

US EPA ARCHIVE DOCUMENT

CATALOG DOCUMENTATION
NATIONAL LAKE ASSESSMENT DATABASE
NORTHEAST REGION 2007
SPARROW LOADS DATA

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1. DATASET IDENTIFICATION
 - 1.1 Title of Catalog document
National Lake Assessment Database
Northeast Region
Sparrow Loads Data
 - 1.2 Author of the Catalog entry
Melissa Hughes, Raytheon MOS
 - 1.3 Catalog revision date
September 2012
 - 1.4 Dataset name
Sparrow Loads Data
 - 1.5 Task Group
National Lake Assessment
 - 1.6 Dataset identification code
NA
 - 1.7 Version
NA
 - 1.8 Request for Acknowledgment
EPA requests that all individuals who download National Lake Assessment data acknowledge the source of these data in any reports, papers, or presentations. If you publish these data, please include a statement similar to: "Some or all of the data described in this article were produced by the U. S. Environmental Protection Agency through its National Lake Assessment (NLA) Program".
 2. INVESTIGATOR INFORMATION
 - 2.1 Principal Investigators
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John Kiddon, U.S. EPA NHEERL-AED
Jeff Hollister, U.S. EPA NHEERL-AED

2.2 Sample Collection Investigators

NA

2.3 Sample Processing Investigators

NA

3. DATASET ABSTRACT

3.1 Abstract of the Dataset

The Sparrow Loads data report lake ID, latitude, longitude, EPA Region and an assigned state and county based on where the greater percentage of lake area falls. The Sparrow Loads represent total average yearly nutrient loads to lakes in the Northeastern United States. These loads are from the USGS Major River Basin 1 Sparrow model. See Moore et. al 2011, DOI: 10.1111/j.1752-1688.2011.00582.x for more information.

3.2 Keywords for the Dataset

Sparrow model, National Lakes Assessment, nitrogen load, phosphorus load, Lakes Ecosystem Services, flow, state, county, EPA region

4. OBJECTIVES AND INTRODUCTION

4.1 Program Objective

The U.S. Environmental Protection Agency (EPA), in partnership with state and tribal organizations, has designed the Survey of the Nation's Lakes to periodically assess the condition of the Nation's surface waters. The National Lake Assessment is a statistical assessment of the condition of our Nation's lakes, ponds, and reservoirs and is designed to: 1) Assess the condition of the Nation's Lakes; 2) Establish a baseline to compare future surveys for trends assessment and evaluate trends since the 1970's National Eutrophication Survey Study and 3) Help build State and Tribal capacity for monitoring and assessment and promote collaboration across jurisdictional boundaries. This survey will generate a statistically-valid report on the condition of our Nation's water resources and identify key stressors to this system. The goal of the Nation's Lakes project is to address two key questions about the quality of the Nation's lakes, ponds, and reservoirs: 1) What percent of the Nation's lakes are in good, fair, and poor condition for key indicators of trophic state, ecological health, and recreation? and 2) What is the relative importance of key stressors such as nutrients and pathogens?

4.2 Dataset Objective

The objective of the Sparrow Loads data set is to provide data from the USGS Major River Basin 1 Sparrow model.

4.3 Dataset Background Discussion

Sparrow Loads represent total average yearly nutrient loads to lakes in the Northeastern United States. These loads are from the USGS Major River Basin 1 Sparrow model.

