

US EPA ARCHIVE DOCUMENT

CATALOG DOCUMENTATION

National Stream Survey (NSS) Database:NSSIFO Field site observations

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1. DATA SET IDENTIFICATION

1.1 Title of Catalog Document
NSS-I Data Set NSSIFSO

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

1.3 Catalog Revision Date
May 1998

1.4 Data Set Name
nssifso

1.5 Task Group
Aquatic Effect Research Program (AERP)- National Surface Water Survey

1.6 Data Set Identification Code
159

1.7 Version
001

1.8 Requested Acknowledgment
This research was funded as apart of the National Acid Precipitation Assessment Program (NAPAP) by the U.S. Environmental Protection Agency (EPA). 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, 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

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2.2 Investigation Participant - Sample Collection

John Baker, Coordinator

3. DATA SET ABSTRACT

3.1 Abstract of the Data Set

This data set, NSSIFS0, contains data that describe the water shed in the immediate vicinity of field sampling sites. This information includes details on immediate watershed disturbances, bank vegetation cover, stream substrate, and additional field comments about the sample site.

3.2 Keywords for the Data Set

Watershed, substrate type, vegetation, cover, land use, habitat

4. OBJECTIVES AND INTRODUCTION

4.1 Program Objective

The specific primary goals of the National Stream Survey (NSS-I) are (1) to determine the percentage, extent (number, length, and drainage area), location, and chemical characteristics of streams in the United States that are presently acidic, or that have low acid neutralizing capacity (ANC) and thus might become acidic in the future, and (2) to identify streams representative of important classes in each region that might be selected for more intensive study or long-term monitoring.

4.2 Data Set Objective

4.3 Data Set Background Discussion

4.4 Summary of Data Set Parameters

Assessment of substrate type and bank vegetation are made as percentage estimates as: absent (0%), sparse (<25%), moderate (25-75%), and heavy (>75%). Data for both the Pilot Survey and the Phase I Survey are combined in one data set.

5. DATA ACQUISITION AND PROCESSING METHODS

5.1 Data Acquisition

This information is based on unvalidated observations of field crews. Vegetation coverage and substrate composition estimates were based on the crew's judgement and are only rough estimates based on visual assessments.

5.1.1 Sampling Objective

5.1.2 Sample Collection Methods Summary

Visual estimates.

5.1.3 Sampling Start Date

March 1985

5.1.4 Sampling End Date

June 1985

5.1.5 Platform

NA

5.1.6 Sampling Gear

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
- 5.1.11 Sample Collection Method Reference
- 5.1.12 Sample Collection Method Deviations
NA

5.2 Data Preparation and Sample Processing
5.2.1 Sample Processing Objective

- 5.2.2 Sample Processing Methods Summary
- 5.2.3 Sample Processing Method Calibration
- 5.2.4 Sample Processing Quality Control
- 5.2.5 Sample Processing Method Reference

6. DATA MANIPULATIONS

6.1 Name of New or Modified Values
None.

6.2 Data Manipulation Description

7. DATA DESCRIPTION

7.1 Description of Parameters

#	Parameter	Data		Parameter	
	SAS Name	Type	Len	Format	Label
19	AUFS	Char	4		AMOUNT OF AUFWUCHS
14	BOULD	Char	4		AMOUNT OF BOULDER SUBSTRATE
45	BRDG_D	Num	8		DISTANCE TO BRIDGE (M)
8	CNTRÉE	Char	4		COVER OF CONIFEROUS TRESS ON BANK
15	COBBLE	Char	4		AMOUNT OF COBBLE SUBSTRATE
55	COMM1	Char	150		FIELD SITE COMMENTS PART 1
56	COMM2	Char	150		FIELD SITE COMMENTS PART 2
72	COUNTY	Char	12		COUNTY FORM 7
58	COUNTY1	Char	15		COUNTY NAME
59	COUNTY2	Char	15		COUNTY NAME
60	COUNTY3	Char	15		COUNTY NAME
61	COUNTY4	Char	15		COUNTY NAME
28	CROP_D	Num	8		DISTANCE TO CROPLAND (M)
23	CRW_ID	Char	6		CREW ID
44	CULV_D	Num	8		DISTANCE TO CULVERT (M)
1	DATSM	Num	8	DATE	DATE SAMPLED
7	DCTREE	Char	4		COVER OF DECIDUOUS TREES ON BANK
4	ELEV	Num	8		SAMPLE SITE ELEVATION (M)
47	FENC_D	Num	8		DISTANCE TO FENCED LAND (M)
34	FIRE	Char	5		PRESENCE AND TIME SINCE FIRES
35	FIRE_D	Num	8		DISTANCE FM SITE TO FIRES(M)

