# CATALOG DOCUMENTATION
# EMAP SURFACE WATERS PROGRAM LEVEL DATABASE
# 1993-1996 MID-ATLANTIC STREAMS DATA
# STREAM FISH COUNT DATA

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## 1. DATA SET IDENTIFICATION

### 1.1 Title of Catalog Document
EMAP Surface Waters Stream Database
1993-1996 Mid-Atlantic Streams
Stream Fish Count Data Summarized by Stream

### 1.2 Authors of the Catalog Entry
U.S. EPA NHEERL Western Ecology Division
Corvallis, OR

### 1.3 Catalog Revision Date
January 1999

### 1.4 Data Set Name
FISHCNT

### 1.5 Task Group
Surface Waters

### 1.6 Data Set Identification Code
0123

1.7 Version
002

1.8 Requested Acknowledgment
These data were produced as part of the U.S. EPA's Environmental Monitoring and Assessment Program (EMAP). If you publish these data or use them for analyses in publications, EPA requires a standard statement for work it has supported:

"Although the data described in this article have been funded wholly or in part by the U.S. Environmental Protection Agency through its EMAP Surface Waters Program, it has not been subjected to Agency review, and therefore does not necessarily reflect the views of the Agency and no official endorsement of the conclusions should be inferred."

2. INVESTIGATOR INFORMATION

2.1 Principal Investigator
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2.2 Investigation Participant - Sample Collection
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State of Virginia
State of West Virginia
State of Maryland
State of Pennsylvania
University of Maine
U.S. Fish and Wildlife Service
U.S. Environmental Protection Agency
Office of Research and Development
Region III

3. DATA SET ABSTRACT

3.1 Abstract of the Data Set
The primary function of the stream fish data are to provide a snapshot of the fish assemblage present in the stream at the time of sampling. The fish community represents an integral component of stream biological integrity and represents a snapshot of a publicly visible reflection of stream quality.

3.2 Keywords for the Data Set
Fish assemblage, fish community, fish species identification

4. OBJECTIVES AND INTRODUCTION

4.1 Program Objective
The Environmental Monitoring and Assessment Program (EMAP) was designed to periodically estimate the status and trends of the Nation's ecological resources on a regional basis. EMAP provides a strategy to identify and bound the extent, magnitude and location of environmental degradation and improvement on a regional scale based on a probability-based statistical survey design.

4.2 Data Set Objective
This data set is part of a demonstration project to evaluate approaches to monitoring streams in EMAP. The data set contains the results of multi-habitat sample of the fish assemblage taken during spring low-flow.

4.3 Data Set Background Discussion
The fish community within a stream is an integral component of stream biological integrity and represents a publicly visible reflection of stream quality. This data set contains a list of species and counts of numbers of individuals of each species collected at each stream sampled.

4.4 Summary of Data Set Parameters
Fish Assemblage parameters include abbreviated genus/species fish code and abundance collected or counted.

5. DATA ACQUISITION AND PROCESSING METHODS

5.1 Data Acquisition
5.1.1 Sampling Objective
To obtain a sample of the fish assemblage within a stream during a two month sampling window from April through mid-June.

5.1.2 Sample Collection Methods Summary
The assemblage was sampled using a single pass electrofishing distributed in multiple habitats throughout the stream.

5.1.3 Sampling Start Date
April 1993

5.1.4 Sampling End Date
September 1996

5.1.5 Platform
NA

5.1.6 Sampling Gear
Backpack electrofisher

5.1.7 Manufacturer of Instruments
NA

5.1.8 Key Variables
NA

5.1.9 Sampling Method Calibration
NA

5.1.10 Sample Collection Quality Control
See Lazorchak, et al. 1998.

5.1.11 Sample Collection Method Reference
Lazorchak, J.M., Klemm, D.J., and Peck D.V. (editors). 1998. Environmental Monitoring and Assessment Program- Surface Waters: Field Operations and Methods for Measuring the Ecological Condition of Wadeable Streams. EPA/620/R-94/004F. U.S. Environmental Protection Agency, Washington, D.C.

Chaloud, D.J. and D.V. Peck. 1994. Environmental Monitoring and Assessment Program: Integrated Quality Assurance Project Plan for the Surface Waters Resource Group, 1994 Activities. EPA 600/X-91/080, Rev. 2.00. U.S. Environmental Protection Agency, Las Vegas, Nevada.

