
An Update of National Wetlands Inventory Activities in New York

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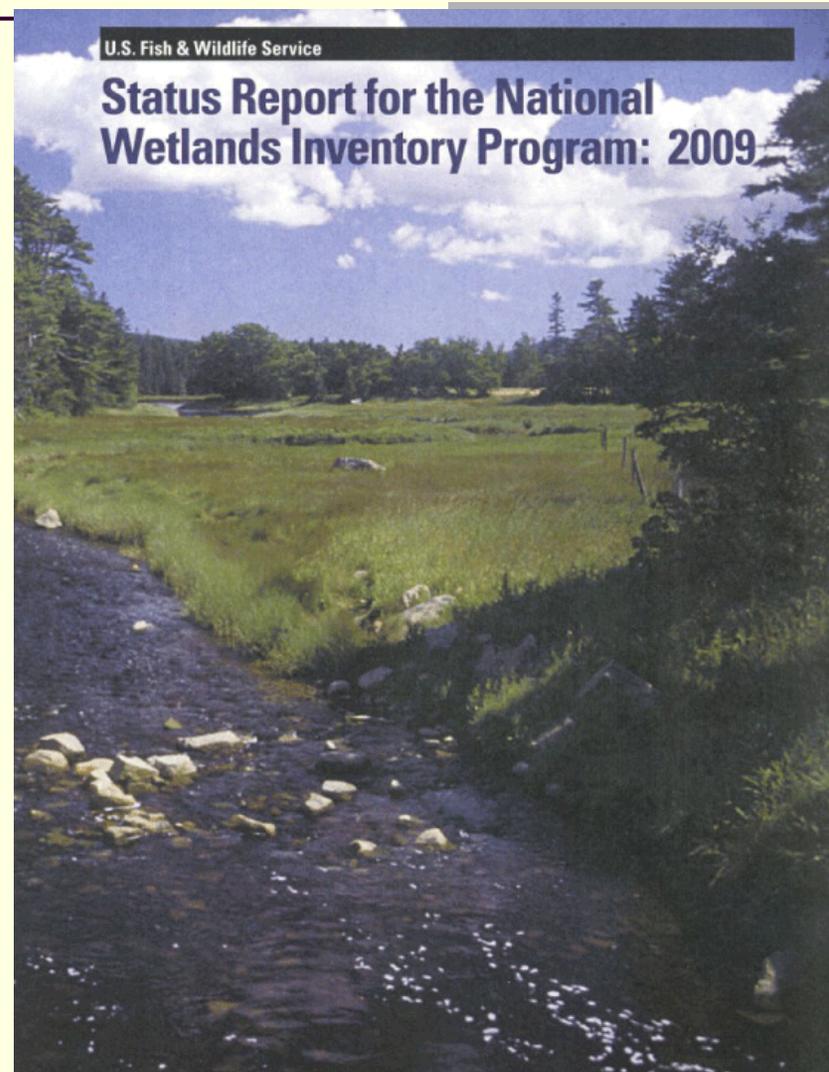
April 2010

National Wetlands Inventory (NWI)

- Mapping the Nation's wetlands since the mid-1970s
- Reports on national wetland status and trends at 10-year intervals
 - Next report due in late 2010/early 2011

Just released: “*NWI Status Report-2009*”

- Available online at:
<http://www.fws.gov/wetlands/>
- Describes evolution of NWI mapping
- Special Products
- Uses of NWI Data
- Reviews status of NWI across the country



