Appendices

Appendix 1: USGS Topographic Quadrangles Names Used in the Creation of the Wetland and Watershed Data Layers, and Their Corresponding Names in the New York State Department of Transportation, New York State Department of Conservation and New York State Adirondack Park Agency Systems. Metric quadrangle names are for USGS quadrangles that were recently updated with metric contours.

USGS Name	Dot Name	Apaquad	Decqua	Metric quad
KEMPSHALL_MTN_(EAST)	KEMPSHALL_MTN	D23SE	E233	KEMPSHALL_MTN
AMPERSAND_LAKE_(EAST)	STREET_MTN	D24NE	E242	AMPERSAND_LAKE
SANTANONI_PEAK_(EAST)	MOUNT_ADAMS	D24SE	E243	SANTANONI_PEAK
SANTANONI_PEAK_(WEST)	SANTANONI	D24SW	E244	SANTANONI_PEAK
KEENE_VALLEY_(WEST)	NORTH_ELBA	D25NW	E251	KEENE_VALLEY
MOUNT_MARCY_(EAST)	DIX_MTN	D25SE	E253	MOUNT_MARCY
MOUNT_MARCY_(WEST)	MOUNT_MARCY	D25SW	E254	MOUNT_MARCY
WITHERBEE_(EAST)	MINEVILLE	D26SE	E263	WITHERBEE
WITHERBEE_(WEST)	UNDERWOOD	D26SW	E264	WITHERBEE
SARGENT_PONDS	SARGENT_PONDS	E22SE	F223	RAQUETTE_LAKE
DUNBROOK_MOUNTAIN	DUN_BROOK_MTN	E23NE	F232	DEERLAND
DEERLAND	DEERLAND	E23NW	F231	DEERLAND
BURGESS_MOUNTAIN	ROCK_LAKE	E23SE	F233	BLUE_MTN_LAKE
BLUE_MOUNTAIN_LAKE	BLUE_MTN	E23SW	F234	BLUE_MTN_LAKE
VANDERWHACKER_MTN	TAHAWUS	E24NE	F242	NEWCOMB
NEWCOMB	NEWCOMB	E24NW	F241	NEWCOMB
STARBUCK_MOUNTAIN	DUTTON_MTN	E24SE	F243	DUTTON_MOUNTAIN
BAD_LUCK_MOUNTAIN	BAD_LUCK_MOUNTAIN	E24SW	F244	DUTTON_MOUNTAIN
BLUE_RIDGE	BLUE_RIDGE	E25NE	F252	BLUE_RIDGE
LESTER_DAM	CHENEY_POND	E25NW	F251	BLUE_RIDGE
SCHROON_LAKE	SCHROON_LAKE	E25SE	F253	SCHROON_LAKE
MINERVA	OLMSTEDVILLE	E25SW	F254	SCHROON_LAKE
EAGLE_LAKE	EAGLE_LAKE	E26NE	F262	
PARADOX_LAKE	PARADOX_LAKE	E26NW	F261	
GRAPHITE	PUTNAM_POND	E26SE	F263	
PHARAOH_MOUNTAIN	PHARAOH_MOUNTAIN	E26SW	F264	
WAKELY_MOUNTAIN	WAKELY_MOUNTAIN	F22NE	G222	WAKELY_MOUNTAIN
SPRUCE_LAKE	WEST_CANADA_LAKES	F22SE	G223	WEST_CANADA_LAKES
SABAEL	INDIAN_LAKE	F23NE	G232	INDIAN_LAKE
SNOWY_MOUNTAIN	LEWEY_MTN	F23NW	G231	INDIAN_LAKE
KUNJAMUK_RIVER	KUNJAMUK_CREEK	F23SE	G233	PAGE_MOUNTAIN
PAGE_MOUNTAIN	PAGE_MOUNTAIN	F23SW	G234	PAGE_MOUNTAIN
GORE_MOUNTAIN	NORTH_RIVER	F24NE	G242	THIRTEENTH_LAKE
BULLHEAD_MOUNTAIN	BULLHEAD_MOUNTAIN	F24NW	G241	THIRTEENTH_LAKE
BAKERS_MILLS	BAKERS_MILLS	F24SE	G243	BAKERS_MILLS
SOUTH_POND_MTN	SOUTH_POND_MTN	F24SW	G244	BAKERS_MILLS
CHESTERTOWN	CHESTERTOWN	F25NE	G252	
NORTH_CREEK	NORTH_CREEK	F25NW	G251	
THE_GLEN	THE_GLEN	F25SE	G253	
JOHNSBURG	JOHNSBURG	F25SW	G254	
SILVER_BAY	SILVER_BAY	F26NE	G262	
BRANT_LAKE	BRANT_LAKE	F26NW	G261	
BOLTON_LANDING	BOLTON_LANDING	F26SW	G264	
PISECO_LAKE	PISECO_LAKE	G22NE	H222	PISECO_LAKE
HOFFMEISTER	HOFFMEISTER	G22NW	H221	PISECO_LAKE
TOMANY_MOUNTAIN	TOMANY_MOUNTAIN	G22SE	H223	MOREHOUSE_MOUNTAIN
MOREHOUSE_LAKE	MOREHOUSE_LAKE	G22SW	H224	MOREHOUSE_MOUNTAIN
WELLS	WELLS	G23NE	H232	WELLS
LAKE_PLEASANT	LAKE_PLEASANT	G23NW	H231	WELLS
CATHEAD_MOUNTAIN	CATHEAD_MOUNTAIN	G23SE	H233	THREE_PONDS_MOUNTAIN
WHITEHOUSE	WHITEHOUSE	G23SW	H234	THREE_PONDS_MOUNTAIN

USGS Name	Dot Name	Apaquad	Decqua	Metric quad
HARRISBURG	HARRISBURG	G24NE	H242	HARRISBURG
GRIFFIN	GRIFFIN	G24NW	H241	HARRISBURG
OHMER_MOUNTAIN	OHMER_MOUNTAIN	G24SE	H253	HOPE_FALLS
HOPE_FALLS	HOPE_FALLS	G24SW	H244	HOPE_FALLS
WARRENSBURG	WARRENSBURG	G25NE	H252	
STONY_CREEK	STONY_CREEK	G25NW	H251	
LAKE_LUZERNE	LAKE_LUZERNE	G25SE	H253	
CONKLINGVILLE	CONKLINGVILLE	G25SW	H254	
LAKE_GEORGE	LAKE_GEORGE	G26NW	H261	
GLENS_FALLS	GLENS_FALLS	G26SW	H264	
CANADA_LAKE	CANADA_LAKE	H22NE	I222	
JACKSON_SUMMIT	JACKSON_SUMMIT	H23NE	I232	
CAROGA_LAKE	CAROGA_LAKE	H23NW	I231	
GLOVERSVILLE	GLOVERSVILLE	H23SE	I233	
PECK_LAKE	PECK_LAKE	H23SW	I234	
EDINBURG	EDINBURG	H24NE	I242	
NORTHVILLE	NORTHVILLE	H24NW	I241	
GALWAY	GALWAY	H24SE	I243	
BROADALBIN	BROADALBIN	H24SW	I244	
CORINTH	CORINTH	H25NE	I252	
PORTER_CORNERS	PORTER_CORNERS	H25NW	I251	
MIDDLE_GROVE	MIDDLE_GROVE	H25SW	I254	

Appendix 2. Metadata for the Digital Watershed Map of the Greater Upper Hudson River.

Report Date: 30-September-1999
Metadata Data Set Name: Watersheds in the Greater Upper Hudson River
1 Identification Information
1.1 Citation:
8 Citation Information:
8.1 Originator: New York State Adirondack Park Agency
8.1 Originator: Daniel M. Spada, Project Director (compiler)
8.2 Publication Date: 19991231
8.4 Title: New York State Adirondack Park Watershed Boundaries in the Upper Hudson Drainage Basin
8.5 Edition: Version 1.0
8.6 Geospatial Data Presentation Form: map
8.7 Series Information:
8.7.1 Series Name: Watershed Scale Protection for Adirondack Wetlands
8.7.2 Issue Identification: Implementing a Procedure to Assess Cumulative Effects and Predict Cumulative Impacts from Development Activities to Wetlands and Watersheds in the Oswegatchie, Black, and Greater Upper Hudson River Watersheds of the Adirondack Park, New York State, USA.
8.8 Publication Information:
8.8.1 Publication Place: Ray Brook, NY
8.8.2 Publisher: New York State Adirondack Park Agency
1.2 Description
1.2.1 Abstract: An Arc/Info coverage was prepared containing the watershed boundaries of major lakes and ponds and the remaining large riverine watersheds within the Upper Hudson River Drainage Basin located in northern New York State for the New York State Adirondack Park Agency (APA). Watersheds were delineated for the ponded waters listed by the New York State Department of Environmental Conservation (DEC) Biological Survey Unit and the Adirondack Lakes Survey Corporation (ALSC). Watershed boundaries were delineated using the most current 1:24000 and 1:25000 scale USGS topographic maps. Boundary lines reflecting the area flowing directly through the pour point of the watershed and not through a tributary watershed were drawn on the maps by hand by two independent parties. The maps were inspected, and disagreements between the parties were rectified by a third party, and the watershed lines on each individual map were digitized. The individual maps were edge-matched and joined into a single map dataset and line and polygon topology was created. Fields were added for the polygon names (ALSC pond number or a descriptive name), polygon identification, and polygon flow direction. The direction of flow was determined for each polygon, and the number of the receiving polygon was added to the polygon database. This information was used to create regional watershed topology (the immediate area as described above plus the area of all tributary watersheds). Finally, an item was added to the polygon database to indicate the type of polygon drainage (i = isolated, p = pond, r = river polygon, and a polygon number indicated the receiving pond where there was more than one direction of drainage).
1.2.2 Purpose: This digital map was intended for use in determining the area included in the surface drainage of ALSC ponded waters. Used as an overlay on other datasets to characterize watershed attributes, and for attribution of water quality data associated with ponded waters or riverine systems.
1.2.3 Supplemental Information: The data set was hand digitized using PC Arc/Info 3.4D+ by the Remote Sensing Laboratory at Plattsburgh State University (RSL) from paper original United States Geological Survey (USGS) maps. Maximum allowable RMS error was 0.003, snapdistance 20.0 meters, snaptype closest, weed tolerance 3.0 meters, and a fuzzy tolerance of 1.219 meters. Hard copies of the coverage at 1:24000 or 1:25000 scale showing arcs and dangle nodes were carefully checked against the topographic manuscript for digitizing accuracy by three individuals. DEC pond number attributes were obtained by intersecting the polygon coverage with a point coverage derived from the Adirondack Lakes Survey Corporation database with NY DEC Biological Survey pond centroid coordinates. The coverage was transferred to the New York State, Executive Department, Adirondack Park Agency (NYS APA) running Arc/Info version 7.2.1. Polygon boundaries and pond labels were verified, region topology was created for watersheds consisting of multiple polygons, and additional attributes were added.
1.3 Time Period of Content
9 Time Period Information
9.3 Range of Dates/Times

9.3.1 Beginning Date: 1945
9.3.3 Ending Date: 1990
1.3.1 Currentness Reference: USGS 7.5' and 7.5' X 15' topographic quadrangle publication dates
1.4 Status
1.4.1 Progress: Complete
1.4.2 Maintenance and Update Frequency: As needed
1.5 Spatial Domain
1.5.1 Bounding Coordinates
1.5.1.1 West Bounding Coordinate: -74.649
1.5.1.2 East Bounding Coordinate: -73.5392
1.5.1.3 North Bounding Coordinate: 44.1477
1.5.1.4 South Bounding Coordinate: 43.0127
1.6 Keywords
1.6.1 Theme
1.6.1.1 Theme Keyword Thesaurus: None
1.6.1.2 Theme Keyword: Watersheds
1.6.1.2 Theme Keyword: Lake Drainage
1.6.1.2 Theme Keyword: Geographic Information System (GIS)
1.6.1.2 Theme Keyword: Arc/Info Coverage
1.6.2 Place
1.6.2.1 Place Keyword Thesaurus: Geographic Names Information System
1.6.2.2 Place Keyword: New York
1.6.2.2 Place Keyword: Adirondack Park
1.6.2.2 Place Keyword: Adirondack Mountains
1.6.2.2 Place Keyword: Upper Hudson River Drainage Basin
1.6.2.2 Place Keyword: Hudson River
1.6.3 Stratum
1.6.3.1 Stratum Keyword Thesaurus: None
1.6.4 Temporal
1.6.4.1 Temporal Keyword Thesaurus: None
1.6.4.2 Temporal Keyword: Date of topographic maps: 1945-1990
1.6.4.2 Temporal Keyword: Date of Aerial Photography: 1985-1995
1.7 Access Constraints: None
1.8 Use Constraints: These data may not be used for legal determinations. Please credit use of this data set to the New York State Adirondack Park Agency, Ray Brook, New York 12977. Please send a copy of an reports or papers in which these data were used or referenced to the above address, Attention, Nancy Heath Librarian.
1.9 Point of Contact
10.2 Contact Organization Primary
10.1.2 Contact Organization: NYS Adirondack Park Agency
10.1.1 Contact Person: Mr. Daniel M. Spada
10.3 Contact Position: Adirondack Park Project Analyst, Biological Resources
10.4 Contact Address
10.4.1 Address Type: mailing and physical address
10.4.2 Address: PO Box 99, Route 86
10.4.3 City: Ray Brook
10.4.4 State or Province: New York
10.4.5 Postal Code: 12977
10.4.6 Country: USA
10.5 Contact Voice Telephone: (518) 891-4050
10.7 Contact Facsimile Telephone: (518) 891-3938
10.9 Hours of Service: 9:00 AM - 5:00 PM Monday through Friday
1.10 Browse Graphic: None
1.11 Data Set Credit: Funding was provided by the US Environmental Protection Agency Office of Wetlands Protection; State Wetlands Protection Program; Project #CD992290-01-0 to the NYS Adirondack Park Agency (NYS APA). Subcontractors for portions of the grant were the Remote Sensing Laboratory,

Plattsburgh State University (RSL) and the Adirondack Lakes Survey Corporation, NYS Department of Environmental Conservation (ALSC).

1.12 Security Information

1.12.1 Security Classification System: None

1.12.2 Security Classification: Unclassified

1.12.3 Security Handling Description: None

1.13 Native Data Set Environment: PC-Arc/Info, Arc/Info

2 Data Quality Information

2.1 Attribute Accuracy

2.1.1 Attribute Accuracy Report: Polygon attributes consist of the DEC ALSC pond number, the APA number, THIS#, FLOWTO#, and CLASS. All polygon attributes were visually checked on screen, against topographic maps, and with 1:70000 scale check plots. Region attributes for region subclass WSHED consist of the DEC ALSC pond number, the NYS APA watershed number, drainage CLASS, the number of subwatersheds contained within the region, the pond polygon number (THIS#), and polygon to which it drains (FLOWTO#) and the number of subcatchments combined into the region. All common attributes between the polygon and regional attribute tables were generated from the polygon attribute table. The number of subcatchments included in each polygon was calculated by the program (NSUBS).

2.1.2 Quantitative Attribute Accuracy Assessment

2.1.2.1 Attribute Accuracy Value: unknown

2.1.2.2 Attribute Accuracy Explanation: All feature attributes are believed to be correct.

2.2 Logical Consistency Report:

POND, APA number (THIS#), and User-ID attributes in polygon and region attribute tables were checked for logical consistency using ArcPlot to logically select and display regions and polygons. Arc/Info macros were written to create watershed regions from multiple polygons using FLOWTO# and THIS# attributes.

2.3 Completeness Report:

Extensive quality assurance/quality control measures were taken for all steps of dataset creation. It is expected however, that because of the hierarchical nature of the subwatersheds and their representation in the region data model, mistakes may be present in the nesting of the watersheds. Identifiable errors will be corrected periodically or as needed.

2.4 Positional Accuracy

2.4.1 Horizontal Positional Accuracy

2.4.1.1 Horizontal Positional Accuracy Report:

Maximum allowable RMS error was 0.003 for each digitizing session. An attempt was made to have horizontal accuracy correct to plus or minus one pencil width (about 12 meters at 1:24000) from the topographic map watershed delineations.

2.4.1.2.2 Horizontal Positional Accuracy Explanation: No formal assessment conducted

2.4.2.1 Vertical Positional Accuracy Report:

1:24000 scale and 1:25000 scale USGS topographic standards.

2.5.1 Source Information

2.5.1.1 Source Citation:

8.1 Originator: Northern Forest Lands Project, SUNY ESF (ed.)

8.2 Publication Date: 19910725

8.4 Title: Northern Forest Lands Quadrangle File (derived from the data set "NYTM Coordinates 11/22/89" purchased from NYSDOT - Mapping Services Bureau)

2.5.1.3 Type of Source Media: disc

2.5.1.4 Source Time Period of Content:

9 Time Period Information

9.1 Single Date/Time

9.1.1 Calendar Date: 19910725

2.5.1.4.1 Source Currentness Reference: publication date

2.5.1.5 Source Citation Abbreviation: NFLSQUAD

2.5.1.6 Source Contribution:

Subsets provided quadrangle corner tic templates for digitizing. Original UTM coordinates were accurate to 0.1 meter. The Arc/Info coverage created from this data is single precision with X coordinates accurate to 0.1 meter and Y coordinates accurate to 1.0 meter.

2.5.1 Source Information

2.5.1.1 Source Citation:
8.1 Originator: USGS
8.2 Publication Date: various
8.4 Title: USGS 7.5' and 7.5' X 15' Topographic Quadrangles
8.6 Geospatial Data Presentation Form: map
2.5.1.2 Source Scale Denominator: 24000 or 25000
2.5.1.3 Type of Source Media: paper
2.5.1.4 Source Time Period of Content:
9 Time Period Information
9.3 Range of Dates/Times
9.3.1 Beginning Date: 1945
9.3.3 Ending Date: 1990
2.5.1.4.1 Source Currentness Reference: publication date
2.5.1.5 Source Citation Abbreviation: TOPO
2.5.1.6 Source Contribution: Watersheds were delineated and digitized based on these maps with aerial photography and field checks as needed.
2.5.1 Source Contribution Information
2.5.1.1 Source Citation:
8.1 Originator: NYS Adirondack Park Agency
8.2 Publication Date: 19930914
8.4 Title: New York State Adirondack Park Boundary
8.6 Geospatial Data Presentation Form: map
8.8.1 Publication Place: Ray Brook, NY
8.8.2 Publisher: NYS Adirondack Park Agency
2.5.1.2 Source Scale Denominator: 24000
2.5.1.3 Type of Source Media: disc
2.5.1.4 Source Time Period of Content:
9 Time Period Information
9.1 Single Date/Time
9.1.1 Calendar Date: 19930914
2.5.1.4.1 Source Currentness Reference: coverage date
2.5.1.5 Source Citation Abbreviation: BLUELN
2.5.1.6 Source Contribution: Used to help define the study area boundary.
2.5.2 Process Step
2.5.2.1 Process Description:
A list of identified ponds from the DEC ALSC database was made for each 7.5' quadrangle.
2.5.2 Process Step
2.5.2.1 Process Description: Ponds and river systems to be delineated were identified on the most recent 1:24000 or 1:25000 scale USGS topographic maps. Metric maps were used when available because they are more accurate. When metric 1:25000 topographic quadrangles were unavailable, 1:24000 scale English maps were used. Ponds were labeled by their unique DEC or ALSC pond numbers and rivers with a descriptive name. Watersheds were delineated by two independent delineators using two sets of identical topographic maps. Delineations were performed according to methods described in National Handbook of Recommended Methods for Water Data Acquisition. Office of Water Data Coordination, Geological Survey, Washington, D. C. (1977) starting from the outlet (pour point), following along high land peaks at the rim of the basin back to the outlet.
2.5.2.2 Source Used Citation Abbreviation: TOPO
2.5.2.5 Source Produced Citation Abbreviation: WS-topos
2.5.2.6 Process Contact
10 Contact Information
10.2 Contact Organization Primary
10.1.2 Contact Organization: New York State Adirondack Park Agency
10.1.1 Contact Person: Mr. Daniel M. Spada
10.3 Contact Position: Adirondack Park Project Analyst, Biological Resources
10.4 Contact Address
10.4.1 Address Type: mailing and physical address
10.4.2 Address: PO Box 99, Route 86

10.4.3 City: Ray Brook
10.4.4 State or Province: New York
10.4.5 Postal Code: 12977
10.4.6 Country: USA
10.5 Contact Voice Telephone: (518) 891-4050
10.7 Contact Facsimile Telephone: (518) 891-3938
10.9 Hours of Service: 9:00 AM to 5:00 PM ET Monday through Friday

2.5.2 Process Step
2.5.2.1 Process Description:
The two sets of watershed delineations were reconciled by a third individual overlaying the two maps on a light table. Most differences occurred in areas of flat areas with low topographic relief, or where the exact location of the pond outlet location was not clear. In several instances more than one outlet was present for an individual pond. Differences between the two maps were minimized using 1:24000 black and white photography, 1:40000 color infrared photography, ALSC field notes defining the location of pond inlets and outlets, and field inspections.
2.5.2.2 Source Used Citation Abbreviation: WS-topos
2.5.2.3 Source Produced Citation Abbreviation: WS-topos-ck

2.5.2 Process Step
2.5.2.1 Process Description:
Once reconciled, the watershed boundaries were redrawn on unfolded topographic maps. The watershed boundaries were digitized from these final maps using a digitizing tablet. Maximum allowed RMS error for each digitizing session was 0.003 or less.
2.5.2.2 Source Used Citation Abbreviation: WS-topos-ck
2.5.2.3 Source Produced Citation Abbreviation: WSquads

2.5.2 Process Step
2.5.2.1 Process Description:
The following steps were repeated for each of the 73 7.5' USGS topographic maps in the watershed:
1: Use ARCEDIT to create a file with the four quadrangle corner tics for each 7.5' USGS quadrangle in the study area.
2.5.2.2 Source Used Citation Abbreviation: NFLSQUAD
2.5.2.5 Source Produced Citation Abbreviation: QDTIC

2.5.2 Process Step
2.5.2.1 Process Description:
2: Digitize watershed boundaries from topographic quadrangles using ARCEDIT (maximum allowable RMS error 0.003, snapdistance 20.0 meters, snaptype closest, weed tolerance 3.0 meters, and fuzzy tolerance 1.219)
2.5.2.2 Source Used Citation Abbreviation: WSquads, QDTIC
2.5.2.5 Source Produced Citation Abbreviation: QDWS

2.5.2 Process Step
2.5.2.1 Process Description:
3: CLEAN QDWS QDWSCLN 0.00 1.219 Clean digitized watershed file. BUILD coverage.
2.5.2.2 Source Used Citation Abbreviation: QDWS
2.5.2.5 Source Produced Citation Abbreviation: QDWSCLN

2.5.2 Process Step
2.5.2.1 Process Description:
4: Create hard copy of digital watershed file and compare to watersheds delineated on USGS topographic maps. Make corrections as necessary. CLEAN or BUILD as appropriate.
2.5.2.2 Source Used Citation Abbreviation: QDWSCLN, WSquads
2.5.2.5 Source Produced Citation Abbreviation: QDWSPLT, QDWSCK

2.5.2 Process Step
2.5.2.1 Process Description:
5: CLIP QDWSCK QD QDWSCLP NET Clip manually digitized watershed arcs with quadrangle border. BUILD coverage.
2.5.2.2 Source Used Citation Abbreviation: QDWSCK
2.5.2.5 Source Produced Citation Abbreviation: QDWSCLP

2.5.2 Process Step

2.5.2.1 Process Description:
6: UNION QDWSCLP BLUELN QDWSUN 0.00 Append Adirondack Park boundary to each quadrangle that included the Park boundary. Interactively edit boundary arcs to identify the outer study area boundary.
2.5.2.2 Source Used Citation Abbreviation: QDWSCLP, BLUELN
2.5.2.5 Source Produced Citation Abbreviation: QDWSUN
2.5.2 Process Step
2.5.2.1 Process Description:
7: EDGEMATCH QDWSCLP QDWSEDG Use this interactive Arc level command to perform heads-up editing in which individual nodes are matched along adjacent coverage boundaries.
2.5.2.2 Source Used Citation Abbreviation: QDWSCLP
2.5.2.5 Source Produced Citation Abbreviation: QDWEDG
2.5.2 Process Step
2.5.2.1 Process Description:
8: Heads-up editing in ARCEDIT to assign arc User-ID values. These values were used to check major subwatershed boundaries.
2.5.2.2 Source Used Citation Abbreviation: QDWSEDG
2.5.2.5 Source Produced Citation Abbreviation: QDWSARC
2.5.2 Process Step
2.5.2.1 Process Description:
APPEND OBWSHDS NET NONE
APPEND all 73 QDWSARC coverages into a single coverage.
BUILD polygon topology.
2.5.2.2 Source Used Citation Abbreviation: QDWSARC
2.5.2.5 Source Produced Citation Abbreviation: UHWSHD
2.5.2 Process Step
2.5.2.1 Process Description:
EXPORT COVER OBWSHD OBWSECP N
Export watershed coverage, compress using WinZip and send to NYS APA.
2.5.2.2 Source Used Citation Abbreviation: UHWSHD
2.5.2.5 Source Produced Citation Abbreviation: UHWSHD.ZIP
2.5.2 Process Step
2.5.2.1 Process Description:
IMPORT COVER UHWSHD UHWSHD1
Uncompress UHWSHD.ZIP using WinZip and IMPORT to NYS APA
Arc/Info 7.2.1 Upper Hudson Database.
2.5.2.2 Source Used Citation Abbreviation: UHWSHD.ZIP
2.5.2.5 Source Produced Citation Abbreviation: UHWSHD1
2.5.2 Process Step
2.5.2.1 Process Description:
Regionalization Step 1: Add THIS#, FLOWTO#, CLASS to UHWSHD1.PAT.
2.5.2.2 Source Used Citation Abbreviation: UHWSHD1
2.5.2.5 Source Produced Citation Abbreviation: UHWSHD2
2.5.2 Process Step
2.5.2.1 Process Description:
Regionalization Step 2: Copy User-ID value to THIS#.
2.5.2.2 Source Used Citation Abbreviation: UHWSHD2
2.5.2.5 Source Produced Citation Abbreviation: UHWSHD3
2.5.2 Process Step
2.5.2.1 Process Description:
Regionalization Step 3: Assign correct THIS# value to FLOWTO# for each polygon.
2.5.2.2 Source Used Citation Abbreviation: UHWSHD3
2.5.2.5 Source Produced Citation Abbreviation: UHWSHD4
2.5.2 Process Step
2.5.2.1 Process Description:
Regionalization Step 4: Assign CLASS value to indicate drainage type.
2.5.2.2 Source Used Citation Abbreviation: UHWSHD4

2.5.2.5 Source Produced Citation Abbreviation: UHWSHD5
2.5.2 Process Step
2.5.2.1 Process Description:
Regionalization Step 5: Convert to regions using THIS# and FLOWTO#.
2.5.2.2 Source Used Citation Abbreviation: UHWSHD5
2.5.2.5 Source Produced Citation Abbreviation: UHWSHD6
2.5.2 Process Step
2.5.2.1 Process Description:
Regionalization Step 6: Add NSUBS to region table and calculate NSUBS to equal the number of polygons per region.
2.5.2.2 Source Used Citation Abbreviation: UHWSHD6
2.5.2.5 Source Produced Citation Abbreviation: UHWSHED

2.6 Cloud Cover: 0
3 Spatial Data Organization Information
3.1 Indirect Spatial Reference:
Watershed polygons were delineated as the upland area draining immediately through the watershed pour point, and do not include upstream tributary ponds or rivers. The Arc/Info Region data model was used to combine these local watershed polygons into a single region polygon representing the area of the immediate watershed and upstream tributaries if any.
3.2 Direct Spatial Reference Method: Vector
3.3 Point and Vector Object Information
3.3.1.1 SDTS Point and Vector Object Type: Complete chain
3.3.1.2 Point and Vector Object Count: 3119
3.3.1.1 SDTS Point and Vector Object Type: Label point
3.3.1.2 Point and Vector Object Count: 953
4 Spatial Reference Information
4.1 Horizontal Coordinate System Definition
4.1.2 Planar
4.1.2.2 Grid Coordinate System
4.1.2.2.1 Grid Coordinate System Name: Universal Transverse Mercator
4.1.2.2.2 Universal Transverse Mercator
4.1.2.2.2.1 UTM Zone Number: 18
4.1.2.1.2.2 Longitude of Central Meridian: -75
4.1.2.1.2.3 Latitude of Projection Origin: 0
4.1.2.1.2.4 False Easting: 0
4.1.2.1.2.5 False Northing: 0
4.1.2.1.2.17 Scale Factor at Central Meridian: 1
4.1.2.4 Planar Coordinate Information
4.1.2.4.2 Coordinate Representation
4.1.2.4.2.1 Abscissa Resolution: 0.1
4.1.2.4.2.2 Ordinate Resolution: 0
4.1.2.1.1 Planar Distance Units: meters
4.1.4 Geodetic Model
4.1.4.1 Horizontal Datum Name: North American Datum of 1927
4.1.4.2 Ellipsoid Name: Clarke 1866
4.1.4.3 Semi-Major Axis: 6378206
4.1.4.4 Denominator of Flattening Ratio: 294.98

5 Entity and Attribute Information
5.1 Detailed Description
5.1.1 Entity Type
5.1.1.1 Entity Type Label: UHWSHED.PAT
5.1.1.2 Entity Type Definition: Polygon attribute table
5.1.1.3 Entity Type Definition Source: Arc/Info
5.1.2 Attribute
5.1.2.1 Attribute Label: AREA

5.1.2.2 Attribute Definition: Area of polygon in square coverage, positive real numbers (the universe polygon possesses a negative value).
5.1.2.3 Attribute Definition Source: computed
5.1.2.5 Attribute Units of Measurement: square meters
5.1.2.6 Attribute Measurement Resolution: 0.001
5.1.2.7 Beginning Date of Attribute Values: 1945
5.1.2.8 Ending Date of Attribute Values: 1990
5.1.2.9 Attribute Value Accuracy Information
5.1.2.9.2 Attribute Value Accuracy Explanation: Automatic software calculation
5.1.2.10 Attribute Measurement Frequency: As Needed
5.1.2 Attribute
5.1.2.1 Attribute Label: PERIMETER
5.1.2.2 Attribute Definition: Perimeter of polygon in coverage units, positive real numbers.
5.1.2.3 Attribute Definition Source: computed by software
5.1.2.5 Attribute Units of Measurement: meters
5.1.2.6 Attribute Measurement Resolution: 0.001
5.1.2.7 Beginning Date of Attribute Values: 1945
5.1.2.8 Ending Date of Attribute Values: 1990
5.1.2.9 Attribute Value Accuracy Information
5.1.2.9.2 Attribute Value Accuracy Explanation: Automatic software calculation
5.1.2.10 Attribute Measurement Frequency: As Needed
5.1.2 Attribute
5.1.2.1 Attribute Label: UHWSHED#
5.1.2.2 Attribute Definition: Internal feature number.
5.1.2.3 Attribute Definition Source: software assigned
5.1.2.5 Attribute Units of Measurement: integer
5.1.2.6 Attribute Measurement Resolution: 1
5.1.2.7 Beginning Date of Attribute Values: coverage date
5.1.2.9 Attribute Value Accuracy Information
5.1.2.9.2 Attribute Value Accuracy Explanation: Automatic software calculation
5.1.2.10 Attribute Measurement Frequency: As Needed
5.1.2 Attribute
5.1.2.1 Attribute Label: UHWSHED-ID
5.1.2.2 Attribute Definition: User-assigned feature number.
5.1.2.3 Attribute Definition Source: User-defined
5.1.2.4 Attribute Domain Values
5.1.2.4.1 Enumerated Domain
5.1.2.4.1.1 Enumerated Domain Value: unique positive integer
5.1.2.4.1.2 Enumerated Domain Value Definition: User-defined values used to identify each polygon, no particular numerical assignment that is linked to other attributes.
5.1.2.4.1.3 Enumerated Domain Value Definition Source: user-defined
5.1.2.5 Attribute Units of Measurement: integer
5.1.2.6 Attribute Measurement Resolution: 1
5.1.2.7 Beginning Date of Attribute Values: Coverage date
5.1.2.10 Attribute Measurement Frequency: As Needed
5.1.2 Attribute
5.1.2.1 Attribute Label: POND
5.1.2.2 Attribute Definition: Pond number.
5.1.2.3 Attribute Definition Source: NYS DEC Biological Survey Unit and ALSC
5.1.2.4 Attribute Domain Values
5.1.2.4.1 Enumerated Domain
5.1.2.4.1.1 Enumerated Domain Value:
Numeric and combination numeric/alpha value: First two digits represent the greater watershed (05 is Upper Hudson) and the remaining four digits and optional letter identify the individual pond. Mixed alpha and numeric values denote major riverine systems within the study area.
5.1.2.4.1.2 Enumerated Domain Value Definition:

The polygon represents the immediate watershed of ponds as identified in the NYS DEC Biological Survey and ALSC databases or of major riverine systems as identified by NYS APA.

5.1.2.4.1.3 Enumerated Domain Value Definition Source: NYS DEC and ALSC databases for pond numbers, NYS APA for all other values.

5.1.2.7 Beginning Date of Attribute Values: Coverage date

5.1.2.10 Attribute Measurement Frequency: As Needed

5.1.2 Attribute

5.1.2.1 Attribute Label: FLOWTO#

5.1.2.2 Attribute Definition: THIS# of the receiving polygon.

5.1.2.3 Attribute Definition Source: NYS APA

5.1.2.5 Attribute Units of Measurement: Integer

5.1.2.6 Attribute Measurement Resolution: 1

5.1.2.7 Beginning Date of Attribute Values: Coverage date

5.1.2.10 Attribute Measurement Frequency: As Needed

5.1.2 Attribute

5.1.2.1 Attribute Label: THIS#

5.1.2.2 Attribute Definition: Unique identifier for each polygon.

5.1.2.3 Attribute Definition Source: NYS APA

5.1.2.5 Attribute Units of Measurement: integer

5.1.2.6 Attribute Measurement Resolution: 1

5.1.2.7 Beginning Date of Attribute Values: Coverage date

5.1.2.10 Attribute Measurement Frequency: As Needed

5.1.2 Attribute

5.1.2.1 Attribute Label: CLASS

5.1.2.2 Attribute Definition: Value denotes polygon drainage.

5.1.2.3 Attribute Definition Source: NYS APA

5.1.2.4 Attribute Domain Values

5.1.2.4.1 Enumerated Domain

5.1.2.4.1.1 Enumerated Domain Value: i

5.1.2.4.1.2 Enumerated Domain Value Definition: isolated, internally draining, no outlet

5.1.2.4.1.3 Enumerated Domain Value Definition Source: NYS APA

5.1.2.4 Attribute Domain Values

5.1.2.4.1 Enumerated Domain

5.1.2.4.1.1 Enumerated Domain Value: p

5.1.2.4.1.2 Enumerated Domain Value Definition: pond

5.1.2.4.1.3 Enumerated Domain Value Definition Source: NYS APA

5.1.2.4 Attribute Domain Values

5.1.2.4.1 Enumerated Domain

5.1.2.4.1.1 Enumerated Domain Value: r

5.1.2.4.1.2 Enumerated Domain Value Definition: riverine

5.1.2.4.1.3 Enumerated Domain Value Definition Source: NYS APA

5.1.2.4 Attribute Domain Values

5.1.2.4.1 Enumerated Domain

5.1.2.4.1.1 Enumerated Domain Value: rw

5.1.2.4.1.2 Enumerated Domain Value Definition: riverine, part of Riverwatch project

5.1.2.4.1.3 Enumerated Domain Value Definition Source: NYS APA

5.1.2.4 Attribute Domain Values

5.1.2.4.1 Enumerated Domain

5.1.2.4.1.1 Enumerated Domain Value: numeric value

5.1.2.4.1.2 Enumerated Domain Value Definition: outflow into two different polygons

5.1.2.4.1.3 Enumerated Domain Value Definition Source: NYS APA

5.1.2.5 Attribute Units of Measurement: alpha character or integer

5.1.2.6 Attribute Measurement Resolution:

5.1.2.7 Beginning Date of Attribute Values: Coverage date

5.1.2.10 Attribute Measurement Frequency: As Needed

5.1.1 Entity Type

5.1.1.1 Entity Type Label: UHWSHED.PATWSHED

5.1.1.2 Entity Type Definition: Region attribute table
5.1.1.3 Entity Type Definition Source: Arc/Info
5.1.2 Attribute
5.1.2.1 Attribute Label: AREA
5.1.2.2 Attribute Definition: Area of regional polygon in square coverage units, positive real numbers (the universe polygon possesses a negative value).
5.1.2.3 Attribute Definition Source: computed
5.1.2.5 Attribute Units of Measurement: square meters
5.1.2.6 Attribute Measurement Resolution: 0.001
5.1.2.7 Beginning Date of Attribute Values: 1945
5.1.2.8 Ending Date of Attribute Values: 1990
5.1.2.9 Attribute Value Accuracy Information
5.1.2.9.2 Attribute Value Accuracy Explanation: Automatic software calculation
5.1.2.10 Attribute Measurement Frequency: As Needed
5.1.2 Attribute
5.1.2.1 Attribute Label: PERIMETER
5.1.2.2 Attribute Definition: Perimeter of regional polygon in coverage units, positive real numbers.
5.1.2.3 Attribute Definition Source: computed by software
5.1.2.5 Attribute Units of Measurement: meters
5.1.2.6 Attribute Measurement Resolution: 0.001
5.1.2.7 Beginning Date of Attribute Values: 1945
5.1.2.8 Ending Date of Attribute Values: 1990
5.1.2.9 Attribute Value Accuracy Information
5.1.2.9.2 Attribute Value Accuracy Explanation: Automatic software calculation
5.1.2.10 Attribute Measurement Frequency: As Needed
5.1.2 Attribute
5.1.2.1 Attribute Label: WSHED#
5.1.2.2 Attribute Definition: Internal feature number.
5.1.2.3 Attribute Definition Source: software assigned
5.1.2.5 Attribute Units of Measurement: integer
5.1.2.6 Attribute Measurement Resolution: 1
5.1.2.7 Beginning Date of Attribute Values: coverage date
5.1.2.9 Attribute Value Accuracy Information
5.1.2.9.2 Attribute Value Accuracy Explanation: Automatic software calculation
5.1.2.10 Attribute Measurement Frequency: As Needed
5.1.2 Attribute
5.1.2.1 Attribute Label: WSHED-ID
5.1.2.2 Attribute Definition: User-assigned feature number.
5.1.2.3 Attribute Definition Source: User-defined
5.1.2.4 Attribute Domain Values
5.1.2.4.1 Enumerated Domain
5.1.2.4.1.1 Enumerated Domain Value: unique positive integer
5.1.2.4.1.2 Enumerated Domain Value Definition: User-defined values used to identify each polygon, no particular numerical assignment that is linked to other attributes.
5.1.2.4.1.3 Enumerated Domain Value Definition Source: user-defined
5.1.2.5 Attribute Units of Measurement: integer
5.1.2.6 Attribute Measurement Resolution: 1
5.1.2.7 Beginning Date of Attribute Values: Coverage date
5.1.2.10 Attribute Measurement Frequency: As Needed
5.1.2 Attribute
5.1.2.1 Attribute Label: THIS#
5.1.2.2 Attribute Definition: Unique identifier for each polygon.
5.1.2.3 Attribute Definition Source: NYS APA
5.1.2.5 Attribute Units of Measurement: integer
5.1.2.6 Attribute Measurement Resolution: 1
5.1.2.7 Beginning Date of Attribute Values: Coverage date
5.1.2.10 Attribute Measurement Frequency: As Needed

5.1.2 Attribute
5.1.2.1 Attribute Label: FLOWTO#
5.1.2.2 Attribute Definition: THIS# of the region receiving flow.
5.1.2.3 Attribute Definition Source: NYS APA
5.1.2.5 Attribute Units of Measurement: Integer
5.1.2.6 Attribute Measurement Resolution: 1
5.1.2.7 Beginning Date of Attribute Values: Coverage date
5.1.2.10 Attribute Measurement Frequency: As Needed
5.1.2 Attribute
5.1.2.1 Attribute Label: POND
5.1.2.2 Attribute Definition: Pond number or descriptive name.
5.1.2.3 Attribute Definition Source: NYS DEC Biological Survey Unit and ALSC
5.1.2.4 Attribute Domain Values
5.1.2.4.1 Enumerated Domain
5.1.2.4.1.1 Enumerated Domain Value:
Numeric and combination numeric/alpha value: First two digits represent the greater watershed (05 is Upper Hudson) and the remaining four digits and optional letter identify the individual pond. Mixed alpha and numeric values denote major riverine systems within the study area.
5.1.2.4.1.2 Enumerated Domain Value Definition:
The polygon represents the immediate watershed of ponds as identified in the NYS DEC Biological Survey and ALSC databases or of major riverine systems as identified by NYS APA.
5.1.2.4.1.3 Enumerated Domain Value Definition Source: NYS DEC and ALSC databases for pond numbers, NYS APA for all other values.
5.1.2.7 Beginning Date of Attribute Values: Coverage date
5.1.2.10 Attribute Measurement Frequency: As Needed
5.1.2 Attribute
5.1.2.1 Attribute Label: CLASS
5.1.2.2 Attribute Definition: Value denotes polygon drainage.
5.1.2.3 Attribute Definition Source: NYS APA
5.1.2.4 Attribute Domain Values
5.1.2.4.1 Enumerated Domain
5.1.2.4.1.1 Enumerated Domain Value: i
5.1.2.4.1.2 Enumerated Domain Value Definition: isolated, internally draining, no outlet
5.1.2.4.1.3 Enumerated Domain Value Definition Source: NYS APA
5.1.2.4 Attribute Domain Values
5.1.2.4.1 Enumerated Domain
5.1.2.4.1.1 Enumerated Domain Value: p
5.1.2.4.1.2 Enumerated Domain Value Definition: pond
5.1.2.4.1.3 Enumerated Domain Value Definition Source: NYS APA
5.1.2.4 Attribute Domain Values
5.1.2.4.1 Enumerated Domain
5.1.2.4.1.1 Enumerated Domain Value: r
5.1.2.4.1.2 Enumerated Domain Value Definition: riverine
5.1.2.4.1.3 Enumerated Domain Value Definition Source: NYS APA
5.1.2.4 Attribute Domain Values
5.1.2.4.1 Enumerated Domain
5.1.2.4.1.1 Enumerated Domain Value: rw
5.1.2.4.1.2 Enumerated Domain Value Definition: riverine, part of Riverwatch project
5.1.2.4.1.3 Enumerated Domain Value Definition Source: NYS APA
5.1.2.4 Attribute Domain Values
5.1.2.4.1 Enumerated Domain
5.1.2.4.1.1 Enumerated Domain Value: numeric value
5.1.2.4.1.2 Enumerated Domain Value Definition: outflow into two different polygons
5.1.2.4.1.3 Enumerated Domain Value Definition Source: NYS APA
5.1.2.5 Attribute Units of Measurement: alpha character or integer
5.1.2.6 Attribute Measurement Resolution:
5.1.2.7 Beginning Date of Attribute Values: Coverage date

5.1.2.10 Attribute Measurement Frequency: As Needed
5.1.2 Attribute
5.1.2.1 Attribute Label: NSUBS
5.1.2.2 Attribute Definition: Number of subwatersheds (polygons) contributing to the regional polygon.
5.1.2.3 Attribute Definition Source: NYS APA
5.1.2.5 Attribute Units of Measurement: integer
5.1.2.6 Attribute Measurement Resolution: 1
5.1.2.7 Beginning Date of Attribute Values: Coverage date
5.1.2.10 Attribute Measurement Frequency: As Needed
6 Distribution Information
6.1 Distributor
10.2 Contact Organization Primary
10.1.2 Contact Organization:
New York State Adirondack Park Agency
10.1.1 Contact Person: John W. Barge
10.3 Contact Position: Senior Natural Resource Planner
10.4 Contact Address
10.4.1 Address Type: mailing and physical address
10.4.2 Address: PO Box 99, Route 86
10.4.3 City: Ray Brook
10.4.4 State or Province: New York
10.4.5 Postal Code: 12977
10.4.6 Country: USA
10.5 Contact Voice Telephone: (518) 891-4050
10.7 Contact Facsimile Telephone: (518) 891-3938
10.8 Contact Electronic Mail Address: Jwbarge@gw.dec.state.ny.us
10.9 Hours of Service: 9:00 AM - 5:00 PM Monday through Friday
6.2 Resource Description: Upper Hudson River Drainage Arc/Info Coverage
6.3 Distribution Liability:
Although these data have been processed successfully on a computer system at the NYS APA, no warranty expressed or implied is made regarding the accuracy or utility of the data on any other system or for general or scientific purposes, nor shall the act of distribution constitute any such warranty. This disclaimer applies both to individual use of these data and aggregate use with other data. It is strongly recommended that these data be directly acquired from the NYS APA, and not indirectly through other sources which may have changed the data in some way. It is also strongly recommended that careful attention be paid to the contents of the metadata file associated with these data. The NYS APA shall not be held liable for improper or incorrect use of the data described and/or contained herein. These data shall not be used for legal jurisdictional determinations.
6.4 Standard Order Process
6.4.2 Digital Form
6.4.2.1.1 Format Name: ARCE uncompressed, in PK zip compressed format
6.4.2.1.3 Format Version Date: December 31, 1999
6.4.2.1.5 Format Information Content: EXPORT with no compression
6.4.2.1.6 File Decompression Technique: PK unzip or compatible method
6.4.2.2 Digital Transfer Option
6.4.2.2.2 Online Option
Data is available from the New York State Gis Metadata Repository. The New York State Gis Metadata Repository can be found at http://www.nysl.nysed.gov/gis/repository/index.html. Once at this site, navigate to the Adirondack Park Agency.
7 Metadata Reference Information
7.1 Metadata Date: 19991231
7.4 Metadata Contact:
10.2 Contact Organization Primary
10.1.2 Contact Organization: Remote Sensing Laboratory, Plattsburgh State University
10.1.1 Contact Person: Eileen B. Allen
10.3 Contact Position: Research Associate
10.4 Contact Address

10.4.1 Address Type: mailing and physical address
10.4.2 Address: Center for Earth and Environmental Science, 101 Broad Street
10.4.3 City: Plattsburgh
10.4.4 State or Province: New York
10.4.5 Postal Code: 12901
10.4.6 Country: USA
10.5 Contact Voice Telephone: (518) 564-4029 or 564-2028
10.7 Contact Facsimile Telephone: (518) 564-5267
7.5 Metadata Standard Name: FGDC Content Standard For Digital Geospatial Metadata
7.6 Metadata Standard Version: June 8, 1994 (Version 1.0)
7.7 Metadata Time Convention: local time
7.8 Metadata Access Constraints: None
7.9 Metadata Use Constraints: None
7.10 Metadata Security Information
7.10.1 Metadata Security Classification System: None
7.10.2 Metadata Security Classification: Unclassified
7.10.3 Metadata Security Handling Description: None

Appendix 3: Legend for Adirondack Park Wetlands Mapping Project

SYSTEMS AND SUBSYSTEMS

R Riverine
- 1 Tidal
- 2 Lower Perennial
- 3 Upper Perennial
- 4 Intermittent
- 5 Unknown Perennial*

L Lacustrine
- 1 Limnetic
- 2 Littoral

P Palustrine
- No Subsystems

U Upland

CLASSES AND SUBCLASSES

SS Scrub/Shrub
- 1 Broad-Leaved Deciduous
- 2 Needle-Leaved Deciduous
- 3 Broad-Leaved Evergreen
- 4 Needle-Leaved Evergreen
- 5 Dead
- 6 Deciduous*
- 7 Evergreen*

FO Forested
- 1 Broad-Leaved Deciduous
- 2 Needle-Leaved Deciduous
- 3 Broad-Leaved Evergreen
- 4 Needle-Leaved Evergreen
- 5 Dead
- 6 Deciduous*
- 7 Evergreen*

OW Open Water/Unknown Bottom*

AB Aquatic Bed
- 1 Algal
- 2 Aquatic Moss
- 3 Rooted Vascular
- 4 Floating Vascular
- 5 Unknown Submergent*
- 6 Unknown Surface*

ML Moss/Lichen
- 1 Moss
- 2 Lichen

RS Rock Bottom
- 1 Bedrock
- 2 Rubble

UB Unconsolidated Bottom
- 1 Cobble/Gravel
- 2 Sand
- 3 Mud
- 4 Organic

RS Rocky Shore
- 1 Bedrock
- 2 Rubble

EM Emergent
- 1 Persistent
- 2 Nonpersistent

US Unconsolidated Shore
- 1 Cobble/Gravel
- 2 Sand
- 3 Mud
- 4 Organic
- 5 Vegetated

SB Streambed
- 1 Bedrock
- 2 Rubble
- 3 Cobble/Gravel
- 4 Sand
- 5 Mud
- 6 Organic
- 7 Vegetated

WATER REGIME MODIFIERS

Nontidal
- A Temporary
- B Saturated
- C Seasonal
- D Seasonally Flooded-Well Drained
- E Seasonally Flooded-Saturated
- F Semipermanent
- G Intermittently Exposed
- H Permanent
- J Intermittently Flooded

Nontidal Combined
- Z Intermittently Exposed/Permanent (G,E above)*
- W Intermittently Flooded/Temporary (A,J above)*
- Y Saturated Semipermanent/All Seasonals (B,C,D,E,F above)*

Nontidal and Tidal
- U Unknown
- K Artificial

SPECIAL MODIFIERS

Special
- b Beaver
- d Partially Drained/Ditched
- f Farmed
- h Diked/Impounded
- r Artificial
- s Spoil
- x Excavated
- /U Upland Covertype Mixed with Wetland

Soils
- g Organic
- n Mineral

pH Freshwater
- a Acid
- t Circumneutral
- l Alkaline

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*Not included in "Classification of Wetlands and Deepwater Habitats of the United States." Created specifically for National Wetland Inventory mapping efforts.

