopterobia | - | - | - | Bacillariophyt | Bacillariophyc |
| Stenopterobia delicatissima | - | - | - | Bacillariophyt | Bacillariophyc |
| Stephanodiscus | - | - | - | Bacillariophyt | Coscinodisco |
| Surirella | - | - | - | Bacillariophyt | Bacillariophyc |
| Surirella angusta | - | - | - | Bacillariophyt | Bacillariophyc |



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| As Entered / STORET station -> | BAK210GS | BAK210GS | GAD104US | | |
|---|---|---|---|---|---|
| Sample date -> | 11/1/2005 | 3/20/2006 | 11/14/2005 | | |
| | Sampleid 55672/PerID | Sampleid 55852/PerID | Sampleid 57811/PerID | | |
| Taxon Name / SampleID/PerDiaID -> | 20631 (# counted) | 20851 (# counted) | 22009 (# counted) | Phylum | Class |
| Synedra | - | - | - | Bacillariophyt | Fragilariophyc |
| Synedra acus | - | - | - | Bacillariophyt | Fragilariophyc |
| Synedra fasciculata | - | - | - | Bacillariophyt | Fragilariophyc |
| Synedra ulna | - | - | 9 | Bacillariophyt | Fragilariophyc |
| Tabellaria | - | - | - | Bacillariophyt | Fragilariophyc |
| Terpsinoe musica | - | - | - | Bacillariophyt | Coscinodisco |
| Thalassionema | - | - | - | Bacillariophyt | Fragilariophyc |
| Thalassiosira | - | - | - | Bacillariophyt | Coscinodisco |
| Tryblionella | - | - | - | Bacillariophyt | Bacillariophyc |
| Tryblionella levidensis | - | - | - | Bacillariophyt | Bacillariophyc |

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As Entered / STORET station ->
Sample date ->

| Taxon Name / SampleID/PerDiaID -> | Order | Family | Genus | Current Name |
|---|---|---|---|---|
| Achnanthaceae | Achnanthales | Achnanthace | Achnanthaceae | |
| Achnanthales | Achnanthales | Achnanthales | Achnanthales | |
| Achnanthes | Achnanthales | Achnanthace | Achnanthes | |
| Achnanthes clevei | Achnanthales | Achnanthidiac | Karayevia | Karayevia clevei |
| Achnanthes exigua | Achnanthales | Achnanthace | Achnanthes | Achnanthidium exiguum |
| Achnanthes fluviatilis | Achnanthales | Achnanthace | Achnanthes | |
| Achnanthes hungarica | Achnanthales | Achnanthidiac | Lemnicola | Lemnicola hungarica |
| Achnanthes lanceolata | Achnanthales | Achnanthidiac | Planothidium | Planothidium lanceolatum |
| Achnanthes lanceolata apiculata | Achnanthales | Achnanthidiac | Planothidium | Planothidium apiculatum |
| Achnanthes lanceolata frequentissima | Achnanthales | Achnanthidiac | Planothidium | Planothidium frequentissimum |
| Achnanthes lanceolata rostrata | Achnanthales | Achnanthidiac | Planothidium | Planothidium rostratum |
| Achnanthes minutissima | Achnanthales | Achnanthidiac | Achnanthidiur | Achnanthidium minutissimum |
| Achnanthes peragalli | Achnanthales | Achnanthace | Achnanthes | |
| Achnanthes rupestoides | Achnanthales | Achnanthace | Achnanthes | |
| Achnanthidiaceae | Achnanthales | Achnanthidiac | Achnanthidiaceae | |
| Achnanthidium | Achnanthales | Achnanthidiac | Achnanthidium | |
| Achnanthidium exiguum | Achnanthales | Achnanthace | Achnanthes | |
| Achnanthidium microcephalum | Achnanthales | Achnanthidiac | Achnanthidium | |
| Achnanthidium minutissimum | Achnanthales | Achnanthidiac | Achnanthidium | |
| Actinella | Eunotiales | Eunotiaceae | Actinella | |
| Amphipleura pellucida | Naviculales | Amphipleurac | Amphipleura | |
| Amphora | Thalassiophys | Catenulaceae | Amphora | |
| Amphora copulata | Thalassiophys | Catenulaceae | Amphora | |
| Amphora libyca | Thalassiophys | Catenulaceae | Amphora | Amphora copulata |
| Amphora veneta | Thalassiophys | Catenulaceae | Amphora | |
| Anorthoneis | Achnanthales | Cocconeidace | Anorthoneis | |
| Asterionella | Fragilariales | Fragilariaceae | Asterionella | |
| Aulacoseira | Aulacoseirales | Aulacoseirace | Aulacoseira | |
| Aulacoseira granulata | Aulacoseirales | Aulacoseirace | Aulacoseira | |
| Aulacoseira herzogii | Aulacoseirales | Aulacoseirace | Aulacoseira | |
| Bacillaria paxillifer | Bacillariales | Bacillariaceae | Bacillaria | |
| Bacillariophyceae | Bacillariophyc | Bacillariophyc | Bacillariophyceae | |
| Bacillariophyta | Bacillariophyt | Bacillariophyt | Bacillariophyta | |
| Brachysira | Naviculales | Brachysiracea | Brachysira | |
| Brachysira brebissonii | Naviculales | Brachysiracea | Brachysira | |
| Brachysira microcephala | Naviculales | Brachysiracea | Brachysira | |
| Brachysira vitrea | Naviculales | Brachysiracea | Brachysira | |
| Caloneis | Naviculales | Pinnulariacea | Caloneis | |
| Caloneis bacillum | Naviculales | Pinnulariacea | Caloneis | |
| Capartogramma crucicula | Naviculales | Naviculaceae | Capartogramma | |
| Cavinula | Naviculales | Cavinulaceae | Cavinula | |
| Cavinula cocconeiformis | Naviculales | Cavinulaceae | Cavinula | |
| Cavinula jaernefeltii | Naviculales | Cavinulaceae | Cavinula | |
| Chamaepinnularia margaritiana | Naviculales | Naviculaceae | Chamaepinnularia | |
| Chamaepinnularia minutissima | Naviculales | Naviculaceae | Chamaepinnularia | |
| Cocconeis | Achnanthales | Cocconeidace | Cocconeis | |
| Cocconeis disculus | Achnanthales | Cocconeidace | Cocconeis | |
| Cocconeis fluviatilis | Achnanthales | Cocconeidace | Cocconeis | |



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As Entered / STORET station ->
Sample date ->

| Taxon Name / SampleID/PerDiaID -> | Order | Family | Genus | Current Name |
|---|---|---|---|---|
| Cocconeis pediculus | Achnanthales | Cocconeidace | Cocconeis | |
| Cocconeis placentula | Achnanthales | Cocconeidace | Cocconeis | |
| Cocconeis pseudothumensis | Achnanthales | Cocconeidace | Cocconeis | |
| Coscinodiscophyceae | Coscinodisco | Coscinodisco | Coscinodiscophyceae | |
| Craticula | Naviculales | Stauroneidac | Craticula | |
| Craticula minusculoides | Naviculales | Stauroneidac | Craticula | |
| Cyclostephanos invisitatus | Thalassiosiral | Stephanodisc | Cyclostephanos | |
| Cyclotella | Thalassiosiral | Stephanodisc | Cyclotella | |
| Cyclotella atomus | Thalassiosiral | Stephanodisc | Cyclotella | |
| Cyclotella meneghiniana | Thalassiosiral | Stephanodisc | Cyclotella | |
| Cyclotella pseudostelligera | Thalassiosiral | Stephanodisc | Cyclotella | |
| Cymbella | Cymbellales | Cymbellaceae | Cymbella | |
| Cymbella aspera | Cymbellales | Cymbellaceae | Cymbella | |
| Cymbella subcuspidata | Cymbellales | Cymbellaceae | Cymbella | |
| Cymbellaceae | Cymbellales | Cymbellaceae | Cymbellaceae | |
| Cymbellales | Cymbellales | Cymbellales | Cymbellales | |
| Diadesmis confervacea | Naviculales | Diadesmidac | Diadesmis | |
| Diadesmis contenta | Naviculales | Diadesmidac | Diadesmis | |
| Diatoma | Fragilariales | Fragilariacea | Diatoma | |
| Diploneis | Naviculales | Diploneidace | Diploneis | |
| Diploneis oblongella | Naviculales | Diploneidace | Diploneis | |
| Diploneis ovalis | Naviculales | Diploneidace | Diploneis | |
| Diploneis parma | Naviculales | Diploneidace | Diploneis | |
| Diploneis pseudovalis | Naviculales | Diploneidace | Diploneis | |
| Encyonema | Cymbellales | Cymbellaceae | Encyonema | |
| Encyonema evergladianum | Cymbellales | Cymbellaceae | Encyonema | |
| Encyonema minutum | Cymbellales | Cymbellaceae | Encyonema | |
| Encyonema neomesianum | Cymbellales | Cymbellaceae | Encyonema | |
| Encyonema silesiacum | Cymbellales | Cymbellaceae | Encyonema | |
| Encyonopsis microcephala | Cymbellales | Cymbellaceae | Encyonopsis | |
| Epithemia | Rhopalodiales | Rhopalodiace | Epithemia | |
| Eunotia | Eunotiales | Eunotiaceae | Eunotia | |
| Eunotia bilunaris | Eunotiales | Eunotiaceae | Eunotia | |
| Eunotia carolina | Eunotiales | Eunotiaceae | Eunotia | |
| Eunotia exigua | Eunotiales | Eunotiaceae | Eunotia | |
| Eunotia flexuosa | Eunotiales | Eunotiaceae | Eunotia | |
| Eunotia formica | Eunotiales | Eunotiaceae | Eunotia | |
| Eunotia implicata | Eunotiales | Eunotiaceae | Eunotia | |
| Eunotia incisa | Eunotiales | Eunotiaceae | Eunotia | |
| Eunotia meisteri | Eunotiales | Eunotiaceae | Eunotia | |
| Eunotia minor | Eunotiales | Eunotiaceae | Eunotia | |
| Eunotia naegelii | Eunotiales | Eunotiaceae | Eunotia | |
| Eunotia paludosa | Eunotiales | Eunotiaceae | Eunotia | |
| Eunotia pectinalis | Eunotiales | Eunotiaceae | Eunotia | |
| Eunotia pectinalis undulata | Eunotiales | Eunotiaceae | Eunotia | |
| Eunotia rhomboidea | Eunotiales | Eunotiaceae | Eunotia | |
| Eunotia transfuga | Eunotiales | Eunotiaceae | Eunotia | |
| Eunotia undulata | Eunotiales | Eunotiaceae | Eunotia | |



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As Entered / STORET station ->
Sample date ->

| Taxon Name / SampleID/PerDiaID -> | Order | Family | Genus | Current Name |
|---|---|---|---|---|
| Eunotia yanomami | Eunotiales | Eunotiaceae | Eunotia | |
| Eunotia zygodon | Eunotiales | Eunotiaceae | Eunotia | |
| Fragilaria | Fragilariales | Fragilariaceae | Fragilaria | |
| Fragilaria brevistriata | Fragilariales | Fragilariaceae | Pseudostauro | Pseudostaurosira brevistriata |
| Fragilaria capucina | Fragilariales | Fragilariaceae | Fragilaria | |
| Fragilaria crotonensis | Fragilariales | Fragilariaceae | Fragilaria | |
| Fragilaria javanica | Fragilariales | Fragilariaceae | Fragilaria | |
| Fragilaria pinnata | Fragilariales | Fragilariaceae | Staurosirella | Staurosirella pinnata |
| Fragilaria synegrotesca | Fragilariales | Fragilariaceae | Fragilaria | |
| Fragilaria virescens | Fragilariales | Fragilariaceae | Fragilaria | Fragilariforma virescens |
| Fragilariaceae | Fragilariales | Fragilariaceae | Fragilariaceae | |
| Fragilariforma | Fragilariales | Fragilariaceae | Fragilariforma | |
| Fragilariforma bicapitata | Fragilariales | Fragilariaceae | Fragilariforma | |
| Fragilariforma virescens | Fragilariales | Fragilariaceae | Fragilariforma | |
| Fragilariophyceae | Fragilariophyc | Fragilariophyc | Fragilariophyceae | |
| Frustulia | Naviculales | Amphipleurac | Frustulia | |
| Frustulia rhomboides | Naviculales | Amphipleurac | Frustulia | |
| Frustulia saxonica | Naviculales | Amphipleurac | Frustulia | |
| Frustulia vulgaris | Naviculales | Amphipleurac | Frustulia | |
| Geissleria decussis | Naviculales | Naviculaceae | Geissleria | |
| Gomphonema | Cymbellales | Gomphonema | Gomphonema | |
| Gomphonema affine | Cymbellales | Gomphonema | Gomphonema | |
| Gomphonema augur | Cymbellales | Gomphonema | Gomphonema | |
| Gomphonema clevei | Cymbellales | Gomphonema | Gomphonema | |
| Gomphonema gracile | Cymbellales | Gomphonema | Gomphonema | |
| Gomphonema grovei lingulatum | Cymbellales | Gomphonema | Gomphonema | |
| Gomphonema guaraniarum | Cymbellales | Gomphonema | Gomphonema | |
| Gomphonema minutum | Cymbellales | Gomphonema | Gomphonema | |
| Gomphonema parvulum | Cymbellales | Gomphonema | Gomphonema | |
| Gomphonema truncatum | Cymbellales | Gomphonema | Gomphonema | |
| Gomphonema vibrio | Cymbellales | Gomphonema | Gomphonema | |
| Gyrosigma | Naviculales | Pleurosigmata | Gyrosigma | |
| Gyrosigma obscurum | Naviculales | Pleurosigmata | Gyrosigma | |
| Hantzschia | Bacillariales | Bacillariaceae | Hantzschia | |
| Hantzschia amphioxys | Bacillariales | Bacillariaceae | Hantzschia | |
| Hippodonta | Naviculales | Naviculaceae | Hippodonta | |
| Hippodonta capitata | Naviculales | Naviculaceae | Hippodonta | |
| Hippodonta hungarica | Naviculales | Naviculaceae | Hippodonta | |
| Karayevia clevei | Achnanthales | Achnanthidiac | Karayevia | |
| Kobayasiella | Naviculales | Naviculaceae | Kobayasiella | |
| Lemnicola hungarica | Achnanthales | Achnanthidiac | Lemnicola | |
| Luticola | Naviculales | Diadesmidace | Luticola | |
| Luticola mutica | Naviculales | Diadesmidace | Luticola | |
| Melosira | Melosirales | Melosiraceae | Melosira | |
| Meridion | Fragilariales | Fragilariaceae | Meridion | |
| Microcostatus polonarum | Naviculales | Naviculaceae | Microcostatus | |
| Navicula | Naviculales | Naviculaceae | Navicula | |
| Navicula bouillantensis | Naviculales | Naviculaceae | Navicula | |



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As Entered / STORET station ->
Sample date ->

| Taxon Name / SampleID/PerDiaID -> | Order | Family | Genus | Current Name |
|---|---|---|---|---|
| Navicula clementis | Cymbellales | Cymbellaceae | Placoneis | Placoneis clementis |
| Navicula cocconeiformis | Naviculales | Naviculaceae | Navicula | Cavinula cocconeiformis |
| Navicula constans | Naviculales | Naviculaceae | Navicula | |
| Navicula cryptocephala | Naviculales | Naviculaceae | Navicula | |
| Navicula cryptotenella | Naviculales | Naviculaceae | Navicula | |
| Navicula decussis | Naviculales | Naviculaceae | Geissleria | Geissleria decussis |
| Navicula elginensis | Cymbellales | Cymbellaceae | Placoneis | Placoneis elginensis |
| Navicula festiva | Naviculales | Naviculaceae | Navicula | |
| Navicula gastrum | Cymbellales | Cymbellaceae | Placoneis | Placoneis gastrum |
| Navicula germainii | Naviculales | Naviculaceae | Navicula | |
| Navicula heimansioides | Naviculales | Naviculaceae | Navicula | |
| Navicula ingenua | Naviculales | Naviculaceae | Navicula | |
| Navicula kotschyi | Naviculales | Naviculaceae | Navicula | |
| Navicula longicephala | Naviculales | Naviculaceae | Navicula | |
| Navicula mediocris | Naviculales | Naviculaceae | Chamaepinnu | Chamaepinnularia mediocris |
| Navicula minima | Naviculales | Naviculaceae | Navicula | |
| Navicula occulta | Naviculales | Naviculaceae | Navicula | |
| Navicula peregrina | Naviculales | Naviculaceae | Navicula | |
| Navicula placenta | Naviculales | Naviculaceae | Navicula | |
| Navicula placentula | Naviculales | Naviculaceae | Navicula | |
| Navicula porifera | Naviculales | Naviculaceae | Navicula | |
| Navicula radiosa | Naviculales | Naviculaceae | Navicula | |
| Navicula rhynchocephala | Naviculales | Naviculaceae | Navicula | |
| Navicula rostellata | Naviculales | Naviculaceae | Navicula | |
| Navicula schroeteri | Naviculales | Naviculaceae | Navicula | |
| Navicula seminulum | Naviculales | Naviculaceae | Navicula | |
| Navicula tripunctata | Naviculales | Naviculaceae | Navicula | |
| Navicula vaneeii | Naviculales | Naviculaceae | Navicula | |
| Navicula viridulacalcis | Naviculales | Naviculaceae | Navicula | |
| Naviculaceae | Naviculales | Naviculaceae | Naviculaceae | |
| Naviculales | Naviculales | Naviculales | Naviculales | |
| Neidium | Naviculales | Neidiaceae | Neidium | |
| Neidium alpinum | Naviculales | Neidiaceae | Neidium | |
| Neidium alpinum quadripunctatum | Naviculales | Neidiaceae | Neidium | |
| Neidium amphigomphus | Naviculales | Neidiaceae | Neidium | |
| Neidium binodis | Naviculales | Neidiaceae | Neidium | |
| Neidium densestriatum | Naviculales | Neidiaceae | Neidium | |
| Neidium dubium | Naviculales | Neidiaceae | Neidium | |
| Neidium ladogensis densestriatum | Naviculales | Neidiaceae | Neidium | |
| Nitzschia | Bacillariales | Bacillariaceae | Nitzschia | |
| Nitzschia amphibia | Bacillariales | Bacillariaceae | Nitzschia | |
| Nitzschia clausii | Bacillariales | Bacillariaceae | Nitzschia | |
| Nitzschia dissipata | Bacillariales | Bacillariaceae | Nitzschia | |
| Nitzschia frustulum | Bacillariales | Bacillariaceae | Nitzschia | |
| Nitzschia gracilis | Bacillariales | Bacillariaceae | Nitzschia | |
| Nitzschia intermedia | Bacillariales | Bacillariaceae | Nitzschia | |
| Nitzschia linearis | Bacillariales | Bacillariaceae | Nitzschia | |
| Nitzschia nana | Bacillariales | Bacillariaceae | Nitzschia | |



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As Entered / STORET station ->
Sample date ->

| Taxon Name / SampleID/PerDiaID -> | Order | Family | Genus | Current Name |
|---|---|---|---|---|
| Nitzschia palea | Bacillariales | Bacillariaceae | Nitzschia | |
| Nitzschia paleacea | Bacillariales | Bacillariaceae | Nitzschia | |
| Nitzschia palustris | Bacillariales | Bacillariaceae | Nitzschia | |
| Nitzschia reversa | Bacillariales | Bacillariaceae | Nitzschia | |
| Nitzschia scalaris | Bacillariales | Bacillariaceae | Nitzschia | |
| Nitzschia seriata | Bacillariales | Bacillariaceae | Nitzschia | |
| Nitzschia serrata | Bacillariales | Bacillariaceae | Nitzschia | |
| Nitzschia subacicularis | Bacillariales | Bacillariaceae | Nitzschia | |
| Nupela | Naviculales | Naviculaceae | Nupela | |
| Nupela cymbelloidea | Naviculales | Naviculaceae | Nupela | |
| Nupela neotropica | Naviculales | Naviculaceae | Nupela | |
| Opephora | Fragilariales | Fragilariaceae | Opephora | |
| Pinnularia | Naviculales | Pinnulariacea | Pinnularia | |
| Pinnularia acrosphaeria | Naviculales | Pinnulariacea | Pinnularia | |
| Placoneis | Cymbellales | Cymbellaceae | Placoneis | |
| Placoneis elginensis | Cymbellales | Cymbellaceae | Placoneis | |
| Planothidium | Achnanthales | Achnanthidiac | Planothidium | |
| Planothidium apiculatum | Achnanthales | Achnanthidiac | Planothidium | |
| Planothidium delicatulum | Achnanthales | Achnanthidiac | Planothidium | |
| Planothidium frequentissimum | Achnanthales | Achnanthidiac | Planothidium | |
| Planothidium lanceolatum | Achnanthales | Achnanthidiac | Planothidium | |
| Planothidium peragalli | Achnanthales | Achnanthidiac | Planothidium | |
| Planothidium rostratum | Achnanthales | Achnanthidiac | Planothidium | |
| Pleurosira laevis | Triceratiales | Triceratiaceae | Pleurosira | |
| Psammothidium daonense | Achnanthales | Achnanthidiac | Psammothidium | |
| Psammothidium sacculum | Achnanthales | Achnanthidiac | Psammothidium | |
| Pseudostaurosira brevistriata | Fragilariales | Fragilariaceae | Pseudostaurosira | |
| Rhopalodia | Rhopalodiales | Rhopalodiace | Rhopalodia | |
| Rossithidium | Achnanthales | Achnanthidiac | Rossithidium | |
| Rossithidium pusillium | Achnanthales | Achnanthidiac | Rossithidium | |
| Sellaphora | Naviculales | Sellaphoracea | Sellaphora | |
| Sellaphora laevissima | Naviculales | Sellaphoracea | Sellaphora | |
| Sellaphora pupula | Naviculales | Naviculaceae | Navicula | |
| Stauroneis | Naviculales | Stauroneidac | Stauroneis | |
| Stauroneis anceps | Naviculales | Stauroneidac | Stauroneis | |
| Stauroneis phoenicenteron | Naviculales | Stauroneidac | Stauroneis | |
| Stauroneis prominula | Naviculales | Stauroneidac | Stauroneis | |
| Stauroneis smithii | Naviculales | Stauroneidac | Stauroneis | |
| Staurosira construens | Fragilariales | Fragilariaceae | Staurosira | |
| Staurosira elliptica | Fragilariales | Fragilariaceae | Staurosira | |
| Staurosirella | Fragilariales | Fragilariaceae | Staurosirella | |
| Staurosirella leptostauron | Fragilariales | Fragilariaceae | Staurosirella | |
| Staurosirella pinnata | Fragilariales | Fragilariaceae | Staurosirella | |
| Stenopterobia | Surirellales | Surirellaceae | Stenopterobia | |
| Stenopterobia delicatissima | Surirellales | Surirellaceae | Stenopterobia | |
| Stephanodiscus | Thalassiosiral | Stephanodisc | Stephanodiscus | |
| Surirella | Surirellales | Surirellaceae | Surirella | |
| Surirella angusta | Surirellales | Surirellaceae | Surirella | |



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As Entered / STORET station ->
Sample date ->

| Taxon Name / SampleID/PerDiaID -> | Order | Family | Genus | Current Name |
|---|---|---|---|---|
| Synedra | Fragilariales | Fragilariaceae | Synedra | |
| Synedra acus | Fragilariales | Fragilariaceae | Synedra | |
| Synedra fasciculata | Fragilariales | Fragilariaceae | Tabularia | Tabularia fasciculata |
| Synedra ulna | Fragilariales | Fragilariaceae | Synedra | |
| Tabellaria | Tabellariales | Tabellariacea | Tabellaria | |
| Terpsinoe musica | Biddulphiales | Biddulphiacea | Terpsinoe | |
| Thalassionema | Thalassionem | Thalassionem | Thalassionema | |
| Thalassiosira | Thalassiosiral | Thalassiosira | Thalassiosira | |
| Tryblionella | Bacillariales | Bacillariaceae | Tryblionella | |
| Tryblionella levidensis | Bacillariales | Bacillariaceae | Tryblionella | |

US EPA ARCHIVE DOCUMENT

| SampleID | Peri_IDs | STORET | Station Nickname | Station Description | Bioregion | WBID | Latitude | Longitude |
|---|---|---|---|---|---|---|---|---|
| 22114 | 8421 | 22030010 | STMARKSREF | St. Marks R approx 4 mi N of Hwy 98 (@ "rapids") | Panhandle East | 793B | 30.2402 | -84.14539 |
| 25672 | 10528 | 22030010 | STMARKSREF | St. Marks R approx 4 mi N of Hwy 98 (@ "rapids") | Panhandle East | 793B | 30.2402 | -84.14539 |
| 47698 | 20630 | BAK210GS | BAK210GS | St. Mary's River - BAK210GS | Northeast | 2211 | 30.4357 | -82.28776 |
| 48420 | 18531 | 32030023 | ECONSCTREF | ECONFINA CREEK AT SCOTT RD | Panhandle West | 553 | 30.5554 | -85.435 |
| 49652 | 18430 | GAD104US | GAD104US | Quincy Creek At Sr267 - GAD104US | Panhandle West | 1303 | 30.6005 | -84.58076 |
| 49677 | 18448 | LIB104LV | LIB104LV | Mule Creek - LIB104LV | Panhandle West | 684 | 30.5114 | -84.82791 |
| 49678 | 18449 | LIB104LV | LIB104LV | Mule Creek - LIB104LV | Panhandle West | 684 | 30.5114 | -84.82791 |
| 50131 | 19608 | CLA254LR | CLA254LR | Black Creek - CLA254LR | Northeast | 2415C | 29.9796 | -81.85229 |
| 52471 | 20006 | LEV502GS | LEV502GS | Waccasassa River - LEV502GS | Peninsula | 3699 | 29.2759 | -82.73666 |
| 52834 | 21128 | 273116508208152 | EFM02 | East Fork Manatee R. S of US62 on Duette Park. Myakka DOSSAC study | Peninsula | 1811 | 27.5213 | -82.13756 |
| 52912 | 20031 | PUT308GS | PUT308GS | Little Orange Creek - PUT308GS | Peninsula | 2713 | 29.5412 | -81.95328 |
| 52996 | 19568 | CLA243LV | CLA243LV | Black Creek - CLA243LV | Northeast | 2498 | 29.9108 | -81.88487 |
| 52997 | 19569 | CLA243LV | CLA243LV | Black Creek - CLA243LV | Northeast | 2498 | 29.9108 | -81.88487 |
| 53033 | 19609 | CLA254LR | CLA254LR | Black Creek - CLA254LR | Northeast | 2415C | 29.9796 | -81.85229 |
| 53059 | 19639 | UNI234LV | UNI234LV | Olustee Creek - UNI234LV | Northeast | 3504 | 30.0959 | -82.47286 |
| 53060 | 19640 | UNI234LV | UNI234LV | Olustee Creek - UNI234LV | Northeast | 3504 | 30.0959 | -82.47286 |
| 53732 | 20850 | BAK210GS | BAK210GS | St. Mary's River - BAK210GS | Northeast | 2211 | 30.4357 | -82.28776 |
| 53951 | 20328 | GLA630GS | GLA630GS | Cypress Branch - GLA630GS | Peninsula | 3235G | 26.8139 | -81.33541 |
| 54263 | 20007 | LEV502GS | LEV502GS | Waccasassa River - LEV502GS | Peninsula | 3699 | 29.2759 | -82.73666 |
| 54275 | 20032 | PUT308GS | PUT308GS | Little Orange Creek - PUT308GS | Peninsula | 2713 | 29.5412 | -81.95328 |
| 55073 | 20329 | GLA630GS | GLA630GS | Cypress Branch - GLA630GS | Peninsula | 3235G | 26.8139 | -81.33541 |
| 55672 | 20631 | BAK210GS | BAK210GS | St. Mary's River - BAK210GS | Northeast | 2211 | 30.4357 | -82.28776 |
| 57324 | 21790 | 3513 | FLO521150 | Withlacoochee River @ Stokes | Peninsula | 1329C | 28.9885 | -82.34984 |
| 57431 | 21831 | PUT308GS | PUT308GS | Little Orange Creek - PUT308GS | Peninsula | 2713 | 29.5412 | -81.95328 |
| 57811 | 22009 | GAD104US | GAD104US | Quincy Creek At Sr267 - GAD104US | Panhandle West | 1303 | 30.6005 | -84.58076 |
| 64546 | 24394 | 23010464 | WITHREF | Withlacoochee R @ county park off Auton Rd (TP3) | Peninsula | 1329F | 28.3 | -82.1 |
| 65025 | 24393 | LIB104LV | LIB104LV | Mule Creek - LIB104LV | Panhandle West | 684 | 30.5114 | -84.82791 |
| 65026 | 24416 | 22020093 | FLRQUINREF | Quincy Creek above SR267 bridge | Panhandle West | 1303 | 30.5997 | -84.58192 |
| 65028 | 24417 | GAD106GS | GAD106GS | Yon Creek - GAD106GS | Panhandle West | 626 | 30.5345 | -84.77116 |
| 65029 | 24392 | NUTREF001 | TELOG1641 | Telogia Creek at CR 1641 | Panhandle West | 1300 | 30.4501 | -84.86123 |
| 65250 | 24411 | CLA246GS | CLA246GS | Peters Creek - CLA246GS | Northeast | 2444 | 30.0075 | -81.74823 |
| 65291 | 24441 | 3545 | S360 | S360 Blackwater River @ Hwy 4 | Panhandle West | 24C | 30.8334 | -86.73373 |
| 65292 | 24452 | 32030023 | ECONSCTREF | ECONFINA CREEK AT SCOTT RD | Panhandle West | 553 | 30.5554 | -85.435 |
| 65293 | 24458 | 21010008 | HAMIL6 | ALAPAHA RIVER 1 SR 150 HAMILTON | Panhandle East | 3324 | 30.5999 | -83.07342 |
| 65296 | 24444 | 3546 | S365 | S365 Yellow River @ Hwy 2 | Panhandle West | 30 | 30.9254 | -86.55917 |
| 65306 | 24430 | BAK208GS | BAK208GS | St. Mary's River - BAK208GS | Northeast | 2097K | 30.5179 | -82.23048 |
| 65316 | 24445 | 3549 | S377 | S377 Escambia River @ HWY 4 Bridge | Panhandle West | 10C | 30.9641 | -87.23599 |
| 65379 | 24479 | 22050083 | STEINCANAL | Steinhatchee @ Canal Road | Panhandle East | 3573A | 29.8288 | -83.30847 |
| 65382 | 24482 | 22050040 | LAFAY1 | STEINHATCHEE RIVER I SR357 | Panhandle East | 3573B | 29.8903 | -83.25278 |



US EPA ARCHIVE DOCUMENT

| SampleID | Peri_IDs | STORET | Station Nickname | Station Description | Bioregion | WBID | Latitude | Longitude |
|---|---|---|---|---|---|---|---|---|
| 65414 | 24471 | WAK158LR | WAK158LR | Sopchoppy River - WAK158LR | Panhandle West | 998 | 30.1301 | -84.49394 |
| 65567 | 24491 | 23010464 | WITHREF | Withlacoochee R @ county park off Auton Rd (TP3) | Peninsula | 1329F | 28.3 | -82.1 |
| 65636 | 24518 | CLA246GS | CLA246GS | Peters Creek - CLA246GS | Northeast | 2444 | 30.0075 | -81.74823 |
| 65637 | 24513 | UNI234LV | UNI234LV | Olustee Creek - UNI234LV | Northeast | 3504 | 30.0959 | -82.47286 |
| 65715 | 24541 | WAK158LR | WAK158LR | Sopchoppy River - WAK158LR | Panhandle West | 998 | 30.1301 | -84.49394 |
| 65731 | 24544 | 19010006 | STMAR2REF | ST MARYS RIVER AT SR #2 | Northeast | 2097K | 30.5179 | -82.23031 |
| 65736 | 24548 | CLA254LR | CLA254LR | Black Creek - CLA254LR | Northeast | 2415C | 29.9796 | -81.85229 |
| 65737 | 24549 | CLA243LV | CLA243LV | Black Creek - CLA243LV | Northeast | 2498 | 29.9108 | -81.88487 |
| 65739 | 24551 | NUTREF001 | TELOG1641 | Telogia Creek at CR 1641 | Panhandle West | 1300 | 30.4501 | -84.86123 |
| 65741 | 24553 | GAD106GS | GAD106GS | Yon Creek - GAD106GS | Panhandle West | 626 | 30.5345 | -84.77116 |
| 65891 | 24591 | GLA630GS | GLA630GS | Cypress Branch - GLA630GS | Peninsula | 3235G | 26.8139 | -81.33541 |
| 65900 | 24599 | 24010002 | MANAREF | Manatee R 20 m below SR64 bridge (TP1) | Peninsula | 1807C | 27.4734 | -82.21097 |
| 65907 | 24600 | 273116508208152 | EFM02 | East Fork Manatee R. S of US62 on Duette Park. Myakka DOSSAC study | Peninsula | 1811 | 27.5213 | -82.13756 |
| 65931 | 24605 | 22050083 | STEINCANAL | Steinhatchee @ Canal Road | Panhandle East | 3573A | 29.8288 | -83.30847 |
| 65932 | 24606 | 22050040 | LAFAY1 | STEINHATCHEE RIVER I SR357 | Panhandle East | 3573B | 29.8903 | -83.25278 |

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| SampleID | Peri_IDs | Sample Date | Nreps | Gear | BacillariophytaPct | ChlorophycotaPct | CryptophycophytaPct | CyanophycotaPct | DiatomNumTaxa | DiatomValveCount |
|---|---|---|---|---|---|---|---|---|---|---|
| 22114 | 8421 | 8/22/2000 | 1 | Peri-NS | 97.39 | 0.19 | 0 | 2.42 | | |
| 25672 | 10528 | 9/18/2001 | 1 | Peri-NS | 96.39 | 0.4 | 0 | 3.01 | | |
| 47698 | 20630 | 11/1/2005 | 1 | Peri-NS | 83.73 | 5.76 | 0 | 9.49 | | |
| 48420 | 18531 | 2/15/2006 | 1 | Peri-NS | 87.7 | 5.18 | 0 | 7.12 | | |
| 49652 | 18430 | 11/14/2005 | 1 | Peri-NS | 87.33 | 6 | 0 | 6.67 | | |
| 49677 | 18448 | 11/21/2005 | 1 | Peri-NS | 72.2 | 9.15 | 0 | 18.31 | | |
| 49678 | 18449 | 11/21/2005 | 1 | Peri-NS | 100 | 0 | 0 | 0 | | |
| 50131 | 19608 | 11/14/2005 | 1 | Peri-NS | 82.33 | 1 | 0 | 16.67 | | |
| 52471 | 20006 | 12/6/2005 | 1 | Peri-NS | 89.67 | 2.33 | 0 | 8 | | |
| 52834 | 21128 | 6/21/2006 | 1 | Peri-NS | 59.32 | 2.71 | 0 | 36.95 | 44 | 500 |
| 52912 | 20031 | 12/13/2005 | 1 | Peri-NS | 95.33 | 1.67 | 0 | 3 | | |
| 52996 | 19568 | 11/14/2005 | 1 | Peri-NS | 93.4 | 3.96 | 0 | 2.64 | | |
| 52997 | 19569 | 11/14/2005 | 1 | Peri-NS | 100 | 0 | 0 | 0 | | |
| 53033 | 19609 | 11/14/2005 | 1 | Peri-NS | 100 | 0 | 0 | 0 | | |
| 53059 | 19639 | 11/15/2005 | 1 | Peri-NS | 97.36 | 0.33 | 0 | 2.31 | | |
| 53060 | 19640 | 11/15/2005 | 1 | Peri-NS | 100 | 0 | 0 | 0 | | |
| 53732 | 20850 | 3/20/2006 | 1 | Peri-NS | 88.47 | 1.36 | 0 | 10.17 | | |
| 53951 | 20328 | 1/23/2006 | 1 | Peri-NS | 63.05 | 9.49 | 0.34 | 22.37 | | |
| 54263 | 20007 | 12/6/2005 | 1 | Peri-NS | 100 | 0 | 0 | 0 | | |
| 54275 | 20032 | 12/13/2005 | 1 | Peri-NS | 100 | 0 | 0 | 0 | | |
| 55073 | 20329 | 1/23/2006 | 1 | Peri-NS | 100 | 0 | 0 | 0 | | |
| 55672 | 20631 | 11/1/2005 | 1 | Peri-NS | 100 | 0 | 0 | 0 | | |
| 57324 | 21790 | 2/20/2007 | 1 | Peri-NS | 90.73 | 0.66 | 0 | 8.61 | 28 | 500 |
| 57431 | 21831 | 2/26/2007 | 1 | Peri-NS | 86.67 | 5.67 | 0 | 7.33 | 33 | 500 |
| 57811 | 22009 | 11/14/2005 | 1 | Peri-NS | 100 | 0 | 0 | 0 | | |
| 64546 | 24394 | 5/7/2008 | 1 | Peri-NS | 72.09 | 1 | 0 | 26.58 | 45 | 500 |
| 65025 | 24393 | 6/10/2008 | 1 | Peri-NS | 99 | 0 | 0 | 1 | 21 | 500 |
| 65026 | 24416 | 6/13/2008 | 1 | Peri-NS | 93 | 2 | 0 | 5 | 44 | 500 |
| 65028 | 24417 | 6/13/2008 | 1 | Peri-NS | 98 | 0 | 0 | 2 | 20 | 500 |
| 65029 | 24392 | 6/10/2008 | 1 | Peri-NS | 85 | 0.33 | 0 | 14.67 | 36 | 500 |
| 65250 | 24411 | 5/28/2008 | 1 | Peri-NS | 96.67 | 1.67 | 0.67 | 0.33 | 26 | 500 |
| 65291 | 24441 | 7/9/2008 | 1 | Peri-NS | 88.45 | 2.31 | 0 | 2.31 | 28 | 500 |
| 65292 | 24452 | 7/24/2008 | 1 | Peri-NS | 89.7 | 5.65 | 0 | 3.65 | 32 | 500 |
| 65293 | 24458 | 7/16/2008 | 1 | Peri-NS | 83.44 | 2.92 | 0 | 13.31 | 46 | 500 |
| 65296 | 24444 | 7/9/2008 | 1 | Peri-NS | 90.07 | 1.99 | 0 | 7.95 | 37 | 500 |
| 65306 | 24430 | 6/18/2008 | 1 | Peri-NS | 90.67 | 9 | 0 | 0.33 | 14 | 500 |
| 65316 | 24445 | 7/10/2008 | 1 | Peri-NS | 84.72 | 5.98 | 0 | 9.3 | 32 | 500 |
| 65379 | 24479 | 8/12/2008 | 1 | Peri-NS | 60.13 | 3.65 | 0 | 36.21 | 43 | 499 |
| 65382 | 24482 | 8/12/2008 | 1 | Peri-NS | 79.67 | 4.33 | 0 | 16 | 42 | 500 |



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| SampleID | Peri_IDs | Sample Date | Nreps | Gear | BacillariophytaPct | ChlorophycotaPct | CryptophycophytaPct | CyanophycotaPct | DiatomNumTaxa | DiatomValveCount |
|---|---|---|---|---|---|---|---|---|---|---|
| 65414 | 24471 | 6/19/2008 | 1 | Peri-NS | 81.67 | 3.67 | 0 | 14.67 | 23 | 500 |
| 65567 | 24491 | 10/8/2008 | 1 | Peri-NS | 84.59 | 2.95 | 0 | 11.48 | 50 | 500 |
| 65636 | 24518 | 10/28/2008 | 1 | Peri-NS | 94 | 2.67 | 0 | 2.67 | 57 | 502 |
| 65637 | 24513 | 10/16/2008 | 1 | Peri-NS | 95.77 | 2.82 | 0 | 1.41 | 55 | 501 |
| 65715 | 24541 | 11/13/2008 | 1 | Peri-NS | 73.05 | 4.55 | 0 | 22.4 | 38 | 500 |
| 65731 | 24544 | 11/12/2008 | 1 | Peri-NS | 93.33 | 4 | 0 | 2.33 | 44 | 502 |
| 65736 | 24548 | 11/6/2008 | 1 | Peri-NS | 94.67 | 1.33 | 0 | 4 | 49 | 500 |
| 65737 | 24549 | 11/6/2008 | 1 | Peri-NS | 98 | 1 | 0 | 0.33 | 36 | 500 |
| 65739 | 24551 | 11/20/2008 | 1 | Peri-NS | 87.69 | 2.56 | 0 | 9.74 | 62 | 500 |
| 65741 | 24553 | 11/20/2008 | 1 | Peri-NS | 88 | 2 | 0 | 10 | 56 | 500 |
| 65891 | 24591 | 12/16/2008 | 1 | Peri-NS | 91.33 | 0 | 0 | 8.67 | 33 | 500 |
| 65900 | 24599 | 12/17/2008 | 1 | Peri-NS | 90 | 0 | 0 | 9.33 | 28 | 501 |
| 65907 | 24600 | 12/17/2008 | 1 | Peri-NS | 76 | 0.33 | 0 | 23.67 | 52 | 500 |
| 65931 | 24605 | 1/14/2009 | 1 | Peri-NS | 67.45 | 14.77 | 0.34 | 16.44 | 52 | 500 |
| 65932 | 24606 | 1/14/2009 | 1 | Peri-NS | 73.33 | 7 | 0 | 19.33 | 41 | 500 |

US EPA ARCHIVE DOCUMENT

| SampleID | Peri_IDs | Dominant DiatomPct | DominantDiatomPct Word | DominantPct |
|---|---|---|---|---|
| 22114 | 8421 | | | 25.14 |
| 25672 | 10528 | | | 39.16 |
| 47698 | 20630 | | | 83.73 |
| 48420 | 18531 | | | 61.81 |
| 49652 | 18430 | | | 87.33 |
| 49677 | 18448 | | | 72.2 |
| 49678 | 18449 | | | 62.4 |
| 50131 | 19608 | | | 82.33 |
| 52471 | 20006 | | | 89.67 |
| 52834 | 21128 | 21.8 | Fragilariaceae | 59.32 |
| 52912 | 20031 | | | 95.33 |
| 52996 | 19568 | | | 93.4 |
| 52997 | 19569 | | | 33.66 |
| 53033 | 19609 | | | 29.6 |
| 53059 | 19639 | | | 97.36 |
| 53060 | 19640 | | | 31.06 |
| 53732 | 20850 | | | 88.47 |
| 53951 | 20328 | | | 63.05 |
| 54263 | 20007 | | | 31 |
| 54275 | 20032 | | | 59.2 |
| 55073 | 20329 | | | 21.8 |
| 55672 | 20631 | | | 71.6 |
| 57324 | 21790 | 30.4 | Melosira | 90.73 |
| 57431 | 21831 | 47 | Eunotia | 86.67 |
| 57811 | 22009 | | | 12.2 |
| 64546 | 24394 | 20.6 | Nitzschia | 72.09 |
| 65025 | 24393 | 29 | Eunotia | 99 |
| 65026 | 24416 | 28.8 | Navicula | 93 |
| 65028 | 24417 | 53 | Navicula | 98 |
| 65029 | 24392 | 15 | Achnanthes | 85 |
| 65250 | 24411 | 55.6 | Eunotia | 96.67 |
| 65291 | 24441 | 56 | Eunotia | 88.45 |
| 65292 | 24452 | 64.4 | Eunotia | 89.7 |
| 65293 | 24458 | 15 | Diadesmis confervacea | 83.44 |
| 65296 | 24444 | 11 | Navicula | 90.07 |
| 65306 | 24430 | 52 | Eunotia | 90.67 |
| 65316 | 24445 | 14.8 | Planothidium | 84.72 |
| 65379 | 24479 | 23.65 | Cocconeis placentula | 60.13 |
| 65382 | 24482 | 39 | Achnanthes rupestoides | 79.67 |



US EPA ARCHIVE DOCUMENT

| SampleID | Peri_IDs | Dominant DiatomPct | DominantDiatomPct Word | DominantPct |
|---|---|---|---|---|
| 65414 | 24471 | 40.4 | Aulacoseira | 81.67 |
| 65567 | 24491 | 25.4 | Nitzschia | 84.59 |
| 65636 | 24518 | 17.33 | Eunotia | 94 |
| 65637 | 24513 | 20.56 | Nupela | 95.77 |
| 65715 | 24541 | 20.6 | Aulacoseira | 73.05 |
| 65731 | 24544 | 20.92 | Nitzschia | 93.33 |
| 65736 | 24548 | 23.6 | Eunotia | 94.67 |
| 65737 | 24549 | 52.8 | Eunotia | 98 |
| 65739 | 24551 | 12.8 | Eunotia | 87.69 |
| 65741 | 24553 | 21 | Eunotia | 88 |
| 65891 | 24591 | 36.2 | Eunotia | 91.33 |
| 65900 | 24599 | 76.65 | Melosira | 90 |
| 65907 | 24600 | 19.6 | Fragilariaceae | 76 |
| 65931 | 24605 | 35.4 | Achnanthes rupestoides | 67.45 |
| 65932 | 24606 | 14 | Navicula seminulum | 73.33 |

US EPA ARCHIVE DOCUMENT

| SampleID | Peri_IDs | DominantPct Word | DominantWet AlgaePct | DominantWetAlgaePct Word | EuglenophycotaPct | PyrrophycophytaPct | TotalNind | TotalTaxa | Sample Comments |
|---|---|---|---|---|---|---|---|---|---|
| 22114 | 8421 | Eunotia | | | 0 | 0 | 537 | 30 | |
| 25672 | 10528 | Cocconeis placentula | | | 0 | 0 | 498 | 34 | |
| 47698 | 20630 | Bacillariophyceae | | | 0.68 | 0 | 295 | 16 | |
| 48420 | 18531 | Eunotia | | | 0 | 0 | 309 | 39 | |
| 49652 | 18430 | Bacillariophyceae | | | 0 | 0 | 300 | 10 | |
| 49677 | 18448 | Bacillariophyceae | | | 0.34 | 0 | 295 | 17 | |
| 49678 | 18449 | Eunotia | | | 0 | 0 | 500 | 31 | |
| 50131 | 19608 | Bacillariophyceae | | | 0 | 0 | 300 | 9 | |
| 52471 | 20006 | Bacillariophyceae | | | 0 | 0 | 300 | 12 | |
| 52834 | 21128 | Bacillariophyta | 42.5 | Jaaginema | 1.02 | 0 | 295 | 16 | |
| 52912 | 20031 | Bacillariophyceae | | | 0 | 0 | 300 | 10 | |
| 52996 | 19568 | Bacillariophyceae | | | 0 | 0 | 303 | 10 | |
| 52997 | 19569 | Eunotia | | | 0 | 0 | 505 | 22 | |
| 53033 | 19609 | Eunotia | | | 0 | 0 | 500 | 32 | |
| 53059 | 19639 | Bacillariophyceae | | | 0 | 0 | 303 | 4 | |
| 53060 | 19640 | Pinnularia | | | 0 | 0 | 499 | 30 | |
| 53732 | 20850 | Bacillariophyceae | | | 0 | 0 | 295 | 9 | |
| 53951 | 20328 | Bacillariophyceae | | | 4.07 | 0 | 295 | 27 | |
| 54263 | 20007 | Achnanthes rupestoides | | | 0 | 0 | 500 | 41 | |
| 54275 | 20032 | Eunotia | | | 0 | 0 | 500 | 29 | |
| 55073 | 20329 | Eunotia | | | 0 | 0 | 500 | 48 | |
| 55672 | 20631 | Eunotia | | | 0 | 0 | 500 | 16 | |
| 57324 | 21790 | Bacillariophyta | 25 | Oscillatoria tenuis | 0 | 0 | 302 | 13 | |
| 57431 | 21831 | Bacillariophyta | 22.5 | Jaaginema | 0.33 | 0 | 300 | 16 | |
| 57811 | 22009 | Cocconeis fluviatilis | | | 0 | 0 | 500 | 43 | |
| 64546 | 24394 | Bacillariophyta | 57.14 | Schizothrix calcicola | 0.33 | 0 | 301 | 9 | |
| 65025 | 24393 | Bacillariophyta | 100 | Jaaginema | 0 | 0 | 300 | 2 | |
| 65026 | 24416 | Bacillariophyta | 19.05 | Synechocystis | 0 | 0 | 300 | 10 | |
| 65028 | 24417 | Bacillariophyta | 66.67 | Planktolyngbya | 0 | 0 | 300 | 4 | |
| 65029 | 24392 | Bacillariophyta | 71.11 | Schizothrix calcicola | 0 | 0 | 300 | 5 | |
| 65250 | 24411 | Bacillariophyta | 30 | Chlorella | 0.33 | 0.33 | 300 | 8 | |
| 65291 | 24441 | Bacillariophyta | 57.14 | Batrachospermum | 0.33 | 0 | 303 | 12 | |
| 65292 | 24452 | Bacillariophyta | 16.13 | Synechocystis | 1 | 0 | 301 | 17 | |
| 65293 | 24458 | Bacillariophyta | 31.37 | Synechocystis | 0.32 | 0 | 308 | 17 | |
| 65296 | 24444 | Bacillariophyta | 23.33 | Synechocystis | 0 | 0 | 302 | 14 | |
| 65306 | 24430 | Bacillariophyta | 50 | Mougeotia | 0 | 0 | 300 | 7 | |
| 65316 | 24445 | Bacillariophyta | 19.57 | Protococcus | 0 | 0 | 301 | 12 | |
| 65379 | 24479 | Bacillariophyta | 51.67 | Anabaena subcylindric | 0 | 0 | 301 | 12 | |
| 65382 | 24482 | Bacillariophyta | 18.03 | Jaaginema | 0 | 0 | 300 | 16 | |



US EPA ARCHIVE DOCUMENT

| SampleID | Peri_IDs | DominantPct Word | DominantWet AlgaePct | DominantWetAlgaePct Word | EuglenophycotaPct | PyrrophycophytaPct | TotalNind | TotalTaxa | Sample Comments |
|---|---|---|---|---|---|---|---|---|---|
| 65414 | 24471 | Bacillariophyta | 72.73 | Anabaena | 0 | 0 | 300 | 9 | |
| 65567 | 24491 | Bacillariophyta | 25.53 | Jaaginema | 0.98 | 0 | 305 | 18 | |
| 65636 | 24518 | Bacillariophyta | 22.22 | Jaaginema | 0.67 | 0 | 300 | 8 | |
| 65637 | 24513 | Bacillariophyta | 66.67 | Oedogonium | 0 | 0 | 71 | 3 | |
| 65715 | 24541 | Bacillariophyta | 24.1 | Schizothrix calcicola | 0 | 0 | 308 | 17 | |
| 65731 | 24544 | Bacillariophyta | 15 | Jaaginema | 0.33 | 0 | 300 | 11 | |
| 65736 | 24548 | Bacillariophyta | 56.25 | Schizothrix calcicola | 0 | 0 | 300 | 6 | |
| 65737 | 24549 | Bacillariophyta | 33.33 | Chlorella | 0 | 0 | 300 | 6 | |
| 65739 | 24551 | Bacillariophyta | 29.17 | Schizothrix calcicola | 0 | 0 | 195 | 10 | |
| 65741 | 24553 | Bacillariophyta | 25 | Jaaginema | 0 | 0 | 300 | 12 | |
| 65891 | 24591 | Bacillariophyta | 69.23 | Schizothrix calcicola | 0 | 0 | 300 | 6 | |
| 65900 | 24599 | Bacillariophyta | 50 | Jaaginema | 0.67 | 0 | 300 | 7 | |
| 65907 | 24600 | Bacillariophyta | 87.5 | Schizothrix calcicola | 0 | 0 | 300 | 6 | |
| 65931 | 24605 | Bacillariophyta | 22.68 | Chlorella | 0 | 0 | 298 | 20 | |
| 65932 | 24606 | Bacillariophyta | 23.75 | Synechocystis | 0.33 | 0 | 300 | 15 | |

US EPA ARCHIVE DOCUMENT

| SampleID | Peri_IDs | Ben/Per/Phy /MacPhy Comments |
|---|---|---|
| 22114 | 8421 | LIMS476051? |
| 25672 | 10528 | lims547453? |
| 47698 | 20630 | SID-55672 |
| 48420 | 18531 | Ref SCI,Biorecon,water,Periphyton samples taken,SCI shipped to Tall.,Turb. viola |
| 49652 | 18430 | 57811?? |
| 49677 | 18448 | 49678? |
| 49678 | 18449 | 49677 |
| 50131 | 19608 | SID-53033 |
| 52471 | 20006 | SID-54263 |
| 52834 | 21128 | not enough leaves to sample. Neoperla observed |
| 52912 | 20031 | SID-54275 |
| 52996 | 19568 | SID-52997 |
| 52997 | 19569 | SID-52996?? |
| 53033 | 19609 | SID-50131?? |
| 53059 | 19639 | SID-53060 |
| 53060 | 19640 | SID-53059?? |
| 53732 | 20850 | SID-55852 |
| 53951 | 20328 | SID-55073 |
| 54263 | 20007 | SID-52471?? |
| 54275 | 20032 | SID-52912?? |
| 55073 | 20329 | SID-53951?? |
| 55672 | 20631 | SID-47698?? |
| 57324 | 21790 | |
| 57431 | 21831 | |
| 57811 | 22009 | SID-49652 |
| 64546 | 24394 | Habitats have alot of sponge on them |
| 65025 | 24393 | |
| 65026 | 24416 | |
| 65028 | 24417 | |
| 65029 | 24392 | |
| 65250 | 24411 | |
| 65291 | 24441 | |
| 65292 | 24452 | |
| 65293 | 24458 | |
| 65296 | 24444 | |
| 65306 | 24430 | |
| 65316 | 24445 | |
| 65379 | 24479 | |
| 65382 | 24482 | |



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| As Calculated / STORET station -> | 20030341 | 20030342 | 33010065 | 21030064 |
|---|---|---|---|---|
| Sample date -> | 10/2/1995 | 10/2/1995 | 2/14/1996 | 2/6/1996 |
| | SampleID 7778/BenthID | SampleID 7779/BenthID | SampleID 9179/BenthID | SampleID 9196/BenthID |
| Taxon Name / SampleID/BenID -> | 8855(#counted) | 8856(#counted) | 10164(#counted) | 10181(#counted) |
| Hydrobiidae | 0 | 0 | 0 | 1 |
| Hydrodroma | 0 | 0 | 0 | 0 |
| Hydrophilidae | 0 | 0 | 0 | 0 |
| Hydroporus | 0 | 0 | 0 | 0 |
| Hydropsyche | 0 | 0 | 0 | 0 |
| Hydropsyche decalda | 0 | 0 | 0 | 0 |
| Hydropsychidae | 0 | 0 | 0 | 0 |
| Hydroptila | 0 | 0 | 0 | 0 |
| Hydroptilidae | 0 | 0 | 0 | 0 |
| Hygrobates | 1 | 0 | 0 | 0 |
| Hygrotus | 0 | 0 | 0 | 0 |
| Ischnura | 0 | 0 | 0 | 0 |
| Ischnura hastata | 0 | 0 | 0 | 0 |
| Isonychia | 0 | 0 | 0 | 0 |
| Isoperla | 0 | 0 | 0 | 0 |
| Isopoda | 0 | 0 | 0 | 2 |
| Isotomurus | 0 | 0 | 0 | 0 |
| Isotomurus tricolor | 0 | 0 | 0 | 0 |
| Kiefferulus | 0 | 0 | 0 | 0 |
| Krendowskia | 0 | 0 | 0 | 0 |
| Labiobaetis | 0 | 0 | 0 | 0 |
| Labrundinia | 0 | 0 | 0 | 1 |
| Labrundinia becki | 0 | 1 | 0 | 0 |
| Labrundinia johannseni | 0 | 0 | 0 | 0 |
| Labrundinia neopilosella | 0 | 0 | 0 | 0 |
| Labrundinia pilosella | 0 | 0 | 0 | 0 |
| Laevapex | 0 | 0 | 0 | 0 |
| Laevapex peninsulae | 0 | 0 | 0 | 0 |
| Larsia berneri | 0 | 0 | 0 | 0 |
| Larsia decolorata | 0 | 0 | 0 | 0 |
| Lauterborniella agrayloides | 0 | 0 | 0 | 0 |
| Lebertia | 0 | 0 | 0 | 1 |
| Lepidoptera | 0 | 0 | 0 | 0 |
| Leptoceridae | 0 | 0 | 0 | 0 |
| Leptophlebia | 0 | 0 | 0 | 0 |
| Leptophlebiidae | 0 | 0 | 7 | 0 |
| Leuctra | 0 | 0 | 0 | 0 |
| Libellulidae | 0 | 0 | 0 | 0 |
| Limnesia | 0 | 0 | 0 | 0 |
| Limnodrilus hoffmeisteri | 16 | 2 | 2 | 0 |
| Limnophila | 0 | 0 | 0 | 0 |
| Limonia | 0 | 0 | 0 | 0 |
| Liodessus | 0 | 0 | 1 | 0 |
| Liodessus affinis | 0 | 0 | 0 | 0 |
| Lioporeus | 0 | 0 | 0 | 0 |
| Lirceus | 0 | 0 | 0 | 0 |
| Littoridinops monroensis | 0 | 2 | 0 | 0 |
| Lumbriculidae | 0 | 0 | 0 | 0 |
| Lumbriculus variegatus | 0 | | | |



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# Appendix A6. FDEP's Development and Testing of Biomonitoring Tools for Macroinvertebrates in Florida Streams

Cross-reference:

*Appendix B-2: FDEP's Development and Testing of Biomonitoring Tools for Macroinvertebrates in Florida Streams.* U.S. EPA. 2010. *Technical Support Document for U.S. EPA's Proposed Rule for Numeric Nutrient Criteria for Florida's Inland Surface Fresh Waters. Water Quality Standards for the State of Florida's Lakes and Flowing Waters. Proposed Rule.* January 14, 2010. EPA-HQ-OW-2009-0596, FRL-9105-1.

