

US EPA ARCHIVE DOCUMENT

CATALOG DOCUMENTATION

National Surface Water Survey: Eastern Lake Survey-Phase II
SPSFIM01 - Spring Chemistry Survey

TABLE OF CONTENTS

1. DATA SET IDENTIFICATION
2. INVESTIGATOR INFORMATION
3. DATA SET ABSTRACT
4. OBJECTIVES AND INTRODUCTION
5. DATA ACQUISITION AND PROCESSING METHODS
6. DATA MANIPULATIONS
7. DATA DESCRIPTION
8. GEOGRAPHIC AND SPATIAL INFORMATION
9. QUALITY CONTROL / QUALITY ASSURANCE
10. DATA ACCESS
11. REFERENCES
12. TABLE OF ACRONYMS
13. PERSONNEL INFORMATION

1. DATA SET IDENTIFICATION

1.1 Title of Catalog Document
SPSFIM1M

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
spsfim01

1.5 Task Group
National Acid Precipitation Assessment Program(NAPAP)- Aquatic Effects
Research Program

1.6 Data Set Identification Code
153

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

2.1 Principal Investigator
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Corvallis, OR 97333

2.2 Investigation Participant - Sample Collection

John Baker, Coordinator

3. DATA SET ABSTRACT

3.1 Abstract of the Data Set

The Eastern Lake Survey-Phase II (ELS-II), conducted in the spring, summer and fall of 1986. The focus of ELS-II was on the northeastern United States. ELS-II involved the resampling of a subset of lakes in the northeastern United States sampled in ELS-I to determining chemical variability and biological status. Furthermore, within-index period variability was examined in the fall of 1986 to provide insight concerning the ability to detect chemical changes over time, and the precision of the estimates of the number of acidic lakes from Phase I.

3.2 Keywords for the Data Set

Aluminum, alkalinity, acid neutralizing capacity, calcium, dissolved inorganic carbon, dissolved organic carbon, chloride, color, specific conductance, iron, potassium, magnesium, manganese, ammonium, sodium, sulfate, nitrate, pH, total phosphorus, silica, turbidity, water chemistry,

4. OBJECTIVES AND INTRODUCTION

4.1 Program Objective

The primary objectives of ELS-II were (1) to assess the sampling error associated with the ELS-I fall index sample, (2) to estimate the number of lakes with low acid neutralizing capacity (ANC) (i.e. potentially susceptible) that are not acidic in the fall but that are acidic in other seasons, and (3) to establish seasonal water chemistry characteristics among lakes.

4.2 Data Set Objective

This data set is part of the National Surface Water Survey (NSWS) and the National Acid Precipitation Assessment Program (NAPAP). The data set contributes to the quantification of the extent, location, and characteristics of sensitive and acidic lakes and streams in the eastern United States sampled during the spring season.

4.3 Data Set Background Discussion

Efforts to assess the impact of acid deposition on aquatic resources have previously been limited to single-factor indices. Acidification of surface waters, however, depends on the acid neutralizing capacity (ANC) generated both within the lake and its watershed. Hence, the response of an aquatic ecosystem to acidic deposition is a composite of many factors. Water chemistry in lakes is analyzed to understand the chemical habitat within which biota must exist so that we can understand the biological potential of the system.

4.4 Summary of Data Set Parameters

Water chemistry parameters are reported for one sample taken at the deepest part of the lake. These include: aluminum, alkalinity, acid neutralizing capacity, calcium, carbonate, color, specific conductance, dissolved inorganic carbon, dissolved organic carbon, bicarbonate, potassium, magnesium, ammonium, sodium, nitrate, total nitrogen, pH, total phosphorus, silica, total suspended solids, and turbidity. In addition to chemical characteristics of lakes, data were collected on lake characteristics- e.g. location, elevation, depth, area, etc.

5. DATA ACQUISITION AND PROCESSING METHODS

5.1 Data Acquisition

5.1.1 Sampling Objective

To obtain a single grab sample of lake water for the purposes of chemical analysis during the spring season, from the center and deepest part of the lake.