Appendix 4. Metadata For Digital Wetland Maps for t he Greater Upper Hudson Watershed

Report Date: 30-September-1999
Metadata Data Set Name: Wetlands in the Greater Upper Hudson River Watershed
1 Identification Information
1.1 Citation:
8 Citation Information:
8.1 Originator: New York State Adirondack Park Agency
8.1 Originator: Daniel M. Spada, Project Director (compiler)
8.2 Publication Date: 19991231
8.4 Title: New York State Adirondack Park Wetland Boundaries in the Upper Hudson Drainage Basin
8.5 Edition: Version 1.0
8.6 Geospatial Data Presentation Form: map
8.7 Series Information:
8.7.1 Series Name: Watershed Scale Protection for Adirondack Wetlands
8.7.2 Issue Identification: Implementing a Procedure to Assess Cumulative Effects and Predict Cumulative Impacts from Development Activities to Wetlands and Watersheds in the Oswegatchie, Black, and Greater Upper Hudson River Watersheds of the Adirondack Park, New York State, USA.
8.8 Publication Information:
8.8.1 Publication Place: Ray Brook, NY
8.8.2 Publisher: New York State Adirondack Park Agency

1.2 Description
1.2.1 Abstract: A set of 73 USGS 7.5' quadrangle-based wetland coverages was prepared for the Greater Upper Hudson River watershed, primarily within the New York State Adirondack Park (Table 1) using PC Arc/Info 3.4D+ at the Remote Sensing Laboratory, Plattsburgh State University (RSL). Wetlands were delineated on 1:40000 color infrared NAPP transparencies or 1:58000 color infrared NHAP transparencies, transferred to orthophoto overlays using an Image Interpretations Systems Stereo Zoom Transfer Scope, and either hand digitized or scanned into PC Arc/Info format. A digital file extracted from the watershed data layer defined the outer boundary of the mapped area. This wetlands database consists of both polygon and linear features labeled using National Wetlands Inventory conventions. The 73 individual quadrangle files were exported to the New York State, Executive Department, Adirondack Park Agency (NYS APA) running Arc/Info version 7.2.1.
1.2.2 Purpose: The wetlands database is part of a larger database designed to help evaluate watershed/wetland relationships and provide data for cumulative impact assessments.
1.2.3 Supplemental Information: Line drawings for 60 quadrangle-based wetland coverages were scanned by Applied Ordnance Technology, Waldorf, Maryland. The remaining 13 quadrangle-based coverages were hand digitized (Street Mtn., North Elba, Deerland, Sargent Ponds, Silver Bay, Hoffmeister, Lake George, Morehouse Lake, Glens Falls, Canada Lake, Corinth, Peck Lake (no wetlands), and Middle Grove). Digital files were transformed into the UTM coordinate system, edited, and attributed by the Remote Sensing Laboratory, SUNY, Plattsburgh.

Digital files were georeferenced into a digital quadrangle file containing four bounding tics using PC Arc/Info 3.4D+. Maximum allowable RMS was 0.003, snapdistance 20.0 meters, snaptype closest, weed tolerance 3.0 meters, and a fuzzy tolerance of 1.219 meters. Hard copies of the digital coverage showing arcs, dangle nodes, and label points were carefully checked against the line overlay for digitizing or scanning accuracy. Wetland labels were added as label components using a digitizer menu customized for this project. A label overlay was placed over the line drawing, and arc and wetland labels were assigned on the digitizer. Wetland label columns were concatenated into a unified wetland label using dBase IV. A hard copy of the wetland coverage was made showing NWI wetland labels and each label was checked against the label overlay. Wetland labels follow the conventions established by Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. FWS/OBS-79/31. Office of Biological Services, U.S. Fish and Wildlife Service. U.S. Department of the Interior, Washington, D.C. 103 pp. Some modifications to the conventions were made

to accommodate this project and are noted in the final project report. Files were transported to the NYS APA as Arc/Info export files (no compression) compressed with WinZip on 100 MB Zip disks.

1.3 Time Period of Content
9 Time Period Information
9.3 Range of Dates/Times
9.3.1 Beginning Date: 19850417
9.3.3 Ending Date: 19950517
1.3.1 Currentness Reference: imagery date
1.4 Status
1.4.1 Progress: Complete
1.4.2 Maintenance and Update Frequency: As needed
1.5 Spatial Domain
1.5.1 Bounding Coordinates
1.5.1.1 West Bounding Coordinate: -74.649
1.5.1.2 East Bounding Coordinate: -73.5392
1.5.1.3 North Bounding Coordinate: 44.1477
1.5.1.4 South Bounding Coordinate: 43.0127
1.6 Keywords
1.6.1 Theme
1.6.1.1 Theme Keyword Thesaurus: None
1.6.1.2 Theme Keyword: Wetlands
1.6.1.2 Theme Keyword: Vegetation
1.6.1.2 Theme Keyword: NWI cover types
1.6.1.2 Theme Keyword: Geographic Information System (GIS)
1.6.1.2 Theme Keyword: Arc/Info
1.6.2 Place
1.6.2.1 Place Keyword Thesaurus: Geographic Names Information System
1.6.2.2 Place Keyword: New York
1.6.2.2 Place Keyword: Adirondack Park
1.6.2.2 Place Keyword: Adirondack Mountains
1.6.2.2 Place Keyword: Upper Hudson River Drainage Basin
1.6.2.2 Place Keyword: Hudson River
1.6.3 Stratum
1.6.3.1 Stratum Keyword Thesaurus: None
1.6.4 Temporal
1.6.4.1 Temporal Keyword Thesaurus: None
1.6.4.2 Temporal Keyword: Date of aerial photography: 1985-1995
1.6.4.2 Temporal Keyword: Date of orthophoto quadrangles: 1976-1986
1.7 Access Constraints: None
1.8 Use Constraints: These data may not be used for legal determinations. Please credit use of this data set to the New York State Adirondack Park Agency, Ray Brook, New York 12977. Please send a copy of an reports or papers in which these data were used or referenced to the above address, Attention, Nancy Heath Librarian.
1.10 Browse Graphic: none
1.11 Data Set Credit: Funding was provided by the US Environmental Protection Agency Office of Wetlands Protection; State Wetlands Protection Program; Project #CD 992290-01-0 to the New York State Adirondack Park Agency. Subcontractors for portions of the grant were the Remote Sensing Laboratory, Plattsburgh State University (RSL) and the Adirondack Lakes Survey Corporation, NYS Department of Environmental Conservation (ALSC).
1.12 Security Information
1.12.1 Security Classification System: None
1.12.2 Security Classification: Unclassified
1.12.3 Security Handling Description: None

1.13 Native Data Set Environment: PC-Arc/Info, Arc/Info

2 Data Quality Information

2.1 Attribute Accuracy

2.1.1 Attribute Accuracy Report:

Attributes assigned to polygon features consist of unique User-Ids, quadrangle identification codes, and wetland labels. Linear attributes include a User-ID (to distinguish between quadrangle borders, the study area boundary, and wetland arcs), ARCVALUE to uniquely identify the quadrangle borders throughout the study area, and wetland labels. Polygon and linear wetland labels were derived from photointerpretation techniques. Wetland labels were entered by superimposing the orrthophoto label overlay upon a hard copy of the wetland coverage arcs and labels on a digitizing table. To minimize typographical errors, both polygon and linear wetland labels were entered utilizing a digitizer menu consisting of columns representing wetland label components. Label columns were concatenated in dBase IV to create a unified wetland cover type label. Hard copies of wetland coverages were printed and labels were individually checked against the orthophoto overlays. Arc User-IDs and ARCVALUE were visually checked on the computer screen for integrity and labeling accuracy.

2.1.2 Quantitative Attribute Accuracy Assessment

2.1.2.1 Attribute Accuracy Value: unknown

2.1.2.2 Attribute Accuracy Explanation:

Polygon and linear wetland cover type labels were derived from photointerpretation techniques. All photo overlays were checked by an independent interpreter for missing wetlands, uplands delineated as wetland, incorrectly delineated polygons, missing wetland labels, and incorrect wetland labels. Photo overlays were directly compared to orthophoto overlays utilizing a Kail Reflecting Reducer/Enlarger. This process helped to verify the transfer of wetland cover type labels and to discover missing arcs. Digitized and scanned coverage hard copies were directly compared to orthophoto overlays to check for missing arcs. The process of digitally labeling the wetland coverages also helped to resolve some missing, incomplete, and nonsensical labels. A hard copy was made of each coverage and both arc and wetland labels were compared to the orthophoto overlays. Linear wetlands were color-coded to facilitate proofing. Finally, all wetland labels were printed in tabular form and proof-read to ensure both complete labeling of the coverage and logical label content.

2.2 Logical Consistency Report:

Polygons: All polygons were required to possess either a wetland or upland cover type (i.e., a SYSTEM entry and therefore a final NWILABEL entry were mandatory). During the labeling process, digital polygons were checked for the presence of a label point and incomplete polygons were repaired. All wetlands were digitized (or for scanned files, transformed) into a blank quadrangle file containing quadrangle boundaries and tics.

Arcs: Only linear wetlands arcs received a wetland label. Printouts were made color-coding linear wetlands to help discover those linear wetlands missing a label or those which were labeled improperly. Only linear wetlands were allowed to exhibit dangle nodes.

General: PC Arc/Info's DISSOLVE program was used to identify adjacent polygons inappropriately possessing the same wetland label, and to identify arcs that should have received a wetland label but did not.

Inter-coverage consistency: PC Arc/Info's EDGEMATCH routine was utilized to match arcs between coverages. Wetland labels along adjacent coverage edges were proofread using ArcView 2.0 and 3.1 and corrected in PC Arc/Info ArcEdit.

2.3 Completeness Report: Extensive quality assurance/quality control measures were taken for all steps of database creation. All wetland labels were reviewed for conformance to National Wetlands Inventory standards. It is expected that because the derivation of data from photointerpretation techniques, uncorrectable errors and mistakes may be present. Identifiable mistakes will be corrected as needed. These wetland maps contain only those wetlands that were identifiable from aerial photographs.

2.4 Positional Accuracy

2.4.1 Horizontal Positional Accuracy

2.4.1.1 Horizontal Positional Accuracy Report:

The outer arc of all individual quadrangle-based wetland files correspond to USGS 7.5' quadrangle boundaries. Wetlands were digitized or transformed (scanned files) into the quadrangle template with a UTM Zone 18 projection and metric coordinates. Horizontal positional accuracy has error potential from several different steps: photointerpretation, transfer to orthophotos, and digitizing techniques. Maximum allowable RMS error was 0.003 for each digitizing session. While great care was taken at every step, no formal quantitative accuracy assessment was conducted. An attempt was made in all mapping operations (delineation, transfer, digitizing) to have horizontal accuracy correct to plus or minus one pencil width (about 12 meters at 1:24000).

2.4.2.1 Vertical Positional Accuracy Report:
No vertical coordinates are associated with this data set. Topographic displacements of air photo delineations were corrected to match USGS orthophoto quadrangles using an IIS Stereo Zoom Scope.

2.5.1 Source Information
2.5.1.1 Source Citation:
8.1 Originator: Northern Forest Lands Project, SUNY ESF (ed.)
8.2 Publication Date: 19910725
8.4 Title: Northern Forest Lands Quadrangle File (derived from the data set "NYTM Coordinates 11/22/89" purchased from NYSDOT - Mapping Services Bureau)
2.5.1.3 Type of Source Media: disc
2.5.1.4 Source Time Period of Content:
9 Time Period Information
9.1 Single Date/Time
9.1.1 Calendar Date: 19910725
2.5.1.4.1 Source Currentness Reference: coverage date
2.5.1.5 Source Citation Abbreviation: NFLSQUAD
2.5.1.6 Source Contribution: Subsets provided quadrangle border and corner tic templates for digitizing into or for transforming scanned files to ground coordinates.

2.5.1 Source Information
2.5.1.1 Source Citation:
8.1 Originator: USGS
8.2 Publication Date: various
8.4 Title: USGS 7.5' and 7.5' X 15' Topographic Quadrangles
8.6 Geospatial Data Presentation Form: map
2.5.1.2 Source Scale Denominator: 24000 or 25000
2.5.1.3 Type of Source Media: paper
2.5.1.4 Source Time Period of Content:
9 Time Period Information
9.3 Range of Dates/Times
9.3.1 Beginning Date: 1945
9.3.3 Ending Date: 1990
2.5.1.4.1 Source Currentness Reference: publication date
2.5.1.5 Source Citation Abbreviation: WSQUADS
2.5.1.6 Source Contribution: Used to determine quadrangle-based study area boundary. See Table 1 for USGS 7.5' quadrangles used in this project.

2.5.1 Source Information
2.5.1.1 Source Citation:
8.1 Originator: USGS
8.2 Publication Date: various
8.4 Title: National Aerial Photography Program (NAPP)
8.6 Geospatial Data Presentation Form: aerial photograph
2.5.1.2 Source Scale Denominator: 40000
2.5.1.3 Type Of Source Media: 9" X 9" color infrared vertical aerial photographic transparencies

2.5.1.4 Source Time Period of Content:
9 Time Period Information
9.3 Range of Dates/Times
9.3.1 Beginning Date: 19940514
9.3.3 Ending Date: 19950507
2.5.1.4.1 Source Currentness Reference: flight dates
2.5.1.5 Source Citation Abbreviation: PHOTOS
2.5.1.6 Source Contribution: Source for wetlands delineations and cover types for all but the nine quadrangles where this imagery was unavailable.

2.5.1 Source Information
2.5.1.1 Source Citation:
8.1 Originator: USGS
8.2 Publication Date: various
8.4 Title: National High Altitude Photography (NHAP)
8.6 Geospatial Data Presentation Form: aerial photograph
2.5.1.2 Source Scale Denominator: 58000
2.5.1.3 Type Of Source Media: 9" X 9" color infrared vertical aerial photographic transparencies
2.5.1.4 Source Time Period of Content:
9 Time Period Information
9.3 Range of Dates/Times
9.3.1 Beginning Date: 19850417
9.3.3 Ending Date: 19861031
2.5.1.4.1 Source Currentness Reference: Flight dates
2.5.1.5 Source Citation Abbreviation: PHOTOS
2.5.1.6 Source Contribution: Source for wetlands delineations and cover types for nine quadrangles (Morehouse Lake, Tomany Mountain, Whitehouse, Canada Lake, Caroga Lake, Jackson Summit, Peck Lake, Gloversville, and Lake Luzerne) where 1:40000 CIR imagery was unavailable.

2.5.1 Source Information
2.5.1.1 Source Citation:
8.1 Originator: USGS
8.2 Publication Date: various
8.4 Title: USGS 7.5' Orthophotoquad
8.6 Geospatial Data Presentation Form: map
2.5.1.2 Source Scale Denominator: 24000
2.5.1.3 Type of Source Media: stable-base material
2.5.1.4 Source Time Period of Content:
9 Time Period Information
9.3 Range of Dates/Times
9.3.1 Beginning Date: 19760513
9.3.3 Ending Date: 19870512
2.5.1.4.1 Source Currentness Reference: Date of aerial photograph used for orthophoto creation.
2.5.1.5 Source Citation Abbreviation: ORTHO
2.5.1.6 Source Contribution: Map base for transfer of wetland photo overlay delineations.
2.5.2 Process Step
2.5.2.1 Process Description: Wetlands polygons were transferred from aerial photograph overlays to orthophoto overlays using an IIS Stereo Zoom Transfer Scope. The orthophoto overlays were either digitized or scanned, depending upon wetland complexity and extent.
2.5.2.2 Source Used Citation Abbreviation: PHOTO wetland overlay
2.5.2.5 Source Produced Citation Abbreviation: ORTHO-POLY
2.5.2.6 Process Contact
10.2 Contact Organization Primary
10.1.2 Contact Organization: Remote Sensing Laboratory, Plattsburgh State University

10.1.1 Contact Person: Eileen B. Allen
10.3 Contact Position: Research Associate
10.4 Contact Address
10.4.1 Address Type: mailing and physical address
10.4.2 Address: Center for Earth and Environmental Science, 101 Broad Street
10.4.3 City: Plattsburgh
10.4.4 State or Province: New York
10.4.5 Postal Code: 12901
10.4.6 Country: USA
10.5 Contact Voice Telephone: (518) 564-4029 or 564-2028
10.7 Contact Facsimile Telephone: (518) 564-5267
10.8 Contact Electronic Mail Address: eileen.allen@plattsburgh.edu
10.9 Hours of Service: 8:30 AM - 4:30 PM Monday through Friday

2.5.2 Process Step
2.5.2.1 Process Description:
Wetland labels were created by transferring wetland labels denoted on aerial photograph overlays using a Kail Reflecting Reducer/Enlarger to orthophoto overlays.
2.5.2.2 Source Used Citation Abbreviation: PHOTO wetland overlay
2.5.2.5 Source Produced Citation Abbreviation: ORTHO-LABEL
2.5.2.6 Process Contact: See previous step creating ORTHO-POLY.

2.5.2 Process Step
2.5.2.1 Process Description:
Create a file using ArcEdit with four quadrangle border arcs and four corner tics for each 7.5' USGS quadrangle in the study area. Build each coverage and assign ARCVALUE, DECQUAD, APAQUAD, METRICQD, and appropriate arc User-IDs.
2.5.2.2 Source Used Citation Abbreviation: NFLSQUAD
2.5.2.5 Source Produced Citation Abbreviation: QD

2.5.2 Process Step
2.5.2.1 Process Description:
Using ArcEdit, ADD wetland arcs into QD file for each hand-digitized quadrangle.
2.5.2.2 Source Used Citation Abbreviation: QD
2.5.2.5 Source Produced Citation Abbreviation: WTLDIG

2.5.2 Process Step
2.5.2.1 Process Description:
Clean digitized wetlands file (CLEAN WTLDIG WTLCLN 0.00 1.219).
Calculate all arc User-IDs to a value of 6.
BUILD coverage.
2.5.2.2 Source Used Citation Abbreviation: WTLDIG
2.5.2.5 Source Produced Citation Abbreviation: WTLCLN

2.5.2 Process Step
2.5.2.1 Process Description:
Clip manually digitized wetland arcs with quadrangle border (CLIP WTLCLN QD WTLFILED).
BUILD coverage.
2.5.2.2 Source Used Citation Abbreviation: WTLCLN
2.5.2.5 Source Produced Citation Abbreviation: WTLFILED

2.5.2 Process Step
2.5.2.1 Process Description:

Import scanned wetland file (IMPORT COVER SCANMAP WTLMAP). Tics were scanned as label points; reassign label locations as tic locations using TABLES. Remove label points, old tics, and BUILD coverage.

2.5.2.5 Source Produced Citation Abbreviation: WTLMAP

2.5.2 Process Step

2.5.2.1 Process Description:

Copy quadrangle file (COPYCOV QD QTLTIC) and create a tic-only file with UTM coordinates. BUILD coverage.

2.5.2.2 Source Used Citation Abbreviation: QD

2.5.2.5 Source Produced Citation Abbreviation: WTLTIC

2.5.2 Process Step

2.5.2.1 Process Description:

Transform scanned polygons (digitizer units) into the empty tic file (UTM coordinates) (TRANSFORM WTLMAP WTLTIC).

2.5.2.2 Source Used Citation Abbreviation: WTLMAP, WTLTIC

2.5.2.5 Source Produced Citation Abbreviation: WTLTIC

2.5.2 Process Step

2.5.2.1 Process Description:

Clean scanned wetlands file (CLEAN WTLTIC WTLFILES 0.00 1.219).
Calculate all arc User-Ids to a value of 6. BUILD coverage.

2.5.2.2 Source Used Citation Abbreviation: WTLTIC

2.5.2.5 Source Produced Citation Abbreviation: WTLFILES

2.5.2 Process Step

2.5.2.1 Process Description:

COPYCOV WSQUADS WSA. Edit WSA in ArcEdit to retain only the outer study area boundary (Upper Hudson River watershed and Adirondack Park boundary). BUILD file.

2.5.2.2 Source Used Citation Abbreviation: WSQUADS

2.5.2.5 Source Produced Citation Abbreviation: WSA

2.5.2 Process Step

2.5.2.1 Process Description:

Add outer study area boundary to 7.5' quadrangle boundary (UNION WSA QD BOUND 0.00) as needed. Delete extraneous arcs (quadrangle borders outside of study area) to create a clipping polygon. CREATELABELS and BUILD.

2.5.2.2 Source Used Citation Abbreviation: WSA

2.5.2.5 Source Produced Citation Abbreviation: BOUND

2.5.2 Process Step

2.5.2.1 Process Description:

Add study area boundary to wetland file and clip arcs to that border (IDENTITY BOUND WTLFILED WTLBOR POLY 0.00 or IDENTITY BOUND WTLFILES WTLBOR POLY 0.00) as necessary.

2.5.2.2 Source Used Citation Abbreviation: WTLFILED or WTLFILES

2.5.2.5 Source Produced Citation Abbreviation: WTLBOR

2.5.2 Process Step

2.5.2.1 Process Description:

Add quadrangle boundary to WTLBOR to produce a final wetland polygon file (IDENTITY QD WTLBOR WTL POLY 0.00) ready for wetland label additions.

2.5.2.2 Source Used Citation Abbreviation: QD

2.5.2.5 Source Produced Citation Abbreviation: WTL

2.5.2 Process Step
2.5.2.1 Process Description:
Add appropriate arc and polygon label columns to each wetland coverage with a macro. Create label point with unique User-ID for each polygon (CREATELABELS WTLFILED, CREATELABELS WTLFILES, or CREATELABELS WTL). BUILD and check with LABELERRORS. Double-check all polygons less than 500 square meters for digitizing or scanning errors. Calculate unique User-IDs for wetland arcs.
2.5.2.2 Source Used Citation Abbreviation: WTLFILED, WTLFILES, or WTL
2.5.2.5 Source Produced Citation Abbreviation: WTLA

2.5.2 Process Step
2.5.2.1 Process Description:
Create hard copy of coverage in ArcPlot showing label points and arcs. Check against ORTHO-POLY. Use this map for arc and polygon label entry.
2.5.2.2 Source Used Citation Abbreviation: WTLA
2.5.2.2 Source Used Citation Abbreviation: WTLA
2.5.2.5 Source Produced Citation Abbreviation: WTLA-edits

2.5.2 Process Step
2.5.2.1 Process Description:
Make map corrections in ArcEdit. MOVEITEM using a custom digitizer menu to add wetland label components to arcs and polygons. BUILD or CLEAN as appropriate.
2.5.2.2 Source Used Citation Abbreviation: WTLA-edits
2.5.2.5 Source Produced Citation Abbreviation: WTLB

2.5.2 Process Step
2.5.2.1 Process Description:
Concatenate SYSTEM, CLASS1, CLASS2, REGIME, SPECIAL1, SPECIAL2, and SPECIAL3 into NWILABEL using dBASE IV. BUILD.
2.5.2.2 Source Used Citation Abbreviation: WTLB
2.5.2.5 Source Produced Citation Abbreviation: WTLC

2.5.2 Process Step
2.5.2.1 Process Description:
Create hard copy edit map in ArcPlot showing arcs, linear wetlands, and NWILABEL. Overlay with ORTHO-LABEL, and if necessary, ORTHO-POLY. Make any edit changes in ArcEdit. BUILD or CLEAN.
2.5.2.2 Source Used Citation Abbreviation: WTLC
2.5.2.5 Source Produced Citation Abbreviation: WTLD

2.5.2 Process Step
2.5.2.1 Process Description:
Edgematch arcs (using interactive EDGEMATCH) along adjoining quadrangles. North and east quadrangle edges were held constant. CLEAN.
2.5.2.2 Source Used Citation Abbreviation: WTLD
2.5.2.5 Source Produced Citation Abbreviation: WTLE

2.5.2 Process Step
2.5.2.1 Process Description:
Use ArcView to check that polygons and linear wetlands posses the same NWILABEL along adjoining quadrangle boundaries. Use ArcEdit to correct and BUILD if necessary.
2.5.2.2 Source Used Citation Abbreviation: WTLE

2.5.2.5 Source Produced Citation Abbreviation: WTLF

2.5.2 Process Step
2.5.2.1 Process Description:
Use NWILABEL as the basis to DISSOLVE arcs with the same wetland label on either side (DISSOLVE WTLF WTLCHK NWILABEL). Compare WETLAND with WTLCHK. This quality control step assures that adjacent polygons do not have the same NWILABEL unless the arc splitting the polygon is a labeled linear wetland.
2.5.2.2 Source Used Citation Abbreviation: WTLF
2.5.2.5 Source Produced Citation Abbreviation: WTLG

2.5.2 Process Step
2.5.2.1 Process Description:
Make corrections in ArcEdit as noted in DISSOLVE. BUILD. Follow list of final quality assurance/quality control measures (full list in Final Report) and make changes. BUILD or CLEAN as needed.
2.5.2.2 Source Used Citation Abbreviation: WTLF
2.5.2.5 Source Produced Citation Abbreviation: WETLAND

2.5.2 Process Step
2.5.2.1 Process Description:
EXPORT WETLAND coverages (EXPORT COVER WETLAND WTLEXP N). Compress using PKZIP. Transport to NYS APA on ZIP disk.

2.6 Cloud Cover: 0

3 Spatial Data Organization Information
3.1 Indirect Spatial Reference:
Wetlands are defined as polygons identified by a software-placed label point or as an arc labeled with a wetland cover type. Some arcs and polygons represent boundaries imposed by the quadrangle borders and therefore do not represent true feature boundaries. All non-wetland polygons possess either a U SYSTEM and NWILABEL or have blank wetland cover types (outside the study area). All non-wetland arcs possess a blank cover type label.
3.2 Direct Spatial Reference Method: Vector
3.3 Point and Vector Object Information
3.3.1.1 SDTS Point and Vector Object Type: Complete chain
3.3.1.2 Point and Vector Object Count: 7-3401, depending on quadrangle
3.3.1.1 SDTA Point and Vector Object Type: Label point
3.3.1.2 Point and Vector Object Count: 2-1292, depending on quadrangle

4 Spatial Reference Information
4.1 Horizontal Coordinate System Definition
4.1.2 Planar
4.1.2.2 Grid Coordinate System
4.1.2.2.1 Grid Coordinate System Name: Universal Transverse Mercator
4.1.2.2.2 Universal Transverse Mercator
4.1.2.2.2.1 UTM Zone Number: 18
4.1.2.1.2.2 Longitude of Central Meridian: -75
4.1.2.1.2.3 Latitude of Projection Origin: 0
4.1.2.1.2.4 False Easting: 0
4.1.2.1.2.5 False Northing: 0
4.1.2.1.2.17 Scale Factor at Central Meridian: 1
4.1.2.4 Planar Coordinate Information
4.1.2.4.2 Coordinate Representation

4.1.2.4.2.1 Abscissa Resolution: 0.1
4.1.2.4.2.2 Ordinate Resolution: 1
4.1.2.4.4 Planar Distance Units: meters
4.1.4 Geodetic Model
4.1.4.1 Horizontal Datum Name: North American Datum of 1927
4.1.4.2 Ellipsoid Name: Clarke 1866
4.1.4.3 Semi-Major Axis: 6378206
4.1.4.4 Denominator of Flattening Ratio: 294.98

5 Entity and Attribute Information
5.1 Detailed Description
5.1.1 Entity Type
5.1.1.1 Entity Type Label: {wetland coverage name}.PAT
5.1.1.2 Entity Type Definition: Polygon attribute table
5.1.1.3 Entity Type Definition Source: Arc/Info
5.1.2 Attribute
5.1.2.1 Attribute Label: AREA
5.1.2.2 Attribute Definition: Area of polygon in square coverage units, positive real numbers (the universe polygon possesses a negative value).
5.1.2.3 Attribute Definition Source: computed
5.1.2.5 Attribute Units of Measurement: Square meters
5.1.2.6 Attribute Measurement Resolution: 0.001
5.1.2.7 Beginning Date of Attribute Values: 1985 (imagery date)
5.1.2.8 Ending Date of Attribute Values: 1995 (imagery date)
5.1.2.10 Attribute Measurement Frequency: As Needed
5.1.2 Attribute
5.1.2.1 Attribute Label: PERIMETER
5.1.2.2 Attribute Definition: Perimeter of polygon in coverage units, positive real numbers.
5.1.2.3 Attribute Definition Source: Computed
5.1.2.5 Attribute Units of Measurement: Meters
5.1.2.6 Attribute Measurement Resolution: 0.001
5.1.2.7 Beginning Date of Attribute Values: 1985 (imagery date)
5.1.2.8 Ending Date of Attribute Values: 1995 (imagery date)
5.1.2.9 Attribute Value Accuracy Information
5.1.2.9.2 Attribute Value Accuracy Explanation: Automatic software calculation
5.1.2.10 Attribute Measurement Frequency: As Needed
5.1.2 Attribute
5.1.2.1 Attribute Label: {wetland coverage name}#
5.1.2.2 Attribute Definition: Internal feature number.
5.1.2.3 Attribute Definition Source: Software assigned
5.1.2.5 Attribute Units of Measurement: Positive integer
5.1.2.6 Attribute Measurement Resolution: 1
5.1.2.7 Beginning Date of Attribute Values: coverage date
5.1.2.9 Attribute Value Accuracy Information
5.1.2.9.2 Attribute Value Accuracy Explanation: Automatic software calculation
5.1.2.10 Attribute Measurement Frequency: As Needed
5.1.2 Attribute
5.1.2.1 Attribute Label: {wetland coverage name}-ID
5.1.2.2 Attribute Definition: User-assigned feature number; User-ID.
5.1.2.3 Attribute Definition Source: User-defined
5.1.2.5 Attribute Units of Measurement: Positive integer
5.1.2.6 Attribute Measurement Resolution: 1
5.1.2.7 Beginning Date of Attribute Values: coverage date
5.1.2.8 Ending Date of Attribute Values:

5.1.2.10 Attribute Measurement Frequency: As needed
5.1.2 Attribute
5.1.2.1 Attribute Label: USGS_NAME
5.1.2.2 Attribute Definition: USGS 7.5' quadrangle name.
5.1.2.3 Attribute Definition Source: USGS
5.1.2.4 Attribute Domain Values
5.1.2.4.1 Enumerated Domain
5.1.2.4.1.1 Enumerated Domain Value: See Table 1
5.1.2.4.1.2 Enumerated Domain Value Definition: See Table 1
5.1.2.5 Attribute Units of Measurement: Alpha-numeric
5.1.2.7 Beginning Date of Attribute Values: Coverage date
5.1.2.10 Attribute Measurement Frequency: None planned
5.1.2 Attribute
5.1.2.1 Attribute Label: DOT_NAME
5.1.2.2 Attribute Definition: NYS Department of Transportation name for 7.5' USGS Quadrangle.
5.1.2.3 Attribute Definition Source: NYS DOT
5.1.2.4 Attribute Domain Values
5.1.2.4.1 Enumerated Domain
5.1.2.4.1.1 Enumerated Domain Value: See Table 1
5.1.2.4.1.2 Enumerated Domain Value Definition: See Table 1
5.1.2.5 Attribute Units of Measurement: Alpha-numeric
5.1.2.7 Beginning Date of Attribute Values: Coverage date
5.1.2.10 Attribute Measurement Frequency: None planned
5.1.2 Attribute
5.1.2.1 Attribute Label: APAQUAD
5.1.2.2 Attribute Definition: APA code for individual 7.5' USGS Quadrangles.
5.1.2.3 Attribute Definition Source: NYS APA
5.1.2.4 Attribute Domain Values
5.1.2.4.1 Enumerated Domain
5.1.2.4.1.1 Enumerated Domain Value: See Table 1
5.1.2.4.1.2 Enumerated Domain Value Definition: See Table 1
5.1.2.5 Attribute Units of Measurement: Alpha-numeric
5.1.2.7 Beginning Date of Attribute Values: Coverage date
5.1.2.10 Attribute Measurement Frequency: None planned
5.1.2 Attribute
5.1.2.1 Attribute Label: DECQUAD
5.1.2.2 Attribute Definition: NYS DEC code for individual 7.5' USGS quadrangles.
5.1.2.3 Attribute Definition Source: NYS DEC
5.1.2.4 Attribute Domain Values
5.1.2.4.1 Enumerated Domain
5.1.2.4.1.1 Enumerated Domain Value: See Table 1
5.1.2.4.1.2 Enumerated Domain Value Definition: See Table 1
5.1.2.5 Attribute Units of Measurement: Alpha-numeric
5.1.2.7 Beginning Date of Attribute Values: Coverage date
5.1.2.10 Attribute Measurement Frequency: None planned
5.1.2 Attribute
5.1.2.1 Attribute Label: METRICQD
5.1.2.2 Attribute Definition: USGS 7.5' X 15' quadrangle name, where applicable.
5.1.2.3 Attribute Definition Source: USGS
5.1.2.4 Attribute Domain Values
5.1.2.4.1 Enumerated Domain
5.1.2.4.1.1 Enumerated Domain Value: See Table 1
5.1.2.4.1.2 Enumerated Domain Value Definition: See Table 1
5.1.2.5 Attribute Units of Measurement: Alpha-numeric

5.1.2.7 Beginning Date of Attribute Values: Coverage date
5.1.2.10 Attribute Measurement Frequency: None planned
5.1.2 Attribute
5.1.2.1 Attribute Label: SYSTEM
5.1.2.2 Attribute Definition: Complex of wetlands and deepwater habitats that share the influence of similar hydrologic, geomorphologic, chemical, or biological factors. This parameter is mandatory for all polygons in the study area.
5.1.2.3 Attribute Definition Source: Cowardin et al 1979
5.1.2.4 Attribute Domain Values
5.1.2.4.1 Enumerated Domain
5.1.2.4.1.1 Enumerated Domain Value: See Table 2
5.1.2.4.1.2 Enumerated Domain Value Definition: See Table 2
5.1.2.5 Attribute Units of Measurement: Alpha-numeric
5.1.2.7 Beginning Date of Attribute Values: 1985 (imagery date)
5.1.2.8 Ending Date of Attribute Values: 1995 (imagery date)
5.1.2.9 Attribute Value Accuracy Information
5.1.2.9.2 Attribute Value Accuracy Explanation: Attributes derived from photointerpretation.
5.1.2.10 Attribute Measurement Frequency: As needed
5.1.2 Attribute
5.1.2.1 Attribute Label: CLASS1
5.1.2.2 Attribute Definition: General appearance of the habitat in terms of either the dominant life form of the vegetation or the physiography and composition of the substrate. Covers at least 30% of the substrate. A value in this column is mandatory for all wetland polygons.
5.1.2.3 Attribute Definition Source: Cowardin et al 1979
5.1.2.4 Attribute Domain Values
5.1.2.4.1 Enumerated Domain
5.1.2.4.1.1 Enumerated Domain Value: See Table 3
5.1.2.4.1.2 Enumerated Domain Value Definition: See Table 3
5.1.2.5 Attribute Units of Measurement: Alpha-numeric
5.1.2.7 Beginning Date of Attribute Values: 1985 (imagery date)
5.1.2.8 Ending Date of Attribute Values: 1995 (imagery date)
5.1.2.9 Attribute Value Accuracy Information
5.1.2.9.2 Attribute Value Accuracy Explanation: Attributes derived from photointerpretation techniques.
5.1.2.10 Attribute Measurement Frequency: As needed
5.1.2 Attribute
5.1.2.1 Attribute Label: CLASS2
5.1.2.2 Attribute Definition: General appearance of the habitat in terms of either the dominant life form of the vegetation or the physiography and composition of the substrate. Covers at least 30% of the substrate. Life form must be the same or lower in height than CLASS1. If the same general life form as CLASS1 (ex. FO), CLASS2 has equal or less areal extent. A value in this column is not mandatory.
5.1.2.3 Attribute Definition Source: Cowardin et al 1979
5.1.2.4 Attribute Domain Values
5.1.2.4.1 Enumerated Domain
5.1.2.4.1.1 Enumerated Domain Value: See Table 3
5.1.2.4.1.2 Enumerated Domain Value Definition: See Table 3
5.1.2.5 Attribute Units of Measurement: Alpha-numeric
5.1.2.7 Beginning Date of Attribute Values: 1985 (imagery date)
5.1.2.8 Ending Date of Attribute Values: 1995 (imagery date)
5.1.2.9 Attribute Value Accuracy Information
5.1.2.9.2 Attribute Value Accuracy Explanation: Attributes derived from photointerpretation techniques.
5.1.2.10 Attribute Measurement Frequency: As needed
5.1.2 Attribute
5.1.2.1 Attribute Label: REGIME

5.1.2.2 Attribute Definition: The water regime modifier describes the hydrologic characteristics of the community. Only non-tidal regimes were used in the Adirondacks. A value in this column is mandatory for all wetland polygons.
5.1.2.3 Attribute Definition Source: Cowardin et al 1979
5.1.2.4 Attribute Domain Values
5.1.2.4.1 Enumerated Domain
5.1.2.4.1.1 Enumerated Domain Value: See Table 4
5.1.2.4.1.2 Enumerated Domain Value Definition: See Table 4
5.1.2.5 Attribute Units of Measurement: Alpha
5.1.2.7 Beginning Date of Attribute Values: 1985 (imagery date)
5.1.2.8 Ending Date of Attribute Values: 1995 (imagery date)
5.1.2.9 Attribute Value Accuracy Information
5.1.2.9.2 Attribute Value Accuracy Explanation: Attributes derived from photointerpretation techniques.
5.1.2.10 Attribute Measurement Frequency: As needed
5.1.2 Attribute
5.1.2.1 Attribute Label: SPECIAL1
5.1.2.2 Attribute Definition: Special modifiers are used to denote man-made or beaver modifications to the habitat. Optional parameter.
5.1.2.3 Attribute Definition Source: Cowardin et al 1979
5.1.2.4 Attribute Domain Values
5.1.2.4.1 Enumerated Domain
5.1.2.4.1.1 Enumerated Domain Value: See Table 5
5.1.2.4.1.2 Enumerated Domain Value Definition: See Table 5
5.1.2.5 Attribute Units of Measurement: Alpha
5.1.2.7 Beginning Date of Attribute Values: 1985 (imagery date)
5.1.2.8 Ending Date of Attribute Values: 1995 (imagery date)
5.1.2.9 Attribute Value Accuracy Information
5.1.2.9.2 Attribute Value Accuracy Explanation: Attributes derived from photointerpretation techniques.
5.1.2.10 Attribute Measurement Frequency: As needed
5.1.2 Attribute
5.1.2.1 Attribute Label: SPECIAL2
5.1.2.2 Attribute Definition: Special modifiers are used to denote man- made or beaver modifications to the habitat. Optional parameter.
5.1.2.3 Attribute Definition Source: Cowardin et al 1979
5.1.2.4 Attribute Domain Values
5.1.2.4.1 Enumerated Domain
5.1.2.4.1.1 Enumerated Domain Value: See Table 5
5.1.2.4.1.2 Enumerated Domain Value Definition: See Table 5
5.1.2.5 Attribute Units of Measurement: Alpha
5.1.2.7 Beginning Date of Attribute Values: 1985 (imagery date)
5.1.2.8 Ending Date of Attribute Values: 1995 (imagery date)
5.1.2.9 Attribute Value Accuracy Information
5.1.2.9.2 Attribute Value Accuracy Explanation: Attributes derived from photointerpretation techniques.
5.1.2.10 Attribute Measurement Frequency: As needed
5.1.2 Attribute
5.1.2.1 Attribute Label: SPECIAL3
5.1.2.2 Attribute Definition: Special modifiers are used to denote man- made or beaver modifications to the habitat. Optional parameter.
5.1.2.3 Attribute Definition Source: Cowardin et al 1979
5.1.2.4 Attribute Domain Values
5.1.2.4.1 Enumerated Domain
5.1.2.4.1.1 Enumerated Domain Value: See Table 5
5.1.2.4.1.2 Enumerated Domain Value Definition: See Table 5
5.1.2.5 Attribute Units of Measurement: Alpha

5.1.2.7 Beginning Date of Attribute Values: 1985 (imagery date)
5.1.2.8 Ending Date of Attribute Values: 1995 (imagery date)
5.1.2.9 Attribute Value Accuracy Information
5.1.2.9.2 Attribute Value Accuracy Explanation: Attributes derived from photointerpretation techniques.
5.1.2.10 Attribute Measurement Frequency: As needed
5.1.2 Attribute
5.1.2.1 Attribute Label: NWILABEL
5.1.2.2 Attribute Definition:
Unified label of SYSTEM, CLASS1, CLASS2, REGIME, SPECIAL1, SPECIAL2, and SPECIAL3. See the definitions of the individual components. This attribute is considered the NWI wetland label. Mandatory parameter for all polygons within the study area, including upland polygons. See the Final Report for the project for the list of NWI cover types utilized in the Upper Hudson Drainage Basin Project.
5.1.2.3 Attribute Definition Source: Cowardin et al 1979
5.1.2.4 Attribute Domain Values
5.1.2.4.1 Enumerated Domain
5.1.2.4.1.1 Enumerated Domain Value: See Tables 2-5
5.1.2.4.1.2 Enumerated Domain Value Definition: See Tables 2-5
5.1.2.5 Attribute Units of Measurement: Alpha-numeric
5.1.2.7 Beginning Date of Attribute Values: 1985 (imagery date)
5.1.2.8 Ending Date of Attribute Values: 1995 (imagery date)
5.1.2.9 Attribute Value Accuracy Information
5.1.2.9.2 Attribute Value Accuracy Explanation: Attributes derived from photointerpretation techniques.
5.1.2.10 Attribute Measurement Frequency: As needed

5.1.1 Entity Type
5.1.1.1 Entity Type Label: {wetland coverage name}.AAT
5.1.1.2 Entity Type Definition: Arc attribute table
5.1.1.3 Entity Type Definition Source: Arc/Info
5.1.2 Attribute
5.1.2.1 Attribute Label: FNODE#
5.1.2.2 Attribute Definition: Internal number of from-node.
5.1.2.3 Attribute Definition Source: software assigned
5.1.2.4 Attribute Domain Values
5.1.2.4.1 Enumerated Domain
5.1.2.4.1.1 Enumerated Domain Value: sequential unique positive integer
5.1.2.4.1.2 Enumerated Domain Value Definition: software assigned
5.1.2.4.1.3 Enumerated Domain Value Definition Source: software assigned
5.1.2.5 Attribute Units of Measurement: 1
5.1.2.6 Attribute Measurement Resolution: integer
5.1.2.7 Beginning Date of Attribute Values: coverage date
5.1.2.9 Attribute Accuracy Information
5.1.2.9.2 Attribute Value Accuracy Explanation: Automatic software calculation based on topology.
5.1.2.10 Attribute Measurement Frequency: As Needed
5.1.2 Attribute
5.1.2.1 Attribute Label: TNODE#
5.1.2.2 Attribute Definition: internal number of to-node
5.1.2.3 Attribute Definition Source: software assigned
5.1.2.4 Attribute Domain Values
5.1.2.4.1 Enumerated Domain
5.1.2.4.1.1 Enumerated Domain Value: positive integer
5.1.2.4.1.2 Enumerated Domain Value Definition: software assigned
5.1.2.4.1.3 Enumerated Domain Value Definition Source: software
5.1.2.5 Attribute Units of Measurement: 1
5.1.2.6 Attribute Measurement Resolution: integer

5.1.2.7 Beginning Date of Attribute Values: coverage date
5.1.2.9 Attribute Value Accuracy Information
5.1.2.9.2 Attribute Value Accuracy Explanation: Automatic software calculation based on topology.
5.1.2.10 Attribute Measurement Frequency: As Needed
5.1.2 Attribute
5.1.2.1 Attribute Label: LPOLY#
5.1.2.2 Attribute Definition: Internal number of polygon to left of arc.
5.1.2.3 Attribute Definition Source: software assigned
5.1.2.4 Attribute Domain Values
5.1.2.4.1 Enumerated Domain
5.1.2.4.1.1 Enumerated Domain Value: positive integer
5.1.2.4.1.2 Enumerated Domain Value Definition: software assigned based on topology
5.1.2.4.1.3 Enumerated Domain Value Definition Source: software
5.1.2.5 Attribute Units of Measurement: 1
5.1.2.6 Attribute Measurement Resolution: integer
5.1.2.7 Beginning Date of Attribute Values: coverage date
5.1.2.9 Attribute Value Accuracy Information
5.1.2.9.2 Attribute Value Accuracy Explanation: Automatic software calculation based on topology.
5.1.2.10 Attribute Measurement Frequency: As Needed
5.1.2 Attribute
5.1.2.1 Attribute Label: RPOLY#
5.1.2.2 Attribute Definition: Internal number of polygon to right of arc.
5.1.2.3 Attribute Definition Source: software assigned
5.1.2.4 Attribute Domain Values
5.1.2.4.1 Enumerated Domain
5.1.2.4.1.1 Enumerated Domain Value: positive integer
5.1.2.4.1.2 Enumerated Domain Value Definition: software
5.1.2.4.1.3 Enumerated Domain Value Definition Source: software assigned
5.1.2.5 Attribute Units of Measurement: 1
5.1.2.6 Attribute Measurement Resolution: integer
5.1.2.7 Beginning Date of Attribute Values: coverage date
5.1.2.9 Attribute Value Accuracy Information
5.1.2.9.2 Attribute Value Accuracy Explanation: Automatic software calculation based on topology.
5.1.2.10 Attribute Measurement Frequency: As Needed
5.1.2 Attribute
5.1.2.1 Attribute Label: LENGTH
5.1.2.2 Attribute Definition: Length of arc in coverage units.
5.1.2.3 Attribute Definition Source: automatic software calculation
5.1.2.5 Attribute Units of Measurement: meters
5.1.2.6 Attribute Measurement Resolution: 0.001
5.1.2.7 Beginning Date of Attribute Values: coverage date
5.1.2.9 Attribute Value Accuracy Information
5.1.2.9.2 Attribute Value Accuracy Explanation: Automatic software calculation.
5.1.2.10 Attribute Measurement Frequency: As Needed
5.1.2 Attribute
5.1.2.1 Attribute Label: {wetland coverage name}#
5.1.2.2 Attribute Definition: Internal feature number.
5.1.2.3 Attribute Definition Source: software assigned
5.1.2.5 Attribute Units of Measurement: sequential unique positive integer
5.1.2.6 Attribute Measurement Resolution: 1
5.1.2.7 Beginning Date of Attribute Values: coverage date
5.1.2.9 Attribute Value Accuracy Information
5.1.2.9.2 Attribute Value Accuracy Explanation: Automatic software calculation.
5.1.2.10 Attribute Measurement Frequency: As Needed