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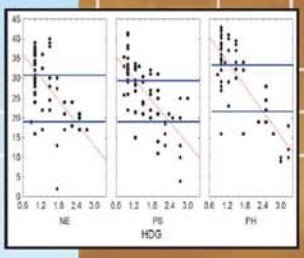
# Development and Testing of Biomonitoring Tools for Macroinvertebrates in Florida Streams




Nonpoint Source Bioassessment Program

# DEVELOPMENT AND TESTING OF BIOMONITORING TOOLS FOR MACROINVERTEBRATES IN FLORIDA STREAMS (STREAM CONDITION INDEX AND BIORECON)

## Final Report

***Prepared for:***

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**March 2007**

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## *Dedication*

*On behalf of the Florida Department of Environmental Protection, the Biocriteria Committee dedicates this document to Dr. James R. Karr.*

*We would like to thank Dr. Karr for his vision, guidance, and mentoring during the development of its monitoring, assessment, and water quality standards programs. We recognize and appreciate his lifelong dedication to the creation, improvement, and implementation of biological monitoring to protect water resources.*

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- *Phil Kane*
- *Steve Kent*
- *Eric Pluchino*

**Northeast District (Jacksonville)**
- *Lee Banks*
- *Patrick O'Connor*

**Northwest District (Pensacola)**
- *Frank Butera*
- *Glenn Butts*
- *Laurence Donelan*
- *Donald Ray*

**South District (Punta Gorda)**
- *Robert Rutter*
- *Albert (Ford) Walton*

**Southeast District (Port St. Lucie)**
- *Mark Thompson*

**Southwest District (Tampa)**
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- *Emily Springer*

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# FOREWARD

The original version of this document was completed in 2004. Subsequently, important observations made during the routine application of these bioassessment tools, as well as new EPA guidance for formulating biological criteria, prompted DEP to revise the document in two key areas.

First, the thresholds for interpreting the final Stream Condition Index values have been revised. This was partially due to responses from DEP biologists, who noted that many reference streams, formally evaluated as “excellent” using the pre-2004 SCI criteria, were now considered “fair”, or sometimes “poor” using the SCI 2004 thresholds. Additionally, in 2006, EPA promoted using the Biological Condition Gradient approach as a nationally standardized and scientifically robust method for developing defensible biocriteria. Using this approach, and a second line of evidence concerning the variability of the reference condition, new SCI thresholds have been devised.

An additional revision to the document addressed measurement error of the SCI related to laboratory subsampling methods which were subsequently modified to improve the precision of the SCI without substantially increasing the cost. This involved increasing the number of individuals examined and averaging the results from two independent aliquots from a field sample.

Science is an iterative process: incremental improvements are made as new evidence and experience accumulate. Such was the motivation behind the revisions made in the original document and as a result of additional statistical analyses conducted during 2004–2006. This document represents the work and expertise of many people, all dedicated to applying the best science possible for the protection of Florida’s stream resources.

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# ABSTRACT

The Florida Department of Environmental Protection assesses the chemical, physical, and biological condition of hundreds of stream sites each year. This study used measures of hydrologic condition, riparian and channel habitat condition, water chemistry, and intensity of human land use to define a gradient of human disturbance for stream sites. We evaluated the sensitivity and tolerance of over 1,000 stream macroinvertebrate taxa using the human disturbance gradient (HDG). We tested for correlation between the HDG and 36 biological measures of the stream macroinvertebrate assemblage (metrics), and selected the 10 most highly correlated metrics within 6 categories of biological organization: taxonomic richness (total number of taxa, number of Trichoptera taxa, and number of Ephemeroptera taxa); feeding group (percentage filterer individuals); voltinism (long-lived taxa richness); habit (clinger taxa richness); community structure (percentage dominance of the most abundant taxon and percentage Tanytarsini midges); and sensitivity and tolerance (sensitive taxa richness and percentage very tolerant individuals).

Metrics were combined into an overall Stream Condition Index (SCI) by transforming metric values into unitless scores and summing the scores. The SCI was highly correlated with the HDG for an independent dataset (Spearman's $r = -0.81$, $p < 0.001$). The SCI was independent of watershed size and geographic region (Florida panhandle, peninsula, and northeast). Across 10 years of sampling, the index showed a similar response to the HDG. The SCI was somewhat higher for winter versus summer samples (3.5%). To summarize the statistical precision of the SCI, we used confidence intervals to calculate that the SCI could distinguish 3.7 categories of biological condition. These results supported subsequent selection of three assessment categories for interpreting SCI values in a regulatory context. A large portion of the variability of the SCI was due to subsampling in the laboratory (49%). To reduce this variability, laboratory sorting procedures have subsequently been modified to target two aliquots of 150 individuals, with the resulting SCI values averaged.

We also tested biological metrics for a second stream macroinvertebrate sampling protocol (the BioReconnaissance Index, or BioRecon), which was based on the sorting of invertebrates in the field and taxonomic identification in the laboratory. Of the 10 SCI metrics, 6 taxa richness metrics were tested using BioRecon data; all were highly correlated with both the SCI and HDG. From these metrics, the BioRecon Index was calculated as the sum of scores for the 6 metrics. The statistical precision of the BioRecon index was sufficient to detect 2.5 categories of biological condition which supported the subsequent decision to select three assessment categories for regulatory purposes.

We primarily followed the EPA 2006 Biological Condition Gradient approach for translating index values into biocriteria for Florida streams. For this approach, a panel of 22 regional scientists examined data representing multiple tiers of aquatic life use for the ultimate purpose of defining biological criteria for state water quality standards. In addition, the experts recommended a threshold of biological condition at which impairment occurs as a result of human disturbance. A secondary, but parallel analysis based on departure from reference condition yielded similar index values for the impairment threshold. Based on these complementary results, three categories of aquatic life use are proposed for Florida streams and described as Category 1 ("exceptional" ), Category 2 ("healthy"), and Category 3 ("impaired").

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# CHAPTER 1: INTRODUCTION

Florida, along with a handful of other states, leads the nation in the development and implementation of water protection policies based on biological criteria (McCarron and Frydenborg, 1997; U. S. Environmental Protection Agency [EPA], 2002). Under the federal Clean Water Act, states are required to define designated uses for specific waterbodies and develop criteria to protect them (Karr, 1991; Ransel, 1995). Over time, the emphasis has shifted from what was primarily the chemical monitoring of pollutants to include the direct measurement of the condition of the biological assemblage (Yoder and Rankin, 1998).

Florida classifies its surface waters according to their designated uses. The five categories are ranked in order of the level of protection that they require, as follows:

Class I–Drinking water;
Class II–Shellfish propagation or harvesting (primarily for coastal waters);
Class III–Recreation and propagation and maintenance of a healthy, well-balanced population of fish and wildlife;
Class IV–Agricultural water; and
Class V–Navigation and industrial use.

This document describes the development and testing of biological monitoring tools for macroinvertebrate stream samples for the assessment of freshwater streams that are applicable to Class I and III waters. FDEP has convened a Designated Uses Policy Advisory Committee (DUPAC) to explore an alternative system of designated use classification for Florida (see Chapter 4 below). We anticipate that FDEP will propose Aquatic Life Use (AL) categories, to which these biological monitoring tools for Class I and III streams would also apply.

The EPA has developed numerous guidance documents to support biological assessment (EPA, 1998; Barbour et al., 1999; Bowman et al., 2000; Jackson et al., 2000; EPA, 2001; EPA, 2002; EPA, 2003a, b, c; Fore, 2003). These documents typically emphasize multimetric indexes to measure the biological condition of surface waters (Karr, 1981; Karr et al., 1986; Barbour et al., 1999). The EPA's recent document, *Draft Report on the Environment 2003,* specifically recognizes multimetric indexes as an "approach that addresses the need to measure critical multiple variables" (EPA, 2003a).

Multimetric indexes are composed of biological measures, called metrics, that show a consistent response to human disturbance (Karr and Chu, 1999). Metrics are converted to unitless scores and summed to obtain a summary index. Multimetric indexes have been developed for fish, birds, invertebrates, and algae in a variety of ecological contexts in North America, Europe, and Asia (Thorne and Williams, 1997; Hughes et al., 1998; Hughes and Oberdorff, 1998; Karr and Chu, 1999; Bryce et al., 2002; Fore and Grafe, 2002; Klemm et al., 2003). Most states use multimetric indexes for biological assessment, although other techniques have been developed (Hawkins et al., 2000; EPA, 2003b, c).

## Background

Barbour et al. (1996) developed multimetric indexes for Florida that have been used since the early 1990s. The authors tested metrics by comparing values at sites with minimal human influence (reference sites) and sites with known disturbance (test sites). They identified three unique geographic regions based on the presence of shared taxa and defined metric expectations for each region.

In contrast, this study selected metrics on the basis of their correlation with a gradient of human disturbance (Bryce et al., 1999). The sensitivity and tolerance of over 1,000 taxa were also evaluated individually, using the human disturbance gradient (HDG). We used confidence intervals to estimate the



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precision associated with the indexes. Working with a panel of regional experts, aquatic life use categories were derived to support management decision related to listing stream sites as impaired and prioritizing sites for additional evaluation as part of the TMDL (Total Maximum Daily Load) process (Karr and Yoder, 2004).

From the original analysis by Barbour et al. (1996), two multimetric indexes were developed for Florida streams based on different sampling and identification protocols. The Stream Condition Index (SCI) was derived from laboratory processing and the identification of samples, while the Biological Reconnaissance (BioRecon) Index was based on field sorting and laboratory identification. This study develops new bioassessment tools for both sampling protocols. For simplicity's sake, the names of the indexes have been retained for this new analysis, and the previous indexes are referred to as the old SCI and the old BioRecon Index within this document.

# Methods

## *Study area*

Portions of Florida have been repeatedly inundated by seawater in recent geologic history; as a consequence, elevation and organism recruitment from adjacent, noninundated areas play an important role in the present-day geographic distribution of macroinvertebrates. Florida can be divided geographically into the northern panhandle, the southern peninsula, and a transitional region known as the northeast. The middle and lower Suwannee Basin provides a natural demarcation between the panhandle and peninsula, with the northeast region straddling the upper Suwannee northeast of the Cody Escarpment (White, 1970).

In the Florida panhandle, rivers typically flow from north to south, and the elevation of headwater streams typically exceeds 200 to 250 feet. The recruitment of stream organisms (over geologic time) from upstream, higher elevation areas (Georgia and Alabama) makes the panhandle richer in freshwater stream taxa than other parts of the state (Florida Natural Areas Inventory [FNAI], 1990). Vegetation communities in the panhandle generally consist of mixed pine/oak/hickory forests (*Pinus* spp., *Quercus* spp., *Carya* spp.); longleaf pine forests (*Pinus palustris*); hardwood forests with a beech/magnolia climax community (*Fagus grandiflora*/*Magnolia grandiflora*); and swamp hardwood forests of cypress (*Taxodium* spp.) or tupelo (*Nyssa* spp.), interspersed with a mosaic of pine plantations, cropland (e.g., corn, soy beans, and peanuts), and pasture (Soil and Water Conservation Society (SWCS), 1989; Fernald and Purdum, 1992). The panhandle is less densely populated by humans than the other areas.

The peninsula has a sandy highland ridge extending down its center almost to Lake Okeechobee. The elevation of the central ridge is approximately 150 to 200 feet. Rivers west of the ridge flow into the Gulf of Mexico. Of the two large drainages east of the ridge, the Kissimmee River flows south into Lake Okeechobee, and the St. Johns River flows north to the Atlantic. Streams in the peninsula tend to have lower water velocity, flowing through wetlands and pine flatwoods (White, 1958). The peninsula has fewer freshwater invertebrate taxa due to the lack of upstream recruitment sources that did not experience marine inundation. Plecoptera, for example, are common in the panhandle but extremely rare in the peninsula, probably due to a combination of poor recruitment, warmer temperatures, and lower water velocities. Peninsular vegetation communities on the ridge consist of longleaf pine/turkey oak forests (*Pinus palustris/Quercus laevis*); on flat areas are slash pine (*Pinus eliottii*) or loblolly pine (*Pinus teada*) with a palmetto/gallberry understory (*Serenoa repens/Ilex glabra*); and in depressional areas are marsh/wet prairies (maidencane, pickerel weed) and hardwood wetlands of sweetbay (*Magnolia virginiana*), cypress (*Taxodium* spp.), and ash (*Fraxinus* spp.; SWCS, 1989). The dominant land use is pasture, cropland (e.g., watermelons, nursery products, and tomatoes), and urban areas (Fernald and Purdum, 1992). Dense population centers are located at Tampa and Orlando.



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The northeast region includes portions of the Okeefenokee Swamp, parts of the upper Suwannee drainage, the Black Creek drainage, and the Sea Island flatwoods. From the perspective of stream invertebrates, this region tends to be intermediate between the panhandle and peninsula regions. With the exception of the Black Creek Basin, with headwaters approximately 200 feet above sea level, other streams in this area tend to be low-relief, wetland systems (Snell and Anderson, 1970). Plant communities consist of longleaf pine/turkey oak (*Pinus palustris/Quercus laevi)* on the sandy uplands; hardwood wetlands of cypress (*Taxodium* spp.), tupelo (*Nyssa* spp.), and loblolly bay (*Gordonia lasianthus*); pine flatwoods; and marsh (FNAI, 1990). Jacksonville is the region's only major population center.

Barbour et al. (1996) used macroinvertebrate stream samples collected from sites with minimal human influence to evaluate the influence of geographic locations on species assemblages. The authors found that the panhandle, peninsula, and northeast regions, which are primarily defined according to drainage patterns, were better predictors of species assemblages than were subecoregions described by Griffith et al. (1994). Regional differences translate into expectations of higher taxonomic diversity in the panhandle relative to the peninsula, with the northeast region representing a transitional area.

## *Site selection and datasets*

The Florida Department of Environmental Protection (FDEP) has collected thousands of macroinvertebrate samples from stream sites throughout the state from 1991–2001. Many sites have been visited repeatedly. Sites and visits were selected from this large database using different criteria for different testing situations **(Table 1).** For example, when testing for metric correlation with disturbance, a range of site conditions was needed; to evaluate variability, sites with many repeat visits were needed; to evaluate laboratory subsampling, large samples were needed. Some datasets contained data from the same sites, and other sites were selected to provide an independent test. For some testing situations, data from site visits were averaged by sites—for example, when one variable in the analysis had only one value for each site, such as the HDG.

The relationship between human disturbance and biological condition was evaluated in several ways. To develop the HDG, FDEP biologists selected sites from their regions that represented the broadest possible range of human influence. First, to ensure that the relationships observed between human land use and biological metrics were consistent and not specific to a particular set of sites, 2 independent sets of sites were tested. These data were then combined to obtain 223 sites to test for metric correlation with the HDG. An additional, independent set of 23 sites was used to test the correlation between the SCI and HDG.

Additional datasets were compiled to estimate the variability of the biological metrics and indexes associated with repeat visits to a site, estimate the variability associated with laboratory subsampling, and evaluate the influence of field sorting versus laboratory sorting. To evaluate SCI variability, data from 62 sites with 2 to 8 visits were selected. About half the sites (32) had repeat visits on the same day. Most of the other repeat visits were during different years, and a few were within the same year. Thus, these data could not be used to estimate the influence of seasons on variability. Instead, additional data were compiled to test for seasonal (winter versus summer) differences in the SCI. To test the influence of subsampling during laboratory processing for the SCI protocol, 3 subsamples were selected from 59 samples collected from 54 sites (5 sites also had 2 duplicate samples each).

To test metrics and evaluate their variability for the BioRecon protocol, 2 additional datasets were used. The first dataset included 116 sites with macroinvertebrate samples collected according to both the BioRecon and SCI sampling protocols. We tested BioRecon metrics for correlation with the SCI and HDG. Most sites had at least 2 visits, and several had 3 to 6 visits. Of the 116 sites, 53 had values calculated for the HDG because they were used initially to develop the HDG. To evaluate the variability of the BioRecon metrics and index, 128 sites were selected, with 2 to 7 visits per site.



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The dataset used to test the SCI and its component metrics against the HDG was large; therefore, simple scatter plots of data against the HDG would be difficult to interpret with the many data points and overstrikes. Consequently, we used box plots to display the range of values associated with different values of the HDG. In all figures, the box defined the 25$^{th}$ and 75$^{th}$ percentiles, the whiskers were the nonoutlier range, and the outliers were calculated as values greater (or less) than 1.5 times the length of the distance from the 25$^{th}$ to the 75$^{th}$ percentile value. During 1991–2001, laboratory protocols mandated a target number of 100 individuals; however, this target was often exceeded due to the laboratory protocols of the time. Several graphs include data from samples with 75 to 175 individuals in order to more closely match the target sample size. A more restrictive range (e.g., 75–125 individuals) would have resulted in too high a loss of sites for testing. Additional analysis (not shown) indicated that the ranges of metric values were similar for an upper limit of 125 and 175 individuals. In recent years (2004–2006), FDEP has modified laboratory protocols to more often match the target number of individuals **(see Appendix G)**. For the BioRecon testing, the number of individuals identified was not recorded; therefore, all site visits were used within a particular analysis, unless specifically stated otherwise.

**Table 1. Description of various datasets, number of sites sampled, total number of visits to all sites (varied by site), and total number of subsamples taken in the laboratory for all visits**

*Some sites were included in more than 1 dataset, except for the 23 independent sites used to verify the correlation between the SCI and HDG.*

| Purpose | Sites | Visits | Lab Subsamples |
|---|---|---|---|
| Test HDG consistent for 2 rounds of data | | | |
| *Round 1* | 154 | 469 | 0 |
| *Round 2* | 69 | 160 | 0 |
| Test metrics vs. HDG | 223 | 629 | 0 |
| Score metrics (same data as above, but only samples with 75 to 175 individuals included) | 176 | 420 | 0 |
| Test sensitive and tolerant taxa versus HDG | 226 | 632 | 0 |
| Verify SCI with independent data | 23 | 23 | 0 |
| Determine SCI variability | 62 | 220 | 0 |
| Determine seasonal variation of SCI | 78 | 578 | 0 |
| Evaluate laboratory subsampling variability for SCI | 54 | 59 | 177 (3 each) |
| Calibrate BioRecon metrics with SCI | 116 | 165 | 0 |
| Test BioRecon metrics versus HDG | 53 | | 0 |
| Evaluate BioRecon variability | 128 | 293 | 0 |

## *Quantifying human disturbance*

Karr and colleagues describe five factors to summarize the ways in which humans alter and degrade rivers and streams (Karr et al., 1986; Karr et al., 2000): flow regime, physical habitat structure, water quality, energy source, and biological interactions. First, the natural flow regime of a stream may be altered by dams, water removal, or water return. In extreme cases, changes in water volume or flow timing can result in flooding or dry channels. Second, stream macroinvertebrates depend on a variety of physical habitat types for food, shelter, and reproduction. A greater diversity of substrate size, types of vegetation, and bank architecture translates into a greater variety of organisms. Third, water quality may



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be evaluated in terms of turbidity, conductivity, nutrient concentrations, or the presence of other chemicals or metals. Fourth, energy source describes the seasonal availability, type of organic material, and size and shape of material available as food. Fifth, the introduction of exotic species or disease and the harvest of fish and shellfish for sport, commercial, and subsistence uses can alter biological interactions such as competition or predation within the natural assemblage.

Data were available to measure four of the five factors. FDEP biologists developed a hydrologic scoring system based on their knowledge of water removal, patterns of drought, and hydrographs for the sites **(Table 2).** To measure habitat condition, FDEP biologists routinely calculate a habitat condition index whenever stream macroinvertebrate samples are collected (FDEP, 2004). The index evaluates substrate condition and availability, water velocity, habitat smothering (e.g., by sand and silt), channelization, bank stability, and the width and condition of riparian vegetation. During the period of data collection, the habitat index was modified to include additional measures that raised the total number of possible points. To make habitat condition comparable across years, the total habitat score was converted to a percentage by dividing the score by the total possible points.

**Table 2. Hydrologic condition of stream site, scoring range for hydrologic index, and description of human influences**

*The high or low values within each condition class were assigned at the discretion of the biologist based on the extent of disturbance. These changes were associated with human disturbances, not natural events such as hurricanes or extreme droughts.*

| Condition | Score | Description |
|---|---|---|
| Excellent | 1–2 | Flow regime as it naturally occurs (slow and fairly continual release of water after rains), few impervious surfaces; high connectivity with ground water and surface features delivering water (e.g., sandhills, wetlands; no ditches or berms) |
| Good | 3–4 | Flow regime minimally changed; some water withdrawals; some wetland drainage, some impervious surfaces, some ditching |
| Moderate | 5–6 | Flow regime moderately altered; hydrograph moderately flashy (scouring after rain events with subsequent reductions in flow), ground water pumping evident; much wetland drainage, topographic alterations reduce natural water input; more impervious surfaces, dams/control structures change normal water delivery schedule |
| Poor | 7–8 | Flow regime highly altered; hydrograph very flashy (scouring after rain events with subsequent reductions in flow, leading to stagnant or dry conditions related to large amounts of impervious surfaces and/or ditching); water withdrawals and impoundments or control structures severely alter flows; large areas of impervious surfaces |
| Very poor | 9–10 | Flow regime entirely human controlled; hydrograph very flashy (scouring after rain events with subsequent reductions in flow, leading to stagnant or dry conditions related to impervious surfaces and ditching); intensity of water withdrawals and impoundments fundamentally alter the nature of the ecosystem |

FDEP biologists also routinely collect measurements of turbidity, temperature, dissolved oxygen, conductivity, and nutrient concentrations. Total phosphate (TP), ammonia ($NH_3$), total Kjeldahl nitrogen (TKN), and nitrites/nitrates ($NO_x$) were measured to summarize nutrients. We selected $NH_3$ to summarize water quality because it was the most consistently associated with the other water quality measures and had the most complete record of data. TP had similar high correlations and complete data, but may be



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more closely associated with fertilizer and farming practices, while $NH_3$ may be a more general indicator of both urbanization and agriculture.

A measure of the type and quantity of energy available to organisms living within the stream was not available. However, Brown and colleagues have developed an index to estimate the intensity of human land use based on nonrenewable energy flow (Brown et al., 1998; Brown and Vivas, 2005). The Landscape Development Intensity (LDI) Index was calculated as the percentage area within the catchment of particular types of land use multiplied by the coefficient of energy use associated with that land use, summed over all land use types in the catchment **(Table 3).**

$$LDI = \sum \left( LDI_i * \%LU_i \right).$$

Where:

LDIi = the nonrenewable energy land use for land use i, and
%LUi = the percentage of land area in the catchment with land use i.

Brown and colleagues derived the coefficients for each land use type from actual billing records and published literature, translated reported energy use into standardized units, and then averaged the values by land use type and standardized to a per-unit area. The calculations used only nonrenewable energies, which included electricity, fuels, fertilizers, pesticides, and water (both public water supply and irrigation).

Land use was derived from aerial photos manipulated as layers in a geographic information system (GIS) computer program. The LDI was calculated in 2 ways. First, a buffer area of 100 meters on each side of the stream and 10 kilometers upstream of the sampling point was used (LDI_BF). Because the definition of the buffer region was somewhat arbitrary, the LDI was also calculated for the entire upstream catchment (LDI_WS) in order to determine which spatial scale was a better predictor of site condition. We selected LDI_BF to include in the HDG because it was slightly more highly correlated with $NH_3$, the hydrologic index, and the habitat index **(Table 4).**

To define the HDG, we converted the 4 measures of human disturbance to unitless scores and summed the scores to create HDG values for each stream site **(Appendix A)**. Three of the measures had values of 0, 1, or 2, indicating low, moderate, or high levels of human influence. One measure, hydrologic condition, had an additional value of 4 available to indicate extreme levels of disturbance **(Table 5).** Thus, values for the HDG ranged from 0 (indicating minimal human disturbance) to 9 (indicating extreme disturbance). The scores for the HDG were derived from a graphical analysis of EPT taxa richness plotted against each measure of disturbance. We identified values for each disturbance measure for which the number of EPT taxa was consistently lower. For $NH_3$, 9 sites had no information. Most of these sites had values for other measures indicating minimal human disturbance. We assumed for these sites that $NH_3$ was less than 0.1 milligram per liter (mg/L).



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**Table 3. Description of land use and the coefficient value used to calculate the LDI**
*Higher values indicate greater intensity of human land use (Brown and Vivas, 2005).*

| Land Use | LDI Value |
|---|---|
| Natural Open Water | 1.00 |
| Natural System (no human activity) | 1.00 |
| Pine Plantation | 1.58 |
| Woodland Pasture | 2.02 |
| Pasture | 2.77 |
| Recreational/Open Space (low-intensity) | 2.77 |
| Low-Intensity Pasture (with livestock) | 3.41 |
| Citrus | 3.68 |
| High-Intensity Pasture (with livestock) | 3.74 |
| Row crops | 4.54 |
| Single-Family Residential (low-density) | 6.79 |
| Recreational/Open Space (high-intensity) | 6.92 |
| High-Intensity Agriculture | 7.00 |
| Single-Family Residential (medium-density) | 7.47 |
| Single-Family Residential (high-density) | 7.55 |
| Low-Intensity Highway | 7.81 |
| Low-Intensity Commercial | 8.00 |
| Institutional | 8.07 |
| High-Intensity Highway | 8.28 |
| Industrial | 8.32 |
| Low-Intensity Multifamily Residential | 8.66 |
| High-Intensity Commercial | 9.18 |
| High-Intensity Multi-family Residential | 9.19 |
| Low-Intensity Central Business District | 9.42 |
| High-Intensity Central Business District | 10.00 |

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**Table 4. Correlation table of $NH_3$ (mg/L), hydrologic index, habitat index, LDI for the buffer, LDI for the upstream watershed, natural log of watershed size, HDG, current SCI, and old SCI for 223 stream sites (except $NH_3$, for which n = 214)**

*Repeat visits to individual sites were averaged for each site. All values shown were significant (Spearman's r, $p < 0.01$).*

| | $NH_3$ | Hydro | Habitat | LDI_BF | Ln (Size) | HDG | SCI |
|---|---|---|---|---|---|---|---|
| $NH_3$ | - | 0.43 | –0.45 | 0.39 | –0.20 | 0.50 | –0.56 |
| Hydro | 0.43 | - | –0.66 | 0.61 | –0.36 | 0.84 | –0.71 |
| Habitat | –0.45 | –0.66 | - | –0.64 | 0.41 | –0.78 | 0.66 |
| LDI_BF | 0.39 | 0.61 | –0.64 | - | –0.37 | 0.79 | –0.60 |
| LDI_WS | 0.34 | 0.56 | –0.55 | 0.74 | –0.28 | 0.70 | –0.59 |
| Ln (Size) | –0.20 | –0.36 | 0.41 | –0.37 | - | –0.41 | 0.36 |
| HDG | 0.50 | 0.84 | –0.78 | 0.79 | –0.41 | - | –0.76 |
| SCI | –0.56 | –0.71 | 0.66 | –0.60 | 0.36 | –0.76 | - |
| Old SCI | –0.43 | –0.59 | 0.56 | –0.54 | 0.29 | –0.69 | 0.86 |

**Table 5. Scoring rules for measures used to calculate the HDG**

*The HDG is the sum of the scores for each site.*

| Measure | 0 | 1 | 2 | 3 |
|---|---|---|---|---|
| $NH_3$ (mg/L) | <0.1 | 0.1–2 | >2 | |
| Habitat index (% of total possible points) | >65 | 50–65 | <50 | |
| Hydrologic index | <6 | 6–7 | 8–9 | 10 |
| LDI | <2 | 2-3.5 | >3.5 | |

## *Stream macroinvertebrate sampling*

FDEP uses two protocols to collect invertebrate samples from streams. The protocols differ in the number of dip net sweeps collected, the location of sample sorting (field versus laboratory), and the final index used for assessment. The BioRecon sampling protocol was designed to be a quick field assessment that could yield a same-day measure of stream site condition. The SCI sampling protocol was meant to be more precise. Both protocols use a D-frame dip net with a 0.25-meter opening and a 600-micrometer mesh net. Both protocols distribute the sweeps among the best available substrates on an approximately equal basis. Florida streams typically have a sandy substrate that supports very few invertebrates. Therefore, the habitat sampled for macroinvertebrates includes logs, roots, and undercut banks; partially decayed leaf packs; aquatic vegetation; and rocks or large cobble. During SCI sampling, if 4 productive substrates are present (snags, roots, vegetation, and leaf packs), each substrate would be sampled 4 times, with sand being sampled 4 times, for a total of 20 sweeps.

In the laboratory, the SCI sample is divided by spreading it onto gridded trays. Squares are randomly selected, and all the material within a square is sorted. Macroinvertebrates are identified to the lowest practical taxonomic level. For the 2004 to 2006 time period, squares were selected until the target sample size of 100 individuals was reached. To avoid bias, the final square selected is always finished,



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even if it contains more than 100 individuals. The current method targets two separate aliquots of 150 individuals. The number of taxa and the relative abundance of each taxon are derived from these data.

BioRecon data are collected using four dip net sweeps from a stream site. Samples are sorted for live macroinvertebrates in the field. The sample is spread in a pan, and the biologist searches through all the material for every unique taxon present. Each taxon is preliminarily identified in the field, and representative specimens of each taxon are preserved and returned to the laboratory for final identification under a dissecting microscope. From this field-sort protocol, the number of taxa present at a site can be measured, but their relative abundance (% composition) cannot.

## *Metric development and testing*

Several authors have described relevant candidate metrics for stream macroinvertebrate assemblages (Barbour et al., 1996 and 1999; Kerans and Karr, 1994; and Klemm et al., 2002). For this study, we evaluated 36 candidate metrics related to taxonomic richness, feeding group, voltinism, habit, community structure, and tolerance or sensitivity for their association with the HDG **(Table 6).** Within each category, we selected metrics with the highest correlation with the HDG (Spearman's *r*). We used one-sided tests to calculate *p*-values because if a metric indicated better biological condition in response to increased human disturbance, that relationship would not be *biologically* significant even if it were statistically significant. All metrics were also evaluated graphically to ensure that they were reliable indicators of disturbance. We tolerated variability in metric values for minimally disturbed sites (low HDG) because not all sources of disturbance were known. For example, water chemistry data were unavailable for metals, pesticides, or other toxics. In contrast, we considered an inconsistent response at more highly disturbed sites to be unacceptable.

### Taxonomic richness

Richness was calculated as the number of unique taxa found within a particular group, such as the Ephemeroptera, Plecoptera, or Trichoptera, or their combination (EPT).

### Feeding group

Trophic designations followed Merritt and Cummins (1996); FDEP biologists and others modified some designations to reflect natural histories in Florida (Merritt et al., 1996). All feeding group metrics were calculated as the number of individuals of a particular group, divided by the total number of individuals in the sample times 100 (percentage).

### Voltinism

Most stream insects spend the majority of their lives as larvae underwater and emerge as adults to mate. The length of time between generations, which is called voltinism, may be less than a year, approximately one year, or greater than one year. We used published sources to identify taxa that require more than one year to complete their life cycles (**Appendix B**; Brigham et al., 1982; Thompson, 1984; Thorp and Covich, 1991; Pescador et al., 1995; Corbet, 1999; Pescador et al., 2000; Smith, 2001; Rasmussen and Pescador, 2002). These taxa require consistent flows and other favorable conditions throughout the year to complete their life cycles. Data on generation length were not available for all Florida taxa; therefore, the current list may not include some long-lived taxa.



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**Table 6. Candidate metric, correlation with the HDG, and whether the metric was included in the final SCI, BioRecon, or original SCI**

*Correlation was tested for 223 sites, with repeat visits to each site averaged before statistical testing. Hyperabundance was tested without averaging, n = 577. All correlations shown were significant at p < 0.01 (Spearman's r, one-sided test).*

| Metric | HDG | SCI | BioRecon | Old SCI |
|---|---|---|---|---|
| **Taxonomic richness** | | | | |
| EPT | –0.73 | | | yes |
| Trichoptera | –0.66 | yes | yes | |
| Ephemeroptera | –0.66 | yes | yes | |
| Total taxa | –0.52 | yes | yes | yes |
| Diptera | –0.44 | | | |
| Chironomidae | –0.40 | | | yes |
| Plecoptera | –0.37 | | | |
| Oligochaeta | 0.32 | | | |
| Noninsect | - | | | |
| **Feeding group** | | | | |
| % Filterer | –0.46 | yes | | yes |
| % Scavenger | –0.38 | | | |
| % Browser/grazer | –0.30 | | | |
| % Collector/gatherer | 0.29 | | | |
| % Predator | –0.21 | | | |
| % Plant piercer | –0.18 | | | |
| % Parasite | - | | | |
| % Scraper | - | | | |
| % Shredder | - | | | |
| **Voltinism** | | | | |
| Long-lived taxa | –0.41 | yes | yes | |
| % Long-lived | –0.35 | | | |
| **Habit** | | | | |
| Clinger taxa | –0.71 | yes | yes | |
| % Clinger | –0.61 | | | |
| **Community structure** | | | | |
| % Dominance | 0.47 | yes | | yes |
| Hyperabundance | - | | | |
| % Ephemeroptera | –0.58 | | | |
| % Trichoptera | –0.55 | | | |
| % Tanytarsini (Chironomidae) | –0.45 | yes | | |
| % Plecoptera | –0.37 | | | |
| % Oligochaeta | 0.32 | | | |
| % Non-insect | 0.32 | | | |
| % Chironomidae | - | | | |
| % Diptera | - | | | yes |
| **Sensitivity/tolerance** | | | | |
| Sensitive taxa | –0.75 | yes | yes | |
| Florida index (sensitive) | –0.71 | | | yes |
| % Very tolerant | 0.70 | yes | | |
| Very tolerant taxa | 0.61 | | | |

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The list included all taxa in the family Cordulegastridae and selected taxa in the families Aeshnidae, Gomphidae, and Libellulidae (Odonata); the family Leuctridae and selected genera in the families Perlidae and Pteronarcidae (Plecoptera); the family Corydalidae (Megaloptera); and the genera *Ceraclea, Pycnopsyche, Molanna,* and *Rhyacophila* (Trichoptera). Several Coleoptera taxa (beetles) also require more than a year to complete their life cycles, but were not included because the FDEP database does not currently distinguish between larvae (which cannot travel to find water) and adults (which can). Noninsects included in the long-lived list were all taxa in the family Decapoda, the genera *Fossaria* and *Pomacea* (Gastropoda), and the families Unionidae and Corbiculidae (Pelecypoda).

## Habit

Other studies have noted a strong correlation between the taxonomic richness of clingers and stream condition (Fore et al., 2001; Karr and Morishita Rossano, 2001; Mebane, 2002). Clingers have morphological and behavioral adaptations that allow them to cling to substrate (Merritt and Cummins, 1996). Channel dredging and the removal of riparian vegetation eliminate the habitat preferred by clingers.

## Community structure

Percentage dominance was calculated as the number of individuals in the most abundant taxon, divided by the total number of individuals in the sample. ”Hyperabundance” represented a measure of the density of stream macroinvertebrates present at a site. Sites with high organic enrichment (e.g., sewage effluent) may have a high density of invertebrates due to the increased source of food for many species. The actual number of individuals present in the total sample was not recorded; however, the number of grids in the sample tray that were searched to best approximate the target number of 100 individuals was recorded. We used the number of grid cells searched as a measure of the density of invertebrates present, or hyperabundance. Other measures of community structure were based on the number of individuals within specific taxonomic groups divided by the total number of individuals.

## Sensitivity and tolerance

Beck (1954) developed a list of sensitive taxa for Florida that was used to calculate a biotic index, which was later modified to be the Florida Index. To calculate the Florida Index (which is more accurately termed a metric), very sensitive taxa are given a score of 2 and sensitive taxa a score of 1. The scores are summed to calculate this metric.

We used the HDG to evaluate the sensitivity and tolerance of 1,195 taxa names. The taxa names included taxa that were not unique because the database included synonyms for the same taxa, as well as specimens identified to genus and species for the same genus. Because many sites had multiple visits and because less-disturbed (reference) sites tended to have a greater number of visits, we summarized data for each taxon *by site* to avoid bias associated with greater sampling effort at less-disturbed sites. We counted a taxon as present at a site if it was found for >= 50% of the site visits. We divided the 226 sites into 2 groups and, for simplicity’s sake, refer to these groups as “good” and “poor” for statistical testing. Good sites were defined as those with moderate levels of disturbance for no more than 2 measures (e.g., the LDI or $NH_3$) or high disturbance for no more than 1 measure (e.g., habitat condition). This translated into HDG <= 2 and included 141 sites. The remaining 85 sites were classified as poor. Thus, the 2 groups might be more accurately labeled better and worse, rather than good and poor. The relatively high number of sites selected to represent good condition reflects the large number of reference sites in the dataset.

We used contingency table analysis to determine what percentage of taxon occurrences in the good-versus-poor range of HDG values represented a statistically significant difference (chi-square test, Yates continuity correction). As for any test, the number of sampling points increases the power of the



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test, such that less extreme difference will be statistically significant. For example, if a taxon occurred at 10 sites, all of the occurrences (100%) would have to be in the good range of the HDG to be statistically significant ($p < 0.05$). In contrast, if a taxon occurred at 38 sites, it would only need to occur at 30 of the good sites (79%) and would still be statistically significant.

For this reason, we chose not to use a strictly statistical criterion for selecting sensitive taxa. Instead, for more common taxa we only selected those with 87% or more of their occurrences in good sites. Using this criterion of 87%, if a taxon occurred at 30 sites, 27 or more of the sites would have to be in the good range of the HDG. The *p*-value associated with this would be $p < 0.002$. A strictly statistical criterion would have selected taxa that *prefer* good conditions, rather than taxa that *require* good conditions. Thus, we used a statistical rule to define the minimum number of occurrences needed for statistical significance but made the standards for selection more strict ($p << 0.05$) for taxa that were more common.

Defining a statistical rule for the selection of tolerant taxa was not possible, because tolerant taxa can also "tolerate" good conditions. Instead, very tolerant taxa were defined as those found in at least 10 sites and for which >= 50% of their occurrences were in the poor range of the HDG. In some cases, multiple species within a genus failed to meet the criteria for inclusion as sensitive (or very tolerant) because they were not present at enough sites. If several species within a genus (or family) were consistently found at good (or poor) sites, we combined the species into the parent genus (or family) and evaluated the genus (or family).

For the BioRecon data, we only tested metrics used in the SCI in order to make the indexes as similar as possible. Relative abundance metrics could not be calculated for these data; therefore, only taxa richness metrics were evaluated. BioRecon metrics were tested for correlation with the SCI and HDG.

## *Index development and testing*

We defined 2 indexes by selecting metrics that showed the most consistent response to the HDG. One index was developed for the SCI protocol (20 dip net samples and laboratory sorting of macroinvertebrates) and another for the BioRecon protocol (4 dip net samples and field sorting).

For the SCI, we transformed metrics into unitless scores by determining the 95$^{th}$ percentile values for each metric and then dividing each metric value by its range and multiplying by 10. Metrics that declined with disturbance were scored from 0 to 10, and metrics that increased with disturbance were scored from 10 to 0, so that the best biological condition was consistently scored as a 10. For skewed metrics, the natural log was calculated before dividing by the metric range. This process was done separately for the northeast, peninsula, and panhandle regions. We tested for differences in metric expectation associated with different regions by comparing the regression lines for each metric against the HDG and adjusted metric scoring as necessary to ensure similar responses for all metrics in the 3 regions.

For the BioRecon Index, we scored metrics to match the SCI metric scores as closely as possible. Using histograms to evaluate the overlap of the BioRecon and SCI metrics measured at the same sites, we adjusted metric scoring for the BioRecon metrics as needed. In order to distinguish between the BioRecon and SCI, BioRecon metrics were scored from 0 to 1 (rather than 0 to 10). In this way, the index values provide a quick clue as to which index is being reported.

After correlation with disturbance was confirmed for both indexes, we evaluated different sources of variability, either due to natural sources (e.g., watershed size or season) or the sampling method (e.g., laboratory subsampling). We used correlation to test for dependence of the SCI on watershed size. To test the influence of season on the SCI, 78 sites with summer and winter samples were compared using a paired *t*-test. Summer was defined as May through October and winter as November through April. Within each season, data for repeat visits to each site were averaged.



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To evaluate other sources of variance, such as site differences, year differences, and repeat visits, we used an ANOVA model to estimate variance components. For the SCI and BioRecon, we estimated variance associated with site, year, site x year interaction, and error. Error was defined as variance associated with repeat visits to the same site within a year. For the SCI data, most of the repeat visits within a year occurred on the same day, rather than at different times during the year. For the BioRecon, most of the repeat visits were on different days within the same or a different year; very few were same day.

Error estimates from ANOVA (mean squared error) were used to calculate the 90% confidence interval for both indexes and the number of categories of biological condition that each index can reliably detect (Zar, 1984). Confidence limits were calculated as:

$$\text{SCI} \pm \left( \sqrt{\frac{s^2}{n}} * 1.645 \right),$$

Where:

$s^2$ = error variance estimated from ANOVA (mean squared error), and
n = number of samples taken from the site.

To calculate the number of categories each index could detect, we divided its range (0 to 100 for the SCI and 0 to 10 for the BioRecon) by the confidence interval. Other statistical approaches could be used to calculate the number of categories of biological condition that the indexes can reliably detect. For example, a 90% confidence interval could also be constructed based on the *difference* in SCI values for 2 sites. This approach would yield a smaller confidence interval: instead of $n$ = 1 in the equation above, $n$ would equal 2 because 2 SCI values would be involved in calculating the difference. Currently there are no standards for which statistical model to use; therefore, we used confidence intervals around the SCI for a single site because they are conceptually simple and somewhat conservative from a statistical point of view. In other words, this approach is less likely to be controversial (Johnson, 1999; Hoenig and Heisey, 2001). The number of categories of biological condition that an index could reliably detect were only used to summarize the precision of the indexes. The assessment categories used to define biocriteria for water quality standards were derived from an entirely different process (see Chapter 4: *Application of Biomonitoring Tools* below).

We also used an ANOVA model to estimate variability associated with laboratory subsampling. For this model, data from 59 sites with 3 subsamples each were used to estimate site variance and error variance. For this model, error was defined as the differences associated with subsamples from the same site visit.

## *Statistical model assumptions*

The method described here for calculating confidence intervals assumes that the multimetric indexes are normally distributed. Other studies have evaluated the statistical properties of multimetric indexes and found that multimetric indexes for fish and invertebrates are unimodal and symmetric (Fore et al., 1994; Doberstein et al., 2000; Blocksom, 2003); thus, an underlying normal distribution is an appropriate assumption for multimetric indexes. A separate and additional consideration is whether to use *z*-values from the normal distribution to calculate 90% confidence limits or values from Student's *t* distribution. For small sample sizes, the *t*-distribution should be used for calculating confidence limits



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because variance may be underestimated; for large sample sizes (df > 30), however, the two distributions converge. We used data from 61 sites to estimate variance; therefore, *z*-values were appropriate.

The 2 datasets used to estimate variance for the SCI and BioRecon Index were unbalanced—that is, the number of visits to each site varied for each site. In contrast, the dataset used to evaluate laboratory subsampling was balanced with 3 subsamples for each site visit. ANOVA assumes a balanced design but is fairly robust to violations of this assumption (Milliken and Johnson, 1992). The primary consequence of an unbalanced design is related to the significance testing of model effects against the error term, which was not the purpose of this analysis. Rather, the goal for these ANOVAs was to estimate an error to use in the confidence interval calculations and to evaluate the relative contributions of year and error to the metrics and indexes. For estimation of the error term, the large sample sizes mitigate any potential inaccuracy associated with unbalanced cells. Sample sizes greater than about 30 are considered large, and this analysis had 61 sites for the SCI and 128 for the BioRecon.

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# CHAPTER 2: RESULTS

## Human disturbance gradient

The human disturbance gradient (HDG) was a consistent predictor of biological condition for two independent rounds of testing. When metrics were regressed against HDG for the two rounds of data, the slopes and intercepts of the regression lines were nearly identical, indicating that measures included in the HDG yielded a reliable measure of human disturbance **(Figure 1).**

Correlations among the four measures of human disturbance used to define the HDG were high, indicating good agreement among the different measures **(see Table 4).** All the individual measures, however, were more highly correlated with the HDG, suggesting that the HDG was a better overall measure of general human disturbance. The SCI showed a similar pattern and was more highly correlated with the HDG than the individual measures of human disturbance.

## Metric selection

On average, 30 insect taxa were found in each sample for the 629 site visits used to test metrics. Diptera dominated the samples, with 23 taxa counted on average; of these taxa, about half were in the family Chironomidae. Of the remaining groups, 3 oligochaete, 2 Trichoptera, 1 Ephemeroptera, and 1 Plecoptera taxa were found, on average.

For many metrics, the change in values from least to most disturbed sites was dramatic. We compared the 20 best sites (HDG = 0 and the lowest values for LDI_WS) with the 18 worst sites (HDG > 6) and found that total taxa richness went from 33 to 19, on average. The number of Ephemeroptera taxa declined from 2 to 0, Trichoptera taxa from 4 to 0, clinger taxa from 8 to 0, and sensitive taxa from 9 to 0. The relative abundance of filterers declined from 22% to 3%, while the relative abundance of tolerant individuals increased from 5% to 69%.

In general, we selected at least one metric from each of the categories below according to which metric was most highly correlated with the HDG. If two metrics were calculated from the same set of taxa (redundant metrics), we only included one metric.

### *Taxonomic richness*

EPT taxa richness was most highly correlated with the HDG, followed by Trichoptera and Ephemeroptera taxa richness **(see Table 6).** Both taxonomic groups disappeared from samples with high levels of disturbance **(Figure 2).** Correlation between the HDG and Plecoptera taxa richness was somewhat lower, primarily because very few plecopterans were found in samples from the peninsula region. We selected Ephemeroptera and Trichoptera taxa richness as separate metrics because they have the potential to respond to different types of disturbance. We did not select Plecoptera taxa richness as a metric because it could only be applied in two of the three regions. Total taxa richness had the next highest correlation and was selected as an indicator of the variety of taxa that a stream site could support.



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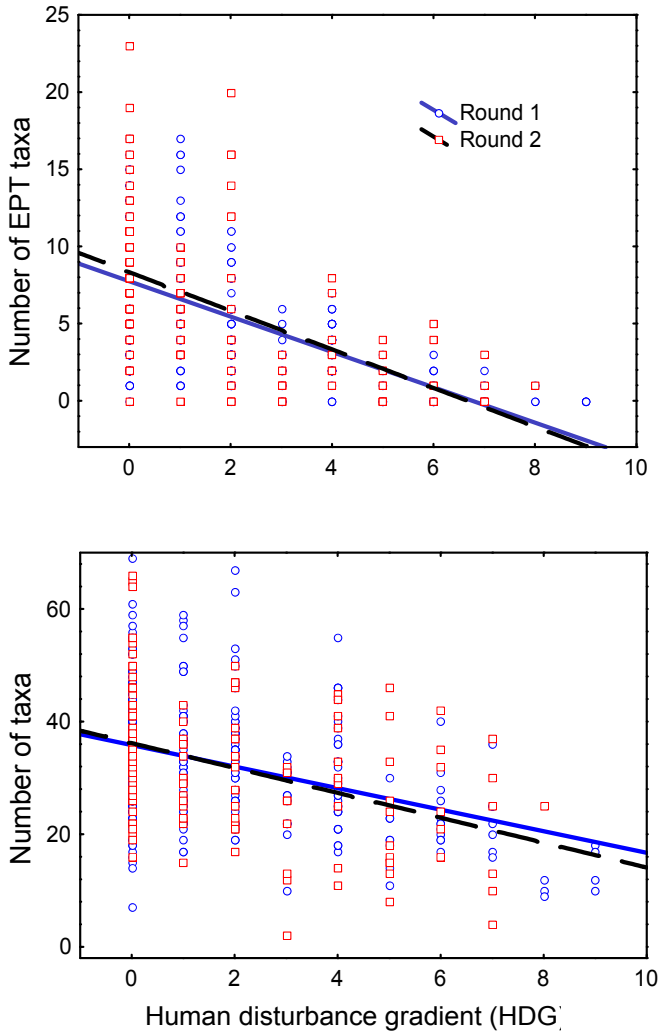


Figure 1. Number of EPT taxa and total number of taxa declined as human disturbance increased. Nearly identical regression lines for two independent sets of sites (rounds 1 and 2) indicated a consistent relationship between HDG and biological condition.



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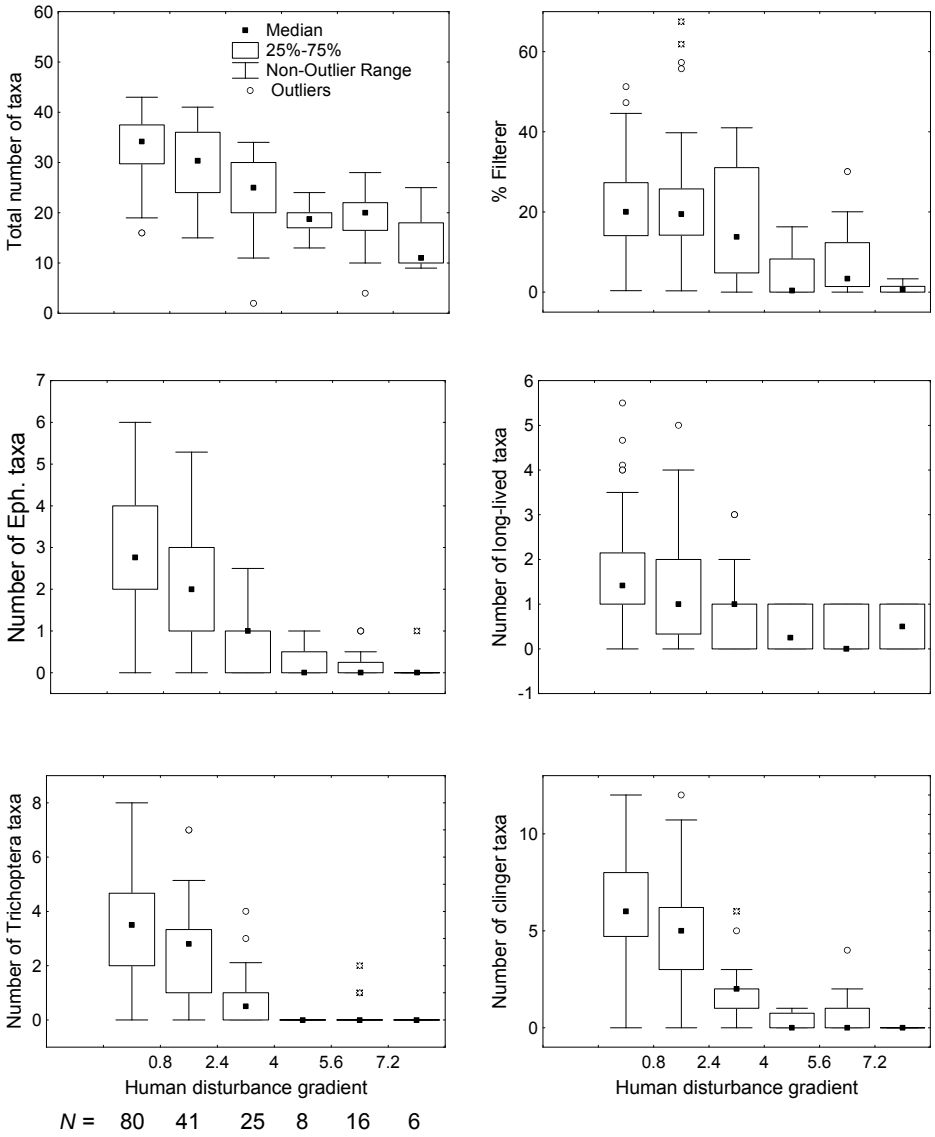


Figure 2. Six of the ten metrics included in the SCI plotted against the human disturbance gradient. All metrics declined with an increase in human disturbance. Metric values were averaged for each of the 176 sites. Samples with greater than 175 or less than 75 individuals were excluded before averaging. Number of sites within each box are shown (*N*). Plotted values are less than or equal to values on x-axis.



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## *Feeding group*

The relative abundance of filterers (percentage filterer individuals) had the highest correlation with the HDG and the most consistent relationship with the HDG when graphed. Other feeding groups failed to show the consistent decline with disturbance that percentage filterer did. We also tested this metric without *Cheumatopsyche* (a somewhat tolerant genus of Trichoptera), but the changes in correlation were very small, and so all taxa were retained (Spearman's $r$ = –0.46 with *Cheumatopsyche* and –0.47 without).

## *Voltinism*

Correct information about generation times was not easily obtained for all Florida taxa; therefore, we only tested long-lived taxa richness and percentage long-lived individuals. Long-lived taxa included semivoltine insects and noninsects that require more than one year to complete their life cycles. Long-lived taxa richness was more highly correlated with the HDG than was relative abundance of long-lived individuals; consequently, long-lived taxa richness was included in the SCI.

## *Habit*

Clinger metrics measured either as taxa richness or as percentage of individuals were among the most highly correlated metrics with the HDG. We selected clinger taxa richness for inclusion in the SCI.

## *Community structure*

Percentage dominance increased with the HDG and was included in the SCI **(Figure 3)**; hyperabundance failed to correlate with the HDG. Although percentage Ephemeroptera and Trichoptera individuals (relative abundance) were both strongly correlated with the HDG, they were calculated from the same information used to calculate the taxa richness of those two groups. Because the taxa richness metrics were more highly correlated with the HDG, the relative abundance of Ephemeroptera and Trichoptera was not included in the index. Correlation for the relative abundance of Tanytarsini midges was not quite as high as the other composition metrics (–0.45), but was included in the SCI as the best available measure of the chironomid assemblage.

## *Sensitivity and tolerance*

The number of taxa selected as sensitive equaled ~12% of the taxa tested, and the number of very tolerant taxa was ~10% of the taxa tested. Many sensitive taxa belonged to the Ephemeroptera or Trichoptera; several chironomids were also included **(Appendix C).** All the Plecoptera were included, though most of the genera and species in this group were too rare to test. Considered as a group, out of 191 occurrences of Plecoptera taxa, only one was found in the poor section of the HDG. All Plecoptera taxa showed a strong tendency to be found in the best of the good (minimally disturbed) sites. Many of the sensitive taxa selected by this study were previously noted by Beck (1954) and used in the Florida Index, but several taxa were new to the list. Many of the taxa included on Beck's list were too uncommon to test with this dataset.



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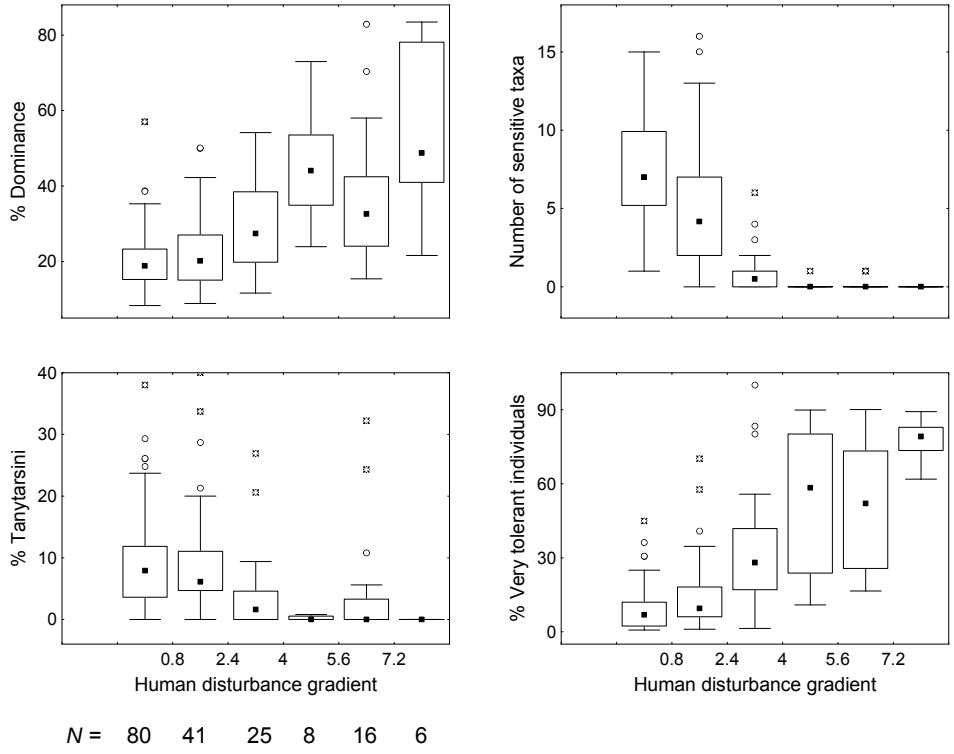


Figure 3. Four of the ten metrics included in the SCI plotted against the human disturbance gradient. Percent dominance and very tolerant individuals increased with disturbance; sensitive and Tanytarsini midge taxa declined. Metric values were averaged for each of the 176 sites. Samples with greater than 175 or less than 75 individuals were excluded before averaging. Number of sites within each box are shown (*N*).