5.1.2 Sample Collection Methods Summary

A 6.2-L Van Dorn acrylic plastic sample bottle was filled from a depth of 1.5 m. Two 60-ml syringes and one 4-L polyethylene Cubitainer were filled from the Van Dorn bottle.

5.1.3 Sampling Start Date

March 25, 1986

5.1.4 Sampling End Date

May 3, 1986

5.1.5 Platform

Helicopter/boat

5.1.6 Sampling Gear

Merritt, G.D., and V.A. Sheppe. 1988. Eastern Lake Survey- Phase II, Field Operations Report. EPA/600/4-89/029. U.S. Environmental Protection Agency, Las Vegas, Nevada.

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

Mitchell-Hall, T.E., A.C. Neale, S.G. Paulsen, and J.E. Pollard. 1989. Eastern Lake Survey- Phase II: Quality Assurance Report. EPA/600/4-85-017. U.S. Environmental Protection Agency, Las Vegas, Nevada.

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 SAS Name	Data Type	Len	Format	Parameter Label
78	ACC011	Num	8	F	CO2-ACIDITY (UEQ/L) FORM 11
59	ALD02	Num	8	F	PCV ALUMINUM DISSOLVED (UG/L) FORM 2
103	ALDI98	Num	8		LABILE MONOMERIC AL (UG/L)
67	ALEX11	Num	8	F	ALUMINUM-EXTRACTABLE (UG/L) FORM 11
79	ALKA11	Num	8	F	ALKALINITY (UEQ/L) FORM 11
60	ALO_02	Num	8	F	PCV ALUMINUM ORGANIC (UG/L) FORM 2
84	ALTL11	Num	8	F	TOTAL ALUMINUM (UG/L) FORM 11
87	ANCAT98	Num	8	F	CATIONS/ANIONS RATIO
90	ANDEF98	Num	8	F	CATSUM - ANSUM (UEQ/L)
85	ANSUM98	Num	8	F	SUM OF ANIONS (UEQ/L)
106	BNSTR99	Num	8	F	POPULATION SIZE BY STRATA
12	C0151D	Num	8	F	CONDUCTIVITY (US/CM) AT 1.5M FORM 1D
28	C04051D	Num	8	F	CONDUCTIVITY AT 4 OR 5 M (US/CM) FORM 1D
30	C06101D	Num	8	F	CONDUCTIVITY AT 6 OR 10M (US/CM) FORM 1D
32	C08151D	Num	8	F	CONDUCTIVITY AT 8 OR 15M (US/CM) FORM 1D
34	C10201D	Num	8	F	CONDUCTIVITY AT 10 OR 20M(US/CM) FORM 1D
36	C12251D	Num	8	F	CONDUCTIVITY AT 12 OR 25M(US/CM) FORM 1D
38	C14301D	Num	8	F	CONDUCTIVITY AT 14 OR 30M(US/CM) FORM 1D