5.1.2 Attribute
5.1.2.1 Attribute Label: {wetland coverage name}-ID
5.1.2.2 Attribute Definition: User-assigned feature number.
5.1.2.3 Attribute Definition Source: user-defined
5.1.2.4 Attribute Domain Values
5.1.2.4.1 Enumerated Domain
5.1.2.4.1.1 Enumerated Domain Value: See Table 6
5.1.2.4.1.2 Enumerated Domain Value Definition: See Table 6
5.1.2.5 Attribute Units of Measurement: integer
5.1.2.6 Attribute Measurement Resolution: 1
5.1.2.7 Beginning Date of Attribute Values: coverage date
5.1.2.10 Attribute Measurement Frequency: As Needed
5.1.2 Attribute
5.1.2.1 Attribute Label: ARCVALUE
5.1.2.2 Attribute Definition: Value to uniquely identify the quadrangle borders throughout the study area; also a unique value (1) for the Upper Hudson River Drainage Basin Study Area (study area boundary). Linear wetlands and wetland polygon boundaries are given a value of 0.
5.1.2.3 Attribute Definition Source: user-defined
5.1.2.5 Attribute Units of Measurement: integer
5.1.2.6 Attribute Measurement Resolution: 1
5.1.2.10 Attribute Measurement Frequency: None planned
5.1.2 Attribute
5.1.2.1 Attribute Label: SYSTEM
5.1.2.2 Attribute Definition: Complex of wetlands and deepwater habitats that share the influence of similar hydrologic, geomorphologic, chemical, or biological factors. This parameter is mandatory for all linear wetlands in the study area.
5.1.2.3 Attribute Definition Source: Cowardin et al 1979
5.1.2.4 Attribute Domain Values
5.1.2.4.1 Enumerated Domain
5.1.2.4.1.1 Enumerated Domain Value: See Table 2
5.1.2.4.1.2 Enumerated Domain Value Definition: See Table 2
5.1.2.5 Attribute Units of Measurement: Alpha-numeric
5.1.2.7 Beginning Date of Attribute Values: 1985 (imagery date)
5.1.2.8 Ending Date of Attribute Values: 1995 (imagery date)
5.1.2.9 Attribute Value Accuracy Information
5.1.2.9.2 Attribute Value Accuracy Explanation: Attributes derived from photointerpretation techniques.
5.1.2.10 Attribute Measurement Frequency: As needed
5.1.2 Attribute
5.1.2.1 Attribute Label: CLASS1
5.1.2.2 Attribute Definition: General appearance of the habitat in terms of either the dominant life form of the vegetation or the physiography and composition of the substrate. Covers at least 30% of the substrate. A value in this column is mandatory for all linear wetlands.
5.1.2.3 Attribute Definition Source: Cowardin et al 1979
5.1.2.4 Attribute Domain Values
5.1.2.4.1 Enumerated Domain
5.1.2.4.1.1 Enumerated Domain Value: See Table 3
5.1.2.4.1.2 Enumerated Domain Value Definition: See Table 3
5.1.2.5 Attribute Units of Measurement: Alpha-numeric
5.1.2.7 Beginning Date of Attribute Values: 1985 (imagery date)
5.1.2.8 Ending Date of Attribute Values: 1995 (imagery date)
5.1.2.9 Attribute Value Accuracy Information
5.1.2.9.2 Attribute Value Accuracy Explanation: Attributes derived from photointerpretation techniques.
5.1.2.10 Attribute Measurement Frequency: As needed
5.1.2 Attribute

5.1.2.1 Attribute Label: CLASS2
5.1.2.2 Attribute Definition: General appearance of the habitat in terms of either the dominant life form of the vegetation or the physiography and composition of the substrate. Covers at least 30% of the substrate. Life form must be the same or lower in height than CLASS1. If the same general life form as CLASS1 (ex. FO), CLASS2 has equal or less areal extent. A value in this column is not mandatory.
5.1.2.3 Attribute Definition Source: Cowardin et al 1979
5.1.2.4 Attribute Domain Values
5.1.2.4.1 Enumerated Domain
5.1.2.4.1.1 Enumerated Domain Value: See Table 3
5.1.2.4.1.2 Enumerated Domain Value Definition: See Table 3
5.1.2.5 Attribute Units of Measurement: Alpha-numeric
5.1.2.7 Beginning Date of Attribute Values: 1985 (imagery date)
5.1.2.8 Ending Date of Attribute Values: 1995 (imagery date)
5.1.2.9 Attribute Value Accuracy Information
5.1.2.9.2 Attribute Value Accuracy Explanation: Attributes derived from photointerpretation techniques.
5.1.2.10 Attribute Measurement Frequency: As needed
5.1.2 Attribute
5.1.2.1 Attribute Label: REGIME
5.1.2.2 Attribute Definition: The water regime modifier describes the hydrologic characteristics of the community. Only non-tidal regimes were used in the Adirondacks. A value in this column is mandatory for all linear wetlands.
5.1.2.3 Attribute Definition Source: Cowardin et al 1979
5.1.2.4 Attribute Domain Values
5.1.2.4.1 Enumerated Domain
5.1.2.4.1.1 Enumerated Domain Value: See Table 4
5.1.2.4.1.2 Enumerated Domain Value Definition: See Table 4
5.1.2.5 Attribute Units of Measurement: Alpha
5.1.2.7 Beginning Date of Attribute Values: 1985 (imagery date)
5.1.2.8 Ending Date of Attribute Values: 1995 (imagery date)
5.1.2.9 Attribute Value Accuracy Information
5.1.2.9.2 Attribute Value Accuracy Explanation: Attributes derived from photointerpretation techniques.
5.1.2.10 Attribute Measurement Frequency: As needed
5.1.2 Attribute
5.1.2.1 Attribute Label: SPECIAL1
5.1.2.2 Attribute Definition: Special modifiers are used to denote man-made or beaver modifications to the habitat. Optional parameter.
5.1.2.3 Attribute Definition Source: Cowardin et al 1979
5.1.2.4 Attribute Domain Values
5.1.2.4.1 Enumerated Domain
5.1.2.4.1.1 Enumerated Domain Value: See Table 5
5.1.2.4.1.2 Enumerated Domain Value Definition: See Table 5
5.1.2.5 Attribute Units of Measurement: Alpha
5.1.2.7 Beginning Date of Attribute Values: 1985 (imagery date)
5.1.2.8 Ending Date of Attribute Values: 1995 (imagery date)
5.1.2.9 Attribute Value Accuracy Information
5.1.2.9.2 Attribute Value Accuracy Explanation: Attributes derived from photointerpretation techniques.
5.1.2.10 Attribute Measurement Frequency: As needed
5.1.2 Attribute
5.1.2.1 Attribute Label: SPECIAL2
5.1.2.2 Attribute Definition: Special modifiers are used to denote man-made or beaver modifications to the habitat. Optional parameter.
5.1.2.3 Attribute Definition Source: Cowardin et al 1979
5.1.2.4 Attribute Domain Values
5.1.2.4.1 Enumerated Domain

5.1.2.4.1.1 Enumerated Domain Value: See Table 5
5.1.2.4.1.2 Enumerated Domain Value Definition: See Table 5
5.1.2.5 Attribute Units of Measurement: Alpha
5.1.2.7 Beginning Date of Attribute Values: 1985 (imagery date)
5.1.2.8 Ending Date of Attribute Values: 1995 (imagery date)
5.1.2.9 Attribute Value Accuracy Information
5.1.2.9.2 Attribute Value Accuracy Explanation: Attributes derived from photointerpretation techniques.
5.1.2.10 Attribute Measurement Frequency: As needed
5.1.2 Attribute
5.1.2.1 Attribute Label: SPECIAL3
5.1.2.2 Attribute Definition: Special modifiers are used to denote man-made or beaver modifications to the habitat. Optional parameter.
5.1.2.3 Attribute Definition Source: Cowardin et al 1979
5.1.2.4 Attribute Domain Values
5.1.2.4.1 Enumerated Domain
5.1.2.4.1.1 Enumerated Domain Value: See Table 5
5.1.2.4.1.2 Enumerated Domain Value Definition: See Table 5
5.1.2.5 Attribute Units of Measurement: Alpha
5.1.2.7 Beginning Date of Attribute Values: 1985 (imagery date)
5.1.2.8 Ending Date of Attribute Values: 1995 (imagery date)
5.1.2.9 Attribute Value Accuracy Information
5.1.2.9.2 Attribute Value Accuracy Explanation: Attributes derived from photointerpretation techniques.
5.1.2.10 Attribute Measurement Frequency: As needed
5.1.2 Attribute
5.1.2.1 Attribute Label: NWILABEL
5.1.2.2 Attribute Definition: Unified label of SYSTEM, CLASS1, CLASS2, REGIME, SPECIAL1, SPECIAL2, and SPECIAL3. See the definitions of the individual components. This attribute is considered the NWI wetland label. Mandatory parameter for all linear wetlands within the study area, including upland polygons. See Final Report for the project for the list of NWI cover types utilized in the Upper Hudson Drainage Basin Project.
5.1.2.3 Attribute Definition Source: Cowardin et al 1979
5.1.2.4 Attribute Domain Values
5.1.2.4.1 Enumerated Domain
5.1.2.4.1.1 Enumerated Domain Value: See Tables 2-5
5.1.2.4.1.2 Enumerated Domain Value Definition: See Tables 2-5
5.1.2.5 Attribute Units of Measurement: Alpha-numeric
5.1.2.6 Attribute Measurement Resolution:
5.1.2.7 Beginning Date of Attribute Values: 1985 (imagery date)
5.1.2.8 Ending Date of Attribute Values: 1995 (imagery date)
5.1.2.9 Attribute Value Accuracy Information
5.1.2.9.2 Attribute Value Accuracy Explanation: Attributes derived from photointerpretation techniques.
5.1.2.10 Attribute Measurement Frequency: As needed

6 Distribution Information
6.1 Distributor
10.2 Contact Organization Primary
10.1.2 Contact Organization: NYS Adirondack Park Agency
10.1.1 Contact Person: John W. Barge
10.3 Contact Position: Senior Natural Resource Planner
10.4 Contact Address
10.4.1 Address Type: mailing and physical address
10.4.2 Address: PO Box 99, Route 86
10.4.3 City: Ray Brook
10.4.4 State or Province: New York

10.4.5 Postal Code: 12977
10.4.6 Country: USA
10.5 Contact Voice Telephone: (518) 891-4050
10.7 Contact Facsimile Telephone: (518) 891-3938
10.8 Contact Electronic Mail Address: jwbarge@gw.dec.state.ny.us
10.9 Hours of Service: 9:00 AM - 5:00 PM Monday through Friday
6.2 Resource Description: Wetlands in the Greater Upper Hudson River Watershed Arc/Info Coverage
6.3 Distribution Liability: Although these data have been processed successfully on a computer system at the NYS APA, no warranty expressed or implied is made regarding the accuracy or utility of the data on any other system or for general or scientific purposes, nor shall the act of distribution constitute any such warranty. This disclaimer applies both to individual use of the data and aggregate use with other data. It is strongly recommended that these data be directly acquired from the NYS APA, and not indirectly through other sources which may have changed the data in some way. It is also strongly recommended that careful attention be paid to the contents of the metadata file associated with these data. The NYS APA shall not be held liable for improper or incorrect use of the data described and/or contained herein. These data shall not be used for legal jurisdictional determinations.
6.4 Standard Order Process
6.4.2 Digital Form
6.4.2.1.1 Format Name: ARCE uncompressed, in PK zip compressed format
6.4.2.1.3 Format Version Date: December 31, 1999
6.4.2.1.5 Format Information Content: EXPORT with no compression
6.4.2.1.6 File Decompression Technique: PK unzip or compatible method
6.4.2.2 Digital Transfer Option
6.4.2.2.2 Online Option
Data is available from the New York State Gis Metadata Repository. The New York State Gis Metadata Repository can be found at http://www.nysl.nysed.gov/gis/repository/index.html. Once at this site, navigate to the Adirondack Park Agency.

7 Metadata Reference Information
7.1 Metadata Date: 19991231
7.4 Metadata Contact:
10.2 Contact Organization Primary
10.1.2 Contact Organization: Remote Sensing Laboratory, Plattsburgh State University
10.1.1 Contact Person: Eileen B. Allen
10.3 Contact Position: Research Associate
10.4 Contact Address
10.4.1 Address Type: mailing and physical address
10.4.2 Address: Center for Earth and Environmental Science, 101 Broad Street
10.4.3 City: Plattsburgh
10.4.4 State or Province: New York
10.4.5 Postal Code: 12901
10.4.6 Country: USA
10.5 Contact Voice Telephone: (518) 564-4029 or 564-2028
10.7 Contact Facsimile Telephone: (518) 564-5267
10.8 Contact Electronic Mail Address: eileen.allen@plattsburgh.edu
10.9 Hours of Service: 8:30 AM - 4:30 PM Monday through Friday
7.5 Metadata Standard Name: FGDC Content Standard for Digital Geospatial Metadata
7.6 Metadata Standard Version: June 8, 1994 (Version 1.0)
7.7 Metadata Time Convention: local time
7.9 Metadata Use Constraints: None
7.10 Metadata Security Information
7.10.1 Metadata Security Classification System: None
7.10.2 Metadata Security Classification: Unclassified
7.10.3 Metadata Security Handling Description: None

Table 1. Upper Hudson River Watershed; Quadrangles Use in Creation of the Wetland Data Layer.

USGS Name	Dot Name	Apaquad	Decquad	Metric quad
KEMPSHALL_MTN_(EAST)	KEMPSHALL_MTN	D23SE	E233	KEMPSHALL_MTN
AMPERSAND_LAKE_(EAST)	STREET_MTN	D24NE	E242	AMPERSAND_LAKE
SANTANONI_PEAK_(EAST)	MOUNT_ADAMS	D24SE	E243	SANTANONI_PEAK
SANTANONI_PEAK_(WEST)	SANTANONI	D24SW	E244	SANTANONI_PEAK
KEENE_VALLEY_(WEST)	NORTH_ELBA	D25NW	E251	KEENE_VALLEY
MOUNT_MARCY_(EAST)	DIX_MTN	D25SE	E253	MOUNT_MARCY
MOUNT_MARCY_(WEST)	MOUNT_MARCY	D25SW	E254	MOUNT_MARCY
WITHERBEE_(EAST)	MINEVILLE	D26SE	E263	WITHERBEE
WITHERBEE_(WEST)	UNDERWOOD	D26SW	E264	WITHERBEE
SARGENT_PONDS	SARGENT_PONDS	E22SE	F223	RAQUETTE_LAKE
DUNBROOK_MOUNTAIN	DUN_BROOK_MTN	E23NE	F232	DEERLAND
DEERLAND	DEERLAND	E23NW	F231	DEERLAND
BURGESS_MOUNTAIN	ROCK_LAKE	E23SE	F233	BLUE_MTN_LAKE
BLUE_MOUNTAIN_LAKE	BLUE_MTN	E23SW	F234	BLUE_MTN_LAKE
VANDERWHACKER_MTN	TAHAWUS	E24NE	F242	NEWCOMB
NEWCOMB	NEWCOMB	E24NW	F241	NEWCOMB
STARBUCK_MOUNTAIN	DUTTON_MTN	E24SE	F243	DUTTON_MOUNTAIN
BAD_LUCK_MOUNTAIN	BAD_LUCK_MOUNTAIN	E24SW	F244	DUTTON_MOUNTAIN
BLUE_RIDGE	BLUE_RIDGE	E25NE	F252	BLUE_RIDGE
LESTER_DAM	CHENEY_POND	E25NW	F251	BLUE_RIDGE
SCHROON_LAKE	SCHROON_LAKE	E25SE	F253	SCHROON_LAKE
MINERVA	OLMSTEDVILLE	E25SW	F254	SCHROON_LAKE
EAGLE_LAKE	EAGLE_LAKE	E26NE	F262	
PARADOX_LAKE	PARADOX_LAKE	E26NW	F261	
GRAPHITE	PUTNAM_POND	E26SE	F263	
PHARAOH_MOUNTAIN	PHARAOH_MOUNTAIN	E26SW	F264	
WAKELY_MOUNTAIN	WAKELY_MOUNTAIN	F22NE	G222	WAKELY_MOUNTAIN
SPRUCE_LAKE	WEST_CANADA_LAKES	F22SE	G223	WEST_CANADA_LAKES
SABAEL	INDIAN_LAKE	F23NE	G232	INDIAN_LAKE
SNOWY_MOUNTAIN	LEWEY_MTN	F23NW	G231	INDIAN_LAKE
KUNJAMUK_RIVER	KUNJAMUK_CREEK	F23SE	G233	PAGE_MOUNTAIN
PAGE_MOUNTAIN	PAGE_MOUNTAIN	F23SW	G234	PAGE_MOUNTAIN
GORE_MOUNTAIN	NORTH_RIVER	F24NE	G242	THIRTEENTH_LAKE
BULLHEAD_MOUNTAIN	BULLHEAD_MOUNTAIN	F24NW	G241	THIRTEENTH_LAKE
BAKERS_MILLS	BAKERS_MILLS	F24SE	G243	BAKERS_MILLS
SOUTH_POND_MTN	SOUTH_POND_MTN	F24SW	G244	BAKERS_MILLS
CHESTERTOWN	CHESTERTOWN	F25NE	G252	
NORTH_CREEK	NORTH_CREEK	F25NW	G251	
THE_GLEN	THE_GLEN	F25SE	G253	
JOHNSBURG	JOHNSBURG	F25SW	G254	
SILVER_BAY	SILVER_BAY	F26NE	G262	
BRANT_LAKE	BRANT_LAKE	F26NW	G261	
BOLTON_LANDING	BOLTON_LANDING	F26SW	G264	
PISECO_LAKE	PISECO_LAKE	G22NE	H222	PISECO_LAKE
HOFFMEISTER	HOFFMEISTER	G22NW	H221	PISECO_LAKE
TOMANY_MOUNTAIN	TOMANY_MOUNTAIN	G22SE	H223	MOREHOUSE_MOUNTAIN
MOREHOUSE_LAKE	MOREHOUSE_LAKE	G22SW	H224	MOREHOUSE_MOUNTAIN
WELLS	WELLS	G23NE	H232	WELLS
LAKE_PLEASANT	LAKE_PLEASANT	G23NW	H231	WELLS
CATHEAD_MOUNTAIN	CATHEAD_MOUNTAIN	G23SE	H233	THREE_PONDS_MOUNTAIN
WHITEHOUSE	WHITEHOUSE	G23SW	H234	THREE_PONDS_MOUNTAIN
HARRISBURG	HARRISBURG	G24NE	H242	HARRISBURG
GRIFFIN	GRIFFIN	G24NW	H241	HARRISBURG
OHMER_MOUNTAIN	OHMER_MOUNTAIN	G24SE	H253	HOPE_FALLS
HOPE_FALLS	HOPE_FALLS	G24SW	H244	HOPE_FALLS
WARRENSBURG	WARRENSBURG	G25NE	H252	
STONY_CREEK	STONY_CREEK	G25NW	H251	

USGS Name	Dot Name	Apaquad	Decquad	Metric quad
LAKE_LUZERNE	LAKE_LUZERNE	G25SE	H253	
CONKLINGVILLE	CONKLINGVILLE	G25SW	H254	
LAKE_GEORGE	LAKE_GEORGE	G26NW	H261	
GLENS_FALLS	GLENS_FALLS	G26SW	H264	
CANADA_LAKE	CANADA_LAKE	H22NE	I222	
JACKSON_SUMMIT	JACKSON_SUMMIT	H23NE	I232	
CAROGA_LAKE	CAROGA_LAKE	H23NW	I231	
GLOVERSVILLE	GLOVERSVILLE	H23SE	I233	
PECK_LAKE	PECK_LAKE	H23SW	I234	
EDINBURG	EDINBURG	H24NE	I242	
NORTHVILLE	NORTHVILLE	H24NW	I241	
GALWAY	GALWAY	H24SE	I243	
BROADALBIN	BROADALBIN	H24SW	I244	
CORINTH	CORINTH	H25NE	I252	
PORTER_CORNERS	PORTER_CORNERS	H25NW	I251	
MIDDLE_GROVE	MIDDLE_GROVE	H25SW	I254	

Table 2. Upper Hudson River Watershed; Wetlands Data Layer; SYSTEM Attributes.

	SYSTEM	Definition
o	L1	Lacustrine habitat, greater than 8 hectares (20 acres) and more than 2 meters deep
o-	P	Palustrine habitat, non-tidal, greater than 8 hectares (20 acres) and more than 2 meters deep
o-	R2	Lower perennial riverine
o-	R3	Upper perennial riverine
-	R4	Intermittent riverine
o	U	Upland

o used in polygon attribute table
- used in arc attribute table

Table 3. Upper Hudson River Watershed; Wetlands Data Layer; CLASS1 and CLASS2 Attributes.

	CLASS	Definition
o	AB3	Rooted vascular aquatic bed
o-	EM1	Persistent emergent
o-	FO1	Forested, broad-leaved deciduous
o-	FO2	Forested, needle-leaved deciduous
o-	FO4	Forested, evergreen
o-	FO5	Forested, dead
o-	OW	Open water
-	SB3	Cobble/gravel streambed
o-	SS1	Broad-leaved deciduous scrub/shrub (shorter than 6 meters)
o	SS2	Needle-leaved deciduous scrub/shrub (shorter than 6 meters)
o-	SS3	Broad-leaved evergreen scrub/shrub (shorter than 6 meters)
o-	SS4	Needle-leaved evergreen scrub/shrub (shorter than 6 meters)
o	SS5	Dead scrub/shrub (shorter than 6 meters)
o	UB1	Cobble/gravel unconsolidated bottom
o	UB2	Sand unconsolidated bottom
o	UB3	Mud unconsolidated bottom
o-	US1	Cobble/gravel unconsolidated shore
o-	US2	Sand unconsolidated shore

o used in polygon attribute table
- used in arc attribute table
Note: All CLASS2 attributes preceded by / to form the concatenated NWILABEL

Table 4. Upper Hudson River Watershed; Wetlands Data Layer; REGIME Attributes.

	REGIME	Definition
o-	B	Saturated
o-	D	Seasonally flooded - well drained
o-	E	Seasonally flooded - saturated
o-	F	Semipermanent
o-	H	Permanent

o used in polygon attribute table
- used in arc attribute table

Table 5. Upper Hudson River Watershed; Wetlands Data Layer; SPECIAL1, SPECIAL2, and SPECIAL3 Attributes.

	SPECIAL	Definition
o-	b	Beaver
o-	d	Partially drained, ditched
o-	f	Farmed
o-	h	Diked/impounded
o	x	Excavated
o	/U	Upland. Used in mixed upland/wetland habitats too homogeneous for separate delineations. Although this designation is not an official Cowardin et al definition, it is in use by various NWI offices and was suggested for use in this project by Ralph W. Tiner, Jr., U.S. Fish and Wildlife Service.

o used in polygon attribute table
- used in arc attribute table
Notes: SPECIAL3 was not utilized in the polygon attribute file. SPECIAL2 and SPECIAL3 were not utilized in the arc attribute file.

Table 6. Upper Hudson River Watershed; Wetlands Data Layer; Arc User-ID Attributes.

User-ID	
1	north quadrangle boundary
2	east quadrangle boundary
3	south quadrangle boundary
4	north quadrangle boundary
5	outer study area boundary
>5	wetland arcs and polygon boundaries

Appendix 5. Upper Hudson Drainage Basin Wetland Labels: Relative Coverage by Wetland Label in Order of Area

Covertype Label	Covertype Area (ha)	Percent of Wetland Coverage	Percent of Watershed Area
PFO4/SS4B	7369.57	14.80	1.03
PFO4B	4942.76	9.93	0.69
PSS1/EM1E	4068.89	8.17	0.57
PSS1/EM1Eb	2577.44	5.18	0.36
PFO4/SS4E	2116.20	4.25	0.30
PFO4E	1962.01	3.94	0.28
PSS1/EM1B	1751.42	3.52	0.25
PSS3/EM1B	1351.41	2.71	0.19
PEM1E	1316.11	2.64	0.18
PSS4B	1217.40	2.45	0.17
PFO4/SS1B	1203.26	2.42	0.17
PFO5/OWHb	1164.18	2.34	0.16
PSS4/SS1B	991.69	1.99	0.14
PEM1Eb	984.44	1.98	0.14
PSS1/EM1Fb	934.03	1.88	0.13
PSS1E	917.92	1.84	0.13
PSS1B	855.20	1.72	0.12
PFO1/SS1B	716.29	1.44	0.10
PSS1/SS4B	672.72	1.35	0.09
PSS4/EM1B	628.78	1.26	0.09
PFO4/SS1E	597.13	1.20	0.08
PFO4/FO1B	581.52	1.17	0.08
PEM1/OWHb	555.90	1.12	0.08
PSS1/EM1F	474.82	0.95	0.07
PEM1B	471.41	0.95	0.07
PSS4/EM1E	452.47	0.91	0.06
PFO1/SS1E	425.68	0.86	0.06
PFO4/FO1E	404.97	0.81	0.06
PSS4/SS1E	397.62	0.80	0.06
PSS4E	390.54	0.78	0.05
PFO1B	368.33	0.74	0.05
PFO1E	365.69	0.73	0.05
PSS1/SS4E	329.86	0.66	0.05
PFO1/FO4B	329.25	0.66	0.05
PEM1Fb	288.30	0.58	0.04
PFO4/EM1B	253.27	0.51	0.04
PFO4/EM1E	252.43	0.51	0.04
PSS3B	216.20	0.43	0.03
PFO1/FO4E	213.04	0.43	0.03
PEM1F	209.07	0.42	0.03
PSS3/EM1E	207.26	0.42	0.03
PSS4/EM1Eb	199.61	0.40	0.03
PFO4/SS4B/U	160.08	0.32	0.02
PSS3/EM1Bb	144.34	0.29	0.02
PSS1Eb	135.05	0.27	0.02

Covertype Label	Covertype Area (ha)	Percent of Wetland Coverage	Percent of Watershed Area
PFO4B/U	133.08	0.27	0.02
PSS4/SS3B	129.53	0.26	0.02
PSS3/SS1B	121.18	0.24	0.02
PSS1/EM1Bb	108.90	0.22	0.02
PSS3/EM1Eb	96.28	0.19	0.01
PSS1/SS3B	95.44	0.19	0.01
PEM1/OWH	92.02	0.18	0.01
PSS1/OWHb	88.08	0.18	0.01
PFO4Eb	76.46	0.15	0.01
PSS3/SS4B	76.33	0.15	0.01
PFO1D	72.51	0.15	0.01
PSS1/SS3E	71.04	0.14	0.01
PSS1Fb	66.73	0.13	0.01
PEM1Bb	64.41	0.13	0.01
PSS4/EM1F	55.22	0.11	0.01
PFO1/EM1E	53.96	0.11	0.01
PFO1/EM1B	52.15	0.10	0.01
PFO1/SS4B	49.03	0.10	0.01
PFO4/OWHb	48.64	0.10	0.01
PFO1/US2D	47.64	0.10	0.01
PSS4/SS2B	47.07	0.09	0.01
PFO2/SS3B	46.51	0.09	0.01
PSS4/EM1Fb	45.30	0.09	0.01
PFO4/FO2B	43.77	0.09	0.01
PFO5/EM1Hb	42.62	0.09	0.01
PSS3/OWHb	41.14	0.08	0.01
PAB3/OWH	40.23	0.08	0.01
PFO5/EM1Eb	40.15	0.08	0.01
PFO5Eb	38.08	0.08	0.01
PFO4Bb	37.93	0.08	0.01
PSS1/US2E	36.13	0.07	0.01
PFO1/SS1D	35.17	0.07	0.00
PFO4/EM1Eb	35.10	0.07	0.00
PSS1/OWH	35.00	0.07	0.00
PFO2/EM1B	33.39	0.07	0.00
PFO5/SS1Eb	32.75	0.07	0.00
PSS3/SS1E	32.41	0.07	0.00
PSS3E	32.02	0.06	0.00
PFO4/SS3B	31.97	0.06	0.00
PSS3Bb	31.68	0.06	0.00
PSS5/OWHb	30.48	0.06	0.00
PFO1/SS4E	29.74	0.06	0.00
PEM1Bf	29.35	0.06	0.00
PSS3/EM1Hb	29.33	0.06	0.00
PSS1/EM1Hb	27.96	0.06	0.00
PFO4/SS4Eb	27.68	0.06	0.00
PFO2/SS1B	27.40	0.06	0.00

Covertype Label	Covertype Area (ha)	Percent of Wetland Coverage	Percent of Watershed Area
PSS4Eb	26.96	0.05	0.00
PSS4/SS1Eb	26.84	0.05	0.00
PFO4/FO2E	23.46	0.05	0.00
PFO1/FO4D	23.23	0.05	0.00
PEM1/OWHh	22.91	0.05	0.00
PFO4/FO1D	22.47	0.05	0.00
PSS1/SS4Eb	21.80	0.04	0.00
PSS3/EM1Fb	21.26	0.04	0.00
PFO4/SS1Eb	21.14	0.04	0.00
PSS3/OWH	20.90	0.04	0.00
PFO5/EM1Bb	20.80	0.04	0.00
PSS2/EM1B	20.70	0.04	0.00
PSS1/US2D	20.58	0.04	0.00
PFO5/EM1Fb	20.07	0.04	0.00
PSS1/EM1D	19.88	0.04	0.00
PFO4/FO5E	19.49	0.04	0.00
PSS1/EM1Bf	18.62	0.04	0.00
PSS3Eb	18.24	0.04	0.00
PFO4/SS4Bb	17.01	0.03	0.00
PSS5/EM1Bb	15.26	0.03	0.00
PFO2/FO4E	14.59	0.03	0.00
PAB3/OWHb	14.22	0.03	0.00
PFO4/FO1Eb	14.21	0.03	0.00
PSS4/EM1Bb	13.34	0.03	0.00
PSS1/EM1Bdf	13.07	0.03	0.00
PFO2/FO4B	12.47	0.03	0.00
PFO4/EM1Fb	12.20	0.02	0.00
PSS4/SS2E	11.80	0.02	0.00
PSS4Bb	11.69	0.02	0.00
PSS3/EM1F	11.41	0.02	0.00
PSS3Hb	10.88	0.02	0.00
PSS4/OWHb	9.93	0.02	0.00
PSS2/SS1E	9.66	0.02	0.00
PFO5Bb	9.62	0.02	0.00
PSS1/SS4Bb	9.62	0.02	0.00
PFO5/SS5Eb	9.39	0.02	0.00
PFO2B	9.16	0.02	0.00
PFO2/SS4B	9.14	0.02	0.00
PSS3/SS2B	8.70	0.02	0.00
PSS1/EM1Eh	8.69	0.02	0.00
PFO2/EM1E	8.69	0.02	0.00
PEM1Ebf	8.45	0.02	0.00
PSS3/SS4E	8.40	0.02	0.00
PFO5/OWHbf	8.37	0.02	0.00
PFO2/SS2B	8.06	0.02	0.00
PFO1Fb	7.72	0.02	0.00
PFO4/SS3E	7.66	0.02	0.00

Covertype Label	Covertype Area (ha)	Percent of Wetland Coverage	Percent of Watershed Area
PSS3/EM1Eh	7.62	0.02	0.00
PSS4/SS1Bb	7.26	0.01	0.00
PFO1/SS1Eb	7.25	0.01	0.00
PFO4D	7.17	0.01	0.00
PSS1Bb	6.98	0.01	0.00
PFO4/SS2E	6.91	0.01	0.00
PSS3/SS1Fb	6.80	0.01	0.00
PFO5/SS1Hb	6.79	0.01	0.00
PFO2/SS3E	6.76	0.01	0.00
PSS1D	6.54	0.01	0.00
PFO4/FO5Eb	6.34	0.01	0.00
PSS1/SS3Bb	6.18	0.01	0.00
PFO4/FO5Hb	5.99	0.01	0.00
PSS1/SS3Eb	5.98	0.01	0.00
PFO4/SS1D	5.73	0.01	0.00
PSS4/SS1Fb	5.72	0.01	0.00
PFO1/OWH	5.70	0.01	0.00
PSS4/SS3E	5.70	0.01	0.00
PFO4/OWH	5.59	0.01	0.00
PEM1/AB3H	5.42	0.01	0.00
PSS1/SS4Fb	5.06	0.01	0.00
PFO4/EM1Bb	5.01	0.01	0.00
PSS3/SS4Bb	4.94	0.01	0.00
PFO5/SS1Fb	4.90	0.01	0.00
PFO5/FO4Eb	4.89	0.01	0.00
PFO4/FO5B	4.81	0.01	0.00
PFO4/US2E	4.66	0.01	0.00
PFO5/FO4Hb	4.60	0.01	0.00
PSS4Fb	4.51	0.01	0.00
PEM1Ef	4.38	0.01	0.00
PFO1/FO4Eb	4.32	0.01	0.00
PSS1/SS2E	4.25	0.01	0.00
PSS1/SS3Fb	4.09	0.01	0.00
PEM1/US2E	3.95	0.01	0.00
PSS1/SS3Bh	3.89	0.01	0.00
PEM1D	3.83	0.01	0.00
PFO1/OWHb	3.79	0.01	0.00
PFO4Fb	3.66	0.01	0.00
PSS4/OWH	3.50	0.01	0.00
PSS1/OWHx	3.48	0.01	0.00
PSS4/EM1D	3.43	0.01	0.00
PEM1/US2B	3.39	0.01	0.00
PSS1/OWHh	3.27	0.01	0.00
PFO4/EM1F	3.22	0.01	0.00
PSS3/SS5Hb	3.18	0.01	0.00
PSS5/SS3Hb	3.12	0.01	0.00
PSS4/SS1Eh	2.99	0.01	0.00

Covertype Label	Covertype Area (ha)	Percent of Wetland Coverage	Percent of Watershed Area
PFO5/OWHh	2.89	0.01	0.00
PFO4/EM1D	2.84	0.01	0.00
PFO5/FO2Bb	2.84	0.01	0.00
PSS1/US2B	2.81	0.01	0.00
PSS5/EM1Hb	2.79	0.01	0.00
PFO4/SS1Hb	2.71	0.01	0.00
PFO4/EM1E/U	2.70	0.01	0.00
PEM1Bdf	2.68	0.01	0.00
PFO2/SS1E	2.61	0.01	0.00
PSS3/OWHh	2.55	0.01	0.00
PFO2/FO5B	2.48	0.00	0.00
PSS2B	2.42	0.00	0.00
PAB3/UB2H	2.34	0.00	0.00
PSS4/US2D	2.26	0.00	0.00
PSS5/EM1Eb	2.25	0.00	0.00
PSS4/SS1Bd	2.18	0.00	0.00
PSS3/SS1Hb	2.10	0.00	0.00
PFO1/EM1Eb	2.03	0.00	0.00
PEM1/US2D	1.96	0.00	0.00
PSS3/SS1Eb	1.95	0.00	0.00
PFO1Eb	1.92	0.00	0.00
PSS4/SS3Bb	1.91	0.00	0.00
PSS2/SS3B	1.88	0.00	0.00
PSS1/EM1Ef	1.88	0.00	0.00
PSS1/AB3H	1.87	0.00	0.00
PFO4/SS1Bb	1.86	0.00	0.00
PFO5/FO4Bb	1.83	0.00	0.00
PFO4E/U	1.75	0.00	0.00
PFO4/FO1Bb	1.70	0.00	0.00
PFO5/SS4Bb	1.65	0.00	0.00
PSS4/SS5Bb	1.62	0.00	0.00
PFO2/FO5Bb	1.60	0.00	0.00
PFO1/SS3B	1.58	0.00	0.00
PFO5Fb	1.54	0.00	0.00
PFO5/SS4Eb	1.54	0.00	0.00
PSS3/SS1Bb	1.48	0.00	0.00
PFO2/SS1Eb	1.45	0.00	0.00
PSS1/US1D	1.41	0.00	0.00
PSS4/SS5Hb	1.39	0.00	0.00
PSS2/SS4B	1.33	0.00	0.00
PFO4/FO5Fb	1.31	0.00	0.00
PFO4/US2B	1.23	0.00	0.00
PFO5/SS5Hb	1.21	0.00	0.00
PFO1/EM1Hb	1.20	0.00	0.00
PEM1Bx	1.19	0.00	0.00
PFO4/SS5E	1.17	0.00	0.00
PSS2/SS4E	1.10	0.00	0.00

Covertype Label	Covertype Area (ha)	Percent of Wetland Coverage	Percent of Watershed Area
PFO4/FO5Bb	1.09	0.00	0.00
PSS5/SS1Eb	1.07	0.00	0.00
PFO5/SS3Bb	1.06	0.00	0.00
PSS1/EM1Fh	0.99	0.00	0.00
PSS3Eh	0.97	0.00	0.00
PFO4/US2D	0.93	0.00	0.00
PSS4/SS5Eb	0.92	0.00	0.00
PSS1/SS5Eb	0.80	0.00	0.00
PSS5Eb	0.77	0.00	0.00
PFO1/SS1Bb	0.74	0.00	0.00
PFO4/SS4D	0.74	0.00	0.00
PSS1/SS4D	0.69	0.00	0.00
PSS1Bf	0.67	0.00	0.00
PFO1/EM1Fb	0.63	0.00	0.00
PEM1/US1B	0.60	0.00	0.00
PSS2/EM1E	0.59	0.00	0.00
PSS4/SS1D	0.56	0.00	0.00
PFO5/EM1Hh	0.51	0.00	0.00
PFO2/SS4E	0.50	0.00	0.00
PFO5/SS3Eb	0.47	0.00	0.00
PFO4/EM1H	0.45	0.00	0.00
PSS1/EM1Bx	0.43	0.00	0.00
PFO1/US1B	0.43	0.00	0.00
PFO4/FO1Fb	0.43	0.00	0.00
PFO5/SS1Bb	0.42	0.00	0.00
PFO1/FO5E	0.42	0.00	0.00
PFO4/FO1Hb	0.41	0.00	0.00
PFO4/SS1Eh	0.40	0.00	0.00
PFO5/FO4Fb	0.39	0.00	0.00
PSS3Fb	0.39	0.00	0.00
PFO1/FO5B	0.38	0.00	0.00
PFO2/EM1Bb	0.36	0.00	0.00
PSS1Bx	0.34	0.00	0.00
PSS2E	0.33	0.00	0.00
PFO4/FO2Bb	0.33	0.00	0.00
PSS5Fb	0.30	0.00	0.00
PFO1/FO5F	0.29	0.00	0.00
PEM1/OWHx	0.27	0.00	0.00
PSS4/US2B	0.26	0.00	0.00
PSS3/SS4Fb	0.25	0.00	0.00
PFO2/SS2Bb	0.24	0.00	0.00
PFO4Bh	0.24	0.00	0.00
PFO2E	0.20	0.00	0.00
PSS2/SS1B	0.18	0.00	0.00
PFO4/OWHh	0.17	0.00	0.00
PEM1Ex	0.07	0.00	0.00
Total	49779.54	100.00	6.98

Appendix 6: Upper Hudson Drainage Basin Wetland Labels: Relative Coverage by Wetland Label in Alphabetical Order

Covertype Label	Covertype Area (ha)	Percent of Wetland Coverage	Percent of Watershed Area
PAB3/OWH	40.23	0.00	0.01
PAB3/OWHb	14.22	0.00	0.00
PAB3/UB2H	2.34	0.00	0.00
PEM1/AB3H	5.42	0.00	0.00
PEM1/OWH	92.02	0.00	0.01
PEM1/OWHb	555.90	0.01	0.08
PEM1/OWHh	22.91	0.00	0.00
PEM1/OWHx	0.27	0.00	0.00
PEM1/US1B	0.60	0.00	0.00
PEM1/US2B	3.39	0.00	0.00
PEM1/US2D	1.96	0.00	0.00
PEM1/US2E	3.95	0.00	0.00
PEM1B	471.41	0.01	0.07
PEM1Bb	64.41	0.00	0.01
PEM1Bdf	2.68	0.00	0.00
PEM1Bf	29.35	0.00	0.00
PEM1Bx	1.19	0.00	0.00
PEM1D	3.83	0.00	0.00
PEM1E	1316.11	0.03	0.18
PEM1Eb	984.44	0.02	0.14
PEM1Ebf	8.45	0.00	0.00
PEM1Ef	4.38	0.00	0.00
PEM1Ex	0.07	0.00	0.00
PEM1F	209.07	0.00	0.03
PEM1Fb	288.30	0.01	0.04
PFO1/EM1B	52.15	0.00	0.01
PFO1/EM1E	53.96	0.00	0.01
PFO1/EM1Eb	2.03	0.00	0.00
PFO1/EM1Fb	0.63	0.00	0.00
PFO1/EM1Hb	1.20	0.00	0.00
PFO1/FO4B	329.25	0.01	0.05
PFO1/FO4D	23.23	0.00	0.00
PFO1/FO4E	213.04	0.00	0.03
PFO1/FO4Eb	4.32	0.00	0.00
PFO1/FO5B	0.38	0.00	0.00
PFO1/FO5E	0.42	0.00	0.00
PFO1/FO5F	0.29	0.00	0.00
PFO1/OWH	5.70	0.00	0.00
PFO1/OWHb	3.79	0.00	0.00
PFO1/SS1B	716.29	0.01	0.10
PFO1/SS1Bb	0.74	0.00	0.00
PFO1/SS1D	35.17	0.00	0.00
PFO1/SS1E	425.68	0.01	0.06
PFO1/SS1Eb	7.25	0.00	0.00

Covertype Label	Covertype Area (ha)	Percent of Wetland Coverage	Percent of Watershed Area
PFO1/SS3B	1.58	0.00	0.00
PFO1/SS4B	49.03	0.00	0.01
PFO1/SS4E	29.74	0.00	0.00
PFO1/US1B	0.43	0.00	0.00
PFO1/US2D	47.64	0.00	0.01
PFO1B	368.33	0.01	0.05
PFO1D	72.51	0.00	0.01
PFO1E	365.69	0.01	0.05
PFO1Eb	1.92	0.00	0.00
PFO1Fb	7.72	0.00	0.00
PFO2/EM1B	33.39	0.00	0.00
PFO2/EM1Bb	0.36	0.00	0.00
PFO2/EM1E	8.69	0.00	0.00
PFO2/FO4B	12.47	0.00	0.00
PFO2/FO4E	14.59	0.00	0.00
PFO2/FO5B	2.48	0.00	0.00
PFO2/FO5Bb	1.60	0.00	0.00
PFO2/SS1B	27.40	0.00	0.00
PFO2/SS1E	2.61	0.00	0.00
PFO2/SS1Eb	1.45	0.00	0.00
PFO2/SS2B	8.06	0.00	0.00
PFO2/SS2Bb	0.24	0.00	0.00
PFO2/SS3B	46.51	0.00	0.01
PFO2/SS3E	6.76	0.00	0.00
PFO2/SS4B	9.14	0.00	0.00
PFO2/SS4E	0.50	0.00	0.00
PFO2B	9.16	0.00	0.00
PFO2E	0.20	0.00	0.00
PFO4/EM1B	253.27	0.01	0.04
PFO4/EM1Bb	5.01	0.00	0.00
PFO4/EM1D	2.84	0.00	0.00
PFO4/EM1E	252.43	0.01	0.04
PFO4/EM1E/U	2.70	0.00	0.00
PFO4/EM1Eb	35.10	0.00	0.00
PFO4/EM1F	3.22	0.00	0.00
PFO4/EM1Fb	12.20	0.00	0.00
PFO4/EM1H	0.45	0.00	0.00
PFO4/FO1B	581.52	0.01	0.08
PFO4/FO1Bb	1.70	0.00	0.00
PFO4/FO1D	22.47	0.00	0.00
PFO4/FO1E	404.97	0.01	0.06
PFO4/FO1Eb	14.21	0.00	0.00
PFO4/FO1Fb	0.43	0.00	0.00
PFO4/FO1Hb	0.41	0.00	0.00
PFO4/FO2B	43.77	0.00	0.01
PFO4/FO2Bb	0.33	0.00	0.00

Covertype Label	Covertype Area (ha)	Percent of Wetland Coverage	Percent of Watershed Area
PFO4/FO2E	23.46	0.00	0.00
PFO4/FO5B	4.81	0.00	0.00
PFO4/FO5Bb	1.09	0.00	0.00
PFO4/FO5E	19.49	0.00	0.00
PFO4/FO5Eb	6.34	0.00	0.00
PFO4/FO5Fb	1.31	0.00	0.00
PFO4/FO5Hb	5.99	0.00	0.00
PFO4/OWH	5.59	0.00	0.00
PFO4/OWHb	48.64	0.00	0.01
PFO4/OWHh	0.17	0.00	0.00
PFO4/SS1B	1203.26	0.02	0.17
PFO4/SS1Bb	1.86	0.00	0.00
PFO4/SS1D	5.73	0.00	0.00
PFO4/SS1E	597.13	0.01	0.08
PFO4/SS1Eb	21.14	0.00	0.00
PFO4/SS1Eh	0.40	0.00	0.00
PFO4/SS1Hb	2.71	0.00	0.00
PFO4/SS2E	6.91	0.00	0.00
PFO4/SS3B	31.97	0.00	0.00
PFO4/SS3E	7.66	0.00	0.00
PFO4/SS4B	7369.57	0.15	1.03
PFO4/SS4B/U	160.08	0.00	0.02
PFO4/SS4Bb	17.01	0.00	0.00
PFO4/SS4D	0.74	0.00	0.00
PFO4/SS4E	2116.20	0.04	0.30
PFO4/SS4Eb	27.68	0.00	0.00
PFO4/SS5E	1.17	0.00	0.00
PFO4/US2B	1.23	0.00	0.00
PFO4/US2D	0.93	0.00	0.00
PFO4/US2E	4.66	0.00	0.00
PFO4B	4942.76	0.10	0.69
PFO4B/U	133.08	0.00	0.02
PFO4Bb	37.93	0.00	0.01
PFO4Bh	0.24	0.00	0.00
PFO4D	7.17	0.00	0.00
PFO4E	1962.01	0.04	0.28
PFO4E/U	1.75	0.00	0.00
PFO4Eb	76.46	0.00	0.01
PFO4Fb	3.66	0.00	0.00
PFO5/EM1Bb	20.80	0.00	0.00
PFO5/EM1Eb	40.15	0.00	0.01
PFO5/EM1Fb	20.07	0.00	0.00
PFO5/EM1Hb	42.62	0.00	0.01
PFO5/EM1Hh	0.51	0.00	0.00
PFO5/FO2Bb	2.84	0.00	0.00
PFO5/FO4Bb	1.83	0.00	0.00