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The very tolerant list included one odonate (*Argia sedula*) and several chironomid taxa (*Larsia spp.*, *Cricotopus bicinctus,* and *Polypedilum illinoiense* grp.) previously noted as sensitive and included in the Florida Index **(Appendix D).** The very tolerant list was dominated by noninsects and chironomids, along with several odonate taxa. One species of tubificid worm, *Limnodrilus hoffmeisteri*, was included as very tolerant, although it was present at 47% of the poor sites that failed to meet the criterion of > = 50% of poor sites. *L. hoffmeisteri* was included as very tolerant because it was very common at all sites. It occurred at 70 out of 85 poor sites, and tended to increase in relative abundance with disturbance. Other studies have also reported tolerance of *L. hoffmeisteri* to a variety of disturbance types (Chapman, 2001; Chapman et al., 1982)

The total number of taxa with 10 or more occurrences was 168. When a large number of tests are conducted, questions arise regarding the probability of Type I error. The detection of a statistically significant result will occur with the approximate frequency of *p*-value. For a *p*-value of 0.05 and 168 tests, approximately 8 taxa may be selected by chance alone (0.05 * 168 = 8.4). The number of sensitive taxa falsely selected from this analysis is likely much lower because the criterion for selection was more strict than statistical significance. In other words, the *p*-values associated with 87% occurrence of more common taxa, e.g., taxa present at 20 or more sites, were much smaller.

### *BioRecon metrics*

The six taxa richness metrics calculated from BioRecon data were significantly correlated with the HDG and highly correlated with the SCI (*r* ranged from 0.60–0.73; **Table 7**). The four SCI metrics calculated as percentages could not be tested because relative abundance was not recorded for BioRecon data. For this reason, we tested the very tolerant metric in terms of *taxa richness* rather than as a percentage. Its correlation was poor with the HDG and nonsignificant with the SCI, and therefore it was not included in the BioRecon Index.

## Multimetric index construction and evaluation

Ten metrics were selected for inclusion in the SCI, and six were selected for the BioRecon Index. Most of the SCI metrics required regional scoring (**Table 8; Appendix E;** FDEP, 2007)**.** In general, taxa richness tended to be higher in the panhandle region than in the peninsula or northeast.

For the SCI, the highest correlation between metrics occurred between Trichoptera and clinger taxa (Spearman's *r* = 0.77) and clinger and sensitive taxa (*r* = 0.84). To determine whether these metrics were redundant, we evaluated the taxa included in each metric. Of the clinger taxa, approximately 41% were also sensitive taxa, and 33% were also Trichoptera taxa. Thus, we concluded that the statistical correlation was due to an underlying association with human disturbance, rather than redundant information.

Two metrics were somewhat skewed, that is, their distributions had long "tails" with sparse values at one end of their distribution. For these metrics, we calculated the natural log of metric values before dividing by the range of the metric values. In this way, metric scores were more evenly spread between 0 through 10. Two SCI metrics increased with disturbance (% dominance and % very tolerant individuals); all others declined with disturbance.

BioRecon metric scoring rules differed somewhat from SCI metric scoring. Taxa richness tended to be lower in two regions, while Ephemeroptera taxa richness was much higher in the panhandle **(Table 9).** More long-lived taxa tended to be found in all three regions for BioRecon samples.



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**Table 7. Correlation of BioRecon metrics and the old and new BioRecon Indexes with the HDG and SCI**

*Metrics included in the BioRecon Index are noted (*). All correlations shown were statistically significant (Spearman's r, p < 0.01, one-sided test, n = 116 for SCI, n = 53 for HDG). Data from multiple visits were averaged for each site.*

| Metric/Index | HDG | SCI |
|---|---|---|
| BioRecon Index | -0.58 | 0.75 |
| Total taxa* | -0.36 | 0.53 |
| Ephemeroptera taxa* | -0.47 | 0.62 |
| Trichoptera taxa* | -0.65 | 0.68 |
| Long-lived taxa* | -0.46 | 0.65 |
| Clinger taxa* | -0.48 | 0.67 |
| Sensitive taxa* | -0.63 | 0.69 |
| Very tolerant taxa | NS | NS |
| Old BioRecon Index | -0.41 | 0.58 |
| EPT | -0.61 | 0.71 |
| Florida Index (metric) | -0.53 | 0.69 |

**Table 8. SCI metric name and range of metric values used to assign a score of 0 (indicating degraded condition) to 10 (indicating minimal disturbance) by region**

*Metric values higher or lower than the listed range were assigned a score of 0 or 10 as appropriate. Metric ranges listed in reverse order indicate metrics that increased (rather than declined) with disturbance. For two marked metrics (*), the natural log was calculated for the range of values before scoring.*

| SCI Metric | Northeast | Panhandle | Peninsula |
|---|---|---|---|
| Total taxa | 16–42 | 16–49 | 16–41 |
| Ephemeroptera taxa | 0–3.5 | 0–6 | 0–5 |
| Trichoptera taxa | 0–6.5 | 0–7 | 0–7 |
| % Filterer | 1–42 | 1–45 | 1–40 |
| Long-lived taxa | 0–3 | 0–5 | 0–4 |
| Clinger taxa | 0–9 | 0–15.5 | 0–8 |
| % Dominance | 54–10 | 43–10 | 54–10 |
| % Tanytarsini * | 0–26 | 0–26 | 0–26 |
| Sensitive taxa | 0–11 | 0–19 | 0–9 |
| % Very tolerant * | 78–0 | 36–0 | 59–0 |



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**Table 9. BioRecon metric name and range of metric values used to assign a score of 0 (indicating degraded condition) to 1 (indicating minimal disturbance) by region**

*Metric values higher or lower than the listed range were assigned a score of 0 or 10 as appropriate. Underlined text indicates metric ranges that differed from those for the SCI.*

| BioRecon Metric | Northeast | Panhandle | Peninsula |
|---|---|---|---|
| Total taxa | **14–37** | 16–49 | **11–36** |
| Ephemeroptera taxa | 0–3.5 | **0–12** | 0–5 |
| Trichoptera taxa | 0–6.5 | 0–7 | 0–7 |
| Long-lived taxa | **0–6** | **0–10** | **0–7** |
| Clinger taxa | **0–7** | 0–15.5 | 0–8 |
| Sensitive taxa | 0–11 | 0–19 | 0–9 |

The SCI was highly correlated with the HDG, with minimal overlap between values for extremely disturbed and minimally disturbed sites **(Figure 4).** The BioRecon Index was also highly correlated with the HDG and was more responsive across the range of human disturbance than the original BioRecon Index **(Figure 5).**

Regional scoring at the metric level resulted in an SCI that showed a similar response to human disturbance within each region. The regression lines for the SCI versus HDG for the northeast and peninsula regions were nearly identical; the line for the panhandle region diverged somewhat from the other two regions for more degraded sites **(Figure 6; Appendix F).** The divergence was associated with two sites in the panhandle with SCI values that were higher than expected. We did not alter the metric scoring rules, because several other panhandle sites did obtain the lowest SCI values for high levels of disturbance.

We calculated the natural log of the area upstream of the sampling site to test for correlation between the SCI and watershed size. Watershed size had an underlying correlation with the HDG **(see Table 4)** because the most disturbed sites tended to have small watersheds. To avoid this confounding association, we divided the sites into 3 groups (low, medium, and high disturbance) before testing for correlation between the SCI and watershed size. The low disturbance group of sites had HDG values equal to 0. We defined medium disturbance as HDG values from 2 to 5 and high disturbance as HDG values > 5. The SCI was not significantly associated with watershed size for any of the 3 levels of disturbance (**Figure 7;** Spearman's $r = -0.01, -0.005, 0.12$, $p > 0.5$).

The relationship between the SCI and HDG was consistent across years as well. When site visits were divided into 2-year segments for 10 years of sampling (1992–2001) and the SCI regressed against the HDG, the 5 regression lines were nearly identical **(Figure 8).** This result indicates that the pattern of association between the SCI and HDG was independent of year.

To verify that the SCI was correlated with the HDG, we used an independent set of 23 sites not used in any of the previous analyses. Correlation was high (Spearman's $r = -0.81$, $p < 0.001$; **Figure 9**). Two sites with > 300 individuals in the samples had somewhat higher SCI values than predicted by the HDG, possibly due to the inflation of taxa richness measures associated with large samples.



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## Statistical precision of indexes

During the 2004-2006 period, the target number of individuals for laboratory identification for the SCI was 95 to 115. For the metric testing dataset, only 27% of the 629 site visits met this target. Most samples had well over 100 individuals. For these data, 32% of the samples had > 175 individuals, with some samples ranging up to hundreds of individuals. At the other end of the scale, only 36 samples (6%) had fewer than 90 individuals in the entire sample.

When we compared small sample sizes with standard (or large) sample sizes from the same sites, samples with < 75 individuals contributed a disproportionately large amount of variability to the repeat visits **(Figure 10).** SCI values were typically much lower for these small samples. For this reason, we excluded these 17 samples from the analysis of variability, which reduced the number of sites from 62 to 61.

Repeat visits to the same sites were used to evaluate the sources of variability for the SCI and BioRecon. The sources of variance included differences associated with sites, years, visits within years, season (summer versus winter), and laboratory subsampling.

From the ANOVA analysis, the variance associated with sites was greatest (304.9, 71%), the variance associated with year was relatively small (7.7, 2%), and the variance components associated with site x year interaction and error were similar (54.6, 12%, and 66.6, 15%; **Figure 11; Appendix F**). For this model, error was defined as repeat visits within years, about half of which were on the same day.

We used the estimate of error variance from the ANOVA to estimate the 90% confidence limits around the SCI as +/– 13.4 points, or a 27-point spread. Graphic representation of this range around the observed values for repeat visits captured all visits to the least disturbed sites (SCI values > 70), but failed to include all the visits to sites with lower SCI values **(Figure 10).** These sites graphically illustrate the site x year variance, that is, certain site-year combinations that changed in unique ways. The fact that undisturbed sites did not show this pattern, while disturbed sites did, suggests that the SCI was measuring real changes in biological condition, rather than “noise” associated with natural variability. Using the length of the 90% confidence interval (27 points) to divide the range of the SCI (0 to 100) yielded 3.7 categories of biological condition that SCI could reliably detect based on a single site visit.

Variance components calculated for the SCI component metrics showed similar patterns to the SCI. Site differences and site x year variance typically contributed the largest percentages to the overall variance **(Figure 12).** The exception was long-lived taxa richness, which had a large error component (with error defined as variance associated with repeat visits within years, as above). The least variable metrics were Ephemeroptera, clinger and sensitive taxa richness, and % very tolerant. Overall, the SCI was less variable than most of its component metrics.



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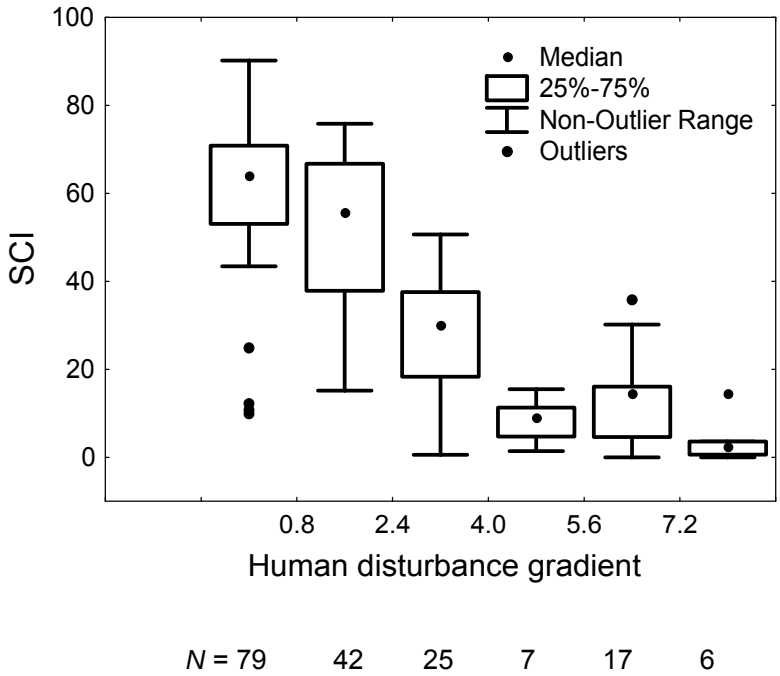


Figure 4. SCI declined as human disturbance increased. Index values were averaged for each of the 176 sites. Only samples with 75-175 individuals are shown. Number of sites in each box are shown (*N*).



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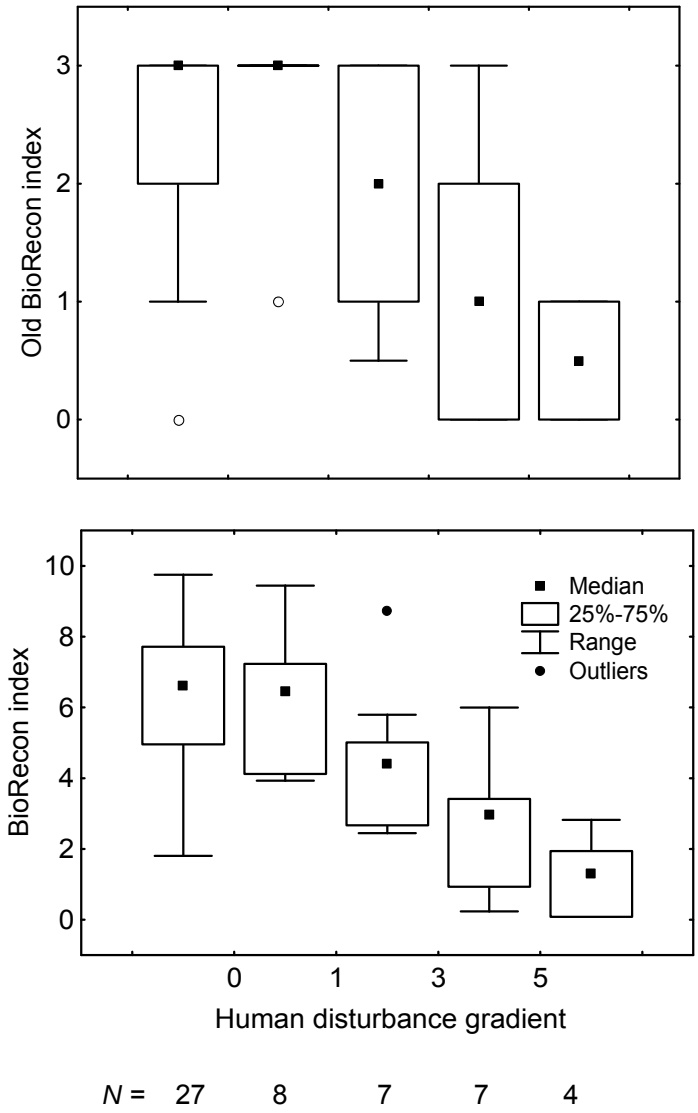


Figure 5. Original BioRecon index based on three metrics (total taxa, EPT taxa, and Florida index; upper panel) and current BioRecon index based on six metrics (lower panel). Both indexes declined as human disturbance increased, but the 6-metric index has a broader range of response to disturbance. Values in boxes are <= value on x-axis.



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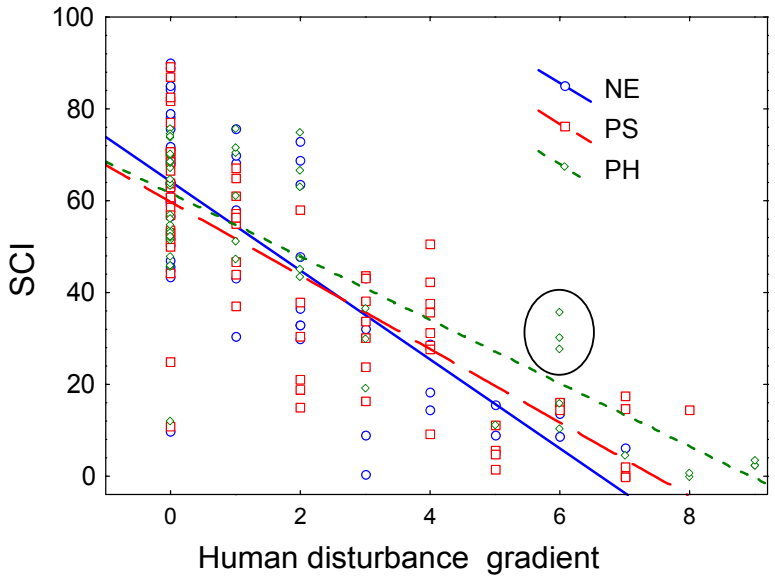


Figure 6. SCI declined as human disturbance increased. Regression lines for the peninsula and northeast had nearly identical slopes indicating a similar index response across the gradient. Three visits to two sites with higher values than predicted (circled) increased the slope for panhandle sites somewhat. Index values were averaged for each of the 176 sites. Only samples with 75-175 individuals are shown and were included in the regression. *N* = 58 (NE), 66 (PS), and 52 (PH).



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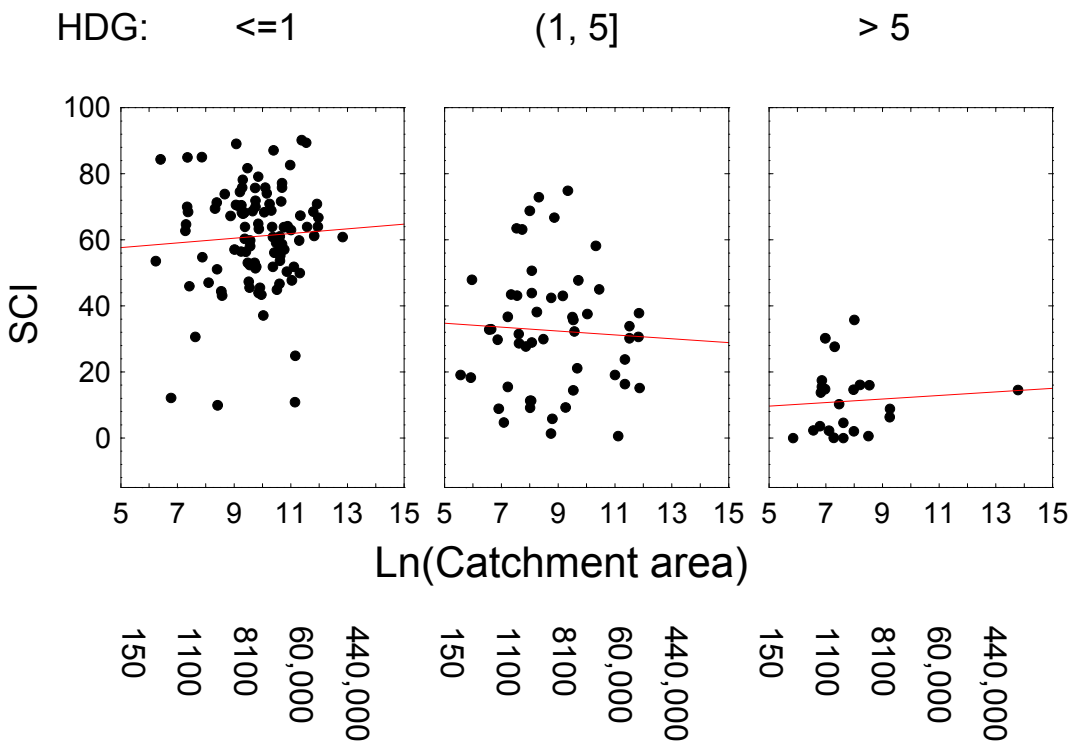


Figure 7. SCI was not significantly associated with watershed size (catchment area) when correlation was tested separately for low, moderate, and high levels of human disturbance (HDG). Highly disturbed sites tended to be small in catchment area and this relationship created a spurious correlation between SCI and catchment size. Shown are average SCI values for 176 sites. Actual catchment area shown below figures (in acres).



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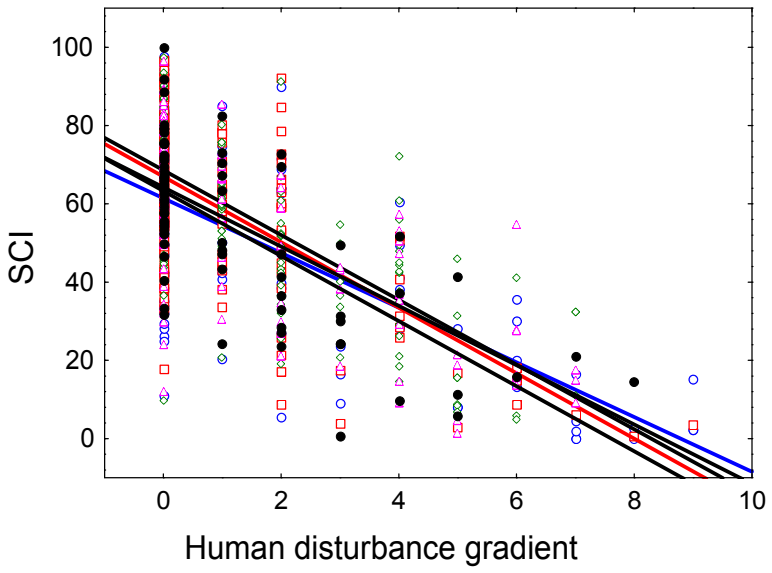


Figure 8. SCI showed a similar response to human disturbance for different years. Shown are five regression lines representing data from 1992-3, 1994-5, 1996-7, 1998-9, and 2000-1. The nearly identical slope lines indicate a consistent relationship between SCI and human disturbance for different time periods.



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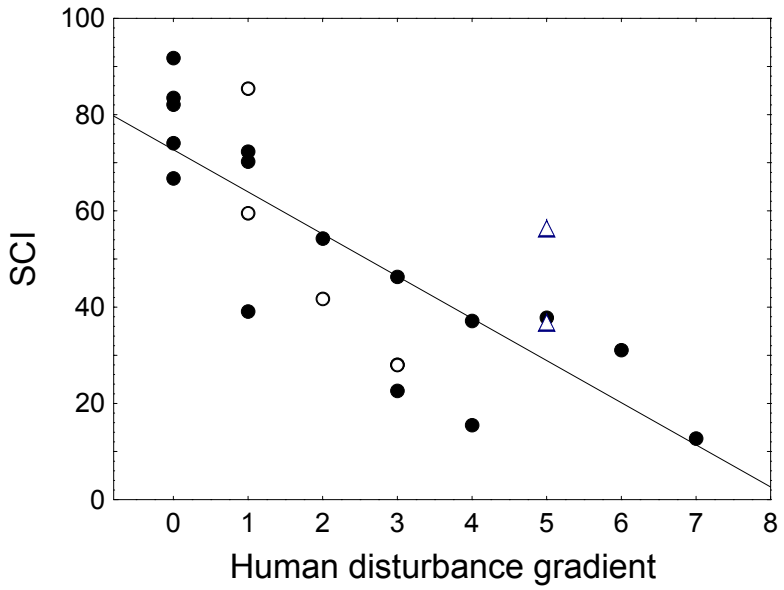


Figure 9. Correlation between SCI and the human disturbance gradient was high for an independent test of 23 sites not included in any previous analyses (Spearman's *r* = -0.81, p<<0.01). Four sites were missing data for NH3 (open circles) and two sites had >300 individuals (open triangles).



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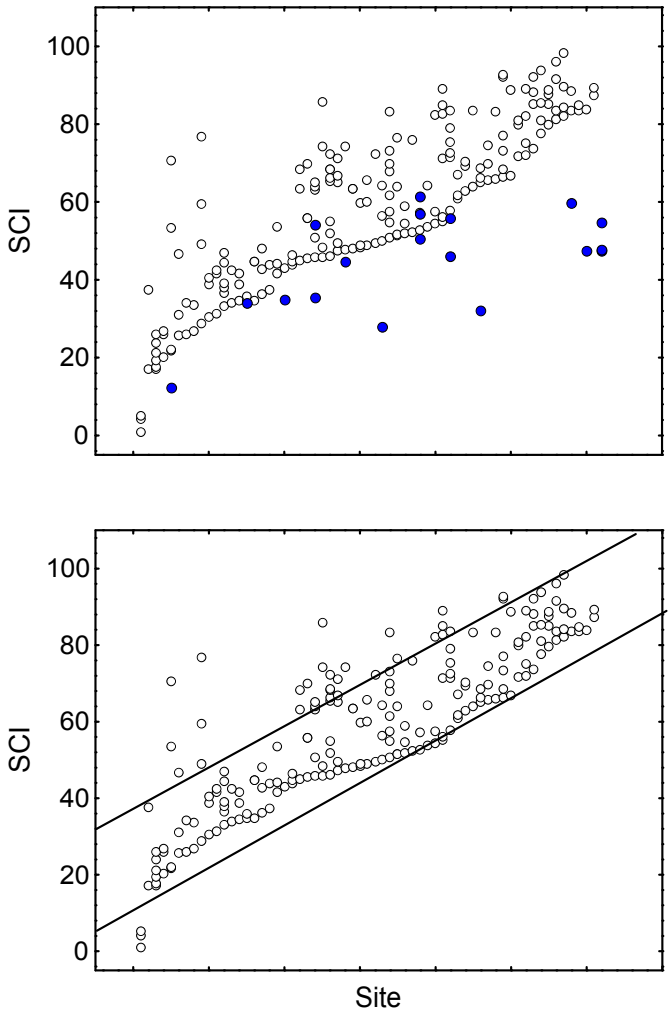


Figure 10. SCI values for repeat visits to 62 sites are shown. Sites were first sorted according to SCI value. Individual site names are not shown, but all SCI values for each site are plotted at a single point on the x-axis. Thus, vertical lines of points represent the range of SCI values at each site. Samples with < 75 individuals are indicated by solid points (upper panel). Lines (lower panel) represent the +/- 15 point confidence interval for the SCI when small samples were eliminated.



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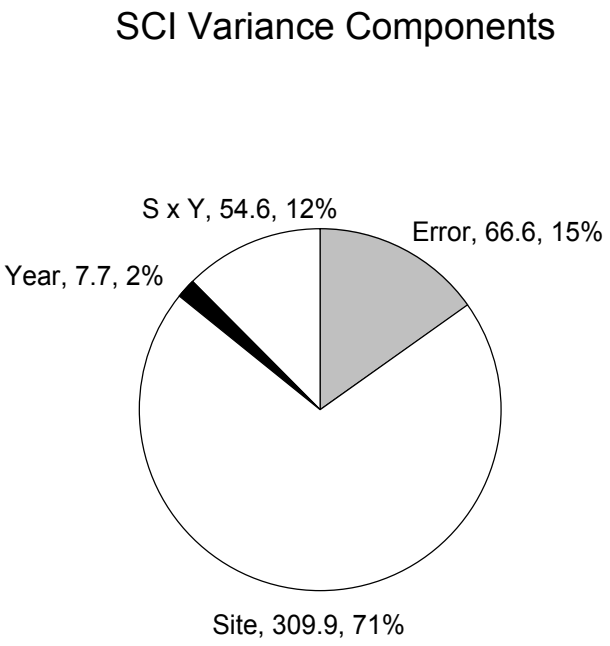


Figure 11. Estimate of variance components and their relative percentage for SCI. The largest percentage of variance was associated with site differences. Replicates collected within a single year (primarily on the same day) accounted for approximately 15% of the total observed variance. Year differences accounted for 4% of the variance. The interaction of site and year accounted for 16% of the total variance.



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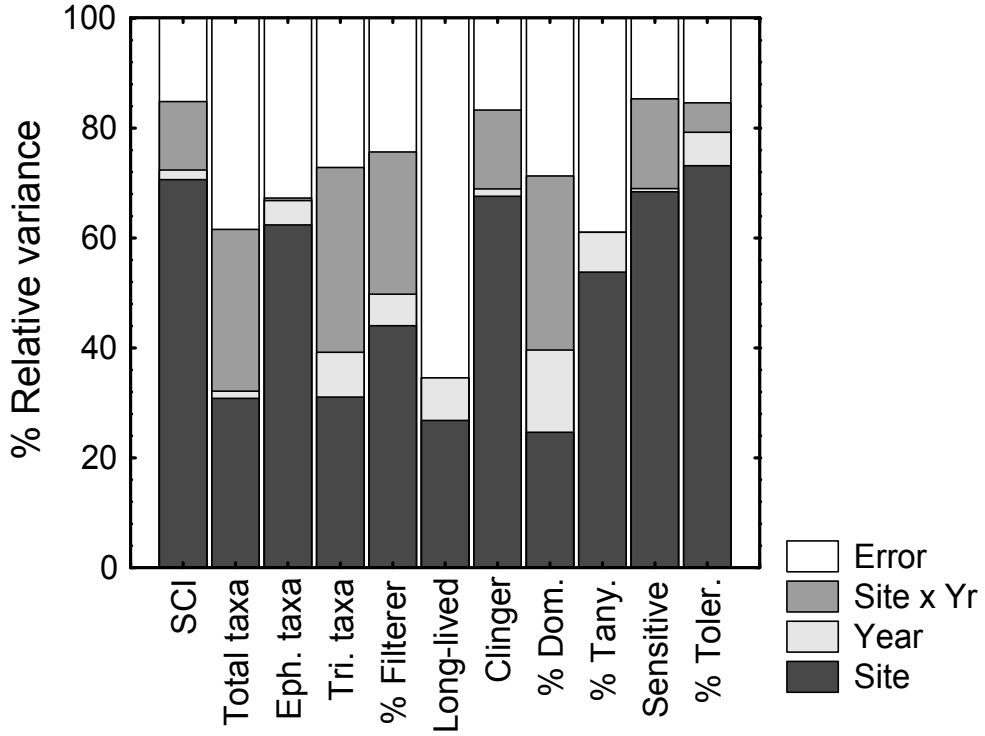


Figure 12. Variance components for SCI and its metrics. For the index and several of the metrics, variance associated with site differences represented the largest component of variance. Error variance associated with repeat visits within years (primarily on the same day) was highest for long-lived taxa richness. The least variable metrics were Ephemeroptera and sensitive taxa richness, and percent very tolerant individuals.



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For the seasonal comparison, sites were chosen to represent locations with minimal human disturbance, in order to eliminate this potentially confounding source of variability from the analysis. Unfortunately, over half the SCI values for these site visits were < 70 (the "exceptional" category), indicating the seasonal dataset represented a broad range of conditions. Highly degraded sites (SCI < 20) were not included in the seasonality analysis. SCI values were on average 3.5 points higher in winter than summer (paired *t*-test, $p = 0.049$). The observed difference was greater in the northeast (6.1 points) than the panhandle (1.6 points) or peninsula (3.6 points; **Figure 13**).

Using the same data, we evaluated metrics to determine which were contributing to the seasonal differences in the SCI. Five metrics had values in the winter indicating better biological condition; these were Ephemeroptera taxa richness, % filterers, % Tanytarsini, sensitive taxa richness, and % very tolerant. Long-lived taxa richness had higher values in the summer, the opposite of the SCI. Although significant, most metric differences were rather small compared with the overall range of the metric **(Table 10).** The paired *t*-test is a very powerful test and can detect very small differences because it compares each site with itself. The exception was % Tanytarsini. With a difference of 4.6% compared with a possible range of 0 to 26%, it had the largest relative change from summer to winter. We did not modify metric scoring to correct for seasonal differences, because most metric differences were very small and the difference between SCI summer and winter values was small (3.5%) relative to the site differences through time.

To evaluate the influence of laboratory subsampling on the SCI, we used data that included multiple subsamples from the same site visit. We estimated variance using ANOVA with stream site-visit (n = 59) as a single factor and the 3 subsamples from each visit to estimate the error variance. Error variance for this model was 32.86, which represents about half the error variance calculated above when error was defined as differences associated with repeat visits to the same site (32.86/66.6 * 100 = 49%). In other words, of the variance associated with repeat visits to the same site, about half the variability is due to laboratory subsampling. However, because the variance estimates were from different datasets, the comparison should be cautiously applied. After these variance estimates for this report were completed, laboratory subsampling methods were tested and modified to address this variability. (See results and discussion in **Appendix G**.)

The BioRecon Index was calculated as the sum of the 6 scored metrics; therefore, the sum of the scores ranged from 0 to 6. We transformed the index to a range of 0 to 10 by dividing the sum by 6. The dataset for this ANOVA model was unbalanced, with many site-year combinations missing; therefore, the site x year interaction component of variance could not be estimated. The components of variance were similar to those for the SCI, in that the largest component of variance was associated with site differences and year variance was again small **(Figure 14).** The error variance for this model was 1.46, with error derived from repeat visits to the same sites. A 90% confidence interval for the BioRecon Index yielded a limit of +/- 2, or a length of 4.0 points. Dividing the range of the BioRecon index (0–10) by 4 translated into 2.5 categories of biological condition that the BioRecon could statistically distinguish**.** This result supported the decision to identify three assessment categories for the BioRecon index in a regulatory context (see Chapter 4: *Application of Biomonitoring Tools* below).



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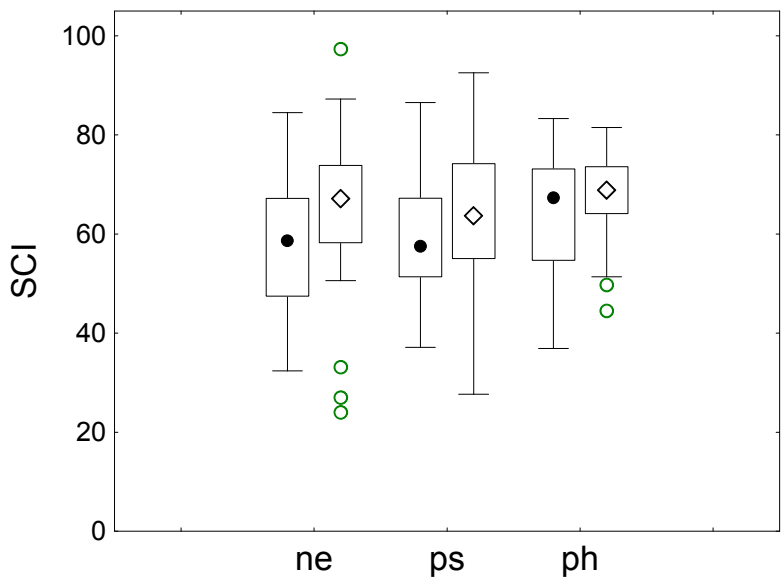


Figure 13. SCI values by region (northeast, peninsula, and panhandle) and season. Summer samples (circles in center of box) tended to be lower than winter samples (diamond centers) in the northeast and peninsula regions. *N* = 23 (NE), 34 (PS) and 31 (PH).



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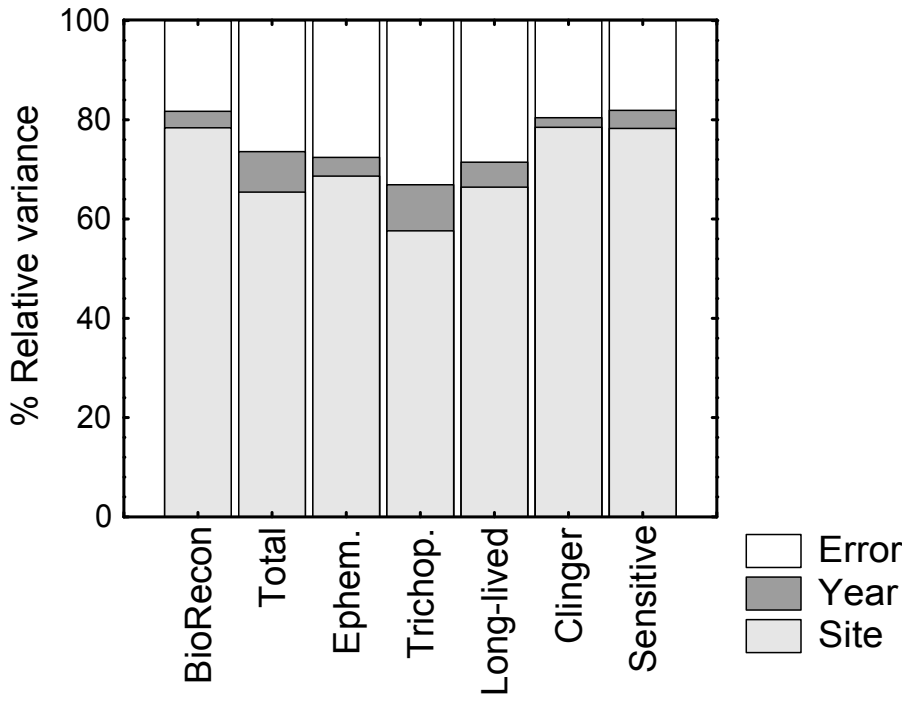


Figure 14. Variance components for BioRecon and its component taxa richness metrics. Variance associated with site differences represented the largest component for metrics and index. Error variance associated with repeat visits within years was similar across metrics ranging from 20-30% of the total. Variability associated with a specific year was relatively small for the index and metrics.



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**Table 10. Results for seasonal comparison of the SCI and its component metrics**
*Differences between summer and winter samples (negative value indicates higher winter values). Significant differences noted (* p < 0.05, paired t-test).*

| Index/metric | Difference |
|---|---|
| SCI | –3.5 * |
| Total taxa | 0.1 |
| Ephemeroptera taxa | –0.4 * |
| Trichoptera taxa | 0.3 |
| % Filterer | –5.2 * |
| Long-lived taxa | 0.6 * |
| Clinger taxa | –0.2 |
| % Dominance | –1.9 |
| % Tanytarsini | –4.6 * |
| Sensitive taxa | –0.9 * |
| % Very tolerant | 2.0 * |

These categories for the BioRecon may be somewhat conservative, particularly for sites with good biological condition, because the variability estimated from repeat visits was much higher for moderately disturbed sites than for sites with minimal disturbance **(Figure 15).** If variance were estimated using only minimally disturbed reference sites, the error variance would be smaller. To determine whether high variability was associated with natural variability or changes in human activities, we selected the sites with the most variable BioRecon values through time and asked regional biologists to note any change in human activities at the site **(Table 11).** Four of the sites improved where roads had been paved to eliminate sediment runoff. Other changes were associated with pesticide spraying, the elimination of runoff from a wastewater treatment plant, road closure, and the cessation of fertilization upstream. The results from this anecdotal analysis suggest that much of the BioRecon variability was associated with real changes in human disturbance, rather than natural variability.

Variance results for the BioRecon components metrics were similar to those for the SCI metrics, with site differences contributing the largest component of the total variance **(see Figure 14).** In general, the metric variance due to nuisance sources of variability (year or error) was smaller for three of the BioRecon metrics than for the same SCI metrics. Lower error variance for total taxa, Trichoptera, and long-lived taxa richness suggests that the BioRecon protocol may provide more reliable estimates of these metrics. Direct comparisons of the results from different datasets should be cautiously applied, particularly for relative variance estimates, because they depend on the magnitude of the site differences.



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**Table 11. STORET site code, region, station nickname, observed change in BioRecon values through time, and possible reason for change**

*Listed sites represent locations with the highest variability observed for BioRecon values.*

| STORET | Region | Station | Change | Reason |
|---|---|---|---|---|
| 20010521 | Peninsula | JIMREF | Declined | Unknown |
| 20010525 | Peninsula | LILHAW@40 | Declined | Unknown |
| 20030341 | Northeast | CECFLD7 | Improved | Unknown |
| 32030024 | Panhandle | SFBEARREF | Improved | Intermittent pesticide spraying |
| 33020064 | Panhandle | PBRNCSTLR | Improved | Section 319 nonpoint source (NPS) restoration project to pave a road and stop sediment |
| 33020065 | Panhandle | BRSTWRKB | Improved | Section 319 NPS restoration project to pave a road and stop sediment |
| 33020067 | Panhandle | CNOECPBRNR | Improved | Section 319 NPS restoration project to pave a road and stop sediment |
| 33020082 | Panhandle | SANHOLTST | Improved | Section 319 NPS restoration project to pave a road and stop sediment |
| 33030039 | Panhandle | TRKLNHDCM | Improved | Partnership with state forest and the Nature Conservancy closed logging road and eliminated sediment |
| 33030102 | Panhandle | TURKEYCR | Improved | Summer aerial pesticide spraying |
| 33040016 | Panhandle | WILLIAMTST | Improved | Runoff from wastewater treatment plant sprayfield eliminated |
| 33040017 | Panhandle | DDFLCWC189 | Improved | Ended fertilization upstream of sites in state forest |
| 24030013 | Peninsula | HILSTP4REF | Improved | Unknown |
| 22020062 | Panhandle | OKLREF | Variable | Unknown |
| 27010050 | Peninsula | MOSESUS1 | Variable | Unknown |
| 27010583 | Peninsula | LITLTOMOKA | Variable | Unknown |

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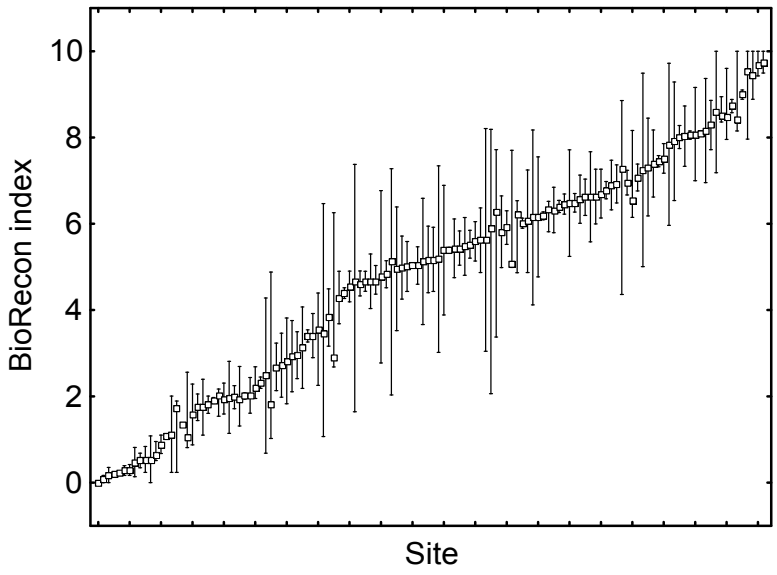


Figure 15. Range of BioRecon index values for repeat visits to 128 sites. Site names are not shown; however, each vertical line represents a single site with the minimum and maximum index values plotted as the endpoints. Note that high and low index values were less variable for repeat visits through time.

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# CHAPTER 3: DISCUSSION

The SCI and BioRecon Index, along with their component metrics, were developed to assess the biological condition of stream sites using samples from the stream macroinvertebrate assemblage. These assessment tools will be used primarily to define biological criteria for freshwater streams and to evaluate the effectiveness of best management practices (BMPs) (Vowell, 2001). Three results support the use of the SCI for this purpose. First, the component metrics showed a strong and consistent response to an independent measure of human disturbance (HDG). The SCI was also highly correlated with the HDG using an independent dataset for verification. Second, the SCI was independent of watershed size and geographic region. This result means that the SCI can be used across the state to compare stream sites. Third, the influence of seasonal and annual differences on the SCI was relatively small. Index values were about 3.5% higher for winter samples, and about 2% of the total variance of the SCI was associated with year of sampling. Although low, these sources of variance should continue to be evaluated with more complete sampling designs because the influence of both could potentially be eliminated by adjusting index values according to season or year.

## Human disturbance gradient

The HDG simplified several aspects of metric and index testing. First, it provided a more stringent test of metric association with disturbance than a comparison of reference versus test sites. Percentage Diptera individuals serves as an example of this. This metric was included in the old SCI because it increased at disturbed sites; however, across a gradient of disturbance, it failed to consistently respond. Second, the HDG was independent of biological condition because no measures of biological condition were included. Therefore, metric expectations could be defined for equivalent levels of disturbance within each region. As a consequence, it was not necessary to correct the multimetric index for regional differences. Third, objective selection criteria based on association with the HDG were used to define individual taxa as sensitive or very tolerant. Finally, the HDG resolved a spurious correlation between watershed size and the SCI. During initial analysis, the SCI appeared to be correlated with watershed size because the most disturbed sites happened to be very small. After controlling for the HDG, the correlation between watershed size and the SCI was eliminated. The HDG can also be used to describe the intensity of disturbance associated with specific biological losses, as measured by the SCI and its component metrics.

## Biological indicators

Multimetric indexes strive to integrate measures from a diverse set of biological categories for two reasons. First, monitoring different aspects of the biological assemblage improves the likelihood of detecting changes associated with different types of disturbance. Second, the potential exists to define metric signatures, that is, associations between specific metrics (or suites of metrics) that correspond to specific human activities (Norton et al., 2000; Yoder and DeShon, 2002). Metric signatures are particularly relevant to the TMDL process, which allocates responsibility for degraded stream condition among the various human activities in the watershed (Karr and Yoder, 2004; EPA, 2000).

Though not specific to any particular group, total taxa richness represents a general measure of the biological complexity found at a site. This metric is one of the most widely applied in biomonitoring programs because of its consistent decline with human disturbance for stream invertebrates (Kerans and Karr, 1994; Fore et al., 1996; Karr and Chu, 1999; Klemm et al., 2002), as well as fish (Hughes et al, 1998), terrestrial invertebrates (Kimberling et al., 2001), and birds (Bryce et al., 2002). Ephemeroptera and Trichoptera taxa richness have also been widely applied, though often combined with Plecoptera into a single (EPT) metric. Splitting these taxonomic groups provides the opportunity for metric signatures



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associated with different types of disturbance. For example, Ephemeroptera taxa are known to be particularly sensitive to metals and will disappear before other taxa (Clements et al., 2000; Fore, 2002). On the other hand, an increase in Ephemeroptera taxa may indicate increased nutrients (Miltner and Rankin, 1998). Filterers are expected to decline in response to disturbance because of the increase in sediment and silt that can damage or clog nets. Long-lived taxa are expected to decline as human disturbance alters the natural flow regime, because these taxa require water in the channel year-round. Pollution events of short duration may also eliminate these taxa, while other taxa may colonize from unaffected sites.

Clinger taxa have morphological and behavioral adaptations that allow them to cling in fast water. Human development near stream sites in Florida often translates into eroding sand that can smother habitat and eliminate these taxa. Other studies have found these taxa to be sensitive to disturbance associated with mining and urbanization (Fore et al., 2001; Mebane, 2002). Percentage dominance of the most abundant taxon increases with disturbance as the natural taxonomic diversity declines and very tolerant taxa dominate samples. This metric represents a measure of the overall structure of the assemblage and has been associated with disturbance in several regions (Klemm et al., 2002). The Tanytarsini midges are used as indicators by Ohio because of their general sensitivity to human disturbance (DeShon, 1995). Three Tanytarsini midge taxa were also selected for inclusion in the list of sensitive taxa for this study.

Several of the sensitive taxa agreed with Beck's (1954) designations used to calculate the Florida Index; however, a few reversals were noted for taxa that satisfied the criteria for very tolerant. The primary difference between the sensitive taxa list and the Florida Index list was the exclusion of many rare taxa that could not be tested. The list of sensitive taxa is now shorter; nonetheless, the objective criteria used to select these taxa make these metrics easier to justify in a regulatory context.

The set of metrics selected for Florida represents a convergence with similar studies and programs in other states (Karr, 1998). Many of the Florida metrics also had a strong correlation with disturbance in Colorado, Idaho, Washington, Tennessee, and Japan, where they responded to a diverse set of human activities including timber harvest (Fore et al., 1996), recreation (Karr, 1998), urbanization (Fore et al., 2001; Karr and Morishita Rossano, 2001; Morley and Karr, 2002), agriculture (Kerans and Karr, 1994), and mining (Mebane, 2001; Fore, 2002; Mebane, 2002). The emergence of a core set of metrics across a variety of geographic contexts further supports the use of these metrics as biological indicators.

## Sources of variance

We evaluated five sources of nuisance variance for the SCI and two for the BioRecon Index. For the SCI, we estimated variance associated with laboratory subsampling, repeat visits within a year (error), different seasons, different years, and site x year interaction. For the BioRecon, we estimated variance due to repeat visits within a year (error) and different years.

One of the largest contributors to the differences observed for the SCI values collected from the same site within the same year was the variability associated with laboratory subsampling. Subsampling represented approximately 49% of the variance due to repeat visits to a site within the same year. Unfortunately, the two variance estimates were derived from different datasets; thus, this percentage should be interpreted with caution. Nonetheless, subsampling in the laboratory seems to be a significant source of variability. Furthermore, the subsampling method for this small study was more carefully controlled than for routine sampling, in that the target of 100 individuals per sample that was in use at the time of this study was more frequently attained. Thus, the subsampling analysis did not include any additional variability associated with variable sample sizes; consequently, variance due to subsampling may actually be higher for routine samples. (See **Appendix G** for analysis and changes made to the subsampling protocol after the evaluation of sources of variance was completed for this document.)



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Site by year interaction represents the variability associated with some unique site-year combinations. This source of variance represented index values from sites that increased (or decreased) from one year to the next in a different or more extreme manner than did other sites during those same years. The differences could be due to natural variability, e.g., the effect of a dry year on some sites but not others, or actual changes in biological condition associated with human influence. These two sources could not be distinguished using the current data, because all sources of human disturbance were not quantified. For example, agriculture is a dominant land use in Florida. Pesticide treatments represent a potentially significant impact to stream invertebrates but could not be evaluated for this study. Nonetheless, the higher variability in both the SCI and BioRecon Index values observed for sites with moderate index values compared with sites with high index values suggests that both indexes may be measuring real changes associated with human land use, rather than nuisance variance. Other studies have found a similar pattern of increased variance associated with greater human disturbance (Karr et al., 1987; Steedman, 1988). For the BioRecon Index, variability for several sites was explained by changes in human land use. Road paving to eliminate erosion, the elimination of toxic runoff, and the discontinuation of fertilization were all associated with improved BioRecon values.

For the SCI, winter index values were significantly higher than summer values collected from the same sites; however, the difference was small (3.5%). We did not adjust metric scores to eliminate the seasonal difference in the SCI because individual metric differences were relatively small and the differences in SCI values was due to a cumulative effect across several metrics. The seasonal difference was also relatively small compared with the variance due to other sources, such as repeat visits within a year or laboratory subsampling. The influence of seasonality awaits a better dataset that compares index values by season for sites with little or no change in human disturbance.

For the BioRecon Index, the variance associated with repeat visits within years was somewhat higher than the variance observed for the SCI. This is largely because the site x year interaction term could not be estimated (due to incomplete data), and this variance was included in the error term. In addition, the BioRecon data included mostly samples from different days within the year, rather than the predominantly same-day samples used for the SCI. As a consequence, the variance estimate for the BioRecon Index may be somewhat high and the precision of the index underestimated.

The higher variability noted for the BioRecon may be due to human disturbance at the site, different levels of sampling effort applied by field biologists, the smaller number of metrics in the index (6 for the BioRecon versus 10 for the SCI), or some combination. In the field, biologists examine the sample until all unique taxa have been identified. They also bring back examples of each taxon for laboratory verification. Biologists may vary both in the amount of time they spend searching for unique taxa and in the number of taxa returned to the lab. The protocol specifies that a minimum of 5 examples of each unique taxon be returned for verification. If multiple examples of each taxon are returned, the probability of identifying additional taxa increases as a function of the number of individuals returned. This is because many field identifications can only be made to the genus level, while in the lab more taxa can be identified to the species level. The precision of this index could likely be improved by applying the same level of effort to each sample in the field. In addition, the number of individuals returned to the laboratory for verification should be made consistent for each sample. (Note: these issues have been addressed in the current version of the BioRecon SOP.)



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# CHAPTER 4: APPLICATION OF BIOMONITORING TOOLS

This section takes the results from the previous chapters and describes how the biological monitoring tools can be integrated into a regulatory framework for managing streams under the Clean Water Act. States are required to report to Congress the water bodies that are failing to support their designated uses. FDEP intends to use biological criteria along with physical and chemical criteria to determine whether stream sites are meeting their designated uses, particularly uses related to aquatic life use support. In this section the regulatory framework of the Clean Water Act is summarized; an approach for defining more specific designated uses for aquatic life use is described; and biological criteria based on the SCI and BioRecon Index are proposed.

Two approaches were used to define categories of biological condition. The primary approach involved the U.S. EPA's Biological Condition Gradient, which we used as a framework for defining biological standards in a regulatory context (EPA, 2005; Davies and Jackson, 2006). A secondary, but parallel approach, adopted by many states, defines biological standards based on measurements, such as SCI, collected from a set of reference sites (EPA, 2006a, 2006b). We examined the reference site data and the variability associated with the SCI determination as a secondary line of evidence to support the impairment threshold decision. Additionally, the reference site data was used as the primary basis for proposing the biological criteria threshold for sites that may be considered of "exceptional" quality.

## Regulatory framework

The regulatory context for the management of surface waters is derived from the mandates of the Clean Water Act (CWA; EPA, 2005; Davies and Jackson, 2006). Within this framework, states and tribes must adopt water quality standards to protect their waters. Water quality standards (WQS) include three parts: 1) designated uses, 2) numeric and narrative criteria that protect the uses, and 3) antidegradation policies to prevent deterioration of high-quality waters (EPA, 2006a). The CWA authorizes the U.S. EPA to determine appropriate minimum levels of protection and provide national oversight to state programs; however, considerable flexibility and discretion are left to states and tribes to design their own programs and establish levels of protection beyond the national minimums (EPA, 2005). WQS are part of state law and define the water quality goals for a water body by designating the use(s) and setting criteria necessary to protect the use(s).

Thus, individual state WQS provide the foundation for the management and protection of surface waters and pollution control programs. WQS provide the basis for determining attainment or nonattainment of water bodies in order to identify impaired waters and prioritize water bodies for TMDL (Total Maximum Daily Load) establishment. Historically, states and tribes have taken different approaches to defining their WQS. Different approaches are acceptable to EPA as long as a minimum standard is protected. In other words, states are encouraged to be more protective than the national minimum. Once WQS are in place, states are authorized to implement monitoring programs that allow them to report on the attainment of those standards and to identify and prioritize waters not attaining standards.

### *Designated uses*

All of the water quality protections available under the CWA follow from the water body's designated use. All state water bodies have designated uses as specified in water quality standards, whether or not the uses are currently being attained. When classifying water bodies and determining designated uses, a state must take into consideration public water supplies, protection and propagation of fish, shellfish, and wildlife, recreation in and on the water, and agricultural, industrial, and other purposes, including navigation. The language of the CWA includes a general mandate for protecting waters for



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fishing and swimming and the protection and propagation of aquatic life. States differ in their approaches to defining designated uses under this general mandate for the protection of aquatic life.

Some states designate a general "aquatic life use" or have narrative biological criteria, which is often a general statement such as "aquatic life communities shall be maintained similar to aquatic life as naturally occurs". Florida's current description for Class III waters provides an example of this approach: "recreation and propagation and maintenance of a healthy, well-balanced population of fish and wildlife". For states with a general narrative biological criterion, single thresholds are typically set based on a multimetric index of biological integrity, with expectations determined according to regional reference conditions (U.S. EPA, 2006a; Stoddard et al., 2006). Water bodies are then assessed to determine whether they support or fail to support a single general use for aquatic life.

Currently in Florida, FDEP has convened a Designated Uses Policy Advisory Committee (DUPAC) to explore an alternative system of designated use classification for Florida. The DUPAC is considering the environmental, social, and economic consequences of use designation, and includes the interested public, the regulated community, water quality managers, and scientists. The scheme currently proposed through the DUPAC involves the separation of human and aquatic life uses and recommends a tiered system of aquatic life uses.

To be consistent with the anticipated direction of the FDEP DUPAC, this chapter proposes three categories for the SCI. Subject to future rule making decisions, those three categories may be conceptually interpreted as "exceptional" (Category 1), "healthy" (Category 2), and "impaired" (Category 3). In this way, exceptional stream resources are identified to support the intent of the anti-degradation component of the water quality standards (see below). Additionally, the "impaired" category supports decisions needed by other regulatory programs, such as the TMDL program.