7.1 Description of Parameters, continued

#	Parameter SAS Name	Data Type	Len	Format	Parameter Label
46	GRAD_D	Num	8		DISTANCE TO GRADE (M)
11	GRASS	Char	4		COVER OF GRASSES/FORBS ON BANK
16	GRAVEL	Char	4		AMOUNT OF GRAVEL SUBSTRATE
38	IMPA	Char	20		TYPE OF IMPOUNDMENTS ABOVE SITE
39	IMPA_D	Num	8		DISTANCE TO ABOVE IMPOUNDMENTS(M)
51	IMPB	Char	20		TYPE OF IMPOUNDMENTS BELOW SITE
52	IMPB_D	Num	8		DISTANCE TO BELOW IMPOUNDMENTS(M)
30	IND1	Char	20		INDUSTRY TYPE
31	IND1_D	Num	8		DISTANCE TO INDUSTRY1(M)
49	IND2	Char	20		INDUSTRY TYPE
50	IND2_D	Num	8		DISTANCE TO INDUSTRY2(M)
70	LAT_STD	Num	8		SAMPLE SITE LATITUDE (DECIMAL FORM)
40	LIVE	Char	20		LIVESTOCK TYPE
41	LIVE_D	Num	8		DISTANCE TO LIVESTOCK(M)
32	LOG	Char	5		PRESENCE AND TIME SINCE LOGGING
33	LOG_D	Num	8		DISTANCE TO LOGGING(M)
71	LON_STD	Num	8		SAMPLE SITE LONGITUDE (DECIMAL FORM)
62	MAP1	Char	35		1:24,000 SCALE MAP NAME
63	MAP2	Char	35		1:24,000 SCALE MAP NAME
64	MAP3	Char	35		1:24,000 SCALE MAP NAME
65	MAP4	Char	35		1:24,000 SCALE MAP NAME
66	MAP5	Char	35		1:24,000 SCALE MAP NAME
67	MAP6	Char	35		1:24,000 SCALE MAP NAME
27	MDWL_D	Num	8		DISTANCE TO MULTIPLE DWELLINGS(M)
36	MNQR	Char	20		TYPE OF MINING OR QUARRIES
37	MNQR_D	Num	8		DISTANCE TO MINE/QUARRY(M)
12	MOSS	Char	4		MOSS COVER ON BANK
53	NODE	Char	9		REACH SAMPLE POSITION (U=UPPER,L=LOWER)
42	OTH	Char	50		OTHER DISTURBANCES NEAR SITE
43	OTH_D	Num	8		DISTANCE TO OTHER DISTURBANCE(M)
24	PRD_D	Num	8		DISTANCE TO PAVED ROAD(M)
29	PSTR_D	Num	8		DISTANCE TO PASTURES (M)
57	QUAD	Char	42		1:250,000 SCALE MAP NAME
54	RCH_ID	Char	9		REACH IDENTIFICATION CODE
13	RCKBR	Char	4		AMOUNT OF ROCK/BARE ON BANK
17	SAND	Char	4		AMOUNT OF SAND SUBSTRATE
26	SDWL_D	Num	8		DISTANCE TO SINGLE DWELLINGS(M)
9	SHRUB	Char	4		COVER OF SHRUBS ON BANK
18	SILT	Char	4		AMOUNT OF SILT SUBSTRATE
68	STATE1	Char	2		STATE (TWO CHARACTER CODE)
69	STATE2	Char	2		STATE (TWO CHARACTER CODE)
6	STRMDP	Num	8		STREAM DEPTH (M)
3	STRMNAM	Char	30		STREAM NAME
5	STRMWD	Num	8		STREAM WIDTH (M)
2	STRM_ID	Char	9		STREAM/SITE IDENTIFICATION CODE
20	TAG_X7	Char	40		MEANING OF TAG X
21	TAG_Y7	Char	20		MEANING OF TAG Y
22	TAG_Z7	Char	20		MEANING OF TAG Z
48	UFNC_D	Num	8		DISTANCE TO UNFENCED LAND (M) FORM 7
73	UNFNC_D	Num	8		DISTANCE TO UNFENCED LAND (M)
25	UPRD_D	Num	8		DISTANCE TO UNPAVED ROAD (M)
10	WETLND	Char	4		AMOUNT OF WETLAND ON BANK