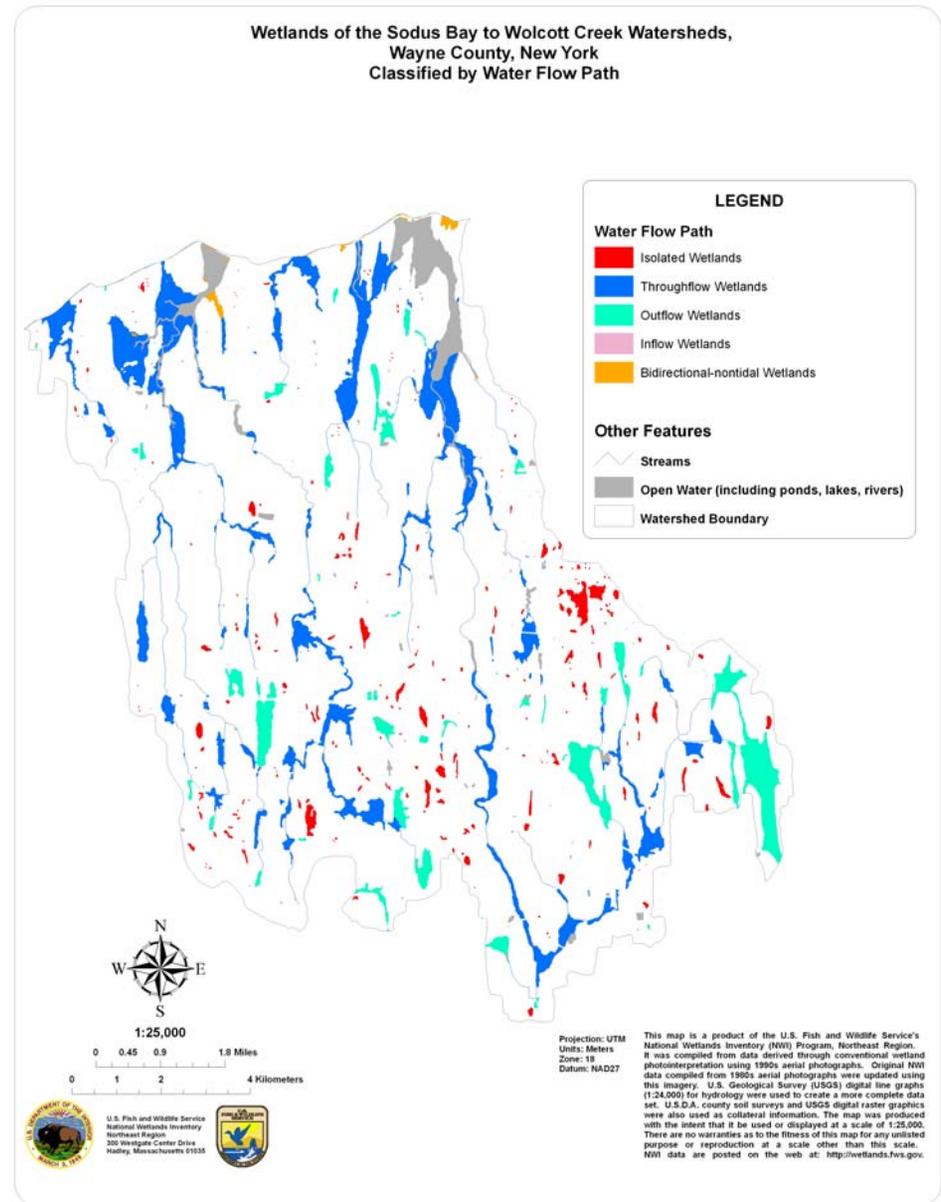
Regional Activities

- Mapping
- Special Projects
 - Local Status and Trends
 - Watershed-based Wetland Characterizations and Preliminary Assessments of Wetland Functions
 - Potential Wetland Restoration Site Inventories
 - Others

Mapping

- Using digital imagery to identify wetlands
 - Following new FGDC wetland mapping standard
- Integrating hydric soils information into NWI data (H-wetlands = areas where wetlands may also exist due to soil mapping)
- Expanded classification – NWIPlus
 - Standard mapping for the Northeast; in other regions being done on a priority basis

Improved Classification and Characterization



Predict Wetland Functions at the Landscape Level

POTENTIAL WETLANDS OF SIGNIFICANCE FOR STREAMFLOW MAINTENANCE Sodus Bay to Wolcott Creek Watersheds, Wayne County, New York

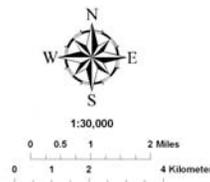
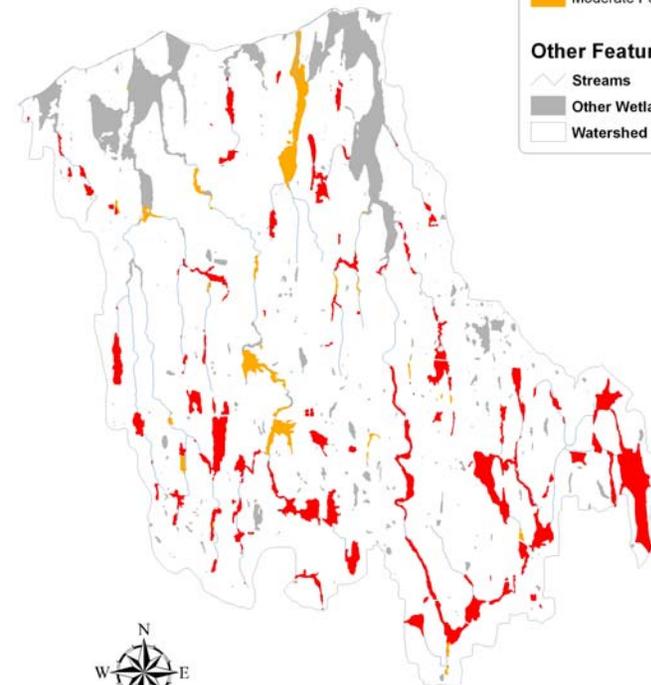
LEGEND

Streamflow Maintenance

- High Potential
- Moderate Potential

Other Features

- Streams
- Other Wetlands and Open Water
- Watershed Boundary



Projection: UTM
Units: Meters
Zone: 18
Datum: NAD27

This map is a product of the U.S. Fish and Wildlife Service's National Wetlands Inventory (NWI) Program, Northeast Region. It was compiled from data derived through conventional wetland photointerpretation using 1990s aerial photographs. Original NWI data compiled from 1980s aerial photographs were updated using this imagery. U.S. Geological Survey (USGS) digital line graphs (1:24,000) for hydrology were used to create a more complete data set. U.S.D.A. county soil surveys and USGS digital raster graphics were also used as collateral information. The map was produced with the intent that it be used or displayed at a scale of 1:30,000. There are no warranties as to the fitness of this map for any unlisted purpose or reproduction at a scale other than this scale. NWI data are posted on the web at: <http://wetlands.fws.gov>.