## *Water quality criteria*

Water quality criteria should be closely tied to a specific designated use and should provide a meaningful assessment of whether the use is supported. The assumption is that when criteria are met, the designated use is protected. Water quality criteria may be either narrative statements that describe the conditions needed for a water body to achieve its designated use, or numeric levels of pollutants or chemicals that should not be exceeded so as to protect the designated use. While all States have adopted *narrative* criteria for the protection of aquatic life, only some have adopted *numeric* criteria such as constituent concentration levels for various pollutants or specific biological index values. Biocriteria refer specifically to criteria based on biological aspects of the water body, typically measures of fish, macroinvertebrates, plants or algae.

## *Anti-degradation policy*

This component of the WQS has traditionally received less attention than the other two components. An anti-degradation policy is required to ensure 1) water quality is sufficient to support existing uses; 2) where water quality is better than that needed to support aquatic life uses, that level of quality must be protected unless a public process determines that quality can be lowered to allow economic or social development; and 3) the water quality of water bodies with exceptional recreational or ecological significance must be maintained and protected (EPA, 1985). Thus, states are required to provide a framework for managing water bodies when their water quality changes. It is anticipated the DUPAC will establish an anti-degradation policy to continue to maintain the water quality and biological health of exceptional water bodies.



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# Tiered aquatic life uses

In 2001, the National Research Council published a report on *Assessing the TMDL Approach to Water Quality Management* in which the authors recommended *tiering* designated uses for improving the decision-making related to setting water quality standards (NRC, 2001). The NRC found the CWA's goals to be too broad to provide the operational definition of designated uses needed to support aquatic life, and recommended greater specificity in defining aquatic life uses. For example, rather than stating that a water body needs to be "fishable," the designated use should specifically describe the expected fish assemblage (e.g., cold water fishery, warm water fishery, or salmon, trout, bass, etc.). *Tiered aquatic life uses* (TALUs) are bioassessment-based statements of expected biological condition in specific water bodies that allow more precise and measurable definitions of *designated aquatic life uses* (EPA, 2005).

Designated uses are written in qualitative, narrative terms; therefore, the challenge is to relate a water quality criterion to the designated use. Establishing this relationship is more straightforward when the water quality measure, or criterion, is closely and meaningfully related to the designated use. For this reason, the NRC recommended the use of biological information to define more appropriate aquatic life uses. The TALU approach provides an interpretative framework for developing a technical program that will tighten the linkage between narrative use statements and numeric biological criteria.

Designated aquatic life uses represent a state's biological goals for their water bodies. Tiered aquatic life uses rely on biological information to more precisely define these goals relative to natural conditions. Bioassessments can then be used to measure attainment of the goals (EPA, 2005). Thus, the TALU approach is designed to support the implementation of biocriteria, and the scientific knowledge of aquatic ecology that they represent, into state and tribal water quality standards. The driving motivation here is to ensure that listings of impaired waters are scientifically defensible and to identify and protect high quality water resources.

## *Determining the impairment threshold using the Biological Condition Gradient model*

The objective of the Clean Water Act is to "restore and maintain the physical, chemical and biological integrity of the Nation's waters." To achieve this, a consistent, uniform interpretation of biological condition must be applied to data derived from any assessment methodology (Davies and Jackson, 2006). This interpretive framework must define ecological condition, allow for variability exhibited in the reference condition, and take into account the designated use of a given waterbody. The U.S. EPA has outlined a tiered system of aquatic life use designation, along a Biological Condition Gradient (BCG), that illustrates how ecological attributes change in response to increasing levels of human disturbance. The BCG is a conceptual model that assigns the relative health of aquatic communities into one of six categories. The BCG is based on fundamental ecological principles and has been extensively tested and verified by aquatic biologists throughout the U.S.

The BCG utilizes ten biological attributes of aquatic systems which respond predictably to increasing pollution and human disturbance. While these ten attributes are measurable, some are not routinely quantified in monitoring programs (e.g., rate measurements such as productivity), but may be inferred via the community composition data (e.g., abundance of taxa indicative of organic enrichment). The attributes are:

I. Historically documented, sensitive, long-lived or regionally endemic taxa
II. Sensitive and rare taxa
III. Sensitive but ubiquitous taxa
IV. Taxa of intermediate tolerance



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V. Tolerant taxa
VI. Non-native taxa
VII. Organism condition
VIII. Ecosystem functions
IX. Spatial and temporal extent of detrimental effects
X. Ecosystem connectance.

The gradient represented by the BCG is divided into six levels (tiers) of condition that were defined during a series of national workshops with experienced aquatic biologists from across the U.S. (Davies and Jackson, 2006). The six tiers are described as:

1. Natural or native condition
2. Minimal changes in structure of the biotic community and minimal changes in ecosystem function
3. Evident changes in structure of the biotic community and minimal changes in ecosystem function
4. Moderate changes in structure of the biotic community with minimal changes in ecosystem function
5. Major changes in structure of the biotic community and moderate changes in ecosystem function
6. Severe changes in structure of the biotic community and major loss of ecosystem function.

Davies and Jackson (2006) recommend that regional biological experts adapt the conceptual tiers described by the BCG to local conditions using data from a regional monitoring program. The tiers can then be used in assessment and biocriteria. To develop a BCG for Florida streams, a panel of 22 experienced aquatic biologists were convened as part of a workshop. Participants were asked to apply and calibrate the general BCG model to stream data collected from Florida streams **(Table 12; Appendix H)**. Results from the workshop were used to define biological thresholds for the SCI.

The panel of experts was provided with macroinvertebrate taxonomic lists and biological metrics for 15 reference stream sites and 30 test samples, equally divided into Florida's three bioregions (Panhandle, Northeast, and Peninsula). Data collection and metric calculation followed standard FDEP protocols. The panel was NOT given the SCI value associated with any of these sites, or any physical, chemical, or habitat descriptions of the sites (other than the Bioregion location). Detailed descriptions of the BCG attributes and tiers were provided to the panel prior to the meeting. On the day of the meeting, a presentation reiterated these definitions, accompanied by extensive discussion (Frydenborg and Miller, 2007).

The panel of 22 Florida scientists assigned the 30 test samples to BCG Tiers 1 through 6, generating a total of 660 individual sample assessments. After discussion, there was general agreement that it was difficult to identify Tier 1 sites (pristine, natural condition). This was primarily due to inadequate information in the data sets to properly characterize BCG Attribute 1, "*Historically documented, sensitive, long-lived or regionally endemic taxa."* The 20 dip net sweep sampling method, along with the laboratory sub-sampling procedure, do not result in a complete biological census of any given site. This lack of data on rare, endemic taxa made it difficult for the group to judge a "pristine" condition. Even given this constraint, there were approximately twenty instances where panelists assigned a score of Tier 1 to a sample, although none of the samples was unanimously assigned to Tier 1 by all 22 experts. However, there was complete agreement among the panelists that Tier 2 represented the minimally disturbed reference condition, which was considered, for practical purposes, to be almost indistinguishable from "natural."



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**Table 12. BCG Workshop Participants**

*Name of regional expert, affiliation, and years of experience in benthic macroinvertebrate identification,*

| Expert name | | Affiliation | Years |
|---|---|---|---|
| Jerrell | Daigle | DSA, Inc. | >20 |
| Dana | Denson | FDEP Central District | 10-15 |
| Doug | Durbin | Biological Research Associates | >20 |
| John | Epler | John Epler Consulting | >20 |
| Julie | Espy | FDEP Tallahassee | 5-10 |
| David | Evans | Water and Air Research | >20 |
| Michael | Heyn | FDEP Tallahassee | >20 |
| Joy | Jackson | FDEP Tallahassee | 10-15 |
| Deron | Lawrence | Biological Research Associates | 10-15 |
| Laura | Line | Water and Air Research | 10-15 |
| Rob | Mattson | St. Johns River Water Management District | >20 |
| Peggy | Morgan | FDEP Southwest District | >20 |
| Patrick | O'Connor | FDEP Northeast District | >20 |
| Manuel | Pescador | Florida Agricultural and Mechanical University | >20 |
| Marianne | Pluchino | Reedy Creek Improvement District | >20 |
| Eric | Pluchino | FDEP Orlando District | >20 |
| Donald | Ray | FDEP Northwest District | >20 |
| Johnny | Richardson | Leon County | 10-15 |
| Gitta | Schmitt | FDEP Southwest District | 5-10 |
| Mary | Szafraniec | Southwest Florida Water Management District | 5-10 |
| Albert | Walton | FDEP South District | >20 |
| Gary | Warren | Florida Fish and Wildlife Commission | >20 |

During the workshop, the 22 panelists BCG scores were tabulated for each test sample and the panel discussed the results. In all cases, the majority of panelists' scores were assigned to the same tier, with a small number of the adjacent tiers represented. After discussion on specifics associated with the data set, the panelists were given the opportunity to modify their score.

During the national workshops sponsored by EPA, different groups of experts independently concurred that the ecological characteristics described by Tiers 1–4 corresponded to how they interpret the Clean Water Act (CWA)'s interim goal for protection and propagation of aquatic life. They further identified Tiers 1 and 2 as indicative of biological integrity (U.S. EPA, 2005). Subsequent to these national workshops, several states have adopted a line of impairment near the threshold between Tiers 4 and 5 (U.S. EPA, 2006b). The Florida panel of experts was similarly asked to offer their opinion as to where along the 6 tiered rankings they believed the interim goal of the Clean Water Act (CWA) was met. In other words, sites below a selected tier threshold would be considered "impaired." There was unanimous agreement that Tier 2 represented reference conditions, and that Tier 3 clearly met the CWA interim goal for biological integrity. There was also unanimous agreement that Tier 5 did not meet the CWA biological integrity goal. Approximately half the group thought the impairment threshold occurred between Tiers 4 and 5. The other half of the Florida experts proposed the impairment line to be drawn between Tiers 3 and 4. Those panelists expressed a concern that management action may not be taken on sites until they were considered "impaired." In other words, those panelists wanted the impairment line to include a buffer to allow more time for management action to prevent sites from becoming impaired. Taking the



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recommendations of all 22 experts, we calculated the mid-point to define the line of impairment to be below Tier 4.

From this definition for the line of impairment, BCG scores were related to SCI values to determine a corresponding numeric criterion for the support of aquatic life use. Two statistical approaches were used: linear regression and change point analysis. Using linear regression, we found that an SCI value of 34 corresponded to a BCG score of 4 **(Figure 16)**. Based on this analysis, the impairment threshold could be set at an SCI value < 34. Step function regression, also known as change point analysis, identified a significant difference (change or break point) corresponding to an SCI score of 36 (**Figure 17; Appendix I;** Niu and Miller, 2007). Based on this analysis, the impairment threshold could be set at an SCI value < 36. Thus, the two different statistical methods yielded very similar results. We averaged the SCI values derived from the two approaches to define the line of impairment to occur at SCI < 35. Using results from the BCG approach and the recommendations of 22 regional experts, SCI values from 0-34 are proposed as Category 3 (provisionally interpreted as "impaired"). SCI scores >= 35 represent Categories 2 and 1 (provisionally interpreted as "healthy" and "exceptional"; see below).

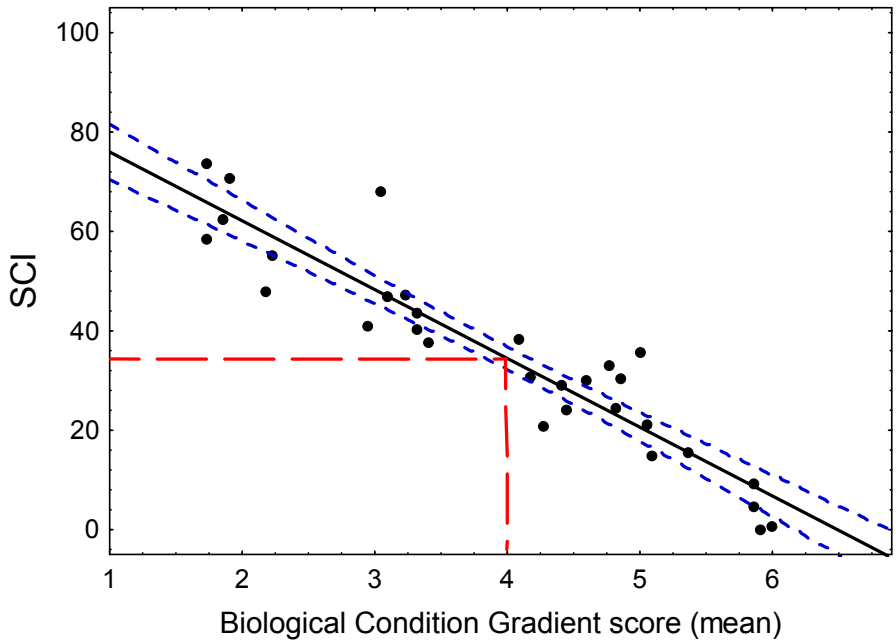


Figure 16. SCI values were highly correlated with the BCG scores assigned by the experts. Shown are the regression line (solid black) and its 90% confidence intervals (dashed blue lines). Red dashed lines indicate the SCI threshold value of 34.4 based on a BCG score of 4 as the line below which biological impairment was defined.



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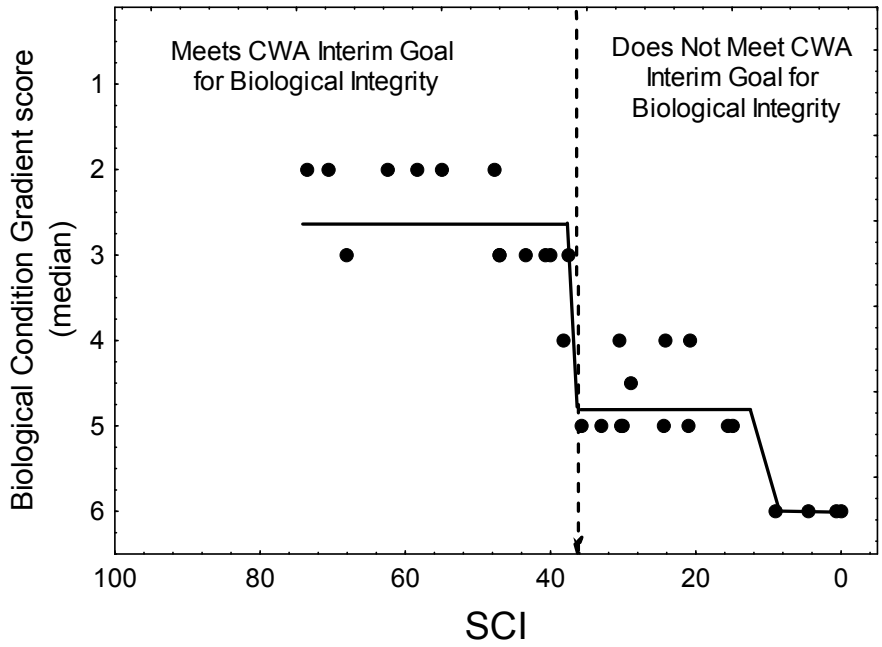


Figure 17. Change point model showing the relationship between the median BCG scores for each test sample and the corresponding SCI scores (change points = 35.8 and 9.1, alpha < 0.05).

## *Defining biocriteria using reference site condition*

Another U.S. EPA-recommended approach for setting the standard for biological condition involves analyzing reference sites. Reference sites may be defined as those with minimal human disturbance, approximating the "natural" condition of a region (U.S. EPA, 2006a, b; Hughes, 1995 Stoddard et al. 2006). From a set of reference sites, measures of site condition, such as a multimetric index of biological condition, can be used to define thresholds for acceptable and unacceptable biological condition.

Lower percentiles, e.g., the 10$^{th}$ or 25$^{th}$ percentile, of the distribution of biological index values observed in reference sites are used by many states to define biological criteria. The selection of the specific percentile depends on the relative confidence associated with the initial selection of reference sites.

Defining the limit of reference condition using a subset of reference sites recognizes that natural stressors can affect the biology of a stream, introducing variability into the reference site data distribution. In Florida, natural drought will cause dry or stagnant flow conditions, which may be associated with lower SCI values. Substrate diversity at some reference sites may be naturally limiting, which also may reduce SCI values. For Florida streams, our confidence was high that reference sites truly represented reference condition; therefore, we selected the 10$^{th}$ (rather than the 25$^{th}$) percentile.

### Reference site selection

To develop the HDG, FDEP biologists selected sites from each of their regions that represented the broadest possible range of human influence, including sites that represented the very best or minimally disturbed sites in their regions. In the early years of FDEP's bioassessment program, every effort was made to identify the best examples of reference sites in the state. Over time, program



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emphasis has shifted to other sampling needs, including status and trend monitoring, TMDL assessment, and springs studies **(Figure 18)**. Due to the extensive experience and knowledge of DEP regional biologists, most of the minimally disturbed stream sites have already been identified and sampled. In contrast, other states that started their biological monitoring programs later may have identified their reference sites from a probabilistic sampling design. The criteria for selecting reference sites may be the same for both data sets, but the results may differ. Specifically, hand-picked reference sites in Florida may represent the very best sites available while other sites meeting the criteria for reference sites may have lower SCI values due to natural variability or minimal human disturbance.

Reference sites were initially selected as sites with HDG = 0. Recall that HDG = 0 does not mean *no* human disturbance, but minimal human disturbance. The criteria for HDG = 0 were:

- $NH_3$ < 0.1 mg/L
- Habitat Assessment Index > 65% of total points (scored from 0–100% of total points)
- Hydrological index < 6 (scored from 0–10), and
- LDI < 2.

Sites meeting these initial conditions were further scrutinized to eliminate sites potentially influenced by human activities not captured by the HDG. Additional criteria applied to reference sites included:

- Habitat Assessment Index > 75% of total points
- Site average conductivity < 600 umhos/cm
- No receiving sites for NPDES-permitted wastewater treatment facility discharges, based on a review of GIS coverage information from the Water Facilities Regulation (WAFR) database, and
- The number of individuals identified ranged from 100-175 (inclusive).

These criteria were established to select the very best reference sites from among sites with a HDG score of 0. The habitat assessment index criterion was raised from 65% to 75% because sites scoring 75% or greater were equivalent to all or most of the habitat assessment parameters scoring as “Optimal” or “Suboptimal” (FDEP, 2004). The < 600 umhos/cm criterion for conductivity was based on results uncovered while evaluating a revision of the Class III freshwater specific conductance criterion (Chapter 62-302.530(61) F.A.C.) This study found that for a specific conductance of 20 umhos/cm approximately half of the taxa within a SCI sample would be sensitive taxa and for 600 umhos/cm the proportion of sensitive taxa decreased to almost none (FDEP, 2005). For the third criterion, sites could not be located below an active facility discharge based on review of GIS coverages and information from district biologists. A lower limit of 100 individuals was set as the minimum sample size for reference sites in order to be consistent with other state monitoring programs. This minimum of 100 individuals is consistent with a target of 100 organisms used by a majority of other state agencies (54% of 43 state programs surveyed; Carter and Resh, 2001). These criteria were established for selection of reference sites only; the application of the SCI is not limited to sites or samples conforming to these reference site criteria.

Based on these criteria, 64 reference sites with a total of 205 site-visits were selected **(Appendix J).** For the 64 vetted reference sites, statistics were calculated from the distribution of reference site SCI values based on the median SCI value observed for each site. SCI values for reference sites ranged from 43.4–92.6 representing the natural variability associated with the SCI at sites with minimal human disturbance **(Table 13)**. The lower 10$^{th}$ percentile SCI value for the reference site distribution was 48.8.

Note that the 10$^{th}$ percentile could have been derived in more than one way from the reference site scores. When we calculated these alternate statistics they provided very similar SCI values. Examples include the 10$^{th}$ percentile of SCI for all site-visits (44.9, N = 205); the 10$^{th}$ percentile for



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reference site mean values (SCI = 50.5, N = 64); the 10th percentile for the most recent site-visit (SCI = 50.2, N = 64).

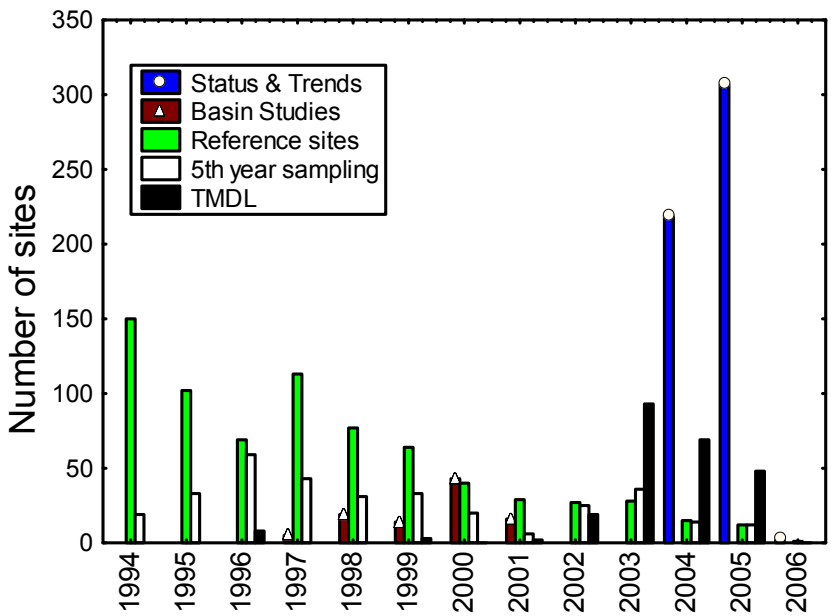


Figure 18. Number of stream sites sampled for SCI by year and program.

**Table 13. Statistics and percentile values for the SCI reference sites.**
*Statistics and values for the distribution of SCI values at reference sites (N = 64).*

| Statistic | Value |
|---|---|
| N | 64 |
| Minimum | 43.4 |
| 10th percentile | 48.8 |
| 25th percentile | 56.7 |
| Median | 67.3 |
| Average | 66.3 |
| Standard Deviation | 12.6 |
| 75th percentile | 75.2 |
| 90th percentile | 84.0 |
| Maximum | 92.6 |

Matching the approach of other states (EPA, 2006b), we defined a buffer of SCI values below the 10th percentile to represent the natural variability associated with field sampling that could be due to water level fluctuation, weather, or microhabitat differences. We used the MDD (calculated above in Chapter 2: *Statistical Precision of Indexes*) to estimate the variability in SCI associated with repeat sampling of the same stream site. Specifically, we subtracted half the MDD interval from the 10th percentile to obtain a



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lower limit of reference value of SCI = 35 (48.8 – 13.4 = 35.4). Thus, an SCI value of 35 represented the lowest SCI value we expect to obtain from a reference site.

### Distinguishing between Category 1 and 2

We used SCI values observed at reference sites to propose a threshold between Category 1 ("exceptional") and Category 2 ("healthy"). The upper 90$^{th}$ percentile of SCI values for the 64 reference sites was selected to represent exceptional sites (SCI score of 84.0). As for the impairment threshold definition above, we defined a buffer below the 90$^{th}$ percentile using half the MDD interval (13.4) to yield an SCI value of 71 as the limit of Category 1 (84.0 – 13.4 = 70.6). The MDD interval provides a buffer around the point estimate of the lowest SCI value representing exceptional reference condition.

As above, we note that the 90$^{th}$ percentile could have been derived in more than one way from the reference sites. And, again as above, when we calculated these alternate statistics they provided very similar SCI values. Examples include the 90$^{th}$ percentile of SCI for all site-visits (86.7, N = 205); the 90$^{th}$ percentile for reference site mean values (SCI = 83.8, N = 64); the 90$^{th}$ percentile for the most recent site-visit (SCI = 83.9, N = 64).

## Biocriteria for streams

The above analyses support the establishment of three categories of aquatic life use for Florida streams, described as Category 1 ("exceptional", with SCI = 71–100), Category 2 ("healthy", with SCI = 35–70), and Category 3 ("impaired", with SCI = 0–34). **Table 14** provides a narrative description for the numeric ranges of SCI**.**

The threshold values for the SCI were also used to define biocriteria for the BioRecon Index. Data were collected using both protocols at 112 sites. A linear regression equation was used to equate threshold values of SCI to corresponding values of the BioRecon Index. This analysis was used to define Category 1 ("exceptional", with BioRecon = 6.5–10), Category 2 ("healthy", with BioRecon = 3.1–6.4), and Category 3 ("impaired", with BioRecon = 0–3.0) stream condition.

To have confidence in the final stream assessment for regulatory decisions, two separate, temporally independent site-visits resulting in a Category 3 evaluation are required to list a stream site as failing to support aquatic life use.

**Table 14. Proposed aquatic life use categories, corresponding SCI values, and descriptions of biological conditions typically found for that category**

*Narrative metric descriptions were not used to score metrics; rather, they describe values associated with a range of SCI values.*

| Aquatic life use category | SCI Range | Description |
|---|---|---|
| **Category 1** | 71–100 | Higher diversity of taxa than for Category 2, particularly for Ephemeroptera and Trichoptera; several more clinger and sensitive taxa than found in Category 2; high proportion for Tanytarsini; few individuals in the dominant taxon; very tolerant individuals make up a very small percentage of the assemblage |
| **Category 2** | 35–70 | Diverse assemblage with 30 different species found on average; several different taxa each of Ephemeroptera, Trichoptera, and long-lived and, on average, 5 unique clinger and 6 sensitive taxa routinely found; small increase in dominance by a single taxon relative to Category 1; very tolerant taxa represent a small percentage of individuals, but noticeably increased from Category 1 |
| **Category 3** | 0–34 | Notable loss of taxonomic diversity; Ephemeroptera, Trichoptera, long-lived, clinger, and sensitive taxa uncommon or rare; half the number of filterers than expected; assemblage dominated by a tolerant taxon; very tolerant individuals represent a large proportion of the individuals collected |



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# CHAPTER 5: CONCLUSIONS

The correlation between biological metrics and the independently derived human disturbance gradient (HDG) provided strong evidence in support of the relationship between human influence and biological condition. The high correlation between the SCI and HDG was verified using an independent set of data. In addition, the pattern of biological response to human disturbance was repeated across all 3 regions in Florida (panhandle, peninsula, and northeast), indicating that the multimetric index was independent of geographic context. Finally, the index was consistent across years, with a nearly identical relationship between the SCI and HDG for 10 years of data.

To document every source of human disturbance is prohibitively expensive; consequently, the HDG was inevitably incomplete. We had no information on metals, pesticides, dredging, or other pollutants. Aerial pesticide application is a frequent practice on agricultural lands and can be very damaging to stream invertebrates, as pesticides are concentrated in rain runoff (Hutchens et al., 1998). This lack of information may likely explain why low SCI values were observed for sites with no known source of disturbance. In sharp contrast, sites with known disturbance never had high values for the SCI. This result supports the idea that much of the lack of fit between disturbance and biological condition is largely due to measurement error associated with quantifying human disturbance, rather than the variability of biological measures (Bryce et al., 1999; Karr and Morishita Rossano, 2001; Fore, 2003). In short, multimetric indexes accurately synthesize the influence of human activities over time, while measures of human disturbance are at best approximations of the complex ways that human activities influence the environment.

The SCI had good statistical precision and could detect 3.7 categories of biological condition based on a single sample and 5 categories based on 2 samples. The BioRecon was not as precise but had adequate precision to detect 2.5 categories of biological condition based on a single sample and 3.5 categories for 2 samples. Strong correlation with an independent measure of disturbance, good statistical precision, immunity to regional differences or watershed size, and minimal sensitivity to seasonal or yearly differences all contribute to the usefulness of these indexes for the biological assessment of Florida's streams.

We followed U.S. EPA guidance to translate index values into biocriteria to be included as part of the water quality standards for the state. Two approaches were used to define categories of biological condition. The primary approach involved convening a panel of regional aquatic scientists to apply a nationally endorsed conceptual model of biological condition to Florida stream data, and was used to define the threshold of impairment (line between biological condition Categories of 2 and 3). The second approach used data from minimally disturbed areas (reference sites) to define expectations for reference condition and to define the threshold of exceptional sites (line between biological condition Categories of 1 and 2). Based on these results, three categories of biological condition are proposed to represent Category 1 ("exceptional"), Category 2 ("healthy)",and Category 3 ("impaired") biological condition for Florida stream site assessments. The results reported here provide the scientific basis for managing and protecting Florida's stream resources.



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# APPENDICES

## Appendix A. HDG calculation

This appendix details the calculations and interim steps involved in deriving an HDG value for each site. The HDG combined 4 measures of human disturbance ($NH_3$, habitat index, hydrologic index, and LDI) by first converting them to unitless scores (representing low, medium and high disturbance) and then summing the scores. When multiple site visits occurred at a single sampling location, the individual component measures were averaged for each site and then converted to unitless scores. For a site with multiple visits, $NH_3$, the habitat index, and, in a few instances, the hydrologic index, could change. LDI could not change because it was calculated only once for each site. When component values were missing, they were assumed to be in good condition and scored as 0.

### *Coding for $NH_3$*

Many of the reported $NH_3$ values had qualifiers associated with them. In some cases the qualifiers were omitted and the results were used as reported and in others the value was simply set to 0 to simplify coding for the HDG (Table A-1). Another more common approach is to record half of the detection limit rather than 0, but for calculating the HDG this interim recoding did not matter because either value would be scored as a 0 for the HDG.

**Table A-1. Laboratory codes associated with water chemistry values, their description, and the action used to convert them to simple numbers. All the codes are listed but J and Q were not found for the $NH_3$ values.**

| CODE | Description | ACTION |
|---|---|---|
| **A** | A-Value reported is the mean of two or more determinations | omitted A qualifier and used result as reported |
| **I** | I- The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit | set result to 0 |
| **J** | J-Estimated Value | omitted J qualifier and used result as reported |
| **Q** | Q-Sample held beyond normal holding time | omitted Q qualifier and used result as reported |
| **U or BDL** | U-Material analyzed for but not detected; value reported is the minimum detection limit | set result to 0 |
| **T** | T- below detection limit; estimate | set result to 0 |



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## *Derivation of habitat index values*

Data for this study were collected from 1991–2001. During that time the habitat assessment protocol was modified and additional measurements were added. During these different time periods the maximum possible total score changed. To make comparisons of the habitat index across years, we divided habitat index values by the total maximum score that was possible for that protocol. In this way the habitat index was transformed into a percentage measure that ranged from 0–100%.

## *Derivation of hydrologic index values*

At the April, 2002, Biocriteria Meeting, a training session on the hydrologic index scoring process was conducted. The purpose for assigning the hydrologic modification scores was to develop one of several components of the HDG. FDEP biologists were instructed to use their knowledge of human activities within a watershed and upstream of selected sampling sites in order to assign a score from 1 to 10, following the specific criteria presented (see Table 2, main document). The key issues for consideration in the scoring process were:

- *The stream's hydrograph response to a rain event.*
- *The amount of ditching or impoundments within the watershed that would alter normal water deliveries to the stream.*
- *Topographic alterations in the watershed that would adversely affect water deliveries to the stream.*
- *Water withdrawals (consumptive use) in the area that may reduce water to the stream.*
- *The relative amount of impervious surfaces in the watershed that would "spike" the hydrograph.*

Since the participants had simultaneously visited certain streams as part of previous Biocriteria Meeting training and quality assurance activities, appropriate hydrologic index scores for these example streams were discussed, to promote consistency in the application of the process.

## *Scoring component measures of the HDG*

In order to calculate the HDG, the 4 component measures were first transformed into unitless scores (see Table 5, main document, for scoring rules). The first round of data was used to derive the break points for scoring the measures. The graphs used to define the break points are shown below for each of the 4 component measures. To define the scoring rules, natural break points in the data were used. When no break points were obvious, the range of the data was divided into approximately equal parts.



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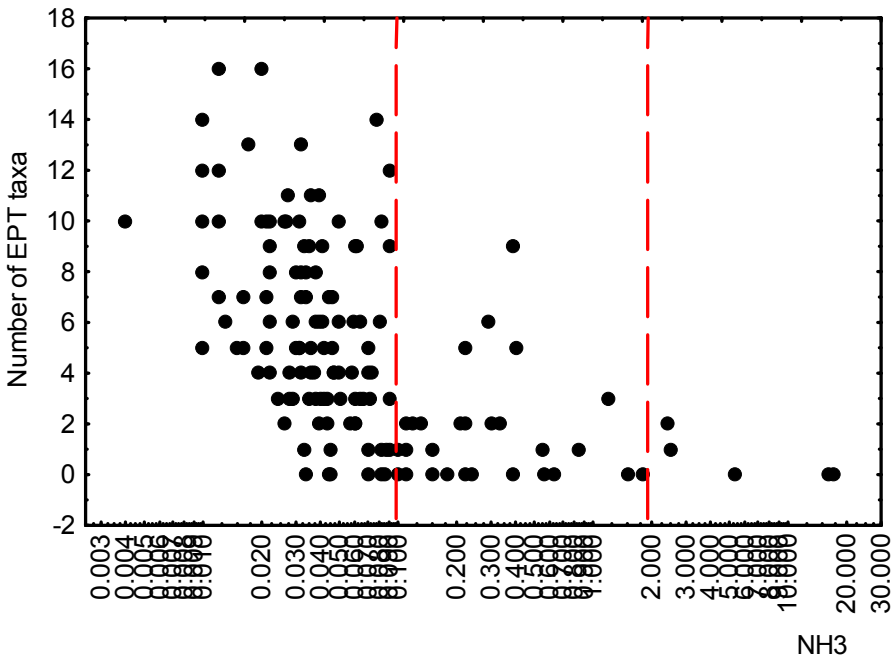


Figure A-1. Scoring rules for $NH_3$ for inclusion in the HDG. $NH_3$ plotted against a logarithmic axis.

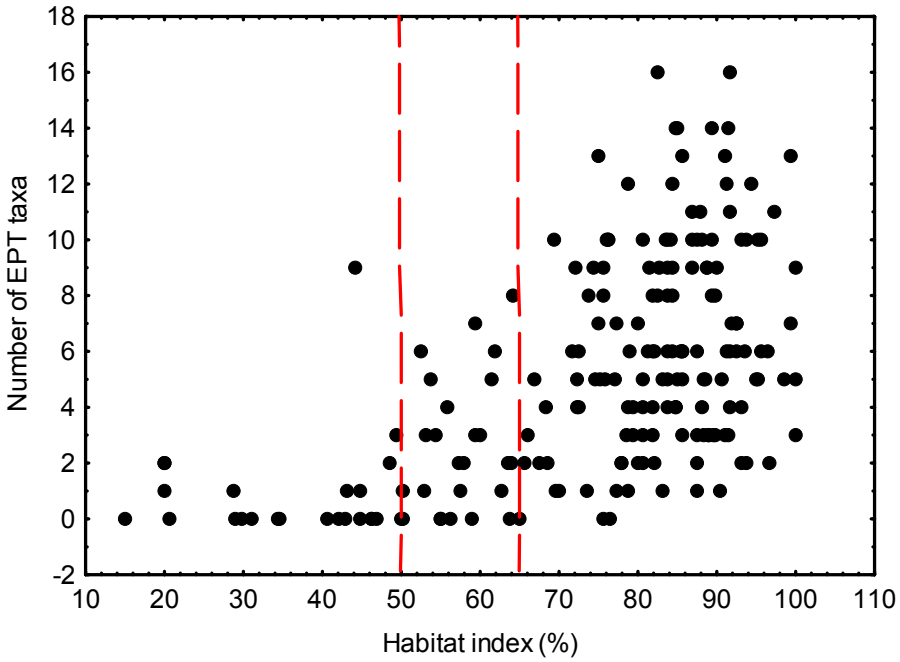


Figure A-2. Scoring rules for the habitat index for inclusion in the HDG.



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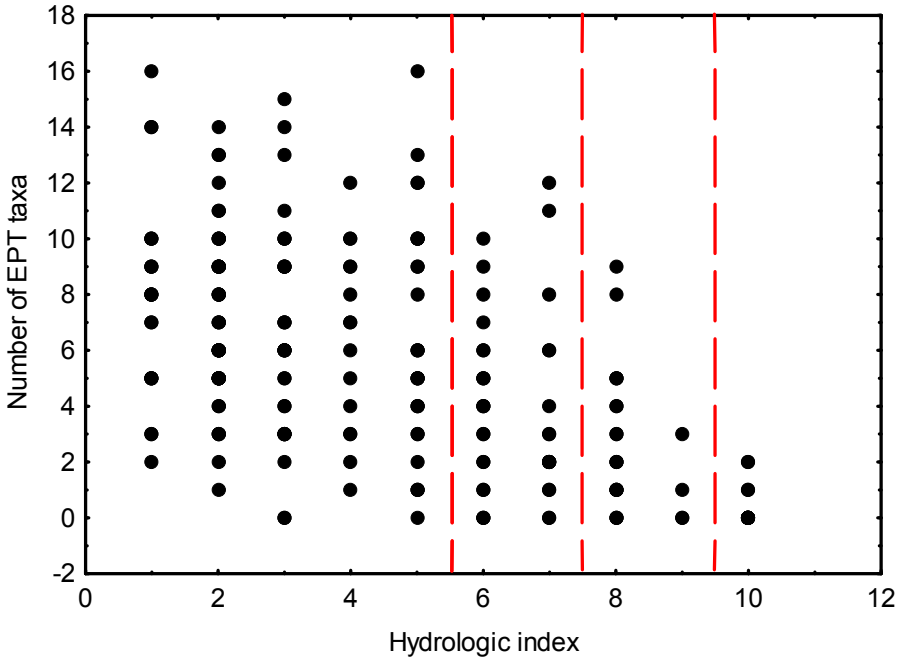


Figure A-3. Scoring rules for hydrologic index for inclusion in the HDG.

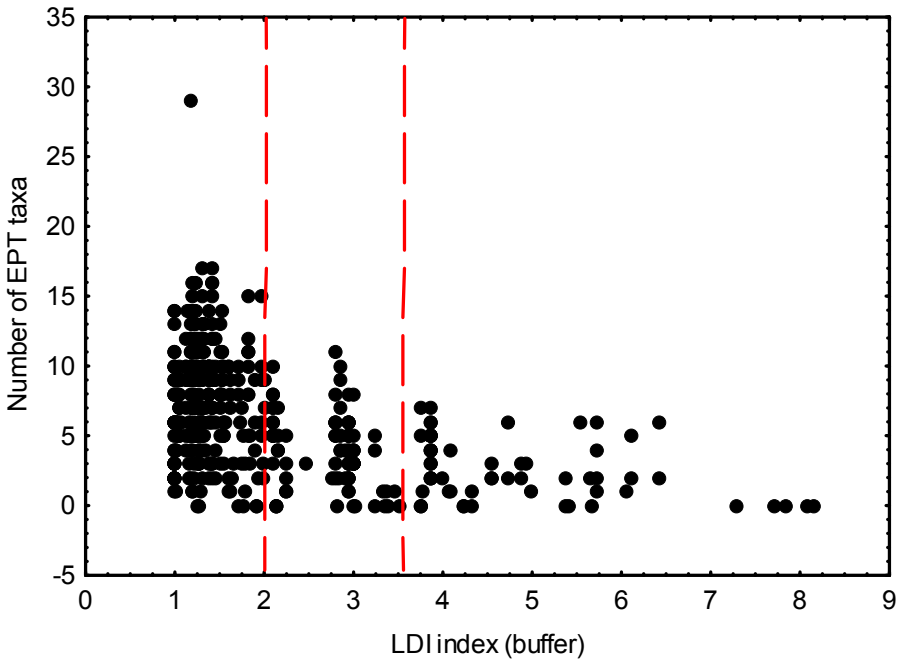


Figure A-4. Scoring rules for the LDI index for inclusion in the HDG.



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# Appendix B. Long-lived taxa

*Taxonomic order, family, genus, or species name of taxa used to calculate long-lived taxa richness. Taxonomic synonyms present in the current Florida database are also shown. Long-lived (semivoltine) taxa require more than one year to complete their life cycles.*

| Order | Family | Genus | Species (Long-lived) | Synonyms |
|---|---|---|---|---|
| Decapoda | | | All families, genera, and species | |
| | | | | |
| Basommatophora | Lymnaeidae | *Fossaria* | All species | |
| | | | | |
| Mesogastropoda | Ampulariidae | *Pomacea* | All species | |
| | | | | |
| Veneroida | Corbiculiidae | *Corbicula* | *Corbicula fluminea* | *Corbicula manilensis* |
| | | | | |
| Unionoida | Unionidae | | All genera and species | |
| | | | | |
| Odonata | Aeshnidae | *Basiaeschna* | *Basiaeschna janata* | |
| | | *Boyeria* | All species | |
| | Cordulegastridae | | All species | |
| | Gomphidae | *Gomphus* | *All species* | *Gomphurus* |
| | | *Haegenius* | *Hagenius brevistylus* | |
| | | *Progomphus* | All species | |
| | Libellulidae | *Macromia* | All species | |
| | | *Somatochlora* | All species | |
| | | *Tetragoneuria* | All species | *Epitheca* |
| | Petaluridae | *Tachopteryx* | *Tachopteryx thoreyi* | |
| | | | | |

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| Order | Family | Genus | Species (Long-lived) | Synonyms |
|---|---|---|---|---|
| Plecoptera | Pteronarcidae | *Pteronarcys* | *Pteronarcys dorsata* | |
| | Leuctridae | *Leuctra* | All species | |
| | Peltoperlidae | *Tallaperla* | *Tallaperla cornelia* | |
| | Perlidae | *Acroneuria* | All species | |
| | | *Agnetina* | *Agnetina annulipes* | |
| | | *Eccoptura* | *Eccoptura xanthenes* | *Acroneuria xanthenes* |
| | | *Neoperla* | All species | |
| | | *Paragnetina* | All species | *Banksiana* |
| | | | | *Banksiella* |
| | Perlodidae | *Clioperla* | *Clioperla clio* | *Isoperla clio* |
| | | *Perlinella* | *Perlinella drymo* | *Atoperla ephyre* |
| | | | *Perlinella ephyre/zwicki* | |
| | | *Isoperla* | *Isoperla orata* | |
| | | | | |
| Megaloptera | Corydalidae | | All genera and species | |
| | | | | |
| Trichoptera | Brachycentridae | *Brachycentrus* | *Brachycentrus americanus* | *Oligoplectrum amercanum* |
| | | *Micrasema* | All species | |
| | Calamoceratidae | *Heteroplectron* | *Heteroplectron americanum* | |
| | Hydropsychidae | *Diplectrona* | *Diplectrona modesta* | |
| | | *Macrostemum* | *Macrostemum carolina* | *Macronema carolina* |
| | | | | *Macronemum carolina* |
| | Lepidostomidae | *Lepidostoma* | All species | *Alepomyia, Alepomyiodes,* |
| | | | | *Arcadopsyche, Atomyia,* |
| | | | | *Jenortha, Mormomyia,* |
| | | | | *Neuropsyche, Nosopus,* |
| | | | | *Notiopsyche, Olemira,* |

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| Order | Family | Genus | Species (Long-lived) | Synonyms |
|---|---|---|---|---|
| | | | | *Oligopsyche, Phanopsyche,* |
| | | | | *Pristosilo, Athripsodes* |
| | Leptoceridae | *Ceraclea* | All species | |
| | Limnephilidae | *Ironoquia* | *Ironoquia punctatissisma* | |
| | | *Pycnopsyche* | All species | |
| | Molannidae | *Molanna* | All species | |
| | Phryganeidae | *Banksiola* | *Banksiola concatenata* | *Neuronia concatenata* |
| | | *Ptilostomis* | *Ptilostomis postica* | *Neuronia postica* |
| | | *Agrypnia* | *Agrypnia vestita* | |
| | Psychomyiidae | *Lype* | *Lype diversa* | |
| | Rhyacophilidae | *Rhyacophila* | All species | |
| | Uenoidae | *Neophylax* | All species | |

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# Appendix C. Sensitive taxa

*Taxonomic order, family, genus or species name; taxonomic synonyms in the current Florida database; whether the taxon was included in the Florida Index (2 = very sensitive; 1 = sensitive); and species name of Florida Index taxa are listed for taxa identified as sensitive to human disturbance.*

| Order | Family | Genus | Species (sensitive) | Synonyms | Florida index | |
|---|---|---|---|---|---|---|
| Acariformes | Lebertiidae | *Lebertia* | All species | | | |
| | | | | | | |
| Isopoda | Asellidae | *Caecidotea* | *Caecidotea* | Asellus | 1 | *Caecidotea* spp. |
| | | | | | | |
| Amphipoda | Crangonyctidae | *Crangonyx* | *Crangonyx* | | | |
| | | | | | | |
| Ephemeroptera | Baetidae | *Acerpenna* | *Acerpenna pygmaea* | *Baetis pygmaeus* | | |
| | Ephemerellidae | | All genera and species | | | |
| | Heptageniidae | | All genera and species | | 1 | *Stenacron interpunctatum*<br>*Stenonema mexicanum integrum* |
| | | | | | 2 | *Stenonema exiguum*<br>*Stenonema smithae* |
| | Leptophlebiidae | | All genera and species | | | |
| | Leptohyphidae | | All genera and species | | | |
| | | | | | | |
| Odonata | Libellulidae | *Macromia* | All species | | 2 | *Macromia* spp. |
| | | | | | | |
| Plecoptera | | | All families, genera and species | | 2 | All Plecoptera |
| | | | | | | |
| Trichoptera | Hydropsychidae | *Hydropsyche* | All species | | 2 | *Hydropsyche* spp. |
| | Leptoceridae | *Triaenodes* | All species | | | |
| | Philopotamidae | *Chimarra* | *Chimarra* | | 2 | *Chimarra* spp. |

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| Order | Family | Genus | Species (sensitive) | Synonyms | Florida index | |
|---|---|---|---|---|---|---|
| | Psychomyiidae | *Lype* | *Lype diversa* | | | |
| | | | | | | |
| Coleoptera | Elmidae | *Ancyronyx* | *Ancyronyx variegatus* | | | |
| | | *Gonielmis* | *Gonielmis dietrichi* | | | |
| | | *Macronychus* | *Macronychus glabratus* | | | |
| | | | | | | |
| Diptera | Chironomidae | *Microtendipes* | All species | | | |
| | | *Parametriocnemus* | All species | | | |
| | | *Polypedilum* | *Polypedilum aviceps* | | | |
| | | *Rheocricotopus* | All species | | 2 | *Rheocricotopus robacki* |
| | | *Stempellinella* | All species | | | |
| | | *Tanytarsus* | *Tanytarsus sp. d epler* | | | |
| | | *Tanytarsus* | *Tanytarsus sp. m epler* | | | |
| | | *Tribelos* | *Tribelos jucundum* | | | |
| | Empididae | *Hemerodromia* | *Hemerodromia* | | | |
| | Simuliidae | | All genera and species | | 2 | *Simulium* spp. |

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# Appendix D. Very tolerant taxa

*Taxonomic order, family, genus or species name; taxonomic synonyms in the current Florida database; whether the taxon was included in the Florida Index (2 = very sensitive; 1 = sensitive); and species name of Florida Index taxa are listed for taxa identified as very tolerant to human disturbance.*

| Order | Family | Genus | Species (very tolerant) | Synonyms | Florida Index | |
|---|---|---|---|---|---|---|
| Hoplonemertea | Tetrastemmatidae | *Prostoma* | *Prostoma rubrum* | | | |
| | | | | | | |
| Haplotaxida | Naididae | *Bratislavia* | *Bratislavia unidentata* | | | |
| | | *Dero* | All species | | | |
| | | *Nais* | *Nais communis* complex | Nais communis | | |
| | | | | *Nais elinguis* | | |
| | | | | *Nais pardalis* | | |
| | | | | *Nais variabilis* | | |
| | | *Pristina* | *Pristina synclites* | | | |
| | Tubificidae | *Haber* | *Haber speciosus* | | | |
| | | *Limnodrilus* | All species | *Camptodrilus californicus* | | |
| | | | | *Limnodrilus aurantiacus* | | |
| | | | | | | |
| Lumbriculida | Lumbriculidae | *Lumbriculus* | All species | | | |
| | | | | | | |
| Rhynchobdellida | Glossiphoniidae | | All genera and species | | | |
| | | | | | | |
| Basommatophora | Ancylidae | *Hebetancylus* | *Hebetancylus excentricus* | | | |
| | | *Laevapex* | All species | | | |
| | Physidae | *Physella* | All species | | | |
| | Planorbidae | | All genera and species | | | |

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| Order | Family | Genus | Species (very tolerant) | Synonyms | Florida Index | |
|---|---|---|---|---|---|---|
| | | | | | | |
| Mesogastropoda | Hydrobiidae | *Pyrgophorus* | *Pyrgophorus platyrachis* | *Pyrogophorus platyrachis* | | |
| | Thiaridae | *Melanoides* | All species | | | |
| | | | | | | |
| Odonata | Libellulidae | *Pachydiplax* | *Pachydiplax longipennis* | | | |
| | Coenagrionidae | *Argia* | *Argia sedula* | | 2 | *Argia sedula* |
| | | *Enallagma* | *Enallagma cardenium* | *Enallagma coecum* | | |
| | | *Ischnura* | All species | Anomalagrion | | |
| | | | | | | |
| Heteroptera | Mesoveliidae | | All genera and species | | | |
| | | | | | | |
| Lepidoptera | Pyralidae | | All genera and species | | | |
| | | | | | | |
| Coleoptera | Haliplidae | *Peltodytes* | All species | | | |
| | | | | | | |
| Diptera | Chironomidae | *Larsia* | All species | | 1 | *Larsia lurida* |
| | | | | | 1 | *Larsia decolorata* |
| | | *Chironomus* | *All species* | *Tendipes Chaetolabis* | | |
| | | *Cladopelma* | *Cladopelma* | | | |
| | | *Cricotopus* | All species | | 2 | *Cricotopus bicinctus* |
| | | *Cryptochironomus* | All species | | | |
| | | *Dicrotendipes* | *Dicrotendipes modestus* | | | |
| | | | *Dicrotendipes neomodestus* | | | |
| | | *Glyptotendipes* | All species | | | |
| | | *Goeldichironomus* | All species | | | |
| | | *Kiefferulus* | *Kiefferulus* | | | |

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| Order | Family | Genus | Species (very tolerant) | Synonyms | Florida Index | |
|---|---|---|---|---|---|---|
| | | *Parachironomus* | All species | | | |
| | | *Polypedilum* | *Polypedilum beckae* | *Asheum beckae*<br>*Pedionomus beckae* | | |
| | | | *Polypedilum illinoiense grp.* | *Polypedilum illnoense* | 1 | *Polypedilum illinoiense grp.* |
| | | | *Polypedilum tritum* | *Chironomus tritum* | | |
| | | *Tanypus* | All species | Pelopia | | |
| | | *Tanytarsus* | *Tanytarsus sp. f epler* | | | |
| | Stratiomyidae | *Odontomyia* | *Odontomyia* | Eulalia | | |
| | Tipulidae | *Tipula* | *Tipula* | *Nippotipula*<br>*Playttipula*<br>*Yamatotipula* | | |

# Appendix E. Regional calibration of SCI metric scores

After metrics were selected based on their correlation with the human disturbance gradient (HDG), they were transformed to unitless scores to compensate for differences in their ranges of values. For example, percentage filterer might range from 0 to 60% while long-lived taxa range only from 0 to 7. The 5$^{th}$ and 95$^{th}$ percentiles for each metric were used to determine the metric values that would be defined as 0 and 10 **(Table E-1)**. To control for differences due to natural variability associated with different bioregions, the percentiles were calculated within each of the 3 bioregions.

The next step tested for regional differences in metrics scores by regressing metric scores for each bioregion against the HDG and comparing the slopes of their lines. If the regression lines for each bioregion failed to match closely, the endpoints for the metrics that defined values of 0 and 10 were adjusted away from the 5$^{th}$ and 95$^{th}$ percentiles and tested again until the regression lines for the different bioregions yielded a similar relationship with HDG **(Figure E-1; Table E-2)**. In some cases, the 5$^{th}$ percentile values were very close and they were simply averaged across bioregions for simplicity.

After determining which metric values define the scores of 0 and 10, the remaining metric values between those endpoints must also be scored (**Table E-3;** FDEP, 2007). As an example, for taxa richness in the northeast bioregion the interval between the 2 endpoints is 42 – 16 which equals 26. If the lowest endpoint is 16, we would first subtract 16 from the total taxa richness observed at a site, divide by the interval length of 26, and multiply the result by 10 to obtain scores that range from 0 to 10. Taxa richness values less than 16 would be scored as 0 and values greater than 42 would be scored as a 10.

**Table E-1. SCI metric name, 5$^{th}$ and 95$^{th}$ percentile values by bioregion for site-visits with 75–175 individuals. Underlined values indicate that the metric values used to define a score of 0 or 10 were slightly different from the percentile value.**

| SCI Metric | NE 5$^{th}$ %tile | PH 5$^{th}$ %tile | PS 5$^{th}$ %tile | NE 95$^{th}$ %tile | PH 95$^{th}$ %tile | PS 95$^{th}$ %tile |
|---|---|---|---|---|---|---|
| Total taxa | 17.0 | 16.0 | 16.0 | 42.0 | 46.0 | 41.0 |
| Ephemeroptera taxa | 0.0 | 0.0 | 0.0 | 4.0 | 6.0 | 5.0 |
| Trichoptera taxa | 0.0 | 0.0 | 0.0 | 7.0 | 7.0 | 7.0 |
| % Filterer | 1.4 | 1.3 | 0.9 | 52.0 | 45.1 | 40.0 |
| Long-lived taxa | 0.0 | 0.0 | 0.0 | 3.0 | 5.0 | 4.0 |
| Clinger taxa | 0.0 | 0.0 | 0.0 | 10.0 | 14.0 | 8.0 |
| % Dominance | 10.9 | 9.6 | 11.6 | 47.2 | 42.6 | 54.5 |
| % Tanytarsini | 0.0 | 0.0 | 0.0 | 27.9 | 22.8 | 26.8 |
| Sensitive taxa | 0.0 | 0.0 | 0.0 | 11.0 | 16.0 | 9.0 |
| % Very tolerant | 0.0 | 0.0 | 0.8 | 78.2 | 36.3 | 58.5 |



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**Table E-2 (Table 8 from main SCI document). SCI metric name, adjusted metric values used to scores metrics (endpoints of the range represent scores of 0 and 10), and comment describing how the values differed from the 5th and 95th percentiles. Underlined values correspond to the underlined values in Table E-1.**

| SCI Metric | Northeast | Panhandle | Peninsula | Comment |
|---|---|---|---|---|
| Total taxa | 16–42 | 16–49 | 16–41 | Averaged the 5th %tile and used same value in all bioregions |
| Ephemeroptera taxa | 0–3.5 | 0–6 | 0–5 | Lowered expectations for 95th %tile for NE |
| Trichoptera taxa | 0–6.5 | 0–7 | 0–7 | Lowered expectations for 95th %tile for NE |
| % Filterer | 1–42 | 1–45 | 1–40 | Lowered expectations for 95th %tile for NE |
| Long-lived taxa | 0–3 | 0–5 | 0–4 | |
| Clinger taxa | 0–9 | 0–15.5 | 0–8 | Lowered expectations for 95th %tile for NE; raised for PH |
| % Dominance | 54–10 | 43–10 | 54–10 | Averaged lower 5th %tile; |
| % Tanytarsini | 0–26 | 0–26 | 0–26 | Raised expectations for 95th %tile for NE |
| Sensitive taxa | 0–11 | 0–19 | 0–9 | Raised expectation for 95th %tile for PH |
| % Very tolerant | 78–0 | 36–0 | 59–0 | |

**Table E-3. SCI metric scoring formulae for converting metric values to a metric score ranging from 0 to 10. In each equation, 'X' stands for the raw metric value; "ln" stands for the natural log.**

| SCI metric | Northeast | Panhandle | Peninsula |
|---|---|---|---|
| Total taxa | 10 * (X–16)/26 | 10 * (X–16)/33 | 10 * (X–16)/25 |
| Ephem. taxa | 10 * X /3.5 | 10 * X /6 | 10 * X /5 |
| Trichoptera taxa | 10 * X /6.5 | 10 * X /7 | 10 * X /7 |
| % Filterer | 10 * (X–1)/41 | 10 * (X–1)/44 | 10 * (X–1)/39 |
| Long-lived taxa | 10 * X /3 | 10 * X /5 | 10 * X /4 |
| Clinger taxa | 10 * X /9 | 10 * X /15.5 | 10 * X /8 |
| % Dominance | 10 – ( 10 * [ ( X–10)/44 ] ) | 10 – ( 10 * [ ( X–10)/33 ] ) | 10 – ( 10 * [ ( X–10)/44 ] ) |
| % Tanytarsini | 10 * [ ln( X + 1) /3.3] | 10 * [ ln( X + 1) /3.3] | 10 * [ ln( X + 1) /3.3] |
| Sensitive taxa | 10 * X /11 | 10 * X /19 | 10 * X /9 |
| % Very tolerant | 10 – (10 * [ ln( X + 1)/4.4 ] ) | 10 – (10 * [ ln( X + 1)/3.6 ] ) | 10 – (10 * [ ln( X + 1)/4.1 ] ) |



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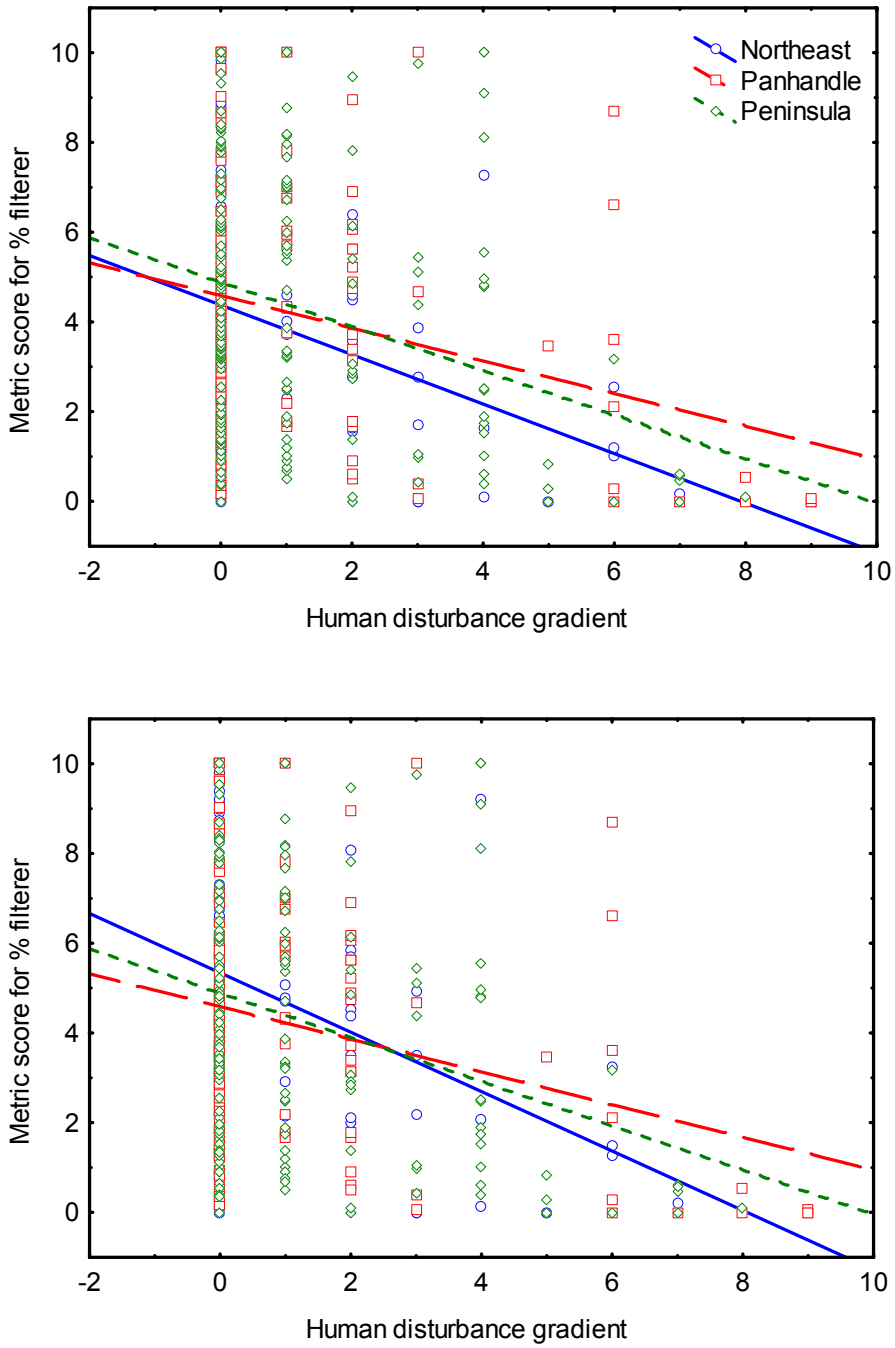


Figure E-1. Metric scores for percent filterer by bioregion. The upper panel shows metrics scored according the 5th and 95th percentiles and the lower panel shows scores after adjustment. The regression line for the NE bioregion was lower than the other 2 regions initially and plotted higher and closer to the other 2 lines after adjustment.