Covertype Label	Covertype Area (ha)	Percent of Wetland Coverage	Percent of Watershed Area
PFO5/FO4Eb	4.89	0.00	0.00
PFO5/FO4Fb	0.39	0.00	0.00
PFO5/FO4Hb	4.60	0.00	0.00
PFO5/OWHb	1164.18	0.02	0.16
PFO5/OWHbf	8.37	0.00	0.00
PFO5/OWHh	2.89	0.00	0.00
PFO5/SS1Bb	0.42	0.00	0.00
PFO5/SS1Eb	32.75	0.00	0.00
PFO5/SS1Fb	4.90	0.00	0.00
PFO5/SS1Hb	6.79	0.00	0.00
PFO5/SS3Bb	1.06	0.00	0.00
PFO5/SS3Eb	0.47	0.00	0.00
PFO5/SS4Bb	1.65	0.00	0.00
PFO5/SS4Eb	1.54	0.00	0.00
PFO5/SS5Eb	9.39	0.00	0.00
PFO5/SS5Hb	1.21	0.00	0.00
PFO5Bb	9.62	0.00	0.00
PFO5Eb	38.08	0.00	0.01
PFO5Fb	1.54	0.00	0.00
PSS1/AB3H	1.87	0.00	0.00
PSS1/EM1B	1751.42	0.04	0.25
PSS1/EM1Bb	108.90	0.00	0.02
PSS1/EM1Bdf	13.07	0.00	0.00
PSS1/EM1Bf	18.62	0.00	0.00
PSS1/EM1Bx	0.43	0.00	0.00
PSS1/EM1D	19.88	0.00	0.00
PSS1/EM1E	4068.89	0.08	0.57
PSS1/EM1Eb	2577.44	0.05	0.36
PSS1/EM1Ef	1.88	0.00	0.00
PSS1/EM1Eh	8.69	0.00	0.00
PSS1/EM1F	474.82	0.01	0.07
PSS1/EM1Fb	934.03	0.02	0.13
PSS1/EM1Fh	0.99	0.00	0.00
PSS1/EM1Hb	27.96	0.00	0.00
PSS1/OWH	35.00	0.00	0.00
PSS1/OWHb	88.08	0.00	0.01
PSS1/OWHh	3.27	0.00	0.00
PSS1/OWHx	3.48	0.00	0.00
PSS1/SS2E	4.25	0.00	0.00
PSS1/SS3B	95.44	0.00	0.01
PSS1/SS3Bb	6.18	0.00	0.00
PSS1/SS3Bh	3.89	0.00	0.00
PSS1/SS3E	71.04	0.00	0.01
PSS1/SS3Eb	5.98	0.00	0.00
PSS1/SS3Fb	4.09	0.00	0.00
PSS1/SS4B	672.72	0.01	0.09

Covertype Label	Covertype Area (ha)	Percent of Wetland Coverage	Percent of Watershed Area
PSS1/SS4Bb	9.62	0.00	0.00
PSS1/SS4D	0.69	0.00	0.00
PSS1/SS4E	329.86	0.01	0.05
PSS1/SS4Eb	21.80	0.00	0.00
PSS1/SS4Fb	5.06	0.00	0.00
PSS1/SS5Eb	0.80	0.00	0.00
PSS1/US1D	1.41	0.00	0.00
PSS1/US2B	2.81	0.00	0.00
PSS1/US2D	20.58	0.00	0.00
PSS1/US2E	36.13	0.00	0.01
PSS1B	855.20	0.02	0.12
PSS1Bb	6.98	0.00	0.00
PSS1Bf	0.67	0.00	0.00
PSS1Bx	0.34	0.00	0.00
PSS1D	6.54	0.00	0.00
PSS1E	917.92	0.02	0.13
PSS1Eb	135.05	0.00	0.02
PSS1Fb	66.73	0.00	0.01
PSS2/EM1B	20.70	0.00	0.00
PSS2/EM1E	0.59	0.00	0.00
PSS2/SS1B	0.18	0.00	0.00
PSS2/SS1E	9.66	0.00	0.00
PSS2/SS3B	1.88	0.00	0.00
PSS2/SS4B	1.33	0.00	0.00
PSS2/SS4E	1.10	0.00	0.00
PSS2B	2.42	0.00	0.00
PSS2E	0.33	0.00	0.00
PSS3/EM1B	1351.41	0.03	0.19
PSS3/EM1Bb	144.34	0.00	0.02
PSS3/EM1E	207.26	0.00	0.03
PSS3/EM1Eb	96.28	0.00	0.01
PSS3/EM1Eh	7.62	0.00	0.00
PSS3/EM1F	11.41	0.00	0.00
PSS3/EM1Fb	21.26	0.00	0.00
PSS3/EM1Hb	29.33	0.00	0.00
PSS3/OWH	20.90	0.00	0.00
PSS3/OWHb	41.14	0.00	0.01
PSS3/OWHh	2.55	0.00	0.00
PSS3/SS1B	121.18	0.00	0.02
PSS3/SS1Bb	1.48	0.00	0.00
PSS3/SS1E	32.41	0.00	0.00
PSS3/SS1Eb	1.95	0.00	0.00
PSS3/SS1Fb	6.80	0.00	0.00
PSS3/SS1Hb	2.10	0.00	0.00
PSS3/SS2B	8.70	0.00	0.00
PSS3/SS4B	76.33	0.00	0.01

Covertype Label	Covertype Area (ha)	Percent of Wetland Coverage	Percent of Watershed Area
PSS3/SS4Bb	4.94	0.00	0.00
PSS3/SS4E	8.40	0.00	0.00
PSS3/SS4Fb	0.25	0.00	0.00
PSS3/SS5Hb	3.18	0.00	0.00
PSS3B	216.20	0.00	0.03
PSS3Bb	31.68	0.00	0.00
PSS3E	32.02	0.00	0.00
PSS3Eb	18.24	0.00	0.00
PSS3Eh	0.97	0.00	0.00
PSS3Fb	0.39	0.00	0.00
PSS3Hb	10.88	0.00	0.00
PSS4/EM1B	628.78	0.01	0.09
PSS4/EM1Bb	13.34	0.00	0.00
PSS4/EM1D	3.43	0.00	0.00
PSS4/EM1E	452.47	0.01	0.06
PSS4/EM1Eb	199.61	0.00	0.03
PSS4/EM1F	55.22	0.00	0.01
PSS4/EM1Fb	45.30	0.00	0.01
PSS4/OWH	3.50	0.00	0.00
PSS4/OWHb	9.93	0.00	0.00
PSS4/SS1B	991.69	0.02	0.14
PSS4/SS1Bb	7.26	0.00	0.00
PSS4/SS1Bd	2.18	0.00	0.00
PSS4/SS1D	0.56	0.00	0.00
PSS4/SS1E	397.62	0.01	0.06
PSS4/SS1Eb	26.84	0.00	0.00
PSS4/SS1Eh	2.99	0.00	0.00
PSS4/SS1Fb	5.72	0.00	0.00
PSS4/SS2B	47.07	0.00	0.01
PSS4/SS2E	11.80	0.00	0.00
PSS4/SS3B	129.53	0.00	0.02
PSS4/SS3Bb	1.91	0.00	0.00
PSS4/SS3E	5.70	0.00	0.00
PSS4/SS5Bb	1.62	0.00	0.00
PSS4/SS5Eb	0.92	0.00	0.00
PSS4/SS5Hb	1.39	0.00	0.00
PSS4/US2B	0.26	0.00	0.00
PSS4/US2D	2.26	0.00	0.00
PSS4B	1217.40	0.02	0.17
PSS4Bb	11.69	0.00	0.00
PSS4E	390.54	0.01	0.05
PSS4Eb	26.96	0.00	0.00
PSS4Fb	4.51	0.00	0.00
PSS5/EM1Bb	15.26	0.00	0.00
PSS5/EM1Eb	2.25	0.00	0.00
PSS5/EM1Hb	2.79	0.00	0.00

Covertype Label	Covertype Area (ha)	Percent of Wetland Coverage	Percent of Watershed Area
PSS5/OWHb	30.48	0.00	0.00
PSS5/SS1Eb	1.07	0.00	0.00
PSS5/SS3Hb	3.12	0.00	0.00
PSS5Eb	0.77	0.00	0.00
PSS5Fb	0.30	0.00	0.00
TOTAL	49779.54	100.00	6.98

Appendix 7. Header File Information for the Thematic Mapper 5 Satellite Image Files Used in the Upper Hudson Watershed Upland Land Cover Classification

South Image: Scene 14/30 July 23, 1997

PRODUCT =98112003-01
WRS =014/03000
ACQUISITION DATE =19970723
SATELLITE =L5
INSTRUMENT =TM10
PRODUCT TYPE =ORBIT ORIENTED
PRODUCT SIZE =FULL SCENE
TYPE OF GEODETIC PROCESSING =SYSTEMATIC
RESAMPLING =NN RAD
GAINS/BIASES = 1.05582/-.00708 2.60541/-.01575 1.63516/-.01205 2.94315/-.02063 0.68572/-.00547
1.52431/0.12378 0.42580/-.00309
TAPE SPANNING FLAG=1/1
START LINE #= 1
LINES PER VOL= 6800
ORIENTATION =-10.54
PROJECTION =UTM
USGS PROJECTION # = 9
USGS MAP ZONE = 18
USGS PROJECTION PARAMETERS = 0.637820640000000D+07 0.635658380000000D+07
0.999600000000000D+00 0.000000000000000D+00 -0.750000000000000D+06 0.000000000000000D+00
0.500000000000000D+06 0.000000000000000D+00 0.000000000000000D+00 0.000000000000000D+00
0.000000000000000D+00 0.000000000000000D+00 0.000000000000000D+00 0.000000000000000D+00
0.000000000000000D+00
EARTH ELLIPSOID =CLARKE_1866
SEMI-MAJOR AXIS =6378206.400
SEMI-MINOR AXIS =6356583.800
PIXEL SIZE =25.00
PIXELS PER LINE= 7942
LINES PER IMAGE= 6800
UL 0745253.8435W 440527.8940N 509476.498 4881779.681
UR 0722731.4539W 434409.6076N 704653.656 4845474.683
LR 0725346.9341W 421424.4471N 613569.701 4678366.070
LL 0751547.9767W 423509.9051N 478392.544 4714671.069
BANDS PRESENT =1234567
BLOCKING FACTOR = 1
RECORD LENGTH = 7942
SUN ELEVATION =57
SUN AZIMUTH =126 CENTER 0735227.7302W 431011.5133N 591498.121 47880078.031 3970 3400
OFFSET=306 REVB

Middle Image: Scene 14/30 June 23, 1992

PRODUCT =92203026-01
WRS =014/03000
ACQUISITION DATE =19910520
SATELLITE =L5
INSTRUMENT =TM10
PRODUCT TYPE =MAP ORIENTED
PRODUCT SIZE =FULL SCENE
TYPE OF GEODETIC PROCESSING =PRECISION
RESAMPLING =NN RAD
GAINS/BIASES = 1.05463/-.00673 2.60344/-.01694
TAPE SPANNING FLAG=1/1
START LINE #= 1
LINES PER VOL= 8520
ORIENTATION = 0.00
PROJECTION =TM
USGS PROJECTION # = 9
USGS MAP ZONE = 61
USGS PROJECTION PARAMETERS =
0.637820640000000D+07 0.635658380000000D+07 0.999600000000000D+00 0.000000000000000D+00 -
0.750000000000000D+06 0.000000000000000D+00 0.500000000000000D+06 0.000000000000000D+00
0.000000000000000D+00
0.000000000000000D+00 0.000000000000000D+00 0.000000000000000D+00
0.000000000000000D+00 0.000000000000000D+00 0.000000000000000D+00
EARTH ELLIPSOID =CLARKE_1866
SEMI-MAJOR AXIS =6378206.400
SEMI-MINOR AXIS =6356583.800
PIXEL SIZE =25.00
PIXELS PER LINE= 8990
LINES PER IMAGE= 8520
UL 0752230.3055W 440839.4097N 470000.000 4887750.
UR 0723359.2176W 440708.2893N 694725.000 4887750.000
LR 0723828.9519W 421210.1569N 694725.000 4674775.000
LL 0752148.6845W 421335.4055N 470000.000 4674775.000
BANDS PRESENT =12
BLOCKING FACTOR = 3
RECORD LENGTH =26970
SUN ELEVATION =57
SUN AZIMUTH =126
CENTER 0735918.2031W 431111.3699N 582207.482 4781806.187 4489 4239
OFFSET= -72 REV

North Image: Scene 14/29 June 16, 1995

PRODUCT =98085038-01
WRS =014/02900
ACQUISITION DATE =19950616
SATELLITE =L5
INSTRUMENT =TM10
PRODUCT TYPE =ORBIT ORIENTED
PRODUCT SIZE =FULL SCENE
TYPE OF GEODETIC PROCESSING =SYSTEMATIC
RESAMPLING = NN RAD
GAINS/BIASES = 1.05596/-.00726 2.60581/-.01650 1.63531/-.01203 2.94233/-.02183 0.68549/-.00528
1.52431/0.12378 0.42566/-.00311
TAPE SPANNING FLAG=1/1
START LINE #= 1
LINES PER VOL= 6800
ORIENTATION =-10.45
PROJECTION =UTM
USGS PROJECTION # = 9
USGS MAP ZONE = 18
USGS PROJECTION PARAMETERS = 0.637820640000000D+07 0.635658380000000D+07
0.999600000000000D+00 0.000000000000000D+00 -0.750000000000000D+06 0.000000000000000D+00
0.500000000000000D+06 0.000000000000000D+00 0.000000000000000D+00 0.000000000000000D+00
0.000000000000000D+00 0.000000000000000D+00 0.000000000000000D+00 0.000000000000000D+00
0.000000000000000D+00
EARTH ELLIPSOID =CLARKE_1866
SEMI-MAJOR AXIS =6378206.400
SEMI-MINOR AXIS =6356583.800
PIXEL SIZE =25.00
PIXELS PER LINE= 7942
LINES PER IMAGE= 6800
UL 0743344.7084W 453249.1893N 534159.365 5043593.228
UR 0720448.5332W 451110.4215N 729388.574 5007569.185
LR 0723210.9835W 434131.7637N 698545.170 4840416.007
LL 0745731.0023W 440235.0166N 503315.961 4876440.050
BANDS PRESENT =1234567
BLOCKING FACTOR = 1
RECORD LENGTH = 7942
SUN ELEVATION =56
SUN AZIMUTH =118 CENTER 0733201.1639W 443726.3313N 616327.282 4942009.737 3970 3400
OFFSET=-163 REVB

Appendix 8. Metadata for Upland Land Cover Map of the Greater Upper Hudson Watershed Created from Landsat Thematic Mapper Images.

Report Date: 21-Oct-1999
Metadata Data Set Name: Uplands in the Greater Upper Hudson River Watershed
1 Identification Information
1.1 Citation:
8 Citation Information:
8.1 Originator: New York State Adirondack Park Agency
8.1 Originator: Daniel M. Spada, Project Director (compiler)
8.2 Publication Date: 19991231
8.4 Title: New York State Adirondack Park Upland Landcover in the Upper Hudson Drainage Basin
8.5 Edition: Version 1.0
8.6 Geospatial Data Presentation Form: map
8.7.1 Series Name: Watershed Scale Protection for Adirondack Wetlands
8.7.2 Issue Identification: Implementing a Procedure to Assess Cumulative Effects and Predict Cumulative Impacts from Development Activities to Wetlands and Watersheds in the Oswegatchie, Black, and Greater Upper Hudson River Watersheds of the Adirondack Park, New York State, USA.
8.8.1 Publication Place: Ray Brook, NY
8.8.2 Publisher: New York State Adirondack Park Agency
1.2 Description
1.2.1 Abstract: Wetlands were subset from LANDSAT Thematic Mapper imagery by rasterizing wetland Arc/Info vector files developed from 1985-1995 aerial photographs. Maximum likelihood classifications of upland pixels were conducted on June 23, 1992, June 16, 1995, and July 23 1997 Thematic Mapper scenes. Final classes include: Deciduous forest, Deciduous/Conifer forest, Conifer/Deciduous forest, Conifer forest, Open with vegetation, and Open without Vegetation. Wetland and Open Water classes were derived from the Arc/Info wetland files. Overall classification accuracy was 85.76%.
1.2.2 Purpose: The upland dataset was created to provide general upland landcover types to compliment the detailed Arc/Info wetlands database developed for the Upper Hudson River Basin project. The upland database is part of a larger database designed to help evaluate watershed/wetland relationships and provide data for cumulative impact assessments.
1.2.3 Supplemental Information: LANDSAT Thematic Mapper (TM) scenes were subset to the approximate study area boundary. Wetlands were masked out of the data by rasterizing the vector wetland files using Arc/Info 7.2.1 and performing the mask with ERDAS Imagine 8.3.1 graphical model interface. TM data were classified using a maximum likelihood classification into six cover type classes using ERDAS Imagine 8.3.1. Classifications were evaluated using 1985-1986 1:58000 and 1994-1995 1:40000 color infrared aerial transparencies, and field check and air photo notes drawn on USGS 7.5' topographic quadrangles. An additional two classes, Wetland and Open Water, were extracted by masking the final classification with a rasterized file created from Greater Upper Hudson project digital wetland coverages. Classification accuracy was based solely on upland landcover classes derived through image processing techniques.
1.3 Time Period of Content
9 Time Period Information
9.3 Range of Dates/Times
9.3.1 Beginning Date: 19850417
9.3.3 Ending Date: 19950517
1.3.1 Currentness Reference: Date of imagery used for wetlands delineations (1985-1995) and TM imagery dates (1992–1997)
1.4 Status
1.4.1 Progress: Complete
1.4.2 Maintenance and Update Frequency: None planned
1.5 Spatial Domain
1.5.1 Bounding Coordinates
1.5.1.1 West Bounding Coordinate: -74.649

1.5.1.2 East Bounding Coordinate: -73.5392
1.5.1.3 North Bounding Coordinate: 44.1477
1.5.1.4 South Bounding Coordinate: 43.0127
1.6 Keywords
1.6.1 Theme
1.6.1.1 Theme Keyword Thesaurus: None
1.6.1.2 Theme Keyword: Vegetation
1.6.1.2 Theme Keyword: Geographic Information System (GIS)
1.6.1.2 Theme Keyword: LANDSAT Thematic Mapper data
1.6.1.2 Theme Keyword: ERDAS (raster) file
1.6.1.2 Theme Keyword: Uplands
1.6.1.2 Theme Keyword: Landcover
1.6.2 Place
1.6.2.1 Place Keyword Thesaurus: Geographic Names Information System
1.6.2.2 Place Keyword: New York
1.6.2.2 Place Keyword: Adirondack Park
1.6.2.2 Place Keyword: Adirondack Mountains
1.6.2.2 Place Keyword: Upper Hudson River Drainage Basin
1.6.3 Stratum
1.6.3.1 Stratum Keyword Thesaurus: None
1.6.4 Temporal
1.6.4.1 Temporal Keyword Thesaurus: None
1.6.4.2 Temporal Keyword: Date of aerial photography: 1985-1995
1.6.4.2 Temporal Keyword: Date of LANDSAT TM imagery: 1992-1997
1.7 Access Constraints: None
1.8 Use Constraints:
These data may not be used for legal determinations.
1.9 Point of Contact
10.2 Contact Organization Primary
10.1.2 Contact Organization: NYS Adirondack Park Agency
10.1.1 Contact Person: Mr. Daniel M. Spada
10.3 Contact Position: Adirondack Park Project Analyst, Biological Resources
10.4 Contact Address
10.4.1 Address Type: mailing and physical address
10.4.2 Address: PO Box 99, Route 86
10.4.3 City: Ray Brook
10.4.4 State or Province: New York
10.4.5 Postal Code: 12977
10.4.6 Country: USA
10.5 Contact Voice Telephone: (518) 891-4050
10.7 Contact Facsimile Telephone: (518) 891-3938
1.11 Data Set Credit: Funding was provided by the US Environmental Protection Agency Office of Wetlands Protection, State Wetlands Protection Program, Project #CD 992290-01-0 to the New York State Adirondack Park Agency. Subcontractors for portions of the grant were the Remote Sensing Laboratory, Plattsburgh State University (RSL) and the Adirondack Lakes Survey Corporation, NYS Department of Environmental Conservation (ALSC).
1.12 Security Information
1.12.1 Security Classification System: None
1.12.2 Security Classification: Unclassified
1.12.3 Security Handling Description: None
1.13 Native Data Set Environment: ERDAS

2 Data Quality Information
2.1 Attribute Accuracy

2.1.1 Attribute Accuracy Report: The classification accuracy assessment tables are shown in Table 1. Landcover attributes were assigned to each raster cell based on image processing techniques. Corroborative data consulted during processing included 1985-86 color infrared NHAP 1:58000 transparencies, 1994-95 color infrared NAPP 1:40000 transparencies, USGS 7.5' topographic quadrangles, and field work. Attributes were qualitatively assessed throughout all steps of image processing by comparing screen displays of classified images to air photos, maps, and field notes. Coding reflects landcover, not land use, classes. Quantitative attribute accuracy was established through the ERDAS classification accuracy function using a stratified random sample.

2.1.2 Quantitative Attribute Accuracy Assessment

2.1.2.1 Attribute Accuracy Value: 85.76%

2.1.2.2 Attribute Accuracy Explanation: Classification accuracy assessment pixels for upland cover types were chosen by the ERDAS software using a stratified random distribution. Pixels values were checked with 1985-1995 aerial photographs. No assessment was conducted on either Wetland or Open Water since these classes were derived separately from air photo interpretations.

2.2 Logical Consistency Report: Upland land classifications were constrained to one of six different cover types. Wetlands and Open Water classes were derived from vector files created from air photo interpretations. No other classes were permitted.

2.3 Completeness Report: The upland landcover file was derived from LANDSAT Thematic Mapper imagery resampled after geo-referencing from a 30 meter to 25 meter pixel size. By combining the classifications from three different scenes, the entire study area was classified. Landcover masked by cloud or cloud shadow were re-interpreted utilizing 1985-1995 aerial photographs and raster cells were replaced with landcover classes. There are no unclassified pixels in the final GIS image. Satellite data average the signal reaching the sensor to an approximate 30 meter cell. Therefore, this file should be used only for regional assessments, not pixel-by-pixel assessments.

2.4 Positional Accuracy

2.4.1 Horizontal Positional Accuracy

2.4.1.1 Horizontal Positional Accuracy Report: The June 23, 1995 scene was purchased as a geo-corrected file from EOSAT. Craig Cheeseman, ALSC, geo-referenced the June 16, 1995 and July 23, 1997 imagery.

2.4.2.1 Vertical Positional Accuracy Report: No vertical coordinates are associated with this data set.

2.5.1 Source Information

2.5.1.1 Source Citation:

8.1 Originator: NYS Adirondack Park Agency

8.2 Publication Date: 19991231

8.4 Title: New York State Adirondack Park Wetland Boundaries in the Upper Hudson Drainage Basin

8.5 Edition: Version 1.0

8.6 Geospatial Data Presentation Form: map

8.7.1 Series Name: Watershed Scale Protection for Adirondack Wetlands

8.7.2 Issue Identification: Implementing a Procedure to Assess Cumulative Effects and Predict Cumulative Impacts from Development Activities to Wetlands and Watersheds in the Oswegatchie, Black, and Greater Upper Hudson River Watersheds of the Adirondack Park, New York State, USA.

8.8.1 Publication Place: Ray Brook, NY

8.8.2 Publisher: New York State Adirondack Park Agency

2.5.1.2 Source Scale Denominator: 24000

2.5.1.3 Type of Source Media: digital database file

2.5.1.4 Source Time Period of Content:

9 Time Period Information

9.3 Range of Dates/Times

9.3.1 Beginning Date: 19850417

9.3.3 Ending Date: 19950517

2.5.1.4.1 Source Currentness Reference: flight dates of imagery

2.5.1.5 Source Citation Abbreviation: WTL

2.5.1.6 Source Contribution: Used to prepare a wetlands mask. Wetlands were masked from the satellite data so that only upland areas were classified.

2.5.1 Source Information
2.5.1.1 Source Citation:
8.1 Originator: USGS
8.2 Publication Date: various
8.4 Title: National High Altitude Photography (NHAP)
8.6 Geospatial Data Presentation Form: aerial photograph
2.5.1.2 Source Scale Denominator: 58000
2.5.1.3 Type of Source Media: 9" X 9" color infrared vertical aerial photographic transparencies
2.5.1.4 Source Time Period of Content:
9 Time Period Information
9.3 Range of Dates/Times
9.3.1 Beginning Date: 19850417
9.3.3 Ending Date: 19861031
2.5.1.4.1 Source Currentness Reference: flight dates
2.5.1.5 Source Citation Abbreviation: PHOTOS
2.5.1.6 Source Contribution: Used for selecting and defining training sample areas. Used to verify classification accuracy assessment pixels.

2.5.1 Source Information
2.5.1.1 Source Citation:
8.1 Originator: USGS
8.2 Publication Date: various
8.4 Title: National Aerial Photography Program (NAPP)
8.6 Geospatial Data Presentation Form: aerial photograph
2.5.1.2 Source Scale Denominator: 40000
2.5.1.3 Type of Source Media: 9" X 9" color infrared vertical aerial photographic transparencies
2.5.1.4 Source Time Period of Content:
9 Time Period Information
9.3 Range of Dates/Times
9.3.1 Beginning Date: 19940514
9.3.3 Ending Date: 19950507
2.5.1.4.1 Source Currentness Reference: flight dates
2.5.1.5 Source Citation Abbreviation: PHOTOS
2.5.1.6 Source Contribution: Used for selection and delineations of signature training samples. Used to verify classification accuracy pixels.

2.5.1 Source Information
2.5.1.1 Source Citation:
8.1 Originator: EOSAT
8.2 Publication Date: 19950616
8.4 Title: LANDSAT Thematic Mapper scene 014/02900
8.6 Geospatial Data Presentation Form: Remote sensing image
8.8 Publication Information
8.8.1 Publication Place: Lanham, MD
8.8.2 Publisher: Earth Observation Satellite Company
2.5.1.2 Source Scale Denominator: none
2.5.1.3 Type of Source Media: magnetic tape
2.5.1.4 Source Time Period of Content:
9 Time Period Information
9.1 Single Date/Times
9.1.1 Calendar Date: 19950616
2.5.1.4.1 Source Currentness Reference: Imagery date
2.5.1.5 Source Citation Abbreviation: TM North

2.5.1.6 Source Contribution: Seven band digital satellite image classified to produce the northern portion of the Upper Hudson Watershed upland landcover GIS image (Figure 1). Image was purchased as raw data.

2.5.1 Source Information
2.5.1.1 Source Citation:
8.1 Originator: EOSAT
8.2 Publication Date: 19920623
8.4 Title: LANDSAT Thematic Mapper scene 014/03000
8.6 Geospatial Data Presentation Form: Remote sensing image
8.8 Publication Information
8.8.1 Publication Place: Lanham, MD
8.8.2 Publisher: Earth Observation Satellite Company
2.5.1.2 Source Scale Denominator: none
2.5.1.3 Type of Source Media: magnetic tape
2.5.1.4 Source Time Period of Content:
9 Time Period Information
9.1 Single Date/Times
9.1.1 Calendar Date: 19920623
2.5.1.4.1 Source Currentness Reference: Imagery date
2.5.1.5 Source Citation Abbreviation: TM Middle
2.5.1.6 Source Contribution: Seven band digital satellite image classified to produce the middle portion of the Upper Hudson Watershed upland landcover GIS image (Figure 1). Image was purchased as a precision corrected scene with pixels resampled from the original 30 meter cell to a 25 meter cell.

2.5.1 Source Information
2.5.1.1 Source Citation:
8.1 Originator: EOSAT
8.2 Publication Date: 19970723
8.4 Title: LANDSAT Thematic Mapper scene 014/03000
8.6 Geospatial Data Presentation Form: Remote sensing image
8.8 Publication Information
8.8.1 Publication Place: Lanham, MD
8.8.2 Publisher: Earth Observation Satellite Company
2.5.1.2 Source Scale Denominator: none
2.5.1.3 Type of Source Media: magnetic tape
2.5.1.4 Source Time Period of Content:
9 Time Period Information
9.1 Single Date/Times
9.1.1 Calendar Date: 19970723
2.5.1.4.1 Source Currentness Reference: Imagery date
2.5.1.5 Source Citation Abbreviation: TM South
2.5.1.6 Source Contribution: Seven band digital satellite image classified to produce the southern portion of the Upper Hudson Watershed upland landcover GIS image (Figure 1). Image was purchased as raw data.

2.5.2 Process Step
2.5.2.1 Process Description: Geo-reference raw LANDSAT TM data.
The TM North and TM South images were purchased as unrectified images. They were rectified using the ERDAS Imagine 8.3.1 rectification procedure. Subsets were created that included the Upper Hudson watershed and the surrounding area. Ground control points (GCPs) were entered using road intersections from NYS DOT digital county road maps. Roads were used because they were easily visible on the TM scenes, were well distributed over the study area, and were more reliably located than natural features. Coordinates for the GCPs were obtained by creating an ArcView project that displayed road coverages for the desired region and zooming in to the desired intersection. The coordinate was identified and recorded

into a table. The same intersection was located on the TM image, and a GCP was entered along with the coordinate derived from ArcView. A fourth order polynomial transformation was used which required a minimum of 15 GCPs. Seventy four GCPs were used to rectify the TM North (June 16, 1995) image. The residual mean square (RMS) of the GCPs used in the rectification was 0.4774. The final rectification of the South (June 23, 1997) used 108 points, and had an RMS value of 0.545.

2.5.2.2 Source Used Citation Abbreviation: TM North, TM South

2.5.2.5 Source Produced Citation Abbreviation: TM Geo-Ref North, TM Geo-Ref South

2.5.2.6 Process Contact:

10.2 Contact Organization Primary

10.1.2 Contact Organization: Adirondack Lakes Survey Corporation, Department of Environmental Conservation

10.1.1 Contact Person: Craig C. Cheeseman

10.3 Contact Position: DataBase Manager, GIS Technician

10.4 Contact Address

10.4.1 Address Type: Mailing and Physical Address

10.4.2 Address: Route 86

10.4.3 City: Ray Brook

10.4.4 State or Province: New York

10.4.5 Postal Code: 12977

10.4.6 Country: USA

10.5 Contact Voice Telephone: (518) 897-1360

10.7 Contact Facsimile Telephone: (518) 897-1370

2.5.2 Process Step

2.5.2.1 Process Description: Import LANDSAT TM data files to the WindowsNT platform and create multi-band image files for each scene. Verify geo-referencing with vector wetland files.

2.5.2.2 Source Used Citation Abbreviation: TM Geo-Ref North, TM Middle, TM Geo-Ref South

2.5.2.5 Source Produced Citation Abbreviation: TM Geo-Ref North, TM Middle, TM Geo-Ref South

2.5.2.6 Process Contact:

10.2 Contact Organization Primary

10.1.2 Contact Organization: Remote Sensing Laboratory, Plattsburgh State University

10.1.1 Contact Person: Eileen B. Allen

10.3 Contact Position: Research Associate

10.4 Contact Address

10.4.1 Address Type: Mailing and Physical Address

10.4.2 Address: Center for Earth and Environmental Science, 101 Broad Street

10.4.3 City: Plattsburgh

10.4.4 State or Province: New York

10.4.5 Postal Code: 12901

10.4.6 Country: USA

10.5 Contact Voice Telephone: (518) 564-4028 or 564-2028

10.7 Contact Facsimile Telephone: (518) 564-5267

2.5.2 Process Step

2.5.2.1 Process Description: Subset TM imagery to approximate study area boundaries. Rasterize vector wetland file and mask out wetlands from the LANDSAT TM data.

2.5.2.2 Source Used Citation Abbreviation: TM Geo-Ref North, TM Middle, TM Geo-Ref South, WTL

2.5.2.5 Source Produced Citation Abbreviation: TM North-mask, TM Middle-mask, TM South-mask

2.5.2.6 Process Contact: Remote Sensing Laboratory, Plattsburgh State University for this and subsequent image processing steps.

2.5.2 Process Step

2.5.2.1 Process Description: Delineate training samples using field maps and aerial photographs on each of the scenes used in the classification. Use ellipses plotted on feature space diagrams and signature

histograms to evaluate within-class signature statistics and merge training samples. Plot ellipses on feature space diagrams to assess between-class signature statistics. Take more training samples and re-merge individual samples into larger training samples as appropriate. Run classifications using the Maximum Likelihood Classifier and experiment with signature processing order and probabilities. Try a variety of leaf-on, leaf-off, and principal component band combinations to achieve the best possible classification. Use Chi^2 signature plots with the ERDAS THRESH routine to evaluate classes. Compare classifications with detailed air photo interpretation notes on 7.5' USGS topographic maps. Final classifications were created from scene 014/02900 June 16, 1995 bands 1,2,3,4,5,and 7 for the north section; scene 014/03000 June 23, 1992 bands 1,2,4,5, and 7 for the middle section; and scene 014/03000 July 23, 1997 bands 1,2,3,4,5,and 7 for the south section (Figure 1). Replace cloud and cloud shadow pixels in the north section with upland landcover types derived from air photo interpretation.

2.5.2.2 Source Used Citation Abbreviation: TM North-mask, TM Middle-mask, TM South-mask

2.5.2.5 Source Produced Citation Abbreviation: TM North-classified, TM Middle-classified, TM South-classified

2.5.2 Process Step

2.5.2.1 Process Description: Conduct a classification accuracy assessment on each of the input files using the ERDAS stratified random classification accuracy pixel generator.

2.5.2.2 Source Used Citation Abbreviation: TM North-classified, TM Middle-classified, TM South-classified

2.5.2.5 Source Produced Citation Abbreviation: TM North-ClassAcc, TM Middle-ClassAcc, TM South-ClassAcc

2.5.2 Process Step

2.5.2.1 Process Description: Replace Cloud and Cloud Shadow classes in the middle image with upland landcover types derived from air photo interpretation. Merge the classified files into a unified upland landcover.

2.5.2.2 Source Used Citation Abbreviation: TM North-classified, TM Middle-classified, TM South-classified

2.5.2.5 Source Produced Citation Abbreviation: UH Upland

2.5.2 Process Step

2.5.2.1 Process Description: List the classification accuracy pixels retained after merging the classified files into the single upland landcover file. Compute classification accuracy reports (Table 1).

2.5.2.2 Source Used Citation Abbreviation: TM North-ClassAcc, TM Middle-ClassAcc, TM South-ClassAcc

2.5.2.5 Source Produced Citation Abbreviation: UH Upland Classification Accuracy

2.5.2 Process Step

2.5.2.1 Process Description: Mask out wetlands from UH Upland in case of misattribution during cloud and cloud shadow substitutions. Create a mask of open water polygons from the wetlands vector data layer using the CLASS1 attribute. Recode the upland landcover file to the final coding (Table 2).

2.5.2.2 Source Used Citation Abbreviation: UH Upland, WTL

2.5.2.5 Source Produced Citation Abbreviation: UHUPLAND

2.6 Cloud Cover: 0

3 Spatial Data Organization Information

3.2 Direct Spatial Reference Method: Raster

3.4 Raster Object Information

3.4.1 Raster Object Type: Grid Cell

3.4.2 Row Count: 5086

3.4.3 Column Count: 3534

4 Spatial Reference Information
4.1 Horizontal Coordinate System Definition
4.1.2 Planar
4.1.2.2 Grid Coordinate System
4.1.2.2.1 Grid Coordinate System Name: Universal Transverse Mercator
4.1.2.2.2 Universal Transverse Mercator
4.1.2.2.2.1 UTM Zone Number: 18
4.1.2.1.2.2 Longitude of Central Meridian: -75
4.1.2.1.2.3 Latitude of Projection Origin: 0
4.1.2.1.2.4 False Easting: 0
4.1.2.1.2.5 False Northing: 0
4.1.2.1.2.17 Scale Factor at Central Meridian: 1
4.1.4 Geodetic Model
4.1.4.1 Horizontal Datum Name: North American Datum of 1927
4.1.4.2 Ellipsoid Name: Clarke 1866
4.1.4.3 Semi-Major Axis: 6378206
4.1.4.4 Denominator of Flattening Ratio: 294.98

5 Entity and Attribute Information
5.1 Detailed Description
5.1.1 Entity Type
5.1.1.1 Entity Type Label: UHUPLAND.IMG
5.1.1.2 Entity Type Definition: Upland landcover classification for the Upper Hudson River Basin. GIS image created using image processing techniques for LANDSAT TM imagery in which wetland areas have been masked.
5.1.1.3 Entity Type Definition Source: Plattsburgh State University Remote Sensing Laboratory

5.1.2 Attribute
5.1.2.1 Attribute Label: Class Value
5.1.2.2 Attribute Definition: Integer corresponding to cell value assigned as a result of image processing techniques.
5.1.2.3 Attribute Definition Source: Attributes defined through signature selection and subsequent image processing techniques in ERDAS.
5.1.2.4 Attribute Domain Values
5.1.2.4.1 Enumerated Domain
5.1.2.4.1.1 Enumerated Domain Value: Upland landcover
5.1.2.4.1.2 Enumerated Domain Value Definition: Detailed wetland boundaries derived from air photo techniques were used to mask the LANDSAT TM data thereby producing an upland LANDSAT file for further image processing.

5.1.2 Attribute
5.1.2.1 Attribute Label: 1
5.1.2.2 Attribute Definition: Deciduous forest
5.1.2.9 Attribute Value Accuracy Information
5.1.2.9.2 Attribute Value Accuracy Explanation: Uplands were subset from the LANDSAT data using wetland vector files derived from air photo interpretation. Upland landcover classes were determined using standard image processing techniques. Accuracy assessments for each class may be found in Table 1. Training samples were collected in either pure Deciduous forest stands or in stands with few conifers.

5.1.2 Attribute
5.1.2.1 Attribute Label: 2
5.1.2.2 Attribute Definition: Deciduous/Conifer forest

5.1.2.9 Attribute Value Accuracy Information
5.1.2.9.2 Attribute Value Accuracy Explanation: Uplands were subset from the LANDSAT data using wetland vector files derived from air photo interpretation. Upland landcover classes were determined using standard image processing techniques. Accuracy assessments for each class may be found in Table 1. Training samples were taken in areas with an estimated 75% Deciduous forest and 25% Conifer forest.

5.1.2 Attribute
5.1.2.1 Attribute Label: 3
5.1.2.2 Attribute Definition: Conifer/Deciduous forest
5.1.2.9 Attribute Value Accuracy Information
5.1.2.9.2 Attribute Value Accuracy Explanation: Uplands were subset from the LANDSAT data using wetland vector files derived from air photo interpretation. Upland landcover classes were determined using standard image processing techniques. Accuracy assessments for each class may be found in Table 1. Training samples were taken in areas with an estimated 75% Conifer forest and 25% Deciduous forest.

5.1.2 Attribute
5.1.2.1 Attribute Label: 4
5.1.2.2 Attribute Definition: Conifer forest
5.1.2.9 Attribute Value Accuracy Information
5.1.2.9.2 Attribute Value Accuracy Explanation:Uplands were subset from the LANDSAT data using wetland vector files derived from air photo interpretation. Upland landcover classes were determined using standard image processing techniques. Accuracy assessments for each class may be found in Table 1. Training samples were taken in either pure Conifer forest stands or in stands with few Deciduous trees.

5.1.2 Attribute
5.1.2.1 Attribute Label: 5
5.1.2.2 Attribute Definition: Open with Vegetation
5.1.2.9 Attribute Value Accuracy Information
5.1.2.9.2 Attribute Value Accuracy Explanation: Uplands were subset from the LANDSAT data using wetland vector files derived from air photo interpretation. Upland landcover classes were determined using standard image processing techniques. Accuracy assessments for each class may be found in Table 1. Training samples were collected from areas with some ground cover but no trees.

5.1.2 Attribute
5.1.2.1 Attribute Label: 6
5.1.2.2 Attribute Definition: Open without Vegetation
5.1.2.7 Beginning Date of Attribute Values: 1992
5.1.2.8 Ending Date Of Attribute Values: 1997
5.1.2.9 Attribute Value Accuracy Information
5.1.2.9.2 Attribute Value Accuracy Explanation: Uplands were subset from the LANDSAT data using wetland vector files derived from air photo interpretation. Upland landcover classes were determined using standard image processing techniques. Accuracy assessments for each class may be found in Table 1. Training samples were collected in gravel pits, stone quarries, mining spoils, or bare rock.

5.1.2 Attribute
5.1.2.1 Attribute Label: 7
5.1.2.2 Attribute Definition: Wetland
5.1.2.3 Attribute Definition Source: Wetlands were masked from the LANDSAT TM data based on vector wetland file polygons derived from interpretation of aerial photographs.

5.1.2.7 Beginning Date of Attribute Values: 1985
5.1.2.8 Ending Date of Attribute Values: 1995
5.1.2.9 Attribute Value Accuracy Information
5.1.2.9.2 Attribute Value Accuracy Explanation:
Wetlands derived from air photo interpretations.

5.1.2 Attribute
5.1.2.1 Attribute Label: 8
5.1.2.2 Attribute Definition: Open Water
5.1.2.3 Attribute Definition Source: Areas masked from LANDSAT data by using the vector wetland files developed for this project. Open Water was defined as OW polygons in CLASS1 in the vector files.
5.1.2.7 Beginning Date of Attribute Values: 1985
5.1.2.8 Ending Date of Attribute Values: 1995
5.1.2.9 Attribute Value Accuracy Information
5.1.2.9.2 Attribute Value Accuracy Explanation: Open water derived from air photo interpretations.

5.1.2.5 Attribute Units of Measurement: Integer
5.1.2.6 Attribute Measurement Resolution: 1
5.1.2.10 Attribute Measurement Frequency: None Planned

6 Distribution Information
6.1 Distributor
10.2 Contact Organization Primary
10.1.2 Contact Organization: NYS Adirondack Park Agency
10.1.1 Contact Person: John W. Barge
10.3 Contact Position: Senior Natural Resource Planner
10.4 Contact Address
10.4.1 Address Type: mailing and physical address
10.4.2 Address: PO Box 99, Route 86
10.4.3 City: Ray Brook
10.4.4 State or Province: New York
10.4.5 Postal Code: 12977
10.4.6 Country: USA
10.5 Contact Voice Telephone: (518) 891-4050
10.7 Contact Facsimile Telephone: (518) 891-3938
6.3 Distribution Liability: Although these data have been processed successfully on a computer system at the NYS Adirondack Park Agency, no warranty expressed or implied is made regarding the accuracy or utility of the data on any other system or for general or scientific purposes, nor shall the act of distribution constitute any such warranty. This disclaimer applies both to individual use of the data and aggregate use with other data. It is strongly recommended that these data are directly acquired from the NYS Adirondack Park Agency, and not indirectly through other sources which may have changed the data in some way. It is also strongly recommended that careful attention be paid to the contents of the metadata file associated with these data. The NYS Adirondack Park Agency shall not be held liable for improper or incorrect use of the data described and/or contained herein. These data shall not be used for legal jurisdictional determinations.
6.4 Standard Order Process
6.4.2 Digital Form
6.4.2.1.1 Format Name: ARCE
6.4.2.1.3 Format Version Date: December 31, 1999
6.4.2.1.5 Format Information Content: EXPORT with no compression
6.4.2.1.6 File Decompression Technique: No compression applied
6.4.2.2 Digital Transfer Option

6.4.2.2.2 Offline Option
6.4.2.2.2.1 Offline Media:CD-ROM
6.4.2.2.2.3 Recording Format: Arc/Info export file
6.4.3 Fees: None
6.4.4 Ordering Instructions: Please provide blank media for copying and self-addressed packaging with proper postage affixed.
6.4.5 Turnaround: 3 weeks

7 Metadata Reference Information
7.1 Metadata Date: 19991231
7.4 Metadata Contact:
10.2 Contact Organization Primary
10.1.2 Contact Organization: Remote Sensing Laboratory, Plattsburgh State University
10.1.1 Contact Person: Eileen B. Allen
10.3 Contact Position: Research Associate
10.4 Contact Address
10.4.1 Address Type: Mailing and Physical Address
10.4.2 Address: Center for Earth and Environmental Science, 101 Broad Street
10.4.3 City: Plattsburgh
10.4.4 State or Province: New York
10.4.5 Postal Code: 12901
10.4.6 Country: USA
10.5 Contact Voice Telephone: (518) 564-4028 or 564-2028
10.7 Contact Facsimile Telephone: (518) 564-5267
7.5 Metadata Standard Name: FGDC Content Standard For Digital Geospatial Metadata
7.6 Metadata Standard Version: June 8, 1994 (Version 1.0)
7.7 Metadata Time Convention: local time
7.8 Metadata Access Constraints: None
7.10 Metadata Security Information
7.10.1 Metadata Security Classification System: None
7.10.2 Metadata Security Classification: Unclassified
7.10.3 Metadata Security Handling Description: None

Table 1. Classification Accuracy Assessment Report for the Upper Hudson River Watershed Upland Land Cover Image.

ERR0R MATRIX	REFERENCE DATA						
Classified data	Deciduous	Deciduous/ Conifer	Conifer/ Deciduous	Conifer	Open with Vegetation	Open without Vegetation	Row Totals
Deciduous	117	15	1	0	0	0	133
Deciduous/ Conifer	7	54	4	1	1	0	67
Conifer/ Deciduous	1	2	38	4	0	0	45
Conifer	1	1	5	43	0	0	50
Open with Vegetation	1	0	0	0	16	1	18
Open without Vegetation	0	0	0	0	0	3	3
Accuracy Totals	127	72	48	48	17	4	316

ACCURACY TOTALS

Class Name	Reference	Classified	Number	Producers	Users
Deciduous	127	133	117	92.13%	87.97%
Deciduous/Conifer	72	67	54	75.00%	80.60%
Conifer/Deciduous	48	45	38	79.17%	84.44%
Conifer	48	50	43	89.58%	86.00%
Open with Vegetation	17	18	16	94.12%	88.89%
Open without Vegetation	4	3	3	75.00%	75.00%
Totals	316	316	271		

Overall Classification Accuracy = 85.76%

The overall classification accuracy of a Mixed forest class comprised of the Deciduous/Conifer and Conifer/Deciduous classes is 87.66%. The producer accuracy of a Mixed forest class is 76.66% while the users accuracy is 82.14%.

Producer = #correct/reference Users = #correct/classified Overall = total correct/total classified

Table 2. Final Upper Hudson Upland Land Cover Attributes.

Raster Value	Class Name	Histogram	Area (Ha)	Percent Area
0	Background	0	0.00	0.00
1	Deciduous Forest	4064256	254016.00	35.72
2	Deciduous/Conifer Forest	2261448	141340.50	19.88
3	Conifer/Deciduous Forest	1462356	91397.25	12.85
4	Conifer Forest	1541736	96358.50	13.55
5	Open with Vegetation	539784	33736.50	4.74
6	Open without Vegetation	86436	5402.25	0.76
7	Wetland	911988	56999.25	8.02
8	Open Water	509796	31862.25	4.48
Total		11377800	711112.50	100.00

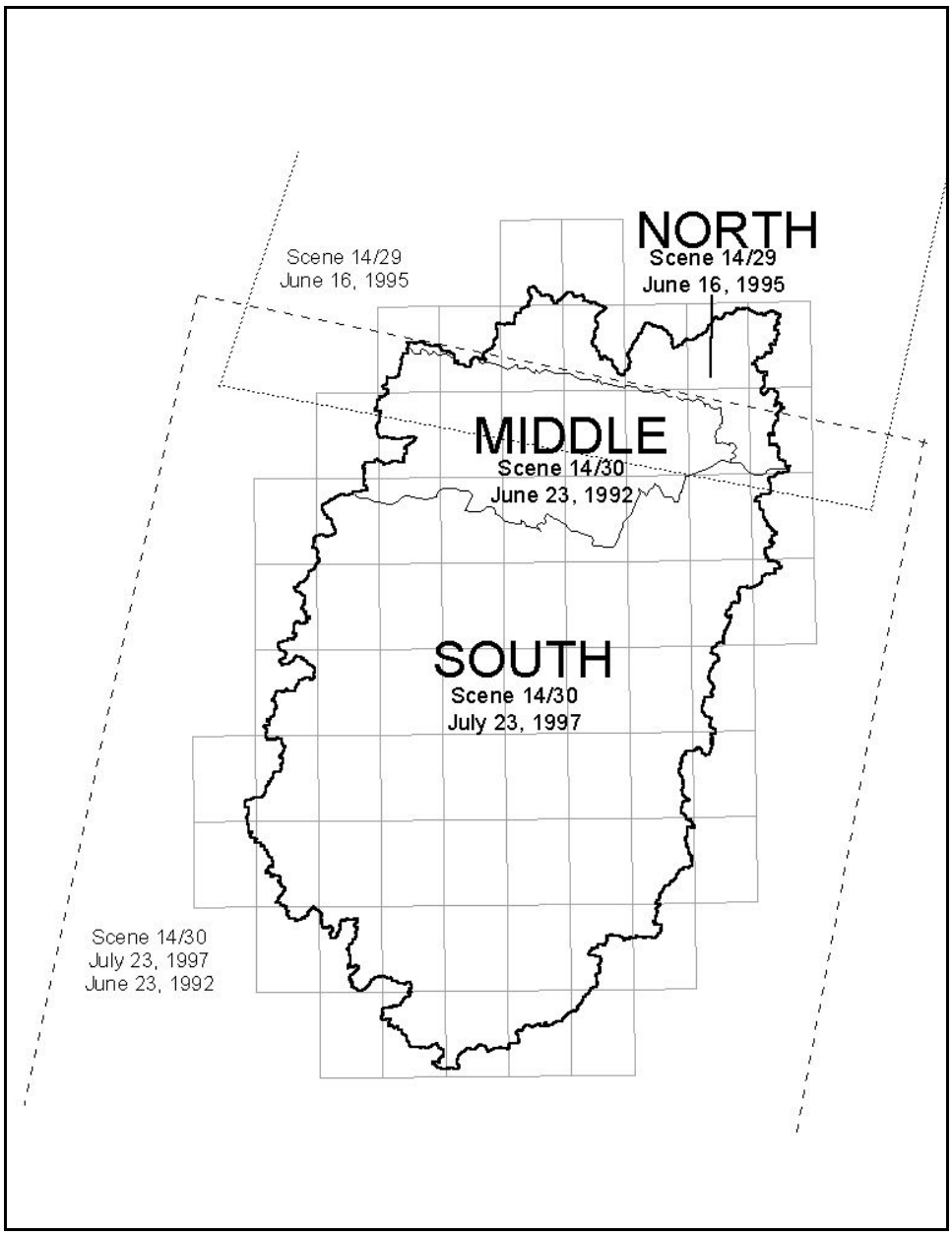

Figure 1. Upper Hudson River Drainage Basin Study Area showing quadrangle boundaries and outer study area boundary. Interior boundaries illustrate the "cut lines" used in merging the classified images into a unified upland landcover file. Dotted lines show approximate TM scene boundaries in the Upper Hudson study area (east-west borders do not represent scene limits).