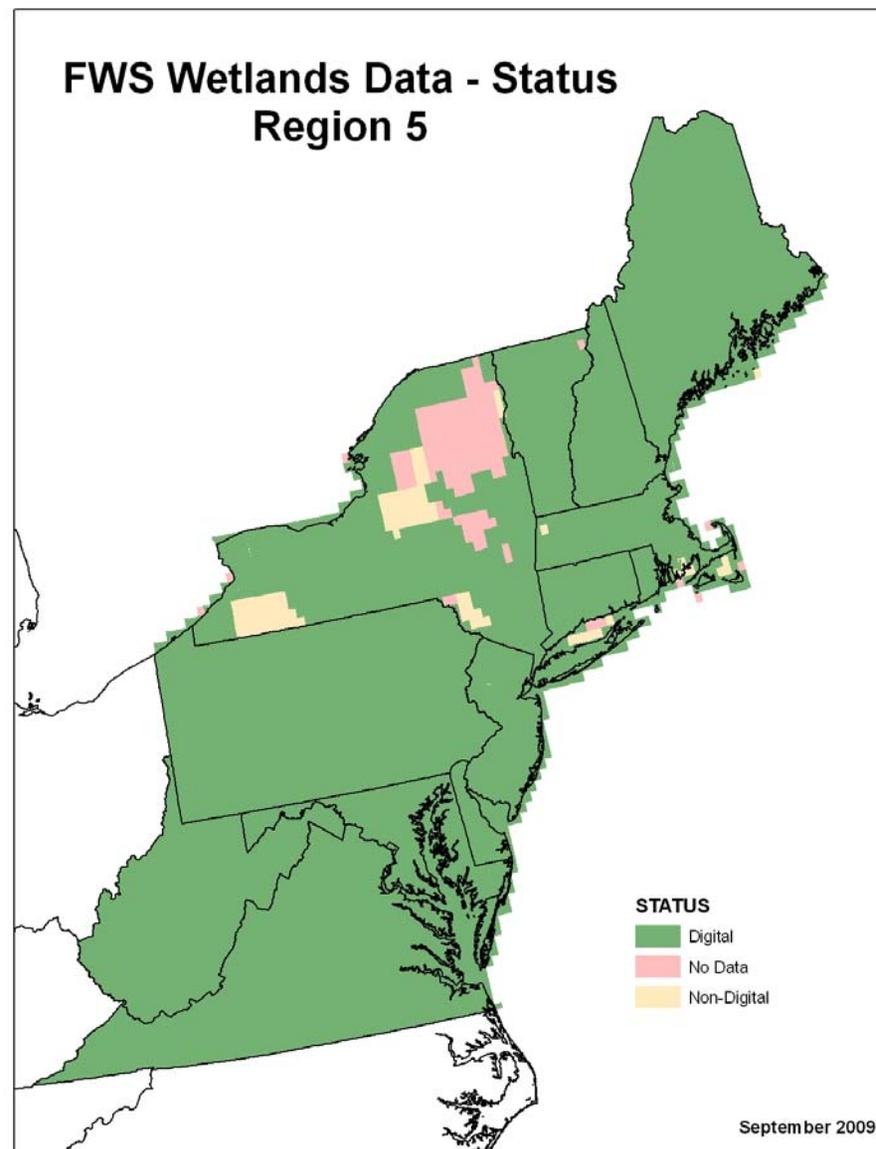


U.S. Fish and Wildlife Service
National Wetlands Inventory
Northeast Region
300 Weygant Center Drive
Hallowell, Massachusetts 01816