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## *References*

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# Appendix F. ANOVA output and regression results for the SCI and BioRecon

**Table F-1. General linear model output for the SCI versus HDG by region (northeast, panhandle, or peninsula)**

*Neither the region nor the interaction of the HDG and region was statistically significant. Test failed to detect a difference in SCI values due to region.*

| Univariate Tests of Significance for AvgOfSCI6_100 (1NGM_4) | | | | | |
|---|---|---|---|---|---|
| | **SS** | **df** | **MS** | **F** | **p** |
| Intercept | 403623.3 | 1 | 403623.3 | 1832.253 | 0.000000 |
| Region | 361.6 | 2 | 180.8 | 0.821 | **0.441846** |
| HDG2 | 62750.7 | 1 | 62750.7 | 284.858 | 0.000000 |
| Region*HDG2 | 1142.9 | 2 | 571.5 | 2.594 | **0.077660** |
| Error | 37449.0 | 170 | 220.3 | | |

**Table F-2. General linear model output for the SCI versus HDG by year class (1992–93, 1994–95, 1996–97, 1998–99, and 2000–01)**

*The interaction term was not significantly different for year class and the HDG, suggesting the lines were parallel (equal slopes). The year class alone, however, was significant, with values for 1994–95 being slightly higher for the SCI.*

| Univariate Tests of Significance for SCI6_100 (1NGM_4) | | | | | |
|---|---|---|---|---|---|
| | **SS** | **df** | **MS** | **F** | **p** |
| Intercept | 1627060 | 1 | 1627060 | 5835.657 | 0.000000 |
| Year class | 2948 | 4 | 737 | 2.644 | **0.032766** |
| HDG2 | 134497 | 1 | 134497 | 482.390 | 0.000000 |
| Year class*HDG2 | 791 | 4 | 198 | 0.709 | **0.586005** |
| Error | 171749 | 616 | 279 | | |

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**Table F-3. ANOVA estimates of SCI variability for repeat visits to the same site within a year**

*Error estimate used to calculate confidence interval is underlined.*

| ANOVA for SCI (SCI6_100) (Same_day_SCI) | | | | | | | |
|---|---|---|---|---|---|---|---|
| | **Effect** | **df** | **MS** | **df** | **MS** | **F** | **p** |
| {1}STORET | Random | 60 | 1211.636 | 39.41542 | 188.7279 | 6.420014 | 0.000000 |
| {2}Year | Random | 6 | 269.430 | 35.76223 | 170.2402 | 1.582648 | 0.180727 |
| 1*2 | Random | 53 | 134.481 | 82.00000 | **66.5952** | 2.019385 | 0.002054 |

**Table F-4. ANOVA estimates of SCI variability for laboratory subsampling**

*Error estimate used is underlined.*

| ANOVA Results: SCI subsampling (Metrics) | | | | | | | |
|---|---|---|---|---|---|---|---|
| | **Effect** | **df** | **MS** | **df** | **MS** | **F** | **p** |
| {1}Sitename | Random | 58 | 1393.986 | 118 | **32.86312** | 42.41795 | 0.00 |

**Table F-5. ANOVA estimates of BioRecon variability for repeat visits to the same site within a year**

*Error estimate used to calculate confidence interval is underlined.*

| ANOVA for BioRecon (BR3_10) (New metrics multiple_2) | | | | | | | |
|---|---|---|---|---|---|---|---|
| | **Effect** | **df** | **MS** | **df** | **MS** | **F** | **p** |
| {1}STORET | Random | 126 | 15.91691 | 117.3771 | 1.696009 | 9.384924 | 0.000000 |
| {2}year | Random | 8 | 6.02260 | 156.0000 | **1.458840** | 4.128352 | 0.000171 |

# Appendix G. Optimal sample size for calculating SCI

**D. Whiting, J. Espy, and L. Wolfe (FDEP)**

Taxa richness increases with the number of individuals identified from a sample. This relationship is well documented for many studies (Larsen and Herlihy, 1998), and is further supported by recent analyses conducted for FDEP which are described below. Because the SCI includes several metrics that quantify taxa richness, the concern here is that SCI values may be artificially increased or decreased depending on the number of individuals identified from a sample. Therefore, laboratory methods were modified in recent years (2004–2006) to ensure that the number of individuals identified is more consistent across samples.

The SCI data used to develop and test the SCI and BioRecon were collected between 1991–2001. The laboratory protocols used during that time mandated a target number of 100 individuals. In practice, however, this target was often exceeded due to the nature of the laboratory subsampling methods (many samples had several hundred individuals). During this early time period, FDEP did subsample material collected from the field; however, laboratory protocols did not allow multiple divisions of the material to achieve the 100-individual target. For the data set used to test and develop SCI, only site-visits with 75–175 individuals were used in order to more closely approximate the target number of individuals. Thus, metric expectations and scoring rules for SCI were based on samples with between 75 and 175 individuals (mean 122, median 119). Restricting the index development data set to samples with only 100 to 110 individuals would have reduced the number of samples available for the recalibration effort dramatically, thereby reducing confidence in the resulting biomonitoring tool.

The target number of organisms for the 2004 laboratory protocols for the SCI was 100 organisms (acceptable range 100-110). Such a narrow acceptable range was made possible by modifying the 20-dip net sweep composite sample preparation Standard Operating Procedure. This modification resulted in the samples consistently being on target.

Random site sampling in 2004 from the ambient monitoring program yielded an adequate number of samples ($n$ = 201) to compare the effect of the more accurate laboratory subsampling methods on metric values. We compared the percentiles of the metric values used to define the scoring rules for the SCI and the percentiles of metric values from this more recent data set. For the 1992-2001 sampling, 420 samples with between 75 and 175 individuals were used. For the 2004 sampling, 196 samples were used. Approximately even numbers of samples were available for the 2004 data in the peninsula and panhandle regions; not enough sites were sampled in the northeast to calculate percentiles.

This comparison was not ideal because the sampling designs were very different. The 2004 sites were selected randomly while the earlier sites used in this study were selected for a variety of specific reasons (e.g., references sites, 5$^{th}$ years inspections, special studies, etc.). Thus, the distribution of percentile values may be shifted due to the laboratory methods or the types of sites sampled. If both data sets had been created from random sampling, the comparison would more clearly isolate the effect of the change in laboratory methods.

As expected, total taxa richness showed the largest differences with lower values observed in 2004 **(Table G-1)**. Other taxa richness metrics were also lower at the 95$^{th}$ percentile. Ephemeroptera and long-lived taxa were lower in peninsula region, Trichoptera had a similar distribution, and clinger taxa were lower in the panhandle region. The 95$^{th}$ percentiles for sensitive taxa were lower in both regions.

Developing scientific protocols for use in a regulatory framework is inevitably an iterative process. Our understanding of the sources of variability and the influence of precision on assessment methods has evolved rapidly in recent years. If we were to start over with no data on



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hand and develop a biological monitoring protocol, the number of individuals to identify from each sample might be one of the first elements that we would define. The iterative nature of this process derives from the fact that knowledge gained regarding one aspect of the analysis methods often necessitates that methods related to another aspect of the analysis be reconsidered. A large portion of the variability in SCI values was tied to laboratory methods, and subsequently, improvements have been made in that area. This change should be understood as a *calibration* of the monitoring protocol. The fundamental relationships between biological metrics and human influence are unaffected by this issue.

A recent analysis by the FDEP Central Laboratory biologists has found that averaging the SCI scores from two 150-organism subsamples provides a more reliable assessment than a single 100-organism subsample. The objective of this analysis was to evaluate how laboratory processing and/or the number of individuals identified affects SCI score variability. For this analysis, all the organisms found in one-third (33%) of the material brought to the laboratory for each of three samples were identified. Using those data, 250 random draws were conducted for each sample for each of six different target numbers of individuals: 100, 125, 150, 175, 200, and 300 **(Figures G-1 to G-3)**

**Table G-1. Percentiles of metric values for the development data set and random sampling in 2004**

*Shown are the 5th and 95th percentile values for SCI metrics from sites sampled during 1992–2001 (SCI development data set) and 2004 (ambient sampling).*

| | Panhandle | | | | Peninsula | | | |
|---|---|---|---|---|---|---|---|---|
| | 1992-2001 | 2004 | 1992-2001 | 2004 | 1992-2001 | 2004 | 1992-2001 | 2004 |
| Percentile | 5th | 5th | 95th | 95th | 5th | 5th | 95th | 95th |
| Total taxa | 16.0 | 13.0 | 46.0 | 37.0 | 16.0 | 13.0 | 41.0 | 35.0 |
| Ephemeroptera taxa | 0.0 | 0.0 | 6.0 | 5.0 | 0.0 | 0.0 | 5.0 | 3.0 |
| Trichoptera taxa | 0.0 | 0.0 | 7.0 | 6.0 | 0.0 | 0.0 | 7.0 | 7.0 |
| % Filterer | 1.3 | 0.9 | 45.1 | 45.7 | 0.9 | 0.0 | 40.0 | 32.0 |
| Long-lived taxa | 0.0 | 0.0 | 5.0 | 5.0 | 0.0 | 0.0 | 4.0 | 2.0 |
| Clinger taxa | 0.0 | 0.0 | 14.0 | 9.0 | 0.0 | 0.0 | 8.0 | 7.0 |
| % Dominance | 9.6 | 11.9 | 42.6 | 55.3 | 11.6 | 13.2 | 54.5 | 68.0 |
| %Tanytarsini | 0.0 | 0.0 | 22.8 | 31.8 | 0.0 | 0.0 | 26.8 | 20.0 |
| Sensitive taxa | 0.0 | 0.0 | 16.0 | 11.0 | 0.0 | 0.0 | 9.0 | 7.0 |
| % Very tolerant | 0.0 | 0.0 | 36.3 | 48.1 | 0.8 | 1.0 | 58.5 | 79.8 |



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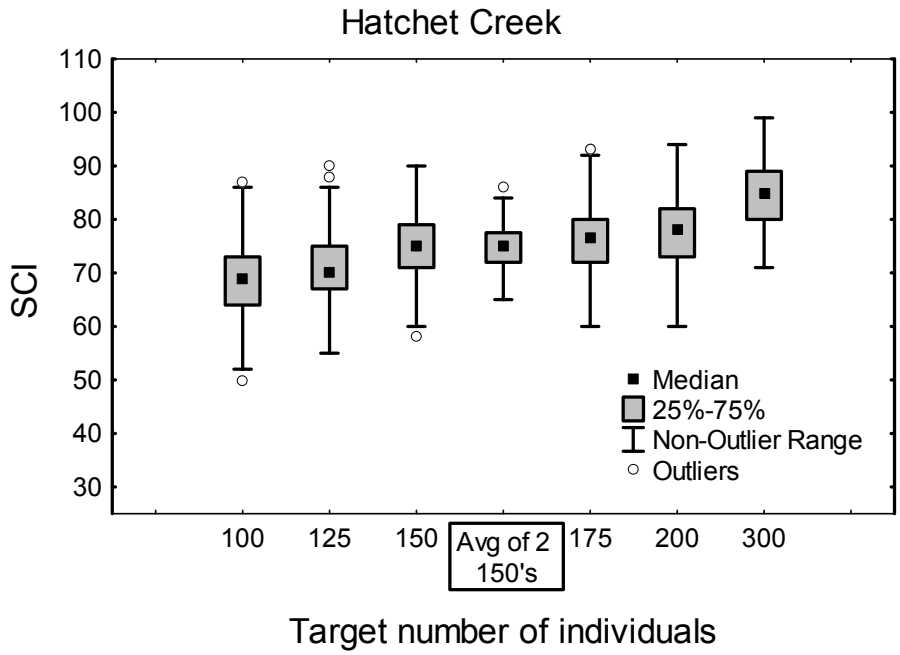


**Figure G-1**. Box plots showing the change in SCI score with target number of individuals counted for 250 random draws of one-third of a sample from Hatchet Creek. Shown also is the box plot for the average SCI score from 2 150 subsamples.

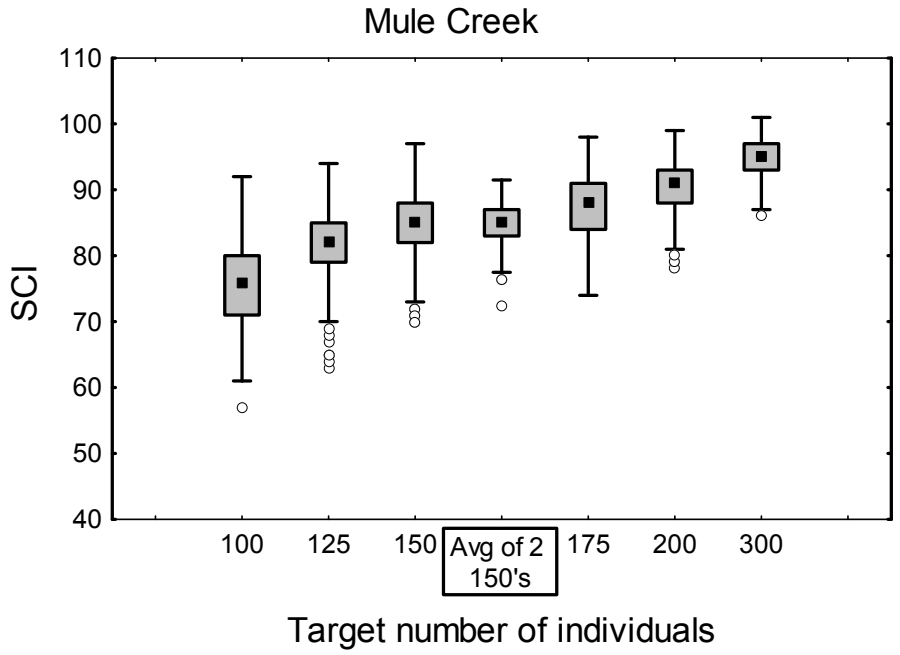


**Figure G-2**. Box plots showing the change in SCI score with target number of individuals counted for 250 random draws of one-third of a sample from Mule Creek. Shown also is the box plot for the average SCI score from 2 150 subsamples.



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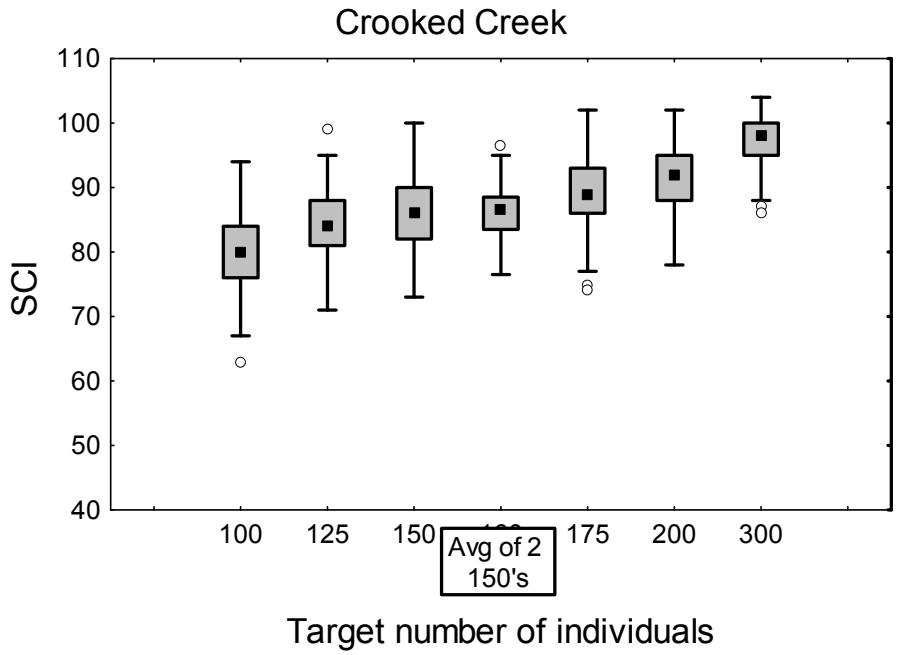


**Figure G-3**. Box plots showing the change in SCI score with target number of individuals counted for 250 random draws of one-third of a sample from Crooked Creek. Shown also is the box plot for the average SCI score from 2 150 subsamples.

FDEP Central Lab biologists believe the increase in precision associated with larger and multiple subsamples is worth the cost, as it makes the calculated result less variable and provides greater confidence in the tool. Prior to the sample preparation SOP being modified to more accurately achieve the target number of organisms, the sample processing time at the FDEP Central Laboratory averaged 18 hours per sample. The revision to the SOP resulted in the processing time being reduced by 56% (approximately 8 hours). While the increase from 100 organisms to 300 organisms (150x2) results in a significant increase in laboratory workload (average processing time based upon preliminary data is about 14 hours), the increase is balanced by the earlier changes to the sample preparation SOP that result in the analyst more accurately achieving the target number of organisms. The result is the identification of three times as many organisms for approximately a 75% increase in laboratory effort.

A survey of 43 state agencies' programs found that approximately 54% of those programs targeted 100 organisms (Carter and Resh, 2001). The next most commonly used target number of organisms was 300 (26%). All other target number of organisms were used by $\leq$ 7% of the programs. Additionally, U.S. EPA has used a target number of organisms of 300 for the National Wadeable Streams survey (EPA, 2006).

The FDEP decision to use 150X2 subsamples was made based upon four key points:

- First, the 150x2 subsampling will result in 300 organisms being identified, which was the second most common subsampling target number in the survey, and which is consistent with U.S. EPA minimum subsampling target used for the National Wadeable Streams survey
- Second, the use of 150x2 subsamples rather than one 300 target subsample maintains scoring within the range used to calibrate the SCI (75-175)



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- Third, targeting 150 organisms in each subsample, rather than 125 organisms (approximately the mean number of organisms in the calibration dataset samples used to score the SCI metrics), results in a slightly higher score at good quality sites, while poor quality sites scores do not appear to increase similarly. This effect results in slightly better discrimination between good, moderate, and poor quality sites
- Fourth, the use of 150x2 subsamples reduces the variability in the resulting SCI score by using the average of two 150-organism-based. This reduction in variability improves consistency with regard to the assessment of category thresholds.

## *References*

Carter, J. L. and V. H. Resh. 2001. After site selection and before data analysis: sampling, sorting, and laboratory procedures used in stream benthic macroinvertebrate monitoring programs by USA state agencies. Journal of the North American Benthological Society 20:658-682.

Larsen, D. P. and A. T. Herlihy. 1998. The dilemma of sampling streams for macroinvertebrate richness. Journal of the North American Benthological Society 17:359-366.

U. S. Environmental Protection Agency (EPA). 2006. *Wadeable Streams Assessment: A* Collaborative Survey of the Nation's Streams. EPA 841-B-06-002. Washington, D. C.: Office of Water. Available: http://www.epa.gov/owow/streamsurvey/.

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# Appendix H. FDEP Biological condition gradient workshop summary

**Russel Frydenborg and Denise Miller (FDEP)**

## *Background*

Florida Department of Environmental Protection (FDEP) staff evaluated stream macroinvertebrate data from the stream condition index (SCI) recalibration dataset with the goal of refining delineations of biological/ecological condition based on the SCI 2004 scores. Several approaches were taken for this evaluation, among them a Biological Condition Gradient (BCG) Workshop which was conducted by FDEP staff on October 24, 2006. This document provides a summary of FDEP's BCG workshop. A more detailed description of the workshop and materials is provided in Frydenborg and Miller, 2007.

In preparing for this workshop, FDEP staff used the framework of prior such workshops conducted by Susan Davies of the Maine Department of Environmental Protection, Susan Jackson of the U.S. Environmental Protection Agency (Davies and Jackson, 2006), and Jeroen Gerritsen of Tetra Tech, Inc. Each of those individuals also contributed thoughtful commentary during the planning of this workshop.

For the FDEP BCG workshop, a group of experts in aquatic biology and stream macroinvertebrate identification were requested to review taxonomic data from a subset of samples from the SCI 2004 recalibration data set and to provide scores for those samples using the BCG framework (scoring based on descriptions of BCG attributes per experts' review of the taxonomic data). Each expert would thus provide their assessment of the biological condition of each of 30 samples selected by FDEP to span the range of SCI scores from the SCI 2004 recalibration data. Experts did not know the SCI scores for the samples. FDEP evaluated the experts' BCG scores together with SCI scores for the samples as one line of evidence in determining what delineations or thresholds of SCI scores should be used in regulatory decision-making (e.g., what distribution of scores signifies that a site is meeting designated use or not meeting designated use).

FDEP invited participants for this workshop who have expertise in Florida stream macroinvertebrate identification, and who hail from local and state regulatory agencies, universities and the private sector.

## *Methods*

Prior to the workshop, experts were provided with background literature on the biocondition gradient concept (Davies and Jackson, 2006; Stoddard et al., 2006) and descriptions from FDEP of the intended process (Frydenborg and Miller, 2007: Attachment A). Experts were informed that they would be asked to review SCI sample data that would be provided to them at the workshop and to assign each sample a score of 1 to 6, signifying their assessment of the biological condition represented by the sample (1 best to 6 worst based on the 6 tiers of the conceptual BCG summarized from Davies and Jackson, 2006: Figure 2):

- Score of 1: Native or natural condition
- Score of 2: Minimal loss of species; some density changes may occur
- Score of 3: Some replacement of sensitive-rare species; functions fully maintained
- Score of 4: Some sensitive species maintained but notable replacement by more-tolerant taxa; altered distributions; functions largely maintained



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- Score of 5: Tolerant species show increasing dominance; sensitive species are rare; functions altered
- Score of 6: Severe alteration of structure and function.

At the workshop, Russel Frydenborg, FDEP's workshop moderator, gave a presentation describing the BCG process and attributes, and distributed materials from the presentation for reference by the experts (Frydenborg and Miller, 2007: Attachment B).

During the workshop, experts were given the opportunity to discuss their rationale for scoring of a site, and, if they desired, to change their score for a site based on their assessment from the discussions (Delphi method). Scoring sheets were provided to each expert for recording both initial and final sample scores. Experts were requested to indicate what relevance they ascribed to their BCG scores. More specifically, they were asked to record the minimum BCG score(s) (1 being best, 6 worst) that they believed met the interim goals of the Clean Water Act (meets designated use), and what maximum score(s) they believed did not meet the interim goals of the Clean Water Act (impaired site; does not meet designated use). In other words, sites below a selected tier score would be considered "impaired."

## *Sample Selection*

Sample data were drawn from the SCI recalibration data and were limited to those where the total number of individual organisms counted in the sample was between 100-175, inclusive.

Five (5) reference site (minimally disturbed condition site) samples from each of three (3) Florida Bioregions (Panhandle, Peninsula, Northeast) were selected to allow the experts an assessment of reference expectations separately for each region because prior SCI analysis indicated differences in expectations for some metrics between the bioregions **(Table H-1)**. The 15 reference site samples were selected from sites already identified as reference based on criteria defined independently of the biological condition (see *Chapter 4: Reference site selection*). The 5 reference samples from each bioregion were selected to span the range of SCI scores for all of the reference site samples from that bioregion, including minimum and maximum SCI 2004 scores, and samples with scores closest to the 25$^{th}$ percentile, median, and 75$^{th}$ percentile values from each bioregion reference range. SCI scores were used for sample selection, but were not provided to the experts. Additionally, experts were not provided with information about the location or description of the selected sample sites, other than the bioregion from which the samples were collected.

Additionally, 10 samples were selected for each bioregion, and identified to bioregion, for analysis of macroinvertebrate data and scoring by the experts. Sites were selected to span a range of conditions using existing information on SCI scores and Human Disturbance Gradient (HDG), and, as needed, LDI from the SCI recalibration data set. The specific 10-sample selection methodology for each bioregion was as follows **(Table H-2)**:

- 4 samples selected based on those having SCI scores closest to the 10$^{th}$, 25$^{th}$, median and 75$^{th}$ percentile SCI scores for the non-reference sites for the bioregion;
- 2 samples randomly selected from non-reference sites for the bioregion having SCI scores in the range of 35-50 (sorted on SCI score), to ensure scrutiny of some samples in this score range;
- 3 samples randomly drawn from HDG ranges of 1-2, 3-5, and/or 6-9, based on the assessment of the HDG scores already represented from the prior 6 sample selection (sorted on HDG scores);
- For the Northeast bioregion samples only, there were insufficient sites with the target HDG ranges (i.e., no HDG scores of 5 through 9, and only one HDG 4 site). Therefore, 2 of the intended HDG-based samples were randomly drawn based on the



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range of LDI scores for the samples, after an assessment of the LDI scores already represented from the prior 7-sample selection. Specifically, there were 6 samples in the 1 to < 2 LDI range, and 1 sample in the LDI 6 to < 7 range. Therefore, 2 samples were randomly selected from the LDI 2 through 9 range (sorted on LDI scores), excepting sites with LDIs >= 6 and < 7; and,

- 1 sample randomly drawn from the entire non-reference dataset for the bioregion (sorted on HDG score).

**Table H-1. BCG workshop reference sites**

*Site identification information, bioregion location, date of sampling, SCI value, and LDI value.*

| BCGSampleID | STORET | Station Nickname | Bioregion | Sample Date | SCI | LDI |
|---|---|---|---|---|---|---|
| NERef01 | 20030341 | CECFLD7 | Northeast | 3/5/1996 | 70.4 | 1.90 |
| NERef02 | 21010018 | FALLNGREF | Northeast | 7/27/1999 | 39 | 1.37 |
| NERef03 | 19010099 | PIGEONREF | Northeast | 2/1/2000 | 58 | 1.27 |
| NERef04 | 21010056 | ROBCKCR131 | Northeast | 3/13/2000 | 79.2 | 1.35 |
| NERef05 | 20030456 | THOMASREFB | Northeast | 3/14/1996 | 92.4 | 1.25 |
| PanhRef01 | 33040014 | BIGHORSREF | Panhandle | 8/23/1994 | 67 | 1.23 |
| PanhRef02 | 32010024 | LIMEREF | Panhandle | 7/14/1998 | 74.5 | 1.33 |
| PanhRef03 | 33010065 | RSTAREARUN | Panhandle | 2/14/1996 | 54.7 | 1.19 |
| PanhRef04 | 22030010 | STMARKSREF | Panhandle | 9/18/2001 | 40.5 | 1.29 |
| PanhRef05 | 31010051 | SWTREF | Panhandle | 7/8/1992 | 97.8 | 1.31 |
| PenRef01 | 28020237 | CYPCKUNK | Peninsula | 7/21/1999 | 55.7 | 1.18 |
| PenRef02 | 20030414 | GLDHEADREF | Peninsula | 1/12/2000 | 100 | 1.00 |
| PenRef03 | 24010002 | MANAREF | Peninsula | 11/21/2000 | 80.2 | 1.31 |
| PenRef04 | 20020012 | OKLRIVREF | Peninsula | 2/15/2000 | 68.1 | 1.01 |
| PenRef05 | 20030253 | PUTNA44 | Peninsula | 3/16/1998 | 24 | 1.15 |

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**Table H-2. BCG workshop samples**

| BCG SampleID | STORET | Station Nickname | Bioregion | Sample Date | SCI | HDG | LDI | Selection Rationale |
|---|---|---|---|---|---|---|---|---|
| NE01 | 19020027 | ALIGTRREF | Northeast | 4/11/2001 | 47.1 | 1 | 1.4 | SCI [35-50] random |
| NE02 | 19010049 | BLDWIN REF | Northeast | 2/14/2000 | 32.9 | 2 | 3.22 | Random |
| NE03 | 19020053 | CALAHANTST | Northeast | 9/24/2001 | 24.4 | 3 | 1.41 | SCI 10th Percentile (22.96) |
| NE04 | 19020053 | CALAHANTST | Northeast | 7/15/1996 | 40.1 | 3 | 1.41 | SCI [35-50] random |
| NE05 | 20030549 | CECFLD6 | Northeast | 3/6/1996 | 73.6 | 1 | 2 | LDI [2-9] random |
| NE06 | 20030332 | JAXHEITTST | Northeast | 5/5/1992 | 28.9 | 4 | 6.11 | HDG [3-5] random |
| NE07 | 21030059 | LKBUTTST | Northeast | 9/15/1992 | 9.1 | 3 | 5.26 | LDI [2-9] random |
| NE08 | 19010073 | MCCLNYTST | Northeast | 3/22/1999 | 68 | 0 | 1.55 | SCI 75th Percentile (68.27) |
| NE09 | 20030573 | MILOG209 | Northeast | 1/26/1998 | 30.6 | 1 | 1.61 | SCI 25th Percentile (30.39) |
| NE10 | 19020059 | YULEEREF | Northeast | 10/28/1996 | 47 | 0 | 1.28 | SCI 50th Percentile (45.09) |
| Panh01 | 22020078 | ABHOPTST | Panhandle | 6/4/1996 | 20.7 | 3 | 1 | HDG [3-5] random |
| Panh02 | 33040073 | CANEYCBELL | Panhandle | 8/22/2000 | 30 | 3 | 1.71 | HDG [3-5] random |
| Panh03 | 31010125 | CHATTATST | Panhandle | 10/13/1998 | 62.5 | 0 | 1.62 | SCI 50th Percentile (62.40) |
| Panh04 | 31020071 | CHTMDLCRKD | Panhandle | 7/23/1996 | 70.5 | 1 | 1.72 | SCI 75th Percentile (70.50) |
| Panh05 | 31020072 | CHTMDLOTTR | Panhandle | 7/23/1996 | 43.5 | 2 | 1.42 | Random |
| Panh06 | 33010112 | COFECSTLR | Panhandle | 2/16/1999 | 47.7 | 2 | 1.05 | SCI [35-50] random |
| Panh07 | 31020042 | DOZREF | Panhandle | 9/1/1992 | 30.2 | 6 | 2.83 | SCI 25th Percentile (30.10) |
| Panh08 | 31020043 | DOZTST | Panhandle | 9/1/1992 | 35.8 | 6 | 2.75 | SCI [35-50] random |
| Panh09 | 22030064 | FLAMINREF | Panhandle | 3/8/1993 | 4.6 | 7 | 8.08 | SCI 10th Percentile (4.92) |
| Panh10 | 22050003 | TAYLO4 | Panhandle | 4/10/2000 | 0.6 | 3 | 2.28 | HDG [3-5] random |
| Pen01 | 20030585 | BUNCNTRL | Peninsula | 9/8/1998 | 15.5 | 6 | 5.29 | HDG [6-9] random |
| Pen02 | 25020550 | DESOT34 | Peninsula | 9/3/1997 | 37.5 | 4 | 2.91 | SCI [35-50] random |



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| BCG SampleID | STORET | Station Nickname | Bioregion | Sample Date | SCI | HDG | LDI | Selection Rationale |
|---|---|---|---|---|---|---|---|---|
| Pen03 | 27010580 | GROOVRARPT | Peninsula | 8/22/2000 | 24.2 | 1 | 1.79 | SCI 25th Percentile (24.55) |
| Pen04 | 24040117 | GULFTST | Peninsula | 10/8/1998 | 14.8 | 7 | 7.85 | SCI 10th Percentile (14.45) |
| Pen05 | 24030044 | HILSTP5REF | Peninsula | 8/18/1993 | 55 | 1 | 2.12 | HDG [1-2] random |
| Pen06 | 20010384 | LONGBRANCH | Peninsula | 7/13/1999 | 38.2 | 3 | 2.53 | SCI [35-50] random |
| Pen07 | 28010224 | NWFRLOXREF | Peninsula | 9/20/1995 | 40.8 | 4 | 3.87 | SCI 50th Percentile (40.81) |
| Pen08 | 25020014 | OAKREF | Peninsula | 8/22/1995 | 58.3 | 1 | 2.1 | SCI 75th Percentile (58.70) |
| Pen09 | 20020145 | SWEETCK | Peninsula | 8/10/1998 | 21.1 | 2 | 1.3 | Random |
| Pen10 | 20020420 | WGCITREF | Peninsula | 12/1/1992 | 0 | 7 | 8.32 | HDG [6-9] random |

## *Data Content*

Data provided for each sample, whether for reference samples or samples for BCG scoring, consisted only of the biological data for each sample and an identification of the sample to the Bioregion of its collection. Other data regarding the sample and site (e.g., more specific location, collection date, information on physical/chemical characteristics, human disturbance metrics such as LDI, hydrologic alteration) were not provided to the experts, but were available for analysis with the scoring data from the workshop.

Biological data that were provided for each sample were retrieved from the FDEP Statewide Biological database (SBIO). Those data included the collapsed taxa list with the number of individuals of each taxon counted in that sample and a suite of metrics. Details regarding the SBIO taxa collapsing procedure are provided in the SBIO database manual (Wolfe and Lurding, 1999: p. 84, and Appendix 2). Frydenborg and Miller, 2007 (Attachment C) provides a copy of each sample sheet of the taxa list and metrics that was provided to experts, a copy of a list of synonyms that was provided to assist in their review of the taxa list, and a copy of the sample scoring sheet.

## *Results*

Each expert provided a BCG score for each site sample **(Table H-3)** and an assessment of the interpretation that should be applied to each BCG score (e.g., meets designated use, does not meet designated use; **Table H-4**). In several cases, experts reported a “gray” area in the relevance they ascribed to their BCG scores. Several experts identified BCG scores they judged as clearly meeting designated use, those they judged as clearly not meeting designated use, and left a gap between those scores signifying their uncertainty about where such a line could be



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drawn. Responses were unanimous that a BCG score of 3 or lower (1-3) meets the CWA interim goal for biological integrity and that BCG scores of 5 and 6 do not meet the CWA biological integrity goal. Approximately half the panel thought the impairment threshold occurred between BCG scores of 4 and 5. The other half of the panel wished the impairment line to be drawn between BCG scores of 3 and 4, with many of those panelists expressing the concern that management action may not be taken on sites until they were considered "impaired."

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**Table H-3. BCG workshop scores summary**

| *Expert Code* | E01 | E02 | E03 | E04 | E05 | E06 | E07 | E08 | E09 | E10 | E11 | E12 | E13 | E14 | E15 | E16 | E17 | E18 | E19 | E20 | E21 | E22 | Median BCG Score | SCI Score |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ***BCGSampleID*** | **Final BCG Score** | | | | | | | | | | | | | | | | | | | | | | | |
| NE01 | 3 | 4 | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 4 | 3 | 4 | 3 | 3 | 3 | 3 | 2 | 3 | 4 | 3 | 47.1 |
| NE02 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 5 | 5 | 5 | 32.9 |
| NE03 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 3 | 5 | 5 | 24.4 |
| NE04 | 3 | 4 | 4 | 3 | 4 | 4 | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 3 | 40.1 |
| NE05 | 2 | 1 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 2 | 1 | 1 | 2 | 2 | 73.6 |
| NE06 | 4 | 5 | 4 | 5 | 3 | 5 | 5 | 5 | 3 | 5 | 5 | 5 | 4 | 5 | 5 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 5 | 28.9 |
| NE07 | 6 | 6 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 6 | 5 | 6 | 6 | 9.1 |
| NE08 | 3 | 3 | 3 | 2 | 3 | 4 | 5 | 3 | 3 | 3 | 4 | 3 | 2 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 68 |
| NE09 | 4 | 4 | 5 | 4 | 5 | 3 | 4 | 4 | 5 | 5 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 30.6 |
| NE10 | 3 | 3 | 4 | 2 | 3 | 4 | 4 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 47 |
| Panh01 | 5 | 4 | 4 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 3 | 5 | 4 | 4 | 5 | 4 | 4 | 5 | 4 | 3 | 4 | 4 | 4 | 20.7 |
| Panh02 | 5 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 4 | 5 | 4 | 4 | 5 | 5 | 5 | 4 | 5 | 5 | 5 | 4 | 4 | 5 | 5 | 30 |
| Panh03 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 1 | 2 | 2 | 2 | 3 | 1 | 2 | 62.5 |
| Panh04 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 1 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 70.5 |
| Panh05 | 4 | 4 | 3 | 2 | 4 | 4 | 3 | 4 | 3 | 3 | 4 | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 43.5 |
| Panh06 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 47.7 |

| *Expert Code* | E01 | E02 | E03 | E04 | E05 | E06 | E07 | E08 | E09 | E10 | E11 | E12 | E13 | E14 | E15 | E16 | E17 | E18 | E19 | E20 | E21 | E22 | Median BCG Score | SCI Score |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Panh07 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 5 | 5 | 30.2 |
| Panh08 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 5 | 4 | 5 | 5 | 5 | 35.8 |
| Panh09 | 6 | 6 | 6 | 6 | 5 | 6 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 6 | 6 | 6 | 6 | 4.6 |
| Panh10 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 0.6 |
| Pen01 | 5 | 5 | 6 | 5 | 5 | 6 | 5 | 6 | 5 | 5 | 5 | 5 | 5 | 6 | 5 | 6 | 6 | 5 | 5 | 5 | 6 | 6 | 5 | 15.5 |
| Pen02 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 4 | 4 | 4 | 3 | 3 | 4 | 4 | 3 | 4 | 4 | 3 | 4 | 3 | 3 | 3 | 3 | 37.5 |
| Pen03 | 5 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 5 | 5 | 4 | 4 | 5 | 5 | 4 | 5 | 4 | 5 | 5 | 4 | 5 | 4 | 4 | 24.2 |
| Pen04 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 5 | 6 | 5 | 6 | 5 | 5 | 5 | 5 | 5 | 6 | 5 | 14.8 |
| Pen05 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 55 |
| Pen06 | 4 | 4 | 4 | 3 | 5 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 38.2 |
| Pen07 | 3 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 40.8 |
| Pen08 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 1 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 58.3 |
| Pen09 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 6 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 5 | 5 | 21.1 |
| Pen10 | 6 | 6 | 6 | 6 | 6 | 5 | 6 | 6 | 6 | 6 | 6 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 0 |



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**Table H-4: Experts' categorization of BCG workshop scores**

| Expert Code: | Not Impaired/ Meets Goal | Gray Area | Does Not Meet Goal/Impaired | Comments |
|---|---|---|---|---|
| E01 | 3 | | 4 | |
| E02 | 3 | 4 | 5 | |
| E03 | 3 | Not impaired 3-4, closer to 4, but not below 4 | 5 | |
| E04 | 4 | | 5 | |
| E05 | 4 | | 5 | |
| E06 | 3 | | 4 | |
| E07 | 3 | | 4 | |
| E08 | 3 | | 4 | |
| E09 | 3 | | 4 | |
| E10 | 3 | | 4 | |
| E11 | 3 | | 4 | |
| E12 | 4 | | 5 | |
| E13 | 3 | | 4 | |
| E14 | 4 | | 5 | Impairment line 4-5, but concerned that the category 5 sites will not be improved and category 4 sites will slip into category 5 and then may be clumped with the other 5's as "irretrievable" |
| E15 | 3 | | 4 | |
| E16 | 3 | line between 4 and 5 | 5 | |
| E17 | 3 | Impairment Line 4-5, 4 probably meets | 5 | |
| E18 | 4 | | 5 | |
| E19 | 4 | | 5 | |
| E20 | 4 | | 5 | |
| E21 | 4 | | 5 | |
| E22 | 4 | | 5 | |

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# Appendix I. Change Point Analysis of Stream Condition Index and Biological Condition Gradient Data

**Xufeng Niu (Florida State University) and Denise Miller (FDEP)**

## *Background*

For the purpose of scrutinizing Stream Condition Index (SCI) macroinvertebrate data with the goal of refining delineations of biological/ecological condition, Florida Department of Environmental Protection (FDEP) staff conducted a biological condition gradient (BCG) workshop in October 2006 (Frydenborg and Miller, 2007). Participants in the BCG workshop (the panel) consisted of twenty-two (22) experienced aquatic biologists in Florida who agreed to assist FDEP as part of this delineation effort.

During the BCG workshop, the panel was provided with species lists and metrics for 15 reference streams and 30 test samples, equally divided into Florida's three bioregions (Panhandle, Northeast, and Peninsula). The panel was not given the SCI scores associated with any of the sites, or any physical, chemical, or habitat descriptions of the sites (other than the Bioregion location). Decisions were based on biological community composition data collected via the 20-dip net sweep method associated with SCI sampling. The scores (1 through 6) were based on the six tiers of the conceptual biological condition gradient (BCG) from Davies and Jackson, 2006, listed below:

- Score of 1: Native or natural condition
- Score of 2: Minimal loss of species; some density changes may occur
- Score of 3: Some replacement of sensitive-rare species; functions fully maintained
- Score of 4: Some sensitive species maintained but notable replacement by more-tolerant taxa; altered distributions; functions largely maintained
- Score of 5: Tolerant species show increasing dominance; sensitive species are rare; functions altered
- Score of 6: Severe alteration of structure and function

The analyses conducted in this report were based on the results from the BCG workshop (BCG scores for 30 samples by each of 22 panelists) and the SCI scores for those same samples to address FDEP's goal of refining delineations of biological/ecological condition for SCI scores.

## *The Detection Procedure*

Niu et al. (2000) introduced an iterative procedure for detecting and modeling level-shift change points. The procedure is similar to that suggested by Chang (1982) and further developed by Chang et al. (1988) for detecting outliers and level shifts in time series analysis. Statistical details of this procedure can also be found in Pankratz (1991, Chapter 8).

For simplicity, let us consider a response variable *Y*, after an appropriate transformation. Suppose that observations $\{(X_i, Y_i),\ i = 1, 2, \ldots, n\}$ are available where *n* is the sample size and *X* is an independent variable. Moreover, we assume that the observations are arranged in the following manner:



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- The values $\{X_i, \quad i = 1, 2, \ldots, n\}$ are distinct. If several $Y_i$'s are corresponding to a single *X* value, the median of the $Y_i$'s is taken to be the response value for the *X* value.
- $\{(X_i, Y_i), \ i = 1, 2, \ldots, n\}$ are sorted according to the values of *X* from least to greatest.

For each integer $l > 1$, define the step variable $S_i(l) = 0$ for $i < l$ and $S_i(l) = 1$ for $i \geq l$.

**Step 1**. Fit the linear regression model:

$$Y_i = \beta_0(l) + \beta_1(l) S_i(l) + \varepsilon_i(l), \qquad i = 1, 2, \ldots, n, \tag{1}$$

where for a fixed *l*, the $\varepsilon_i(l)$'s are assumed to be independent and identically distributed normal random variables with mean zero and variance $\sigma^2(l)$.

**Step 2**. Calculate the values $\{L(l) = \hat{\beta}_1(l) / se(\hat{\beta}_1(l)), \ l = 2, 3, \ldots, (n-1)\}$ where $se(\hat{\beta}_1(l))$ is the estimated standard error of $\hat{\beta}_1(l)$.

**Step 3**. Let $L(l_1) = \max\{L(2), L(3), \ldots, L(n-1)\}$ and compare $L(l_1)$ with the critical value *C*=3.0 (or *C*=3.5). The critical value *C*=3.0 (or *C*=3.5) corresponds roughly to $\alpha = 0.10$ (or $\alpha = 0.05$), or the 10% (or the 5%) significance level, based on the simulation results of Chang et al. (1988). If $L(l_1)$ is significant, we conclude that the response *Y* has a change point at $X_{l_1}$ with a level-shift $\hat{\beta}_1(l)$.

**Step 4**. Let $Y_i^* = Y_i - \beta_1(l_1) S_i(l_1)$. Repeat Steps 1-3 on the new response variable $Y_i^*$ for detecting a possible second change point. Continue the process until no further change point can be identified.

**Step 5**. Suppose that *k* change points are detected in the response variable *Y* and the corresponding *X* values are $\{X_{l_1}, X_{l_2}, \ldots, X_{l_k}\}$. Fit the model

$$Y_i = \beta_0 + \beta_1 S_i(l_1) + \beta_2 S_i(l_2) + \ldots + \beta_k S_i(l_k) + \varepsilon_i, \qquad i = 1, 2, \ldots, n. \tag{2}$$

Then the estimated coefficients $\{\hat{\beta}_1, \hat{\beta}_2, \ldots, \hat{\beta}_k\}$ will be the *k* estimated level-shift values.



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## *Analysis of SCI and BCG Data*

### Change Point Analysis

Table I-1 contains a list of the SCI values for the 30 samples from the BCG workshop along with their median and mean BCG scores based on the individual scores given by the experts. Change-point analysis of the SCI values was conducted in this report using the median BCG scores as the dependent variable. Median BCG scores rather than mean BCG scores were used to avoid potential outlier problems.

Two change points were detected in the SCI values. The first change point was at SCI=35.8, which has the statistic $L(l_1)$ = 9.79 and is significant at the 5% level (95% confidence). The second change point occurred at SCI=9.1 which has the statistic $L(l_1)$ = 3.87 and is also significant at the 5% level (95% confidence). The R-square of the regression is 0.86, indicating that the step-function regression model fits the median BCG scores very well.

**Table I-1. SCI and BCG scores for the 30 Samples**

| STORET Station | Sample Date | SCI Score | BCG Median Score | BCG Mean Score |
|---|---|---|---|---|
| 20030549 | 3/6/1996 | 73.6 | 2 | 1.7 |
| 31020071 | 7/23/1996 | 70.5 | 2 | 1.9 |
| 19010073 | 3/22/1999 | 68 | 3 | 3 |
| 31010125 | 10/13/1998 | 62.5 | 2 | 1.9 |
| 25020014 | 8/22/1995 | 58.3 | 2 | 1.7 |
| 24030044 | 8/18/1993 | 55 | 2 | 2.2 |
| 33010112 | 2/16/1999 | 47.7 | 2 | 2.2 |
| 19020027 | 4/11/2001 | 47.1 | 3 | 3.2 |
| 19020059 | 10/28/1996 | 47 | 3 | 3.1 |
| 31020072 | 7/23/1996 | 43.5 | 3 | 3.3 |
| 28010224 | 9/20/1995 | 40.8 | 3 | 3 |
| 19020053 | 9/24/2001 | 40.1 | 3 | 3.3 |
| 20010384 | 7/13/1999 | 38.2 | 4 | 4.1 |
| 25020550 | 9/3/1997 | 37.5 | 3 | 3.4 |
| 31020043 | 9/1/1992 | 35.8 | 5 | 5 |
| 19010049 | 2/14/2000 | 32.9 | 5 | 4.8 |
| 20030573 | 1/26/1998 | 30.6 | 4 | 4.2 |
| 31020042 | 9/1/1992 | 30.2 | 5 | 4.9 |
| 33040073 | 8/22/2000 | 30 | 5 | 4.6 |
| 20030332 | 5/5/1992 | 28.9 | 4.5 | 4.4 |
| 19020053 | 9/24/2001 | 24.4 | 5 | 4.8 |
| 27010580 | 8/22/2000 | 24.2 | 4 | 4.5 |
| 20020145 | 8/10/1998 | 21.1 | 5 | 5 |
| 22020078 | 6/4/1996 | 20.7 | 4 | 4.3 |



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| STORET Station | Sample Date | SCI Score | BCG Median Score | BCG Mean Score |
|---|---|---|---|---|
| 20030585 | 9/8/1998 | 15.5 | 5 | 5.4 |
| 24040117 | 10/8/1998 | 14.8 | 5 | 5.1 |
| 21030059 | 9/15/1992 | 9.1 | 6 | 5.9 |
| 22030064 | 3/8/1993 | 4.6 | 6 | 5.9 |
| 22050003 | 4/10/2000 | 0.6 | 6 | 6 |
| 20020420 | 12/1/1992 | 0 | 6 | 5.9 |

Change Points: 1). SCI=35.8 with the test statistic of 9.79 and confidence level > 95%;
2). SCI=9.1 with the test statistic of 3.87 and confidence level > 95%.
Highlighted numbers are the SCI-BCG Scores at the change points.

## Confidence Intervals for the Change Points

In this section, we constructed confidence intervals for the detected change points based on a *modified* bootstrapping method. "Regular" bootstrapping is a statistical method for estimating the sampling distribution of an estimator by resampling with replacement from the original sample (Efron, 1979; Efron and Tibshirani, 1993). This method is widely used in parameter estimation, regression, time series, and other statistical problems.

In regression analysis, there are two basic approaches to perform bootstrapping. The first approach is bootstrapping cases. Assume that we want to fit a regression model with response variable *Y* and predictors $\{x_1, \ldots, \ldots x_p\}$, and we have a sample of *n* cases $\{Z_i = (Y_i, x_{1i}, \ldots, \ldots x_{pi}), i = 1, \ldots, n\}$. In bootstrapping, we select *n* cases randomly from the original observations with replacement. For each bootstrapping sample, we fit the regression model and save the coefficients. Confidence intervals for the regression coefficients can be constructed based on *M* (a given large number) bootstrapping samples. The second approach in bootstrapping regression analysis is resampling the residuals. In this way a regression model is fitted to the original data first. The fitted values and residuals are calculated based on the fitted model. The residuals are randomly resampled and added back to the fitted values. After generating a new set of bootstrapping data, the regression model is refitted.

Efron and Tibshirani (1993, Chapter 9, p. 113) pointed out that bootstrapping cases is less sensitive to model assumptions such as normality and constant variance than bootstrapping residuals. In this study, the bootstrapping cases method was used to construct confidence intervals for change points.

There are several approaches to constructing bootstrap confidence intervals for change points. The bootstrap percentile interval approach was used in this study. This approach uses the empirical quantiles of $\hat{\theta}$ to form a confidence interval $[\hat{\theta}^*_{Lower}, \hat{\theta}^*_{Upper}]$ for the change point θ, where $\{\hat{\theta}_{(1)}{}^*, \hat{\theta}_{(2)}{}^*, \ldots, \hat{\theta}_{(M)}{}^*\}$ are the ordered bootstrap estimates of the change point; $\hat{\theta}^*_{Lower}$ and $\hat{\theta}^*_{Upper}$ are the α/2 percentile and the (1 − α/2) percentile of the bootstrap estimates of the change point, respectively.

For this analysis, we had 30 pairs of SCI and Median BCG Scores. We used a modified bootstrapping method to construct confidence intervals for the change points. Specifically, we



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first randomly drew 90% of the 30 pairs (or dropped 10%) from the original data and conducted change-point analysis. This procedure is also called the *drop-d Jackknife method* in statistics (Efron and Tibshirani, 1993, Page 149). Three thousand (3,000) samples were drawn from the original data, and the results are presented in Table I-2. For the first change point at SCI=35.8, the 90% and 95% confidence intervals based on the percentiles of the 3,000 estimated change points were identical.

**Table I-2. Confidence Intervals (CI) for the change points of SCI scores based on *M*=3,000 drop-10% samples.**

| | First Change Points | Second Change Points |
|---|---|---|
| SCI Based on Original Data | 35.8 | 9.1 |
| SCI Based on Average of drop-10% Estimates | 35.8 | 8.8 |
| SCI Based on Median of drop-10% Estimates | 35.8 | 9.1 |
| Standard Error of the Change Point | 1.6 | 2.7 |
| SCI Percentile Interval, 95% CI | [32.9, 38.2] | [4.6, 13.4] |
| SCI Percentile Interval, 90% CI | [32.9, 38.2] | [4.6, 12.0] |

## Summary

This change-point analysis was conducted for the purpose of addressing FDEP's goal of refining delineations of biological/ecological condition for Stream Condition Index (SCI) scores. The BCG (biological condition gradient) scores that were used to evaluate changes in SCI scores were provided by a panel of 22 experienced aquatic biologists in Florida. The results of this change-point analysis indicated a first change point at SCI=35.8, with the 95% confidence interval [32.9, 38.2]. In other words, SCI scores higher (better) than 35.8 were determined to be different from lower scores based on the biological condition assigned to taxonomic data for the samples by experienced aquatic biologists. Additional details of the BCG workshop and the change-point analysis are provided in Frydenborg and Miller, 2007 and Niu and Miller, 2007, respectively.