7.1.6 Precision to which values are reported

NA

7.1.7 Minimum Value in Data Set

Name	Min
BRDG_D	-1
CROP_D	-1
CULV_D	-1
DATSMP	9193
ELEV	0
FENC_D	-1
FIRE_D	0
GRAD_D	-1
IMPA_D	5
IMPB_D	0
IND1_D	0
IND2_D	80
LAT_STD	28.308611111
LIVE_D	-1
LOG_D	-1
LON_STD	-73.539166667
MDWL_D	-1
MNQR_D	-1
OTH_D	0
PRD_D	0
PSTR_D	-1
SDWL_D	-1
STRMDP	0
STRMWD	0
UFNC_D	-1
UNFNC_D	0
UPRD_D	-1

7.1.7 Maximum Value in Data Set

Name	Max
BRDG_D	2300
CROP_D	350
CULV_D	3000
DATSMP	9631
ELEV	4460
FENC_D	800
FIRE_D	300
GRAD_D	100
IMPA_D	3080
IMPB_D	1000
IND1_D	600
IND2_D	80
LAT_STD	42.253611111
LIVE_D	2000
LOG_D	400
LON_STD	-95.899722222
MDWL_D	400
MNQR_D	2000
OTH_D	2000
PRD_D	900
PSTR_D	2000
SDWL_D	900
STRMDP	7
STRMWD	1260
UFNC_D	200
UNFNC_D	45
UPRD_D	1000

7.2 Data Record Example

7.2.1 Column Names for Example Records

AUFS BOULD BRDG_D CNTREE COBBLE COMM1 COMM2 COUNTY COUNTY1 COUNTY2 COUNTY3 COUNTY4
 CROP_D CRW_ID CULV_D DATSMP DCTREE ELEV FENC_D FIRE FIRE_D GRAD_D GRASS GRAVEL IMPA
 IMPA_D IMPB IMPB_D IND1 IND1_D IND2 IND2_D LAT STD LIVE LIVE_D LOG LOG_D LON STD MAP1
 MAP2 MAP3 MAP4 MAP5 MAP6 MDWL_D MNQR MNQR_D MOSS NODE OTH OTH_D PRD_D PSTR_D QUAD
 RCH_ID RCKBR SAND SDWL_D SHRUB SILT STATE1 STATE2 STRMDP STRMNAM STRMWD STRM_ID
 TAG_X7 TAG_Y7 TAG_Z7 UFNC_D UNFNC_D UPRD_D WETLND

7.2.2 Example Data Records

"M","S",100,"A","H"," "," "," "," ","CHAUTAUQUA"," "," "," ","",1531",.,23APR86,"M",
 1347,.," ",.,.,,"M","S"," ",.,," ",.,," ",.,," ",.,42.215," ",.,," ",.,79.099166667,
 "KENNEDY, NY 1979","CHERRY CREEK, NY 1954","HAMLET, NY 1954","GERRY, NY 1979"," ",
 " ",.,," ",.,,"A","L"," ",.,.,40,"BUFFALO 1962","1D022009","S","S",100,"M","A","NY",
 " ",0.25,"CLEAR CREEK",7,"1D022009L"," ",," "," ",.,.,.,,"A"

"M","S",.,,"S","M"," ",," "," "," ",,"CHAUTAUQUA"," "," "," "," ",40,"1531",.,23APR86,"M",
 1389,40," ",.,.,,"S","M"," ",.,," ",.,," ",.,," ",.,42.226388889," ",.,," ",.,
 79.115555556,"KENNEDY, NY 1979","CHERRY CREEK, NY 1954","HAMLET, NY 1954","GERRY,
 NY 1979"," ",," "," ",.,," ",.,,"A","U"," ",.,.,.,,"BUFFALO 1962","1D022009","M","S",.,
 "M","A","NY", " ",0.2,"CLEAR CREEK",6,"1D022009U"," ",," "," ",.,.,.,,"A"

"S","A",.,,"A","S"," ",," "," "," ",,"CATTARAUGUS"," ",," "," ",100,"1531",.,23APR86,"H",
 1268,90," ",.,.,,"M","H"," ",.,," ",.,," ",.,," ",.,42.156111111," ",.,," ",.,
 78.965555556,"RANDOLPH, NY 1979","NEW ALBION, NY 1963"," ",," "," ",," ",.,.,," ",.,
 "A","L"," ",.,.,0,"BUFFALO 1962","1D022010","A","S",.,,"S","S","NY", " ",0.2,
 "ELM CREEK",7,"1D022010L"," ",," "," ",.,.,.,,"M"