40	C16351D	Num	8	F	CONDUCTIVITY AT 16 OR 35M(US/CM) FORM 1D
42	C18401D	Num	8	F	CONDUCTIVITY AT 18 OR 40M(US/CM) FORM 1D
44	C20451D	Num	8	F	CONDUCTIVITY AT 20 OR 45M(US/CM) FORM 1D
61	CA11	Num	8	F	CALCIUM (MG/L) FORM 11
92	CA98	Num	8	F	CALCIUM (UEQ/L)
86	CATSU98	Num	8	F	SUM OF CATIONS (UEQ/L)
68	CL11	Num	8	F	CHLORIDE ION (MG/L) FORM 11
94	CL98	Num	8	F	CHLORIDE (UEQ/L)
136	CLSTR99	Num	8		PHASE II CLUSTER (1,2 or 3)
107	CNTY99	Char	5		FIPS CODE(ST,COUNTY)
93	C0398	Num	8	F	CARBONATE ALKALINITY (UEQ/L)
57	COLOR02	Num	8	F	COLOR (PCU) FORM 2
23	CON601D	Num	8	F	CONDUCTIVITY AT 0.6*DEPTH(US/CM) FORM 1D
80	COND11	Num	8	F	CONDUCTIVITY (US/CM) FORM 11
17	CON_B1D	Num	8	F	CONDUCT AT BOTTOM-1.5M (US/CM) FORM 1D
46	CXX501D	Num	8	F	CONDUCTIVITY AT 50 M (US/CM) FORM 1D
2	DATSMP	Num	8	DATE	DATE SAMPLED
54	DIC02	Num	8	F	DIC (MG/L) FORM 2
81	DICE11	Num	8	F	DIC-EQUIL (MG/L) FORM 11
82	DICI11	Num	8	F	DIC-INIT (MG/L) FORM 11
108	DISM99	Num	8	F	DISTANCE FROM COAST (MILES)
73	DOC11	Num	8	F	DOC (MG/L) FORM 11
11	DO_151D	Num	8	F	DISSOLVED OXYGEN (MG/L) 1.5M FORM 1D
22	DO_601D	Num	8	F	DISSOLVED OXYGEN AT 0.6*DEPTH FORM 1D
16	DO_B1D	Num	8	F	DIS OXYGEN (MG/L) BOTTOM-1.5M FORM 1D
26	DPCAT1D	Num	8	F	DEPTH CATEGORY 4=<20M 5=>20M FORM 1D
5	DPSIT1D	Num	8	F	SITE DEPTH (M) FORM 1D
6	DPSITX1D	Num	8		MAXIMUM LAKE DEPTH (M) - ALSC
20	DP_601D	Num	8	F	DEPTH 0.6*BOTTOM (M) FORM 1D
14	DP_B1D	Num	8	F	DEPTH AT BOTTOM-1.5M (M) FORM 1D
148	DRPCDE	Num	8		Drop code for population estimates
109	ELEV99	Num	8	F	LAKE ELEVATION (M)
141	ELEVX99	Num	8		LAKE ELEVATION (M) - ALSC
66	FE11	Num	8	F	IRON (UG/L) FORM 11
72	FTL11	Num	8	F	FLUORIDE (MG/L) FORM 11
100	FTL98	Num	8	F	FLUORIDE (UEQ/L)
102	H98	Num	8	F	HYDROGEN FROM PHAC11 (UEQ/L)
91	HC0398	Num	8	F	HCO3 (UEQ/L)
110	HDEP99	Num	8	F	HYDROGEN ION DEPOSITION (G/M**2/YR)