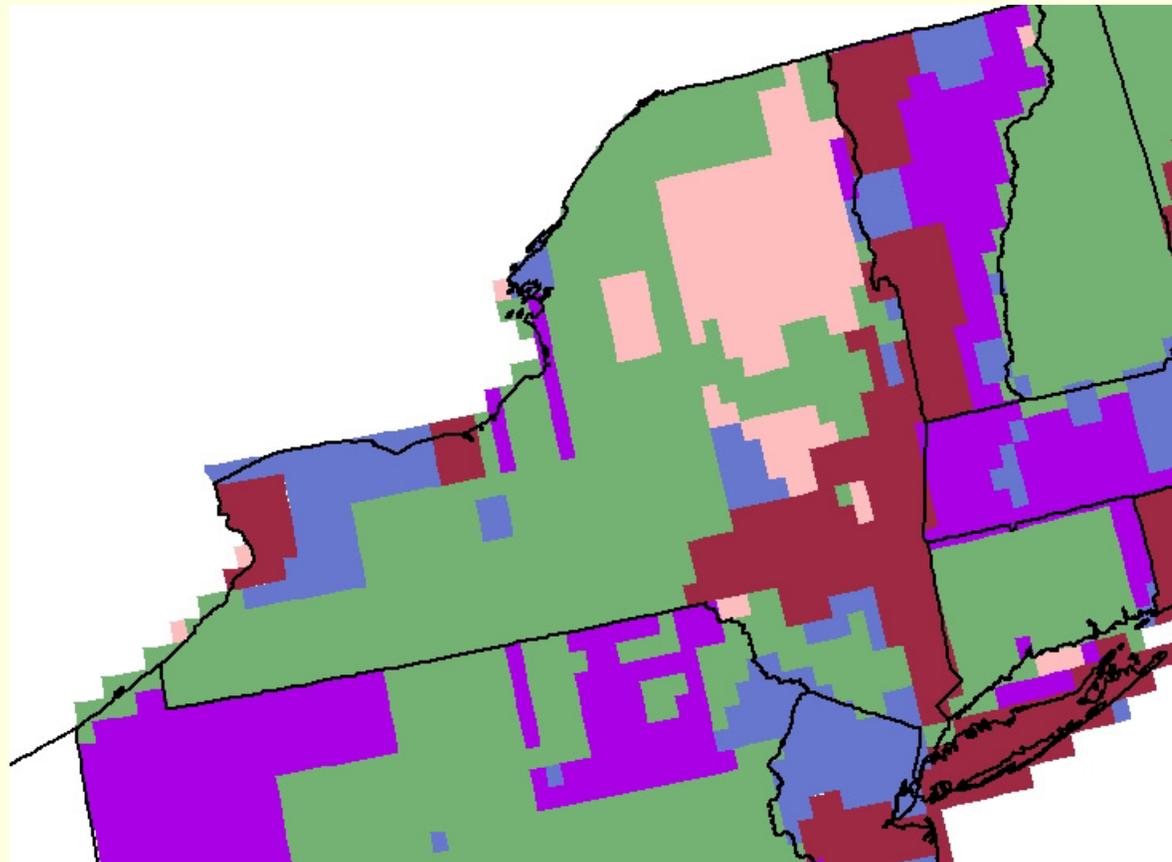


Mapping Status

- Digital Data
- Hardcopy Maps
- No Data



NWI Status: New York

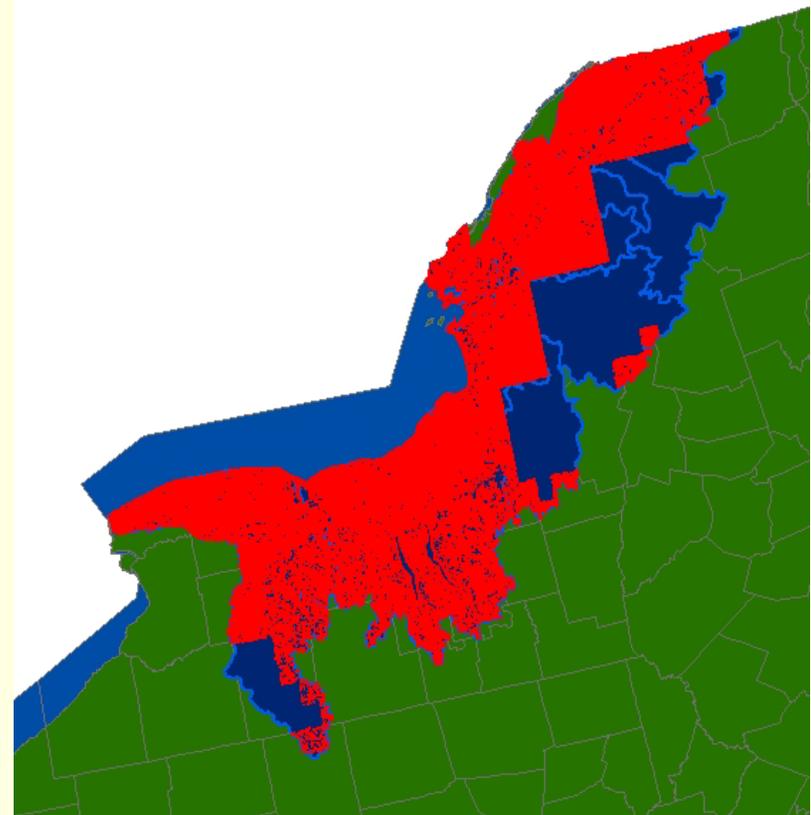


IMAGE_YR

- 1970's Imagery
- 1980's Imagery
- 1990's Imagery
- 2000's Imagery
- No Data

Mapping Initiatives for 2010-2112

- Mapping wetlands in the Lake Ontario Watershed
- Original mapping (unmapped areas)
- Updating existing data
- NWIPlus for all areas
- Inventory of potential wetland restoration sites



Special Projects

- Published Reports
- Nearly Completed Studies
- Ongoing Studies for Completion by 2011

Recent Published Reports

- Buffalo Metro Area Trends
- West of Hudson Wetland Trends
- Northeast Region NWI Findings
- Watershed-based Wetland Characterizations and Preliminary Assessments of Wetland Functions