Appendix 9. Manual for Digitizing New Project Polygons Using Arcview

Permit location digitizing protocol
1) Organize the permit maps by sorting them by quadrangle map.

2) Prepare the computer by creating necessary directories.

3) Start ARC-View by clicking on the ARC-View icon on the monitor screen. When ArcView is opened a new project is automatically established. Because of this there is no need to open a new project.

4) Maps that are partially complete. For maps that have already been worked on, open the existing ARC-View project. To open an existing project, click on the File button at the top of the window and choose Open Project. Steer through your directory tree to find the project you want to open. Do not save the unnamed empty project created when you opened ARC-View.

5) New maps. For a new map quadrangle, immediately save the empty project to the name of the quadrangle you are working on. Be sure to point the file towards the correct directory or ARC-View will attempt save it to the local temp directory or a more obscure place. To save the project using a specific path click on the File button at the top of the window. In the drop down window click on the "Save Project As..." button. Steer through the directory tree to the location you want the files stored in and give the project the name of the quadrangle that you are working on. The name will be used later to add the map name to the finished Arc-Info coverage. Notice that the name of the small window inside the ARC-View window will change to the name you supplied. After you save the project the first time ARC-View will know where to save changes if you work in the same project again.

NOTE: A project is the ARC-View version of a dataset and can consist of several different files. This is important to remember if the project was initially saved to the wrong location.

6) Open a view. In ArcView drawing is done within Views. Open a View window by double clicking on the globe icon with the subscript Views on the left margin.

7) Add the appropriate planimetric base map to the view. After opening a view within the project add the NYS DOT planimetric map to the view by adding it as a theme. To add a theme, click on the View button on the top of the ARC-View window and choose add theme. Planimetric maps are raster data, so change the feature type at the bottom of the pop up window that appears to Image Data Source, and steer through the directory structure to the location of the planimetric maps. Find the correct map, and double click on it. Notice that on the left margin of the view window a raised box appears that contains the name of the map you choose. To view the image click on the small button next to the name in the box. This button turns on and off the display of the theme in the view window.

Note: Each theme is a layer in the display window. The order of the layers is the same as the order of the theme boxes in the left hand margin of the view window. Some themes will not be

visible if an opaque theme is higher on the list. Planimetric maps are opaque. The theme order can be changed by dragging the name box to the desired level.

8) Create an empty theme in which to add permit map shapes. Click on the View button at the top of the window and choose New Theme. In the popup window that appears choose polygon and click Okay. In the next popup window steer through the directory tree to the location you want files associated with the new theme to be saved. This should be the same location you choose earlier for the project files. A new bar will appear on the left side of the View window with the name that you gave to the new theme.

9) Start editing the new theme. Notice that there is a dotted box around the small check box next to the name. This indicates that the theme is opened for editing. If the dotted box does not appear, open the theme for editing by clicking on the Theme button on the menu and choosing Start Editing.

10) Add columns to the new theme's data table. The year and number of the permit need to be added to the data table of the new theme. Before this can be done, columns for the year and number have to be added to the theme data table. Open the data table by clicking on the table icon (looks like spread sheet cells over a piece of paper). A new window will appear with the data table. Click in the new window to insure that it is the active window. Then click on the Edit button on the top menu. Choose Add Field from the list of choices. In the field definition window give the field name **year**, leave the Type set at Number, and choose a width of 3. Repeat the process to add a second field named **number**. Close the data table and return to the view.

11) Locate the area of the first project. Click on the + icon on the lower icon bar. Draw a box in the view window around the project area on the planimetric map. This should zoom in to the project area. If this is not the right area, zoom out using the **-** button or pan around the view using the hand icon. Center the desired area in the view screen. Include enough surrounding landmarks to locate the boundary of the polygon drawn on the project map.

12) Add the project polygon from the project map. The new theme is now ready to add the first polygon. Make the theme active for adding shapes by clicking and holding the rightmost icon in the bottom row of icons. These are the choices for adding shapes to the theme. Choose the irregular polygon (6^{th} from the top). When you release the icon, the image of the irregular polygon should appear on the icon. Go to view of the theme and add the project polygon in the correct location using single clicks. Add the last point with a double click to finish the polygon. Use the cues common to both maps in adding the project polygon. These include roads, benchmarks, streams, highway labels, marsh symbols, house locations and other symbols on the maps. Where the location of a corner is not known by these symbols exactly, put the corner in the best estimate of the correct location using distance and angle to these cues.

13) Add the year and number to the data table. When the polygon is complete, add the year and number to the data table activating the data table. Click on the table icon on the top row of icons. The icons on the top window will change. Three new icons will appear in the second row of icons. Choose the middle icon that contains a cursor marker and an arrow to edit the table. The

table row for the last added polygon will be highlighted in yellow. Click on the fields in the data table for this row and add the appropriate information.

14) Add the rest of the polygons for the map repeating steps 11, 12 and 13.

15) Check the information for each polygon before closing the map. Before closing the project and declaring the map finished check that the data in the table matches with the polygon for which it was intended. With the view active click on the **i** icon at the left of the lower row of icons. Click on a polygon in the view. A new window will appear with the data table entries for that polygon. Repeat the process for each polygon in the view making sure that the table data is correct.

16) Close the view and save the project.

17) Transfer the project files to the NT machine for processing into an Arc-Info coverage. Create a folder called projfolder. Start Arc-Info from the directory that contains the folder projfolder. This directory should contain the convert, append and check amls. Run shapecon.aml to convert the shapefiles (*.shp) that were created by ARC-View to individual Arc-Info coverages for each map. Shapecon will ask for the path to the directory containing the files created by ARC-View. These should all be in one folder. Shapecon will convert these into Arc-Info coverages and place the result in projfolder.

18) Run **appender.aml** to join the coverages into one map. There are separate amls for converting lines that accomplish the same data transformations.

19) Check the year and number on each project polygon using ARCView. Start ARCView. Add the appended project coverage to the view. Add planimetric map coverages as needed using the map field in the table as a guide. Open the table by clicking on the table icon in the middle of the upper toolbar. With the table active, choose the select tool from among the three buttons on the lower right. Click on the first line in the table. Click on the view window. Choose the selector on the lower left toolbar. In the middle of the upper tool bar choose zoom to selected. The view will change to show only the polygon selected in the table. Check the polygon for position on the map and year and number on the table. Repeat the procedure for the next project. If errors are found in the table make the table editable by choosing TABLE on the pulldown bar. Select start editing. Click on the table window. Select the middle button from the lower toolbar. Click in the field and add the correct information. Choose TABLE from the pulldown menu and select SAVE EDITS. Answer yes to the popup window asking if it is ok to save.

Appendix 10. Selected Arc-Info Macro Programs (Aml's) Used in Data Processing.

Aml for Converting ARCView permit location shape files into Arc-Info coverages

```
/* shapecon.aml
/* AML for converting project shape files to region coverages
/* prepared April 1998. Avram Primack
/* ////////////////////////////////////////////////

/* set the home and source directory
/* set these before starting
&sv hom = f:\projects\
/* location of the folder containing the shapefiles to be converted
&sv source = tracy
/* location of the ouput from the aml
&sv dest = projfolder\

/* replace list with source location of new project files
&do let &list %source%

&s closer [ close -all ]
&if [ exists junk.junk -file ] &then &sys del junk.junk

/* get a list of the files in the source directory
&sys dir/b %hom%%source%\*.shp > junk.junk

&sv unit = [ open junk.junk openstatus -read ]
&if %openstatus% <> 0 &then &goto openout

&s kntr = 1

/* read the first line
&s lin%kntr% := [ read %unit% readstatus ]
&if %readstatus% <> 0 &then &goto readout

/* make an array with containing the file names
&do &while %readstatus% = 0
&s kntr = %kntr% + 1
&s lin%kntr% := [ read %unit% readstatus ]
&end

/* reset kntr to the number of lines read
&if %readstatus% <> 102 &then &goto readout
&s kntr = %kntr% - 1

/* truncate the names in the array to remove the .shp extension
&do cntr := 1 &to %kntr%
&s lin%cntr% = [ subst [ value lin%cntr% ] .shp ]
&type [ value lin%cntr% ]

/* create a region coverage from the shape file
&severity &error &ignore
shapearc  %hom%%source%\[value lin%cntr% ].shp %hom%%dest%[ value lin%cntr% ] project
clean %dest%[ value lin%cntr% ] # # 0.1
```

```
/* additems to the region coverage and add the name
ae
edit %hom%%dest%[ locase [ value lin%cntr% ] ]
editf region.project
additem map 8 9 c
sel all
calc map = [ quote [ value lin%cntr% ] ]
save
q

&severity &error &fail

&end
&end
&return

/* for when the input file does not exist.
&label openout
&type Could not open list file. Quitting operation
&return

/* for when the file is messed up.
&label readout
&type Could not read list file. Quitting operation
&return
```

Aml for Appending shape files for Permit application polygons

```
/* appender.aml
/* AML for appending project shape files to region coverages
/* prepared April 1998. Avram Primack

/* set dirctory paths here
&sv sourc = f:\projects\
/* location of the coverages to append
&sv dest = projfolder\
&sv numit = 1

/* make a list of files
/* count the number of files in the target directory. If none then quit
&s closer [ close -all ]
&s  count := [ filelist %sourc%%dest% junk.junk -cover -region.project ]
&if %count% <= 0 &then &routine nocovs

&sv unit = [ open junk.junk openstatus -read ]
&if %openstatus% <> 0 &then &routine openout

/* cycle through the coverages
&do kntr := 1 &to %count%

/* read the first line
&s incov := [ read %unit% readstatus ]
&if %readstatus% <> 0 &then &routine readout

/* fix the item definitions
```

```
ae
edit %dest%%incov%
editf region.project
&if [ iteminfo %dest%%incov% -region.project yr -exists ] &then &goto continue
additem yr 4 5 b
additem num 4 5 b
additem codes 4 5 c
sel all
calc yr = year

&if [ iteminfo %dest%%incov% -region.project number -exists ] &then calc num = number
&if [ iteminfo %dest%%incov% -region.project pnum -exists ] &then calc num = pnum

&if [ iteminfo %dest%%incov% -region.project code -exists ] &then calc codes = code
save
q

dropitem %dest%%incov%.patproject  %dest%%incov%.patproject year

&if [ iteminfo %dest%%incov% -region.project pnum -exists ] &then ~
        dropitem %dest%%incov%.patproject  %dest%%incov%.patproject pnum
&if [ iteminfo %dest%%incov% -region.project number -exists ] &then ~
        dropitem %dest%%incov%.patproject  %dest%%incov%.patproject number
&if [ iteminfo %dest%%incov% -region.project code -exists ] &then ~
    dropitem %dest%%incov%.patproject  %dest%%incov%.patproject code
&if [ iteminfo %dest%%incov% -region.project check -exists ] &then ~
    dropitem %dest%%incov%.patproject  %dest%%incov%.patproject check

ae
edit %dest%%incov%
editf region.project

&label continue

additem year 4 5 b
additem number 4 5 b
additem code 4 5 c
additem check 4 5 b

sel all

calc year = yr
calc number = num
calc code = codes
save
q

dropitem %dest%%incov%.patproject  %dest%%incov%.patproject yr
dropitem %dest%%incov%.patproject  %dest%%incov%.patproject num
dropitem %dest%%incov%.patproject  %dest%%incov%.patproject codes

&severity &errror &ignore
/* append coverages to final project file
```

```
&if [iteminfo %dest%%incov% -region.project id -exists ] ne .true.  &then ~
            additem  %dest%%incov%.patproject %dest%%incov%.patproject  id 8 8 f 0 rings_nok

/* append the coverages
/* test for first iteration
&if %numit% <> 1 &then &goto moreits

&if  [ exists projectpoly1 -cover ] &then kill projectpoly1 all
copy %dest%%incov% projectpoly1
&sv  numit = 99
&goto secondtime

/* routine for after the first iteration
&label moreits
&if [ exists temp -cover ] &then kill temp
clean %dest%%incov%

append temp region.project all
projectpoly1
%dest%%incov%
end
&severity &error &fail

/* clean up
kill projectpoly1
rename temp projectpoly1

&label secondtime

/* remove finished coverages to a new directory : delete this later as part of cleaning up silly !
/*  kill %dest%%incov%

/* end of the do while loop
&end
&return

&TYPE !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
&type !!!!!REMEBER TO DELETE THE SOURCE DATA IF THE OPERATION WAS SUCCESSFULL !

/* for when the file is messed up.
&routine readout
&type No information in file. Stopping operations...................................
&return
/* for when the input file does not exist.
&routine openout
&type Could not open list file. Quitting operation....................................
&return
/* for when the file is messed up.
&routine nocovs
&type No file of specified type at that location. Stopping operations............
&return
```

AML for calculating temperature and precipitation values using coefficients from Ollinger et al. 1995

```
/* Ollinger dem calculation program
/* Avram Primack, March, 1998
/* AML for GATHERING WATERSHED climate information
/* logfile off

  &sv iter = 1
  &sv start = 1220

/* COLLECT THE NUMBER items to operate on
ae
edit wshd
editf region.wsheds
sel all
&sv totnum = 1260
/*&sv totnum = [ show number selected ]
q

/* BEGIN PROCESSING LOOP
 &do k = %start% &to %totnum%

&call cleanup

/* WORK STARTS HERE !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
/* COLLECT THE QUAD NAME FROM PKQUADS
/* BY CYCLING THROUGH THE region ID NUMBERS

&sv leftnum = %totnum% - %k%
&type now looking for watershed %k% out of %totnum% !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
&type now looking for watershed %k% %leftnum% remaining !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
&type now looking for watershed %k% !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
&type now looking for watershed %k% !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!

&if [ exists warea -cover ] &then kill warea all
&if [ exists wpoly -cover ] &then kill wpoly all

/* select the watershed to work on
ae
/* get the region
 edit wshd
 editf region.wsheds
 sel kounter = %k%
  cursor open
   &sv pondnum = %:edit.pond%
  cursor close
&severity &error &ignore
 nsel
 &if [show number selected] = 0 &then &goto nodelete
 delete
&label nodelete
&severity &error &fail
 save warea
```

```
/* get the polygon
edit wshdlocal
editf poly
sel p2 = [ quote %pondnum% ]
&severity &error &ignore
 nsel
 &if [show number selected] = 0 &then &goto nodelete
 delete
&label nodelete
&severity &error &fail
save wpoly
q

/* convert the region watershed to a polygon
 regionpoly warea watemp wsheds junk
 tables
 sel junk
 erase junk
  y
  q

kill warea all
rename watemp warea
rebox warea

ap
 display 1040
 junk
 mape warea
  resel f:\dem\qds\dem.cat   image box [show mapex]
  &s inum = [before [show select f:\dem\qds\dem.cat    image ] , ]

/* SKIP REALLY LARGE WATERSHEDS
  &if %inum% > 49 &then &goto skipper

/* collect the names of the maps into an array
    &do ikount = 1 &to %inum%
      &s im%ikount% = [ show select f:\dem\qds\dem.cat   image %ikount% item image ]
      &s ij%ikount% =  [ after [ after [after [after [ value im%ikount% ] / ] / ] / ] / ]
     &type [ value ij%ikount% ]
    &end
    q /* arcplot

&goto jumper
&label skipper
q
&goto nextwshed

&label jumper
/* WRITE AML FILE TO RUN MERGE for elevation grids
     &if [EXISTS mergeel.aml -file] &then &s ok [DELETE mergeel.aml -file]
     &s cok [ close -all ]
     &s unit [OPEN mergeel.aml ok -write]
```

```
/* write the first line of the file
    &s wok [write %unit% [quote  mergeel = merge ( f:\dem\qds\[value ij1] , ~ ]  ]
    &s cok [close %unit% ]

    &sv ilas = %inum% - 1
/* write the rest of the file
    &s unit [OPEN mergeel.aml ok -append]
    &do ikount = 2 &to %ilas%
     &s wok [ WRITE %unit%  f:\dem\qds\[ quote [ value ij%ikount% ]  , ~ ] ]
    &end

/* normal end of file
     &s wok [ write %unit%   f:\dem\qds\[quote [value ij%inum% ]  ) ]]
     &s wok [ write %unit% &return ]
     &s cok [ close %unit% ]

/* WRITE AML FILE TO RUN MERGE xcoord grids
    &if [EXISTS mergex.aml -file] &then &s ok [DELETE mergex.aml -file]
    &s cok [ close -all ]
    &s unit [OPEN mergex.aml ok -write]

/* write the first line of the file
    &s wok [write %unit% [quote  mergex = merge ( i:\tempdemdd\[value ij1]x , ~ ]  ]
    &s cok [close %unit% ]
    &sv ilas = %inum% - 1

/* write the rest of the file
    &s unit [OPEN mergex.aml ok -append]
    &do ikount = 2 &to %ilas%
     &s wok [ WRITE %unit%  i:\tempdemdd\[ quote [ value ij%ikount% ]x  , ~ ] ]
    &end

/* normal end of file
     &s wok [ write %unit%   i:\tempdemdd\[quote [value ij%inum% ]x  ) ]]
     &s wok [ write %unit% &return ]
     &s cok [ close %unit% ]

/* WRITE AML FILE TO RUN MERGE
    &if [EXISTS mergey.aml -file] &then &s ok [DELETE mergey.aml -file]

    &s cok [ close -all ]
    &s unit [OPEN mergey.aml ok -write]

/* write the first line of the file
    &s wok [write %unit% [quote  mergey = merge ( i:\tempdemdd\[value ij1]y , ~ ]  ]
    &s cok [close %unit% ]

    &sv ilas = %inum% - 1
/* write the rest of the file
    &s unit [OPEN mergey.aml ok -append]
    &do ikount = 2 &to %ilas%
     &s wok [ WRITE %unit%  i:\tempdemdd\[ quote [ value ij%ikount% ]y  , ~ ] ]
    &end
```

```
/* normal end of file
     &s wok [ write %unit%   i:\tempdemdd\[quote [value ij%inum% ]y  ) ]]
     &s wok [ write %unit% &return ]
     &s cok [ close %unit% ]

/* /////////////////////////////////////// Done writing file
/* MERGE THE GRIDS and prepare stream coverage

/* merge and clip the wetland cover to wabuf
 &do nam &list el x y
  &if [ exists merge%nam% -grid ] &then kill merge%nam%
  &if [ exists merge%nam%c -grid ] &then kill merge%nam%c

  grid
  &r merge%nam%.aml
  q
  latticeclip merge%nam% warea merge%nam%c
   kill merge%nam%
 &end /* merge and clip do

/* get local watershed mean max min stdv
  &if [ exists mergepoly -grid ] &then kill mergepoly
  latticeclip mergeelc wpoly mergepoly
  &describe mergepoly

   /* write output to file for month and factor here
    &sv outline = [ quote %k%,%pondnum%,%grd$mean%,%grd$zmin%,%grd$zmax%,%grd$stdv%]
    /* write aml file to merge wetlands
     &s unit [OPEN locel.txt ok -append]
     &s wok [ WRITE %unit%  %outline% ]
     &s cok [ close %unit% ]
    kill mergepoly

/* compute the ollinger values for the regional and loca watersheds and write summary information to a file
 grid

&do fact &list tmin tmax precip
&call set%fact%

  &do mon &list 1 2 3 4 5 6 7 8 9 10 11 12
    &type working on %mon% for watershed %pondnum% for %fact% factor
    &if [ exists monthval -grid ] &then kill monthval all
    &if [ exists mvalloc -grid ] &then kill mvalloc
    monthval =       [ value con%mon% ] + ~
                  [ value belev%mon% ] * mergeelc - ~
                  [ value bx%mon% ] * mergexc     + ~
                  [ value by%mon% ] * mergeyc
```

```
     &describe monthval
      &sv %fact%%mon%mean = %grd$mean%
      &sv %fact%%mon%min  = %grd$zmin%
      &sv %fact%%mon%max  = %grd$zmax%
      &sv %fact%%mon%std  = %grd$stdv%

&type %fact%%mon%mean = [value %fact%%mon%mean ] , ~
                    %fact%%mon%min = [ value %fact%%mon%min ] , %fact%%mon%max = [ value ~
                    %fact%%mon%max ], %fact%%mon%stdv = [value %fact%%mon%stdv ]

   /* write output to file for month and factor here
    &sv outline = [ quote %k%,%pondnum%,%fact%%mon%,[value %fact%%mon%mean],[value
%fact%%mon%min],[value %fact%%mon%max],[value %fact%%mon%std]]
    /* write aml file to merge wetlands
     &s unit [OPEN climreg%fact%.txt ok -append]
     &s wok [ WRITE %unit%  %outline% ]
     &s cok [ close %unit% ]

/* clip the lattice here and repeat describe for local watershed
     gridclip monthval mvalloc cover wpoly
      &describe mvalloc
       &sv %fact%%mon%mean = %grd$mean%
       &sv %fact%%mon%min  = %grd$zmin%
       &sv %fact%%mon%max  = %grd$zmax%
       &sv %fact%%mon%std  = %grd$stdv%

&type %fact%%mon%mean = [value %fact%%mon%mean ] , ~
                    %fact%%mon%min = [ value %fact%%mon%min ] , %fact%%mon%max = [ value ~
                    %fact%%mon%max ], %fact%%mon%stdv = [value %fact%%mon%stdv ]

   /* write output to file for month and factor here
    &sv outline = [ quote %k%,%pondnum%,%fact%,%mon%,[value %fact%%mon%mean],[value ~
                     %fact%%mon%min],[value %fact%%mon%max],[value %fact%%mon%std]]
    /* write aml file to merge wetlands
     &s unit [OPEN climloc%fact%.txt ok -append]
     &s wok [ WRITE %unit%  %outline% ]
     &s cok [ close %unit% ]

     &end /* write loop
     &end /* factor loop
    q /* grid
&label nextwshed
&end /* major doloop

/* final cleanup
kill mergeelc
kill mergexc
kill mergeyc
kill monthval
kill mvalloc
kill warea
kill wpoly

&return
```

```
/* ERROR FAIL LOCATIONS HERE
&label badout
&type !!Difficulty in creating outfile.!!
&type !!Terminating processing.!!
&return

&label badclose
&type !!Difficulty in closing outfile.!!
&type !!Terminating processing.!!
&return

&label badopen
&type !!Difficulty in opening outfile.!!
&type !!Terminating processing.!!
&return

&routine cleanup
  /* cleanup section
   &if [ exists log -file ] &then &sys del log
   &if [ exists xx* -file ] &then &sys del xx*
   &if [ exists xx*.*  -file ] &then &sys del xx*.*
   &if [ exists temp -cover ] &then kill temp all
   &if [ exists temp1 -cover ] &then
   &do
     kill temp1 all
     tables
     sel temp1
     erase temp1
     yes
    quit
   &end

   &if [ exists temp1 -info ] &then
    &do
    tables
     sel temp1
     erase temp1
     yes
    quit
   &end

  &do kk = 0 &to 9
  &if [exists $$temp000%kk% -info ] &then
   &do
     tables
      sel $$temp000%kk% ; erase $$temp000%kk% ; y
     quit
   &end /* if
   &end /* do

  &do kk = 10 &to 29
  &if [exists $$temp00%kk% -info ] &then
   &do
     tables
```

```
      sel $$temp00%kk% ; erase $$temp00%kk% ; y
     quit
   &end /* if
   &end /* do
   &return /* cleanup section returning to the main program

&routine setprecip
 &sv con1   = 104.11
 &sv con2   = 94.98
 &sv con3  = 119.02
 &sv con4 = 79.43
 &sv con5   = 54.49
 &sv con6  = 21.48
 &sv con7  = 26.83
 &sv con8   = 53.45
 &sv con9  = 51.1
 &sv con10   = 59.44
 &sv con11   = 91.98
 &sv con12   = 106.5
 &sv by1  = -1.119
 &sv by2  = -1.018
 &sv by3 = -1.505
 &sv by4 = -1.001
 &sv by5  = -0.609
 &sv by6 = -0.197
 &sv by7 = -0.143
 &sv by8  = -0.614
 &sv by9 = -0.599
 &sv by10  = -0.545
 &sv by11  = -0.894
 &sv by12   = -1.059
 &sv bx1  = -0.674
 &sv bx2  = -0.615
 &sv bx3 = -0.642
 &sv bx4 = -0.390
 &sv bx5  = -0.280
 &sv bx6 = -0.071
 &sv bx7 = -0.168
 &sv bx8  = -0.252
 &sv bx9 = -0.232
 &sv bx10  = -0.385
 &sv bx11  = -0.617
 &sv bx12  = -0.724
 &sv belev1  =  0.0067
 &sv belev2  =  0.0069
 &sv belev3 =  0.0072
 &sv belev4 =  0.0056
 &sv belev5  =  0.0052
 &sv belev6 =  0.0055
 &sv belev7 =  0.0051
 &sv belev8  =  0.0058
 &sv belev9 =  0.0055
 &sv belev10  =  0.0055
 &sv belev11  =  0.0077
```

```
 &sv belev12  =  0.0077
&return /* elev

&routine settmax
 &sv con1   = 67.98
 &sv con2   = 67.27
 &sv con3  = 54.14
 &sv con4 = 54.60
 &sv con5   = 42.15
 &sv con6  = 36.4
 &sv con7  = 42.57
 &sv con8   = 44.93
 &sv con9  = 41.17
 &sv con10   = 43.73
 &sv con11   = 56.71
 &sv con12   = 63.58
 &sv by1  = -1.466
 &sv by2  = -1.385
 &sv by3 = -1.113
 &sv by4 = -1.11
 &sv by5  = -0.634
 &sv by6 = -0.476
 &sv by7 = -0.497
 &sv by8  = -0.586
 &sv by9 = -0.702
 &sv by10  = -0.845
 &sv by11  = -1.159
 &sv by12   = -1.43
 &sv bx1  = -0.062
 &sv bx2  = -0.084
 &sv bx3 = -0.002
 &sv bx4 = 0.097
 &sv bx5  = 0.079
 &sv bx6 = 0.0128
 &sv bx7 = 0.099
 &sv bx8  = 0.0104
 &sv bx9 = 0.164
 &sv bx10  = 0.133
 &sv bx11  = 0.039
 &sv bx12  = 0.009
 &sv belev1  = -0.00562
 &sv belev2  = -0.00535
 &sv belev3  = -0.00522
 &sv belev4  = -0.00556
 &sv belev5  = -0.00451
 &sv belev6  = -0.00519
 &sv belev7  = -0.00623
 &sv belev8  = -0.00639
 &sv belev9  = -0.00601
 &sv belev10  = -0.00544
 &sv belev11  = -0.00631
 &sv belev12  = -0.00616

&return /* maxtemp
```

```
&routine settmin
 &sv con1   = 65.33
 &sv con2   = 65.96
 &sv con3  = 49.59
 &sv con4 = 29.84
 &sv con5   = 26.69
 &sv con6  = 26.8
 &sv con7  = 38.61
 &sv con8   = 42.11
 &sv con9  = 37.07
 &sv con10   = 27.67
 &sv con11   = 29.32
 &sv con12   = 48.11
 &sv by1  = -1.942
 &sv by2  = -1.914
 &sv by3 = -1.375
 &sv by4 = -0.915
 &sv by5  = -0.735
 &sv by6 = -0.654
 &sv by7 = -0.757
 &sv by8  = -0.871
 &sv by9 = -0.937
 &sv by10  = -0.812
 &sv by11  = -0.939
 &sv by12  = -1.627
 &sv bx1  = 0.118
 &sv bx2  = 0.102
 &sv bx3 = 0.083
 &sv bx4 = 0.16
 &sv bx5  = 0.172
 &sv bx6 = 0.196
 &sv bx7 = 0.136
 &sv bx8  = 0.143
 &sv bx9 = 0.193
 &sv bx10  = 0.171
 &sv bx11  = 0.158
 &sv bx12  = 0.212
 &sv belev1  = -0.00805
 &sv belev2  = -0.00866
 &sv belev3 = -0.00831
 &sv belev4 = -0.00696
 &sv belev5  = -0.00651
 &sv belev6 = -0.00682
 &sv belev7 = -0.00798
 &sv belev8  = -0.00792
 &sv belev9 = -0.00743
 &sv belev10  = -0.00711
 &sv belev11  = -0.00706
 &sv belev12  = -0.00791
&return /* mintemp
```

Appendix 11. Metadata for the Map of Park Agency Approved Permits

Report Date: 26-Jul-1999
Metadata Data Set Name: New York State Adirondack Park Agency: Agency Approved Permit Locations
1 Identification Information
1.1 Citation:
8 Citation Information:
8.1 Originator: New York State Adirondack Park Agency: Avram Primack (compiler)
8.2 Publication Date: 1999 1231
8.3 Publication Time: Unknown
8.4 Title: Map of the location of New York State Adirondack Park Agency Approved Permits between 1988 and 1997
8.5 Edition: Version 1
8.6 Geospatial Data Presentation Form: Map
8.7.1 Series Name: Watershed Scale Protection for Adirondack Wetlands
8.7.2 Issue Identification: New York State Adirondack Park Project History Map: Agency Approved Project Locations
8.8.1 Publication Place: Ray Brook, New York
8.8.2 Publisher: New York State Adirondack Park Agency
1.2 Description
1.2.1 Abstract: This map is a digital compilation of individual maps prepared by project review officers at the New York State Adirondack Park Agency. Individual maps were prepared from information supplied by individual applicants, and transferred from appropriate tax maps to a planimetric base at 1:24000 scale. These individual sheets were transferred to digital form by screen digitizing using scanned NYS DOT planimetric maps as a background.
1.2.2 Purpose: This data layer is part of a larger database designed to help evaluate human impacts on wetlands and watersheds within the area of the Adirondack Park.
1.3 Time Period Of Content
1.3.1 Currentness Reference: Observed
1.4 Status
1.4.1 Progress: In Work
1.4.2 Maintenance and Update Frequency: As Needed
1.5 Spatial Domain
1.5.1 Bounding Coordinates
1.5.1.1 West Bounding Coordinate: 75.31694444
1.5.1.2 East Bounding Coordinate: 73.28111111
1.5.1.3 North Bounding Coordinate: 44.87152778
1.5.1.4 South Bounding Coordinate: 43.05291667
1.6 Keywords
1.6.1 Theme
1.6.1.1 Theme Keyword Thesaurus: None
1.6.1.2 Theme Keyword: Adirondack Park
1.6.1.2 Theme Keyword: Adirondacks
1.6.1.2 Theme Keyword: Regulatory
1.6.1.2 Theme Keyword: Decision
1.6.1.2 Theme Keyword: Permit
1.6.1.2 Theme Keyword: Project
1.6.3 Stratum
1.6.3.1 Stratum Keyword Thesaurus: None
1.6.4 Temporal
1.6.4.1 Temporal Keyword Thesaurus: None
1.7 Access Constraints: None
1.8 Use Constraints: These data may not be used for legal determinations. Please credit use of this data set to the New York State Adirondack Park Agency, Ray Brook, New York 12977. Please send a copy of an reports

or papers in which these data were used or referenced to the above address, Attention, Nancy Heath Librarian.

1.9 Point of Contact

10.1 Contact Person Primary

10.1.1 Contact Person: John Barge

10.1.2 Contact Organization: New York State Adirondack Park

10.2 Contact Organization Primary

10.1.2 Contact Organization: New York State Adirondack Park Agency

10.3 Contact Position: Adirondack Park Senior Natural Resource Planner

10.4 Contact Address

10.4.1 Address Type: Mailing Address

10.4.2 Address: POB 99

10.4.3 City: Ray Brook

10.4.4 State or Province: New York

10.4.5 Postal Code: 12977

10.4.6 Country: USA

10.5 Contact Voice Telephone: (518) 891-4050

1.11 Data Set Credit: Funding was provided by the U.S. Environmental Protection Agency; Office of Wetlands Protection; State Wetlands Protection Program; Grant No.992290-01-0

2 Data Quality Information

2.1 Attribute Accuracy

2.1.1 Attribute Accuracy Report: Each polygon in the dataset is intended to represent the location of the tax parcel which was involved in a permit granted by the agency. The project polygon was first drawn onto a xerox copy of a NYS DOT planimetric map using the tax identification number, the appropriate tax map, and standard cartographic procedures. Each paper map was digitized directly on screen over a background of the same NYS DOT planimetric map. Every effort was made to insure that the digitzed polygon covered the same area as indicated on the paper map. The digitized polygons may cover slightly different areas, but should cover at least 95 % of the area indicated on the paper map. The resulting ArcView shapefile was converted to a region coverage using the SHAPEARC command in ARC/Info. Because some properties may be subject to more than one permit, the digital data is in region format. The polygons should not be used to measure area or perimeter.

2.2 Logical Consistency Report: Each polygon was given a year and number attribute. After they were digitized, each polygon was checked to insure that it contained the correct year and number.

2.3 Completeness Report: This information will be updated as needed, and additional data will be added as available.

2.4 Positional Accuracy

2.4.1 Horizontal Positional Accuracy

2.4.1.1 Horizontal Positional Accuracy Report: Each polygon in the dataset is intended to represent the location of the tax parcel which was involved in a permit granted by the agency. The project polygon was first drawn onto a xerox copy of a NYS DOT planimetric map using the tax identification number, the appropriate tax map, and standard cartographic procedures. Each paper map was digitized directly on screen over a background of the same NYS DOT planimetric map. Every effort was made to insure that the digitzed polygon covered the same area as indicated on the paper map. The digitized polygons may cover slightly different areas, but should cover at least 95 % of the area indicated on the paper map.

2.4.2.1 Vertical Positional Accuracy Report: Not applicable

2.5.2 Process Step

2.5.2.1 Process Description: 1: Find location of tax parcel in application

2.5.2.3 Process Date: various

2.5.2 Process Step

2.5.2.1 Process Description: 2: Transfer to paper map at 1:24000 scale

2.5.2 Process Step

2.5.2.1 Process Description: 3: Transfer to digital form using NYS DOT planimetric map as background

2.5.2 Process Step

2.5.2.1 Process Description: 4: Convert from ArcView shapefile to ARC/Info region coverage
2.5.2 Process Step
2.5.2.1 Process Description: 5: Add year and permit number to region database.
2.5.2 Process Step
2.5.2.1 Process Description: 6: Check accuracy of attribute information

3 Spatial Data Organization Information
3.3 Point and Vector Object Information
3.3.1.1 SDTS Point and Vector Object Type: Complete Chain
3.3.1.2 Point and Vector Object Count: 1322

4 Spatial Reference Information
4.1.4 Geodetic Model
4.1.4.1 Horizontal Datum Name: North American Datum of 1927
4.1.4.3 Semi-Major Axis: 6378206
4.1.4.4 Denominator of Flattening Ratio: 294.98

5 Entity and Attribute Information
5.1 Detailed Description
5.1.1 Entity Type
5.1.1.1 Entity Type Label: apaproj1.patproject
5.1.1.2 Entity Type Definition: Region polygon attribute table
5.1.1.3 Entity Type Definition Source: ARC/Info 7.1.2
5.1.2 Attribute
5.1.2.1 Attribute Label: area
5.1.2.2 Attribute Definition: area of polygon in square coverage units (meters)
5.1.2.3 Attribute Definition Source: computed
5.1.2 Attribute
5.1.2.1 Attribute Label: perimeter
5.1.2.2 Attribute Definition: perimeter of the polygon in linear coverage units (meters)
5.1.2.3 Attribute Definition Source: computed
5.1.2 Attribute
5.1.2.1 Attribute Label: map
5.1.2.2 Attribute Definition: source map code according to APA
5.1.2 Attribute
5.1.2.1 Attribute Label: year
5.1.2.2 Attribute Definition: year project application was opened
5.1.2.3 Attribute Definition Source: project permit
5.1.2 Attribute
5.1.2.1 Attribute Label: number
5.1.2.2 Attribute Definition: Project application number applied sequentially according to date of arrival
5.1.2.3 Attribute Definition Source: Project application
5.1.1 Entity Type
5.1.1.1 Entity Type Label: code
5.1.1.2 Entity Type Definition: special application codes were used in some applications
5.1.1.3 Entity Type Definition Source: Permit application

6 Distribution Information
6.1 Distributor
10.1 Contact Person Primary
10.1.1 Contact Person: John Barge
10.1.2 Contact Organization: New York State Adirondack Park
10.2 Contact Organization Primary
10.1.2 Contact Organization: New York State Adirondack Park Agency

10.3 Contact Position: Adirondack Park Senior Natural Resource Planner
10.4 Contact Address
10.4.1 Address Type: Mailing Address
10.4.2 Address: POB 99
10.4.3 City: Ray Brook
10.4.4 State or Province: New York
10.4.5 Postal Code: 12977
10.4.6 Country: USA
10.5 Contact Voice Telephone: (518) 891-4050

6.3 Distribution Liability: Although these data have been processed successfully on a computer system at the Adirondack Park Agency, no warranty expressed or implied is made regarding the accuracy or utility of the data on any other system or for general or scientific purposes, nor shall the act of distribution constitute any such warranty. This disclaimer applies both to individual use of the data and aggregate use with other data. It is strongly recommended that these data are directly acquired from the New York State Adirondack Park Agency, and not indirectly through other sources which may have changed the data in some way. It is also strongly recommended that careful attention be paid to the contents of the metadata file associated with these data. The New York State Adirondack Park Agency shall not be held liable for improper or incorrect use of the data described and/or contained herein. These data are not to be used in making legal determinations.

7 Metadata Reference Information
7.1 Metadata Date: 19991231
7.2 Metadata Review Date: As Needed
7.4 Metadata Contact:
10.1 Contact Person Primary
10.1.1 Contact Person: John Barge
10.1.2 Contact Organization: New York State Adirondack Park
10.2 Contact Organization Primary
10.1.2 Contact Organization: New York State Adirondack Park Agency
10.3 Contact Position: Adirondack Park Senior Natural Resource Planner
10.4 Contact Address
10.4.1 Address Type: Mailing Address
10.4.2 Address: POB 99
10.4.3 City: Ray Brook
10.4.4 State or Province: New York
10.4.5 Postal Code: 12977
10.4.6 Country: USA
10.5 Contact Voice Telephone: (518) 891-4050
10.8 Contact Electronic Mail Address: 9:00 am to 5 pm
7.5 Metadata Standard Name: FGDC Content Standard For Digital Geospatial Metadata
7.6 Metadata Standard Version: December 1995
7.7 Metadata Time Convention: The Local Time
7.8 Metadata Access Constraints: None
7.9 Metadata Use Constraints: None
7.10 Metadata Security Information
7.10.1 Metadata Security Classification System: None
7.10.3 Metadata Security Handling Description: None

Appendix 12. Metadata for the Upper Hudson Portion of the 1916 Fire Map

Report Date: 26-Jul-1999
Metadata Data Set Name: Upper Hudson River Drainage 1916 Fire Protection Map
1 Identification Information
1.1 Citation:
8 Citation Information:
8.1 Originator: New York State Adirondack Park Agency
8.2 Publication Date: 19991231
8.3 Publication Time: Unknown
8.4 Title: New York State Adirondack Park 1916 Fire Protection Map for the Greater Upper Hudson Drainage Basin
8.5 Edition: First
8.6 Geospatial Data Presentation Form: Map
8.7.1 Series Name: Watershed Scale Protection for Adirondack Wetlands
8.7.2 Issue Identification: Implementing a Procedure to Assess Cumulative Effects and Predict Cumulative Impacts from Development Activities to Wetands and Watersheds in the Oswegatchie, Black, and Greater Upper Hudson River Watersheds of the Adirondack Park, New York State, USA
8.8.1 Publication Place: Ray Brook, New York
8.8.2 Publisher: NYS Adirondack Park Agency
1.2 Description
1.2.1 Abstract: This file was digitized from a map entitled "Fire Protection Map of the Adirondack Forest; Based on Field Work of State Forest Rangers and on United States Geological Survey; Compiled by Karl Schmitt, Forester; State of New York Conservation Commission; 1916; Drawn, Engraved, and Printed at Matthews-Northrup Works, Buffalo, New York." Map data (polygons and tic marks) were traced onto a mylar overlay. The mylar overlay was scanned and converted to a line dataset using the gridline command in ARC\Info. The result was edited until it formed a polygon coverage. The polygon coverage was projected to the UTM coordinate system using tics copied from the paper map onto the mylar. This polygon coverage depicts Green Timber, Logged for Softwood Only, Logged for Both Soft and Hard Wood, Burned Over Area, Waste and Denuded Lands, and Open Land. The original map was intended to show relative amounts of slash and the resources available for fire suppression in 1916 for the Adirondack Forest. The outer boundary of the map area is defined by the Upper Hudson watershed and the boundary of the Adirondack Park, commonly referred to as the Blueline.
1.2.2 Purpose:This data layer is part of a larger database designed to help evaluate watershed/wetland relationships and to enable examination of cumulative impacts within the study area. The project was funded by a grant from the U.S. Environmental Protection Agency to the NYS Adirondack Park Agency.
1.2.3 Supplemental Information: The 1916 Fire Protection Map appears to have value in verifying the location of potential old growth forest stands and identifying historically fire-disturbed regions within the Upper Hudson Watershed Study Area. Polygons terminating on a shoreline were digitized to the center of the waterbody since the base map origin was unknown and waterbody delineations were not digitized from this map. The geographic extent of the original map comprised the Adirondack Forest of 1916 and surrounding area. The original map is quite large (59" X 73") and was printed at a scale of one inch equals two miles. Printed in four horizontal sections, it was pieced together onto a linen backing. The match between abutting sections is not exact. The original map projection is unknown. The map legend does not describe field work protocol, base map source, or cartographic methodologies. While the title suggests that boundaries are based on field work, it is not likely that precision mapping standards were employed. While the 1916 Fire Protection Map is a rare and exquisite map, geospatial data derived from this source must be somewhat suspect.
1.3 Time Period Of Content
1.3.1 Currentness Reference: Publication date of source map. Data may be earlier than 1916
1.4 Status
1.4.1 Progress: Complete
1.4.2 Maintenance and Update Frequency: As Needed
1.5 Spatial Domain

1.5.1 Bounding Coordinates
1.5.1.1 West Bounding Coordinate: -74.64889
1.5.1.2 East Bounding Coordinate: -73.53917
1.5.1.3 North Bounding Coordinate: 44.14778
1.5.1.4 South Bounding Coordinate: 43.01278
1.6 Keywords
1.6.1 Theme
1.6.1.1 Theme Keyword Thesaurus: None
1.6.1.2 Theme Keyword: Historical forest
1.6.1.2 Theme Keyword: Disturbance
1.6.1.2 Theme Keyword: Fire Protection
1.6.1.2 Theme Keyword: Fire
1.6.1.2 Theme Keyword: Northern Hardwood
1.6.1.2 Theme Keyword: Geographic Information System
1.6.1.2 Theme Keyword: (GIS)
1.6.2 Place
1.6.2.1 Place Keyword Thesaurus: None
1.6.2.2 Place Keyword: Hudson River
1.6.2.2 Place Keyword: Adirondack Park
1.6.2.2 Place Keyword: Adirondacks
1.6.2.2 Place Keyword: Adirondack Mountains
1.6.2.2 Place Keyword: New York
1.6.3 Stratum
1.6.3.1 Stratum Keyword Thesaurus: None
1.6.4 Temporal
1.6.4.1 Temporal Keyword Thesaurus: None
1.6.4.2 Temporal Keyword: 1916
1.6.4.2 Temporal Keyword: Early twentieth century
1.7 Access Constraints: None
1.8 Use Constraints: These data may not be used for legal determinations. Please credit use of this data set to the New York State Adirondack Park Agency, Ray Brook, New York 12977. Please send a copy of an reports or papers in which these data were used or referenced to the above address, Attention, Nancy Heath Librarian.
1.9 Point of Contact
1.11 Data Set Credit: Funding was provided by the U.S. Environmental Protection Agency; Office of Wetlands Protection; State Wetlands Protection Program; Grant No. 992290-01-0
1.12 Security Information
1.12.1 Security Classification System: None
1.12.2 Security Classification: None
1.12.3 Security Handling Description: None
1.13 Native Data Set Environment: NT ARC/INFO 7.1.2 Protection Agency; Office of Wetlands Protection; State Wetlands Protection Program; Grant No. 992290-01-0

2 Data Quality Information
2.1 Attribute Accuracy
2.1.1 Attribute Accuracy Report: Initial attribute assignation rules and methods used to determine polygon boundaries on the original hard copy map are unknown. Map legend descriptions were coded with a numerical value which was subsequently transferred to the pen-on-mylar tracing of the original map. The transfer of tic locations, polygon boundaries, and legend codes to the mylar overlay were checked by overlay of the mylar onto the original map. Tics, polygons, and labels were traced beyond the outer boundary of the Upper Hudson watershed to ensure that the entire study area was included. The polygon label attribute VALUE was assigned by the digitizer from the mylar overlay, and was manually checked by comparing a print of the digital map with the original map. No dangle nodes were tolerated in the final digital file.

2.2 Logical Consistency Report: The digital map was compared with the original printed map, and all disagreements found were corrected in the digital map. All adjacent polygons with similar values were merged or the value data attribute was corrected.

2.3 Completeness Report: The digital map was subjected to extensive QA/QC measures at all steps in the process of its creation, including overlay of the digital map on the original map. All identifiable errors were corrected. Existing mistakes will be corrected as needed.

2.4 Positional Accuracy

2.4.1 Horizontal Positional Accuracy

2.4.1.1 Horizontal Positional Accuracy Report: Positional accuracy, including map projection, is unknown for the source map. Tracing of polygon boundaries was carefully conducted, and it is expected that the tracing and subsequent digital line is coincident with the original map to plus or minus one pencil width (about 65 meters). The pen-on-mylar tracing of polygon boundaries, label values, and tic locations made of the source map was QA/QC'd by two individuals separately by direct overlay on the source map. Where polygon boundaries coincided with shorelines, the boundary was altered (if the polygon did not already embrace the waterbody) to reflect the approximate pond (or lake) centerline. Digital polygon boundary QA/QC was conducted by creating a hard copy of the digital file and overlaying the hard copy onto the original map. Following the polygon digitizing operation and combination of the file with the outer watershed boundary digital file, a hard copy was produced and QA/QC'd separately by two individuals for line placement, polygon completeness, and tic placement by direct overlay on the tracing and original paper map.