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# Appendix J. Reference sites

**Table J-1. Reference site locations.**

| STORET | Site Description | Bioregion | Waterbody Name | Facility Information from GIS Coverages | Latitude | | | Longitude | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Deg | Min | Sec | Deg | Min | Sec |
| 20030245 | Ates Creek @ CR 315 | Northeast | BLACK CREEK | No point sources or stormwater inputs upstream | 29 | 54 | 38 | 81 | 53 | 5 |
| 20030437 | BLACK CR., NORTH PRONG, 1/4 ABOVE BIG BRANCH | Northeast | BLACK CREEK | One large stormwater constructin permit upstream, possibly connected through wetlands issued in 6/2005. | 30 | 6 | 48.13 | 81 | 54 | 23.34 |
| 20030419 | Black Creek, South Prong | Northeast | BLACK CREEK | Camp blanding is upstream of this site | 29 | 56 | 3.15 | 81 | 55 | 9.63 |
| 20030723 | N. FORK BLACK CRK ABOVE CARTER SPENCER RD. | Northeast | BLACK CREEK | Dupont Highland Mine facility discharges, but this site is above this. | 30 | 4 | 9.2 | 81 | 58 | 43.9 |
| 20030247 | South Fork Black Creek @ SR 16 | Northeast | BLACK CREEK | No point sources or stormwater inputs upstream | 29 | 58 | 45 | 81 | 51 | 10 |
| 20030570 | Bradley Crk @ 739B-Peter's crk basin | Northeast | BRADLEY CREEK | Subdivision (Silver Creek) stormwater permits (2003 &2005), discharge may flow towards this site. | 30 | 2 | 48.8 | 81 | 47 | 5.5 |
| 20030487 | Bull Creek @ NE Crossing of CR 215 | Northeast | BULL CREEK | No point sources or stormwater inputs upstream | 30 | 2 | 3.2 | 81 | 54 | 6.8 |
| 19010042 | Calkins Ck, off Hamp Register Rd. | Northeast | CALKINS CREEK | No point sources or stormwater inputs upstream | 30 | 19 | 50.95 | 82 | 14 | 30.47 |
| 21010043 | Deep Creek upstream of bridge @Old River Rd | Northeast | DEEP CREEK | No point sources or stormwater inputs upstream | 30 | 22 | 35.7 | 82 | 38 | 16.1 |
| 21010018 | Falling Creek @ CR 131, above falls Suwannee R. | Northeast | FALLING CREEK | KOA Domestic WWTF ~3000 m upstream of site, not NPDES permitted, design capacity = 0.0150. Not NPDES permitted, and small design capacity likely means that this is a percolation pond. District Biologist is not aware of a KOA discharge in this area. | 30 | 15 | 39.47 | 82 | 40 | 5.19 |
| 19010064 | John Rowe Br, test site for NE FL State Hosp FYI | Northeast | JOHN ROWE BRANCH | No point sources or stormwater inputs upstream; The hospital doesn't show up as permitted site on the GIS coverage | 30 | 13 | 47.4 | 82 | 8 | 16.4 |

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| STORET | Site Description | Bioregion | Waterbody Name | Facility Information from GIS Coverages | Latitude | | | Longitude | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Deg | Min | Sec | Deg | Min | Sec |
| 20030571 | Peter's Crk above Rosemary hill Rd- Basin | Northeast | PETERS CREEK | Clay Co. Dept. of Env. Services has 2 stormwater permits right at the site and 2 stormwater outfall sites | 30 | 0 | 25.9 | 81 | 44 | 55.4 |
| 19010099 | Pigeon Creek at US 1 St. Marys-Nassau River | Northeast | PIGEON CREEK | No point sources or stormwater inputs upstream | 30 | 45 | 40.73 | 81 | 58 | 3.07 |
| 21010056 | PCS Phosphate FYI5, control site | Northeast | ROBINSON CREEK | No point sources or stormwater inputs upstream | 30 | 19 | 14 | 82 | 39 | 44.1 |
| 21010032 | Rocky Ck @ Woodpecker Rd | Northeast | ROCKY CREEK | No point sources or stormwater inputs upstream | 30 | 32 | 40.27 | 82 | 44 | 1.91 |
| 20030265 | Sal Taylor Creek below Rowell Creek | Northeast | SAL TAYLOR CREEK | One large stormwater constructin permit above these sites issued in 12/2004. | 30 | 11 | 59 | 81 | 54 | 50 |
| 21030115 | Santa Fe Rv- Control A BMP | Northeast | SANTA FE RIVER | A few stormwater permits pretty far upstream | 29 | 50 | 46.9 | 82 | 12 | 13.8 |
| 20030456 | Thomas Ck, Forestry BMP Study Ref Site B | Northeast | THOMAS CREEK | No point sources or stormwater inputs upstream | 29 | 54 | 57.6 | 81 | 51 | 44.9 |
| 19010072 | McClenny WWTP upstream | Northeast | TURKEY CREEK | A few stormwater permits around, look to be small and may not actually discharge to this stream | 30 | 16 | 6.4 | 82 | 7 | 34.9 |
| 20030341 | Yellow Water Creek above Sal Taylor Creek | Northeast | YELLOW WATER CREEK | One large stormwater constructin permit above these sites issued in 12/2004. | 30 | 12 | 3.2 | 81 | 55 | 10.35 |
| 20030342 | Yellow Water Creek below Sal Taylor Creek | Northeast | YELLOW WATER CREEK | One large stormwater constructin permit above these sites issued in 12/2004. | 30 | 11 | 44.45 | 81 | 55 | 5.8 |
| 22020070 | BIG CYPRESS BRANCH-TIMBER ENERGY FYI CNTRL SITE | Panhandle | BIG CYPRESS BRANCH | No point sources or stormwater inputs upstream | 30 | 19 | 0 | 84 | 48 | 0 |
| 33040014 | BIG HORSE CREEK S.R.2 OKA.CO. | Panhandle | BIG HORSE CREEK | No point sources or stormwater inputs upstream | 30 | 55 | 19.3 | 86 | 35 | 42.6 |
| 21030064 | Cedar Head Run, above Ichetucknee River | Panhandle | CEDAR HEAD RUN | Ichetucknee Family Campground WWTF upstream of site, not NPDES permitted (?), design capacity=0.007. Subsequent additional information indicates no discharge. Stream begins in State Park. | 29 | 58 | 50.2 | 82 | 45 | 30.92 |
| 31010050 | CROOKED CREEK HWY.270 GADSDEN CO. | Panhandle | CROOKED CREEK | No point sources or stormwater inputs upstream | 30 | 34 | 59.79 | 84 | 52 | 51.49 |

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| STORET | Site Description | Bioregion | Waterbody Name | Facility Information from GIS Coverages | Latitude | | | Longitude | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Deg | Min | Sec | Deg | Min | Sec |
| 32030023 | ECONFINA CREEK AT SCOTT RD | Panhandle | ECONFINA CREEK | No point sources or stormwater inputs upstream | 30 | 33 | 19.3 | 85 | 26 | 6 |
| 22050077 | Econfina River Forestry BMP Study Ref Site B | Panhandle | ECONFINA RIVER | No point sources or stormwater inputs upstream | 30 | 9 | 52.8 | 83 | 50 | 14.6 |
| 33040064 | Jacks Branch, Forestry BMP Study Ref Site B | Panhandle | JACK'S BRANCH | No point sources or stormwater inputs upstream | 30 | 52 | 10.3 | 86 | 29 | 21.7 |
| 32010024 | Limestone Ck @ Beckridge Rd | Panhandle | LIMESTONE CREEK | No point sources or stormwater inputs upstream | 30 | 59 | 21.58 | 86 | 5 | 9.81 |
| 32020063 | LITTLE CROOKED CREEK S.R.79 BAY CO. | Panhandle | LTL CROOKED CREEK | No point sources or stormwater inputs upstream | 30 | 24 | 48.4 | 85 | 52 | 6.5 |
| 22030062 | MCBRIDE SLOUGH HWY.267 WAKULLA CO. | Panhandle | MCBRIDE SLOUGH | No point sources or stormwater inputs upstream | 30 | 14 | 10 | 84 | 16 | 20 |
| 33010054 | MCDAVID CREEK AT SR 99 | Panhandle | MCDAVID CREEK | No point sources or stormwater inputs upstream | 30 | 44 | 21.6 | 87 | 26 | 54.8 |
| 22020049 | MULE CREEK S.R.12 LIBERTY CO. | Panhandle | MULE CREEK | No point sources or stormwater inputs upstream | 30 | 30 | 43.55 | 84 | 49 | 44.1 |
| 22020062 | Oklawaha Ck, SR 267, S of Quincy | Panhandle | OKLAWAHA CREEK | Sand mine operations (permitted IWF's). Subsequent additional information indicates no discharge to sampled site. | 30 | 27 | 2.18 | 84 | 38 | 36.89 |
| 31020073 | Pitts Mill Creek above conf with Cypress Ck | Panhandle | PITTS MILL CREEK | No point sources or stormwater inputs upstream | 30 | 16 | 43.9 | 85 | 14 | 23.6 |
| 22020010 | QUINCY CR above SR12, ref for Quincy STP FYI | Panhandle | QUINCY CREEK | Engelhard IWF upstream and numerous other small IWF's just S that may/may not flow towards this site. Subsequent additional information indicates no discharge to site except maybe during hurricanes. | 30 | 35 | 34.6 | 84 | 33 | 50.3 |
| 22030010 | St. Marks R approx 4 mi N of Hwy 98 (@ "rapids") | Panhandle | ST. MARKS RIVER | No point sources or stormwater inputs upstream | 30 | 14 | 24.8 | 84 | 8 | 43.4 |
| 31010051 | SWEETWATER CREEK HWY.270 LIBERTY CO. | Panhandle | SWEETWATER CREEK | No point sources or stormwater inputs upstream | 30 | 31 | 26.68 | 84 | 58 | 25.15 |

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| STORET | Site Description | Bioregion | Waterbody Name | Facility Information from GIS Coverages | Latitude | | | Longitude | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Deg | Min | Sec | Deg | Min | Sec |
| 31020040 | TEN MILE CREEK S.R.73 CALHOUN CO. | Panhandle | TEN MILE CREEK | One small WWTP and one Industrial Wastewater permitted facility upstream; Stormwater construction at sampling point. WW facilities at least 1.5 to 2 km upstream. Additional subsequent information from District Biologist is that site is appropriate for reference. | 30 | 30 | 1.27 | 85 | 12 | 1.91 |
| 33010065 | Rest Area Run Creek below I 10 | Panhandle | UNNAMED CREEK | Surrounded by stormwater construction, potential inputs from Perdido landfill upstream. Subsequent additional information from District Biologist is that this site was reference at the time relevant to the SCI sampling for the calibration dataset. | 30 | 34 | 5.4 | 87 | 24 | 10.6 |
| 22040038 | Unnamed Creek above Monticello WWTP | Panhandle | UNNAMED CREEK | A few stormwater permits around, look to be small and may not actually discharge to this stream | 30 | 30 | 59.5 | 83 | 51 | 25.3 |
| 32020066 | Wright Ck, ref for Noma STP FYI | Panhandle | WRIGHTS CREEK | Site is upstream of Noma WWTP | 30 | 58 | 47.7 | 85 | 35 | 54.4 |
| 20010455 | BLACKWATER CREEK AT HWY 44A | Peninsula | BLACKWATER CREEK | No point sources or stormwater inputs upstream | 28 | 52 | 38.96 | 81 | 29 | 19.91 |
| 28020239 | Cypress brch above SR 78 | Peninsula | CYPRESS BRANCH | No point sources or stormwater inputs upstream | 26 | 48 | 49 | 81 | 20 | 7 |
| 28020237 | Cypress Creek 2 mi above SR78 | Peninsula | CYPRESS CREEK | Small stormwater construction permit for Wayne Homes; permit started in 9/2004 | 26 | 45 | 5 | 81 | 37 | 14 |
| 26010972 | DAVENPORT CR AT SR 545 BRIDGE | Peninsula | DAVENPORT CREEK | Gas pipeline relocation stormwater permit started in 2/2005 | 28 | 16 | 15.2 | 81 | 35 | 28.06 |
| 26010593 | FISHEATING CREEK ABOVE US 27 | Peninsula | FISHEATING CREEK | Lykes Campground WWTF nearby, not NPDES permitted (?); Depending on flow direction could impact site. Subsequent additional information indicates that site is upstream from campground. | 26 | 56 | 12 | 81 | 19 | 34 |
| 20030414 | GOLD HEAD BR. IN STATE PARK | Peninsula | GOLD HEAD BRANCH | No point sources or stormwater inputs upstream | 29 | 49 | 56.03 | 81 | 56 | 46.64 |
| 24030142 | Hillsborough R upstrm of Southside Br, Zephyrhil | Peninsula | HILLSBOROUGH RIVER | Zephyrhills WWTF upstream of site, but can't determine where outfall is. Lots of monitoring wells around. Subsequent additional information indicates probably a percolation pond. No discharge to the site - the site was just visited. | 28 | 11 | 8.4 | 82 | 10 | 30.9 |

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| STORET | Site Description | Bioregion | Waterbody Name | Facility Information from GIS Coverages | Latitude | | | Longitude | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Deg | Min | Sec | Deg | Min | Sec |
| 24030048 | Hillsborough River at SR 39 | Peninsula | HILLSBOROUGH RIVER | Zephyrhills WWTF upstream of site, but can't determine where outfall is. Lots of monitoring wells around. Subsequent additional information indicates no discharge to the site - the site was just visited. | 28 | 11 | 38.7 | 82 | 10 | 2.8 |
| 25020111 | Horse Creek @ SR 72 Bridge | Peninsula | HORSE CREEK | No point sources or stormwater inputs upstream | 27 | 11 | 59.91 | 81 | 59 | 15.28 |
| 20010454 | JUNIPER CREEK AT HIGHWAY 19 | Peninsula | JUNIPER CREEK | No point sources or stormwater inputs upstream | 29 | 12 | 49.41 | 81 | 39 | 17.5 |
| 20020004 | Little Orange Creek @ Hwy 21 | Peninsula | LITTLE ORANGE CREEK | Ga Pacific-Hawthorne Plywood STW discharges upstream, but may flow into Little Orange Lake. Subsequent additional information indicates no discharge to the stream. | 29 | 32 | 28.42 | 81 | 57 | 16.67 |
| 26011019 | LIVINGSTON CREEK AT RUCKS DAIRY RD. | Peninsula | LIVINGSTON CREEK | No point sources or stormwater inputs upstream | 27 | 42 | 29.61 | 81 | 26 | 49.02 |
| 28010223 | N FK LOXAHATCHEE RIVER REF BIO STATION | Peninsula | LOXAHATCHEE RIVER | No point sources or stormwater inputs upstream | 27 | 0 | 4.76 | 80 | 6 | 58.48 |
| 24010002 | Manatee R 20 m below SR64 bridge (TP1) | Peninsula | MANATEE RIVER | Wingate Creek Mine flows SE into Johnson Crk | 27 | 28 | 24.14 | 82 | 12 | 39.48 |
| 20020012 | OKLAWAHA RIVER AT SR 316 | Peninsula | OKLAWAHA RIVER | No point sources or stormwater inputs upstream | 29 | 22 | 24.34 | 81 | 54 | 6.35 |
| 20020404 | ORANGE CREEK 50 YDS. UP FROM HWY. 21 | Peninsula | ORANGE CREEK | Water bottling facility (IWF) right at the sampling lat/longs. Subsequent additional information from DEP Bureau of Labs staff is that sampling trips in this area indicate that the IWF facility is located downstream of this site. | 29 | 30 | 33.44 | 81 | 56 | 47.8 |
| 20030253 | RICECR #3@BR SR #3/250yds above Bardine | Peninsula | RICE CREEK | No point sources or stormwater inputs upstream | 29 | 41 | 34 | 81 | 43 | 27 |
| 20020317 | SILVER RUN AT CONFLUENCE WITH BOAT RAMP CANAL | Peninsula | SILVER RUN | One small WWTP (Sharpes Ferry Mobile Home Park) permitted facility upstream, design capacity = 0.0190. Subsequent additional information indicates the site is upstream of any discharge. | 29 | 12 | 35.7 | 81 | 59 | 36 |
| 28020221 | TELEGRAPH CREEK AT BABCOCK RANCH | Peninsula | TELEGRAPH CREEK | One large stormwater construction nearby (permitted 3/2005), but flows into Big Island Canal which is also the receiving water for Telegraph Creek | 26 | 44 | 54.4 | 81 | 40 | 13.2 |

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| STORET | Site Description | Bioregion | Waterbody Name | Facility Information from GIS Coverages | Latitude | | | Longitude | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Deg | Min | Sec | Deg | Min | Sec |
| 26011020 | TIGER CREEK AT WALKING WATERS RD. | Peninsula | TIGER CREEK | No point sources or stormwater inputs upstream | 27 | 48 | 43.53 | 81 | 26 | 38.63 |
| 23010464 | Withlacoochee R @ county park off Auton Rd (TP3) | Peninsula | WITHLACOOCHEE RIVER | Small stormwater construction permit for bike trail; permit started in 4/2005 | 28 | 21 | 0 | 82 | 7 | 28.2 |
| 23010446 | WITHLACOOCHEE RIVER | Peninsula | WITHLACOOCHEE RIVER | No point sources or stormwater inputs upstream; site below WITHREF | 28 | 18 | 13.9 | 82 | 4 | 0.1 |

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**Table J-2. Reference sites sample data**

| STORET | Site Description | Bioregion | Waterbody Name | SCI | HDG | LDI | Total # individuals counted | Sample Date |
|---|---|---|---|---|---|---|---|---|
| 20030245 | Ates Creek @ CR 315 | Northeast | BLACK CREEK | 75.8 | 0 | 1.2 | 153 | 4/17/1997 |
| 20030437 | BLACK CR., NORTH PRONG, 1/4 ABOVE BIG BRANCH | Northeast | BLACK CREEK | 56.1 | 0 | 1.2 | 103 | 8/1/1995 |
| 20030437 | BLACK CR., NORTH PRONG, 1/4 ABOVE BIG BRANCH | Northeast | BLACK CREEK | 57.7 | 0 | 1.2 | 108 | 8/8/2000 |
| 20030437 | BLACK CR., NORTH PRONG, 1/4 ABOVE BIG BRANCH | Northeast | BLACK CREEK | 66.9 | 0 | 1.2 | 117 | 8/8/2000 |
| 20030437 | BLACK CR., NORTH PRONG, 1/4 ABOVE BIG BRANCH | Northeast | BLACK CREEK | 71.5 | 0 | 1.2 | 122 | 1/30/1996 |
| 20030437 | BLACK CR., NORTH PRONG, 1/4 ABOVE BIG BRANCH | Northeast | BLACK CREEK | 67.3 | 0 | 1.2 | 123 | 7/20/1994 |
| 20030419 | Black Creek, South Prong | Northeast | BLACK CREEK | 68.4 | 0 | 1.4 | 103 | 1/24/1995 |
| 20030419 | Black Creek, South Prong | Northeast | BLACK CREEK | 64.3 | 0 | 1.4 | 106 | 7/20/1994 |
| 20030419 | Black Creek, South Prong | Northeast | BLACK CREEK | 79.3 | 0 | 1.4 | 106 | 3/20/1997 |
| 20030419 | Black Creek, South Prong | Northeast | BLACK CREEK | 66.1 | 0 | 1.4 | 119 | 7/11/2000 |
| 20030419 | Black Creek, South Prong | Northeast | BLACK CREEK | 81.3 | 0 | 1.4 | 150 | 7/7/1998 |
| 20030723 | N. FORK BLACK CRK ABOVE CARTER SPENCER RD. | Northeast | BLACK CREEK | 43.4 | 0 | 1.2 | 108 | 7/12/1999 |
| 20030247 | South Fork Black Creek @ SR 16 | Northeast | BLACK CREEK | 90.2 | 0 | 1.1 | 123 | 4/17/1997 |
| 20030570 | Bradley Crk @ 739B-Peter's crk basin | Northeast | BRADLEY CREEK | 85.1 | 0 | 1.3 | 144 | 1/28/1998 |
| 20030487 | Bull Creek @ NE Crossing of CR 215 | Northeast | BULL CREEK | 63.9 | 0 | 1.2 | 164 | 4/17/1997 |
| 19010042 | Calkins Ck, off Hamp Register Rd. | Northeast | CALKINS CREEK | 75.7 | 0 | 1.2 | 102 | 8/3/1994 |
| 19010042 | Calkins Ck, off Hamp Register Rd. | Northeast | CALKINS CREEK | 80.4 | 0 | 1.2 | 108 | 11/1/1994 |
| 19010042 | Calkins Ck, off Hamp Register Rd. | Northeast | CALKINS CREEK | 50.0 | 0 | 1.2 | 114 | 7/10/2001 |
| 21010043 | Deep Creek upstream of bridge @Old River Rd | Northeast | DEEP CREEK | 66.9 | 0 | 1.4 | 101 | 11/10/1997 |
| 21010018 | Falling Creek @ CR 131, above falls Suwannee R. | Northeast | FALLING CREEK | 51.5 | 0 | 1.4 | 112 | 7/12/1994 |
| 21010018 | Falling Creek @ CR 131, above falls Suwannee R. | Northeast | FALLING CREEK | 77.9 | 0 | 1.4 | 126 | 7/17/1997 |
| 21010018 | Falling Creek @ CR 131, above falls Suwannee R. | Northeast | FALLING CREEK | 39.0 | 0 | 1.4 | 132 | 7/27/1999 |
| 21010018 | Falling Creek @ CR 131, above falls Suwannee R. | Northeast | FALLING CREEK | 42.7 | 0 | 1.4 | 160 | 2/8/1994 |
| 21010018 | Falling Creek @ CR 131, above falls Suwannee R. | Northeast | FALLING CREEK | 87.8 | 0 | 1.4 | 161 | 1/4/1995 |
| 19010064 | John Rowe Br, test site for NE FL State Hosp FYI | Northeast | JOHN ROWE BRANCH | 62.7 | 0 | 1.8 | 142 | 11/1/1994 |
| 20030571 | Peter's Crk above Rosemary hill Rd- Basin | Northeast | PETERS CREEK | 89.0 | 0 | 1.2 | 110 | 1/26/1998 |

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| STORET | Site Description | Bioregion | Waterbody Name | SCI | HDG | LDI | Total # individuals counted | Sample Date |
|---|---|---|---|---|---|---|---|---|
| 19010099 | Pigeon Creek at US 1 St. Marys-Nassau River | Northeast | PIGEON CREEK | 78.8 | 0 | 1.3 | 105 | 3/7/1994 |
| 19010099 | Pigeon Creek at US 1 St. Marys-Nassau River | Northeast | PIGEON CREEK | 76.8 | 0 | 1.3 | 108 | 7/25/1994 |
| 19010099 | Pigeon Creek at US 1 St. Marys-Nassau River | Northeast | PIGEON CREEK | 78.9 | 0 | 1.3 | 109 | 3/6/1995 |
| 19010099 | Pigeon Creek at US 1 St. Marys-Nassau River | Northeast | PIGEON CREEK | 58.0 | 0 | 1.3 | 111 | 2/1/2000 |
| 19010099 | Pigeon Creek at US 1 St. Marys-Nassau River | Northeast | PIGEON CREEK | 83.5 | 0 | 1.3 | 156 | 3/3/1993 |
| 19010099 | Pigeon Creek at US 1 St. Marys-Nassau River | Northeast | PIGEON CREEK | 54.8 | 0 | 1.3 | 157 | 7/9/1996 |
| 21010056 | PCS Phosphate FYI5, control site | Northeast | ROBINSON CREEK | 79.2 | 0 | 1.4 | 113 | 3/13/2000 |
| 21010032 | Rocky Ck @ Woodpecker Rd | Northeast | ROCKY CREEK | 56.7 | 0 | 1.2 | 152 | 8/24/1994 |
| 20030265 | Sal Taylor Creek below Rowell Creek | Northeast | SAL TAYLOR CREEK | 68.6 | 0 | 1.8 | 138 | 3/5/1996 |
| 20030265 | Sal Taylor Creek below Rowell Creek | Northeast | SAL TAYLOR CREEK | 35.1 | 0 | 1.8 | 146 | 10/2/1995 |
| 21030115 | Santa Fe Rv- Control A BMP | Northeast | SANTA FE RIVER | 75.7 | 0 | 1.5 | 148 | 11/6/1998 |
| 20030456 | Thomas Ck, Forestry BMP Study Ref Site B | Northeast | THOMAS CREEK | 75.7 | 0 | 1.2 | 118 | 7/2/1997 |
| 20030456 | Thomas Ck, Forestry BMP Study Ref Site B | Northeast | THOMAS CREEK | 82.6 | 0 | 1.2 | 128 | 2/12/1998 |
| 20030456 | Thomas Ck, Forestry BMP Study Ref Site B | Northeast | THOMAS CREEK | 92.4 | 0 | 1.2 | 129 | 3/14/1996 |
| 20030456 | Thomas Ck, Forestry BMP Study Ref Site B | Northeast | THOMAS CREEK | 86.7 | 0 | 1.2 | 159 | 2/21/1997 |
| 19010072 | McClenny WWTP upstream | Northeast | TURKEY CREEK | 78.2 | 0 | 1.6 | 160 | 3/22/1999 |
| 20030341 | Yellow Water Creek above Sal Taylor Creek | Northeast | YELLOW WATER CREEK | 70.4 | 0 | 1.9 | 107 | 3/5/1996 |
| 20030341 | Yellow Water Creek above Sal Taylor Creek | Northeast | YELLOW WATER CREEK | 66.4 | 0 | 1.9 | 147 | 10/2/1995 |
| 20030342 | Yellow Water Creek below Sal Taylor Creek | Northeast | YELLOW WATER CREEK | 43.5 | 0 | 1.8 | 103 | 10/2/1995 |
| 20030342 | Yellow Water Creek below Sal Taylor Creek | Northeast | YELLOW WATER CREEK | 74.8 | 0 | 1.8 | 166 | 3/5/1996 |
| 22020070 | BIG CYPRESS BRANCH-TIMBER ENERGY FYI CNTRL SITE | Panhandle | BIG CYPRESS BRANCH | 53.6 | 0 | 1.3 | 125 | 8/9/1999 |
| 33040014 | BIG HORSE CREEK S.R.2 OKA.CO. | Panhandle | BIG HORSE CREEK | 67.4 | 0 | 1.2 | 114 | 7/15/1996 |
| 33040014 | BIG HORSE CREEK S.R.2 OKA.CO. | Panhandle | BIG HORSE CREEK | 41.7 | 0 | 1.2 | 119 | 2/17/1993 |
| 33040014 | BIG HORSE CREEK S.R.2 OKA.CO. | Panhandle | BIG HORSE CREEK | 78.4 | 0 | 1.2 | 126 | 1/30/1995 |
| 33040014 | BIG HORSE CREEK S.R.2 OKA.CO. | Panhandle | BIG HORSE CREEK | 75.3 | 0 | 1.2 | 148 | 2/8/2001 |
| 33040014 | BIG HORSE CREEK S.R.2 OKA.CO. | Panhandle | BIG HORSE CREEK | 67.0 | 0 | 1.2 | 154 | 8/23/1994 |
| 33040014 | BIG HORSE CREEK S.R.2 OKA.CO. | Panhandle | BIG HORSE CREEK | 96.3 | 0 | 1.2 | 173 | 7/15/1998 |
| 21030064 | Cedar Head Run, above Ichetucknee River | Panhandle | CEDAR HEAD RUN | 42.2 | 0 | 1.0 | 100 | 8/1/1994 |
| 21030064 | Cedar Head Run, above Ichetucknee River | Panhandle | CEDAR HEAD RUN | 40.6 | 0 | 1.0 | 105 | 2/1/1995 |

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| STORET | Site Description | Bioregion | Waterbody Name | SCI | HDG | LDI | Total # individuals counted | Sample Date |
|---|---|---|---|---|---|---|---|---|
| 21030064 | Cedar Head Run, above Ichetucknee River | Panhandle | CEDAR HEAD RUN | 46.2 | 0 | 1.0 | 108 | 2/6/1996 |
| 21030064 | Cedar Head Run, above Ichetucknee River | Panhandle | CEDAR HEAD RUN | 69.4 | 0 | 1.0 | 111 | 3/15/2000 |
| 31010050 | CROOKED CREEK HWY.270 GADSDEN CO. | Panhandle | CROOKED CREEK | 71.1 | 0 | 1.1 | 108 | 2/13/1995 |
| 31010050 | CROOKED CREEK HWY.270 GADSDEN CO. | Panhandle | CROOKED CREEK | 58.5 | 0 | 1.1 | 132 | 3/25/1993 |
| 31010050 | CROOKED CREEK HWY.270 GADSDEN CO. | Panhandle | CROOKED CREEK | 84.8 | 0 | 1.1 | 151 | 7/9/1996 |
| 32030023 | ECONFINA CREEK AT SCOTT RD | Panhandle | ECONFINA CREEK | 68.2 | 0 | 1.2 | 102 | 2/7/1995 |
| 32030023 | ECONFINA CREEK AT SCOTT RD | Panhandle | ECONFINA CREEK | 70.4 | 0 | 1.2 | 106 | 8/25/1992 |
| 32030023 | ECONFINA CREEK AT SCOTT RD | Panhandle | ECONFINA CREEK | 62.3 | 0 | 1.2 | 124 | 2/6/2001 |
| 32030023 | ECONFINA CREEK AT SCOTT RD | Panhandle | ECONFINA CREEK | 81.3 | 0 | 1.2 | 151 | 6/28/1993 |
| 32030023 | ECONFINA CREEK AT SCOTT RD | Panhandle | ECONFINA CREEK | 87.9 | 0 | 1.2 | 162 | 2/5/1997 |
| 22050077 | Econfina River Forestry BMP Study Ref Site B | Panhandle | ECONFINA RIVER | 59.8 | 0 | 1.1 | 135 | 5/13/1998 |
| 33040064 | Jacks Branch, Forestry BMP Study Ref Site B | Panhandle | JACK'S BRANCH | 63.4 | 0 | 1.7 | 111 | 2/22/1996 |
| 33040064 | Jacks Branch, Forestry BMP Study Ref Site B | Panhandle | JACK'S BRANCH | 63.6 | 0 | 1.7 | 140 | 2/25/1997 |
| 33040064 | Jacks Branch, Forestry BMP Study Ref Site B | Panhandle | JACK'S BRANCH | 66.9 | 0 | 1.7 | 173 | 7/1/1998 |
| 32010024 | Limestone Ck @ Beckridge Rd | Panhandle | LIMESTONE CREEK | 74.5 | 0 | 1.3 | 171 | 7/14/1998 |
| 32020063 | LITTLE CROOKED CREEK S.R.79 BAY CO. | Panhandle | LTL CROOKED CREEK | 78.6 | 0 | 1.2 | 100 | 1/21/1999 |
| 32020063 | LITTLE CROOKED CREEK S.R.79 BAY CO. | Panhandle | LTL CROOKED CREEK | 67.4 | 0 | 1.2 | 113 | 2/9/1995 |
| 32020063 | LITTLE CROOKED CREEK S.R.79 BAY CO. | Panhandle | LTL CROOKED CREEK | 62.3 | 0 | 1.2 | 116 | 8/30/1994 |
| 32020063 | LITTLE CROOKED CREEK S.R.79 BAY CO. | Panhandle | LTL CROOKED CREEK | 71.5 | 0 | 1.2 | 126 | 6/29/1993 |
| 32020063 | LITTLE CROOKED CREEK S.R.79 BAY CO. | Panhandle | LTL CROOKED CREEK | 72.6 | 0 | 1.2 | 129 | 2/23/1994 |
| 32020063 | LITTLE CROOKED CREEK S.R.79 BAY CO. | Panhandle | LTL CROOKED CREEK | 80.1 | 0 | 1.2 | 153 | 7/16/1996 |
| 32020063 | LITTLE CROOKED CREEK S.R.79 BAY CO. | Panhandle | LTL CROOKED CREEK | 52.7 | 0 | 1.2 | 156 | 3/1/1993 |
| 22030062 | MCBRIDE SLOUGH HWY.267 WAKULLA CO. | Panhandle | MCBRIDE SLOUGH | 41.6 | 0 | 1.0 | 112 | 7/8/1992 |
| 22030062 | MCBRIDE SLOUGH HWY.267 WAKULLA CO. | Panhandle | MCBRIDE SLOUGH | 60.2 | 0 | 1.0 | 138 | 3/21/1994 |
| 22030062 | MCBRIDE SLOUGH HWY.267 WAKULLA CO. | Panhandle | MCBRIDE SLOUGH | 57.3 | 0 | 1.0 | 147 | 2/11/1997 |
| 33010054 | MCDAVID CREEK AT SR 99 | Panhandle | MCDAVID CREEK | 73.2 | 0 | 1.3 | 101 | 1/24/1995 |
| 33010054 | MCDAVID CREEK AT SR 99 | Panhandle | MCDAVID CREEK | 75.6 | 0 | 1.3 | 115 | 2/22/2001 |
| 33010054 | MCDAVID CREEK AT SR 99 | Panhandle | MCDAVID CREEK | 68.7 | 0 | 1.3 | 118 | 2/18/1993 |
| 33010054 | MCDAVID CREEK AT SR 99 | Panhandle | MCDAVID CREEK | 48.5 | 0 | 1.3 | 126 | 8/10/1994 |

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| STORET | Site Description | Bioregion | Waterbody Name | SCI | HDG | LDI | Total # individuals counted | Sample Date |
|---|---|---|---|---|---|---|---|---|
| 33010054 | MCDAVID CREEK AT SR 99 | Panhandle | MCDAVID CREEK | 70.2 | 0 | 1.3 | 127 | 8/12/1997 |
| 33010054 | MCDAVID CREEK AT SR 99 | Panhandle | MCDAVID CREEK | 76.9 | 0 | 1.3 | 141 | 8/17/1992 |
| 33010054 | MCDAVID CREEK AT SR 99 | Panhandle | MCDAVID CREEK | 88.7 | 0 | 1.3 | 173 | 2/14/1994 |
| 22020049 | MULE CREEK S.R.12 LIBERTY CO. | Panhandle | MULE CREEK | 49.9 | 0 | 1.2 | 104 | 3/25/1993 |
| 22020049 | MULE CREEK S.R.12 LIBERTY CO. | Panhandle | MULE CREEK | 65.7 | 0 | 1.2 | 106 | 2/13/1995 |
| 22020049 | MULE CREEK S.R.12 LIBERTY CO. | Panhandle | MULE CREEK | 57.7 | 0 | 1.2 | 112 | 2/23/1999 |
| 22020049 | MULE CREEK S.R.12 LIBERTY CO. | Panhandle | MULE CREEK | 58.6 | 0 | 1.2 | 114 | 7/8/1992 |
| 22020049 | MULE CREEK S.R.12 LIBERTY CO. | Panhandle | MULE CREEK | 67.8 | 0 | 1.2 | 125 | 7/9/1996 |
| 22020062 | Oklawaha Ck, SR 267, S of Quincy | Panhandle | OKLAWAHA CREEK | 52.0 | 0 | 1.1 | 100 | 9/9/1998 |
| 22020062 | Oklawaha Ck, SR 267, S of Quincy | Panhandle | OKLAWAHA CREEK | 41.8 | 0 | 1.1 | 101 | 8/1/1994 |
| 22020062 | Oklawaha Ck, SR 267, S of Quincy | Panhandle | OKLAWAHA CREEK | 45.2 | 0 | 1.1 | 105 | 8/12/1997 |
| 22020062 | Oklawaha Ck, SR 267, S of Quincy | Panhandle | OKLAWAHA CREEK | 48.3 | 0 | 1.1 | 108 | 2/13/1995 |
| 22020062 | Oklawaha Ck, SR 267, S of Quincy | Panhandle | OKLAWAHA CREEK | 82.9 | 0 | 1.1 | 147 | 2/13/1996 |
| 31020073 | Pitts Mill Creek above conf with Cypress Ck | Panhandle | PITTS MILL CREEK | 68.2 | 0 | 1.5 | 115 | 7/23/1996 |
| 22020010 | QUINCY CR above SR12, ref for Quincy STP FYI | Panhandle | QUINCY CREEK | 45.5 | 0 | 1.5 | 105 | 11/6/1995 |
| 22030010 | St. Marks R approx 4 mi N of Hwy 98 (@ "rapids") | Panhandle | ST. MARKS RIVER | 40.5 | 0 | 1.3 | 100 | 9/18/2001 |
| 22030010 | St. Marks R approx 4 mi N of Hwy 98 (@ "rapids") | Panhandle | ST. MARKS RIVER | 56.0 | 0 | 1.3 | 105 | 3/18/1997 |
| 22030010 | St. Marks R approx 4 mi N of Hwy 98 (@ "rapids") | Panhandle | ST. MARKS RIVER | 46.8 | 0 | 1.3 | 108 | 8/22/2000 |
| 31010051 | SWEETWATER CREEK HWY.270 LIBERTY CO. | Panhandle | SWEETWATER CREEK | 69.9 | 0 | 1.3 | 104 | 2/13/1996 |
| 31010051 | SWEETWATER CREEK HWY.270 LIBERTY CO. | Panhandle | SWEETWATER CREEK | 75.2 | 0 | 1.3 | 110 | 3/21/1994 |
| 31010051 | SWEETWATER CREEK HWY.270 LIBERTY CO. | Panhandle | SWEETWATER CREEK | 97.8 | 0 | 1.3 | 110 | 7/8/1992 |
| 31010051 | SWEETWATER CREEK HWY.270 LIBERTY CO. | Panhandle | SWEETWATER CREEK | 59.7 | 0 | 1.3 | 129 | 8/1/1994 |
| 31010051 | SWEETWATER CREEK HWY.270 LIBERTY CO. | Panhandle | SWEETWATER CREEK | 66.7 | 0 | 1.3 | 132 | 3/25/1993 |
| 31010051 | SWEETWATER CREEK HWY.270 LIBERTY CO. | Panhandle | SWEETWATER CREEK | 70.0 | 0 | 1.3 | 151 | 2/13/1995 |
| 31010051 | SWEETWATER CREEK HWY.270 LIBERTY CO. | Panhandle | SWEETWATER CREEK | 84.1 | 0 | 1.3 | 162 | 7/20/1993 |
| 31020040 | TEN MILE CREEK S.R.73 CALHOUN CO. | Panhandle | TEN MILE CREEK | 50.5 | 0 | 1.2 | 107 | 8/26/1994 |
| 31020040 | TEN MILE CREEK S.R.73 CALHOUN CO. | Panhandle | TEN MILE CREEK | 72.9 | 0 | 1.2 | 113 | 8/20/1992 |
| 31020040 | TEN MILE CREEK S.R.73 CALHOUN CO. | Panhandle | TEN MILE CREEK | 82.0 | 0 | 1.2 | 124 | 2/7/1995 |
| 31020040 | TEN MILE CREEK S.R.73 CALHOUN CO. | Panhandle | TEN MILE CREEK | 55.3 | 0 | 1.2 | 125 | 2/23/1993 |

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| STORET | Site Description | Bioregion | Waterbody Name | SCI | HDG | LDI | Total # individuals counted | Sample Date |
|---|---|---|---|---|---|---|---|---|
| 31020040 | TEN MILE CREEK S.R.73 CALHOUN CO. | Panhandle | TEN MILE CREEK | 76.1 | 0 | 1.2 | 126 | 2/21/1994 |
| 31020040 | TEN MILE CREEK S.R.73 CALHOUN CO. | Panhandle | TEN MILE CREEK | 62.0 | 0 | 1.2 | 129 | 6/24/1993 |
| 31020040 | TEN MILE CREEK S.R.73 CALHOUN CO. | Panhandle | TEN MILE CREEK | 67.7 | 0 | 1.2 | 130 | 2/4/1997 |
| 31020040 | TEN MILE CREEK S.R.73 CALHOUN CO. | Panhandle | TEN MILE CREEK | 49.4 | 0 | 1.2 | 141 | 2/10/1998 |
| 33010065 | Rest Area Run Creek below I 10 | Panhandle | UNNAMED CREEK | 82.2 | 0 | 1.2 | 113 | 7/12/1995 |
| 33010065 | Rest Area Run Creek below I 10 | Panhandle | UNNAMED CREEK | 54.7 | 0 | 1.2 | 147 | 2/14/1996 |
| 22040038 | Unnamed Creek above Monticello WWTP | Panhandle | UNNAMED CREEK | 54.7 | 0 | 1.7 | 153 | 12/12/1995 |
| 32020066 | Wright Ck, ref for Noma STP FYI | Panhandle | WRIGHTS CREEK | 73.9 | 0 | 1.7 | 123 | 4/29/1993 |
| 20010455 | BLACKWATER CREEK AT HWY 44A | Peninsula | BLACKWATER CREEK | 59.0 | 0 | 1.0 | 109 | 3/29/1994 |
| 20010455 | BLACKWATER CREEK AT HWY 44A | Peninsula | BLACKWATER CREEK | 56.5 | 0 | 1.0 | 111 | 7/19/1994 |
| 20010455 | BLACKWATER CREEK AT HWY 44A | Peninsula | BLACKWATER CREEK | 80.9 | 0 | 1.0 | 126 | 8/26/1996 |
| 20010455 | BLACKWATER CREEK AT HWY 44A | Peninsula | BLACKWATER CREEK | 54.0 | 0 | 1.0 | 127 | 9/28/1993 |
| 20010455 | BLACKWATER CREEK AT HWY 44A | Peninsula | BLACKWATER CREEK | 51.9 | 0 | 1.0 | 128 | 8/11/1992 |
| 20010455 | BLACKWATER CREEK AT HWY 44A | Peninsula | BLACKWATER CREEK | 59.7 | 0 | 1.0 | 133 | 2/8/1993 |
| 20010455 | BLACKWATER CREEK AT HWY 44A | Peninsula | BLACKWATER CREEK | 33.5 | 0 | 1.0 | 143 | 2/7/1995 |
| 28020239 | Cypress brch above SR 78 | Peninsula | CYPRESS BRANCH | 57.6 | 0 | 1.3 | 135 | 8/20/1997 |
| 28020239 | Cypress brch above SR 78 | Peninsula | CYPRESS BRANCH | 70.3 | 0 | 1.3 | 142 | 8/20/1997 |
| 28020237 | Cypress Creek 2 mi above SR78 | Peninsula | CYPRESS CREEK | 55.7 | 0 | 1.2 | 132 | 7/21/1999 |
| 28020237 | Cypress Creek 2 mi above SR78 | Peninsula | CYPRESS CREEK | 70.4 | 0 | 1.2 | 135 | 8/5/1997 |
| 26010972 | DAVENPORT CR AT SR 545 BRIDGE | Peninsula | DAVENPORT CREEK | 63.0 | 0 | 2.0 | 104 | 8/16/1994 |
| 26010972 | DAVENPORT CR AT SR 545 BRIDGE | Peninsula | DAVENPORT CREEK | 66.3 | 0 | 2.0 | 110 | 9/30/1997 |
| 26010972 | DAVENPORT CR AT SR 545 BRIDGE | Peninsula | DAVENPORT CREEK | 73.6 | 0 | 2.0 | 113 | 2/14/1995 |
| 26010972 | DAVENPORT CR AT SR 545 BRIDGE | Peninsula | DAVENPORT CREEK | 79.4 | 0 | 2.0 | 167 | 1/10/2000 |
| 26010593 | FISHEATING CREEK ABOVE US 27 | Peninsula | FISHEATING CREEK | 60.8 | 0 | 1.1 | 113 | 3/9/1993 |
| 20030414 | GOLD HEAD BR. IN STATE PARK | Peninsula | GOLD HEAD BRANCH | 90.0 | 0 | 1.0 | 100 | 8/21/1996 |
| 20030414 | GOLD HEAD BR. IN STATE PARK | Peninsula | GOLD HEAD BRANCH | 72.2 | 0 | 1.0 | 102 | 1/24/1995 |
| 20030414 | GOLD HEAD BR. IN STATE PARK | Peninsula | GOLD HEAD BRANCH | 80.8 | 0 | 1.0 | 109 | 7/20/1994 |
| 20030414 | GOLD HEAD BR. IN STATE PARK | Peninsula | GOLD HEAD BRANCH | 100.0 | 0 | 1.0 | 111 | 1/12/2000 |
| 20030414 | GOLD HEAD BR. IN STATE PARK | Peninsula | GOLD HEAD BRANCH | 89.2 | 0 | 1.0 | 121 | 3/10/1998 |

US EPA ARCHIVE DOCUMENT

| STORET | Site Description | Bioregion | Waterbody Name | SCI | HDG | LDI | Total # individuals counted | Sample Date |
|---|---|---|---|---|---|---|---|---|
| 20030414 | GOLD HEAD BR. IN STATE PARK | Peninsula | GOLD HEAD BRANCH | 77.4 | 0 | 1.0 | 123 | 2/15/1994 |
| 24030142 | Hillsborough R upstrm of Southside Br, Zephyrhil | Peninsula | HILLSBOROUGH RIVER | 87.1 | 0 | 1.6 | 145 | 8/21/1996 |
| 24030048 | Hillsborough River at SR 39 | Peninsula | HILLSBOROUGH RIVER | 60.8 | 0 | 1.5 | 109 | 8/21/1996 |
| 25020111 | Horse Creek @ SR 72 Bridge | Peninsula | HORSE CREEK | 70.4 | 0 | 1.8 | 110 | 2/17/1999 |
| 25020111 | Horse Creek @ SR 72 Bridge | Peninsula | HORSE CREEK | 66.6 | 0 | 1.8 | 147 | 10/24/1994 |
| 20010454 | JUNIPER CREEK AT HIGHWAY 19 | Peninsula | JUNIPER CREEK | 55.8 | 0 | 1.1 | 110 | 1/31/1995 |
| 20010454 | JUNIPER CREEK AT HIGHWAY 19 | Peninsula | JUNIPER CREEK | 29.6 | 0 | 1.1 | 115 | 8/3/1993 |
| 20010454 | JUNIPER CREEK AT HIGHWAY 19 | Peninsula | JUNIPER CREEK | 75.5 | 0 | 1.1 | 146 | 3/4/1996 |
| 20020004 | Little Orange Creek @ Hwy 21 | Peninsula | LITTLE ORANGE CREEK | 73.2 | 0 | 1.2 | 133 | 2/9/1998 |
| 20020004 | Little Orange Creek @ Hwy 21 | Peninsula | LITTLE ORANGE CREEK | 82.5 | 0 | 1.2 | 134 | 2/12/1996 |
| 20020004 | Little Orange Creek @ Hwy 21 | Peninsula | LITTLE ORANGE CREEK | 86.8 | 0 | 1.2 | 138 | 8/30/1994 |
| 20020004 | Little Orange Creek @ Hwy 21 | Peninsula | LITTLE ORANGE CREEK | 82.2 | 0 | 1.2 | 139 | 2/15/1994 |
| 20020004 | Little Orange Creek @ Hwy 21 | Peninsula | LITTLE ORANGE CREEK | 90.3 | 0 | 1.2 | 150 | 9/26/1995 |
| 20020004 | Little Orange Creek @ Hwy 21 | Peninsula | LITTLE ORANGE CREEK | 75.3 | 0 | 1.2 | 161 | 8/15/2000 |
| 26011019 | LIVINGSTON CREEK AT RUCKS DAIRY RD. | Peninsula | LIVINGSTON CREEK | 71.2 | 0 | 1.5 | 118 | 9/5/2001 |
| 26011019 | LIVINGSTON CREEK AT RUCKS DAIRY RD. | Peninsula | LIVINGSTON CREEK | 61.5 | 0 | 1.5 | 156 | 2/18/1997 |
| 28010223 | N FK LOXAHATCHEE RIVER REF BIO STATION | Peninsula | LOXAHATCHEE RIVER | 34.3 | 0 | 1.0 | 106 | 9/21/1998 |
| 28010223 | N FK LOXAHATCHEE RIVER REF BIO STATION | Peninsula | LOXAHATCHEE RIVER | 49.2 | 0 | 1.0 | 115 | 9/22/1995 |
| 28010223 | N FK LOXAHATCHEE RIVER REF BIO STATION | Peninsula | LOXAHATCHEE RIVER | 59.9 | 0 | 1.0 | 124 | 10/7/1999 |
| 28010223 | N FK LOXAHATCHEE RIVER REF BIO STATION | Peninsula | LOXAHATCHEE RIVER | 33.9 | 0 | 1.0 | 134 | 8/20/1992 |
| 28010223 | N FK LOXAHATCHEE RIVER REF BIO STATION | Peninsula | LOXAHATCHEE RIVER | 54.8 | 0 | 1.0 | 146 | 8/25/1994 |
| 28010223 | N FK LOXAHATCHEE RIVER REF BIO STATION | Peninsula | LOXAHATCHEE RIVER | 33.8 | 0 | 1.0 | 158 | 3/22/1999 |
| 28010223 | N FK LOXAHATCHEE RIVER REF BIO STATION | Peninsula | LOXAHATCHEE RIVER | 44.7 | 0 | 1.0 | 161 | 2/20/1996 |
| 24010002 | Manatee R 20 m below SR64 bridge (TP1) | Peninsula | MANATEE RIVER | 60.3 | 0 | 1.3 | 109 | 3/17/1993 |
| 24010002 | Manatee R 20 m below SR64 bridge (TP1) | Peninsula | MANATEE RIVER | 76.3 | 0 | 1.3 | 126 | 2/2/1994 |
| 24010002 | Manatee R 20 m below SR64 bridge (TP1) | Peninsula | MANATEE RIVER | 77.2 | 0 | 1.3 | 129 | 7/17/1996 |
| 24010002 | Manatee R 20 m below SR64 bridge (TP1) | Peninsula | MANATEE RIVER | 96.7 | 0 | 1.3 | 145 | 2/2/1994 |
| 24010002 | Manatee R 20 m below SR64 bridge (TP1) | Peninsula | MANATEE RIVER | 80.2 | 0 | 1.3 | 172 | 11/21/2000 |
| 20020012 | OKLAWAHA RIVER AT SR 316 | Peninsula | OKLAWAHA RIVER | 77.9 | 0 | 1.0 | 101 | 8/29/1995 |

US EPA ARCHIVE DOCUMENT

| STORET | Site Description | Bioregion | Waterbody Name | SCI | HDG | LDI | Total # individuals counted | Sample Date |
|---|---|---|---|---|---|---|---|---|
| 20020012 | OKLAWAHA RIVER AT SR 316 | Peninsula | OKLAWAHA RIVER | 65.2 | 0 | 1.0 | 117 | 3/20/1995 |
| 20020012 | OKLAWAHA RIVER AT SR 316 | Peninsula | OKLAWAHA RIVER | 67.2 | 0 | 1.0 | 117 | 8/10/1993 |
| 20020012 | OKLAWAHA RIVER AT SR 316 | Peninsula | OKLAWAHA RIVER | 68.1 | 0 | 1.0 | 137 | 2/15/2000 |
| 20020012 | OKLAWAHA RIVER AT SR 316 | Peninsula | OKLAWAHA RIVER | 80.6 | 0 | 1.0 | 151 | 8/11/1998 |
| 20020012 | OKLAWAHA RIVER AT SR 316 | Peninsula | OKLAWAHA RIVER | 49.6 | 0 | 1.0 | 153 | 2/8/1993 |
| 20020404 | ORANGE CREEK 50 YDS. UP FROM HWY. 21 | Peninsula | ORANGE CREEK | 93.1 | 0 | 1.4 | 105 | 8/17/1993 |
| 20020404 | ORANGE CREEK 50 YDS. UP FROM HWY. 21 | Peninsula | ORANGE CREEK | 94.5 | 0 | 1.4 | 110 | 9/22/1992 |
| 20020404 | ORANGE CREEK 50 YDS. UP FROM HWY. 21 | Peninsula | ORANGE CREEK | 92.1 | 0 | 1.4 | 111 | 8/30/1994 |
| 20020404 | ORANGE CREEK 50 YDS. UP FROM HWY. 21 | Peninsula | ORANGE CREEK | 83.1 | 0 | 1.4 | 118 | 3/16/1993 |
| 20020404 | ORANGE CREEK 50 YDS. UP FROM HWY. 21 | Peninsula | ORANGE CREEK | 91.8 | 0 | 1.4 | 135 | 8/15/2000 |
| 20020404 | ORANGE CREEK 50 YDS. UP FROM HWY. 21 | Peninsula | ORANGE CREEK | 94.3 | 0 | 1.4 | 139 | 2/15/1994 |
| 20020404 | ORANGE CREEK 50 YDS. UP FROM HWY. 21 | Peninsula | ORANGE CREEK | 72.0 | 0 | 1.4 | 144 | 8/15/2000 |
| 20020404 | ORANGE CREEK 50 YDS. UP FROM HWY. 21 | Peninsula | ORANGE CREEK | 96.3 | 0 | 1.4 | 168 | 2/28/1995 |
| 20030253 | RICECR #3@BR SR #3/250yds above Bardine | Peninsula | RICE CREEK | 67.1 | 0 | 1.1 | 125 | 5/11/1999 |
| 20030253 | RICECR #3@BR SR #3/250yds above Bardine | Peninsula | RICE CREEK | 24.0 | 0 | 1.1 | 136 | 3/16/1998 |
| 20020317 | SILVER RUN AT CONFLUENCE WITH BOAT RAMP CANAL | Peninsula | SILVER RUN | 34.8 | 0 | 1.3 | 133 | 9/1/1992 |
| 20020317 | SILVER RUN AT CONFLUENCE WITH BOAT RAMP CANAL | Peninsula | SILVER RUN | 42.3 | 0 | 1.3 | 136 | 8/10/1993 |
| 20020317 | SILVER RUN AT CONFLUENCE WITH BOAT RAMP CANAL | Peninsula | SILVER RUN | 53.5 | 0 | 1.3 | 142 | 9/4/2001 |
| 20020317 | SILVER RUN AT CONFLUENCE WITH BOAT RAMP CANAL | Peninsula | SILVER RUN | 57.6 | 0 | 1.3 | 142 | 2/8/1994 |
| 20020317 | SILVER RUN AT CONFLUENCE WITH BOAT RAMP CANAL | Peninsula | SILVER RUN | 54.2 | 0 | 1.3 | 150 | 3/20/1995 |
| 20020317 | SILVER RUN AT CONFLUENCE WITH BOAT RAMP CANAL | Peninsula | SILVER RUN | 76.0 | 0 | 1.3 | 166 | 9/16/1996 |
| 28020221 | TELEGRAPH CREEK AT BABCOCK RANCH | Peninsula | TELEGRAPH CREEK | 84.4 | 0 | 1.0 | 107 | 9/16/1996 |
| 28020221 | TELEGRAPH CREEK AT BABCOCK RANCH | Peninsula | TELEGRAPH CREEK | 80.8 | 0 | 1.0 | 146 | 7/27/1994 |
| 26011020 | TIGER CREEK AT WALKING WATERS RD. | Peninsula | TIGER CREEK | 74.4 | 0 | 1.0 | 109 | 7/14/1992 |
| 26011020 | TIGER CREEK AT WALKING WATERS RD. | Peninsula | TIGER CREEK | 76.5 | 0 | 1.0 | 111 | 2/18/1997 |
| 26011020 | TIGER CREEK AT WALKING WATERS RD. | Peninsula | TIGER CREEK | 75.7 | 0 | 1.0 | 142 | 2/21/1995 |
| 26011020 | TIGER CREEK AT WALKING WATERS RD. | Peninsula | TIGER CREEK | 73.4 | 0 | 1.0 | 161 | 7/20/1999 |
| 23010464 | Withlacoochee R @ county park off Auton Rd (TP3) | Peninsula | WITHLACOOCHEE RIVER | 43.4 | 0 | 1.2 | 100 | 9/28/1994 |
| 23010464 | Withlacoochee R @ county park off Auton Rd (TP3) | Peninsula | WITHLACOOCHEE RIVER | 46.9 | 0 | 1.2 | 100 | 9/2/1993 |

US EPA ARCHIVE DOCUMENT

| STORET | Site Description | Bioregion | Waterbody Name | SCI | HDG | LDI | Total # individuals counted | Sample Date |
|---|---|---|---|---|---|---|---|---|
| 23010464 | Withlacoochee R @ county park off Auton Rd (TP3) | Peninsula | WITHLACOOCHEE RIVER | 67.8 | 0 | 1.2 | 120 | 3/9/1999 |
| 23010464 | Withlacoochee R @ county park off Auton Rd (TP3) | Peninsula | WITHLACOOCHEE RIVER | 50.6 | 0 | 1.2 | 122 | 7/26/1999 |
| 23010464 | Withlacoochee R @ county park off Auton Rd (TP3) | Peninsula | WITHLACOOCHEE RIVER | 49.6 | 0 | 1.2 | 125 | 3/11/1993 |
| 23010464 | Withlacoochee R @ county park off Auton Rd (TP3) | Peninsula | WITHLACOOCHEE RIVER | 66.1 | 0 | 1.2 | 136 | 2/13/1996 |
| 23010446 | WITHLACOOCHEE RIVER | Peninsula | WITHLACOOCHEE RIVER | 50.0 | 0 | 1.6 | 147 | 7/28/1999 |

# Appendix A7. FDEP's Site Information and Taxa Lists for SCI BCG Workshop Samples

Cross-references:

*Appendix B-16: FDEP's Site Information and Taxa Lists for SCI BCG Workshop Samples*. U.S. EPA. 2010. *Technical Support Document for U.S. EPA's Proposed Rule for Numeric Nutrient Criteria for Florida's Inland Surface Fresh Waters. Water Quality Standards for the State of Florida's Lakes and Flowing Waters. Proposed Rule*. January 14, 2010. EPA-HQ-OW-2009-0596, FRL-9105-1.

*Appendix 3-E*. U.S. EPA. 2009. Proposed Methods and Approaches for Developing Numeric Nutrient Criteria for Florida's Inland Waters. United States Environmental Protection Agency, Office of Water, Office of Science and Technology, Health and Ecological Criteria Division, Washington, DC.

US EPA ARCHIVE DOCUMENT

US EPA ARCHIVE DOCUMENT

# FDEP's Site Information and Taxa Lists for SCI BCG Workshop Samples

(Appendix 3-E from USEPA. 2009. *Proposed Methods and Approaches for Developing Numeric Nutrient Criteria for Florida's Inland Waters*. United States Environmental Protection Agency, Office of Water, Office of Science and Technology, Health and Ecological Criteria Division, Washington, DC.)