8. GEOGRAPHIC AND SPATIAL INFORMATION

8.1 Minimum Longitude

-95.89972222 Decimal Degrees

8.2 Maximum Longitude

-73.539166667 Decimal Degrees

8.3 Minimum Latitude

28.3086111111 Decimal Degrees

8.4 Maximum Latitude

42.25361111 Decimal Degrees

8.5 Name of Area or Region

Alabama, Arkansas, Florida, Georgia, Kentucky, Maryland, Mississippi, New York,
 North Carolina, Oklahoma, Pennsylvania, South Carolina, Tennessee, Virginia,
 and West Virginia.

9. QUALITY CONTROL / QUALITY ASSURANCE

9.1 Data Quality Objectives

9.2 Quality Assurance Procedures

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

Drouse, S.K. 1987. Evaluation of Quality Assurance and Quality Control Sample Data for the National Stream Survey (Phase I- Pilot Survey). EPA/600/8-87/057. Lockheed Engineering and Management Services Company, Inc., Las Vegas, Nevada, 89109.

Hagley, C.A., C.L. Mayer, and R. Hoenicke. 1988. National Surface Water Survey: National Stream Survey (Phase I, Southeast Screening, and Episodes Pilot). Field Operations Report. EPA/600/4-88/023. U.S. Environmental Protection Agency, Washington, D.C. 265 pp.

Hillman, D.C., S.L. Pia, and S.J. Simon. 1987. National Surface Water Survey: National Stream Survey (Pilot, Middle-Atlantic Phase I, Southeast Screening, and Middle-Atlantic Episodes Pilot). Analytical Methods Manual. EPA/600/8-87/005. U.S. Environmental Protection Agency, Washington, D.C. 265 pp.

Kaufmann, P.R., A.T. Herlihy, J.W. Elwood, M.E. Mitch, W.S. Overton, M.J. Sale, J.J. Messer, K.A. Cougan, D.V. Peck, K.H. Reckhow, A.J. Kinney, S.J. Christie, D.D. Brown, C.A. Hagley, and H.I. Jager. 1988. Chemical Characteristics of Streams in the Mid-Atlantic and Southeastern United States. Volume I. Population Descriptions and Physico-Chemical Relationships. EPA/600/3-88/021a. U.S. Environmental Protection Agency, Washington, D.C. 397 pp.

Knapp, C.M., C.L. Mayer, D.V. Peck, J.R. Baker, and G.J. Filbin. 1987. National Surface Water Survey: National Stream Survey (Pilot Survey). Field Operations Report. EPA/600/8-87/019. U.S. Environmental Protection Agency, Las Vegas, Nevada.

Messer, J.J., E.W. Ariss, J.R. Baker, S.K. Drouse, K.N. Eshleman, P.R. Kaufmann, R.A. Linthurst, J.M. Omernik, W.S. Overton, M.J. Sale, R.D. Schonbrod, S.M. Stambaugh, and J.R. Tuschall, Jr. 1986. National Stream Survey Phase I - Pilot Survey. EPA/600/4-86/026. U.S. Environmental Protection Agency, Washington, D.C. 179 pp.

Messer, J.J., C.W. Ariss, J.R. Baker, S.K. Drouse, K.N. Eshleman, A.J. Kinney, W.S. Overton, M.J. Sale, and R.D. Schonbrod. 1988. Steam Chemistry in the Southern Blue Ridge: feasibility of a regional synoptic sampling approach. Water Resour. Bull. 24(4) 821-829.

Mitch, M.E., P.R. Kaufmann, A.T. Herlihy, W.S. Overton, and M.J. Sale. 1990. National Stream Survey Database Guide. EPA/600/8-90/055. U.S. EPA Environmental Research Laboratory, Corvallis, Oregon. 92 pp.

Herlihy, A.T., P.R. Kaufmann, and M.E. Mitch. 1991. Stream chemistry in the eastern United States. 2. Current sources of acidity and low acid-neutralizing capacity streams. Water Resour. Res. 27(4) 629-642.

Kaufmann, P.R., A.T. Herlihy, M.E. Mitch, J. J. Messer, and W.S. Overton. 1991. Stream chemistry in the eastern United States. 1. Synoptic survey design, acid-base status, and regional patterns. Water Resour. Res. 27(4) 611-627.

12. TABLE OF ACRONYMS

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