2.4.2.1 Vertical Positional Accuracy Report: No vertical coordinates are associated with this data set. Source map projection parameters and mapping techniques are unknown.

2.5.1 Source Information

2.5.1.1 Source Citation:

8.1 Originator: State of New York Conservation Commission, Karl Schmitt (comp.)

8.2 Publication Date: 1916

8.4 Title: Fire Protection Map of the Adirondack Forest: Based on Field Work of State Forest Rangers and on United States Geological Survey

8.5 Edition: Unknown

8.6 Geospatial Data Presentation Form: Map

2.5.1.2 Source Scale Denominator: 126720

2.5.1.3 Type Of Source Media: Paper

2.5.1.4 Source Time Period Of Content:

2.5.1.4.1 Source Currentness Reference: Publication Date

2.5.1.5 Source Citation Abbreviation: None

2.5.1.6 Source Contribution: Primary source of information

2.5.1 Source Information

2.5.1.1 Source Citation:

8.1 Originator: State University of New York, Plattsburgh, Remote Sensing Laboratory: Dr. D. J. Bogucki, Director

8.2 Publication Date: 19991231

8.4 Title: New York State Adirondack Park Watershed Boundaries in the Upper Hudson River Drainage Basin

8.5 Edition: 1

8.6 Geospatial Data Presentation Form: Map

8.7.1 Series Name: Upper Hudson River Drainage Basin Database

8.7.2 Issue Identification: Implementing a Procedure to Assess Cumulative Effects and Predict Cumulative Impacts from Development Activities to Wetands and Watersheds in the Oswegatchie, Black, and Greater Upper Hudson River Watersheds of the Adirondack Park, New York State, USA

8.8.1 Publication Place: Ray Brook, New York

8.8.2 Publisher: New York State Adirondack Park Agency

2.5.1.2 Source Scale Denominator: 24000

2.5.1.3 Type Of Source Media: map
2.5.1.4 Source Time Period Of Content:
2.5.1.4.1 Source Currentness Reference: USGS 7 1/2' and 7 1/2' x 15' map dates
2.5.1.5 Source Citation Abbreviation: UHouter
2.5.1.6 Source Contribution: Delineation of the Upper Hudson watershed using USGS maps used as the outer boundary of the fire map area

2.5.1 Source Information
2.5.1.1 Source Citation:
8.1 Originator: State of New York Conservation Commission, Karl Schmitt (comp.)
8.2 Publication Date: 1916
8.4 Title: Fire Protection Map of the Adirondack Forest: Based on Field Work of State Forest Rangers and on United States Geological Survey
8.5 Edition: Unknown
8.6 Geospatial Data Presentation Form: Map
2.5.1.4 Source Time Period Of Content:
2.5.1 Source Information
2.5.1.1 Source Citation:
8.1 Originator: State of New York Conservation Commission, Karl Schmitt (comp.)
8.2 Publication Date: 1916
8.4 Title: Fire Protection Map of the Adirondack Forest: Based on Field Work of State Forest Rangers and on United States Geological Survey
8.5 Edition: Unknown
8.6 Geospatial Data Presentation Form: Map
2.5.1.4 Source Time Period Of Content:

2.5.2 Process Step
2.5.2.1 Process Description: Tics, polygons, and legend codes were traced from the source map onto a mylar overlay. The mylar overlay was scanned at 300 DPI and converted from raster to vector format using the gridline command in ARC\Info. Extraneous information (tic locations, polygon label codes) was removed from the vector file. The remaining lines were cleaned using the raster scan as a background until the vector coverage was successfully converted to a polygon coverage. Legend codes were added to an item in the polygon attribute table (the value field). The result was printed and compared to the original map. The map was then projected to the UTM coordinate system using the tic marks in the raster scan.
2.5.2.3 Process Date: 19980931
2.5.2.4 Process Time: Unknown
2.5.2.5 Source Produced Citation Abbreviation: UHFP1916

3 Spatial Data Organization Information
3.3 Point and Vector Object Information
3.3.1.1 SDTS Point and Vector Object Type: Complete Chain
3.3.1.2 Point and Vector Object Count: 1056

4 Spatial Reference Information
4.1 Horizontal Coordinate System Definition
4.1.2 Planar
4.1.2.2 Grid Coordinate System
4.1.2.2.1 Grid Coordinate System Name: Universal Transverse Mercator
4.1.2.2.2 Universal Transverse Mercator
4.1.2.2.2.1 UTM Zone Number: 18
4.1.2.1.2.2 Longitude Of Central Meridian: -75
4.1.2.1.2.3 Latitude Of Projection Origin: 0
4.1.2.1.2.4 False Easting: 0

4.1.2.1.2.5 False Northing: 0
4.1.2.1.2.17 Scale Factor at Central Meridian: 1
4.1.2.4 Planar Coordinate Information
4.1.2.4.2 Coordinate Representation
4.1.2.4.2.1 Abscissa Resolution: .1
4.1.2.4.2.2 Ordinate Resolution: 1
4.1.2.4.4 Planar Distance Units: Meters

5 Entity and Attribute Information
5.1 Detailed Description
5.1.1 Entity Type
5.1.1.1 Entity Type Label: uhfp1916.pat
5.1.1.2 Entity Type Definition: polygon attribute table
5.1.1.3 Entity Type Definition Source: Arc/Info 7.1.2
5.1.2 Attribute
5.1.2.1 Attribute Label: AREA
5.1.2.2 Attribute Definition: Area of polygon in square coverage units (meters)
5.1.2.3 Attribute Definition Source: Computed
5.1.2.4 Attribute Domain Values
5.1.2.4.1 Enumerated Domain
5.1.2.4.1.1 Enumerated Domain Value: Positive real numbers
5.1.2.4.1.2 Enumerated Domain Value Definition: Square Meters
5.1.2.4.1.3 Enumerated Domain Value Definition Source: Computed
5.1.2 Attribute
5.1.2.1 Attribute Label: Perimeter
5.1.2.2 Attribute Definition: Perimeter of polygon in meters
5.1.2.3 Attribute Definition Source: computed
5.1.2.5 Attribute Units Of Measurement: Meters
5.1.2.7 Beginning Date Attribute Values: 1916
5.1.2.8 Ending Date Of Attribute Values: 1916
5.1.2.9 Attribute Value Accuracy Information
5.1.2 Attribute
5.1.2.1 Attribute Label: Value
5.1.2.2 Attribute Definition: Number corresponding to source map description
5.1.2.3 Attribute Definition Source: "Fire Protection Map of the AdirondackForest; Based on Field Work of State Forest Rangers and on United States Geological Survey"
5.1.2.5 Attribute Units Of Measurement: Arbitrary Integer Units
5.1.2.7 Beginning Date Attribute Values: 1916
5.1.2.8 Ending Date Of Attribute Values: 1916
5.1.2.9 Attribute Value Accuracy Information
5.1.2.4 Attribute Domain Values
5.1.2.4.2 Range Domain
5.1.2.4.2.1 Range Domain Minimum: 0
5.1.2.4.2.2 Range Domain Maximum: infinity
5.1.2 Attribute
5.1.2.1 Attribute Label: Perimeter
5.1.2.2 Attribute Definition: Perimeter of polygon in meters
5.1.2.3 Attribute Definition Source: computed
5.1.2.5 Attribute Units Of Measurement: Meters
5.1.2.7 Beginning Date Attribute Values: 1916
5.1.2.8 Ending Date Of Attribute Values: 1916
5.1.2.9 Attribute Value Accuracy Information
5.1.2 Attribute
5.1.2.1 Attribute Label: Value

5.1.2.2 Attribute Definition: Number corresponding to source map description
5.1.2.3 Attribute Definition Source: "Fire Protection Map of the AdirondackForest; Based on Field Work of State Forest Rangers and on United States Geological Survey"
5.1.2.5 Attribute Units Of Measurement: Arbitrary Integer Units
5.1.2.7 Beginning Date Attribute Values: 1916
5.1.2.8 Ending Date Of Attribute Values: 1916
5.1.2.9 Attribute Value Accuracy Information
5.1.2.5 Attribute Units Of Measurement: square meters
5.1.2.7 Beginning Date Attribute Values: 1916
5.1.2.9 Attribute Value Accuracy Information
5.1.2.9.1 Attribute Value Accuracy: unknown
5.1.2.9.2 Attribute Value Accuracy Explanation: computed
5.1.1 Entity Type
5.1.1.1 Entity Type Label: uhfp1916.pat
5.1.1.2 Entity Type Definition: polygon attribute table
5.1.1.3 Entity Type Definition Source: Arc/Info 7.1.2
5.1.2 Attribute
5.1.2.1 Attribute Label: Perimeter
5.1.2.2 Attribute Definition: Perimeter of polygon in coverage units (meters)
5.1.2.3 Attribute Definition Source: computed
5.1.2.4 Attribute Domain Values
5.1.2.4.2 Range Domain
5.1.2.4.2.1 Range Domain Minimum: 0
5.1.2.4.2.2 Range Domain Maximum: infinity
5.1.1 Entity Type
5.1.1.1 Entity Type Label: uhfp1916.pat
5.1.1.2 Entity Type Definition: polygon attribute table
5.1.1.3 Entity Type Definition Source: Arc/Info 7.1.2
5.1.2 Attribute
5.1.2.1 Attribute Label: value
5.1.2.2 Attribute Definition: number corresponding to map legend description
5.1.2.3 Attribute Definition Source: "Fire Protection Map of the Adirondack Forest; Based on Field Work of State Forest Rangers and on United States Geological Survey; Compiled by Karl Schmitt, Forester; State of New York Conservation Commission; 1916; Drawn, Engraved, and Printed at Matthews-Northrup Works, Buffalo, New York."
5.1.2.4 Attribute Domain Values
5.1.2.4.1 Enumerated Domain
5.1.2.4.1.1 Enumerated Domain Value: 1 to 6
5.1.2.4.1.2 Enumerated Domain Value Definition: Values in the key of the original paper map numbered from the top of the key
5.1.2 Attribute
5.1.2.1 Attribute Label: 1
5.1.2.2 Attribute Definition: GREEN TIMBER- virgin and second growth - no slash
5.1.2.3 Attribute Definition Source:"Fire Protection Map of the Adirondack Forest; Based on Field Work
5.1.2.9 Attribute Value Accuracy Information
5.1.2 Attribute
5.1.2.1 Attribute Label: 2
5.1.2.2 Attribute Definition: LOGGED FORSOFTWOOD ONLY - considerable slash
5.1.2.3 Attribute Definition Source: "Fire Protection Map of the Adirondack Forest; Based on Field Work
5.1.2.9 Attribute Value Accuracy Information
5.1.2 Attribute
5.1.2.1 Attribute Label: 3
5.1.2.2 Attribute Definition: LOGGED FORBOTH SOFT AND HARD WOOD - much slash
5.1.2.3 Attribute Definition Source: "Fire Protection Map of the Adirondack Forest; Based on Field Work

5.1.2.9 Attribute Value Accuracy Information
5.1.2 Attribute
5.1.2.1 Attribute Label: 4
5.1.2.2 Attribute Definition: BURNED OVERAREA - much inflammable material left
5.1.2.3 Attribute Definition Source: "Fire Protection Map of the Adirondack Forest; Based on Field Work
5.1.2.9 Attribute Value Accuracy Information
5.1.2 Attribute
5.1.2.1 Attribute Label: 5
5.1.2.2 Attribute Definition: WASTE ANDDENUDED LANDS - very little inflammable material
5.1.2.3 Attribute Definition Source: "Fire Protection Map of the Adirondack Forest; Based on Field Work
5.1.2.9 Attribute Value Accuracy Information
5.1.2 Attribute
5.1.2.1 Attribute Label: 6
5.1.2.2 Attribute Definition: OPEN LAND -farmland and grazing
5.1.2.3 Attribute Definition Source: "Fire Protection Map of the Adirondack Forest; Based on Field Work
5.1.2.9 Attribute Value Accuracy Information

6 Distribution Information
6.1 Distributor
10.1 Contact Person Primary
10.1.1 Contact Person: John Barge
10.1.2 Contact Organization: New York State Adirondack Park Agency
10.3 Contact Position: Adirondack Park Senior Natural Resource Planner
10.4 Contact Address
10.4.1 Address Type: Mailing Address
10.4.2 Address: POB 99
10.4.3 City: Ray Brook
10.4.4 State or Province: New York
10.4.5 Postal Code: 12977
10.4.6 Country: USA
10.5 Contact Voice Telephone: (518) 891 4050
6.2 Resource Description: Upper Hudson River Basin ARC/Info coverage 1916 Fire Protection Map
6.3 Distribution Liability: Although these data have been processed successfully on a computer system at the at the Adirondack Park Agency, no warranty expressed or implied is made regarding the accuracy or utility of the data on any other system or for general or scientific purposes, nor shall the act of distribution constitute any such warranty. This disclaimer applies both to individual use of the data and aggregate use with other data. It is strongly recommended that these data are directly acquired from the New York State Adirondack Park Agency, and not indirectly through other sources which may have changed the data in some way. It is also strongly recommended that careful attention be paid to the contents of the metadata file associated with these data. The New York State Adirondack Park Agency shall not be held liable for improper or incorrect use of the data described and/or contained herein. These data are not to be used in making legal determinations.

7 Metadata Reference Information
7.1 Metadata Date: 19990631
7.2 Metadata Review Date: as needed
7.4 Metadata Contact:
10.1 Contact Person Primary
10.1.1 Contact Person: John Barge
10.1.2 Contact Organization: New York State Adirondack Park Agency
10.3 Contact Position: Adirondack Park Senior Natural Resource Planner
10.4 Contact Address
10.4.1 Address Type: Mailing Address
10.4.2 Address: POB 99

10.4.3 City: Ray Brook
10.4.4 State or Province: New York
10.4.5 Postal Code: 12977
10.4.6 Country: USA
10.5 Contact Voice Telephone: (518) 891 4050
7.5 Metadata Standard Name: FGDC Content Standard For Digital Geospatial Metadata
7.6 Metadata Standard Version: June 8, 1994 (Version 1.0)
7.7 Metadata Time Convention: The Local Time
7.8 Metadata Access Constraints: None
7.9 Metadata Use Constraints: None

Appendix 13. Metadata for the Map of Water and Sewer District Boundaries

Report Date: 26-Jul-1999
Metadata Data Set Name: Water and Sewer Districts in the Adirondack Park, New York
1 Identification Information
1.1 Citation:
8 Citation Information:
8.1 Originator: New York State Adirondack Park Agency, Avram Primack (compiler)
8.2 Publication Date: 19991231
8.3 Publication Time: Unknown
8.4 Title: Map of Water and Sewer Districts located within the New York State Adirondack Park
8.5 Edition: Version 1
8.7.1 Series Name: Watershed Scale Protection for Adirondack Wetlands
8.7.2 Issue Identification: Implementing a Procedure to Assess Cumulative Effects and Predict Cumulative Impacts from Development Activities to Wetlands and Watersheds in the Oswegatchie, Black, and Greater Upper Hudson River Watersheds of the Adirondack Park, New York State, USA
8.8.1 Publication Place: Ray Brook, New York
8.8.2 Publisher: New York State Adirondack Park Agency
1.2 Description
1.2.1 Abstract: Towns and villages wholly or party in the Adirondack State Park were requested to indicate the presence of water and sewer districts within their borders. Where towns indicated that water and sewer districts were present they were requested to supply a map of the district. These maps were digitized using ARCView over a background of NYS DOT planimetric map images.
1.2.2 Purpose: The purpose of this map is to indicate the approximate boundary of water and sewer districts in the Adirondack Park, New York.
1.3 Time Period Of Content
9 Time Period Information
9.3 Range of Dates/Times
9.3.1 Beginning Date: 1984
9.3.3 Ending Date: 1985
1.3.1 Currentness Reference: Observed
1.4 Status
1.4.1 Progress: Complete
1.4.2 Maintenance and Update Frequency: As Needed
1.5 Spatial Domain
1.5.1 Bounding Coordinates
1.5.1.1 West Bounding Coordinate: 75.31694444
1.5.1.2 East Bounding Coordinate: 73.28111111
1.5.1.3 North Bounding Coordinate: 44.87152778
1.5.1.4 South Bounding Coordinate: 43.05291667
1.6 Keywords
1.6.1 Theme
1.6.1.1 Theme Keyword Thesaurus: None
1.6.1.2 Theme Keyword: sewer district
1.6.1.2 Theme Keyword: water district
1.6.2 Place
1.6.2.1 Place Keyword Thesaurus: None
1.6.2.2 Place Keyword: Adirondack Park
1.6.3 Stratum
1.6.3.1 Stratum Keyword Thesaurus: None
1.6.4 Temporal
1.6.4.1 Temporal Keyword Thesaurus: None
1.7 Access Constraints: None

1.8 Use Constraints: These data may not be used for legal determinations. Please credit use of this data set to the New York State Adirondack Park Agency, Ray Brook, New York 12977. Please send a copy of an reports or papers in which these data were used or referenced to the above address, Attention, Nancy Heath Librarian.

1.9 Point of Contact

10.1 Contact Person Primary

10.1.1 Contact Person: John Barge

10.1.2 Contact Organization: Adirondack Park Senior Natural Resource Planner

10.3 Contact Position: Adirondack Park Project Analyst (Biological Resources)

10.4 Contact Address

10.4.1 Address Type: Mailing Address

10.4.2 Address: POB 99

10.4.3 City: Ray Brook

10.4.4 State or Province: New York

10.4.5 Postal Code: 12977

10.4.6 Country: USA

10.5 Contact Voice Telephone: (518) 891 4050

1.11 Data Set Credit: Funding was provided by the U. S. EPA under the State Wetlands Protection Program Grant #992290-01-0 to the NY State Adirondack Park Agency in cooperation with the NYS Adirondack Lakes Survey Corporation and SUNY Plattsburgh Remote Sensing Laboratory

1.12 Security Information

1.12.1 Security Classification System: None

1.12.2 Security Classification: None

1.12.3 Security Handling Description: None

2 Data Quality Information

2.1 Attribute Accuracy

2.1.1 Attribute Accuracy Report: The accuracy of the location of the polygon boundaries depends on the accuracy of the information supplied by the individual towns and villages. Each polygon examined on a planimetric base map for position and size by at least two people separately. Labels for each polygon were added as indicated by the maps supplied.

2.2 Logical Consistency Report: All polygons were required to have a unique identification number and label indicating whether they represented a water or sewer district.

2.3 Completeness Report: All towns with some area in the New York State Adirondack Park were requested to supply information. The information received was checked by persons at the agency with first hand knowledge of the water and sewer infrastructure of the towns and villages in the Park.

2.4 Positional Accuracy

2.4.1 Horizontal Positional Accuracy

2.4.1.1 Horizontal Positional Accuracy Report: The maps supplied were of varying scale. These were digitized by transferring the paper map information using NYS DOT planimetric maps as a background. In all cases, the area indicated on the maps supplied by the towns and villages were included in the digitized polygon. The digitized polygon may be slightly larger in some places than the actual area covered.

2.4.2.1 Vertical Positional Accuracy Report: Not applicable

2.5.2 Process Step

2.5.2.1 Process Description: Maps obtained from the towns and villages were transferred to digital form using ArcView. A view was created with the appropriate NYS DOT planimetric map image as a background. The polygon indicated on the paper map was transferred to the computer screen by creating a new theme in the view window and adding the polygon using the freeform polygon tool.

2.5.2.3 Process Date: 19991231

2.5.2.6 Process Contact

10 Contact Information

10.1 Contact Person Primary

10.1.1 Contact Person: John Barge

10.1.2 Contact Organization: New York State Adirondack Park Agency

10.3 Contact Position: Adirondack Park Senior Natural Resource Planner
10.4 Contact Address
10.4.1 Address Type: Mailing Address
10.4.2 Address: POB 99
10.4.3 City: Ray Brook
10.4.4 State or Province: New York
10.4.5 Postal Code: 12977
10.4.6 Country: USA
10.5 Contact Voice Telephone: (518) 891 4050

3 Spatial Data Organization Information
3.2 Direct Spatial Reference Method: Vector
3.3 Point and Vector Object Information
3.3.1.1 SDTS Point and Vector Object Type: Complete Chain

4 Spatial Reference Information
4.1 Horizontal Coordinate System Definition
4.1.2 Planar
4.1.2.2 Grid Coordinate System
4.1.2.2.1 Grid Coordinate System Name: Universal Transverse Mercator
4.1.4 Geodetic Model
4.1.4.1 Horizontal Datum Name: North American Datum of 1927
4.1.4.2 Ellipsoid Name: Clarke 1866
4.1.4.3 Semi-Major Axis: 6378206
4.1.4.4 Denominator of Flattening Ratio: 294.98
4.2 Vertical Coordinate System Definition
4.2.1.1 Altitude Datum Name: None used
4.2.2.1 Depth Datum Name: None used

5 Entity and Attribute Information
5.2 Overview Description
5.2.1 Entity and Attribute Overview: This dataset contains polygons that identify the area served by water or sewer districts for those portions of towns and villages within the New York State Adirondack Park. The region attribute table contain area, perimeter, region identification numbers, Town or Village name, and a field indicating the function (water or sewer) of the polygon.
5.2.2 Entity and Attribute Detail Citation: "Watershed Scale Protection for Adirondack Wetlands: Implementing a Procedure to Assess Cumulative Effects and Predict Cumulative Impacts From Development Activities to Wetlands and Watersheds in the Oswegatchie, Black, and Greater Upper Hudson River Watersheds if the Adirondack Park, New York State, USA

6 Distribution Information
6.1 Distributor
10.1 Contact Person Primary
10.1.1 Contact Person: John Barge
10.1.2 Contact Organization: New York State Adirondack Park
10.2 Contact Organization Primary
10.1.2 Contact Organization: New York State Adirondack Park Agency
10.3 Contact Position: Adirondack Park Senior Natural Resource Planner
10.4 Contact Address
10.4.1 Address Type: Mailing Address
10.4.2 Address: POB 99
10.4.3 City: Ray Brook
10.4.4 State or Province: New York
10.4.5 Postal Code: 12977

10.4.6 Country: USA
10.5 Contact Voice Telephone: (518) 891-4050
10.8 Contact Electronic Mail Address: 9:00 am to 5 pm

6.3 Distribution Liability: Although these data have been processed successfully on a computer system at the Adirondack Park Agency, no warranty expressed or implied is made regarding the accuracy or utility of the data on any other system or for general or scientific purposes, nor shall the act of distribution constitute any such warranty. This disclaimer applies both to individual use of the data and aggregate use with other data. It is strongly recommended that these data are directly acquired from the New York State Adirondack Park Agency, and not indirectly through other sources which may have changed the data in some way. It is also strongly recommended that careful attention be paid to the contents of the metadata file associated with these data. The New York State Adirondack Park Agency shall not be held liable for improper or incorrect use of the data described and/or contained herein. These data are not to be used in making legal determinations.

7 Metadata Reference Information
7.1 Metadata Date: 19990701
7.2 Metadata Review Date: 19990701
7.3 Metadata Future Review Date: as needed
7.4 Metadata Contact:
10.1 Contact Person Primary
10.1.1 Contact Person: John Barge
10.1.2 Contact Organization: New York State Adirondack Park
10.2 Contact Organization Primary
10.1.2 Contact Organization: New York State Adirondack Park Agency
10.3 Contact Position: Adirondack Park Senior Natural Resource Planner
10.4 Contact Address
10.4.1 Address Type: Mailing Address
10.4.2 Address: POB 99
10.4.3 City: Ray Brook
10.4.4 State or Province: New York
10.4.5 Postal Code: 12977
10.4.6 Country: USA
10.5 Contact Voice Telephone: (518) 891-4050
7.5 Metadata Standard Name: FGDC Content Standard For Digital Geospatial Metadata
7.6 Metadata Standard Version: June 8, 1994 (Version 1.0)
7.7 Metadata Time Convention: The Local Time
7.8 Metadata Access Constraints: None
7.9 Metadata Use Constraints: Not for use in making legal determinations
7.10 Metadata Security Information
7.10.1 Metadata Security Classification System: None
7.10.2 Metadata Security Classification: None
7.10.3 Metadata Security Handling Description: None

Appendix 14. New and Old Flushing Rates for ALSC Sampled Lakes and Ponds in the Oswegatchie, Black, and Greater Upper Hudson Watersheds

POND	PONDNAME	ALSC Flushing Rate	New (OT) Flushing Rate
040118	HILLS POND	20.00	6.69
040120	PORTAFERRY LAKE	0.40	0.38
040130	LONG LAKE	3.80	1.70
040131	TWIN POND EAST	20.60	10.71
040132	TWIN POND WEST	28.50	32.64
040133	SPIDER POND	119.00	86.82
040134	BEAR LAKE	6.90	6.46
040135	THE GULF	124.60	108.62
040136	DRY TIMBER LAKE	15.20	12.31
040137	ROCK LAKE	4.70	4.36
040138	JENNY LAKE	10.80	6.88
040144	BIG HILL POND	0.90	0.70
040145A	UNNAMED POND	71.70	57.66
040146	SOUTH CREEK LAKE	6.00	5.07
040152	ELIJAH LAKE	0.70	0.55
040153	LITTLE SILVER DAWN LAKE	23.60	17.53
040154	SILVER DAWN LAKE	1.30	0.94
040161	ROUND LAKE	2.80	2.35
040162	LONG LAKE	1.90	1.70
040164	LANES POND	0.80	0.90
040166	MOULDY POND	1.40	1.10
040167	LITTLE MOULDY POND	2.60	2.17
040168	MULLINS FLOW	113.20	101.34
040170	UNNAMED POND		1340.19
040171	WOLF POND	19.80	16.26
040173	MASSAWEPIE POND	23.30	24.03
040179	KELLY POND	16.90	17.44
040180	UNNAMED POND	28.70	30.59
040181	GREGG LAKE	14.60	14.89
040184	GREEN POND	3.80	3.88
040185	TWIN PONDS	7.70	5.68
040186	LOON HOLLOW POND	2.40	2.05
040187	BRINDLE POND	9.90	8.39
040188	GRASS POND	7.00	5.78
040189	ROCK LAKE	2.40	2.46
040190	EMERALD LAKE	11.90	8.53
040191	SAND LAKE	5.10	5.54
040192	SITZ POND	6.30	6.07
040194	UNNAMED POND	190.00	172.79
040195	MUSKRAT POND	5.20	3.89
040196	BEAR POND	0.80	0.73
040197	DIANA POND	1.50	1.35
040198	LOWER SOUTH POND	8.00	8.07

040199	MIDDLE SOUTH POND	3.50	3.05
040200	UPPER SOUTH POND	2.70	2.48
040201	UNNAMED POND	4.00	4.15
040202	UNNAMED POND	16.20	4.68
040203	UNNAMED POND	1.20	0.78
040204	UNNAMED POND	282.10	313.59
040205	UNNAMED POND	2.30	1.69
040206	UNNAMED POND	33.90	16.96
040208	UNNAMED POND	6.20	6.02
040209	UNNAMED POND	12.90	12.41
040210	WILLYS LAKE (HORSESHOE)	1.00	0.99
040211	UNNAMED POND	249.60	1510.20
040212	UNNAMED POND	470.80	411.57
040213	UNNAMED POND	49.60	38.04
040214	WALKER POND	0.90	0.76
040218	TWIN POND WEST	18.20	16.01
040219	TWIN POND EAST	0.80	1.08
040227	MUD POND	46.80	41.33
040228	FRENCH POND	0.50	0.43
040230	CLEAR POND	1.30	1.19
040231	ROCK POND	131.80	116.29
040232	TROUT POND	11.00	8.75
040233	LITTLE DEER POND	6.50	3.54
040234A	UNNAMED POND	58.30	51.15
040235	UNNAMED POND	379.80	606.81
040237	LONG POND	6.00	5.53
040238	ROUND POND	40.90	37.57
040240	DESERT POND	49.80	95.16
040245	JAKES POND	2.50	1.94
040246	BUCK POND	2.50	2.83
040247	HOG POND	5.00	5.67
040260	UNNAMED POND	-999.90	9284.39
040261	UNNAMED POND	366.40	420.94
040262	TITUS POND	3.30	0.49
040264	DODGE POND	3.10	0.08
040265	FLAT ROCK RESERVOIR	107.20	97.37
040267	TWIN LAKE NORTH	1.40	1.17
040268	TWIN LAKE SOUTH	2.20	1.93
040279	READWAY POND	1.20	12.64
040281	STAR LAKE	0.40	0.28
040285	STREETER LAKE	2.60	2.75
040286	PINE POND	23.10	17.33
040287	MUD POND	6.50	6.06
040288A	UNNAMED POND	774.60	674.25
040288C	UNNAMED POND	218.70	184.28
040288E	UNNAMED POND	112.80	77.27
040289	CRYSTAL LAKE	0.70	0.52
040290A	BENSON MINES POND	421.70	367.06

040291	SUNNY POND	1.60	3.67
040293	LITTLE RIVER FLOW	8.70	7.71
040297	UNNAMED POND	7.10	2.79
040298	HEATH POND	41.10	36.82
040298B	UNNAMED POND	11.30	10.52
040299	UNNAMED POND	37.80	34.50
040300	MUSKRAT POND	2.90	2.59
040301	UNNAMED(NEWTON FALLS)RES	66.30	65.19
040301B	BROWN'S FALLS RESERVOIR	83.80	81.81
040303	CHAUMONT POND	8.70	7.52
040303A	BENSON MINES PONDS	14.60	1.86
040303B	BEAVER POND	2.40	2.13
040304	LOST POND	23.90	21.88
040305	CRANE POND	0.90	0.83
040306	TOOLEY POND	3.80	3.42
040307	LOST POND	7.10	5.52
040308	DILLON POND	0.70	0.41
040310	EGG POND	108.10	43.76
040311	LILYPAD POND	27.60	2.89
040313	CURTIS POND	2.20	1.87
040313A	UNNAMED POND	73.80	78.90
040314	UNNAMED POND	17.50	16.84
040315	DONUT POND	11.60	10.75
040316	DOG POND	4.80	4.18
040317	LITTLE DOG POND	29.40	27.11
040318	FISHPOLE POND	14.80	14.09
040319	DARNING NEEDLE POND	7.60	9.93
040320	LITTLE FISH POND	71.20	65.01
040320A	UNNAMED POND	59.20	60.24
040320B	UNNAMED POND	14.30	12.19
040321A	UNNAMED POND	60.20	53.28
040322	SCOTT POND	3.10	2.69
040322B	UNNAMED POND	67.30	65.57
040323	COLVIN POND	1.20	0.95
040324	UNNAMED POND	9.80	11.10
040325	INDIAN MOUNTAIN POND	3.50	3.19
040326	ASH POND	8.50	10.45
040327	COWHORN POND	2.80	3.79
040328	OLMSTEAD POND	3.50	3.13
040329	CAT MOUNTAIN POND	3.10	2.76
040330	BASSOUT POND	7.20	6.01
040331	UNNAMED POND	210.90	187.66
040333	TOAD POND	11.40	4.02
040334	SPECTACLE POND NORTH	4.10	4.19
040335	SPECTACLE POND SOUTH	0.80	0.69
040336	SIMMONS POND	1.20	1.73
040338	UNNAMED POND (MILL POND)	100.10	79.92
040340	OTTER POND	28.40	26.09

040343	BUCK POND	7.00	7.13
040344	CAGE LAKE	3.30	3.15
040345	BIG SHALLOW POND	66.20	57.13
040346	WASHBOWL POND	4.40	3.59
040347	LITTLE SHALLOW POND	58.50	50.67
040348	LITTLE FIVE POND	817.50	724.96
040349	BIG FIVE POND	199.30	176.88
040350	LONE DUCK POND	8.30	3.39
040351	MUIR POND	4.00	3.97
040352	WOLF POND	15.90	14.30
040353	STREETER FISHPOND	1.00	0.83
040354	RILEY POND LOWER	38.00	46.74
040355	RILEY POND UPPER	5.80	5.97
040356	UNNAMED POND	12.20	11.49
040357	GLASBY POND	18.30	15.16
040359	NICKS POND	53.00	41.83
040360	BIG DEER POND	7.70	6.28
040361	CLEAR POND	6.00	1.32
040362	GRASSY POND	13.40	11.79
040363	SLENDER POND	1.00	0.85
040364	WEST POND	59.30	54.26
040365	OVEN LAKE	7.60	7.19
040366	GRASSY POND	12.10	12.98
040367	HYDE POND	3.40	3.21
040368	HITCHENS POND	60.70	55.45
040369	TOAD POND	6.90	7.05
040370	UNNAMED POND	153.60	145.80
040372	LITTLE CROOKED LAKE	3.30	3.02
040373	CROOKED LAKE	2.60	1.79
040374	COVEY POND	8.80	10.59
040375	CRACKER POND	12.30	4.88
040376	GAL POND	89.40	82.10
040377	GULL LAKE	0.80	0.73
040378	LITTLE DUCK POND	36.10	32.17
040379	DEER POND	41.80	39.58
040380	PARTLOW MILLDAM	185.30	380.30
040381	JENKINS POND	3.00	1.01
040382	PARTLOW LAKE	2.00	1.79
040409	UNNAMED POND	18.50	14.13
040416	LOWER WEST POND	15.50	2.38
040417	UPPER WEST POND	35.10	31.04
040431	SOFT MAPLE DAM POND	1.20	0.98
040432	UNNAMED POND (TWIN WEST)	3.20	3.50
040433	ENGLE POND	0.80	2.03
040434	SOFT MAPLE RESERVOIR	43.90	47.02
040434A	IN OUT POND	2.80	0.79
040434B	SEEPAGE POND	9.40	9.55
040436	SAND POND	3.30	2.22

040437	UNNAMED POND	20.90	16.69
040438	IKE'S POND	1.10	1.60
040439	UNNAMED POND	4.20	10.47
040440	UNNAMED POND	11.50	22.36
040441A	SADIE POND	1.10	4.59
040442	MCCABE POND	20.40	15.93
040443	PEPPERBOX POND	3.10	2.94
040444	UNNAMED POND	35.60	30.49
040444A	UNNAMED POND	5.20	2.33
040446	TIED LAKE	4.20	2.01
040449	BEAVER LAKE	139.50	155.01
040450	LITTLE BEAVER LAKE	15.00	14.98
040451	FRANCIS LAKE	1.60	2.13
040453	MIRROR POND	94.00	4.61
040454	WOODWARDIA POND	6.60	4.71
040454A	BEAVER MEADOW LAKE	31.90	28.72
040456	UNNAMED POND	20.90	68.09
040457	UNNAMED POND	236.20	226.45
040458	BEAR POND	17.40	17.81
040464A	UNNAMED POND	154.10	84.29
040473	SUNDAY LAKE	32.50	42.45
040474A	UNNAMED POND	9.00	11.16
040474B	UNNAMED POND	1.00	0.66
040476	UNNAMED POND	37.00	35.29
040478	MOSHIER RESERVOIR	45.40	48.12
040480	CROPSEY POND	10.70	7.88
040484A	UNNAMED POND	14.60	11.00
040485	DEER POND	20.00	23.77
040487	SUNSHINE POND	0.90	0.98
040488	UNNAMED POND	3.00	2.63
040489	LOWER MOSHIER POND	8.20	10.32
040490	UNNAMED POND	5.60	2.07
040491	UPPER MOSHIER POND	5.10	4.99
040492	DUCK POND	2.10	1.81
040494	SHALLOW POND	23.80	23.39
040495	UNNAMED POND	3.70	3.97
040496	RAVEN LAKE	1.10	1.15
040497	UNNAMED POND	15.40	15.20
040498	LYON LAKE	0.80	0.76
040499	SLIM POND	2.20	1.70
040500	EVERGREEN LAKE	0.50	0.43
040501	UNNAMED POND	1.80	2.20
040502	PEAKED MOUNTAIN LAKE	1.60	1.52
040504	HAWK POND	1.20	1.25
040505	HIDDEN LAKE (HANK'S PD)	0.70	0.63
040506	UNNAMED POND	35.50	282.49
040508	GINGER POND	25.60	26.21
040510	UNNAMED POND	12.70	11.09

040511	SODA POND	0.90	0.88
040512	UNNAMED POND	26.20	21.23
040513	UNNAMED POND	2.80	6.89
040515	DISMAL POND	4.40	4.94
040516	UNNAMED POND	6.40	6.18
040517	SALMON LAKE	6.60	5.80
040518	CAT POND	15.80	22.50
040521	UNNAMED (ODOR POND)	10.20	9.50
040522	HIGBY TWINS EAST POND	5.90	5.55
040523	HIGBY TWINS WEST POND	3.40	3.53
040524	MUD POND	291.60	278.88
040525	CLEAR LAKE	0.60	0.60
040526	UNNAMED POND	3.90	3.99
040527	SUMMIT POND	1.20	1.15
040528	WITCH HOPPLE POND	10.20	9.49
040529	NEGRO LAKE	8.00	0.56
040530	BEAVERDAM POND	14.20	12.32
040531	WILDER POND	9.80	11.72
040536	UNNAMED POND	16.60	10.65
040537	FALLS LAKE	0.60	0.55
040540	BUCK POND	22.60	14.37
040542	HARRINGTON POND	530.90	459.24
040543	SCHLEY POND	197.90	173.31
040544	RAINER POND	14.40	7.11
040545	SNELL POND	10.70	9.41
040547	LILYPAD POND	488.40	450.69
040548	MUD POND	87.40	81.59
040552	SALMON LAKE	1.40	1.33
040558	FLY POND WEST	195.90	208.29
040560	EAST POND	1.30	1.31
040561	DEER POND	1.70	1.72
040562	WEST POND	4.70	4.19
040563	NORTH POND	1.70	1.40
040564	PANTHER POND	14.80	14.43
040565	SHINGLE SHANTY POND	5.50	5.52
040566	UNNAMED POND	24.80	23.69
040567	THAYER LAKE	1.70	1.45
040568	ROSE POND	22.30	21.09
040569	UNNAMED POND	73.70	21.77
040570	TERROR LAKE	9.00	4.93
040571	EAST POND	2.10	4.02
040573	RAZORBACK POND	1.20	1.14
040574	MUD LAKE	12.70	3.33
040576A	OUTLET POND	49.30	48.80
040577	LITTLE ROCK POND	48.60	46.16
040578	BUCK POND	1.80	1.71
040579	SNAKE POND	50.20	1.68
040580	SILVER LAKE	0.90	0.89

040581	POCKET PONDS	4.50	2.10
040582	SOUTH POND	4.20	4.19
040583	JOCK POND	6.80	6.02
040584	TWITCHELL LAKE	3.10	3.05
040585	OSWEGO POND	13.30	25.94
040586	LITTLE BIRCHES POND	18.80	16.99
040587	LILYPAD POND LOWER	8.10	9.26
040595	CRYSTAL LAKE	0.70	0.49
040597	CHASE LAKE	4.30	2.60
040600	PARSONS POND	0.50	3.03
040602	UPPER CHASE LAKE	22.20	19.63
040605	HINCHINGS POND	1.20	1.83
040607	CORK POND	1.10	0.95
040608	EVIES POND	2.40	0.80
040610	LONG LAKE	1.00	1.47
040611	SPECTACLE POND EAST	0.70	1.59
040612	SPECTACLE POND WEST	1.50	1.10
040613	MAHAN POND	2.70	4.53
040615	NORTH POND	50.40	40.92
040617	STONY LAKE	1.00	0.78
040618	HOPSICKER POND	1.20	1.04
040619	CLEVELAND LAKE	1.50	2.19
040620	PAYNE LAKE	1.20	4.39
040622	HUCKLEBERRY LAKE	1.60	2.55
040625	HALFMOON LAKE	5.00	4.23
040626	GOURD POND	212.90	46.51
040627	STEWART POND	2.70	1.71
040628	TROUT POND	16.70	18.57
040630	BILLS POND	4.20	4.31
040631	MIKES POND	13.70	10.76
040632	PANTHER POND	38.40	21.93
040635	FIFTH CREEK POND	9.70	9.92
040636	UNNAMED POND	65.40	65.07
040638	UNNAMED (LENNON) POND	5.80	4.41
040639	HITCHCOCK LAKE	1.00	1.68
040640	BLUE POND	23.20	1.75
040641	HITCHCOCK POND	3.90	3.89
040642	GRASS POND	16.50	14.68
040643	MOOSE POND	2.00	2.45
040644	UNNAMED POND	777.10	689.87
040645	UNNAMED POND	17.60	12.32
040646	UNNAMED POND	6.50	7.06
040647	INDEPENDENCE LAKE	2.40	2.09
040649	LYONS MARSH	33.30	33.83
040650	LITTLE INDEPENDENCE POND	78.60	82.85
040650A	DOE POND	43.50	40.68
040651	LITTLE DIAMOND POND	5.90	10.20
040662A	PITCHER POND	2.00	1.80

040663	SAND POND	2.00	1.17
040664	LITTLE OTTER LAKE	4.40	3.07
040664A	FLORENCE POND	0.50	0.21
040667	EAST POND	72.90	68.48
040675	WEST POND	20.30	15.17
040676	BIG OTTER LAKE	2.80	18.80
040677	NORTH POND	200.00	170.12
040678	EAST POND	4.40	4.82
040679	UNNAMED POND	17.50	8.59
040680	LITTLE SIMON POND	11.60	115.15
040681	BLACKFOOT POND	34.40	32.23
040683	UNNAMED POND	270.90	267.40
040684	GIBBS LAKE	2.60	2.37
040689	BRANTINGHAM LAKE	0.80	0.69
040690	PLEASANT LAKE	0.90	0.37
040691	BURNT (MUD) POND	2.90	1.64
040693	DYER POND	3.30	2.41
040694	WEST PINE POND	9.00	10.66
040697	GARRIT LAKE	17.00	8.62
040699	PINE LAKE	2.30	7.67
040700	EAST PINE POND	19.20	16.41
040702	LOST LAKE	16.30	7.39
040704	MIDDLE SETTLEMENT LAKE	1.40	1.38
040705	CEDAR POND	58.80	39.36
040706	GRASS POND	23.00	24.69
040707	MIDDLE BRANCH LAKE	7.60	2.23
040708	LITTLE PINE LAKE	8.50	26.02
040710B	UNNAMED POND	31.70	21.83
040713	TWIN SISTER LAKE	697.30	217.90
040717	GULL LAKE	1.30	1.00
040718	NELSON LAKE	7.70	5.50
040720	OKARA LAKE EAST	2.10	1.74
040721	OKARA LAKE WEST	6.70	6.62
040722	ROCK POND	2.50	2.27
040725	UNNAMED POND	30.00	24.16
040726	UNNAMED POND	7.10	45.69
040727	WINDFALL POND		1263.40
040729A	UNNAMED POND	19.70	8.60
040731	WHEELER POND	0.90	1.11
040731A	ROUND POND	0.80	0.79
040733	BIG DIAMOND POND	9.80	11.63
040734	CLEAR POND	3.50	2.31
040735	LITTLE SAFFORD LAKE	18.90	17.30
040736	SAFFORD POND	35.00	32.70
040737	UNNAMED POND	12.30	35.66
040738	THIRSTY POND	4.40	4.35
040739	LAKE RONDAXE	39.40	37.40
040740	GOOSE POND	19.10	11.73

040742	FLY POND	70.40	13.30
040743	WEST LAKE	0.50	4.63
040744	KANACTO LAKE	3.10	1.05
040745	LINDSEY POND (TA-JEC-NA)	0.90	0.59
040746	MOSS LAKE	1.60	3.38
040747	CASCADE LAKE	2.10	2.10
040748	BUBB LAKE	3.70	3.65
040749	SIS LAKE	11.80	11.70
040750	DART LAKE	21.50	20.73
040750A	WINDFALL POND	4.30	3.94
040753	WEST POND	5.40	4.62
040754	SQUASH POND	6.90	21.58
040755	SILVER DOLLAR POND	2.40	2.62
040756	MERRIAM LAKE	12.90	4.07
040757	LITTLE CHIEF POND	33.70	49.60
040758	GULL LAKE SOUTH	3.70	11.94
040759	UNNAMED POND	1.30	1.42
040760	OTTER POND	16.50	19.76
040762	GULL LAKE NORTH	4.40	3.80
040765	UNNAMED POND	109.90	118.74
040766	UNNAMED POND	102.70	92.64
040768	LOWER SISTER LAKE	22.20	22.04
040769	UPPER SISTER LAKE	15.50	14.91
040770	UNNAMED POND	12.60	11.11
040771	UNNAMED POND	41.90	40.06
040772	SOUTH POND	1.60	1.31
040773	UNNAMED POND	2.90	2.84
040774	RUSSIAN LAKE	2.70	2.46
040775	MAYS POND	3.00	2.78
040775A	PUG HOLE POND	15.40	16.80
040777	CONSTABLE POND	16.50	16.12
040778	CHUB LAKE	2.60	3.01
040779	PIGEON LAKE	2.90	2.43
040782	UNNAMED POND	324.00	292.73
040783	BALD MOUNTAIN POND	13.20	7.33
040784	SURPRISE POND	4.20	4.72
040787A	SIXTH LAKE FULTON CHAIN	22.10	19.14
040788	EAGLES NEST LAKE	0.30	2.38
040789	BUG LAKE	0.50	0.47
040790	EIGHTH LAKE FULTON CHAIN	0.40	0.22
040792	UNNAMED POND	22.00	18.60
040794	LAKE KATHRYN	1.00	1.98
040797	UNNAMED POND	2.50	1.40
040798	TWIN POND	6.70	0.96
040802	GRAY LAKE	5.70	3.87
040803	BLOODSUCKER POND	26.00	20.27
040804	NICKS LAKE	4.40	3.84
040805	UNNAMED POND	212.40	228.61

040806	UNNAMED POND	499.00	64.22
040824	BEAVERDAM POND	5.20	8.75
040825	UNNAMED POND	92.40	121.11
040826	LIMEKILN LAKE	0.70	0.93
040827	FAWN LAKE	113.20	115.51
040836	STINK LAKE	12.20	33.64
040837	BALSAM LAKE	9.50	8.92
040840	UNNAMED POND	28.90	410.81
040841	UNNAMED (KETTLE) POND	1.80	35.94
040846	UNNAMED POND	37.90	21.73
040847	MITCHELL POND LOWER	2.70	2.51
040848	MITCHELL POND UPPER	8.00	8.65
040849	BEAVER LAKE	6.50	8.00
040850	SQUAW LAKE	1.30	1.85
040851	UNNAMED POND	43.60	113.64
040852	INDIAN LAKE	9.60	9.67
040853	MUSKRAT POND	33.30	41.80
040854	HORN LAKE	1.40	1.39
040855	MOUNTAIN LAKE	2.30	2.59
040856	UNNAMED POND	28.00	31.29
040857A	UNNAMED POND	215.80	78.06
040858	UNNAMED POND	7.80	3.90
040859	TWIN LAKE LOWER	74.50	81.43
040860	TWIN LAKE UPPER	24.70	20.76
040861	LITTLE DEER LAKE	12.60	7.46
040862	CARTER MUDHOLE	94.20	21.69
040863	UNNAMED POND	6.30	7.51
040864A	UNNAMED POND	54.10	52.80
040866	DEEP LAKE	0.80	0.89
040868	TWIN LAKES WEST	499.60	570.07
040869	TWIN LAKE WEST	19.00	22.13
040870	TWIN LAKE EAST	11.90	13.66
040871	UNNAMED POND	16.70	17.48
040872	UNNAMED POND	577.80	603.91
040873	WOLF LAKE	13.80	16.22
040874	BROOK TROUT LAKE	0.70	0.61
040875	NORTHRUP LAKE	3.60	3.49
040876	ICEHOUSE POND	1.00	1.49
040877	HELLDIVER POND	5.80	3.86
040878	LOST POND WEST	13.40	7.53
040879	LOST PONDS EAST	1.70	0.83
040880	BEAR POND	11.00	12.91
040881	LOST POND	390.40	394.80
040885	FALLS POND	1.80	2.00
040886	JIMMY POND	80.70	93.60
040887	LOST POND	38.40	47.86
040888	SLY POND	9.80	9.86
040889	CELLAR POND	55.90	65.08