If you have a disability and are unable to read this spreadsheet, please contact Eric Shaw at Eric.Shaw@dep.state.fl.us, and you will be provided with an accessible version.

US EPA ARCHIVE DOCUMENT

| BCGSampleID | STORET | Station Nickname | Bioregion | Sample Date | SCI | HDG | LDI | Selection Rationale |
|---|---|---|---|---|---|---|---|---|
| NE01 | 19020027 | ALIGTRREF | Northeast | 4/11/2001 | 47.1 | 1 | 1.4 | SCI [35-50] random |
| NE02 | 19010049 | BLDWIN REF | Northeast | 2/14/2000 | 32.9 | 2 | 3.22 | Random |
| NE03 | 19020053 | CALAHANTST | Northeast | 9/24/2001 | 24.4 | 3 | 1.41 | SCI 10th Percentile (22.96) |
| NE04 | 19020053 | CALAHANTST | Northeast | 7/15/1996 | 40.1 | 3 | 1.41 | SCI [35-50] random |
| NE05 | 20030549 | CECFLD6 | Northeast | 3/6/1996 | 73.6 | 1 | 2 | LDI [2-9] random |
| NE06 | 20030332 | JAXHEITTST | Northeast | 5/5/1992 | 28.9 | 4 | 6.11 | HDG [3-5] random |
| NE07 | 21030059 | LKBUTTST | Northeast | 9/15/1992 | 9.1 | 3 | 5.26 | LDI [2-9] random |
| NE08 | 19010073 | MCCLNYTST | Northeast | 3/22/1999 | 68 | 0 | 1.55 | SCI 75th Percentile (68.27) |
| NE09 | 20030573 | MILOG209 | Northeast | 1/26/1998 | 30.6 | 1 | 1.61 | SCI 25th Percentile (30.39) |
| NE10 | 19020059 | YULEEREF | Northeast | 10/28/1996 | 47 | 0 | 1.28 | SCI 50th Percentile (45.09) |
| Panh01 | 22020078 | ABHOPTST | Panhandle | 6/4/1996 | 20.7 | 3 | 1 | HDG [3-5] random |
| Panh02 | 33040073 | CANEYCBELL | Panhandle | 8/22/2000 | 30 | 3 | 1.71 | HDG [3-5] random |
| Panh03 | 31010125 | CHATTATST | Panhandle | 10/13/1998 | 62.5 | 0 | 1.62 | SCI 50th Percentile (62.40) |
| Panh04 | 31020071 | CHTMDLCRKD | Panhandle | 7/23/1996 | 70.5 | 1 | 1.72 | SCI 75th Percentile (70.50) |
| Panh05 | 31020072 | CHTMDLOTTR | Panhandle | 7/23/1996 | 43.5 | 2 | 1.42 | Random |
| Panh06 | 33010112 | COFECSTLR | Panhandle | 2/16/1999 | 47.7 | 2 | 1.05 | SCI [35-50] random |
| Panh07 | 31020042 | DOZREF | Panhandle | 9/1/1992 | 30.2 | 6 | 2.83 | SCI 25th Percentile (30.10) |
| Panh08 | 31020043 | DOZTST | Panhandle | 9/1/1992 | 35.8 | 6 | 2.75 | SCI [35-50] random |
| Panh09 | 22030064 | FLAMINREF | Panhandle | 3/8/1993 | 4.6 | 7 | 8.08 | SCI 10th Percentile (4.92) |
| Panh10 | 22050003 | TAYLO4 | Panhandle | 4/10/2000 | 0.6 | 3 | 2.28 | HDG [3-5] random |
| Pen01 | 20030585 | BUNCNTRL | Peninsula | 9/8/1998 | 15.5 | 6 | 5.29 | HDG [6-9] random |
| Pen02 | 25020550 | DESOT34 | Peninsula | 9/3/1997 | 37.5 | 4 | 2.91 | SCI [35-50] random |
| Pen03 | 27010580 | GROOVRARPT | Peninsula | 8/22/2000 | 24.2 | 1 | 1.79 | SCI 25th Percentile (24.55) |
| Pen04 | 24040117 | GULFTST | Peninsula | 10/8/1998 | 14.8 | 7 | 7.85 | SCI 10th Percentile (14.45) |
| Pen05 | 24030044 | HILSTP5REF | Peninsula | 8/18/1993 | 55 | 1 | 2.12 | HDG [1-2] random |
| Pen06 | 20010384 | LONGBRANCH | Peninsula | 7/13/1999 | 38.2 | 3 | 2.53 | SCI [35-50] random |
| Pen07 | 28010224 | NWFRLOXREF | Peninsula | 9/20/1995 | 40.8 | 4 | 3.87 | SCI 50th Percentile (40.81) |
| Pen08 | 25020014 | OAKREF | Peninsula | 8/22/1995 | 58.3 | 1 | 2.1 | SCI 75th Percentile (58.70) |
| Pen09 | 20020145 | SWEETCK | Peninsula | 8/10/1998 | 21.1 | 2 | 1.3 | Random |
| Pen10 | 20020420 | WGCITREF | Peninsula | 12/1/1992 | 0 | 7 | 8.32 | HDG [6-9] random |

US EPA ARCHIVE DOCUMENT

| ***Northeast Bioregion Reference Sites*** | | | | | |
|---|---|---|---|---|---|
| ***BCGSampleID*** | NERef01 | NERef02 | NERef03 | NERef04 | NERef05 |
| ***Functional Feeding Groups*** | | | | | |
| % Browser-Grazers | 0.93 | 0 | 0 | 0 | 0 |
| % Burrowing Deposit Feeders | 1.87 | 0 | 0.9 | 1.77 | 3.88 |
| % Parasites | 0 | 0 | 0 | 0 | 0 |
| % Plant Piercers | 0 | 0 | 0 | 0 | 0 |
| % Predators | 9.81 | 10.98 | 13.96 | 15.93 | 15.12 |
| % Scavengers | 1.4 | 3.79 | 7.21 | 3.54 | 0.78 |
| % Scrapers | 12.62 | 45.45 | 22.52 | 11.06 | 8.91 |
| % Shredders | 12.15 | 11.36 | 13.06 | 2.65 | 14.34 |
| % Surface Deposit Feeders | 35.98 | 23.86 | 31.98 | 25.22 | 31.01 |
| % Suspension Feeders | 18.69 | 4.55 | 6.76 | 39.82 | 24.42 |
| % Unknown | 6.54 | 0 | 3.6 | 0 | 1.55 |
| | | | | | |
| ***Taxonomic Composition*** | | | | | |
| % Amphipoda | 0 | 0.76 | 13.51 | 0 | 2.33 |
| % Chironomidae | 11.21 | 25 | 28.83 | 47.79 | 31.01 |
| % Coleoptera | 0.49 | 7.58 | 8.11 | 5.31 | 3.88 |
| % Decapoda | 2.8 | 0 | 0 | 0 | 0 |
| % Diptera | 25.23 | 25.76 | 29.73 | 53.1 | 51.16 |
| % Dominant Taxon | 12.15 | 28.79 | 13.51 | 18.58 | 10.85 |
| % Ephemeroptera | 27.1 | 18.18 | 16.22 | 15.04 | 11.63 |
| % Gastropoda | 6.54 | 32.58 | 12.61 | 2.65 | 1.55 |
| % Isopoda | 0 | 3.79 | 7.21 | 3.54 | 0.78 |
| % Odonata | 0.93 | 3.79 | 2.7 | 0.88 | 2.33 |
| % Oligochaeta | 1.87 | 0 | 0.9 | 1.77 | 3.88 |
| % Pelecypoda | 12.15 | 3.03 | 3.6 | 0.88 | 0 |
| % Plecoptera | 0 | 0 | 0 | 2.65 | 8.53 |
| % Tanytarsini individuals | 0 | 0 | 2.7 | 27.43 | 6.2 |
| % Very Tolerant individuals | 0.93 | 29.55 | 11.71 | 7.96 | 0.78 |
| % Trichoptera | 5.61 | 4.55 | 1.8 | 13.27 | 10.85 |
| % Trombidiformes | 1.86 | 0 | 3.6 | 0 | 2.33 |
| Number of Chironomid taxa | 7 | 8 | 10 | 13 | 14 |
| Number of Clinger Taxa | 5 | 3 | 6 | 7 | 10 |
| Number of Ephemeroptera taxa | 6 | 4 | 5 | 4 | 3 |
| Number of EPT taxa | 9 | 6 | 6 | 7 | 10 |
| Number of Long-Lived Taxa | 2 | 0 | 0 | 1 | 5 |
| Number of Oligochaete taxa | 1 | 0 | 1 | 2 | 3 |
| Number of Plecoptera Taxa | 0 | 0 | 0 | 1 | 2 |
| Number of Sensitive Taxa | 9 | 6 | 10 | 10 | 16 |
| Number of Trichoptera taxa | 3 | 2 | 1 | 2 | 5 |
| Total Number of Individuals | 107 | 132 | 111 | 113 | 129 |
| Total Number of Taxa | 34 | 25 | 33 | 35 | 43 |

US EPA ARCHIVE DOCUMENT

| ***Panhandle Bioregion Reference Sites*** | | | | | |
|---|---|---|---|---|---|
| ***BCGSampleID*** | PanhRef01 | PanhRef02 | PanhRef03 | PanhRef04 | PanhRef05 |
| ***Functional Feeding Groups*** | | | | | |
| % Browser-Grazers | 0 | 0 | 0.34 | 1 | 0 |
| % Burrowing Deposit Feeders | 0 | 1.17 | 2.04 | 1 | 0.91 |
| % Parasites | 0 | 0 | 0 | 0 | 0 |
| % Plant Piercers | 0 | 0 | 0 | 0 | 0.91 |
| % Predators | 6.17 | 11.99 | 15.99 | 19.5 | 22.27 |
| % Scavengers | 0 | 0.29 | 1.36 | 7 | 2.73 |
| % Scrapers | 21.1 | 24.56 | 4.76 | 24.5 | 8.18 |
| % Shredders | 15.58 | 6.14 | 4.76 | 14 | 11.36 |
| % Surface Deposit Feeders | 40.91 | 40.64 | 17.35 | 30.5 | 22.27 |
| % Suspension Feeders | 16.23 | 14.62 | 53.4 | 2.5 | 31.36 |
| % Unknown | 0 | 0.58 | 0 | 0 | 0 |
| | | | | | |
| ***Taxonomic Composition*** | | | | | |
| % Amphipoda | 0 | 5.26 | 0 | 11 | 0 |
| % Chironomidae | 33.12 | 16.37 | 30.61 | 16 | 29.09 |
| % Coleoptera | 18.18 | 20.47 | 3.4 | 12 | 10 |
| % Decapoda | 0 | 0.58 | 1.36 | 6 | 4.55 |
| % Diptera | 44.81 | 25.15 | 79.59 | 16 | 31.82 |
| % Dominant Taxon | 9.74 | 16.96 | 47.62 | 11 | 19.09 |
| % Ephemeroptera | 24.03 | 33.33 | 6.12 | 11 | 13.64 |
| % Gastropoda | 0 | 0 | 0 | 18 | 0.91 |
| % Isopoda | 0 | 0 | 0.68 | 4 | 0 |
| % Odonata | 0 | 0 | 1.36 | 6 | 2.73 |
| % Oligochaeta | 0 | 1.17 | 2.04 | 1 | 0.91 |
| % Pelecypoda | 0 | 0.58 | 2.04 | 0 | 0 |
| % Plecoptera | 0.65 | 1.75 | 0.68 | 0 | 8.18 |
| % Tanytarsini individuals | 2.6 | 7.02 | 6.8 | 4 | 20 |
| % Trichoptera | 9.74 | 9.36 | 0.68 | 2 | 22.73 |
| % Trombidiformes | 1.95 | 0.58 | 2.04 | 11 | 1.82 |
| % Very Tolerant individuals | 9.09 | 1.17 | 4.08 | 14 | 0.91 |
| Number of Chironomid taxa | 12 | 14 | 14 | 4 | 10 |
| Number of Clinger Taxa | 12 | 11 | 6 | 2 | 16 |
| Number of Ephemeroptera taxa | 7 | 5 | 2 | 3 | 6 |
| Number of EPT taxa | 13 | 13 | 4 | 5 | 19 |
| Number of Long-Lived Taxa | 2 | 3 | 4 | 3 | 9 |
| Number of Oligochaete taxa | 0 | 1 | 2 | 1 | 1 |
| Number of Plecoptera taxa | 1 | 1 | 1 | 0 | 4 |
| Number of Sensitive Taxa | 15 | 14 | 11 | 4 | 14 |
| Number of Trichoptera taxa | 5 | 7 | 1 | 2 | 9 |
| Total Number of Individuals | 154 | 171 | 147 | 100 | 110 |
| Total Number of Taxa | 38 | 41 | 35 | 28 | 46 |

US EPA ARCHIVE DOCUMENT

| ***Peninsula Bioregion Reference Sites*** | | | | | |
|---|---|---|---|---|---|
| ***BCGSampleID*** | PenRef01 | PenRef02 | PenRef03 | PenRef04 | PenRef05 |
| ***Functional Feeding Groups*** | | | | | |
| % Browser-Grazers | 0 | 0 | 0 | 1.46 | 0 |
| % Burrowing Deposit Feeders | 0 | 4.5 | 4.65 | 5.84 | 1.47 |
| % Parasites | 2.27 | 0 | 0 | 0 | 0 |
| % Plant Piercers | 0 | 0 | 0 | 0 | 0.74 |
| % Predators | 5.3 | 17.57 | 4.36 | 6.57 | 4.41 |
| % Scavengers | 0 | 0 | 0.58 | 1.46 | 0 |
| % Scrapers | 40.15 | 12.16 | 18.31 | 9.85 | 5.51 |
| % Shredders | 7.95 | 8.56 | 13.95 | 20.07 | 32.35 |
| % Surface Deposit Feeders | 29.92 | 21.62 | 32.56 | 35.04 | 45.59 |
| % Suspension Feeders | 14.39 | 30.18 | 25.58 | 19.71 | 9.93 |
| % Unknown | 0 | 5.41 | 0 | 0 | 0 |
| | | | | | |
| ***Taxonomic Composition*** | | | | | |
| % Amphipoda | 1.52 | 0 | 0 | 20.44 | 1.47 |
| % Chironomidae | 15.15 | 37.84 | 43.6 | 36.5 | 68.38 |
| % Coleoptera | 10.61 | 1.8 | 23.26 | 5.84 | 14.71 |
| % Decapoda | 0 | 0 | 1.16 | 2.92 | 0 |
| % Diptera | 23.48 | 41.44 | 49.42 | 43.07 | 69.85 |
| % Dominant Taxon | 20.45 | 9.91 | 24.42 | 20.44 | 59.56 |
| % Ephemeroptera | 29.55 | 13.51 | 11.05 | 10.22 | 1.47 |
| % Gastropoda | 20.45 | 2.7 | 0 | 2.19 | 0 |
| % Isopoda | 0 | 0 | 0 | 0 | 0 |
| % Odonata | 3.03 | 4.5 | 0.58 | 0.73 | 0 |
| % Oligochaeta | 0 | 4.5 | 4.65 | 5.84 | 1.47 |
| % Pelecypoda | 3.79 | 0 | 1.74 | 0.73 | 4.41 |
| % Plecoptera | 0 | 0.9 | 0 | 0 | 0 |
| % Tanytarsini individuals | 1.52 | 18.92 | 15.7 | 14.6 | 2.94 |
| % Trichoptera | 3.79 | 28.83 | 6.98 | 6.57 | 1.47 |
| % Trombidiformes | 0.76 | 1.8 | 0.58 | 0 | 4.42 |
| % Very Tolerant individuals | 25.76 | 0.9 | 1.74 | 8.03 | 61.03 |
| Number of Chironomid taxa | 7 | 14 | 10 | 10 | 6 |
| Number of Clinger Taxa | 5 | 12 | 8 | 6 | 4 |
| Number of Ephemeroptera taxa | 4 | 3 | 3 | 3 | 1 |
| Number of EPT taxa | 7 | 14 | 9 | 7 | 2 |
| Number of Long-Lived Taxa | 2 | 3 | 2 | 2 | 0 |
| Number of Oligochaete taxa | 0 | 3 | 2 | 3 | 2 |
| Number of Plecoptera taxa | 0 | 1 | 0 | 0 | 0 |
| Number of Sensitive Taxa | 4 | 11 | 6 | 5 | 3 |
| Number of Trichoptera taxa | 3 | 10 | 6 | 4 | 1 |
| Total Number of Individuals | 132 | 111 | 172 | 137 | 136 |
| Total Number of Taxa | 29 | 40 | 30 | 34 | 23 |

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If you have a disability and are unable to read this spreadsheet, please contact Eric Shaw at Eric.Shaw@dep.state.fl.us, and you will be provided with an accessible version.

US EPA ARCHIVE DOCUMENT

| | | | | |
|---|---|---|---|---|
| ***Expert:*** | | | | |
| ***Bioregion:*** | **Northeast** | | | |
| ***BCGSampleID:*** | **NE01** | | | |
| ***Initial Score:*** | | | | |
| ***Final Score:*** | | | | |
| ***Scientific Name*** | ***Noind*** | ***Order*** | ***Family*** | ***Comments*** |
| Caecidotea | 39 | Isopoda | Asellidae | |
| Micromenetus | 13 | Basommatophora | Planorbidae | |
| Caenis | 13 | Ephemeroptera | Caenidae | |
| Elliptio | 12 | Unionoida | Unionidae | |
| Hyalella azteca | 11 | Amphipoda | Hyalellidae | |
| Simulium | 9 | Diptera | Simuliidae | |
| Ancylidae | 7 | Basommatophora | | |
| Rheotanytarsus exiguus grp. | 4 | Diptera | Chironomidae | |
| Cheumatopsyche | 4 | Trichoptera | Hydropsychidae | |
| Stenelmis | 4 | Coleoptera | Elmidae | |
| Ancyronyx variegatus | 2 | Coleoptera | Elmidae | |
| Ablabesmyia mallochi | 2 | Diptera | Chironomidae | |
| Tribelos jucundum | 2 | Diptera | Chironomidae | |
| Polypedilum illinoense grp. | 2 | Diptera | Chironomidae | |
| Labrundinia pilosella | 1 | Diptera | Chironomidae | |
| Dicrotendipes simpsoni | 1 | Diptera | Chironomidae | |
| Baetidae | 1 | Ephemeroptera | | |
| Nanocladius | 1 | Diptera | Chironomidae | |
| Atrichopogon | 1 | Diptera | Ceratopogonidae | |
| Hydrobiidae | 1 | Mesogastropoda | | |
| Stenochironomus | 1 | Diptera | Chironomidae | |
| Clinotanypus | 1 | Diptera | Chironomidae | |
| Procambarus | 1 | Decapoda | Cambaridae | |
| Eclipidrilus | 1 | Lumbriculida | Lumbriculidae | |
| Polypedilum scalaenum grp. | 1 | Diptera | Chironomidae | |

US EPA ARCHIVE DOCUMENT

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|---|---|---|---|---|
| ***Expert:*** | | | | |
| ***Bioregion:*** | **Northeast** | | | |
| ***BCGSampleID:*** | **NE02** | | | |
| ***Initial Score:*** | | | | |
| ***Final Score:*** | | | | |
| ***Scientific Name*** | ***Noind*** | ***Order*** | ***Family*** | ***Comments*** |
| Pelecypoda | 26 | | | |
| Hebetancylus excentricus | 12 | Basommatophora | Ancylidae | |
| Paratanytarsus dissimilis | 12 | Diptera | Chironomidae | |
| Tanytarsus sp. g epler | 10 | Diptera | Chironomidae | |
| Tanytarsus sp. l epler | 6 | Diptera | Chironomidae | |
| Polypedilum tritum | 5 | Diptera | Chironomidae | |
| Dero digitata complex | 3 | Haplotaxida | Naididae | |
| Crangonyx | 3 | Amphipoda | Crangonyctidae | |
| Polypedilum illinoense grp. | 3 | Diptera | Chironomidae | |
| Neoporus | 3 | Coleoptera | Dytiscidae | |
| Kiefferulus | 3 | Diptera | Chironomidae | |
| Physella | 2 | Basommatophora | Physidae | |
| Tanypus | 2 | Diptera | Chironomidae | |
| Haber speciosus | 2 | Haplotaxida | Tubificidae | |
| Larsia | 2 | Diptera | Chironomidae | |
| Clinohelea | 1 | Diptera | Ceratopogonidae | |
| Corynoneura | 1 | Diptera | Chironomidae | |
| Ablabesmyia mallochi | 1 | Diptera | Chironomidae | |
| Tanytarsus sp. a epler | 1 | Diptera | Chironomidae | |
| Limnodrilus hoffmeisteri | 1 | Haplotaxida | Tubificidae | |
| Tribelos | 1 | Diptera | Chironomidae | |
| Nanocladius | 1 | Diptera | Chironomidae | |

US EPA ARCHIVE DOCUMENT

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|---|---|---|---|---|
| ***Expert:*** | | | | |
| ***Bioregion:*** | **Northeast** | | | |
| ***BCGSampleID:*** | **NE03** | | | |
| ***Initial Score:*** | | | | |
| ***Final Score:*** | | | | |
| ***Scientific Name*** | ***Noind*** | ***Order*** | ***Family*** | ***Comments*** |
| Polypedilum illinoense grp. | 50 | Diptera | Chironomidae | |
| Limnodrilus hoffmeisteri | 13 | Haplotaxida | Tubificidae | |
| Sphaeriidae | 8 | Veneroida | | |
| Aulodrilus pigueti | 6 | Haplotaxida | Tubificidae | |
| Chironomus | 4 | Diptera | Chironomidae | |
| Pseudocloeon propinquum | 4 | Ephemeroptera | Baetidae | |
| Dero | 2 | Haplotaxida | Naididae | |
| Ancyronyx variegatus | 2 | Coleoptera | Elmidae | |
| Allonais paraguayensis | 2 | Haplotaxida | Naididae | |
| Simulium | 2 | Diptera | Simuliidae | |
| Haber speciosus | 2 | Haplotaxida | Tubificidae | |
| Enchytraeidae | 1 | Haplotaxida | | |
| Psammoryctides convolutus | 1 | Haplotaxida | Tubificidae | |
| Polypedilum halterale grp. | 1 | Diptera | Chironomidae | |
| Stenacron floridense | 1 | Ephemeroptera | Heptageniidae | |
| Hydrobiidae | 1 | Mesogastropoda | | |
| Eclipidrilus palustris | 1 | Lumbriculida | Lumbriculidae | |
| Tanytarsus | 1 | Diptera | Chironomidae | |
| Calopteryx | 1 | Odonata | Calopterygidae | |
| Caenis | 1 | Ephemeroptera | Caenidae | |
| Coenagrionidae | 1 | Odonata | | |
| Ancylidae | 1 | Basommatophora | | |

US EPA ARCHIVE DOCUMENT

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|---|---|---|---|---|
| ***Expert:*** | | | | |
| ***Bioregion:*** | **Northeast** | | | |
| ***BCGSampleID:*** | **NE04** | | | |
| ***Initial Score:*** | | | | |
| ***Final Score:*** | | | | |
| ***Scientific Name*** | ***Noind*** | ***Order*** | ***Family*** | ***Comments*** |
| Polypedilum illinoense grp. | 20 | Diptera | Chironomidae | |
| Pisidiidae | 18 | Veneroida | | |
| Micromenetus | 13 | Basommatophora | Planorbidae | |
| Amnicola | 10 | Mesogastropoda | Bithyniidae | |
| Enallagma signatum | 7 | Odonata | Coenagrionidae | |
| Nanocladius | 6 | Diptera | Chironomidae | |
| Caenis | 6 | Ephemeroptera | Caenidae | |
| Limnodrilus hoffmeisteri | 6 | Haplotaxida | Tubificidae | |
| Pentaneura inconspicua | 5 | Diptera | Chironomidae | |
| Ablabesmyia rhamphe grp. | 5 | Diptera | Chironomidae | |
| Argia | 5 | Odonata | Coenagrionidae | |
| Physella | 4 | Basommatophora | Physidae | |
| Tanytarsus sp. a epler | 4 | Diptera | Chironomidae | |
| Baetis | 4 | Ephemeroptera | Baetidae | |
| Parachironomus carinatus | 3 | Diptera | Chironomidae | |
| Dero trifida | 3 | Haplotaxida | Naididae | |
| Microcylloepus pusillus | 2 | Coleoptera | Elmidae | |
| Hyalella azteca | 1 | Amphipoda | Hyalellidae | |
| Dubiraphia vittata | 1 | Coleoptera | Elmidae | |
| Stenelmis | 1 | Coleoptera | Elmidae | |
| Ancyronyx variegatus | 1 | Coleoptera | Elmidae | |
| Prionocyphon | 1 | Coleoptera | norowsselected | |
| Palpomyia/bezzia grp. | 1 | Diptera | Ceratopogonidae | |
| Polypedilum convictum grp. | 1 | Diptera | Chironomidae | |
| Labrundinia pilosella | 1 | Diptera | Chironomidae | |
| Stenochironomus | 1 | Diptera | Chironomidae | |
| Simulium | 1 | Diptera | Simuliidae | |
| Tabanidae | 1 | Diptera | | |
| Allonais paraguayensis | 1 | Haplotaxida | Naididae | |
| Stylaria lacustris | 1 | Haplotaxida | Naididae | |
| Caecidotea | 1 | Isopoda | Asellidae | |
| Calopteryx | 1 | Odonata | Calopterygidae | |
| Corduliidae | 1 | Odonata | | |

US EPA ARCHIVE DOCUMENT

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|---|---|---|---|---|
| ***Expert:*** | | | | |
| ***Bioregion:*** | **Northeast** | | | |
| ***BCGSampleID:*** | **NE05** | | | |
| ***Initial Score:*** | | | | |
| ***Final Score:*** | | | | |
| ***Scientific Name*** | ***Noind*** | ***Order*** | ***Family*** | ***Comments*** |
| Stenelmis | 19 | Coleoptera | Elmidae | |
| Ancylidae | 11 | Basommatophora | | |
| Oecetis | 9 | Trichoptera | Leptoceridae | |
| Polypedilum illinoense | 8 | Diptera | Chironomidae | |
| Stenacron interpunctatum | 6 | Ephemeroptera | Heptageniidae | |
| Eurylophella temporalis | 5 | Ephemeroptera | Ephemerellidae | |
| Stempellinella | 5 | Diptera | Chironomidae | |
| Cladotanytarsus | 4 | Diptera | Chironomidae | |
| Caenis | 4 | Ephemeroptera | Caenidae | |
| Polypedilum scalaenum grp. | 3 | Diptera | Chironomidae | |
| Stenonema smithae | 2 | Ephemeroptera | Heptageniidae | |
| Tanytarsus sp. t epler | 2 | Diptera | Chironomidae | |
| Amnicola | 2 | Mesogastropoda | Bithyniidae | |
| Stenochironomus | 2 | Diptera | Chironomidae | |
| Paraleptophlebia volitans | 1 | Ephemeroptera | Leptophlebiidae | |
| Palaemonetes paludosus | 1 | Decapoda | Palaemonidae | |
| Pisidiidae | 1 | Veneroida | | |
| Micromenetus dilatatus | 1 | Basommatophora | Planorbidae | |
| Hemerodromia | 1 | Diptera | Empididae | |
| Labrundinia | 1 | Diptera | Chironomidae | |
| Conchapelopia | 1 | Diptera | Chironomidae | |
| Simulium | 1 | Diptera | Simuliidae | |
| Triaenodes | 1 | Trichoptera | Leptoceridae | |
| Cheumatopsyche | 1 | Trichoptera | Hydropsychidae | |
| Lype | 1 | Trichoptera | Psychomyiidae | |
| Prionocyphon | 1 | Coleoptera | | |
| Sminthurides | 1 | Collembola | Sminthuridae | |
| Tanytarsus sp. c epler | 1 | Diptera | Chironomidae | |
| Tanytarsus sp. o epler | 1 | Diptera | Chironomidae | |
| Ablabesmyia rhamphe grp. | 1 | Diptera | Chironomidae | |
| Ancyronyx variegatus | 1 | Coleoptera | Elmidae | |
| Pentaneura inconspicua | 1 | Diptera | Chironomidae | |
| Tribelos jucundum | 1 | Diptera | Chironomidae | |
| Rheocricotopus robacki | 1 | Diptera | Chironomidae | |

US EPA ARCHIVE DOCUMENT

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|---|---|---|---|---|
| ***Expert:*** | | | | |
| ***Bioregion:*** | **Northeast** | | | |
| ***BCGSampleID:*** | **NE06** | | | |
| ***Initial Score:*** | | | | |
| ***Final Score:*** | | | | |
| ***Scientific Name*** | ***Noind*** | ***Order*** | ***Family*** | ***Comments*** |
| Enallagma cardenium | 24 | Odonata | Coenagrionidae | |
| Lumbriculus inconstans | 15 | Lumbriculida | Lumbriculidae | |
| Polypedilum scalaenum grp. | 13 | Diptera | Chironomidae | |
| Physella | 9 | Basommatophora | Physidae | |
| Polypedilum tritum | 9 | Diptera | Chironomidae | |
| Chironomus decorus | 7 | Diptera | Chironomidae | |
| Pisidiidae | 4 | Veneroida | | |
| Dicrotendipes neomodestus | 3 | Diptera | Chironomidae | |
| Ischnura | 3 | Odonata | Coenagrionidae | |
| Cheumatopsyche | 3 | Trichoptera | Hydropsychidae | |
| Argia sedula | 3 | Odonata | Coenagrionidae | |
| Hemerodromia | 3 | Diptera | Empididae | |
| Conchapelopia | 2 | Diptera | Chironomidae | |
| Stenelmis | 2 | Coleoptera | Elmidae | |
| Progomphus obscurus | 1 | Odonata | Gomphidae | |
| Tipulidae | 1 | Diptera | | |
| Tanytarsus sp. e epler | 1 | Diptera | Chironomidae | |
| Peltodytes muticus | 1 | Coleoptera | Haliplidae | |
| Dicrotendipes modestus | 1 | Diptera | Chironomidae | |
| Palpomyia/bezzia grp. | 1 | Diptera | Ceratopogonidae | |
| Mesovelia | 1 | Heteroptera | Mesoveliidae | |
| Abedus | 1 | Heteroptera | Belostomatidae | |
| Hydropsyche | 1 | Trichoptera | Hydropsychidae | |
| Ablabesmyia mallochi | 1 | Diptera | Chironomidae | |

US EPA ARCHIVE DOCUMENT

| | | | | |
|---|---|---|---|---|
| ***Expert:*** | | | | |
| ***Bioregion:*** | **Northeast** | | | |
| ***BCGSampleID:*** | **NE07** | | | |
| ***Initial Score:*** | | | | |
| ***Final Score:*** | | | | |
| ***Scientific Name*** | ***Noind*** | ***Order*** | ***Family*** | ***Comments*** |
| Polypedilum illinoense grp. | 62 | Diptera | Chironomidae | |
| Physella | 32 | Basommatophora | Physidae | |
| Limnodrilus hoffmeisteri | 23 | Haplotaxida | Tubificidae | |
| Chironomus | 23 | Diptera | Chironomidae | |
| Enchytraeidae | 7 | Haplotaxida | | |
| Lirceus | 2 | Isopoda | Asellidae | |
| Stenelmis | 2 | Coleoptera | Elmidae | |
| Paratanytarsus | 1 | Diptera | Chironomidae | |
| Ischnura | 1 | Odonata | Coenagrionidae | |
| Cryptochironomus | 1 | Diptera | Chironomidae | |
| Pseudorthocladius | 1 | Diptera | Chironomidae | |
| Macronychus glabratus | 1 | Coleoptera | Elmidae | |

US EPA ARCHIVE DOCUMENT

| | | | | |
|---|---|---|---|---|
| ***Expert:*** | | | | |
| ***Bioregion:*** | **Northeast** | | | |
| ***BCGSampleID:*** | **NE08** | | | |
| ***Initial Score:*** | | | | |
| ***Final Score:*** | | | | |
| ***Scientific Name*** | ***Noind*** | ***Order*** | ***Family*** | ***Comments*** |
| Tanytarsus sp. m epler | 29 | Diptera | Chironomidae | |
| Polypedilum convictum grp. | 25 | Diptera | Chironomidae | |
| Cheumatopsyche | 14 | Trichoptera | Hydropsychidae | |
| Rheocricotopus robacki | 13 | Diptera | Chironomidae | |
| Ablabesmyia mallochi | 10 | Diptera | Chironomidae | |
| Caecidotea | 8 | Isopoda | Asellidae | |
| Ablabesmyia rhamphe grp. | 7 | Diptera | Chironomidae | |
| Stenelmis | 5 | Coleoptera | Elmidae | |
| Simulium | 4 | Diptera | Simuliidae | |
| Rheotanytarsus exiguus grp. | 4 | Diptera | Chironomidae | |
| Tanytarsus sp. u epler | 3 | Diptera | Chironomidae | |
| Ancylidae | 3 | Basommatophora | | |
| Polypedilum illinoense grp. | 3 | Diptera | Chironomidae | |
| Polypedilum scalaenum grp. | 3 | Diptera | Chironomidae | |
| Thienemannimyia grp. | 3 | Diptera | Chironomidae | |
| Rheotanytarsus distinctissimus grp. | 2 | Diptera | Chironomidae | |
| Tanytarsus sp. l epler | 2 | Diptera | Chironomidae | |
| Procladius | 2 | Diptera | Chironomidae | |
| Tanytarsus sp. c epler | 1 | Diptera | Chironomidae | |
| Microcylloepus pusillus | 1 | Coleoptera | Elmidae | |
| Stenonema smithae | 1 | Ephemeroptera | Heptageniidae | |
| Slavina appendiculata | 1 | Haplotaxida | Naididae | |
| Cladotanytarsus | 1 | Diptera | Chironomidae | |
| Cryptotendipes | 1 | Diptera | Chironomidae | |
| Conchapelopia | 1 | Diptera | Chironomidae | |
| Enallagma | 1 | Odonata | Coenagrionidae | |
| Progomphus | 1 | Odonata | Gomphidae | |
| Acerpenna pygmaea | 1 | Ephemeroptera | Baetidae | |
| Xenochironomus xenolabis | 1 | Diptera | Chironomidae | |
| Thienemanniella xena | 1 | Diptera | Chironomidae | |
| Hygrobates | 1 | Acariformes | Hygrobatidae | |
| Gyrinidae | 1 | Coleoptera | | |
| Cricotopus bicinctus | 1 | Diptera | Chironomidae | |
| Pentaneura inconspicua | 1 | Diptera | Chironomidae | |

US EPA ARCHIVE DOCUMENT

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|---|---|---|---|---|
| ***Expert:*** | | | | |
| ***Bioregion:*** | **Northeast** | | | |
| ***BCGSampleID:*** | **NE09** | | | |
| ***Initial Score:*** | | | | |
| ***Final Score:*** | | | | |
| ***Scientific Name*** | ***Noind*** | ***Order*** | ***Family*** | ***Comments*** |
| Cheumatopsyche | 57 | Trichoptera | Hydropsychidae | |
| Simulium | 17 | Diptera | Simuliidae | |
| Polypedilum illinoense grp. | 14 | Diptera | Chironomidae | |
| Sphaeriidae | 8 | Veneroida | | |
| Polypedilum aviceps | 6 | Diptera | Chironomidae | |
| Dubiraphia | 5 | Coleoptera | Elmidae | |
| Micromenetus | 3 | Basommatophora | Planorbidae | |
| Nais communis | 3 | Haplotaxida | Naididae | |
| Physella | 3 | Basommatophora | Physidae | |
| Parametriocnemus | 3 | Diptera | Chironomidae | |
| Coenagrionidae | 2 | Odonata | | |
| Neoporus | 2 | Coleoptera | Dytiscidae | |
| Stenelmis | 2 | Coleoptera | Elmidae | |
| Caecidotea | 2 | Isopoda | Asellidae | |
| Hydrobiidae | 1 | Mesogastropoda | | |
| Limnodrilus hoffmeisteri | 1 | Haplotaxida | Tubificidae | |
| Dicrotendipes simpsoni | 1 | Diptera | Chironomidae | |
| Paratanytarsus sp. c epler | 1 | Diptera | Chironomidae | |
| Slavina appendiculata | 1 | Haplotaxida | Naididae | |
| Tabanidae | 1 | Diptera | | |
| Labrundinia | 1 | Diptera | Chironomidae | |
| Nanocladius | 1 | Diptera | Chironomidae | |

US EPA ARCHIVE DOCUMENT

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|---|---|---|---|---|
| ***Expert:*** | | | | |
| ***Bioregion:*** | **Northeast** | | | |
| ***BCGSampleID:*** | **NE10** | | | |
| ***Initial Score:*** | | | | |
| ***Final Score:*** | | | | |
| ***Scientific Name*** | ***Noind*** | ***Order*** | ***Family*** | ***Comments*** |
| Pelecypoda | 18 | | | |
| Caecidotea | 18 | Isopoda | Asellidae | |
| Ancylidae | 17 | Basommatophora | | |
| Micromenetus dilatatus | 17 | Basommatophora | Planorbidae | |
| Leptophlebiidae | 9 | Ephemeroptera | | |
| Paratanytarsus sp. a epler | 9 | Diptera | Chironomidae | |
| Ablabesmyia mallochi | 8 | Diptera | Chironomidae | |
| Stenochironomus | 3 | Diptera | Chironomidae | |
| Neoporus | 3 | Coleoptera | Dytiscidae | |
| Polypedilum illinoense grp. | 3 | Diptera | Chironomidae | |
| Neurocordulia alabamensis | 2 | Odonata | Libellulidae | |
| Tanytarsus sp. t epler | 2 | Diptera | Chironomidae | |
| Labrundinia pilosella | 2 | Diptera | Chironomidae | |
| Eclipidrilus | 1 | Lumbriculida | Lumbriculidae | |
| Physella | 1 | Basommatophora | Physidae | |
| Caenis | 1 | Ephemeroptera | Caenidae | |
| Crangonyx | 1 | Amphipoda | Crangonyctidae | |
| Notomicrus | 1 | Coleoptera | Noteridae | |
| Kiefferulus | 1 | Diptera | Chironomidae | |
| Dicrotendipes simpsoni | 1 | Diptera | Chironomidae | |
| Tanytarsus sp. m epler | 1 | Diptera | Chironomidae | |
| Rheotanytarsus exiguus grp. | 1 | Diptera | Chironomidae | |
| Libellula vibrans | 1 | Odonata | Libellulidae | |
| Stenelmis | 1 | Coleoptera | Elmidae | |
| Oecetis | 1 | Trichoptera | Leptoceridae | |
| Clinotanypus | 1 | Diptera | Chironomidae | |
| Larsia | 1 | Diptera | Chironomidae | |
| Procladius | 1 | Diptera | Chironomidae | |
| Parachironomus | 1 | Diptera | Chironomidae | |

US EPA ARCHIVE DOCUMENT

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|---|---|---|---|---|
| ***Expert:*** | | | | |
| ***Bioregion:*** | **Panhandle** | | | |
| ***BCGSampleID:*** | **Panh01** | | | |
| ***Initial Score:*** | | | | |
| ***Final Score:*** | | | | |
| ***Scientific Name*** | ***Noind*** | ***Order*** | ***Family*** | ***Comments*** |
| Ablabesmyia mallochi | 39 | Diptera | Chironomidae | |
| Polypedilum scalaenum grp. | 23 | Diptera | Chironomidae | |
| Procladius | 15 | Diptera | Chironomidae | |
| Phaenopsectra punctipes grp. | 10 | Diptera | Chironomidae | |
| Hemerodromia | 9 | Diptera | Empididae | |
| Procambarus | 2 | Decapoda | Cambaridae | |
| Polypedilum fallax | 2 | Diptera | Chironomidae | |
| Polypedilum halterale grp. | 2 | Diptera | Chironomidae | |
| Polypedilum illinoense | 2 | Diptera | Chironomidae | |
| Caenis | 1 | Ephemeroptera | Caenidae | |
| Orthocladiinae | 1 | Diptera | | |
| Parametriocnemus | 1 | Diptera | Chironomidae | |
| Cryptochironomus | 1 | Diptera | Chironomidae | |
| Dicrotendipes modestus | 1 | Diptera | Chironomidae | |
| Elmidae | 1 | Coleoptera | | |
| Pisidiidae | 1 | Veneroida | | |
| Neoporus | 1 | Coleoptera | Dytiscidae | |
| Xestochironomus | 1 | Diptera | Chironomidae | |
| Paracladopelma | 1 | Diptera | Chironomidae | |
| Chironomus | 1 | Diptera | Chironomidae | |
| Neotrichia | 1 | Trichoptera | Hydroptilidae | |
| Odonata | 1 | Odonata | | |
| Triaenodes | 1 | Trichoptera | Leptoceridae | |

US EPA ARCHIVE DOCUMENT

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|---|---|---|---|---|
| ***Expert:*** | | | | |
| ***Bioregion:*** | **Panhandle** | | | |
| ***BCGSampleID:*** | **Panh02** | | | |
| ***Initial Score:*** | | | | |
| ***Final Score:*** | | | | |
| ***Scientific Name*** | ***Noind*** | ***Order*** | ***Family*** | ***Comments*** |
| Pelecypoda | 19 | | | |
| Tribelos jucundum | 19 | Diptera | Chironomidae | |
| Pachydiplax longipennis | 9 | Odonata | Libellulidae | |
| Polypedilum tritum | 6 | Diptera | Chironomidae | |
| Ceratopogonidae | 5 | Diptera | | |
| Zavreliella marmorata | 4 | Diptera | Chironomidae | |
| Chironomus | 4 | Diptera | Chironomidae | |
| Mideopsis | 3 | Acariformes | Mideopsidae | |
| Hyalella azteca | 3 | Amphipoda | Hyalellidae | |
| Stenelmis | 3 | Coleoptera | Elmidae | |
| Tanytarsus sp. m epler | 2 | Diptera | Chironomidae | |
| Nais communis complex | 2 | Haplotaxida | Naididae | |
| Nilothauma | 2 | Diptera | Chironomidae | |
| Polypedilum illinoense grp. | 2 | Diptera | Chironomidae | |
| Dubiraphia vittata | 2 | Coleoptera | Elmidae | |
| Slavina appendiculata | 2 | Haplotaxida | Naididae | |
| Neoporus | 2 | Coleoptera | Dytiscidae | |
| Dicrotendipes simpsoni | 1 | Diptera | Chironomidae | |
| Dero digitata complex | 1 | Haplotaxida | Naididae | |
| Corethrella | 1 | Diptera | Corethrellidae | |
| Cryptochironomus | 1 | Diptera | Chironomidae | |
| Macronychus glabratus | 1 | Coleoptera | Elmidae | |
| Tanytarsus sp. o epler | 1 | Diptera | Chironomidae | |
| Tanytarsus sp. s epler | 1 | Diptera | Chironomidae | |
| Parachironomus carinatus | 1 | Diptera | Chironomidae | |
| Ancyronyx variegatus | 1 | Coleoptera | Elmidae | |
| Micromenetus dilatatus | 1 | Basommatophora | Planorbidae | |
| Limnodrilus hoffmeisteri | 1 | Haplotaxida | Tubificidae | |
| Thienemannimyia grp. | 1 | Diptera | Chironomidae | |
| Kiefferulus | 1 | Diptera | Chironomidae | |
| Hydrodroma | 1 | Acariformes | Hydrodromidae | |
| Culicidae | 1 | Diptera | | |

US EPA ARCHIVE DOCUMENT

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|---|---|---|---|---|
| ***Expert:*** | | | | |
| ***Bioregion:*** | **Panhandle** | | | |
| ***BCGSampleID:*** | **Panh03** | | | |
| ***Initial Score:*** | | | | |
| ***Final Score:*** | | | | |
| ***Scientific Name*** | ***Noind*** | ***Order*** | ***Family*** | ***Comments*** |
| Rheotanytarsus exiguus grp. | 19 | Diptera | Chironomidae | |
| Simulium | 15 | Diptera | Simuliidae | |
| Rheocricotopus robacki | 15 | Diptera | Chironomidae | |
| Microcylloepus pusillus | 6 | Coleoptera | Elmidae | |
| Polypedilum convictum grp. | 5 | Diptera | Chironomidae | |
| Eurylophella doris | 5 | Ephemeroptera | Ephemerellidae | |
| Polypedilum illinoense grp. | 4 | Diptera | Chironomidae | |
| Oecetis | 4 | Trichoptera | Leptoceridae | |
| Thienemanniella sp. b epler | 3 | Diptera | Chironomidae | |
| Chironomus | 3 | Diptera | Chironomidae | |
| Labrundinia pilosella | 3 | Diptera | Chironomidae | |
| Baetis | 3 | Ephemeroptera | Baetidae | |
| Corynoneura | 3 | Diptera | Chironomidae | |
| Polypedilum scalaenum grp. | 2 | Diptera | Chironomidae | |
| Labiobaetis | 2 | Ephemeroptera | Baetidae | |
| Pentaneura inconspicua | 2 | Diptera | Chironomidae | |
| Ablabesmyia mallochi | 2 | Diptera | Chironomidae | |
| Pristina synclites | 2 | Haplotaxida | Naididae | |
| Caenis | 2 | Ephemeroptera | Caenidae | |
| Leptophlebiidae | 2 | Ephemeroptera | | |
| Rheotanytarsus distinctissimus grp. | 1 | Diptera | Chironomidae | |
| Polypedilum aviceps | 1 | Diptera | Chironomidae | |
| Thienemanniella xena | 1 | Diptera | Chironomidae | |
| Nilotanypus fimbriatus | 1 | Diptera | Chironomidae | |
| Thienemannimyia grp. | 1 | Diptera | Chironomidae | |
| Stempellinella | 1 | Diptera | Chironomidae | |
| Xestochironomus | 1 | Diptera | Chironomidae | |
| Stenochironomus | 1 | Diptera | Chironomidae | |
| Nanocladius | 1 | Diptera | Chironomidae | |
| Cheumatopsyche | 1 | Trichoptera | Hydropsychidae | |
| Stenelmis | 1 | Coleoptera | Elmidae | |
| Agnetina | 1 | Plecoptera | Perlidae | |
| Argia | 1 | Odonata | Coenagrionidae | |
| Lepidoptera | 1 | Lepidoptera | | |
| Atractides | 1 | Acariformes | Hygrobatidae | |
| Hygrobates | 1 | Acariformes | Hygrobatidae | |
| Isonychia | 1 | Ephemeroptera | Oligoneuriidae | |
| Stenonema | 1 | Ephemeroptera | Heptageniidae | |
| Oribatei | 1 | | | |
| Thienemanniella sp. a epler | 1 | Diptera | Chironomidae | |

US EPA ARCHIVE DOCUMENT

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|---|---|---|---|---|
| ***Expert:*** | | | | |
| ***Bioregion:*** | **Panhandle** | | | |
| ***BCGSampleID:*** | **Panh04** | | | |
| ***Initial Score:*** | | | | |
| ***Final Score:*** | | | | |
| ***Scientific Name*** | ***Noind*** | ***Order*** | ***Family*** | ***Comments*** |
| Chimarra | 17 | Trichoptera | Philopotamidae | |
| Polypedilum convictum grp. | 14 | Diptera | Chironomidae | |
| Cheumatopsyche | 7 | Trichoptera | Hydropsychidae | |
| Calopteryx | 6 | Odonata | Calopterygidae | |
| Crangonyx | 5 | Amphipoda | Crangonyctidae | |
| Parametriocnemus | 4 | Diptera | Chironomidae | |
| Hemerodromia | 4 | Diptera | Empididae | |
| Triaenodes | 3 | Trichoptera | Leptoceridae | |
| Rheotanytarsus exiguus grp. | 3 | Diptera | Chironomidae | |
| Microtendipes pedellus grp. | 3 | Diptera | Chironomidae | |
| Gonielmis dietrichi | 3 | Coleoptera | Elmidae | |
| Ancyronyx variegatus | 3 | Coleoptera | Elmidae | |
| Enallagma | 3 | Odonata | Coenagrionidae | |
| Simulium | 3 | Diptera | Simuliidae | |
| Eclipidrilus palustris | 3 | Lumbriculida | Lumbriculidae | |
| Stempellinella | 3 | Diptera | Chironomidae | |
| Hydroptila | 2 | Trichoptera | Hydroptilidae | |
| Oecetis | 2 | Trichoptera | Leptoceridae | |
| Microtendipes rydalensis grp. | 2 | Diptera | Chironomidae | |
| Cambaridae | 2 | Decapoda | | |
| Planariidae | 2 | Tricladida | | |
| Paranyctiophylax | 2 | Trichoptera | Polycentropodidae | |
| Hydropsyche | 1 | Trichoptera | Hydropsychidae | |
| Neurocordulia alabamensis | 1 | Odonata | Libellulidae | |
| Argia | 1 | Odonata | Coenagrionidae | |
| Baetidae | 1 | Ephemeroptera | | |
| Lebertia | 1 | Acariformes | Lebertiidae | |
| Tanytarsus sp. m epler | 1 | Diptera | Chironomidae | |
| Polypedilum illinoense grp. | 1 | Diptera | Chironomidae | |
| Polypedilum scalaenum grp. | 1 | Diptera | Chironomidae | |
| Tribelos jucundum | 1 | Diptera | Chironomidae | |
| Polypedilum aviceps | 1 | Diptera | Chironomidae | |
| Pentaneura inconspicua | 1 | Diptera | Chironomidae | |
| Arrenurus | 1 | Acariformes | Arrenuridae | |
| Meropelopia | 1 | Diptera | Chironomidae | |
| Limnodrilus hoffmeisteri | 1 | Haplotaxida | Tubificidae | |
| Pseudochironomus | 1 | Diptera | Chironomidae | |
| Paraponyx | 1 | Lepidoptera | Pyralidae | |
| Stenelmis | 1 | Coleoptera | Elmidae | |
| Caecidotea | 1 | Isopoda | Asellidae | |

US EPA ARCHIVE DOCUMENT

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|---|---|---|---|---|
| ***Expert:*** | | | | |
| ***Bioregion:*** | **Panhandle** | | | |
| ***BCGSampleID:*** | **Panh05** | | | |
| ***Initial Score:*** | | | | |
| ***Final Score:*** | | | | |
| ***Scientific Name*** | ***Noind*** | ***Order*** | ***Family*** | ***Comments*** |
| Polypedilum convictum grp. | 30 | Diptera | Chironomidae | |
| Pisidiidae | 14 | Veneroida | | |
| Caecidotea | 8 | Isopoda | Asellidae | |
| Dubiraphia | 7 | Coleoptera | Elmidae | |
| Polypedilum scalaenum grp. | 6 | Diptera | Chironomidae | |
| Rheotanytarsus exiguus grp. | 6 | Diptera | Chironomidae | |
| Dugesia tigrina | 5 | Tricladida | Dugesiidae | |
| Conchapelopia | 5 | Diptera | Chironomidae | |
| Hydropsyche | 5 | Trichoptera | Hydropsychidae | |
| Oecetis | 5 | Trichoptera | Leptoceridae | |
| Ancyronyx variegatus | 4 | Coleoptera | Elmidae | |
| Cheumatopsyche | 4 | Trichoptera | Hydropsychidae | |
| Tanytarsus sp. l epler | 4 | Diptera | Chironomidae | |
| Hyalella azteca | 3 | Amphipoda | Hyalellidae | |
| Palpomyia/bezzia grp. | 3 | Diptera | Ceratopogonidae | |
| Dicrotendipes modestus | 3 | Diptera | Chironomidae | |
| Limnodrilus hoffmeisteri | 2 | Haplotaxida | Tubificidae | |
| Corixidae | 2 | Heteroptera | | |
| Clinotanypus | 2 | Diptera | Chironomidae | |
| Polypedilum illinoense grp. | 2 | Diptera | Chironomidae | |
| Thienemannimyia grp. | 1 | Diptera | Chironomidae | |
| Pristinella longisoma | 1 | Haplotaxida | Naididae | |
| Microcylloepus pusillus | 1 | Coleoptera | Elmidae | |
| Tanytarsus sp. m epler | 1 | Diptera | Chironomidae | |
| Thienemanniella sp. a epler | 1 | Diptera | Chironomidae | |
| Stenelmis | 1 | Coleoptera | Elmidae | |
| Helodidae | 1 | Coleoptera | | |
| Libellulidae | 1 | Odonata | | |
| Chironomus | 1 | Diptera | Chironomidae | |
| Tvetenia discoloripes grp. | 1 | Diptera | Chironomidae | |
| Tanytarsus sp. e epler | 1 | Diptera | Chironomidae | |
| Rheotanytarsus distinctissimus grp. | 1 | Diptera | Chironomidae | |
| Labrundinia neopilosella | 1 | Diptera | Chironomidae | |
| Larsia decolorata | 1 | Diptera | Chironomidae | |

US EPA ARCHIVE DOCUMENT

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|---|---|---|---|---|
| ***Expert:*** | | | | |
| ***Bioregion:*** | **Panhandle** | | | |
| ***BCGSampleID:*** | **Panh06** | | | |
| ***Initial Score:*** | | | | |
| ***Final Score:*** | | | | |
| ***Scientific Name*** | ***Noind*** | ***Order*** | ***Family*** | ***Comments*** |
| Tribelos jucundum | 26 | Diptera | Chironomidae | |
| Dubiraphia vittata | 7 | Coleoptera | Elmidae | |
| Eurylophella doris | 7 | Ephemeroptera | Ephemerellidae | |
| Oecetis georgia | 4 | Trichoptera | Leptoceridae | |
| Polypedilum illinoense grp. | 4 | Diptera | Chironomidae | |
| Leptophlebiidae | 3 | Ephemeroptera | | |
| Cryptochironomus | 3 | Diptera | Chironomidae | |
| Thienemannimyia grp. | 3 | Diptera | Chironomidae | |
| Probezzia | 3 | Diptera | Ceratopogonidae | |
| Triaenodes | 2 | Trichoptera | Leptoceridae | |
| Enchytraeidae | 2 | Haplotaxida | | |
| Palaemonetes kadiakensis | 2 | Decapoda | Palaemonidae | |
| Polypedilum convictum grp. | 2 | Diptera | Chironomidae | |
| Ablabesmyia mallochi | 2 | Diptera | Chironomidae | |
| Tanytarsus sp. d epler | 2 | Diptera | Chironomidae | |
| Tanytarsus sp. o epler | 2 | Diptera | Chironomidae | |
| Ceratopogon | 2 | Diptera | Ceratopogonidae | |
| Stenacron floridense | 2 | Ephemeroptera | Heptageniidae | |
| Microcylloepus pusillus | 2 | Coleoptera | Elmidae | |
| Conchapelopia | 2 | Diptera | Chironomidae | |
| Aeshnidae | 2 | Odonata | | |
| Sphaeriidae(mollusca) | 2 | Veneroida | | |
| Neureclipsis | 1 | Trichoptera | Polycentropodidae | |
| Stempellinella | 1 | Diptera | Chironomidae | |
| Polypedilum scalaenum grp. | 1 | Diptera | Chironomidae | |
| Stelechomyia perpulchra | 1 | Diptera | Chironomidae | |
| Paracladopelma undine | 1 | Diptera | Chironomidae | |
| Rheocricotopus robacki | 1 | Diptera | Chironomidae | |
| Gonielmis dietrichi | 1 | Coleoptera | Elmidae | |
| Ancyronyx variegatus | 1 | Coleoptera | Elmidae | |
| Stenochironomus | 1 | Diptera | Chironomidae | |
| Sciaridae | 1 | Diptera | | |
| Atractides | 1 | Acariformes | Hygrobatidae | |
| Caecidotea | 1 | Isopoda | Asellidae | |
| Enallagma | 1 | Odonata | Coenagrionidae | |
| Ectopria | 1 | Coleoptera | Psephenidae | |
| Stenelmis | 1 | Coleoptera | Elmidae | |

US EPA ARCHIVE DOCUMENT

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|---|---|---|---|---|
| ***Expert:*** | | | | |
| ***Bioregion:*** | **Panhandle** | | | |
| ***BCGSampleID:*** | **Panh07** | | | |
| ***Initial Score:*** | | | | |
| ***Final Score:*** | | | | |
| ***Scientific Name*** | ***Noind*** | ***Order*** | ***Family*** | ***Comments*** |
| Eclipidrilus palustris | 31 | Lumbriculida | Lumbriculidae | |
| Tanytarsus sp. t epler | 19 | Diptera | Chironomidae | |
| Tanytarsus sp. c epler | 13 | Diptera | Chironomidae | |
| Conchapelopia | 10 | Diptera | Chironomidae | |
| Cryptochironomus | 8 | Diptera | Chironomidae | |
| Tanytarsus sp. u epler | 5 | Diptera | Chironomidae | |
| Stenelmis | 5 | Coleoptera | Elmidae | |
| Cricotopus bicinctus | 5 | Diptera | Chironomidae | |
| Polypedilum scalaenum grp. | 4 | Diptera | Chironomidae | |
| Saetheria | 4 | Diptera | Chironomidae | |
| Polypedilum tritum | 3 | Diptera | Chironomidae | |
| Polypedilum illinoense | 2 | Diptera | Chironomidae | |
| Cladotanytarsus | 2 | Diptera | Chironomidae | |
| Ablabesmyia mallochi | 2 | Diptera | Chironomidae | |
| Enchytraeidae | 1 | Haplotaxida | | |
| Physella | 1 | Basommatophora | Physidae | |
| Bratislavia unidentata | 1 | Haplotaxida | Naididae | |
| Baetis frondalis | 1 | Ephemeroptera | Baetidae | |
| Cheumatopsyche | 1 | Trichoptera | Hydropsychidae | |
| Guttipelopia guttipennis | 1 | Diptera | Chironomidae | |
| Celina | 1 | Coleoptera | Dytiscidae | |
| Hydaticus | 1 | Coleoptera | Dytiscidae | |