7.1 Description of Parameters, continued

#	Parameter SAS Name	Data Type	Len	Format	Parameter Label
4	HYDID1D	Char	4		HYDROLAB METER IDENTIFIER CODE FORM 1D
111	HYTYP99	Char	9		HYDROLOGIC TYPE
112	INOUT99	Char	6		PRESENSE/ABSENCE OF INLETS/OUTLETS
63	K11	Num	8	F	POTASSIUM (MG/L) FORM 11
97	K98	Num	8	F	POTASSIUM (UEQ/L)
53	LABNA02	Char	30		LABORATORY FOR ANALYSIS FORM 2
1	LAKE_ID	Char	7		LAKE IDENTIFICATION NUMBER
116	LAT99	Char	10		LATITUDE
117	LATDD99	Num	8	F	LATITUDE (DECIMAL DEGREES)
115	LKID99	Char	7		ERLD-UMD ID/ALSC WSHED-POND ID
105	LKNAM99	Char	30		LAKE NAME
113	LKSIZ99	Num	8	F	LAKE SURFACE AREA (HA)
142	LKSIZX99	Num	8		LAKE SURFACE AREA (HA) - ALSC
114	LKVOL99	Num	8	F	CALC LAKE VOL (10**6 CU M)
143	LKVOLX99	Num	8		DIG. LAKE VOL (10**6 CU M) -ALSC
119	LNDD99	Num	8	F	LONGITUDE (DECIMAL DEGREES)
118	LONG99	Char	11		LONGITUDE
120	MAPBG99	Char	25		MAP SHEET NAME (1:250,000 SCALE)
121	MAPSM99	Char	40		MAP SHEET NAME, 15 OR 7.5 QUAD
62	MG11	Num	8	F	MAGNESIUM (MG/L) FORM 11
95	MG98	Num	8	F	MAGNESIUM (UEQ/L)
65	MN11	Num	8	F	MANGANESE (UG/L) FORM 11
64	NA11	Num	8	F	SODIUM (MG/L) FORM 11
98	NA98	Num	8	F	SODIUM (UEQ/L)
74	NH411	Num	8	F	AMMONIUM ION (MG/L) FORM 11
101	NH498	Num	8	F	AMMONIUM (UEQ/L)
70	NO311	Num	8	F	NITRATE ION (MG/L) FORM 11
96	NO398	Num	8	F	NITRATE (UEQ/L)
122	NO3DP99	Num	8	F	NITRATE DEPOSITION (G/M**2/YR)
89	ORGI098	Num	8	F	ORGANIC ANION (UEQ/L)
13	PH0151D	Num	8	F	PH AT 1.5M FORM 1D
55	PH02	Num	8	F	STATION PH FORM 2
77	PHAC11	Num	8	F	ACIDITY INITIAL PH FORM 11
76	PHAL11	Num	8	F	ALKALINITY INITIAL PH FORM 11
75	PHEQ11	Num	8	F	AIR-EQUILIBRATED PH FORM 11
24	PH_601D	Num	8	F	PH AT 0.6*DEPTH FORM 1D
18	PH_B1D	Num	8	F	PH AT BOTTOM-1.5M FORM 1D
123	PRCIP99	Num	8	F	PRECIPITATION (M/YR)
50	PREC1D	Char	5		PRECIPITATION FORM 1D
83	PTL11	Num	8	F	TOTAL PHOSPHORUS (UG/L) FORM 11
124	RGSPC99	Char	16		REG SPEC LTM NRC DEW DER SAMPLE CLASS
51	RPREC1D	Char	8		RATE OF PRECIPITATION FORM 1D
125	RT99	Num	8	F	RESIDENCE TIME (YR)
144	RTX99	Num	8		RESIDENCE TIME (YR) - ALSC
126	RUNIN99	Num	8	F	ANNUAL RUNOFF INCHES FROM DIGIT MAP
127	RUNOF99	Num	8	F	SURFACE WATER RUNOFF (M/YR)
145	RUNOFX99	Num	8		SURFACE WATER RUNOFF (M/YR) - ALSC
131	SBRGN99	Char	1		NSWS SUBREGION
7	SECDI1D	Num	8	F	SECCHI DEPTH: DISAPPEAR (M) FORM 1D
104	SECME98	Num	8		MEAN: SECCHI DISK DISAPPEAR, REAPPEAR (M)
8	SECRE1D	Num	8	F	SECCHI DEPTH: REAPPEAR (M) FORM 1D
71	SI0211	Num	8	F	SILICA (MG/L) FORM 11
52	SITETYP	Char	9		SAMPLING SITE OR TYPE CODE
69	S0411	Num	8	F	SULFATE ION (MG/L) FORM 11
99	S0498	Num	8	F	SULFATE (UEQ/L)
128	S04DP99	Num	8	F	SULFATE DEPOSITION (G/M**2/YR)
88	S0BC98	Num	8	F	SUM OF BASE CATIONS (UEQ/L)
58	SPLCD02	Char	1		SPLIT/SAMPLE CODE TO LAS VEGAS FORM 2
129	ST99	Char	2		STATE (TWO-LETTER ABBREV)