040890	LITTLE MOOSE LAKE	17.60	13.59
040906	UNNAMED POND	28.90	28.30
040907	ROUND POND	1.90	1.91
040910	BUCK LAKE	3.20	2.26
040920	ROUND LAKE	0.30	0.24
040921	DEER POND	3.80	8.61
040922	LONG LAKE	9.30	6.81
040923	BRANDY LAKE	2.40	1.31
040924	UNNAMED POND	33.30	29.14
040925	LOST POND	7.70	5.83
040926	OTTER LAKE	5.00	3.55
040927	MUDHOLE POND	12.60	7.46
040948	DEAD LAKE	0.70	1.61
040949	STONE DAM LAKE	38.50	27.78
040951	LITTLE WOODHULL LAKE	43.00	36.38
040952	LILY LAKE	24.30	9.02
040958	WHITE LAKE	0.40	0.31
040963	GRANNY MARSH POND	30.20	11.19
040967	BREWER LAKE	1.40	0.80
040968	BEAR LAKE	10.70	8.26
040969	GULL LAKE	2.00	2.50
040970	BUCK POND	25.20	16.68
040971	CHUB POND	55.50	42.64
040972	UNNAMED POND	-999.90	989.03
040984	BLOODSUCKER POND	2.60	2.13
040991	MAPLE LAKE	116.50	77.05
040992	NORTH BRANCH LAKE	34.10	24.79
040994	COTTON LAKE	11.00	9.96
040995	BURP LAKE	2.40	5.10
040996	BLACK CREEK LAKE	3.60	2.85
041000	TWIN LAKES RESERVOIR	35.80	28.85
041001	MINK LAKE	11.80	8.83
041002	REEDS POND	347.80	258.74
041003	LITTLE SALMON LAKE	4.40	3.51
041007	NORTH LAKE	7.20	6.02
041008	MUD POND	12.80	10.50
041009	UNNAMED POND	149.70	135.45
041010	GOOSENECK LAKE	9.30	7.47
041011	SNYDER LAKE	30.20	27.33
041012	MONUMENT LAKE	5.40	4.24
041015	HARDSCRABBLE POND	8.30	6.12
041016	UNNAMED POND	9.10	6.96
041017	UNNAMED POND	6.80	4.92
050119	BULLHEAD POND	3.10	2.82
050126	O'KEEFE POND	40.60	139.26
050127B	PALMER LAKE	19.00	25.44
050127C	UNNAMED POND	32.00	61.43
050128	BLACK POND	4.50	6.10

050130	JENNY LAKE	2.90	3.70
050131A	MINER MILL VLY	124.00	182.16
050147	LAKE DESOLATION	2.40	3.45
050155	MUD POND	5.80	5.47
050164	CHASE LAKE	3.00	3.60
050182	BENNETT LAKE	3.80	3.59
050184	MIDDLE LAKE	1.00	1.14
050186	TENANT LAKE	5.60	7.31
050187	NEW LAKE	1.40	1.62
050188	WILCOX LAKE	0.60	0.62
050197	LIXARD POND	4.40	5.83
050205A	UNNAMED POND	33.60	45.13
050213	MURPHY LAKE	1.40	1.06
050215	WILLIS LAKE	4.60	3.71
050218	BUCK POND	8.90	4.83
050229	ROCK LAKE	5.80	5.25
050230	UNNAMED POND	26.50	30.16
050232	SPY LAKE	1.00	0.98
050241	SCOTCH LAKE	21.00	44.85
050242	DEER POND	57.80	64.52
050243	FALL LAKE	170.90	148.04
050247	FAWN LAKE	0.30	0.27
050249	SILVER POND	7.20	4.50
050256	LOWER LOOMIS POND	65.10	63.00
050257	MIDDLE LOOMIS POND	6.10	7.12
050259	JOCKEYBUSH LAKE	1.70	1.62
050260	TROUT LAKE	22.10	19.21
050266	ROSS LAKE	13.50	17.96
050268	BROWN LAKE	3.10	3.07
050276	MECO LAKE	4.70	6.00
050282	SHIRAS POND	3.80	2.13
050286	COD POND	5.60	3.39
050287	FISH POND (LOWER)	54.30	61.12
050288	UPPER FISH POND	46.50	45.97
050290A	EAGLE POND	15.80	11.98
050291	KIBBY POND	4.40	5.96
050292	SIAMESE POND (LOWER)	1.20	1.46
050294	TWIN POND (LOWER)	35.90	41.34
050296	ROUND POND	17.10	17.43
050298	SECOND POND	13.90	18.99
050299	THE VLY POND	45.90	105.91
050310	LONG POND	2.00	1.81
050315	SOUND LAKE	4.40	2.86
050320	BULLHEAD POND	6.10	5.77
050340	FOREST LAKE	0.90	1.08
050342	BURNT POND	7.00	9.81
050352	BUTTERMILK POND (ORDWAY)	5.50	4.51
050368	PALMER POND	1.20	1.25

050370	VALENTINE POND	3.20	3.23
050371	SMITH POND	1.50	1.35
050373	UNNAMED POND	0.30	1.67
050383	BIG SHERMAN POND	8.80	12.30
050385	OLIVER POND	3.10	2.46
050386	BARNES POND	6.10	7.71
050388	HEWITT POND	0.90	0.85
050398	MARION POND	0.80	1.08
050399	MARSH POND	7.90	18.71
050402	THURMAN POND	3.90	4.25
050406	BIG POND	6.90	7.45
050407	HARRISON MARSH POND	57.10	64.98
050409	SPECTACLE POND (UPPER)	5.50	6.20
050410	CRAB POND	3.60	4.33
050417	WILCOX POND	45.60	51.04
050418	GULL POND	0.40	0.46
050419	GOOSE POND	0.10	0.15
050420	ALDER POND	154.10	190.55
050421	CRANE POND	1.30	1.69
050421A	UNNAMED POND	41.30	51.10
050424	ROCK POND	0.70	0.85
050425	LITTLE ROCK (LILYPAD) PD	1.90	2.70
050426	BURGE POND	1.90	2.52
050429	GLIDDEN MARSH	26.00	34.35
050452	MUD POND	6.40	6.89
050454	BIG MARSH POND	19.60	29.29
050457	SAND POND	1.80	2.03
050458	CLEAR POND	0.60	0.71
050460A	DIX POND	247.50	419.41
050464	BASS LAKE	0.70	0.84
050465	CHALLIS POND	1.00	1.19
050465A	GERO POND	466.50	539.45
050472	HOWARD POND	2.60	2.95
050473	BROTHERS POND (LOWER)	10.30	9.34
050476	EAGLES NEST POND	1.10	1.36
050477	BLOODY POND	1.80	2.35
050478	BLACK BROOK POND (LOWER)	129.30	159.84
050479	BLACK BROOK POND (UPPER)	8.00	9.25
050480	JUG POND	10.20	7.71
050481	HOLIDAY POND	47.60	63.90
050486	MUNSON POND	1.50	1.34
050487	TRIANGLE POND	4.20	4.77
050489	ROUND POND	3.30	4.45
050495	BIRCH POND	1.20	1.41
050500	MAKOMISS POND	84.00	142.03
050505	NEWPORT POND	12.70	15.45
050506	HATCHING POND	7.80	11.11
050510	BEAR POND	5.90	7.50

050513	CHUB POND (MUD)	2.10	2.20
050515	LITTLE POND	2.30	3.60
050517	OVEN MOUNTAIN POND	4.50	5.96
050523	BIRD POND	18.00	16.23
050540	THIRTEENTH LAKE	2.30	2.91
050541	HOUR POND	19.20	22.74
050549	BULLHEAD POND	3.00	3.48
050550	HOT WATER POND	64.00	59.40
050552	FISH POND	2.10	2.20
050554	VANDERWACKER POND	3.60	4.30
050556	RANKIN POND	7.80	9.28
050556A	LITTLE RANKIN POND	306.60	37.53
050557	STONY POND	3.60	5.01
050560	CHENEY POND	20.10	3.39
050561	WOLF POND	32.50	33.20
050563	UNNAMED POND	312.20	356.38
050567	OK SLIP POND	4.20	4.32
050568	WHORTLEBERRY POND	1.40	14.07
050569	ROSS POND	3.00	3.08
050572	PINE MOUNTAIN POND	3.00	2.78
050573	BLUE LEDGE POND	5.70	10.27
050577	NATE POND	4.60	3.62
050587A	LAKE ADIRONDACK	1.90	1.31
050588A	KINGS FLOW	80.70	80.85
050589	PUFFER POND	6.10	7.14
050590	ROUND POND	3.30	3.39
050591A	LAKE SNOW	31.60	29.23
050597A	LEWEY LAKE	6.10	5.48
050598	CROTCHED POND	6.00	5.29
050601	MIDDLE DUG MOUNTAIN POND	21.20	17.32
050602	UPPER DUG MOUNTAIN POND	12.70	7.92
050607	LITTLE MOOSE POND	28.30	29.04
050608	OTTER LAKE	22.00	21.25
050610	JESSUP LAKE	14.00	17.69
050613	MASON LAKE	1.70	1.30
050623	UNNAMED POND	13.90	11.88
050625	FIRST LAKE ESSEX CHAIN	16.70	16.13
050626	SECOND LAKE	112.00	109.38
050626A	THIRD LAKE	2.40	2.23
050635	UNNAMED POND	3.80	3.95
050636	BARKER POND	5.10	2.95
050644	CASCADE POND	23.00	26.88
050649	LONG POND	6.00	6.31
050650	GRASSY POND	6.40	7.65
050655	PINE LAKE	0.50	0.48
050669	CARRY POND	2.80	2.66
050670	CEDAR LAKE	1.70	1.75
050671	BEAVER POND	9.70	10.63

050675	BATES POND	25.50	21.05
050678	MOOSE POND	1.50	1.08
050680	HARRIS LAKE	17.00	33.33
050687	ROUND POND	4.20	4.34
050690	COUNTY LINE FLOW	393.70	384.18
050690	COUNTY LINE FLOW	393.70	384.18
050691	PICKWACKET POND	3.20	2.95
050701	HYSLOP POND	57.60	61.07
050703	TROUT POND	1.70	3.45
050705	LIVINGSTON POND	4.40	3.61
050706	LAKE COLDEN	11.60	21.73
050707	AVALANCHE LAKE	5.00	9.35
060222	SHAW POND	7.10	7.91

Appendix 15. Number of Acres in the Adirondack Park Land Use and Development Land Use Classification Areas by Town and Village. These data were prepared using land classification data from June 1999, and will vary depending on changes in the map after this date from map amendments requested by towns and villages, and state purchases. State land includes the categories Canoe Area, Historic, Intensive use, Pending Classification Primitive, State Administrative, Wild Forest, and Wilderness.

	Town or Village	Hamlet	Moderate Intensity	Low Intensity	Rural	Resource	Industrial	State Land	Open Water	Total
Villages	Corinth	513.8	0	0	0	0	0	0	28.1	541.9
	Dannemora	542.2	0	0	0	0	0	226.0	1.2	769.4
	Keeseville	746.2	0	0	0	2.4	0	0	28.6	777.2
	Lake George	381.1	0	0	0	0	0	0.4	0.4	381.9
	Lake Placid	800.3	0	0	1.2	0	0	0	121.6	923.1
	Mayfield	473.8	0	0	10	0	0	0	9.1	492.9
	Northville	637.9	0	0	0	0	0	0	57.8	695.7
	Port Henry	763.9	0	0	0	0	0	1.1	163.9	928.9
	Saranac Lake	1745.4	0	0	0	10.5	0	0.5	162.9	1919.3
	Speculator	1187.1	126.2	686.1	469.1	15191.7	0	5989.4	1711.9	25361.5
	Ticonderoga	719.6	59.4	3	0	0.5	0	9.7	44	836.2
	Tupper Lake	1142.1	0.3	0	0	0	0	0	1.4	1143.8
	Westport	670.6	0	0	0	0	0	2.5	0	673.1
Towns outside of villages	Altamont	424.4	3864.3	4536.9	3781.3	53872.9	50.2	6597.7	7810.6	80938.3
	Ausable	228.2	1307.4	8016.8	4439.8	10561.9	0	7.6	3031.2	27592.9
	Broadalbin	0	1525.4	3374.1	3250.5	0	0	101.7	5181.2	13432.9
	Chesterfield	504.6	2033.4	3602.4	6014.9	35480.3	0	3157.3	16073.9	66866.8
	Corinth	153.1	1011.9	1961.6	12417.3	4448.8	0	4448.3	573.7	25014.7
	Dannemora	407.9	1770.3	4710.7	10490	12688.6	11.1	7441.3	4293.3	41813.2
	Harrietstown	1609.3	1560.5	3079.7	5649.1	23412.6	577.6	89886.6	10392.6	136168
	Lake George	2929.6	1945.9	514.9	9459.5	1453.7	0	2575.3	2441.5	21320.4
	Lake Pleasant	262.8	3002.4	2151.5	3798.9	10838.9	0	76313.3	4832.5	101200.3
	Mayfield	270.4	1030.9	2943.9	6482.1	9993.7	0	4228.2	3792.2	28741.4
	Moriah	1334.3	3572.3	5014.8	5874.8	21014.7	427.9	4606.1	3782.2	45627.1
	North Elba	2269.2	1089.1	3755.9	5278.6	7793.2	0	74736	2854.3	97776.3
	Northampton	806.1	1646.3	2229.5	5102.1	2456.4	0	544.4	8733.4	21518.2
	Oppenheim	0	0	1494.1	3192.5	1106.1	0	349.9	58.1	6200.7
	Saranac	520.5	985.6	10118.9	35184.7	21861.8	46.6	2318.4	445.3	71481.8
	St Armand	747.2	638.1	871	3082.5	1182	342.5	28782.6	733.9	36379.8
	Ticonderoga	336.2	2040.6	2252.3	18796	11521.5	1048.4	15606	4136.3	55737.3
	Westport	88.5	0	2888.1	13412.5	17379.1	0	2869.7	5605	42242.9

	Town or Village	Hamlet	Moderate Intensity	Low Intensity	Rural	Resource	Industrial	State Land	Open Water	Total
Towns without villages	Altona	0	0	0	756.4	13351.5	0	3471.5	56	17635.4
	Arietta	0	1239.7	4526.9	1303.8	5776.9	0	190077.2	7822.3	210746.8
	Bellmont	341.9	952.2	930.3	47770.8	39112.3	0	6344.3	2091.8	97543.6
	Benson	0	79.5	661.5	2457.8	1963.4	0	47645.2	394.5	53201.9
	Black Brook	840.9	1630.4	6660.8	35640.7	15871.1	0	22390.9	2844.8	85879.6
	Bleecker	0	393.1	1391.3	8774.6	7413.3	0	18585.1	1442.9	38000.3
	Bolton	531.3	935.4	7574.6	10536.6	10360	0	10513.4	14400.8	54852.1
	Brighton	255.1	1518.7	1819.9	1603.5	20361.6	0	24196.2	3216.2	52971.2
	Caroga	1370.1	393.3	2858.6	4649.7	2048.3	0	20988.1	2281.4	34589.5
	Chester	1459.5	7767.5	6163.3	30970.2	5116.4	117.3	2166	1947.5	55707.7
	Clare	0	0	0	6729.7	52572.8	0	1380.6	986.2	61669.3
	Clifton	878.2	618	302.8	2569	49677.9	3168.2	29097.8	9995.1	96307
	Colton	0	410.9	148	23223.3	75500.7	758.4	31352.6	7149.7	138543.6
	Croghan	0	93.3	0	1640.9	16197.3	0	0	621	18552.5
	Crown Point	410	0	5536.1	18969.2	18380	0	3578.7	3344.2	50218.2
	Day	0	2531	2034.7	12800.8	14825.1	0	6757.5	3419.3	42368.4
	Diana	0	0	1421.5	3664.1	11284.3	0	459.4	356.8	17186.1
	Dresden	0	581.8	0	21958.4	1290.7	0	11310.7	1223.5	36365.1
	Duane	0	27.4	1180.4	13397.9	5851.9	0	27478.5	2027.5	49963.6
	Edinburg	0	2245.4	2767.5	25260.5	6011.4	0	1237.5	4485.1	42007.4
	Elizabethtown	470.5	1159.2	1857.1	12335	16242.2	0	19597	875.8	52536.8
	Ellenburg	94.9	789.8	777.2	25272.7	13610.5	0	8793.2	399.7	49738
	Ephratah	85.5	0	110.5	1832.6	2316.7	0	1166.7	21.7	5533.7
	Essex	255	222.1	1892.1	8728.5	8195.5	0	617	3856	23766.2
	Fine	554.7	473.2	899.7	16513.8	32912.2	0	54764.3	2108.9	108226.8
	Forestport	238.8	1295.2	0	7248.8	470.1	0	6339.3	717.6	16309.8
	Fort Ann	0	4158.8	1187.3	14143	12188.1	0	10409.4	790.5	42877.1
	Franklin	604.2	0	7519.7	40077.3	19398.9	0	40918.7	3529.2	112048
	Greenfield	0	0	0	0	737.3	0	254	3.8	995.1
	Greig	0	653.9	3444.8	8806.9	2249.1	0	26785.6	996.4	42936.7
	Hadley	582.6	461.2	2597.6	17418.6	2249.1	0	1634.2	910.6	25853.9
	Hague	215.9	1358.6	2043.9	8239	5157.9	0	24147.2	9982.8	51145.3
	Hope	0	111.6	1431.3	9221.2	524.7	0	14702.3	635.1	26626.2
	Hopkinton	525.8	172.1	0	24820.5	67469.4	0	7623.1	1740.9	102351.8
	Horicon	590.5	1972	3520.3	18032.1	6600.9	0	11120	3841.9	45677.7
	Indian Lake	1080.7	3250.8	6110.7	10257	39006.9	139.7	101364.5	9063.5	170273.8
	Inlet	365.3	649.9	1133.8	1795.5	15.2	0	35708.3	2777.1	42445.1
	Jay	1642.7	375.2	9806.3	9002.6	14693.5	114	7822	323.5	43779.8
	Johnsburg	1900	643.7	8657.9	36164	5685.2	950.5	76473.3	1719.1	132193.7
	Johnstown	0	574.2	793.4	1760.4	1381	0	0	442.1	4951.1
	Keene	777.6	257.7	1388.7	9008.3	17363.7	0	73528.3	497.4	102821.7
	Lake Luzerne	515.5	4499.9	3280.8	11786.6	1469	0	2748.6	708	25008.4
	Lawrence	68.8	0	0	1026.3	0.5	0	0	36.5	1132.1
	Lewis	104.3	1752.9	9982.3	18825.8	13781.9	703.6	9199.9	192.1	54542.8
	Long Lake	1335.2	2789.3	2606.7	2443.2	141190.5	0	109719.2	27583.9	287668
	Lyonsdale	0	0	5477.6	13359.4	9560.5	0	1021.2	494.9	29913.6
	Minerva	582.8	457.2	9668.9	7666.9	16502.8	0	64291.9	2364.1	101534.6
	Morehouse	0	0	5820.8	6205.1	14786.3	0	94972.3	2759.9	124544.4
	Newcomb	1463.3	747.9	3076.1	18785.3	51070.4	3437.6	60973.9	4338.4	143892.9
	North Hudson	340.3	374.8	2777.1	2664.3	38115.1	0	75954.6	1888.1	122114.3
	Ohio	25.6	34.5	10880.1	26291	38334.2	0	117204.3	4715.7	197485.4
	Parishville	0	27	0	8504.7	15078.9	0	8655.4	1992.8	34258.8

Town or Village	Hamlet	Moderate Intensity	Low Intensity	Rural	Resource	Industrial	State Land	Open Water	Total
Peru	0	730.1	1019.8	13686.7	501.6	0	7021.5	8353	31312.7
Piercefield	153.6	745	1048	7323.4	38059.8	0	19466.2	4308.7	71104.7
Pitcairn	0	74.3	0	6920.5	0.9	0	2326.8	154.7	9477.2
Plattsburgh	0	0	0	0	0	0	161.5	0	161.5
Providence	0	92.2	935.2	5734.5	4578.4	0	116	570.6	12026.9
Putnam	0	231.9	6832.8	6061.4	8021	0	243.9	1317.7	22708.7
Queensbury	336.1	1728.5	1559	8745.9	798.5	0	1452.6	2234.9	16855.5
Remsen	0	0	51.1	0	0	0	139.8	0	190.9
Russia	111.8	186	7058.3	4863	0	0	1922.1	1788.2	15929.4
Salisbury	38.2	0	660.7	7904.5	46.8	0	27505.5	469.5	36625.2
Santa Clara	153.6	989.2	2615.8	2171.1	69896.9	0	36003	10860	122689.6
Schroon	1812.5	1648.5	5585.9	13616.2	4627.9	0	59046.6	5185.8	91523.4
Stony Creek	167.6	616	1656.2	8282.2	14598.6	0	29679.5	695.6	55695.7
Stratford	81.2	0	3247.7	12795.2	2856.1	0	29010.3	1098.9	49089.4
Thurman	0	3392.7	1559	11237.7	13087.7	0	29071.4	1009	59357.5
Warrensburg	1560.5	685.9	2082.3	17705.7	12842.9	0	5587.7	951.9	41416.9
Watson	0	974.4	1274.6	13299.8	12127.6	0	26488.6	2110.3	56275.3
Waverly	379.4	476	0	19375.6	57679.3	0	1731.2	1223.1	80864.6
Webb	1402	4657.6	3725.6	10816.3	70627.3	0	196208.3	21372.9	308810
Wells	657.9	1114	2914	4932.1	12928.6	0	90343.9	1217	114107.5
Willsboro	1264.1	2176.3	3598.8	6227.7	13114.1	396	42.6	19921.7	46741.3
Wilmington	571.7	1686	4093.9	6593.4	2537.4	0	26415	186	42083.4
Total	52414	102095.2	270445.8	1017395	1582528	12289.6	2448325	334546.2	5820038

Appendix 16. Number of Parcels Present in Different APA Land Use Categories Organized by Town or Village. The number of parcels does not include vacant (300 class parcels), and forest lands (900 class parcels). Parcels were assigned to land class groups by overlaying the parcel centroid map on the Adirondack Park Land Use and Development Map. Res = residential, non = nonresidential.

	Town or Village	Hamlet		Moderate		Low		Rural		Resource		State		Water	
		Res	Non	Res	Non	Res	Non	Res	Non	Res	Non	Res	Non	Res	Non
Villages	Corinth	671	118	0	0	0	0	0	0	0	0	0	0	0	1
	Dannemora	372	58	0	0	0	0	0	0	0	0	0	0	0	0
	Keeseville	571	122	0	0	0	0	0	0	1	0	0	0	0	1
	Lake George	285	190	0	0	0	0	0	0	0	0	0	0	0	0
	Lake Placid	964	270	0	0	0	0	0	0	0	0	0	0	5	1
	Mayfield	264	50	0	0	0	0	0	0	0	0	0	0	0	0
	Northville	434	83	0	0	0	0	0	0	0	0	0	0	2	0
	Port Henry	431	105	0	0	0	0	0	0	0	0	0	0	0	0
	Saranac Lake	1323	398	0	0	0	0	0	0	0	2	0	0	6	1
	Speculator	282	73	25	1	30	1	9	0	2	2	4	1	1	1
	Ticonderoga	796	160	46	6	3	0	0	0	0	0	1	5	1	4
	Tupper Lake	1276	219	0	0	0	0	0	0	0	0	0	0	0	1
	Westport	258	57	0	0	0	0	0	0	0	0	0	0	0	0
Towns outside of villages	Ausable	93	9	169	23	254	27	77	4	80	6	0	0	22	1
	Broadalbin	0	0	536	25	282	14	139	5	0	0	0	0	3	0
	Chesterfield	154	24	220	14	108	12	124	4	165	9	0	0	2	3
	Corinth	65	6	122	13	138	5	81	21	26	3	0	0	1	2
	Dannemora	186	6	393	14	56	6	107	6	49	3	16	1	3	0
	Harrietstown	233	37	263	10	177	9	181	10	125	5	32	3	16	0
	Lake George	872	193	247	44	30	1	167	22	7	3	0	1	2	1
	Lake Pleasant	50	8	420	28	69	10	32	11	1	1	20	0	2	1
	Mayfield	75	14	427	8	355	14	270	11	81	16	0	0	8	0
	Moriah	524	45	376	32	248	21	165	18	101	9	0	1	1	2
	North Elba	667	102	249	31	130	16	194	22	88	10	28	18	8	1
	Northampton	244	13	357	14	223	11	214	27	41	8	20	8	4	2
	Oppenheim	0	0	0	0	13	2	16	4	6	1	1	0	0	0
	Saranac	154	27	94	15	430	12	544	20	64	3	1	0	5	1
	St Armand	256	37	42	6	33	3	70	5	7	4	11	0	5	0
	Ticonderoga	86	19	336	40	170	21	316	29	170	33	1	0	7	1
	Westport	22	10	0	0	76	13	233	32	113	27	0	1	2	0

Towns without villages

Town or Village	Hamlet		Moderate		Low		Rural		Resource		State		Water	
	Res	Non	Res	Non	Res	Non	Res	Non	Res	Non	Res	Non	Res	Non
Altamont	296	27	391	30	182	11	34	0	32	5	3	4	10	3
Altona	0	0	0	0	0	0	11	0	66	0	6	0	0	0
Arietta	0	0	282	15	129	8	8	2	2	0	20	1	3	0
Bellmont	69	13	320	7	73	2	427	19	59	3	1	0	9	2
Benson	0	0	9	0	13	1	103	7	14	0	5	0	1	0
Black Brook	193	37	149	8	85	10	293	7	20	1	5	0	35	0
Bleecker	0	0	78	1	76	8	175	8	74	11	5	0	20	0
Bolton	348	62	324	24	676	41	329	34	82	7	32	4	49	7
Brighton	78	0	136	21	108	0	27	3	103	9	11	3	8	2
Caroga	745	33	9	5	674	24	113	4	49	7	28	1	17	4
Chester	268	79	734	32	149	9	499	27	49	2	7	0	5	2
Clare	0	0	0	0	0	0	36	4	26	4	1	1	1	0
Clifton	271	36	256	4	10	2	64	5	78	14	8	0	5	1
Colton	0	0	9	2	3	0	79	3	22	1	4	1	1	0
Croghan	0	0	21	2	0	0	3	1	9	0	20	0	2	0
Crown Point	99	41	0	0	313	23	215	7	172	15	0	1	1	0
Day	0	0	626	22	295	6	299	4	22	0	0	0	2	1
Diana	0	0	0	0	7	1	21	0	18	0	0	0	1	0
Dresden	0	0	249	25	0	0	203	24	15	2	0	0	3	0
Duane	0	0	12	0	23	0	105	4	8	0	7	0	3	0
Edinburg	0	0	1009	75	235	23	240	11	5	2	0	1	5	1
Elizabethtown	173	94	162	9	56	5	139	22	72	6	9	2	1	0
Ellenburg	42	9	168	7	22	1	226	5	41	1	1	1	4	0
Ephratah	30	5	0	0	12	1	18	0	23	2	0	0	0	0
Essex	102	36	47	2	26	3	93	4	112	20	0	0	12	4
Fine	276	39	155	13	84	9	151	23	352	29	3	1	6	3
Forestport	191	11	432	11	0	0	78	6	17	1	20	0	9	0
Fort Ann	0	0	607	24	201	3	200	13	77	6	2	0	4	1
Franklin	139	7	0	0	276	10	270	9	109	1	8	0	53	0
Greenfield	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Greig	0	0	364	7	150	8	79	0	11	0	5	0	9	0
Hadley	373	55	91	6	122	12	219	9	13	3	0	0	1	2
Hague	108	28	460	31	115	4	212	23	24	2	5	1	6	1
Hope	0	0	47	4	53	8	165	11	31	1	5	0	2	0
Hopkinton	54	13	90	1	0	0	141	6	54	7	0	2	0	0
Horicon	130	38	411	12	229	7	534	4	85	1	1	0	12	4
Indian Lake	252	83	498	46	299	23	290	32	33	6	19	3	16	13
Inlet	136	66	292	49	53	11	240	16	1	0	12	1	10	4
Jay	412	76	43	1	437	12	200	6	119	3	1	0	4	6
Johnsburg	387	117	51	8	289	30	764	29	14	1	0	0	8	2
Johnstown	0	0	42	5	107	2	16	1	35	6	0	0	1	1
Keene	213	49	35	5	105	5	240	18	217	44	3	0	0	0
Lake Luzerne	398	47	732	80	148	9	91	20	24	1	0	0	9	4
Lawrence	19	10	0	0	0	0	31	6	0	0	0	0	0	0

Town or Village	Hamlet		Moderate		Low		Rural		Resource		State		Water	
	Res	Non	Res	Non	Res	Non	Res	Non	Res	Non	Res	Non	Res	Non
Lewis	50	10	74	11	192	9	137	11	29	10	1	0	1	0
Long Lake	417	69	409	18	184	5	63	0	65	6	48	4	20	5
Lyonsdale	0	0	0	0	90	2	56	0	44	1	0	0	2	1
Minerva	137	19	34	4	222	15	67	4	38	1	5	22	2	2
Morehouse	0	0	0	0	189	13	14	0	9	0	10	1	3	0
Newcomb	259	31	175	0	41	1	45	2	32	7	0	0	3	0
North Hudson	24	20	23	5	65	4	36	12	76	19	10	4	2	1
Ohio	10	3	9	0	304	5	435	20	24	1	51	0	2	0
Parishville	0	0	35	1	0	0	76	3	138	6	6	0	9	0
Peru	0	0	77	32	24	0	121	7	3	0	6	2	1	1
Piercefield	85	7	87	9	26	1	121	3	39	9	4	1	0	0
Pitcairn	0	0	3	0	0	0	24	1	0	0	0	0	1	0
Providence	0	0	39	0	82	2	88	7	1	20	0	0	0	2
Putnam	0	0	123	6	201	11	78	3	143	10	0	0	1	0
Queensbury	57	2	640	29	141	10	247	16	40	3	9	0	3	2
Russia	28	4	30	1	259	6	110	3	0	0	10	1	8	0
Salisbury	9	2	0	0	21	0	37	3	1	0	3	1	0	1
Santa Clara	23	5	227	8	202	8	3	1	23	1	22	2	6	0
Schroon	634	188	284	67	436	52	244	14	28	10	7	1	5	3
Stony Creek	44	13	24	7	46	2	133	10	129	8	4	2	1	0
Stratford	26	6	0	0	87	3	310	12	76	2	3	1	2	1
Thurman	0	0	141	9	57	6	182	15	102	6	1	0	3	1
Warrensburg	873	138	65	1	118	15	205	21	107	16	2	1	6	1
Watson	0	0	248	5	36	1	121	12	9	9	11	1	3	3
Waverly	212	31	9	0	0	0	259	11	29	0	5	0	1	0
Webb	849	199	1294	50	376	14	201	15	134	10	100	2	67	8
Wells	187	49	219	10	100	5	102	8	32	1	11	2	6	0
Willsboro	322	70	513	9	227	7	79	5	74	9	0	0	16	0
Wilmington	147	49	150	17	143	9	81	17	15	4	7	6	2	0
Total	21803	4479	18595	1217	12529	736	14295	924	4957	538	728	121	630	125

Appendix 17. Average Parcel Size for Parcels in Hamlet Areas by Town or Village, and the Percent of the Area in Land Use Classes Already Occupied by Development as of 1998. Some saturation calculations resulted in a number larger than 100 percent (italics in the table). These occurred where the area available in that land class was small (see Appendix 15), and may contain parcel centroids for parcels that crossed land classification boundaries. Saturation values that were greater than 60 percent are shown in bold.

		Hamlet density			Saturation			
	Town or Village	Hamlet Area	Parcels	Acres / Parcel	Moderate Intensity	Low Intensity	Rural Use	Resource
Village	Corinth	513.8	790	0.65				
	Dannemora	542.2	430	1.26				
	Keeseville	746.2	694	1.08				
	Lake George	381.1	475	0.80				
	Lake Placid	800.3	1240	0.65				
	Mayfield	473.8	314	1.51				
	Northville	637.9	519	1.23				
	Port Henry	763.9	536	1.43				
	Saranac Lake	1745.4	1728	1.01				*813.33*
	Speculator	1187.1	362	3.28	26.78	14.46	16.31	1.12
	Ticonderoga	719.6	967	0.74	*113.80*	*320.00*		
	Tupper Lake	1142.1	1496	0.76				
	Westport	670.6	315	2.13				
Towns Outside of Villages	Altamont	424.4	343	1.24	14.16	13.61	7.64	2.93
	Ausable	228.2	125	1.83	19.09	11.22	15.51	34.77
	Broadalbin	0.0	3	0.00	47.81	28.07	37.66	
	Chesterfield	504.6	183	2.76	14.96	10.66	18.09	20.94
	Corinth	153.1	74	2.07	17.34	23.33	6.98	27.83
	Dannemora	407.9	212	1.92	29.89	4.21	9.16	17.50
	Harrietstown	1609.3	321	5.01	22.74	19.33	28.74	23.71
	Lake George	2929.6	1069	2.74	19.44	19.27	16.98	29.37
	Lake Pleasant	262.8	81	3.24	19.40	11.75	9.62	0.79
	Mayfield	270.4	97	2.79	54.85	40.11	36.85	41.45
	Moriah	1334.3	573	2.33	14.85	17.17	26.48	22.35
	North Elba	2269.2	824	2.75	33.42	12.44	34.78	53.70
	Northampton	806.1	291	2.77	29.30	33.59	40.15	85.18
	Oppenheim	0.0	1	0.00		3.21	5.32	27.02
	Saranac	520.5	188	2.77	14.38	13.98	13.63	13.09
	St Armand	747.2	309	2.42	9.78	13.23	20.68	39.74
	Ticonderoga	336.2	114	2.95	23.95	27.14	15.60	75.23
	Westport	88.5	35	2.53		9.86	16.79	34.40
	Altona	0.0	6	0.00			12.36	21.11
	Arietta	0.0	24	0.00	31.14	9.68	6.52	1.48
	Bellmont	341.9	94	3.64	44.64	25.80	7.94	6.77
	Benson	0.0	6	0.00	14.72	6.77	38.04	30.45
	Black Brook	840.9	270	3.11	12.52	4.56	7.15	5.65
	Bleecker	0.0	25	0.00	26.13	19.32	17.73	48.96
	Bolton	531.3	502	1.06	48.36	30.29	29.28	36.68

Town or Village	Hamlet density			Saturation			
	Hamlet Area	Parcels	Acres / Parcel	Moderate Intensity	Low Intensity	Rural Use	Resource
Brighton	255.1	102	2.50	13.44	18.99	15.90	23.49
Caroga	1370.1	828	1.65	4.63	**78.14**	21.39	*116.74*
Chester	1459.5	361	4.04	12.82	8.20	14.44	42.56
Clare	0.0	3	0.00			5.05	2.44
Clifton	878.2	321	2.74	54.69	12.68	22.83	7.91
Colton	0.0	6	0.00	3.48	6.49	3.00	1.30
Croghan	0.0	22	0.00	32.05		2.07	2.37
Crown Point	410.0	142	2.89		19.42	9.95	43.44
Day	0.0	3	0.00	33.28	47.34	20.12	6.34
Diana	0.0	1	0.00		1.80	4.87	6.81
Dresden	0.0	3	0.00	61.22		8.79	56.24
Duane	0.0	10	0.00	56.93	6.24	6.92	5.84
Edinburg	0.0	7	0.00	**62.76**	29.83	8.45	4.97
Elizabethtown	470.5	279	1.69	19.18	10.51	11.09	20.51
Ellenburg	94.9	57	1.66	28.80	9.47	7.77	13.18
Ephratah	85.5	35	2.44		37.65	8.35	46.08
Essex	255.0	154	1.66	28.68	4.90	9.45	68.77
Fine	554.7	328	1.69	46.15	33.08	8.96	49.43
Forestport	238.8	231	1.03	44.46		9.85	*163.50*
Fort Ann	0.0	7	0.00	19.72	54.98	12.80	29.08
Franklin	604.2	207	2.92		12.17	5.92	24.21
Greenfield							5.79
Greig	0.0	14	0.00	73.76	14.68	7.62	20.88
Hadley	582.6	431	1.35	27.34	16.51	11.13	30.38
Hague	215.9	149	1.45	46.98	18.63	24.24	21.52
Hope	0.0	7	0.00	59.41	13.64	16.22	*260.42*
Hopkinton	525.8	69	7.62	**68.74**		5.03	3.86
Horicon	590.5	185	3.19	27.89	21.45	25.36	55.63
Indian Lake	1080.7	386	2.80	21.75	16.86	26.68	4.27
Inlet	365.3	229	1.60	**68.21**	18.06	*121.19*	*280.92*
Jay	1642.7	499	3.29	15.25	14.65	19.45	35.45
Johnsburg	1900.0	514	3.70	11.92	11.79	18.64	11.27
Johnstown	0.0	2	0.00	10.64	43.96	8.21	*126.77*
Keene	777.6	265	2.93	20.18	25.35	24.34	**64.18**
Lake Luzerne	515.5	458	1.13	23.46	15.31	8.00	**72.67**
Lawrence	68.8	29	2.37			30.64	
Lewis	104.3	62	1.68	6.30	6.44	6.68	12.08
Long Lake	1335.2	563	2.37	19.90	23.20	21.92	2.15
Lyonsdale	0.0	3	0.00		5.37	3.56	20.10
Minerva	582.8	187	3.12	10.80	7.84	7.87	10.09
Morehouse	0.0	14	0.00		11.11	1.92	2.60
Newcomb	1463.3	293	4.99	30.42	4.37	2.13	3.26
North Hudson	340.3	61	5.58	9.71	7.95	15.31	10.64
Ohio	25.6	66	0.39	33.91	9.09	14.71	2.78
Parishville	0.0	15	0.00	*173.33*		7.90	40.78
Peru	0.0	10	0.00	19.41	7.53	7.95	25.54
Piercefield	153.6	97	1.58	16.75	8.24	14.39	5.39

Town or Village	Hamlet density			Saturation			
	Hamlet Area	Parcels	Acres / Parcel	Moderate Intensity	Low Intensity	Rural Use	Resource
Pitcairn	0.0	1	0.00	5.25		3.07	0.00
Plattsburgh	0.0	0	0.00				
Providence	0.0	2	0.00	54.99	28.74	14.08	19.59
Putnam	0.0	1	0.00	**72.32**	9.93	11.36	**81.45**
Queensbury	336.1	73	4.60	50.32	30.99	25.56	*229.94*
Remsen							
Russia	111.8	51	2.19	21.67	12.01	19.75	
Salisbury	38.2	16	2.39		10.17	4.30	**91.24**
Santa Clara	153.6	58	2.65	30.88	25.69	1.57	1.47
Schroon	1812.5	838	2.16	27.68	27.96	16.11	35.06
Stony Creek	167.6	64	2.62	6.54	9.27	14.68	40.07
Stratford	81.2	39	2.08		8.87	21.39	*116.61*
Thurman	0.0	5	0.00	5.75	12.93	14.90	35.24
Warrensburg	1560.5	1021	1.53	12.51	20.44	10.85	40.89
Watson	0.0	18	0.00	33.75	9.29	8.50	6.34
Waverly	379.4	249	1.52	2.46		11.84	2.15
Webb	1402.0	1225	1.14	37.51	33.50	16.97	8.71
Wells	657.9	255	2.58	26.72	11.53	18.96	10.90
Willsboro	1264.1	408	3.10	31.18	20.81	11.46	27.03
Wilmington	571.7	211	2.71	12.88	11.88	12.63	31.97
Total	52414.0	27886	1.88	25.23	15.70	12.71	14.83

Appendix 18. Sensitivity Values Calculated for ALSC Sampled Lakes and Ponds in the Oswegatchie, Black, and Upper Hudson Watersheds. Pond, Pondname, Lake type, Total P1, and Trucolor were obtained from ALSC sampling records from the 1980's. Sensitivity was calculated as described in the text.

Pond	Pondname	Lake Type	Total P1	Trucolor	Sensitivity
040260	UNNAMED POND	Salt impacted	0.01	25	6.34E-05
040261	UNNAMED POND	Salt impacted	0.009	25	0.000625
040727	WINDFALL POND	Salt impacted	0.013	25	0.00066
040288A	UNNAMED POND	Thin till drainage high DOC	0.11	350	0.001141
040972	UNNAMED POND	Thin till drainage low DOC	0.007	25	0.001263
040135	THE GULF	Medium till drainage high DOC	0.023	90	0.001585
040170	UNNAMED POND	Medium till drainage high DOC	0.051	350	0.001858
040301B	BROWN'S FALLS RESERVOIR	Salt impacted	0.025	37	0.001901
040868	TWIN LAKES WEST	Thin till drainage high DOC	0.016	40	0.00194
040231	ROCK POND	Thin till drainage high DOC	0.018	160	0.001945
040348	LITTLE FIVE POND	Thin till drainage high DOC	0.024	60	0.001962
040265	FLAT ROCK RESERVOIR	Salt impacted	0.012	30	0.002004
050465A	GERO POND	Salt impacted	0.031	70	0.002048
040644	UNNAMED POND	Medium till drainage low DOC	0.012	60	0.002057
040380	PARTLOW MILLDAM	Thick till drainage low DOC	0.028	40	0.002176
040211	UNNAMED POND	Salt impacted	0.027	175	0.002192
040782	UNNAMED POND	Salt impacted	0.007	15	0.00226
040449	BEAVER LAKE	Medium till drainage low DOC	0.032	20	0.002645
050563	UNNAMED POND	Thick till drainage high DOC	0.009	40	0.002752
040301	UNNAMED(NEWTON FALLS)RES	Thick till drainage low DOC	0.007	35	0.002781
050460A	DIX POND	Thick till drainage low DOC	0.006	40	0.002917
040434	SOFT MAPLE RESERVOIR	Thin till drainage low DOC	0.007	35	0.00296
050243	FALL LAKE	Thick till drainage high DOC	0.058	140	0.002994
040542	HARRINGTON POND	Thick till drainage high DOC	0.04	300	0.003035
040547	LILYPAD POND	Thin till drainage high DOC	0.006	70	0.00308
040506	UNNAMED POND	Thin till drainage high DOC	0.011	45	0.003406
040478	MOSHIER RESERVOIR	Thin till drainage low DOC	0.01	30	0.003441
040290A	BENSON MINES POND	Salt impacted	0.022	100	0.003703
050626	SECOND LAKE	Carbonate influenced	0.008	30	0.003756
040840	UNNAMED POND	Thin till drainage high DOC	0.014	110	0.003808
040872	UNNAMED POND	Salt impacted	0.037	60	0.003873
040881	LOST POND	Medium till drainage high DOC	0.023	120	0.003979
040204	UNNAMED POND	Thin till drainage high DOC	0.019	90	0.004223
040212	UNNAMED POND	Thin till drainage high DOC	0.031	60	0.004401
041002	REEDS POND	Medium till drainage high DOC	0.027	55	0.004416
040288C	UNNAMED POND	Medium till drainage high DOC	0.061	140	0.004565
050500	MAKOMISS POND	Flagged data not rated	0.013	15	0.004619
050478	BLACK BROOK POND (LOWER)	Thick till drainage high DOC	0.06	35	0.004763
050690	COUNTY LINE FLOW	Salt impacted	0.027	150	0.004766
050690	COUNTY LINE FLOW	Salt impacted	0.027	150	0.004766
040524	MUD POND	Thin till drainage low DOC	0.017	5	0.005359
040238	ROUND POND	Thin till drainage high DOC	0.026	160	0.00552
040133	SPIDER POND	Thin till drainage high DOC	0.02	120	0.005566
050287	FISH POND (LOWER)	Thick till drainage high DOC	0.008	45	0.00565
040750	DART LAKE	Thin till drainage low DOC	0.01	15	0.005715
040713	TWIN SISTER LAKE	Thick till drainage high DOC	0.03	40	0.005733
040680	LITTLE SIMON POND	Thin till drainage	0.029	80	0.005781
040227	MUD POND	Thin till drainage high DOC	0.012	100	0.005798
040548	MUD POND	Medium till drainage	0.009	40	0.006071
040667	EAST POND	Thin till drainage high DOC	0.056	300	0.006187
050131A	MINER MILL VLY	Medium till drainage high DOC	0.063	90	0.006488
040558	FLY POND WEST	Thin till drainage low DOC	0.006	25	0.00649
040320	LITTLE FISH POND	Thin till drainage low DOC	0.01	25	0.006677

Pond	Pondname	Lake Type	Total P1	Trucolor	Sensitivity
040194	UNNAMED POND	Salt impacted	0.018	300	0.006701
040376	GAL POND	Thin till drainage low DOC	0.014	35	0.006707
050680	HARRIS LAKE	Salt impacted	0.005	40	0.006958
040971	CHUB POND	Thin till drainage	0.007	20	0.006997
050420	ALDER POND	Carbonate influenced	0.034	35	0.007002
040364	WEST POND	Thin till drainage low DOC	0.007	15	0.007098
040851	UNNAMED POND	Carbonate influenced	0.009	45	0.007158
040739	LAKE RONDAXE	Thin till drainage low DOC	0.007	15	0.007161
040841	UNNAMED (KETTLE) POND	Thin till drainage high DOC	0.006	80	0.007173
050126	O'KEEFE POND	Flow seepage high DOC	0.039	10	0.007227
041009	UNNAMED POND	Medium till drainage high DOC	0.031	70	0.007268
040705	CEDAR POND	Medium till drainage high DOC	0.02	80	0.007269
040494	SHALLOW POND	Thin till drainage low DOC	0.01	5	0.007271
040650	LITTLE INDEPENDENCE POND	Thin till drainage high DOC	0.013	160	0.007295
040683	UNNAMED POND	Flow seepage high DOC	0.025	175	0.00744
040473	SUNDAY LAKE	Thin till drainage high DOC	0.018	150	0.007483
040677	NORTH POND	Thin till drainage high DOC	0.015	110	0.007545
050625	FIRST LAKE ESSEX CHAIN	Carbonate influenced	0.009	25	0.007794
050407	HARRISON MARSH POND	Thick till drainage high DOC	0.027	40	0.007852
040240	DESERT POND	Thin till drainage high DOC	0.021	300	0.007967
040836	STINK LAKE	Medium till drainage	0.015	100	0.007982
040457	UNNAMED POND	Thin till drainage high DOC	0.014	50	0.0084
040543	SCHLEY POND	Thick till drainage high DOC	0.031	300	0.008549
050288	UPPER FISH POND	Thick till drainage high DOC	0.014	45	0.00862
040338	UNNAMED POND (MILL POND)	Carbonate influenced	0.055	50	0.00869
040886	JIMMY POND	Thin till drainage high DOC	0.014	80	0.008947
041000	TWIN LAKES RESERVOIR	Medium till drainage high DOC	0.01	80	0.009324
050299	THE VLY POND	Medium till drainage high DOC	0.022	60	0.009477
040370	UNNAMED POND	Thin till drainage high DOC	0.012	120	0.009581
040331	UNNAMED POND	Thin till drainage high DOC	0.02	160	0.009622
050505	NEWPORT POND	Salt impacted	0.029	55	0.009632
040787A	SIXTH LAKE FULTON CHAIN	Salt impacted	0.041	15	0.009806
040765	UNNAMED POND	Thin till drainage high DOC	0.028	80	0.009833
050417	WILCOX POND	Carbonate influenced	0.032	90	0.009864
050429	GLIDDEN MARSH	Carbonate influenced	0.019	35	0.009869
040132	TWIN POND WEST	Carbonate influenced	0.039	140	0.009879
040825	UNNAMED POND	Thick till drainage high DOC	0.028	175	0.009992
050127B	PALMER LAKE	Medium till drainage high DOC	0.025	80	0.010152
050523	BIRD POND	Salt impacted	0.023	100	0.010272
050591A	LAKE SNOW	Salt impacted	0.022	120	0.01031
040359	NICKS POND	Thick till drainage low DOC	0.025	50	0.010324
050568	WHORTLEBERRY POND	Thick till drainage high DOC	0.006	40	0.01033
040568	ROSE POND	Thin till drainage high DOC	0.009	80	0.010337
040636	UNNAMED POND	Thin till drainage high DOC	0.031	100	0.010505
040736	SAFFORD POND	Medium till drainage	0.013	90	0.010578
040991	MAPLE LAKE	Thick till drainage low DOC	0.013	20	0.010843
040298	HEATH POND	Salt impacted	0.004	200	0.010868
040168	MULLINS FLOW	Thin till drainage high DOC	0.025	80	0.010952
040288E	UNNAMED POND	Thin till drainage high DOC	0.032	200	0.011047
040889	CELLAR POND	Thin till drainage high DOC	0.01	60	0.011342
050481	HOLIDAY POND	Salt impacted	0.028	20	0.011487
040859	TWIN LAKE LOWER	Thin till drainage high DOC	0.024	90	0.011623
050608	OTTER LAKE	Medium till drainage high DOC	0.013	60	0.011664
050607	LITTLE MOOSE POND	Thin till drainage low DOC	0.004	30	0.011881
040313A	UNNAMED POND	Medium till drainage high DOC	0.042	120	0.012119
040846	UNNAMED POND	Thin till drainage	0.011	160	0.012158
040766	UNNAMED POND	Thin till drainage high DOC	0.018	90	0.012179
040181	GREGG LAKE	Thin till drainage high DOC	0.007	140	0.012245
040237	LONG POND	Thin till drainage high DOC	0.025	120	0.012513