US EPA ARCHIVE DOCUMENT

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|---|---|---|---|---|
| ***Expert:*** | | | | |
| ***Bioregion:*** | **Peninsula** | | | |
| ***BCGSampleID:*** | **Pen08** | | | |
| ***Initial Score:*** | | | | |
| ***Final Score:*** | | | | |
| ***Scientific Name*** | ***Noind*** | ***Order*** | ***Family*** | ***Comments*** |
| Stenelmis | 18 | Coleoptera | Elmidae | |
| Caenis | 13 | Ephemeroptera | Caenidae | |
| Oecetis | 12 | Trichoptera | Leptoceridae | |
| Tribelos fuscicornis | 11 | Diptera | Chironomidae | |
| Polypedilum convictum grp. | 6 | Diptera | Chironomidae | |
| Dubiraphia | 5 | Coleoptera | Elmidae | |
| Cheumatopsyche | 5 | Trichoptera | Hydropsychidae | |
| Macromia taeniolata | 4 | Odonata | Libellulidae | |
| Limnodrilus hoffmeisteri | 4 | Haplotaxida | Tubificidae | |
| Cryptochironomus | 4 | Diptera | Chironomidae | |
| Argia | 3 | Odonata | Coenagrionidae | |
| Ablabesmyia rhamphe grp. | 2 | Diptera | Chironomidae | |
| Acerpenna pygmaea | 2 | Ephemeroptera | Baetidae | |
| Hyalella azteca | 2 | Amphipoda | Hyalellidae | |
| Hemerodromia | 2 | Diptera | Empididae | |
| Neotrichia | 2 | Trichoptera | Hydroptilidae | |
| Cernotina | 2 | Trichoptera | Polycentropodidae | |
| Ancylidae | 2 | Basommatophora | | |
| Enchytraeidae | 2 | Haplotaxida | | |
| Tricorythodes albilineatus | 1 | Ephemeroptera | Leptohyphidae | |
| Polypedilum scalaenum grp. | 1 | Diptera | Chironomidae | |
| Ablabesmyia (karelia) grp. | 1 | Diptera | Chironomidae | |
| Planorbidae | 1 | Basommatophora | | |
| Heptageniidae | 1 | Ephemeroptera | | |
| Enallagma | 1 | Odonata | Coenagrionidae | |
| Triaenodes | 1 | Trichoptera | Leptoceridae | |
| Dineutus | 1 | Coleoptera | Gyrinidae | |
| Gammarus | 1 | Amphipoda | Gammaridae | |
| Pisidiidae | 1 | Veneroida | | |
| Hydrobiidae | 1 | Mesogastropoda | | |
| Nyctiophylax | 1 | Trichoptera | Polycentropodidae | |
| Stenochironomus | 1 | Diptera | Chironomidae | |
| Palpomyia/bezzia grp. | 1 | Diptera | Ceratopogonidae | |
| Polypedilum illinoense grp. | 1 | Diptera | Chironomidae | |
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US EPA ARCHIVE DOCUMENT

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|---|---|---|---|---|
| ***Expert:*** | | | | |
| ***Bioregion:*** | **Panhandle** | | | |
| ***BCGSampleID:*** | **Panh09** | | | |
| ***Initial Score:*** | | | | |
| ***Final Score:*** | | | | |
| ***Scientific Name*** | ***Noind*** | ***Order*** | ***Family*** | ***Comments*** |
| Cricotopus bicinctus | 63 | Diptera | Chironomidae | |
| Limnodrilus hoffmeisteri | 22 | Haplotaxida | Tubificidae | |
| Lumbriculus variegatus | 19 | Lumbriculida | Lumbriculidae | |
| Cricotopus or orthocladius | 15 | Diptera | Chironomidae | |
| Bratislavia unidentata | 13 | Haplotaxida | Naididae | |
| Physella | 9 | Basommatophora | Physidae | |
| Nais pardalis | 8 | Haplotaxida | Naididae | |
| Enchytraeidae | 2 | Haplotaxida | | |
| Dero nivea | 2 | Haplotaxida | Naididae | |
| Culicidae | 1 | Diptera | | |
| Chironomus | 1 | Diptera | Chironomidae | |
| Dero trifida | 1 | Haplotaxida | Naididae | |
| Pristinella jenkinae | 1 | Haplotaxida | Naididae | |
| Argia fumipennis | 1 | Odonata | Coenagrionidae | |
| Dero vaga | 1 | Haplotaxida | Naididae | |
| Mooreobdella | 1 | Arhynchobdellida | Erpobdellidae | |

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|---|---|---|---|---|
| ***Expert:*** | | | | |
| ***Bioregion:*** | **Panhandle** | | | |
| ***BCGSampleID:*** | **Panh10** | | | |
| ***Initial Score:*** | | | | |
| ***Final Score:*** | | | | |
| ***Scientific Name*** | ***Noind*** | ***Order*** | ***Family*** | ***Comments*** |
| Limnodrilus hoffmeisteri | 86 | Haplotaxida | Tubificidae | |
| Chironomus | 80 | Diptera | Chironomidae | |

US EPA ARCHIVE DOCUMENT

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|---|---|---|---|---|
| ***Expert:*** | | | | |
| ***Bioregion:*** | **Peninsula** | | | |
| ***BCGSampleID:*** | **Pen01** | | | |
| ***Initial Score:*** | | | | |
| ***Final Score:*** | | | | |
| ***Scientific Name*** | ***Noind*** | ***Order*** | ***Family*** | ***Comments*** |
| Limnodrilus hoffmeisteri | 27 | Haplotaxida | Tubificidae | |
| Goeldichironomus holoprasinus | 15 | Diptera | Chironomidae | |
| Aulodrilus pigueti | 13 | Haplotaxida | Tubificidae | |
| Physella | 11 | Basommatophora | Physidae | |
| Micromenetus dilatatus | 11 | Basommatophora | Planorbidae | |
| Sphaeriidae | 6 | Veneroida | | |
| Polypedilum illinoense grp. | 6 | Diptera | Chironomidae | |
| Dero vaga | 5 | Haplotaxida | Naididae | |
| Dero digitata complex | 5 | Haplotaxida | Naididae | |
| Pachydiplax longipennis | 4 | Odonata | Libellulidae | |
| Cladopelma | 3 | Diptera | Chironomidae | |
| Dicrotendipes modestus | 3 | Diptera | Chironomidae | |
| Ancylidae | 2 | Basommatophora | | |
| Hydrocanthus | 2 | Coleoptera | Noteridae | |
| Helobdella triserialis | 2 | Rhynchobdellida | Glossiphoniidae | |
| Coenagrionidae | 1 | Odonata | | |
| Gloiobdella elongata | 1 | Rhynchobdellida | Glossiphoniidae | |
| Pomacea paludosa | 1 | Mesogastropoda | Ampullariidae | |
| Haber speciosus | 1 | Haplotaxida | Tubificidae | |
| Planorbella | 1 | Basommatophora | Planorbidae | |

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|---|---|---|---|---|
| ***Expert:*** | | | | |
| ***Bioregion:*** | **Peninsula** | | | |
| ***BCGSampleID:*** | **Pen02** | | | |
| ***Initial Score:*** | | | | |
| ***Final Score:*** | | | | |
| ***Scientific Name*** | ***Noind*** | ***Order*** | ***Family*** | ***Comments*** |
| Pyrogophorus platyrachis | 34 | Mesogastropoda | Hydrobiidae | |
| Cheumatopsyche | 33 | Trichoptera | Hydropsychidae | |
| Corbicula fluminea | 9 | Veneroida | Corbiculidae | |
| Stenelmis hungerfordi | 6 | Coleoptera | Elmidae | |
| Microcylloepus pusillus | 6 | Coleoptera | Elmidae | |
| Caenis diminuta | 6 | Ephemeroptera | Caenidae | |
| Goeldichironomus holoprasinus | 5 | Diptera | Chironomidae | |
| Macromia taeniolata | 4 | Odonata | Libellulidae | |
| Hyalella azteca | 3 | Amphipoda | Hyalellidae | |
| Pentaneura inconspicua | 3 | Diptera | Chironomidae | |
| Pyralidae | 2 | Lepidoptera | | |
| Ablabesmyia rhamphe grp. | 2 | Diptera | Chironomidae | |
| Polypedilum convictum grp. | 2 | Diptera | Chironomidae | |
| Polypedilum halterale grp. | 2 | Diptera | Chironomidae | |
| Helobdella triserialis | 2 | Rhynchobdellida | Glossiphoniidae | |
| Ischnura | 1 | Odonata | Coenagrionidae | |
| Polypedilum scalaenum grp. | 1 | Diptera | Chironomidae | |
| Polypedilum trigonum | 1 | Diptera | Chironomidae | |
| Hydrocanthus regius | 1 | Coleoptera | Noteridae | |
| Palaemonetes paludosus | 1 | Decapoda | Palaemonidae | |
| Ancylidae | 1 | Basommatophora | | |
| Stenochironomus | 1 | Diptera | Chironomidae | |
| Pelocoris | 1 | Heteroptera | Naucoridae | |
| Mesovelia | 1 | Heteroptera | Mesoveliidae | |
| Dubiraphia | 1 | Coleoptera | Elmidae | |

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|---|---|---|---|---|
| ***Expert:*** | | | | |
| ***Bioregion:*** | **Peninsula** | | | |
| ***BCGSampleID:*** | **Pen03** | | | |
| ***Initial Score:*** | | | | |
| ***Final Score:*** | | | | |
| ***Scientific Name*** | ***Noind*** | ***Order*** | ***Family*** | ***Comments*** |
| Pelecypoda | 30 | | | |
| Dubiraphia vittata | 29 | Coleoptera | Elmidae | |
| Hydrobiidae | 10 | Mesogastropoda | | |
| Stenelmis | 10 | Coleoptera | Elmidae | |
| Pachydiplax longipennis | 5 | Odonata | Libellulidae | |
| Caecidotea | 4 | Isopoda | Asellidae | |
| Arrenurus | 3 | Acariformes | Arrenuridae | |
| Chironomus | 3 | Diptera | Chironomidae | |
| Caenis | 2 | Ephemeroptera | Caenidae | |
| Goeldichironomus holoprasinus | 2 | Diptera | Chironomidae | |
| Scirtes | 2 | Coleoptera | Scirtidae | |
| Kiefferulus | 2 | Diptera | Chironomidae | |
| Hyalella azteca | 2 | Amphipoda | Hyalellidae | |
| Dicrotendipes simpsoni | 2 | Diptera | Chironomidae | |
| Polypedilum halterale grp. | 2 | Diptera | Chironomidae | |
| Oniscidae | 1 | Isopoda | | |
| Microcylloepus pusillus | 1 | Coleoptera | Elmidae | |

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|---|---|---|---|---|
| ***Expert:*** | | | | |
| ***Bioregion:*** | **Peninsula** | | | |
| ***BCGSampleID:*** | **Pen04** | | | |
| ***Initial Score:*** | | | | |
| ***Final Score:*** | | | | |
| ***Scientific Name*** | ***Noind*** | ***Order*** | ***Family*** | ***Comments*** |
| Polypedilum illinoense grp. | 46 | Diptera | Chironomidae | |
| Asheum beckae | 12 | Diptera | Chironomidae | |
| Goeldichironomus natans | 7 | Diptera | Chironomidae | |
| Melanoides | 7 | Mesogastropoda | Thiaridae | |
| Tanytarsus sp. t epler | 6 | Diptera | Chironomidae | |
| Argia | 6 | Odonata | Coenagrionidae | |
| Hyalella azteca | 4 | Amphipoda | Hyalellidae | |
| Limnodrilus hoffmeisteri | 3 | Haplotaxida | Tubificidae | |
| Orthemis ferruginea | 2 | Odonata | Libellulidae | |
| Ceratopogonidae | 2 | Diptera | | |
| Cambaridae | 2 | Decapoda | | |
| Enchytraeidae | 2 | Haplotaxida | | |
| Hirudinea | 2 | | | |
| Polypedilum tritum | 1 | Diptera | Chironomidae | |
| Hydrobiidae | 1 | Mesogastropoda | | |
| Physella | 1 | Basommatophora | Physidae | |
| Chironomus | 1 | Diptera | Chironomidae | |
| Larsia | 1 | Diptera | Chironomidae | |
| Microvelia | 1 | Heteroptera | Veliidae | |
| Planorbidae | 1 | Basommatophora | | |

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|---|---|---|---|---|
| ***Expert:*** | | | | |
| ***Bioregion:*** | **Peninsula** | | | |
| ***BCGSampleID:*** | **Pen05** | | | |
| ***Initial Score:*** | | | | |
| ***Final Score:*** | | | | |
| ***Scientific Name*** | ***Noind*** | ***Order*** | ***Family*** | ***Comments*** |
| Hyalella azteca | 53 | Amphipoda | Hyalellidae | |
| Amnicola dalli | 10 | Mesogastropoda | Bithyniidae | |
| Baetis propinquus | 9 | Ephemeroptera | Baetidae | |
| Cricotopus or orthocladius | 8 | Diptera | Chironomidae | |
| Oligochaeta | 6 | | | |
| Cricotopus bicinctus | 4 | Diptera | Chironomidae | |
| Microcylloepus pusillus | 3 | Coleoptera | Elmidae | |
| Hydroptila | 3 | Trichoptera | Hydroptilidae | |
| Polypedilum illinoense grp. | 2 | Diptera | Chironomidae | |
| Elimia floridensis | 2 | Mesogastropoda | Pleuroceridae | |
| Planorbella duryi | 2 | Basommatophora | Planorbidae | |
| Tanytarsus sp. e epler | 2 | Diptera | Chironomidae | |
| Rheotanytarsus exiguus grp. | 2 | Diptera | Chironomidae | |
| Cheumatopsyche | 2 | Trichoptera | Hydropsychidae | |
| Tricorythodes albilineatus | 2 | Ephemeroptera | Leptohyphidae | |
| Oecetis | 1 | Trichoptera | Leptoceridae | |
| Rheotanytarsus distinctissimus grp. | 1 | Diptera | Chironomidae | |
| Polypedilum convictum grp. | 1 | Diptera | Chironomidae | |
| Astacidae | 1 | Decapoda | | |
| Turbellaria | 1 | | | |
| Hydropsyche | 1 | Trichoptera | Hydropsychidae | |
| Stenelmis | 1 | Coleoptera | Elmidae | |
| Pentaneura inconspicua | 1 | Diptera | Chironomidae | |
| Palaemonetes paludosus | 1 | Decapoda | Palaemonidae | |
| Rhagovelia choreutes | 1 | Heteroptera | Veliidae | |
| Stenochironomus | 1 | Diptera | Chironomidae | |
| Palpomyia/bezzia grp. | 1 | Diptera | Ceratopogonidae | |
| Hemerodromia | 1 | Diptera | Empididae | |
| Baetis intercalaris | 1 | Ephemeroptera | Baetidae | |
| Simulium | 1 | Diptera | Simuliidae | |

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|---|---|---|---|---|
| ***Expert:*** | | | | |
| ***Bioregion:*** | **Peninsula** | | | |
| ***BCGSampleID:*** | **Pen06** | | | |
| ***Initial Score:*** | | | | |
| ***Final Score:*** | | | | |
| ***Scientific Name*** | ***Noind*** | ***Order*** | ***Family*** | ***Comments*** |
| Cheumatopsyche | 20 | Trichoptera | Hydropsychidae | |
| Microcylloepus pusillus | 15 | Coleoptera | Elmidae | |
| Sphaeriidae(mollusca) | 10 | Veneroida | | |
| Corbicula fluminea | 9 | Veneroida | Corbiculidae | |
| Ablabesmyia rhamphe grp. | 6 | Diptera | Chironomidae | |
| Polypedilum scalaenum grp. | 4 | Diptera | Chironomidae | |
| Hyalella azteca | 4 | Amphipoda | Hyalellidae | |
| Tubificidae | 4 | Haplotaxida | | |
| Dubiraphia | 3 | Coleoptera | Elmidae | |
| Polypedilum illinoense grp. | 2 | Diptera | Chironomidae | |
| Hydrobiidae | 2 | Mesogastropoda | | |
| Cryptochironomus | 2 | Diptera | Chironomidae | |
| Polypedilum tritum | 2 | Diptera | Chironomidae | |
| Ablabesmyia peleensis | 2 | Diptera | Chironomidae | |
| Ablabesmyia mallochi | 2 | Diptera | Chironomidae | |
| Stenelmis | 2 | Coleoptera | Elmidae | |
| Gloiobdella elongata | 2 | Rhynchobdellida | Glossiphoniidae | |
| Polypedilum halterale grp. | 1 | Diptera | Chironomidae | |
| Laevapex fuscus | 1 | Basommatophora | Ancylidae | |
| Hebetancylus excentricus | 1 | Basommatophora | Ancylidae | |
| Argia sedula | 1 | Odonata | Coenagrionidae | |
| Micromenetus dilatatus | 1 | Basommatophora | Planorbidae | |
| Laevapex peninsulae | 1 | Basommatophora | Ancylidae | |
| Clinotanypus | 1 | Diptera | Chironomidae | |
| Astacidae | 1 | Decapoda | | |
| Dineutus | 1 | Coleoptera | Gyrinidae | |

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|---|---|---|---|---|
| ***Expert:*** | | | | |
| ***Bioregion:*** | **Peninsula** | | | |
| ***BCGSampleID:*** | **Pen07** | | | |
| ***Initial Score:*** | | | | |
| ***Final Score:*** | | | | |
| ***Scientific Name*** | ***Noind*** | ***Order*** | ***Family*** | ***Comments*** |
| Hyalella azteca | 21 | Amphipoda | Hyalellidae | |
| Caenis | 15 | Ephemeroptera | Caenidae | |
| Neotrichia | 10 | Trichoptera | Hydroptilidae | |
| Pyrogophorus platyrachis | 8 | Mesogastropoda | Hydrobiidae | |
| Limnodrilus hoffmeisteri | 7 | Haplotaxida | Tubificidae | |
| Tribelos fuscicornis | 7 | Diptera | Chironomidae | |
| Pisidiidae | 5 | Veneroida | | |
| Ablabesmyia mallochi | 3 | Diptera | Chironomidae | |
| Tanytarsus sp. g epler | 2 | Diptera | Chironomidae | |
| Polypedilum scalaenum grp. | 2 | Diptera | Chironomidae | |
| Polypedilum halterale grp. | 2 | Diptera | Chironomidae | |
| Rheotanytarsus distinctissimus grp. | 2 | Diptera | Chironomidae | |
| Stenochironomus | 2 | Diptera | Chironomidae | |
| Larsia decolorata | 2 | Diptera | Chironomidae | |
| Tanytarsus sp. d epler | 2 | Diptera | Chironomidae | |
| Tanytarsus sp. e epler | 2 | Diptera | Chironomidae | |
| Tanytarsus sp. t epler | 2 | Diptera | Chironomidae | |
| Ablabesmyia (karelia) grp. | 1 | Diptera | Chironomidae | |
| Palpomyia/bezzia grp. | 1 | Diptera | Ceratopogonidae | |
| Cernotina | 1 | Trichoptera | Polycentropodidae | |
| Clinotanypus | 1 | Diptera | Chironomidae | |
| Oecetis | 1 | Trichoptera | Leptoceridae | |
| Micromenetus | 1 | Basommatophora | Planorbidae | |
| Cladotanytarsus | 1 | Diptera | Chironomidae | |
| Cryptochironomus | 1 | Diptera | Chironomidae | |
| Polypedilum illinoense grp. | 1 | Diptera | Chironomidae | |
| Ablabesmyia rhamphe grp. | 1 | Diptera | Chironomidae | |
| Nanocladius | 1 | Diptera | Chironomidae | |
| Microcylloepus pusillus | 1 | Coleoptera | Elmidae | |

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| ***Expert:*** | | | | |
| ***Bioregion:*** | **Peninsula** | | | |
| ***BCGSampleID:*** | **Pen08** | | | |
| ***Initial Score:*** | | | | |
| ***Final Score:*** | | | | |
| ***Scientific Name*** | ***Noind*** | ***Order*** | ***Family*** | ***Comments*** |
| Stenelmis | 18 | Coleoptera | Elmidae | |
| Caenis | 13 | Ephemeroptera | Caenidae | |
| Oecetis | 12 | Trichoptera | Leptoceridae | |
| Tribelos fuscicornis | 11 | Diptera | Chironomidae | |
| Polypedilum convictum grp. | 6 | Diptera | Chironomidae | |
| Dubiraphia | 5 | Coleoptera | Elmidae | |
| Cheumatopsyche | 5 | Trichoptera | Hydropsychidae | |
| Macromia taeniolata | 4 | Odonata | Libellulidae | |
| Limnodrilus hoffmeisteri | 4 | Haplotaxida | Tubificidae | |
| Cryptochironomus | 4 | Diptera | Chironomidae | |
| Argia | 3 | Odonata | Coenagrionidae | |
| Ablabesmyia rhamphe grp. | 2 | Diptera | Chironomidae | |
| Acerpenna pygmaea | 2 | Ephemeroptera | Baetidae | |
| Hyalella azteca | 2 | Amphipoda | Hyalellidae | |
| Hemerodromia | 2 | Diptera | Empididae | |
| Neotrichia | 2 | Trichoptera | Hydroptilidae | |
| Cernotina | 2 | Trichoptera | Polycentropodidae | |
| Ancylidae | 2 | Basommatophora | | |
| Enchytraeidae | 2 | Haplotaxida | | |
| Tricorythodes albilineatus | 1 | Ephemeroptera | Leptohyphidae | |
| Polypedilum scalaenum grp. | 1 | Diptera | Chironomidae | |
| Ablabesmyia (karelia) grp. | 1 | Diptera | Chironomidae | |
| Planorbidae | 1 | Basommatophora | | |
| Heptageniidae | 1 | Ephemeroptera | | |
| Enallagma | 1 | Odonata | Coenagrionidae | |
| Triaenodes | 1 | Trichoptera | Leptoceridae | |
| Dineutus | 1 | Coleoptera | Gyrinidae | |
| Gammarus | 1 | Amphipoda | Gammaridae | |
| Pisidiidae | 1 | Veneroida | | |
| Hydrobiidae | 1 | Mesogastropoda | | |
| Nyctiophylax | 1 | Trichoptera | Polycentropodidae | |
| Stenochironomus | 1 | Diptera | Chironomidae | |
| Palpomyia/bezzia grp. | 1 | Diptera | Ceratopogonidae | |
| Polypedilum illinoense grp. | 1 | Diptera | Chironomidae | |

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|---|---|---|---|---|
| ***Expert:*** | | | | |
| ***Bioregion:*** | **Peninsula** | | | |
| ***BCGSampleID:*** | **Pen09** | | | |
| ***Initial Score:*** | | | | |
| ***Final Score:*** | | | | |
| ***Scientific Name*** | ***Noind*** | ***Order*** | ***Family*** | ***Comments*** |
| Dero pectinata | 61 | Haplotaxida | Naididae | |
| Einfeldia sp. a epler | 23 | Diptera | Chironomidae | |
| Nais communis | 8 | Haplotaxida | Naididae | |
| Pristina aequiseta | 7 | Haplotaxida | Naididae | |
| Hyalella azteca | 7 | Amphipoda | Hyalellidae | |
| Pristina leidyi | 4 | Haplotaxida | Naididae | |
| Tanypus carinatus | 4 | Diptera | Chironomidae | |
| Larsia decolorata | 4 | Diptera | Chironomidae | |
| Enallagma | 3 | Odonata | Coenagrionidae | |
| Chironomus | 3 | Diptera | Chironomidae | |
| Dasyhelea | 2 | Diptera | Ceratopogonidae | |
| Haemonais waldvogeli | 2 | Haplotaxida | Naididae | |
| Caenis | 2 | Ephemeroptera | Caenidae | |
| Arrenurus | 2 | Acariformes | Arrenuridae | |
| Suphisellus insularis | 2 | Coleoptera | Noteridae | |
| Palaemonetes paludosus | 2 | Decapoda | Palaemonidae | |
| Bratislavia unidentata | 2 | Haplotaxida | Naididae | |
| Allonais paraguayensis | 2 | Haplotaxida | Naididae | |
| Slavina appendiculata | 2 | Haplotaxida | Naididae | |
| Celina | 1 | Coleoptera | Dytiscidae | |
| Parakiefferiella sp. c epler | 1 | Diptera | Chironomidae | |
| Planorbidae | 1 | Basommatophora | | |
| Unionicola | 1 | Acariformes | Unionicolidae | |
| Limnesia | 1 | Acariformes | Limnesiidae | |
| Physella | 1 | Basommatophora | Physidae | |
| Turbellaria | 1 | | | |
| Tanytarsus sp. c epler | 1 | Diptera | Chironomidae | |
| Polypedilum trigonum | 1 | Diptera | Chironomidae | |
| Mesonoterus | 1 | Coleoptera | Noteridae | |
| Pseudochironomus | 1 | Diptera | Chironomidae | |
| Notomicrus nanulus | 1 | Coleoptera | Noteridae | |
| Limnodrilus hoffmeisteri | 1 | Haplotaxida | Tubificidae | |

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|---|---|---|---|---|
| ***Expert:*** | | | | |
| ***Bioregion:*** | **Peninsula** | | | |
| ***BCGSampleID:*** | **Pen10** | | | |
| ***Initial Score:*** | | | | |
| ***Final Score:*** | | | | |
| ***Scientific Name*** | ***Noind*** | ***Order*** | ***Family*** | ***Comments*** |
| Goeldichironomus holoprasinus | 92 | Diptera | Chironomidae | |
| Anax junius | 6 | Odonata | Aeshnidae | |
| Ischnura | 4 | Odonata | Coenagrionidae | |
| Tabanidae | 2 | Diptera | | |
| Odontomyia | 2 | Diptera | Stratiomyidae | |
| Paramerina | 1 | Diptera | Chironomidae | |
| Libellula semifasciata | 1 | Odonata | Libellulidae | |
| Suphis inflatus | 1 | Coleoptera | Noteridae | |
| Culicidae | 1 | Diptera | | |
| Tanypus carinatus | 1 | Diptera | Chironomidae | |

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# Appendix A8. Memo to FDEP Regarding Interval and Equivalence Tests for the SCI

Cross-references:

*Appendix B-14: Memo to FDEP Regarding Interval and Equivalence Tests for the SCI*. U.S. EPA. 2010. *Technical Support Document for U.S. EPA's Proposed Rule for Numeric Nutrient Criteria for Florida's Inland Surface Fresh Waters. Water Quality Standards for the State of Florida's Lakes and Flowing Waters. Proposed Rule*. January 14, 2010. EPA-HQ-OW-2009-0596, FRL-9105-1.

*Appendix 3-C*. U.S.EPA. 2009. Proposed Methods and Approaches for Developing Numeric Nutrient Criteria for Florida's Inland Waters. United States Environmental Protection Agency, Office of Water, Office of Science and Technology, Health and Ecological Criteria Division, Washington, DC.

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# Memo to FDEP Regarding Interval and Equivalence Tests for the SCI

(Appendix 3-C from USEPA. 2009. *Proposed Methods and Approaches for Developing Numeric Nutrient Criteria for Florida's Inland Waters*. United States Environmental Protection Agency, Office of Water, Office of Science and Technology, Health and Ecological Criteria Division, Washington, DC.)

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# Appendix 3-C

# Memo from Leska Fore regarding interval and equivalence tests for the Stream Condition Index

*Statistical Design*

*136 NW 40th St.*
*Seattle, WA 98107*
*(206) 708-5048*

# MEMORANDUM

**DATE:** April 9, 2009

**TO:** Russ Frydenborg, Florida DEP

**FROM:** Leska Fore, Statistical Design

**RE:** Statistical Framework for Defining Impairment for SCI

## Objective

Identify a statistical test and approach for defining impairment status for the case in which a single test site is compared to a distribution of reference sites. Florida DEP's stream condition index (SCI) for macroinvertebrate stream samples is used as a case study.

## Why use a statistical framework?

- A statistical model provides a hypothesis and a decision rule for determining whether a test site differs from reference condition.
- Uncertainty associated with an impairment decision can be estimated.
- Type I (true reference site called impaired) and Type II (true impaired site called reference) error can be compared and balanced to be equally protective of the resource and the regulated community.
- Provides a framework for future, unforeseen questions and needs, for example, how to deal with two replicate visits to a test site.
- Methods are symmetric in that they can be equally applied to de-listing or listing a site as impaired.
- Makes listing decisions more robust to legal challenge.

## Statistical decision ≠ Stakeholder decision

Defining a threshold for biological impairment involves scientific information and social values. Statistics can support this decision, but cannot ultimately be used to make the



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decision. Once a threshold has been defined, a statistical framework can be used to structure the decision process around the line of impairment.

This document addresses the statistical uncertainty around the threshold line.

## Criteria for selection of a statistical framework

- Applicable to our situation: comparison of one test site to a reference population.
- Legally and statistically defensible.
- Provides estimate of uncertainty associated with impairment status calls.
- Can estimate false positive and negative rates.
- Can be used to model the effect of repeat visits to a site.

## Candidate statistical tests

Much of the literature related to threshold testing for environmental compliance addresses the comparison of water chemistry samples to a threshold (SWRCB, 2004). This testing scenario for chemical contaminants is somewhat the opposite from our situation in that contaminant thresholds are defined as a single value with no associated uncertainty, that is, no set of values from reference sites. For biocriteria, thresholds are derived from a population of reference sites, not a single value. Furthermore, water chemistry test sites have multiple samples rather than a single value as is typical for biocriteria.

For water chemistry, the variability is associated with the test site rather than the reference sites. In contrast, for biocriteria we are comparing one test site value to multiple reference site values. Expectations for biocriteria are based on local reference condition while thresholds for toxics and contaminants tend to be expressed as a single threshold that is nationally applied. Most of the papers related to statistical testing for thresholds address the chemical contaminant model.

An alternative approach for biocriteria threshold testing was described by Kilgour et al. (1998). Their method was based on interval and equivalence tests. Both tests can be used to evaluate whether an observation at a test location falls within or outside of the normal range of variation for reference locations. When results from the tests are interpreted together, errors due to false positives and negatives are equally likely.

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Table 1. Candidate statistical tests for comparing SCI values at a test site to a threshold derived from reference sites.

| Test name | Application to biocriteria threshold |
|---|---|
| **Recommended**: Combination of interval and equivalence tests (Kilgour et al., 1998) | Both tests are designed to compare 1 test site against a population of reference sites; pair of tests controls for both Type I and Type II error |
| Two-sample t test | Assumes multiple samples from both the test population and the reference population |
| One-sample t test | Comparison to the mean, not to percentiles of the distribution; low power to detect differences |
| One-sample Wilcoxon signed rank test | Nonparametric analog to one-sample t test, compares median of a test population to a threshold; not designed to compare percentiles |
| Confidence interval around a proportion (Gibbons, 2001) | Designed to test what proportion of test samples exceed a threshold; multiple test samples, one reference threshold |
| Exact binomial test | Widely recommended for chemical testing of % exceedances of a threshold; compares multiple test values to a single reference value |

## Interval and Equivalence Testing

The specific statistical methods described by Kilgour et al. (1998) are not particularly novel, i.e., the comparison of a statistic to the noncentral F distribution, but the pairing of two tests (interval and equivalence tests) and the application to bioassessment endpoints represents a new approach. Their approach was developed specifically for the comparison of a single test site to a population of reference sites for measures of biological condition.

Both the interval and the equivalence tests can be applied to the comparison of a single test site value with values from a population of reference sites. Both tests have a low Type I error rate (false positive), but they can be used to balance false positives and negatives because they test the *opposite* null hypotheses. The interval null hypothesis tests for *difference* from reference and the equivalence null hypothesis tests for *equality* to reference (Table 2). In this way, the tests are symmetric. By pairing these two tests, we can balance for the error rates associated with falsely determining a reference site to be impaired (Type I) and missing a site that is truly impaired (Type II; Appendix A).

Although not relevant for this application to the SCI, the approach can also be generalized to a multivariate comparison of multiple indicators (e.g., metrics) against their respective thresholds (Bowman and Somers, 2006).



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Table 2. Comparison of the interval and equivalence tests, hypotheses tested by each and their advantages and disadvantages relative to decisions about impairment.

| Statistical test | $H_O$ | $H_A$ | Advantages | Disadvantages |
|---|---|---|---|---|
| **Interval test** | Test site *is* within the range of reference sites | Test site *is not* within the range of reference sites | Protects the polluter (guards against unnecessary listing) | Not as sensitive at detecting impairment |
| **Equivalence test** | Test site *is not* within the range of reference sites | Test site *is* within the range of reference sites | Protects the environment (very sensitive to impairment) | Very sensitive and may identify reference sites as impaired |

## How do we specify the test?

Both tests use the same test statistic, the familiar F-statistic. Because we are testing for differences not from the mean, but for some distance from the mean, e.g., the 10th percentile (our defined threshold), we need to use a noncentral F test. The null and alternate hypotheses are mirror images of each for the interval and equivalence tests.

Interval test

The *null* hypothesis is that the test and reference sites are the *same*. The *alternative* hypothesis is that test and reference sites are the *different*.

$H_O$ (null): $(\mu_{ref} - T) \leq \delta$, or "The difference between the mean SCI of the reference sites and the SCI at the test site is less than delta." Delta can be any specified value, e.g., the 10th percentile of SCI values for reference sites.

$H_A$ (alternate): $(\mu_{ref} - T) > \delta$, or "The test site is more different than the specified difference (delta) from the mean SCI."

Equivalence test

The *null* hypothesis is that the test and reference sites are *different*. The *alternative* hypothesis is that test and reference sites are the *same*.

$H_O$: $(\mu_{ref} - T) \geq \delta$, or "The difference between the mean SCI of the reference sites and the SCI at the test site is more than delta."



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$H_A$: $(\mu_{ref} - T) < \delta$, or "The test site is not different from the specified difference from the mean SCI for reference sites."

Test statistic

$$F = \frac{\left(\overline{X}_{ref} - T\right)^2}{\left(s_{ref}\sqrt{\frac{1}{n_{ref}}}\right)^2}$$

## How does statistical test work?

Suppose we go to a stream site and sample for SCI and calculate a value of 46 out of a possible range of values from 0–100. We want to compare this observed value to the 10th percentile of SCI values for reference sites (Table 3). The 10th percentile is derived from an assumption that reference sites follow an approximately normal distribution. The table value for the 10th percentile of a normal distribution (–1.28) is used to define 10th percentile of the reference distribution. This z-table value is also used to define the noncentrality parameter, lambda.

We calculate the F-statistic and use a statistical program (e.g., R or Excel) to look up the p-value associated with the F-statistic with 1 and 63 degrees of freedom and determine that we can reject the interval test and conclude that the test site is different from reference condition.

Table 3. Worked example for comparing SCI at a test site to SCI values at reference sites.

| Description | Value |
|---|---|
| Mean SCI (reference sites) | 66.3 |
| Standard deviation of SCI (reference sites) | 12.6 |
| Number of reference sites | 64 |
| 10th Percentile of SCI (reference sites) | 66.3–(1.28*12.6) = 50 |
| SCI for test site | 46 |
| Standardized z-value for 10th percentile of reference (one-tailed test); used to define difference (delta) we are testing for | –1.28 |



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| | |
|---|---|
| F-statistic | $\frac{(66.3-46)^2}{\left(12.6\sqrt{\frac{1}{64}}\right)^2} = 166.1$ |
| Degrees of freedom | (1, 63) |
| Lambda, noncentrality parameter; this value represents how far from the mean the test site should be, i.e., lower than the 10th percentile | $64 * (1.28)^2 = 104.9$ |
| p-value for F-statistic (interval test) | p = 0.04, significantly lower than the 10th %tile of reference |
| Conclusion | "We are 95% confident the test site is impaired with impairment defined as below the 10th percentile of reference." |

## Statistical Decision Rules for SCI

We can use the statistical framework of interval and equivalence testing to estimate uncertainty for SCI values at a test site based on different definitions of impairment.

Table 4. Statistical decision rules for SCI values at a test site for threshold values defined as the 1st, 5th, and 10th percentiles of SCI values for reference sites. Shown are values for $p < 0.05$. N = 1 SCI value for each site.

| Impairment threshold (description) | Impairment threshold (numeric) | Impaired | Undetermined | Reference |
|---|---|---|---|---|
| 2.5th percentile of reference | 42 | <37 | 37–45 | >45 |
| 5th percentile of reference | 46 | <41 | 41–49 | >49 |
| 10th percentile of reference | 50 | <47 | 47–53 | >53 |

## Summary

- Caveat: Statistical tests provide a framework for comparison and testing around a threshold, but cannot be used alone to define impairment thresholds. That decision also relies on scientific understanding and social values.

The method described here combines two statistical tests, the interval test and the equivalence test, to compare a single test site value to a set of values from a population of reference sites. This approach satisfies most of our criteria for a statistical framework for



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a biocriteria threshold. Pairing the interval and equivalence tests to evaluate percentiles from the reference site distribution represents a simple statistical decision rule that is easy to describe and legally defensible. We can estimate error rates for false positives and false negatives and balance them. The method is symmetric and can be easily inverted for delisting without any change to Type I or Type II errors.

This approach does not deal explicitly with the case in which more than one sample value is collected from a test site. This problem could be addressed in two ways. For the simple case of two repeat visits to a test site, a new distribution of reference sites could be developed based on the average SCI value for two repeat visits to each reference site. These could be the most recent visit or two visits that were randomly chosen.

A more general approach to incorporating test site variability could be accomplished with a simulation. Using our estimate of within-site variability, a distribution around point estimates of SCI could be defined. Repeat sampling from this distribution could be used to generate a distribution of F-statistics. In this way, we could model the variability associated with a single SCI for a test site.

Combining the interval and equivalence tests provides a statistical framework to support impairment decisions, and is particularly suited to biocriteria because a single test value is compared to a population of reference values.

# Appendix A

Example showing application of interval and equivalence testing for determining the status of a test site. The threshold for impairment is defined as the 10th percentile of SCI values for reference sites. Shown are the SCI value, difference between mean of reference and SCI, numerator and denominator for the F statistic, F, p-value for F for the interval and equivalence tests, status call, and result for the interval and equivalence tests. See Table 3 for values used in calculations. SCI values greater than or equal to the mean for reference sites (SCI = 66–100) are not shown.

| SCI | Mu-imp | F_Num | F_Den | F | P_Int | P_Equ | STATUS | Interv. | Equiv. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 65.3 | 4264.1 | 2.48 | 1719.0 | 0.00 | 1.00 | IMPAIRED | >delta | >=delta |
| 2 | 64.3 | 4134.5 | 2.48 | 1666.7 | 0.00 | 1.00 | IMPAIRED | >delta | >=delta |
| 3 | 63.3 | 4006.9 | 2.48 | 1615.3 | 0.00 | 1.00 | IMPAIRED | >delta | >=delta |
| 4 | 62.3 | 3881.3 | 2.48 | 1564.6 | 0.00 | 1.00 | IMPAIRED | >delta | >=delta |
| 5 | 61.3 | 3757.7 | 2.48 | 1514.8 | 0.00 | 1.00 | IMPAIRED | >delta | >=delta |
| 6 | 60.3 | 3636.1 | 2.48 | 1465.8 | 0.00 | 1.00 | IMPAIRED | >delta | >=delta |
| 7 | 59.3 | 3516.5 | 2.48 | 1417.6 | 0.00 | 1.00 | IMPAIRED | >delta | >=delta |
| 8 | 58.3 | 3398.9 | 2.48 | 1370.2 | 0.00 | 1.00 | IMPAIRED | >delta | >=delta |
| 9 | 57.3 | 3283.3 | 2.48 | 1323.6 | 0.00 | 1.00 | IMPAIRED | >delta | >=delta |
| 10 | 56.3 | 3169.7 | 2.48 | 1277.8 | 0.00 | 1.00 | IMPAIRED | >delta | >=delta |
| 11 | 55.3 | 3058.1 | 2.48 | 1232.8 | 0.00 | 1.00 | IMPAIRED | >delta | >=delta |
| 12 | 54.3 | 2948.5 | 2.48 | 1188.6 | 0.00 | 1.00 | IMPAIRED | >delta | >=delta |
| 13 | 53.3 | 2840.9 | 2.48 | 1145.2 | 0.00 | 1.00 | IMPAIRED | >delta | >=delta |
| 14 | 52.3 | 2735.3 | 2.48 | 1102.7 | 0.00 | 1.00 | IMPAIRED | >delta | >=delta |
| 15 | 51.3 | 2631.7 | 2.48 | 1060.9 | 0.00 | 1.00 | IMPAIRED | >delta | >=delta |
| 16 | 50.3 | 2530.1 | 2.48 | 1019.9 | 0.00 | 1.00 | IMPAIRED | >delta | >=delta |
| 17 | 49.3 | 2430.5 | 2.48 | 979.8 | 0.00 | 1.00 | IMPAIRED | >delta | >=delta |



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| SCI | Mu-imp | F_Num | F_Den | F | P_Int | P_Equ | STATUS | Interv. | Equiv. |
|---|---|---|---|---|---|---|---|---|---|
| 18 | 48.3 | 2332.9 | 2.48 | 940.4 | 0.00 | 1.00 | IMPAIRED | >delta | >=delta |
| 19 | 47.3 | 2237.3 | 2.48 | 901.9 | 0.00 | 1.00 | IMPAIRED | >delta | >=delta |
| 20 | 46.3 | 2143.7 | 2.48 | 864.2 | 0.00 | 1.00 | IMPAIRED | >delta | >=delta |
| 21 | 45.3 | 2052.1 | 2.48 | 827.2 | 0.00 | 1.00 | IMPAIRED | >delta | >=delta |
| 22 | 44.3 | 1962.5 | 2.48 | 791.1 | 0.00 | 1.00 | IMPAIRED | >delta | >=delta |
| 23 | 43.3 | 1874.9 | 2.48 | 755.8 | 0.00 | 1.00 | IMPAIRED | >delta | >=delta |
| 24 | 42.3 | 1789.3 | 2.48 | 721.3 | 0.00 | 1.00 | IMPAIRED | >delta | >=delta |
| 25 | 41.3 | 1705.7 | 2.48 | 687.6 | 0.00 | 1.00 | IMPAIRED | >delta | >=delta |
| 26 | 40.3 | 1624.1 | 2.48 | 654.7 | 0.00 | 1.00 | IMPAIRED | >delta | >=delta |
| 27 | 39.3 | 1544.5 | 2.48 | 622.6 | 0.00 | 1.00 | IMPAIRED | >delta | >=delta |
| 28 | 38.3 | 1466.9 | 2.48 | 591.3 | 0.00 | 1.00 | IMPAIRED | >delta | >=delta |
| 29 | 37.3 | 1391.3 | 2.48 | 560.9 | 0.00 | 1.00 | IMPAIRED | >delta | >=delta |
| 30 | 36.3 | 1317.7 | 2.48 | 531.2 | 0.00 | 1.00 | IMPAIRED | >delta | >=delta |
| 31 | 35.3 | 1246.1 | 2.48 | 502.3 | 0.00 | 1.00 | IMPAIRED | >delta | >=delta |
| 32 | 34.3 | 1176.5 | 2.48 | 474.3 | 0.00 | 1.00 | IMPAIRED | >delta | >=delta |
| 33 | 33.3 | 1108.9 | 2.48 | 447.0 | 0.00 | 1.00 | IMPAIRED | >delta | >=delta |
| 34 | 32.3 | 1043.3 | 2.48 | 420.6 | 0.00 | 1.00 | IMPAIRED | >delta | >=delta |
| 35 | 31.3 | 979.7 | 2.48 | 394.9 | 0.00 | 1.00 | IMPAIRED | >delta | >=delta |
| 36 | 30.3 | 918.1 | 2.48 | 370.1 | 0.00 | 1.00 | IMPAIRED | >delta | >=delta |
| 37 | 29.3 | 858.5 | 2.48 | 346.1 | 0.00 | 1.00 | IMPAIRED | >delta | >=delta |
| 38 | 28.3 | 800.9 | 2.48 | 322.9 | 0.00 | 1.00 | IMPAIRED | >delta | >=delta |
| 39 | 27.3 | 745.3 | 2.48 | 300.4 | 0.00 | 1.00 | IMPAIRED | >delta | >=delta |
| 40 | 26.3 | 691.7 | 2.48 | 278.8 | 0.00 | 1.00 | IMPAIRED | >delta | >=delta |
| 41 | 25.3 | 640.1 | 2.48 | 258.0 | 0.00 | 1.00 | IMPAIRED | >delta | >=delta |
| 42 | 24.3 | 590.5 | 2.48 | 238.0 | 0.00 | 1.00 | IMPAIRED | >delta | >=delta |
| 43 | 23.3 | 542.9 | 2.48 | 218.9 | 0.00 | 1.00 | IMPAIRED | >delta | >=delta |
| 44 | 22.3 | 497.3 | 2.48 | 200.5 | 0.01 | 0.99 | IMPAIRED | >delta | >=delta |
| 45 | 21.3 | 453.7 | 2.48 | 182.9 | 0.02 | 0.98 | IMPAIRED | >delta | >=delta |
| 46 | 20.3 | 412.1 | 2.48 | 166.1 | 0.04 | 0.96 | IMPAIRED | >delta | >=delta |
| 47 | 19.3 | 372.5 | 2.48 | 150.2 | 0.09 | 0.91 | Undetermined | <=delta | >=delta |
| 48 | 18.3 | 334.9 | 2.48 | 135.0 | 0.18 | 0.82 | Undetermined | <=delta | >=delta |
| 49 | 17.3 | 299.3 | 2.48 | 120.7 | 0.31 | 0.69 | Undetermined | <=delta | >=delta |
| 50 | 16.3 | 265.7 | 2.48 | 107.1 | 0.48 | 0.52 | Undetermined | <=delta | >=delta |
| 51 | 15.3 | 234.1 | 2.48 | 94.4 | 0.67 | 0.33 | Undetermined | <=delta | >=delta |
| 52 | 14.3 | 204.5 | 2.48 | 82.4 | 0.82 | 0.18 | Undetermined | <=delta | >=delta |
| 53 | 13.3 | 176.9 | 2.48 | 71.3 | 0.93 | 0.07 | Undetermined | <=delta | >=delta |
| 54 | 12.3 | 151.3 | 2.48 | 61.0 | 0.98 | 0.02 | REFERENCE | <=delta | <delta |
| 55 | 11.3 | 127.7 | 2.48 | 51.5 | 1.00 | 0.00 | REFERENCE | <=delta | <delta |
| 56 | 10.3 | 106.1 | 2.48 | 42.8 | 1.00 | 0.00 | REFERENCE | <=delta | <delta |
| 57 | 9.3 | 86.5 | 2.48 | 34.9 | 1.00 | 0.00 | REFERENCE | <=delta | <delta |
| 58 | 8.3 | 68.9 | 2.48 | 27.8 | 1.00 | 0.00 | REFERENCE | <=delta | <delta |
| 59 | 7.3 | 53.3 | 2.48 | 21.5 | 1.00 | 0.00 | REFERENCE | <=delta | <delta |
| 60 | 6.3 | 39.7 | 2.48 | 16.0 | 1.00 | 0.00 | REFERENCE | <=delta | <delta |
| 61 | 5.3 | 28.1 | 2.48 | 11.3 | 1.00 | 0.00 | REFERENCE | <=delta | <delta |
| 62 | 4.3 | 18.5 | 2.48 | 7.5 | 1.00 | 0.00 | REFERENCE | <=delta | <delta |
| 63 | 3.3 | 10.9 | 2.48 | 4.4 | 1.00 | 0.00 | REFERENCE | <=delta | <delta |
| 64 | 2.3 | 5.3 | 2.48 | 2.1 | 1.00 | 0.00 | REFERENCE | <=delta | <delta |
| 65 | 1.3 | 1.7 | 2.48 | 0.7 | 1.00 | 0.00 | REFERENCE | <=delta | <delta |
| 66 | 0.3 | 0.1 | 2.48 | 0.0 | 1.00 | 0.00 | REFERENCE | <=delta | <delta |



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# Appendix A9. Mapping Continuous Biological Index Values to BCG Tiers

Cross-reference:

*Appendix B-13. Mapping Continuous Biological Index Values to BCG Tiers*. U.S. EPA. 2010. *Technical Support Document for U.S. EPA's Proposed Rule for Numeric Nutrient Criteria for Florida's Inland Surface Fresh Waters. Water Quality Standards for the State of Florida's Lakes and Flowing Waters. Proposed Rule*. January 14, 2010. EPA-HQ-OW-2009-0596, FRL-9105-1.

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# Mapping Continuous Biological Index Values to BCG Tiers

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## Appendix B-13. Mapping Continuous Biological Index Values to BCG Tiers

The Florida Department of Environmental Protection (FDEP) conducted a workshop to calibrate a biological condition gradient (BCG) using macroinvertebrate data collected from streams in Florida. During the workshop, macroinvertebrate samples (a list of taxa and their abundances) from 30 streams spanning the human disturbance gradient were provided to a panel of 22 biologists with expertise and experience with Florida streams. Each biologist then assigned each sample to one of the six BCG tiers. A stream condition index value (SCI) was also computed for each sample, but this SCI value was not provided to the biologists during the calibration workshop.

BCG tiers represent categories of stream condition, ranging from "as naturally occurs" (Tier 1) to "severely degraded" (Tier 6). Modeling the relationship between the SCI value associated with each sample and the BCG tiers assigned to the sample requires that one taken into account the categorical nature of the data. One approach for modeling the relationship between a continuous variable (e.g., SCI) and a categorical response (e.g., BCG tier) is a proportional odds logistic regression model (Guisan and Harrell 2000). This model estimates the cumulative probability of a site's being assigned to a given tier (e.g., Tier 3) or to any higher-quality tier (Tier 1 or 2). The model equation can be written as follows:

$$\ln\left(\frac{g_j}{1-g_j}\right) = a_j - b(SCI) \qquad \text{Eqn. B13-1}$$

Where *gj* is the probability of a site's being assigned to Tiers 1 through *j*, and *j* ranges from 1 to 5. Note that the regression coefficient, *aj*, can differ depending on the value of *j*, but the regression coefficient that scales the effects of SCI is constant for all tiers. Five parallel models are fit, modeling the probability of assignment to Tiers 5 to 1, Tiers 4 to 1, Tiers 3 to 1, Tiers 2 to 1, and Tier 1 only. Once these five models are fit, the probability of assignment to any single tier can be extracted from the model results.

In Figure B13-1, the mean predictions of a proportional odds logistic regression model are plotted as solid lines. The lines are color-coded and labeled by different tiers, and each line can be interpreted as the proportion of experts that assigned samples with the indicated SCI value to a particular tier. For example, approximately 90% of experts assigned a sample with SCI = 0 to Tier 6 (brown line), while the remaining 10% of experts assigned the sample to Tier 5 (purple line). The solid circles represent the actual expert assignments recorded from the workshop for each SCI value. The size of the circle is proportional to the number of experts that assigned a sample to a particular tier, and the circles are color-coded by tier.

Expert consensus in tier assignments was high for very degraded sites. That is, sites with SCI < 15 were assigned only to Tier 5 or 6. Consequently, the maximum values for the curves for Tiers 6 and 5 were relatively high. Similarly, expert consensus was high for high-quality sites because most sites with SCI > 58 were scored as Tier 1 or 2. The range of expert assignments at mid-range SCI values was much broader.

At the workshop, experts were also asked to identify a point on the BCG where they thought streams were impaired, and approximately half the experts identified the transition between Tier 4 and Tier 5 as the impairment threshold. The other half identified the boundary between Tier 3 and Tier 4 as the impairment threshold. Most experts also agreed that Tiers 1 and 2 corresponded to reference conditions.

One approach for using the results from the BCG calibration workshop to support a biocriterion threshold established by candidate reference sites is to identify an SCI value that corresponds with both a low probability of assignment to Tier 5 (impaired) and corresponds with a low probability of assignment to Tier 2 (reference conditions). For these data, this point occurs at approximately SCI = 40–44, where both the purple and the blue lines are low (i.e., less than about 0.15). In a sense, thresholds selected in this range of values balance the probability of mistakenly assessing a degraded site as meeting aquatic life use goals with the probability of mistakenly assessing a reference site as impaired.

The same modeling approach can be applied to expert assignments of lake vegetation samples to a BCG. Here, lake vegetation can also be summarized as a Lake Vegetation Index (LVI).

The consensus among experts was somewhat weaker compared to the results for the SCI. For example, most experts assigned the lake with the highest LVI value (LVI = 94) to Tier 1 or 2, but one expert assigned it to Tier 4. Similarly, at the other end of the condition gradient, a lake with LVI = 18 was assigned by experts to Tiers 3–6.

The same logic can be applied to interpreting these results to support criterion selection. In this case, the probabilities of assignment to Tiers 5 and 2 were less than about 0.15 for LVI = 50–58.

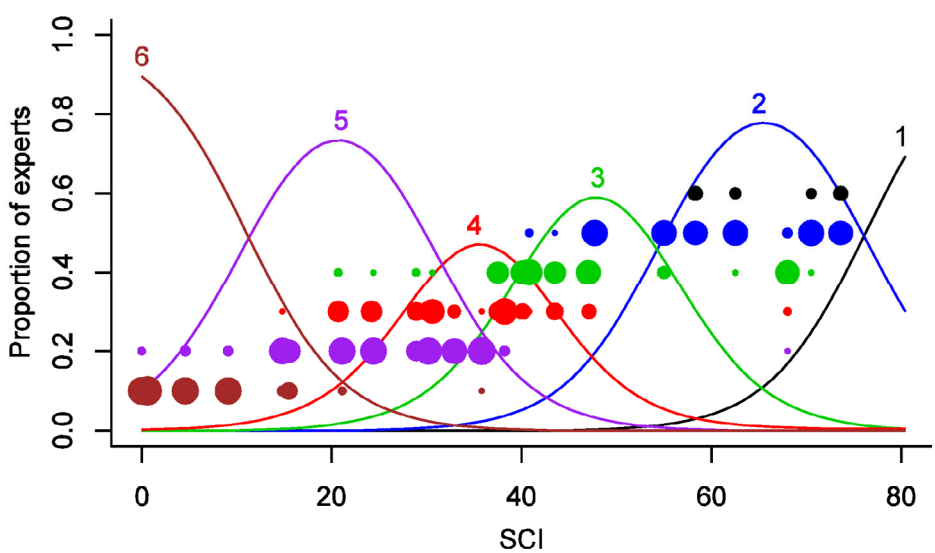


Figure B13-1. BCG tier assignments modeled with a proportional odds logistic regression.



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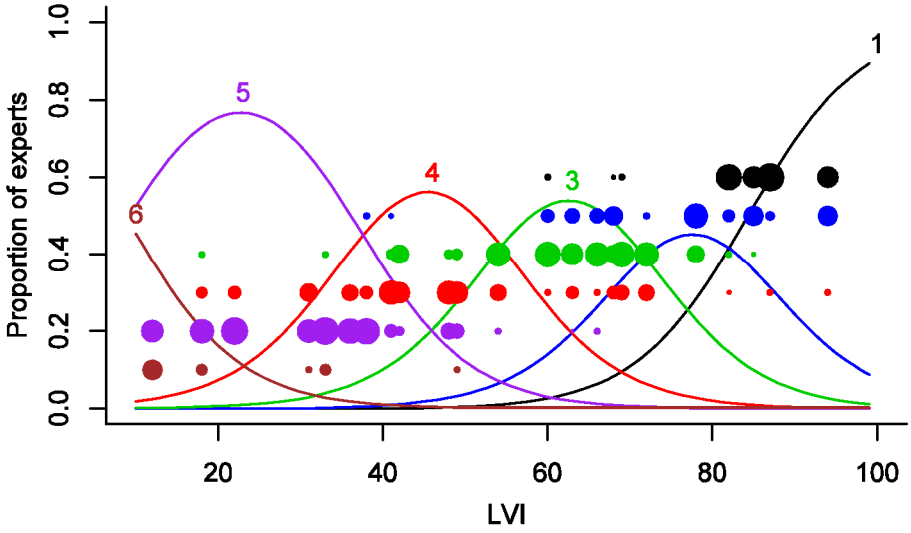


Figure B13-2. BCG tier assignments based on lake vegetation. LVI: Lake Vegetation Index.

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