7.1 Description of Parameters, continued

#	Parameter SAS Name	Data Type	Len	Format	Parameter Label
130	STRAT99	Char	3		NSWS STRATA
27	T04051D	Num	8	F	TEMPERATURE AT 4 OR 5 M (DEG C) FORM 1D
29	T06101D	Num	8	F	TEMPERATURE AT 6 OR 10 M (DEG C) FORM 1D
31	T08151D	Num	8	F	TEMPERATURE AT 8 OR 15 M (DEG C) FORM 1D
33	T10201D	Num	8	F	TEMPERATURE AT 10 OR 20M (DEG C) FORM 1D
35	T12251D	Num	8	F	TEMPERATURE AT 12 OR 25M (DEG C) FORM 1D
37	T14301D	Num	8	F	TEMPERATURE AT 14 OR 30M (DEG C) FORM 1D
39	T16351D	Num	8	F	TEMPERATURE AT 16 OR 35M (DEG C) FORM 1D
41	T18401D	Num	8	F	TEMPERATURE AT 18 OR 40M (DEG C) FORM 1D
43	T20451D	Num	8	F	TEMPERATURE AT 20 OR 45M (DEG C) FORM 1D
3	TIMSM1D	Num	8	TIME	TIME SAMPLED (24 H) HH:MM FORM 1D
10	TM0151D	Num	8	F	TEMPERATURE (DEG C) AT 1.5M FORM 1D
21	TMP601D	Num	8	F	TEMPERATURE AT 0.6*DEPTH (DEG C) FORM 1D
47	TMPA1D	Num	8	F	AIR TEMPERATURE (DEC G) FORM 1D
19	TMPD11D	Num	8	F	TEMP DIF 1.5M-BOTTOM (DEG C) FORM 1D
25	TMPD21D	Num	8	F	TEMP DIF 1.5M-0.6*DEPTH (DEG C) FORM 1D
15	TMP_B1D	Num	8	F	TEMP AT BOTTOM-1.5M (DEG C) FORM 1D
56	TUR02	Num	8	F	TURBIDITY (NTU) FORM 2
45	TXX501D	Num	8	F	TEMPERATURE AT 50 M (DEG C) FORM 1D
9	VISIT1D	Char	12		VISIT FORM 1D
132	WALA99	Num	8	F	WATERSHED AREA/LAKE AREA
146	WALAX99	Num	8		WATERSHED AREA/LAKE AREA - ALSC
49	WDIR1D	Char	3		ESTIMATED WIND DIRECTION FORM 1D
133	WSDIS99	Char	8		D)WELL I)ND L)OG M)INE R)OAD S)TOCK
135	WSHED99	Num	8	F	WATERSHED AREA (HA)
147	WSHEDX99	Num	8		WATERSHED AREA (HA) - ALSC
134	WSOTH99	Char	25		DISTURB W/I 100M - OTHER
48	WSPD1D	Char	8		ESTIMATED WIND SPEED FORM 1D
138	WT1M99	Num	8		MODIFIED PHASE I WEIGHT
137	WT10_99	Num	8		ORIGINAL PHASE I WEIGHT
139	WT2C99	Num	8		CONDITIONAL PHASE II WEIGHT
140	WT2T99	Num	8		TOTAL PHASE II WEIGHT

7.1.6 Precision to which values are reported

7.1.7 Minimum Value in Data Set

Name	Min
ACC011	5.4
ALD02	6.1
ALDI98	0
ALEX11	-2.939E-39
ALKA11	-63.1
ALO_02	6.2
ALT11	10
ANCAT98	.
ANDEF98	.
ANSUM98	.
BNSTR99	96
C0151D	4
C04051D	10
C06101D	13
C08151D	10
C10201D	11
C12251D	13
C14301D	15
C16351D	14
C18401D	.

7.1.7 Minimum Value in Data Set, continued

Name	Min
C20451D	.
CA11	0.55
CA98	27.445
CATSU98	72.16
CL11	.
CL98	.
CLSTR99	1
C0398	0
COLOR02	-2.939E-39
CON601D	10
COND11	12.4
CON_B1D	4
CXX501D	.
DATSMP	9580
DIC02	0.024
DICE11	0.086
DIC111	0.28
DISM99	1
DOC11	0.2
DO_151D	7.16
DO_601D	0.37
DO_B1D	0.6
DPCAT1D	4
DPSIT1D	1.2
DPSITX1D	1.2
DP_601D	2.4
DP_B1D	0.7
DRPCDE	0
ELEV99	1.5
ELEVX99	227
FE11	-2.939E-39
FTL11	0.006
FTL98	0.316
H98	0.026
HC0398	0.557
HDEP99	0.027
K11	0.1
K98	2.557
LATDD99	41.0042
LKSIZ99	4
LKSIZX99	4
LKV0L99	0.043
LKV0LX99	0.0388239
LNGDD99	-67.2667
MG11	0.145
MG98	11.928
MN11	-2.939E-39
NA11	0.077
NA98	3.35
NH411	-2.939E-39
NH498	-2.939E-39
N0311	-2.939E-39
N0398	-2.939E-39
N03DP99	0.71
ORGI098	1.4368
PH0151D	4.09
PH02	4.44
PHAC11	4.4
PHAL11	4.41
PHEQ11	4.42