Buffalo Area Trends: 1980-2002

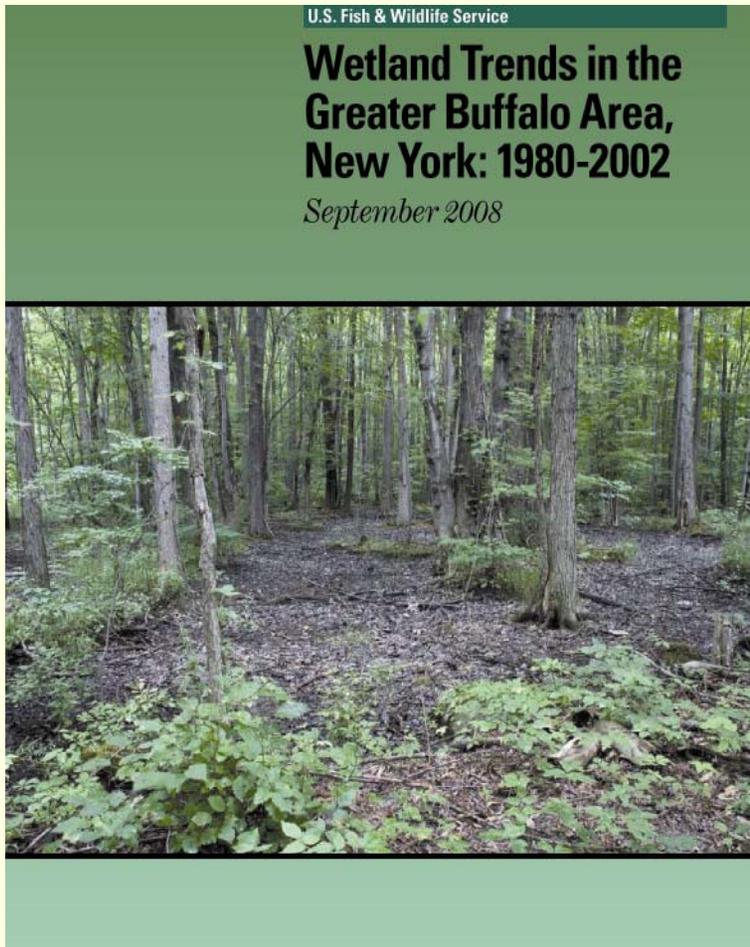
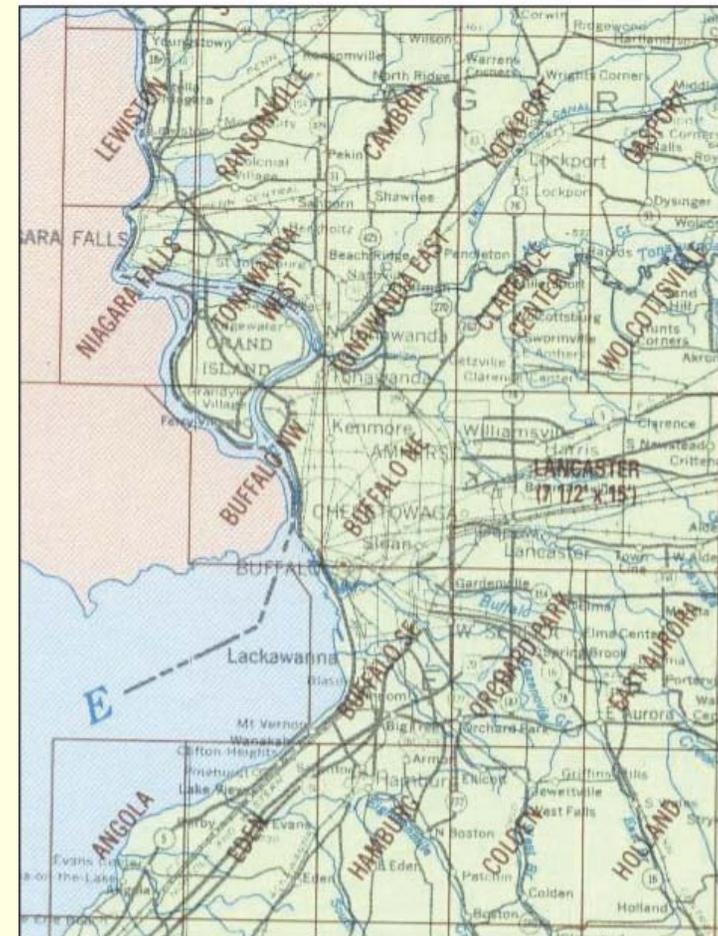