4.4 Summary of Dataset Parameters

NA

5. DATA ACQUISITION AND PROCESSING METHODS

5.1 Data Acquisition

NA

5.1.1 Sampling Objective

NA

5.1.2 Sample Collection: Methods Summary
NA

5.1.3 Beginning Sampling Dates
NA

5.1.4 Ending Sampling Dates
NA

5.1.5 Sampling Platform
NA

5.1.6 Sampling Equipment
NA

5.1.7 Manufacturer of Sampling Equipment
Not applicable

5.1.8 Key Variables
Not applicable

5.1.9 Sample Collection: Calibration
NA

5.1.10 Sample Collection: Quality Control
NA

5.1.11 Sample Collection: References
NA

5.1.12 Sample Collection: Alternate Methods
NA

5.2 Data Preparation and Sample Processing
Physical data did not require analytical processing.

5.2.1 Sample Processing Objective
NA

5.2.2 Sample Processing: Methods Summary
NA

5.2.3 Sample Processing: Calibration
NA

5.2.4 Sample Processing: Quality Control
NA

5.2.5 Sample Processing: References
NA

6. DATA ANALYSIS AND MANIPULATIONS

6.1 Name of New or Modified Value
NA

6.2 Data Manipulation Description
NA

7. DATA DESCRIPTION

7.1 Description of Parameters

7.1.1 Components of the Dataset

Attribute	Format	Description
WB_ID	NUMBER(10)	Unique Waterbody ID
LATITUDE	NUMBER(14,5)	Latitude (decimal deg.):lake centroid
LONGITUDE	NUMBER(14,5)	Longitude (decimal deg.):lake centroid
STATE_ASSIGNED	VARCHAR2(10 BYTE)	State assigned by US EPA-AED within which the greater percentage of lake area falls
COUNTY_ASSIGNED	VARCHAR2(150 BYTE)	County assigned by US EPA-AED within which the greater percentage of lake area falls
EPA_REGION_ASSIGNED	NUMBER(10)	US EPA Region assigned based on State
FLOW	NUMBER(22,5)	Total Flow (m3/yr) for all flowlines within a lake
NITROGEN	NUMBER(22,6)	Total Nitrogen Load (kg/yr) to a lake
PHOSPHORUS	NUMBER(22,6)	Total Phosphorus Load (kg/yr) to a lake

7.1.2 Precision of Reported Values

NA

7.1.3 Minimum Value in Dataset / 7.1.4 Maximum Value in Dataset

Parameter	Minimum	Maximum
FLOW	78725.5433	11887145252.8
NITROGEN	25.52478	10312606.1202
PHOSPHORUS	0.002355	718281.595333

7.2 Data Record Example

7.2.1 Column Names for Example Records

WB_ID, LAKE NAME, FLOW, NITROGEN, PHOSPHORUS, STATE_ASSIGNED, COUNTY_ASSIGNED, EPA_REGION_ASSIGNED

7.2.2 Example Data Records

1021280, Little Big Wood Pond, 19995322.9178, 5863.076456, 153.312123, ME, Somerset County, 1, 45.63486, -70.36666
 1021662, Burnham Pond, 13952203.6648, 3886.758011, 129.027392, ME, Piscataquis County, 1, 45.54079, -69.71851
 1023062, Tomhegan Pond, 73646467.9192, 19793.71948, 639.680367, ME, Somerset County, 1

8. GEOGRAPHIC AND SPATIAL INFORMATION

8.1 Minimum Longitude (Westernmost)

-80.20877 decimal degrees

8.2 Maximum Longitude (Easternmost)

-67.09310 decimal degrees

8.3 Minimum Latitude (Southernmost)

36.70827 decimal degrees

8.4 Maximum Latitude (Northernmost)

47.41625 decimal degrees

8.5 Name of area or region

The National Lake Assessment Northeast Region covers the northeastern US from Maine to West Virginia.

9. QUALITY CONTROL AND QUALITY ASSURANCE

9.1 Measurement Quality Objectives

NA

9.2 Data Quality Assurance Procedures

NA

9.3 Actual Measurement Quality

NA

10. DATA ACCESS

10.1 Data Access Procedures

Access data at: <http://www.epa.gov/aed/lakesecoservices> by clicking on the Database link.

10.2 Data Access Restrictions

None

10.3 Data Access Contact Persons

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10.4 Dataset Format

Comma-delimited ASCII files

10.5 Information Concerning Anonymous FTP

Not available

10.6 Information Concerning WWW

See Section 10.1 for WWW access

10.7 EMAP CD-ROM Containing the Dataset

Data not available on CD-ROM

11. REFERENCES

USEPA. 2007. Survey of the Nation's Lakes. Field Operations Manual.
EPA 841-B-07-004. US Environmental Protection Agency, Washington, DC.
(http://water.epa.gov/type/lakes/lakesurvey_index.cfm#CP_JUMP_474534)

Moore et. all 2011, DOI: 10.1111/j.1752-1688.2011.00582.x

USEPA. 2006. Survey of the Nation's Lakes. Lake Evaluation Guidelines.
EPA 841-B-06-003. US Environmental Protection Agency, Washington, DC.

12. TABLE OF ACRONYMS

EPA	Environmental Protection Agency
NLA	National Lakes Assessment
QA/QC	Quality Assurance/Quality Control
WWW	World Wide Web

13. PERSONNEL INFORMATION

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