Pond	Pondname	Lake Type	Total P1	Trucolor	Sensitivity
050242	DEER POND	Thin till drainage high DOC	0.006	45	0.012654
040577	LITTLE ROCK POND	Thin till drainage high DOC	0.015	70	0.012673
040737	UNNAMED POND	Thin till drainage high DOC	0.044	60	0.012753
050421A	UNNAMED POND	Thick till drainage high DOC	0.017	40	0.012773
040853	MUSKRAT POND	Thin till drainage low DOC	0.024	35	0.012826
040368	HITCHENS POND	Thin till drainage low DOC	0.02	60	0.012852
050706	LAKE COLDEN	Thin till drainage low DOC	0	10	0.012873
040232	TROUT POND	Thin till drainage high DOC	0.024	160	0.012894
050127C	UNNAMED POND	Salt impacted	0.012	25	0.012976
040871	UNNAMED POND	Thin till drainage low DOC	0.01	20	0.013004
040318	FISHPOLE POND	Medium till drainage high DOC	0.013	100	0.013286
050588A	KINGS FLOW	Carbonate influenced	0.012	40	0.013331
040345	BIG SHALLOW POND	Thick till drainage low DOC	0.014	20	0.013521
050399	MARSH POND	Flagged data not rated	0.031	90	0.013527
040857A	UNNAMED POND	Thin till drainage high DOC	0.013	100	0.013607
050260	TROUT LAKE	Salt impacted	0.027	50	0.013616
040322B	UNNAMED POND	Thin till drainage low DOC	0.01	35	0.013756
050601	MIDDLE DUG MOUNTAIN POND	Medium till drainage low DOC	0.004	20	0.013842
050256	LOWER LOOMIS POND	Thin till drainage low DOC	0.026	10	0.013961
040700	EAST PINE POND	Medium till drainage high DOC	0.038	100	0.014057
040585	OSWEGO POND	Thin till drainage	0.024	160	0.014238
040873	WOLF LAKE	Thin till drainage high DOC	0.005	35	0.014249
050342	BURNT POND	Salt impacted	0.007	35	0.014325
040576A	OUTLET POND	Carbonate influenced	0.016	70	0.014334
050701	HYSLOP POND	Thick till drainage high DOC	0.022	80	0.014611
040803	BLOODSUCKER POND	Thick till drainage high DOC	0.02	125	0.014623
040517	SALMON LAKE	Thin till drainage low DOC	0.003	10	0.014727
040676	BIG OTTER LAKE	Thin till drainage high DOC	0.019	80	0.014733
040456	UNNAMED POND	Thin till drainage low DOC	0.012	40	0.014767
040489	LOWER MOSHIER POND	Thin till drainage high DOC	0.012	45	0.01481
040213	UNNAMED POND	Thin till drainage low DOC	0.005	15	0.014817
040615	NORTH POND	Salt impacted	0.016	160	0.014823
050454	BIG MARSH POND	Carbonate influenced	0.022	25	0.014908
050550	HOT WATER POND	Carbonate influenced	0.014	70	0.014937
050644	CASCADE POND	Thick till drainage high DOC	0.015	60	0.015082
040869	TWIN LAKE WEST	Thin till drainage high DOC	0.024	40	0.015162
040357	GLASBY POND	Thin till drainage	0.011	60	0.015298
050290A	EAGLE POND	Medium till drainage high DOC	0.004	30	0.015344
040806	UNNAMED POND	Thick till drainage low DOC	0.011	35	0.015461
040949	STONE DAM LAKE	Medium till drainage high DOC	0.013	40	0.015491
040708	LITTLE PINE LAKE	Thin till drainage high DOC	0.016	45	0.015588
040319	DARNING NEEDLE POND	Thin till drainage low DOC	0.009	35	0.015862
040602	UPPER CHASE LAKE	Medium till drainage high DOC	0.015	80	0.015925
050597A	LEWEY LAKE	Salt impacted	0.012	30	0.015989
040706	GRASS POND	Medium till drainage low DOC	0.011	30	0.016038
040340	OTTER POND	Thin till drainage high DOC	0.021	110	0.016191
040180	UNNAMED POND	Thin till drainage high DOC	0.027	180	0.016259
040726	UNNAMED POND	Salt impacted	0.071	160	0.016427
040379	DEER POND	Thin till drainage low DOC	0.009	25	0.016473
040528	WITCH HOPPLE POND	Thin till drainage low DOC	0.022	20	0.016483
050241	SCOTCH LAKE	Thin till drainage low DOC	0.028	25	0.016544
040320A	UNNAMED POND	Thin till drainage low DOC	0.02	35	0.016665
040434B	SEEPAGE POND	Thick till drainage low DOC	0.005	20	0.01667
040768	LOWER SISTER LAKE	Thin till drainage low DOC	0.014	60	0.016728
040681	BLACKFOOT POND	Thin till drainage high DOC	0.023	55	0.016734
040628	TROUT POND	Thin till drainage high DOC	0.006	150	0.016775
040827	FAWN LAKE	Medium till drainage	0.023	100	0.01705
041007	NORTH LAKE	Thin till drainage low DOC	0.003	20	0.017069
040586	LITTLE BIRCHES POND	Thin till drainage low DOC	0.022	25	0.017136

Pond	Pondname	Lake Type	Total P1	Trucolor	Sensitivity
040906	UNNAMED POND	Thin till drainage high DOC	0.011	45	0.01721
040444	UNNAMED POND	Thin till drainage high DOC	0.02	120	0.017213
040777	CONSTABLE POND	Thin till drainage low DOC	0.007	15	0.017259
040887	LOST POND	Thin till drainage high DOC	0.007	70	0.01754
040769	UPPER SISTER LAKE	Thin till drainage high DOC	0.017	110	0.017592
050294	TWIN POND (LOWER)	Medium till drainage high DOC	0.019	40	0.017689
040136	DRY TIMBER LAKE	Thin till drainage high DOC	0.015	180	0.017932
040321A	UNNAMED POND	Thin till drainage low DOC	0.013	35	0.018149
040864A	UNNAMED POND	Thin till drainage	0.026	80	0.018441
050707	AVALANCHE LAKE	Thin till drainage low DOC	0	20	0.018553
040234A	UNNAMED POND	Thin till drainage high DOC	0.028	90	0.018574
040757	LITTLE CHIEF POND	Thin till drainage high DOC	0.012	60	0.018794
040631	MIKES POND	Mounded seepage high DOC	0.025	200	0.01881
050556A	LITTLE RANKIN POND	Medium till drainage high DOC	0.023	100	0.018876
050541	HOUR POND	Salt impacted	0	15	0.019027
050602	UPPER DUG MOUNTAIN POND	Medium till drainage low DOC	0.004	10	0.019274
040171	WOLF POND	Flow seepage high DOC	0.032	120	0.019289
040852	INDIAN LAKE	Thin till drainage low DOC	0.008	30	0.019374
040508	GINGER POND	Thin till drainage high DOC	0.015	80	0.019499
040442	MCCABE POND	Thin till drainage high DOC	0.06	125	0.019508
040352	WOLF POND	Thin till drainage high DOC	0.01	30	0.019595
040366	GRASSY POND	Thin till drainage low DOC	0.019	30	0.01969
040458	BEAR POND	Thin till drainage	0.007	30	0.019732
040771	UNNAMED POND	Thin till drainage high DOC	0.012	100	0.019818
040650A	DOE POND	Thin till drainage low DOC	0.019	20	0.019853
040354	RILEY POND LOWER	Thin till drainage high DOC	0.006	30	0.020013
040569	UNNAMED POND	Thin till drainage low DOC	0.008	15	0.02003
040510	UNNAMED POND	Thin till drainage high DOC	0.02	40	0.020077
040191	SAND LAKE	Thin till drainage low DOC	0.004	30	0.020219
050230	UNNAMED POND	Thin till drainage high DOC	0.023	25	0.02034
050386	BARNES POND	Medium till drainage high DOC	0.012	40	0.020518
050479	BLACK BROOK POND (UPPER)	Thick till drainage high DOC	0.024	50	0.020676
050489	ROUND POND	Carbonate influenced	0.012	35	0.020721
040970	BUCK POND	Thin till drainage	0.014	90	0.020815
040924	UNNAMED POND	Salt impacted	0.023	100	0.021035
040566	UNNAMED POND	Thin till drainage	0.015	120	0.021141
040378	LITTLE DUCK POND	Thin till drainage high DOC	0.015	80	0.02124
040951	LITTLE WOODHULL LAKE	Medium till drainage high DOC	0.026	80	0.02145
040206	UNNAMED POND	Thin till drainage high DOC	0.009	55	0.021725
050623	UNNAMED POND	Thick till drainage high DOC	0.009	45	0.021988
040131	TWIN POND EAST	Flow seepage high DOC	0.029	110	0.02215
040299	UNNAMED POND	Thin till drainage low DOC	0.015	100	0.022466
040862	CARTER MUDHOLE	Seepage	0.023	25	0.022527
040326	ASH POND	Thin till drainage high DOC	0.031	180	0.022648
040450	LITTLE BEAVER LAKE	Medium till drainage low DOC	0.012	55	0.022762
040485	DEER POND	Thin till drainage low DOC	0.004	30	0.022775
040760	OTTER POND	Medium till drainage low DOC	0.01	15	0.022866
040733	BIG DIAMOND POND	Thin till drainage low DOC	0.009	30	0.023086
050266	ROSS LAKE	Thin till drainage high DOC	0.028	60	0.023201
050610	JESSUP LAKE	Thin till drainage low DOC	0.011	20	0.023261
040540	BUCK POND	Medium till drainage high DOC	0.018	160	0.023309
040293	LITTLE RIVER FLOW	Salt impacted	0.026	100	0.023322
050298	SECOND POND	Thin till drainage low DOC	0.011	30	0.023629
040218	TWIN POND WEST	Thin till drainage high DOC	0.021	40	0.023891
050205A	UNNAMED POND	Thick till drainage high DOC	0.026	125	0.024085
040788	EAGLES NEST LAKE	Carbonate influenced	0.012	15	0.02429
041011	SNYDER LAKE	Thin till drainage low DOC	0.032	35	0.024316
040725	UNNAMED POND	Thin till drainage high DOC	0.016	110	0.024469
040476	UNNAMED POND	Thick till drainage low DOC	0.038	150	0.024714

Pond	Pondname	Lake Type	Total P1	Trucolor	Sensitivity
040417	UPPER WEST POND	Thin till drainage high DOC	0.017	70	0.024808
040512	UNNAMED POND	Thin till drainage high DOC	0.013	35	0.025117
040530	BEAVERDAM POND	Thin till drainage low DOC	0.024	30	0.025236
040645	UNNAMED POND	Thin till drainage high DOC	0.016	43	0.025249
050383	BIG SHERMAN POND	Medium till drainage low DOC	0.003	20	0.025279
040860	TWIN LAKE UPPER	Thin till drainage high DOC	0.007	100	0.025359
040697	GARRIT LAKE	Medium till drainage high DOC	0.029	200	0.025561
040365	OVEN LAKE	Thin till drainage low DOC	0.022	35	0.02606
040138	JENNY LAKE	Carbonate influenced	0.017	140	0.026215
040356	UNNAMED POND	Thin till drainage low DOC	0.014	45	0.026244
040743	WEST LAKE	Thick till drainage low DOC	0.007	10	0.026271
040480	CROPSEY POND	Thin till drainage high DOC	0.012	40	0.026515
050186	TENANT LAKE	Medium till drainage low DOC	0.009	25	0.026544
050421	CRANE POND	Carbonate influenced	0.019	10	0.02665
040870	TWIN LAKE EAST	Thin till drainage low DOC	0.021	35	0.026943
040721	OKARA LAKE WEST	Medium till drainage low DOC	0.015	30	0.026974
040746	MOSS LAKE	Medium till drainage low DOC	0.029	25	0.026988
040343	BUCK POND	Thin till drainage high DOC	0.023	140	0.027065
050296	ROUND POND	Thin till drainage high DOC	0.038	200	0.027116
050291	KIBBY POND	Medium till drainage low DOC	0.022	10	0.027168
040286	PINE POND	Thin till drainage high DOC	0.017	80	0.027321
040439	UNNAMED POND	Thin till drainage low DOC	0.007	25	0.027671
050556	RANKIN POND	Salt impacted	0.027	80	0.027797
050573	BLUE LEDGE POND	Flagged data not rated	0.028	70	0.027816
050370	VALENTINE POND	Salt impacted	0.002	20	0.027988
040922	LONG LAKE	Salt impacted	0.009	20	0.02804
040848	MITCHELL POND UPPER	Thick till drainage	0.006	25	0.028138
040327	COWHORN POND	Thin till drainage low DOC	0.008	15	0.02818
040518	CAT POND	Thin till drainage high DOC	0.008	25	0.028789
050410	CRAB POND	Carbonate influenced	0.017	15	0.028862
040632	PANTHER POND	Thin till drainage high DOC	0.016	55	0.02895
050540	THIRTEENTH LAKE	Thick till drainage low DOC	0.003	10	0.029203
040454A	BEAVER MEADOW LAKE	Thick till drainage high DOC	0.024	80	0.029223
040564	PANTHER POND	Thin till drainage high DOC	0.015	180	0.029285
040992	NORTH BRANCH LAKE	Thin till drainage high DOC	0.028	50	0.029321
050406	BIG POND	Salt impacted	0.019	70	0.02975
040314	UNNAMED POND	Thin till drainage high DOC	0.007	40	0.02978
050402	THURMAN POND	Salt impacted	0.006	15	0.029803
040330	BASSOUT POND	Thin till drainage high DOC	0.007	80	0.030062
050675	BATES POND	Flow seepage high DOC	0.039	100	0.030091
040649	LYONS MARSH	Thin till drainage high DOC	0.013	100	0.030121
040118	HILLS POND	Flow seepage high DOC	0.029	80	0.030173
040497	UNNAMED POND	Thin till drainage low DOC	0.023	30	0.030251
040792	UNNAMED POND	Thin till drainage high DOC	0.016	15	0.030338
040968	BEAR LAKE	Medium till drainage low DOC	0.006	25	0.030577
040317	LITTLE DOG POND	Thin till drainage high DOC	0.198	40	0.031107
040699	PINE LAKE	Medium till drainage high DOC	0.02	35	0.031299
040565	SHINGLE SHANTY POND	Thin till drainage low DOC	0.026	25	0.031324
050164	CHASE LAKE	Thin till drainage low DOC	0.009	25	0.031561
050598	CROTCHED POND	Thin till drainage high DOC	0.004	20	0.031597
040440	UNNAMED POND	Thin till drainage low DOC	0.011	40	0.03164
040153	LITTLE SILVER DAWN LAKE	Thin till drainage high DOC	0.039	175	0.031888
040856	UNNAMED POND	Thin till drainage high DOC	0.021	50	0.031901
040758	GULL LAKE SOUTH	Thin till drainage	0.011	5	0.032231
040362	GRASSY POND	Mounded seepage low DOC	0.027	50	0.032414
040849	BEAVER LAKE	Medium till drainage high DOC	0.013	25	0.032788
040316	DOG POND	Thin till drainage low DOC	0.004	15	0.032849
050567	OK SLIP POND	Carbonate influenced	0.022	30	0.032867
050276	MECO LAKE	Thin till drainage low DOC	0.019	10	0.03288

Pond	Pondname	Lake Type	Total P1	Trucolor	Sensitivity
040678	EAST POND	Thin till drainage	0.016	0	0.033109
050257	MIDDLE LOOMIS POND	Thin till drainage low DOC	0.019	5	0.033122
040437	UNNAMED POND	Thin till drainage high DOC	0.01	70	0.033241
050229	ROCK LAKE	Thin till drainage low DOC	0.019	10	0.033463
040783	BALD MOUNTAIN POND	Salt impacted	0.019	60	0.033507
050128	BLACK POND	Medium till drainage high DOC	0.008	25	0.033585
040324	UNNAMED POND	Thin till drainage high DOC	0.022	70	0.033936
050130	JENNY LAKE	Salt impacted	0.004	10	0.034079
040303	CHAUMONT POND	Thick till drainage low DOC	0.027	40	0.034146
050589	PUFFER POND	Thin till drainage low DOC	0.004	25	0.034147
040179	KELLY POND	Flow seepage	0.032	150	0.034538
040409	UNNAMED POND	Mounded seepage high DOC	0.032	90	0.034804
050626A	THIRD LAKE	Carbonate influenced	0.004	20	0.034824
040735	LITTLE SAFFORD LAKE	Thin till drainage high DOC	0.017	50	0.035258
040454	WOODWARDIA POND	Flow seepage high DOC	0.037	140	0.035501
050409	SPECTACLE POND (UPPER)	Carbonate influenced	0.021	60	0.035669
040620	PAYNE LAKE	Flow seepage high DOC	0.012	25	0.03568
040626	GOURD POND	Flow seepage low DOC	0.042	110	0.035818
040925	LOST POND	Medium till drainage high DOC	0.018	80	0.036145
041010	GOOSENECK LAKE	Thin till drainage high DOC	0.02	140	0.036159
040710B	UNNAMED POND	Carbonate influenced	0.029	60	0.036303
040192	SITZ POND	Thin till drainage low DOC	0.005	20	0.036348
040597	CHASE LAKE	Medium till drainage low DOC	0.012	35	0.036411
040994	COTTON LAKE	Thin till drainage low DOC	0.007	15	0.036987
040531	WILDER POND	Thin till drainage low DOC	0.013	25	0.037167
040880	BEAR POND	Thin till drainage high DOC	0.008	50	0.037405
050703	TROUT POND	Thick till drainage low DOC	0.006	15	0.037474
050649	LONG POND	Thin till drainage high DOC	0.017	120	0.037639
040750A	WINDFALL POND	Carbonate influenced	0.004	10	0.037918
050147	LAKE DESOLATION	Thick till drainage high DOC	0.005	35	0.038158
050292	SIAMESE POND (LOWER)	Medium till drainage low DOC	0	10	0.038162
040847	MITCHELL POND LOWER	Thick till drainage	0.003	15	0.038603
040522	HIGBY TWINS EAST POND	Thin till drainage low DOC	0.005	10	0.03873
050473	BROTHERS POND (LOWER)	Medium till drainage high DOC	0.031	125	0.038902
040544	RAINER POND	Medium till drainage high DOC	0.01	55	0.038949
040921	DEER POND	Salt impacted	0.008	35	0.038997
040675	WEST POND	Thin till drainage high DOC	0.028	40	0.039041
050506	HATCHING POND	Medium till drainage high DOC	0.032	90	0.039083
040198	LOWER SOUTH POND	Thin till drainage low DOC	0.009	5	0.039121
050705	LIVINGSTON POND	Medium till drainage low DOC	0	10	0.03952
040322	SCOTT POND	Thin till drainage low DOC	0.005	0	0.039713
050549	BULLHEAD POND	Salt impacted	0.022	45	0.03972
040742	FLY POND	Salt impacted	0.015	70	0.039726
050182	BENNETT LAKE	Thin till drainage low DOC	0	10	0.039784
040995	BURP LAKE	Thin till drainage low DOC	0.003	15	0.03995
040775A	PUG HOLE POND	Thin till drainage low DOC	0.026	35	0.039965
040315	DONUT POND	Thin till drainage high DOC	0.012	35	0.040007
040173	MASSAWEPIE POND	Medium till drainage	0.038	120	0.040056
040571	EAST POND	Thin till drainage	0.006	10	0.040095
050487	TRIANGLE POND	Carbonate influenced	0.014	45	0.040593
040778	CHUB LAKE	Thin till drainage low DOC	0.004	15	0.040879
040664	LITTLE OTTER LAKE	Medium till drainage high DOC	0.008	40	0.040913
040355	RILEY POND UPPER	Thin till drainage low DOC	0.005	25	0.040942
040523	HIGBY TWINS WEST POND	Thin till drainage low DOC	0.003	10	0.041092
050477	BLOODY POND	Carbonate influenced	0.003	15	0.041263
040453	MIRROR POND	Mounded seepage high DOC	0.036	140	0.041626
040552	SALMON LAKE	Thin till drainage low DOC	0.006	20	0.041794
040888	SLY POND	Thin till drainage low DOC	0.007	15	0.041926
050557	STONY POND	Thin till drainage low DOC	0.009	20	0.041974

Pond	Pondname	Lake Type	Total P1	Trucolor	Sensitivity
040625	HALFMOON LAKE	Thin till drainage low DOC	0.008	15	0.04212
040336	SIMMONS POND	Thin till drainage low DOC	0.009	25	0.042155
040526	UNNAMED POND	Thin till drainage low DOC	0.005	5	0.042414
050687	ROUND POND	Thick till drainage high DOC	0.004	60	0.042416
040694	WEST PINE POND	Thin till drainage high DOC	0.036	150	0.04259
040890	LITTLE MOOSE LAKE	Thick till drainage low DOC	0.028	15	0.04286
040491	UPPER MOSHIER POND	Thin till drainage low DOC	0.007	35	0.043411
040521	UNNAMED (ODOR POND)	Thin till drainage high DOC	0.011	70	0.043435
050320	BULLHEAD POND	Thick till drainage high DOC	0.019	60	0.043579
040513	UNNAMED POND	Thin till drainage high DOC	0.006	30	0.043816
040613	MAHAN POND	Mounded seepage high DOC	0.019	60	0.043876
040375	CRACKER POND	Thin till drainage low DOC	0.017	20	0.044329
050457	SAND POND	Salt impacted	0.004	30	0.044416
040247	HOG POND	Thin till drainage high DOC	0.081	300	0.044483
040146	SOUTH CREEK LAKE	Thick till drainage	0.016	110	0.044584
040876	ICEHOUSE POND	Flow seepage low DOC	0.02	35	0.044789
040351	MUIR POND	Thin till drainage high DOC	0.015	90	0.044927
040770	UNNAMED POND	Thin till drainage high DOC	0.011	42	0.045002
040161	ROUND LAKE	Thin till drainage low DOC	0.009	35	0.04519
040635	FIFTH CREEK POND	Thin till drainage low DOC	0.017	10	0.045218
040762	GULL LAKE NORTH	Thin till drainage	0.004	5	0.045388
040134	BEAR LAKE	Medium till drainage	0.016	80	0.046012
040496	RAVEN LAKE	Thin till drainage low DOC	0.005	10	0.046203
040201	UNNAMED POND	Thin till drainage low DOC	0.008	35	0.046301
040804	NICKS LAKE	Salt impacted	0.007	20	0.046318
040291	SUNNY POND	Flow seepage high DOC	0.021	70	0.046347
040298B	UNNAMED POND	Medium till drainage	0.012	500	0.046684
050425	LITTLE ROCK (LILYPAD) PD	Carbonate influenced	0.007	40	0.046715
041008	MUD POND	Thin till drainage high DOC	0.016	140	0.046871
040584	TWITCHELL LAKE	Thin till drainage low DOC	0.009	15	0.046949
050554	VANDERWACKER POND	Thick till drainage low DOC	0.01	25	0.047001
050249	SILVER POND	Salt impacted	0.02	60	0.047018
040875	NORTHRUP LAKE	Thin till drainage low DOC	0.012	10	0.04705
040605	HINCHINGS POND	Flow seepage	0.004	0	0.047196
040646	UNNAMED POND	Thin till drainage low DOC	0.013	25	0.047301
040495	UNNAMED POND	Thin till drainage high DOC	0.016	40	0.047931
040642	GRASS POND	Thin till drainage high DOC	0.014	55	0.047958
040774	RUSSIAN LAKE	Thin till drainage low DOC	0.003	10	0.048167
040722	ROCK POND	Medium till drainage high DOC	0.04	100	0.04825
050510	BEAR POND	Carbonate influenced	0.004	15	0.04849
040560	EAST POND	Thin till drainage low DOC	0.003	15	0.04879
040775	MAYS POND	Thin till drainage low DOC	0.004	0	0.048948
040747	CASCADE LAKE	Medium till drainage	0.009	10	0.049292
040619	CLEVELAND LAKE	Flow seepage low DOC	0.02	15	0.049406
040536	UNNAMED POND	Thin till drainage high DOC	0.038	120	0.049481
040639	HITCHCOCK LAKE	Thin till drainage low DOC	0.004	25	0.049483
040304	LOST POND	Thin till drainage high DOC	0.017	220	0.049629
040718	NELSON LAKE	Medium till drainage low DOC	0.014	30	0.049675
040488	UNNAMED POND	Thin till drainage high DOC	0.008	35	0.049678
040501	UNNAMED POND	Thin till drainage high DOC	0.019	100	0.049837
041015	HARDSCRABBLE POND	Thin till drainage low DOC	0.014	20	0.050015
040515	DISMAL POND	Mounded seepage low DOC	0.007	10	0.050272
040773	UNNAMED POND	Thin till drainage	0.01	25	0.050315
040740	GOOSE POND	Thin till drainage low DOC	0.007	15	0.050466
041003	LITTLE SALMON LAKE	Thin till drainage low DOC	0.003	10	0.050703
040587	LILYPAD POND LOWER	Mounded seepage low DOC	0.006	5	0.050927
040952	LILY LAKE	Thin till drainage low DOC	0.025	30	0.051061
040208	UNNAMED POND	Thin till drainage high DOC	0.011	60	0.051098
050671	BEAVER POND	Thin till drainage low DOC	0.008	35	0.051208

Pond	Pondname	Lake Type	Total P1	Trucolor	Sensitivity
040545	SNELL POND	Thin till drainage high DOC	0.042	70	0.051244
050577	NATE POND	Medium till drainage high DOC	0.019	30	0.051327
040285	STREETER LAKE	Medium till drainage high DOC	0.01	90	0.051362
040651	LITTLE DIAMOND POND	Thin till drainage low DOC	0.008	20	0.051493
040837	BALSAM LAKE	Thin till drainage	0.029	45	0.051589
040344	CAGE LAKE	Thin till drainage low DOC	0.005	35	0.051927
050352	BUTTERMILK POND (ORDWAY)	Carbonate influenced	0.006	20	0.051941
050465	CHALLIS POND	Carbonate influenced	0.02	10	0.052058
050310	LONG POND	Thin till drainage low DOC	0.003	10	0.052447
040824	BEAVERDAM POND	Thin till drainage high DOC	0.014	100	0.052716
040600	PARSONS POND	Mounded seepage high DOC	0.065	110	0.052905
040516	UNNAMED POND	Thin till drainage high DOC	0.011	90	0.052914
040582	SOUTH POND	Thin till drainage low DOC	0.007	10	0.053074
040630	BILLS POND	Thin till drainage high DOC	0.032	150	0.053142
050560	CHENEY POND	Salt impacted	0.004	40	0.053156
040367	HYDE POND	Thin till drainage low DOC	0.015	55	0.053356
040755	SILVER DOLLAR POND	Thin till drainage high DOC	0.006	40	0.053442
040268	TWIN LAKE SOUTH	Salt impacted	0.024	5	0.053691
040329	CAT MOUNTAIN POND	Thin till drainage low DOC	0.002	0	0.053829
040863	UNNAMED POND	Thin till drainage low DOC	0.009	10	0.053881
040927	MUDHOLE POND	Flow seepage low DOC	0.012	15	0.054238
050476	EAGLES NEST POND	Carbonate influenced	0	25	0.054366
050197	LIXARD POND	Carbonate influenced	0.005	15	0.054428
050472	HOWARD POND	Medium till drainage low DOC	0.023	15	0.054774
040861	LITTLE DEER LAKE	Thin till drainage low DOC	0.009	30	0.054852
040562	WEST POND	Thin till drainage high DOC	0.012	70	0.054863
040202	UNNAMED POND	Thin till drainage low DOC	0.008	35	0.054917
040878	LOST POND WEST	Carbonate influenced	0.012	25	0.055029
040137	ROCK LAKE	Thin till drainage low DOC	0.011	35	0.055034
040279	READWAY POND	Salt impacted	0.027	40	0.055084
040756	MERRIAM LAKE	Thin till drainage	0.01	25	0.055113
050569	ROSS POND	Thin till drainage high DOC	0.004	25	0.055125
040484A	UNNAMED POND	Thin till drainage low DOC	0.009	15	0.055284
050187	NEW LAKE	Medium till drainage low DOC	0.002	10	0.055434
050268	BROWN LAKE	Thin till drainage low DOC	0	0	0.055554
060222	SHAW POND	Carbonate influenced	0.018	55	0.055632
050259	JOCKEYBUSH LAKE	Thin till drainage low DOC	0.021	0	0.05568
040431	SOFT MAPLE DAM POND	Thin till drainage low DOC	0.007	30	0.055702
040866	DEEP LAKE	Thin till drainage low DOC	0.003	5	0.055809
050590	ROUND POND	Thin till drainage low DOC	0.01	15	0.056498
040583	JOCK POND	Thin till drainage	0.009	10	0.056535
040753	WEST POND	Thin till drainage low DOC	0.02	40	0.056705
040487	SUNSHINE POND	Thin till drainage low DOC	0.006	20	0.056743
040186	LOON HOLLOW POND	Thin till drainage low DOC	0.004	10	0.056833
040693	DYER POND	Mounded seepage low DOC	0.024	15	0.056887
050426	BURGE POND	Medium till drainage high DOC	0.016	45	0.057024
040451	FRANCIS LAKE	Thin till drainage low DOC	0.014	30	0.057663
040570	TERROR LAKE	Thin till drainage low DOC	0.005	10	0.057816
040187	BRINDLE POND	Medium till drainage high DOC	0.019	110	0.057822
040578	BUCK POND	Medium till drainage low DOC	0.003	5	0.057944
050452	MUD POND	Flagged data not rated	0.011	30	0.05817
040323	COLVIN POND	Thin till drainage low DOC	0.003	5	0.058291
040333	TOAD POND	Thin till drainage low DOC	0.007	20	0.058322
040581	POCKET PONDS	Thin till drainage	0.006	30	0.058557
050552	FISH POND	Medium till drainage low DOC	0.02	20	0.058714
040195	MUSKRAT POND	Thin till drainage low DOC	0.008	20	0.058804
040858	UNNAMED POND	Mounded seepage high DOC	0.019	80	0.058826
040720	OKARA LAKE EAST	Salt impacted	0.019	15	0.058976
050458	CLEAR POND	Thick till drainage low DOC	0.019	10	0.05936

Pond	Pondname	Lake Type	Total P1	Trucolor	Sensitivity
040731	WHEELER POND	Medium till drainage high DOC	0.01	40	0.059531
040963	GRANNY MARSH POND	Thin till drainage high DOC	0.011	110	0.059604
050388	HEWITT POND	Medium till drainage low DOC	0.011	15	0.05965
040877	HELLDIVER POND	Medium till drainage high DOC	0.233	120	0.059659
040382	PARTLOW LAKE	Medium till drainage low DOC	0.005	30	0.059891
040734	CLEAR POND	Medium till drainage low DOC	0.005	10	0.060044
040184	GREEN POND	Thin till drainage low DOC	0.028	25	0.060059
040794	LAKE KATHRYN	Thin till drainage high DOC	0.036	70	0.060132
040663	SAND POND	Flow seepage	0.007	5	0.060447
050572	PINE MOUNTAIN POND	Thick till drainage high DOC	0.012	30	0.060463
050635	UNNAMED POND	Flow seepage high DOC	0.012	50	0.06052
050218	BUCK POND	Thin till drainage low DOC	0.022	10	0.060535
040189	ROCK LAKE	Thin till drainage low DOC	0.013	25	0.060649
040738	THIRSTY POND	Thin till drainage low DOC	0.017	10	0.060861
040850	SQUAW LAKE	Thin till drainage	0.004	5	0.061037
040438	IKE'S POND	Thin till drainage low DOC	0.009	10	0.061108
040759	UNNAMED POND	Thin till drainage low DOC	0.003	5	0.061212
040372	LITTLE CROOKED LAKE	Thin till drainage low DOC	0.003	15	0.061261
040948	DEAD LAKE	Thin till drainage low DOC	0.027	45	0.061307
040287	MUD POND	Thin till drainage high DOC	0.024	150	0.061583
040307	LOST POND	Thin till drainage high DOC	0.2	240	0.061722
040374	COVEY POND	Thin till drainage high DOC	0.013	55	0.06174
050495	BIRCH POND	Carbonate influenced	0.003	15	0.06178
040267	TWIN LAKE NORTH	Salt impacted	0.02	10	0.061784
040784	SURPRISE POND	Salt impacted	0.04	25	0.061993
040627	STEWART POND	Thin till drainage high DOC	0.017	25	0.062013
050155	MUD POND	Thin till drainage high DOC	0.025	40	0.06204
050373	UNNAMED POND	Mounded seepage low DOC	0.025	15	0.062073
050215	WILLIS LAKE	Medium till drainage low DOC	0.007	20	0.06214
050480	JUG POND	Salt impacted	0.018	20	0.062427
050650	GRASSY POND	Flow seepage high DOC	0.021	35	0.0626
040313	CURTIS POND	Thin till drainage low DOC	0.005	5	0.062789
040702	LOST LAKE	Thin till drainage high DOC	0.025	125	0.062817
040306	TOOLEY POND	Medium till drainage high DOC	0.014	80	0.062873
040662A	PITCHER POND	Thin till drainage high DOC	0.015	30	0.06291
040561	DEER POND	Thin till drainage low DOC	0.003	15	0.063
050670	CEDAR LAKE	Thin till drainage low DOC	0.005	10	0.06306
050669	CARRY POND	Mounded seepage low DOC	0.008	5	0.063175
040303B	BEAVER POND	Carbonate influenced	0.01	35	0.063431
050213	MURPHY LAKE	Thin till drainage low DOC	0	15	0.063498
050119	BULLHEAD POND	Mounded seepage high DOC	0.013	20	0.063722
040885	FALLS POND	Thin till drainage low DOC	0.007	25	0.063888
040436	SAND POND	Thin till drainage low DOC	0.013	50	0.063956
040209	UNNAMED POND	Thin till drainage low DOC	0.024	35	0.063985
050515	LITTLE POND	Carbonate influenced	0.017	15	0.064007
040926	OTTER LAKE	Salt impacted	0.018	40	0.064323
040826	LIMEKILN LAKE	Medium till drainage low DOC	0.001	5	0.064325
040638	UNNAMED (LENNON) POND	Thin till drainage high DOC	0.013	55	0.064375
040188	GRASS POND	Flow seepage high DOC	0.031	70	0.064509
041001	MINK LAKE	Thin till drainage low DOC	0.02	40	0.064642
040684	GIBBS LAKE	Medium till drainage high DOC	0.017	35	0.064797
040504	HAWK POND	Thin till drainage low DOC	0.004	10	0.064868
040647	INDEPENDENCE LAKE	Medium till drainage low DOC	0.006	15	0.064916
040443	PEPPERBOX POND	Thin till drainage high DOC	0.015	20	0.065045
040996	BLACK CREEK LAKE	Thin till drainage low DOC	0.011	10	0.065088
040200	UPPER SOUTH POND	Thin till drainage low DOC	0.005	20	0.065431
040246	BUCK POND	Flow seepage high DOC	0.011	100	0.065541
040527	SUMMIT POND	Thin till drainage low DOC	0.004	5	0.065733
050371	SMITH POND	Salt impacted	0.021	15	0.065809

Pond	Pondname	Lake Type	Total P1	Trucolor	Sensitivity
040369	TOAD POND	Thin till drainage low DOC	0.02	15	0.06582
050691	PICKWACKET POND	Thick till drainage low DOC	0.007	15	0.065905
050636	BARKER POND	Flow seepage low DOC	0.008	40	0.065916
041016	UNNAMED POND	Thin till drainage high DOC	0.009	45	0.066221
040196	BEAR POND	Thin till drainage low DOC	0.001	10	0.066327
040233	LITTLE DEER POND	Thin till drainage high DOC	0.017	70	0.066346
040346	WASHBOWL POND	Thin till drainage high DOC	0.013	100	0.066489
040744	KANACTO LAKE	Mounded seepage low DOC	0.016	10	0.067255
040162	LONG LAKE	Thin till drainage low DOC	0.004	15	0.067498
040492	DUCK POND	Thin till drainage low DOC	0.008	15	0.067535
040689	BRANTINGHAM LAKE	Thick till drainage low DOC	0.012	30	0.067599
040874		Thin till drainage low DOC	0.002	5	0.067657
050424	ROCK POND	Carbonate influenced	0.004	5	0.067698
040525	CLEAR LAKE	Thin till drainage low DOC	0.015	5	0.067762
040679	UNNAMED POND	Thin till drainage low DOC	0.011	20	0.068044
040580	SILVER LAKE	Thin till drainage low DOC	0.041	0	0.068283
040579	SNAKE POND	Thin till drainage	0.005	15	0.068341
040334	SPECTACLE POND NORTH	Thin till drainage low DOC	0.024	30	0.068514
050232	SPY LAKE	Salt impacted	0.022	10	0.068589
040446	TIED LAKE	Thin till drainage low DOC	0.004	30	0.069063
040641	HITCHCOCK POND	Thin till drainage low DOC	0.007	25	0.069114
040611	SPECTACLE POND EAST	Mounded seepage high DOC	0.102	40	0.069282
040210	WILLYS LAKE (HORSESHOE)	Thin till drainage low DOC	0.003	5	0.06949
050315	SOUND LAKE	Carbonate influenced	0.018	40	0.069598
040328	OLMSTEAD POND	Thin till drainage low DOC	0.012	40	0.06964
040373	CROOKED LAKE	Thin till drainage low DOC	0.004	5	0.069837
040907	ROUND POND	Thin till drainage low DOC	0.012	25	0.069859
040350	LONE DUCK POND	Thin till drainage low DOC	0.016	40	0.069904
050282	SHIRAS POND	Medium till drainage low DOC	0.007	25	0.069906
041017	UNNAMED POND	Thin till drainage high DOC	0.008	35	0.070257
040190	EMERALD LAKE	Thin till drainage high DOC	0.017	70	0.070289
040745	LINDSEY POND (TA-JEC-NA)	Mounded seepage low DOC	0.006	5	0.0706
040167	LITTLE MOULDY POND	Thin till drainage high DOC	0.023	80	0.070806
040130	LONG LAKE	Medium till drainage high DOC	0.011	45	0.070836
040297	UNNAMED POND	Flow seepage high DOC	0.029	280	0.07091
040704	MIDDLE SETTLEMENT LAKE	Thin till drainage low DOC	0.009	5	0.071117
040622	HUCKLEBERRY LAKE	Thin till drainage high DOC	0.053	80	0.071208
040199	MIDDLE SOUTH POND	Thin till drainage low DOC	0.02	10	0.071215
040707	MIDDLE BRANCH LAKE	Thin till drainage low DOC	0.008	20	0.07134
040502	PEAKED MOUNTAIN LAKE	Thin till drainage low DOC	0.003	10	0.071782
040610	LONG LAKE	Mounded seepage	0.009	15	0.072424
040855	MOUNTAIN LAKE	Thin till drainage low DOC	0.009	50	0.07252
040360	BIG DEER POND	Flow seepage high DOC	0.023	45	0.072548
050340	FOREST LAKE	Carbonate influenced	0.008	20	0.072959
050513	CHUB POND (MUD)	Carbonate influenced	0.013	10	0.073288
040969	GULL LAKE	Thin till drainage low DOC	0.005	15	0.073368
040529	NEGRO LAKE	Thin till drainage low DOC	0.019	15	0.073506
040573	RAZORBACK POND	Thin till drainage	0.006	5	0.073608
040245	JAKES POND	Thin till drainage low DOC	0.014	25	0.073738
050385	OLIVER POND	Salt impacted	0.004	15	0.073793
040185	TWIN PONDS	Thin till drainage high DOC	0.018	55	0.073931
050517	OVEN MOUNTAIN POND	Carbonate influenced	0.01	30	0.074074
040433	ENGLE POND	Flow seepage low DOC	0.021	20	0.07408
050464	BASS LAKE	Carbonate influenced	0.003	15	0.074759
040567	THAYER LAKE	Flow seepage high DOC	0.011	40	0.075325
040325	INDIAN MOUNTAIN POND	Thin till drainage high DOC	0.024	70	0.07553
040772	SOUTH POND	Thin till drainage low DOC	0.004	10	0.075705
040432	UNNAMED POND (TWIN WEST)	Thin till drainage low DOC	0.007	10	0.075817
040214	WALKER POND	Thin till drainage low DOC	0.002	5	0.075862

Pond	Pondname	Lake Type	Total P1	Trucolor	Sensitivity
040779	PIGEON LAKE	Thin till drainage low DOC	0.007	10	0.076213
040640	BLUE POND	Thin till drainage high DOC	0.007	45	0.076402
041012	MONUMENT LAKE	Salt impacted	0.013	35	0.076513
040607	CORK POND	Mounded seepage low DOC	0.008	20	0.076516
040967	BREWER LAKE	Thin till drainage	0.011	5	0.07652
040164	LANES POND	Thin till drainage low DOC	0.035	25	0.07681
050184	MIDDLE LAKE	Thin till drainage low DOC	0	10	0.077057
040197	DIANA POND	Thin till drainage low DOC	0.002	5	0.077237
040612	SPECTACLE POND WEST	Mounded seepage high DOC	0.092	40	0.077381
050486	MUNSON POND	Medium till drainage high DOC	0.007	30	0.077436
040691	BURNT (MUD) POND	Mounded seepage low DOC	0.018	15	0.077561
040910	BUCK LAKE	Medium till drainage high DOC	0.02	30	0.07777
050655	PINE LAKE	Carbonate influenced	0.011	20	0.077843
050613	MASON LAKE	Salt impacted	0.007	10	0.078051
040305	CRANE POND	Thin till drainage low DOC	0.01	5	0.078241
040854	HORN LAKE	Thin till drainage low DOC	0.004	5	0.078444
040120	PORTAFERRY LAKE	Salt impacted	0.006	20	0.078556
040361	CLEAR POND	Thick till drainage low DOC	0.002	5	0.078663
040505	HIDDEN LAKE (HANK'S PD)	Thin till drainage low DOC	0.003	5	0.079481
050368	PALMER POND	Carbonate influenced	0.016	25	0.079485
040203	UNNAMED POND	Thin till drainage low DOC	0.003	5	0.080006
050398	MARION POND	Flow seepage low DOC	0.004	25	0.080044
040499	SLIM POND	Thin till drainage high DOC	0.006	20	0.080313
050188	WILCOX LAKE	Medium till drainage low DOC	0	10	0.080747
040563	NORTH POND	Medium till drainage low DOC	0.016	25	0.080803
040498	LYON LAKE	Thin till drainage low DOC	0.002	5	0.080811
040377	GULL LAKE	Thin till drainage low DOC	0	0	0.081514
040643	MOOSE POND	Thin till drainage low DOC	0.021	80	0.081748
040879	LOST PONDS EAST	Flow seepage low DOC	0.03	25	0.081883
040618	HOPSICKER POND	Mounded seepage low DOC	0.032	35	0.081888
040152	ELIJAH LAKE	Medium till drainage	0.002	10	0.081919
040381	JENKINS POND	Mounded seepage low DOC	0.01	30	0.082279
040353	STREETER FISHPOND	Thin till drainage low DOC	0.007	10	0.082352
040595	CRYSTAL LAKE	Flow seepage low DOC	0.004	5	0.082356
040608	EVIES POND	Mounded seepage high DOC	0.017	40	0.082832
040923	BRANDY LAKE	Medium till drainage low DOC	0.009	15	0.083196
040574	MUD LAKE	Thin till drainage high DOC	0.019	90	0.083328
050678	MOOSE POND	Medium till drainage low DOC	0.025	20	0.083547
050286	COD POND	Carbonate influenced	0.012	30	0.083617
040511	SODA POND	Thin till drainage low DOC	0.002	0	0.083711
040205	UNNAMED POND	Thin till drainage low DOC	0.003	5	0.084126
040154	SILVER DAWN LAKE	Thin till drainage low DOC	0.009	30	0.084283
040717	GULL LAKE	Thin till drainage low DOC	0.024	50	0.084418
040300	MUSKRAT POND	Thin till drainage low DOC	0.023	70	0.084513
040789	BUG LAKE	Carbonate influenced	0.003	10	0.085383
050587A	LAKE ADIRONDACK	Salt impacted	0.016	35	0.085711
040416	LOWER WEST POND	Thin till drainage low DOC	0.009	15	0.086246
050247	FAWN LAKE	Medium till drainage low DOC	0.004	10	0.086528
040500	EVERGREEN LAKE	Thin till drainage low DOC	0.001	10	0.087006
040790	EIGHTH LAKE FULTON CHAIN	Salt impacted	0.01	20	0.087835
040363	SLENDER POND	Thin till drainage low DOC	0.009	10	0.088275
040311	LILYPAD POND	Thin till drainage high DOC	0.03	180	0.088431
040958	WHITE LAKE	Salt impacted	0.002	0	0.090736
040490	UNNAMED POND	Thin till drainage low DOC	0.025	50	0.090901
050419	GOOSE POND	Carbonate influenced	0.004	10	0.091131
040731A	ROUND POND	Mounded seepage low DOC	0.005	0	0.091495
050418	GULL POND	Carbonate influenced	0.059	30	0.091744
040434A	IN OUT POND	Thick till drainage low DOC	0.009	20	0.093113
040228	FRENCH POND	Mounded seepage low DOC	0.015	10	0.093205

Pond	Pondname	Lake Type	Total P1	Trucolor	Sensitivity
040144	BIG HILL POND	Medium till drainage high DOC	0.015	55	0.093485
040617	STONY LAKE	Thin till drainage low DOC	0.005	20	0.09417
040920	ROUND LAKE	Salt impacted	0.006	10	0.094915
040984	BLOODSUCKER POND	Thin till drainage low DOC	0.013	45	0.095398
040166	MOULDY POND	Thin till drainage high DOC	0.018	35	0.096492
040289	CRYSTAL LAKE	Mounded seepage low DOC	0.005	5	0.096707
040797	UNNAMED POND	Salt impacted	0.02	70	0.097284
040281	STAR LAKE	Salt impacted	0.007	5	0.09743
040303A	BENSON MINES PONDS	Flagged data not rated	0.017	40	0.097825
040335	SPECTACLE POND SOUTH	Thin till drainage low DOC	0.016	30	0.097978
040444A	UNNAMED POND	Thin till drainage high DOC	0.04	140	0.098794
040690	PLEASANT LAKE	Flow seepage low DOC	0.017	5	0.098849
040537	FALLS LAKE	Thin till drainage low DOC	0.004	5	0.100336
040308	DILLON POND	Thin till drainage high DOC	0.019	180	0.101416
040262	TITUS POND	Mounded seepage low DOC	0.019	20	0.10322
040664A	FLORENCE POND	Flow seepage high DOC	0.03	160	0.106412
040264	DODGE POND	Thick till drainage high DOC	0.02	113	0.115165

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