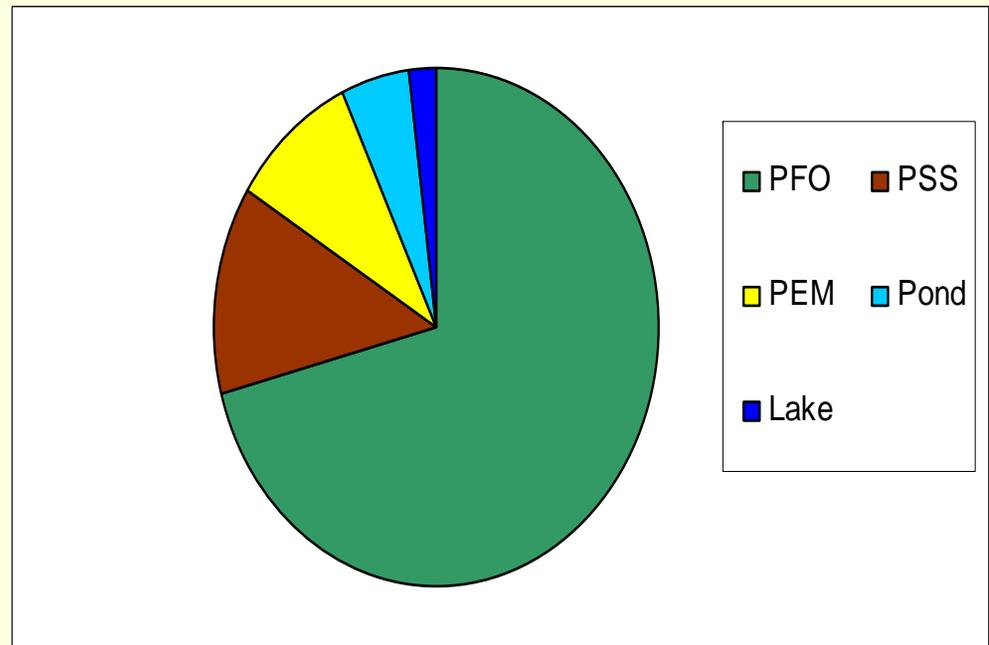
Figure 1. Location of study area in western New York. Note: Holland is not in the study area.



Some Findings – Buffalo Metro Area

2002 Wetlands Status

- 11% of study area
- PFO = 70%
- PSS = 13%
- PEM = 9%
- Ponds = 5%
- Lacustrine = 2%



Trends 1980-1994 - Vegetated Wetlands

Net Annual Loss = 109 acres

Losses

- 1560 acres of vegetated
- Mostly PFO
- 43% to residential
- 13% to commercial
- 11% to ponds
- 9% to gravel mining

Gains

- 75 acres
- Mostly from abandoned farmland
- Rest from plant colonization of ponds

Trends 1994-2002 – Vegetated Wetlands

Net Annual Loss = 67 acres

Losses

- 545 acres destroyed
- 38% residential
- 22% transitional land
- 13% commercial
- 13% ponds

Gains

- 9 acres

Change in Type

- 24 acres from conversion of PFO to PEM

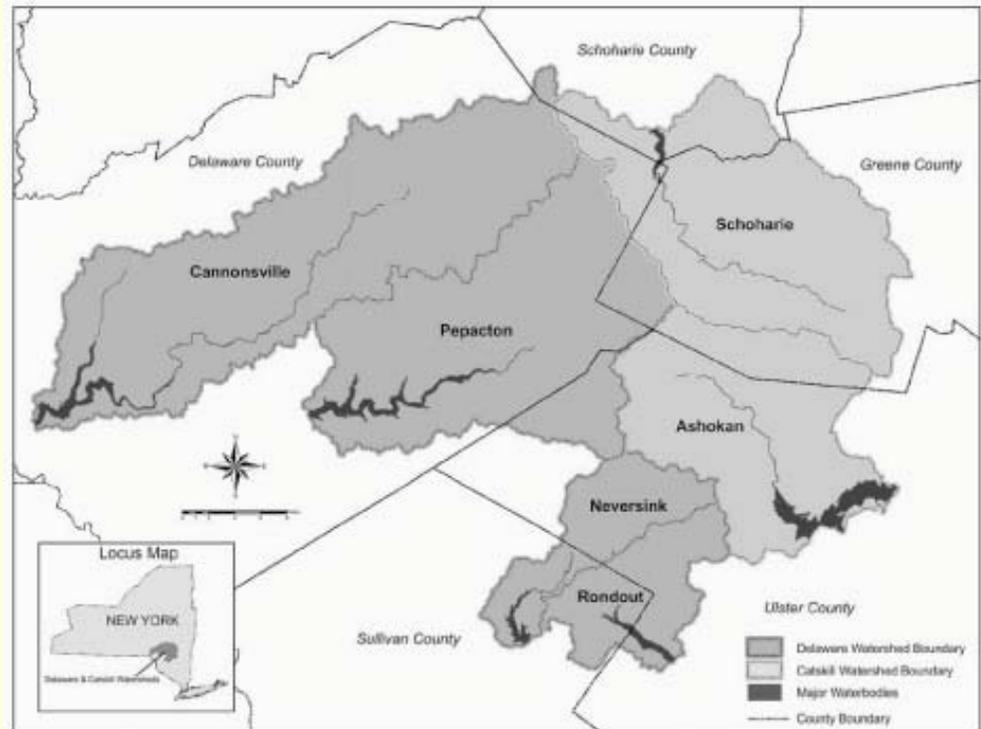
Trends 1980-2002 - Ponds

- Total gain of 1220 acres
- 38% increase from 1980-1994
- 10% increase from 1994-2002
- Gains from both uplands (1076 acres) and vegetated wetlands (268 acres)
- Mostly on farmland and for golf courses