7.1.7 Minimum Value in Data Set, continued

Name	Min
PH_601D	4.64
PH_B1D	4.17
PRCIP99	0.697
PTL11	-2.939E-39
RT99	0.001
RTX99	0.3
RUNIN99	10
RUNOF99	0.254
RUNOFX99	0.508
SECDI1D	1.2
SECME98	1.1
SECRE1D	1
SI0211	-2.939E-39
S0411	1.242
S0498	25.858
S04DP99	1.18
S0BC98	52.2286
T04051D	4.5
T06101D	4
T08151D	3.7
T10201D	3.4
T12251D	4.1
T14301D	4
T16351D	4
T18401D	.
T20451D	.
TIMSM1D	30000
TM0151D	3.3
TMP601D	3.7
TMPA1D	-6
TMPD11D	-2.939E-39
TMPD21D	0.1
TMP_B1D	3.3
TUR02	0.2
TXX501D	.
WALA99	2.18
WALAX99	2.2
WSHED99	13
WSHEDX99	26
WT1M99	1.477
WT10_99	1.449
WT2C99	1
WT2T99	12.054

7.1.7 Maximum Value in Data Set

Name	Max
ACC011	174.7
ALD02	517.2
ALDI98	481.6
ALEX11	435.2
ALKA11	371.8
ALO_02	155.6
ALTL11	701.7
ANCAT98	.
ANDEF98	.
ANSUM98	.
BNSTR99	1682
C0151D	128

7.1.7 Maximum Value in Data Set, continued

Name	Max
C04051D	93
C06101D	98
C08151D	55
C10201D	60
C12251D	45
C14301D	39
C16351D	39
C18401D	.
C20451D	.
CA11	8.855
CA98	441.865
CATSU98	1104.4
CL11	.
CL98	.
CLSTR99	3
C0398	1.816
COLOR02	95
CON601D	94
COND11	126.2
CON_B1D	125
CXX501D	.
DATSMP	9619
DIC02	4.673
DICE11	5.011
DICI11	5.378
DISM99	94
DOC11	10.92
DO_151D	14.8
DO_601D	72
DO_B1D	14.04
DPCAT1D	5
DPSIT1D	30.5
DPSITX1D	37.5
DP_601D	18
DP_B1D	29
DRPCDE	3
ELEV99	791
ELEVX99	792
FE11	433
FTL11	0.28
FTL98	14.739
H98	39.811
HC0398	416.016
HDEP99	0.065
K11	1.651
K98	42.216
LATDD99	46.9339
LKSIZ99	1619.2
LKSIZX99	1626.9
LKVOL99	84.214
LKVOLX99	110.696
LNGDD99	-76.3208
MG11	2.735
MG98	224.981
MN11	369
NA11	13.57
NA98	590.295
NH411	0.251
NH498	13.915
N0311	2.9235