5.1.12 Sample Collection Method Deviations

5.2 DATA PREPARATION AND SAMPLE PROCESSING

5.2.1 Sample Processing Objective
See Lazorchak, et al. (1998) and Chaloud and Peck (1994).

5.2.2 Sample Processing Methods Summary
See Lazorchak, et al. (1998) and Chaloud and Peck (1994).

5.2.3 Sample Processing Method Calibration
See Lazorchak, et al. (1998) and Chaloud and Peck (1994).

5.2.4 Sample Processing Quality Control
See Lazorchak, et al. (1998) and Chaloud and Peck (1994).

5.2.5 Sample Processing Method Reference
See Lazorchak, et al. (1998) and Chaloud and Peck (1994).

## 6. DATA MANIPULATIONS

6.1 Name of New or Modified Values
None.

6.2 Data Manipulation Description
See Chaloud and Peck (1994).

## 7. DATA DESCRIPTION

7.1 Description of Parameters

| # | Parameter SAS Name | Data Type | Len | Format | Parameter Label |
|---|---|---|---|---|---|
| 7 | COMMENT | Char | 30 | | Comments |
| 8 | COUNT | Num | 8 | | the sum, COUNT |
| 6 | DATE_COL | Num | 8 | MMDDYY | Date of sample collection |
| 5 | SAMPLED | Char | 30 | | Site Sampled Code |
| 1 | STRM_ID | Char | 6 | | Stream ID |
| 4 | VERTCODE | Char | 8 | | 8 letter species code |
| 3 | VISIT_NO | Num | 8 | | Visit Number |
| 2 | YEAR | Num | 8 | | Sample Year |

7.1.6 Precision to which values are reported

7.1.7 Minimum Value in Data Set

| Name | Min |
|---|---|
| COUNT | 0 |
| DATE_COL | 04/26/1993 |
| VISIT_NO | 1 |
| YEAR | 1993 |

7.1.8 Maximum Value in Data Set

| Name | Max |
|---|---|
| COUNT | 999 |
| DATE_COL | 09/15/1996 |
| VISIT_NO | 2 |
| YEAR | 1996 |

7.2 Data Record Example

7.2.1 Column Names for Example Records

```
"COMMENT","COUNT","DATE_COL","SAMPLED","STRM_ID","VERTCODE","VISIT_NO","YEAR"
```

7.2.2 Example Data Records

```
" ",2,05/17/1994,"Yes","DE75OS","AMEINATA",1,1994
" ",1,05/17/1994,"Yes","DE75OS","AMEINEBU",1,1994
" ",1,05/17/1994,"Yes","DE75OS","ANGUROST",1,1994
" ",3,05/17/1994,"Yes","DE75OS","APHRSAYA",1,1994
" ",51,05/17/1994,"Yes","DE75OS","ENNEGLOR",1,1994
```

8. GEOGRAPHIC AND SPATIAL INFORMATION

8.1 Minimum Longitude

-83 Degrees 14 Minutes 39 Seconds West (-83.24444 Decimal Degrees )

8.2 Maximum Longitude

-75 Degrees 7 Minutes 17 Seconds West (-75.12139 Decimal Degrees )

8.3 Minimum Latitude

36 Degrees 33 Minutes 12 Seconds North (36.55350 Decimal Degrees )

8.4 Maximum Latitude

41 Degrees 57 Minutes 21 Seconds North (41.95601 Decimal Degrees)

8.5 Name of Area or Region

Mid Atlantic: EPA Region III which includes Delaware, Maryland, New York, Virginia, and West Virginia

9. QUALITY CONTROL / QUALITY ASSURANCE

9.1 Data Quality Objectives

See Chaloud and Peck (1994)

9.2 Quality Assurance Procedures

See Chaloud and Peck (1994)

9.3 Unassessed Errors

NA

10. DATA ACCESS

10.1 Data Access Procedures

10.2 Data Access Restrictions

10.3 Data Access Contact Persons

10.4 Data Set Format

10.5 Information Concerning Anonymous FTP

10.6 Information Concerning Gopher and WWW

10.7 EMAP CD-ROM Containing the Data

11. REFERENCES

Lazorchak, J.M., Klemm, D.J., and Peck D.V. (editors). 1998. Environmental Monitoring and Assessment Program- Surface Waters: Field Operations and Methods for Measuring the Ecological Condition of Wadeable Streams. EPA/620/R-94/004F. U.S. Environmental Protection Agency, Washington, D.C.

Chaloud, D.J. and D.V. Peck. 1994. Environmental Monitoring and Assessment Program: Integrated Quality Assurance Project Plan for the Surface Waters Resource Group, 1994 Activities. EPA 600/X-91/080, Rev. 2.00. U.S. Environmental Protection Agency, Las Vegas, Nevada.

12. TABLE OF ACRONYMS

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