West of Hudson Status and Trends Report

Funded by NYCDEP

- Mid-1980s to 2004
- 10,560 acres of wetlands in 2004
- 1% of watershed
- PEM – 29%
- Pond – 26%
- PFO – 21%
- PSS – 15%



WoH Trends

Mid-80s to mid-90s

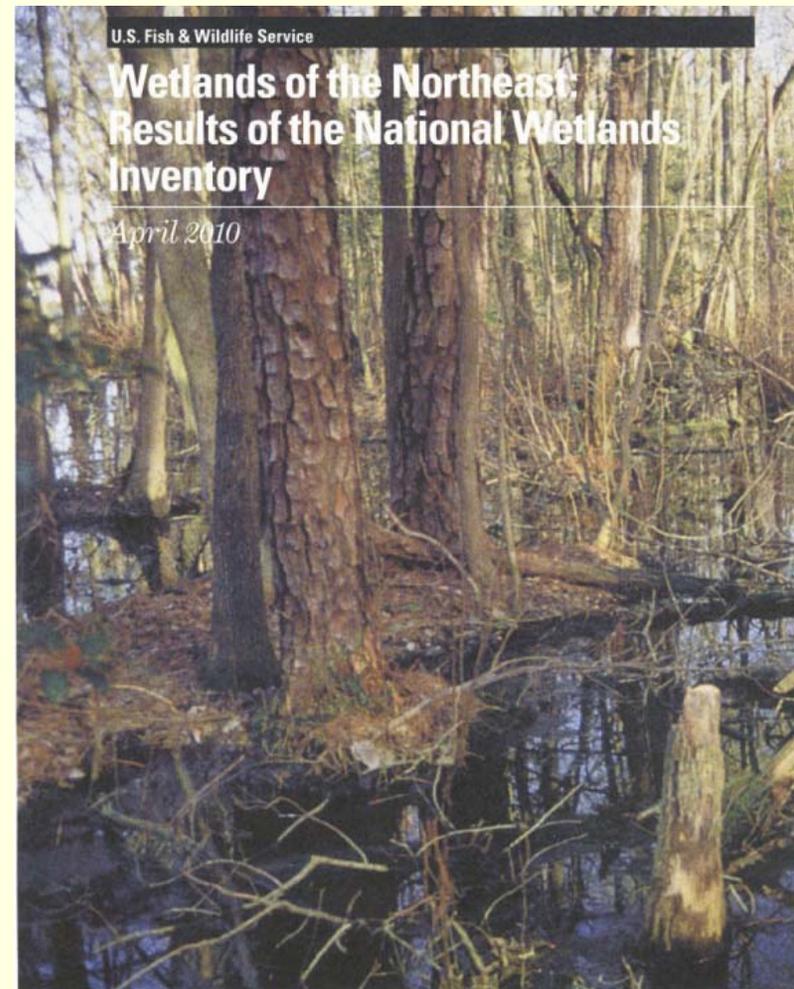
- Net loss of vegetated wetlands = 87 acres
 - Mostly from ponds
- Net gain in ponds = 527 acres
 - Mostly from upland

Mid-90s to 2004

- Net gain in vegetated wetlands = 3.5 acres
- Net gain in ponds = 109 acres

NWI Data: Regional Summary

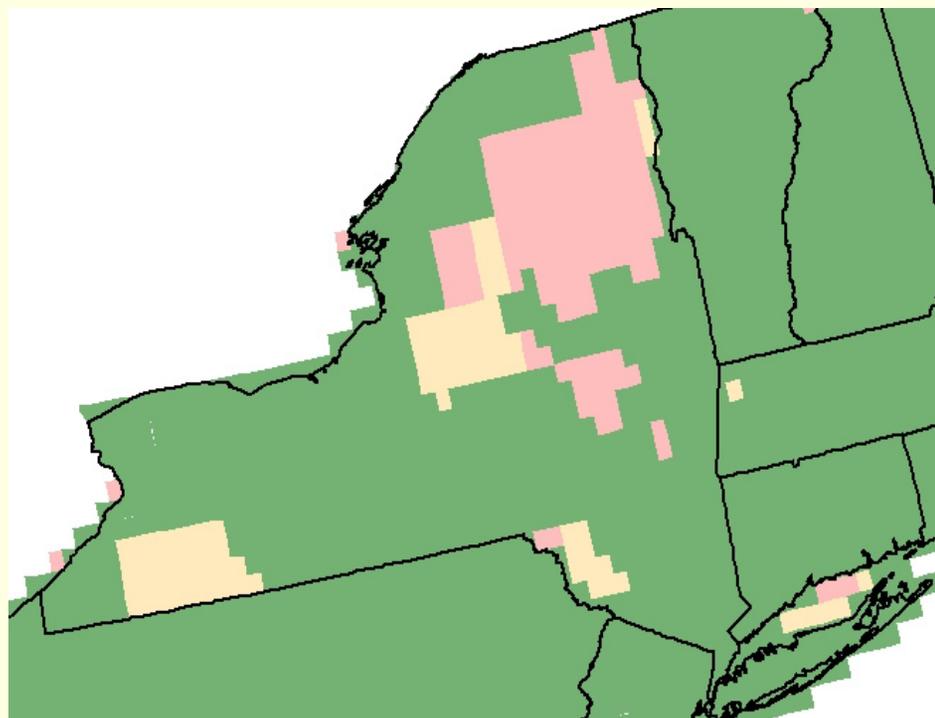
- Just completed
- Describes Region's NWI operation and products
- Summarizes NWI findings for all 13 states
- Complete list of NWI special products and reports