7.1.7 Maximum Value in Data Set, continued

Name	Max
N0398	47.156
N03DP99	1.83
ORGIO98	98.6494
PH0151D	7.39
PH02	7.39
PHAC11	7.59
PHAL11	7.51
PHEQ11	7.73
PH_601D	6.74
PH_B1D	7.29
PRCIP99	1.344
PTL11	52
RT99	10.042
RTX99	1319.1
RUNIN99	30
RUNOF99	0.762
RUNOFX99	0.889
SECDI1D	8.9
SECME98	8.85
SECRE1D	8.8
SI0211	7.135
S0411	13.886
S0498	289.107
S04DP99	3
SOBC98	1100.8036
T04051D	10.3
T06101D	7.8
T08151D	6.2
T10201D	5.4
T12251D	5.3
T14301D	5.2
T16351D	5.4
T18401D	.
T20451D	.
TIMSM1D	60000
TM0151D	15.6
TMP601D	15.5
TMPA1D	28
TMPD11D	9
TMPD21D	9.6
TMP_B1D	12.9
TUR02	5.8
TXX501D	.
WALA99	2932.39
WALAX99	2192.5769231
WSHED99	81424
WSHEDX99	81424
WT1M99	27.209
WT10_99	27.209
WT2C99	15.5245
WT2T99	50.082

7.2 Data Record Example

7.2.1 Column Names for Example Records

ACC011 ALD02 ALDI98 ALEX11 ALKA11 ALO_02 ALTL11 ANCAT98 ANDEF98 ANSUM98 BNSTR99
C0151D C04051D C06101D C08151D C10201D C12251D C14301D C16351D C18401D C20451D
CA11 CA98 CATSU98 CL11 CL98 CLSTR99 CNTY99 C0398 COLOR02 CON601D COND11 CON_B1D
CXX501D DATSMP DIC02 DICE11 DICI11 DISM99 DOC11 DO_151D DO_601D DO_B1D DPCAT1D
DPSIT1D DPSITX1D DP_601D DP_B1D DRPCDE ELEV99 ELEVX99 FE11 FTL11 FTL98 H98

7.2.1 Column Names for Example Records, continued

HC0398 HDEP99 HYDID1D HYTYP99 INOUT99 K11 K98 LABNA02 LAKE_ID LAT99 LATDD99
 LKID99 LKNAM99 LKSIZ99 LKSIZX99 LKVL099 LKVL0X99 LNGDD99 LONG99 MAPBG99 MAPSM99
 MG11 MG98 MN11 NA11 NA98 NH411 NH498 N0311 N0398 N03DP99 ORGI098 PH0151D PH02
 PHAC11 PHAL11 PHEQ11 PH_601D PH_B1D PRCIP99 PREC1D PTL11 RGSPC99 RPREC1D RT99
 RTX99 RUNIN99 RUNOF99 RUNOFX99 SBRGN99 SECDI1D SECME98 SECRE1D SIO211 SITETYP
 S0411 S0498 S04DP99 SOB98 SPLCD02 ST99 STRAT99 T04051D T06101D T08151D T10201D
 T12251D T14301D T16351D T18401D T20451D TIMSM1D TM0151D TMP601D TMPA1D TMPD11D
 TMPD21D TMP_B1D TUR02 TXX501D VISIT1D WALA99 WALAX99 WDIR1D WSDIS99 WSHED99
 WSHEDX99 WS0TH99 WSPD1D WT1M99 WT10_99 WT2C99 WT2T99

7.2.2 Example Data Records

135.6,502.6000,481.6000,382.7000,-33.4,21.0000,672.6000, . . . ,711,40, . . . , . . . ,
 . . . ,1.396,69.6600,133.0800, . . . ,1,"36043",0.0000,15, . . . ,28.2,39, . . . ,25APR86,0.759,
 0.191,0.602, . . . ,3.10,10.98, . . . ,9.42, . . . ,9.5,11.6, . . . ,8.1,0,645.3,645.0,148.000,0.0485,
 2.5530,19.0550,1.1060,0.043,"H","DRAINAGE","NI/O",0.295,7.5430,"PBS&J","1A1-003",
 "43-57'25'N",43.9569,"04-504","HAWK POND",12.80,13.50,0.434,0.617,74.9583,
 "74-57'30'W","UTICA","15' BIG MOOSE",0.249,20.4830,45.000,0.359,15.6170,0.013,
 0.7210,2.9235,47.1560,1.25,21.8919,4.45,4.60,4.72,4.67,4.78, . . . ,4.48,0.909,"NONE",
 1.0000,"REG/","NONE",0.683,1.200,30,0.762,0.762,"A",5.5,5.4,5.3,3.590,"",
 5.762,119.9650,2.10,113.3028,"","NY","1A1", . . . , . . . ,13:53,9.6, . . . ,19,
 3.8, . . . ,5.8,0.30, . . . ,"SPRING VISIT",7.50,7.36,"E","",96.000,99.400,"","MODERATE",
 9.633,9.633,1.2754,12.285

