CATALOG DOCUMENTATION
EMAP SURFACE WATERS PROGRAM LEVEL DATABASE
1993-1996 MID-ATLANTIC STREAMS DATA
Rapid Habitat Data

TABLE OF CONTENTS

1. DATA SET IDENTIFICATION

1.1 Title of Catalog Document
EMAP Surface Waters Stream Database
1993-1996 Mid-Atlantic Streams
Rapid Habitat Data

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

1.3 Catalog Revision Date
July 2002

1.4 Data Set Name
RAPIDHAB

1.5 Task Group
Surface Waters

1.6 Data Set Identification Code
145

1.7 Version
001

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 publication, 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 view of the Agency and no official endorsement of the conclusions should be inferred."

2.0 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

3.0 DATA SET ABSTRACT

3.1 Abstract of the Data Set

The data set contains the rapid habitat visual assessments.

3.2 Keywords for the Data Set

bank condition, sinuousity, channel, riparian, vegetation, stream velocity

4.0 OBJECTIVES AND INTRODUCTION

4.1 Program Objectives

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.

4.3 Data Set Background Discussion

The primary function of the rapid habitat data set is to provide visual-based habitat assessment of the stream reach and make a general visual assessment of the stream and adjacent area.

4.4 Summary of Data Set Parameters
Substrates, stream velocity regimes, sediments, channel condition, riparian vegetation

5. DATA ACQUISITION AND PROCESSING METHODS

5.1 Data Acquisition

5.1.1 Sampling Objective
To provide the field team's visual observations of catchment and stream characteristics that are useful for data validation, future data interpretation, ecological value assessment, development of associations, and verification of stressor data.

5.1.2 Sample Collection Methods Summary
Data were collected according to the Rapid Habitat and Visual Stream Assessments section in Surface Waters Field Operations Manual.

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.

5.1.3 Sampling Start Date
April 1993

5.1.4 Sampling End Date
July 1996

5.1.5 Platform
NA

5.1.6 Sampling Gear
NA

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
NA

5.1.11 Sample Collection Method Reference
NA

5.1.12 Sample Collection Method Deviations
NA

5.2 Data Preparation and Sample Processing
NA

5.2.1 Sample Processing Objective
NA

5.2.2 Sample Processing Methods Summary
NA

5.2.3 Sample Processing Method Calibration
NA

5.2.4 Sample Processing Quality Control
NA

5.2.5 Sample Processing Method Reference
NA

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
24	LAT_DD	Num	8		X-Site Latitude (decimal degrees)
25	LON_DD	Num	8		X-Site Longitude (decimal degrees)
6	RHNOMET	Num	8		number of all nonmissing scores
23	RH_BKVG	Num	8		bank protective vegetation score
9	RH_CHALT	Num	8		lack of channel alteration score
12	RH_CHBKC	Num	8		condition of banks score
10	RH_CHQST	Num	8		channel flow status score
11	RH_CHSIN	Num	8		channel sinuosity score
13	RH_EMB	Num	8		gravel not buried by fines score
14	RH_EPISB	Num	8		epifaunal substrate score
15	RH_FQRIF	Num	8		riffle frequency score
16	RH_GRAZ	Num	8		vegetative grazing disturbance score
17	RH_INCVR	Num	8		instream cover score
18	RH_POLSB	Num	8		pool substrate characterization score
19	RH_POLVR	Num	8		pool variability score
20	RH_RIPVG	Num	8		width of riparian vegetation zone score
21	RH_SEDDP	Num	8		lack of sediment deposition
7	RH_SUM	Num	8		sum of all nonmissing scores

7.1 Description of Parameters (con't)

22	RH_VELOD	Num	8	presence of velocity/depth regimes score
8	RH_XHAB	Num	8	mean of all nonmissing scores
5	SAMPLED	Char	30	Site Sampled Code
4	SAMPTYPE	Char	20	Sample method
1	SITE_ID	Char	15	Site identification code
3	VISIT_NO	Num	8	Visit Number
2	YEAR	Num	8	Year of Site Visit

7.1.6 Precision to which values are reported

7.1.7 Minimum Value in Data Set

Name	Min
LAT_DD	36.5535
LON_DD	-83.24443889
RHNOMET	0
RH_BKVG	0
RH_CHALT	0
RH_CHBKC	1
RH_CHQST	0
RH_CHSIN	3
RH_EMB	0
RH_EPISB	0
RH_FQRIF	0
RH_GRAZ	0
RH_INCVR	0
RH_POLSB	0
RH_POLVR	2
RH_RIPVG	0
RH_SEDDP	0
RH_SUM	0
RH_VELOD	0
RH_XHAB	2
VISIT_NO	1
YEAR	1993

7.1.7 Maximum Value in Data Set

Name	Max
LAT_DD	42.355663889
LON_DD	-74.2589
RHNOMET	12
RH_BKVG	20
RH_CHALT	20
RH_CHBKC	20
RH_CHQST	20
RH_CHSIN	19
RH_EMB	20
RH_EPISB	20

7.1.7 Maximum Value in Data Set (con't)

RH_FQRIF	20
RH_GRAZ	20
RH_INCVR	20
RH_POLSB	18
RH_POLVR	20
RH_RIPVG	20
RH_SEDDP	20
RH_SUM	235
RH_VELOD	20
RH_XHAB	19.5833
VISIT_NO	2
YEAR	1994

7.2 Data Record Example

7.2.1 Column Names for Example Records

"LAT_DD","LON_DD","RHNOMET","RH_BKVG","RH_CHALT","RH_CHBKC","RH_CHQST",
"RH_CHSIN","RH_EMB","RH_EPISB","RH_FQRIF","RH_GRAZ","RH_INCVR","RH_POLSB",
"RH_POLVR","RH_RIPVG","RH_SEDDP","RH_SUM","RH_VELOD","RH_XHAB","SAMPLED",
"SAMPTYPE","SITE_ID","VISIT_NO","YEAR"

7.2.2 Example Data Records

38.525300,-75.631100,12,12,9,13,19,3,.,8,.,9,4,13,13,3,4,110,.,9.1666666667,
"Yes"," ","DE750S",1,1994
39.683689,-79.472397,12,15,18,14,12,.,8,9,16,19,16,.,.,18,7,167,15,13.9167,
"Yes","R","MD507S",1,1993
39.544686,-79.182003,12,15,16,18,15,.,18,20,18,15,19,.,.,18,9,196,15,16.3333,
"Yes","R","MD508S",1,1993
39.605953,-79.080003,12,13,19,13,17,.,18,19,20,13,19,.,.,7,19,194,17,16.1667,
"Yes","R","MD510S",1,1993
39.659286,-78.429564,12,15,20,18,17,.,16,19,20,20,19,.,.,18,15,216,19,18,
"Yes","R","MD511S",1,1993

8. GEOGRAPHIC AND SPATIAL INFORMATION

8.1 Minimum Longitude

-83 Degrees 14 Minutes 39 Seconds West (-83.244439 Decimal Degrees)

8.2 Maximum Longitude

-74 Degrees 15 Minutes 32 Seconds West (-74.258900 Decimal Degrees)

8.3 Minimum Latitude

36 Degrees 33 Minutes 12 Seconds North (36.553500 Decimal Degrees)

8.4 Maximum Latitude

42 Degrees 21 Minutes 20 Seconds North (42.355664 Decimal Degrees)

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 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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