73.1,102.2000,35.1000,89.8000,16.8,67.1000,271.6000, . . . ,711,38, . . . , . . . ,
 . . . ,1.990,99.3010,168.9300, . . . ,2,"36041",0.0010,25, . . . ,21.8, . . . ,21APR86,0.820,
 0.713,0.813, . . . ,3.45,11.17, . . . ,1.6,3.0, . . . ,0,640.1,640.0,32.000,0.0432,2.2740,
 1.3490,16.3620,0.043,"H","DRAINAGE","I/O",0.202,5.1650,"PBS&J","1A1-008",
 "43-42'30'N",43.7083,"05-667","CEDAR RIVER FLOW",264.60,266.40,1.842,3.026,
 74.4750,"74-28'30'W","UTICA","15' INDIAN LAKE",0.433,35.6190,36.000,0.539,
 23.4470,0.073,4.0470,0.7510,12.1140,1.23,31.1667,5.68,5.72,5.87,5.85,6.10, . . . ,
 0.909,"RAIN",7.0000,"REG/","MODERATE",0.025,33.400,25,0.635,0.889,"A", . . . , . . . ,
 4.880,"",5.302,110.3880,2.08,163.5312,"","NY","1A1", . . . , . . . ,10:45,
 8.1, . . . ,9, . . . ,0.60, . . . ,"SPRING VISIT",45.03,42.65,"S","DR",11914.00,11361.80,
 "DAM AT NORTH END OF LAKE","LIGHT",9.633,9.633,2.2883,22.043

62.3,143.8000,106.5000,77.8000,-0.2,37.3000,210.2000, . . . ,711,30, . . . , . . . ,
 . . . ,1.893,94.4610,148.2300, . . . ,1,"36041",0.0010,15, . . . ,20.7,30, . . . ,24APR86,1.436,
 0.209,1.048, . . . ,2.47,10.80, . . . ,10.10, . . . ,5.0,12.2, . . . ,3.5,0,748.6,749.0,65.000,0.0350,
 1.8420,2.2910,13.7900,0.045,"H","DRAINAGE","NI/O",0.211,5.3950,"PBS&J","1A1-012",
 "43-35'15'N",43.5875,"07-936","WHITNEY LAKE",43.10,42.60,0.860,1.643,74.5625,
 "74-33'45'W","UTICA","15' WEST CANADA LAKES",0.345,28.3800,44.000,0.342,14.8770,
 0.051,2.8270,1.2220,19.7110,1.30,21.6092,5.21,5.41,5.64,5.58,5.72, . . . ,5.24,0.899,
 "NONE",1.0000,"REG/","NONE",0.492,1.500,30,0.762,0.889,"A",5.0,5.0, . . . ,2.570,"",
 4.700,97.8540,2.18,143.1127,"","NY","1A1", . . . , . . . ,11:33,5.3, . . . ,12,
 0.1, . . . ,5.2,0.30, . . . ,"SPRING VISIT",6.31,6.58,"NE","",272.000,280.300,"","STRONG",
 9.633,9.633,1.2754,12.285

8. GEOGRAPHIC AND SPATIAL INFORMATION

8.1 Minimum Longitude
 -73.3208 decimal degrees

8.2 Maximum Longitude
 -67.2667 decimal degrees

8.3 Minimum Latitude
 41.0042 decimal degrees

8.4 Maximum Latitude
 46.9339 decimal degrees

8.5 Name of Area or Region
Connecticut, Maine, New York, Pennsylvania, Rhode Island, Massachusetts, and
New Hampshire

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 Gopher and WWW

10.7 EMAP CD-ROM Containing the Data

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12. TABLE OF ACRONYMS

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