Wetlands of New York

Findings based on 74% of state

■ Green areas



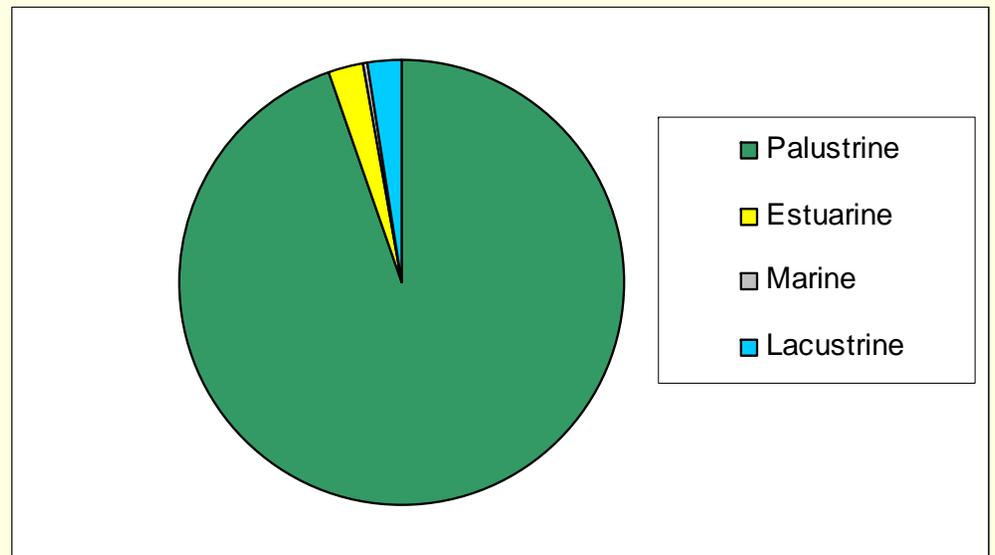
Wetlands of New York

Almost 1.6 M acres mapped
to date

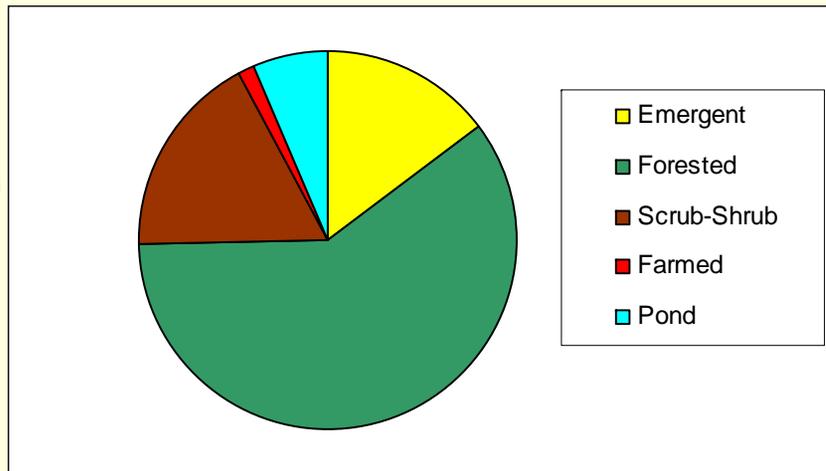
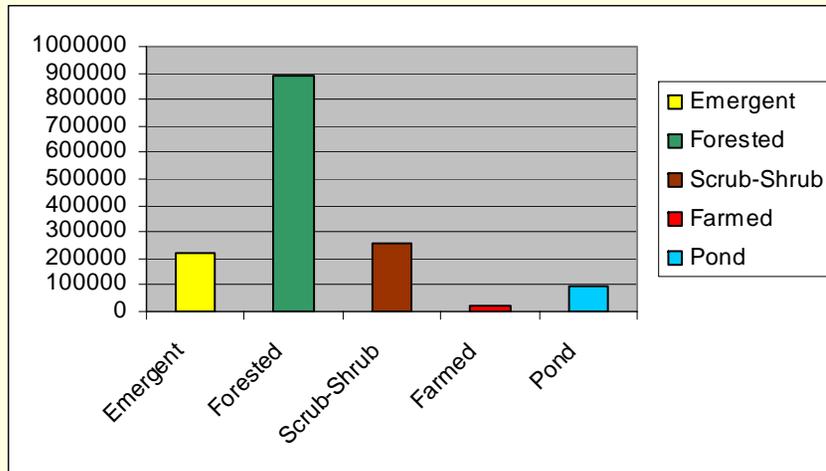
2nd Ranked among 13
Northeast States (even
when based on NWI data
for only 74% of state;
ME = 2.2M acres)

~7% of state's land area

- Palustrine = 94%
- Lacustrine = 3%
- Estuarine = 2%
- Riverine = <1%
- Marine = <1%



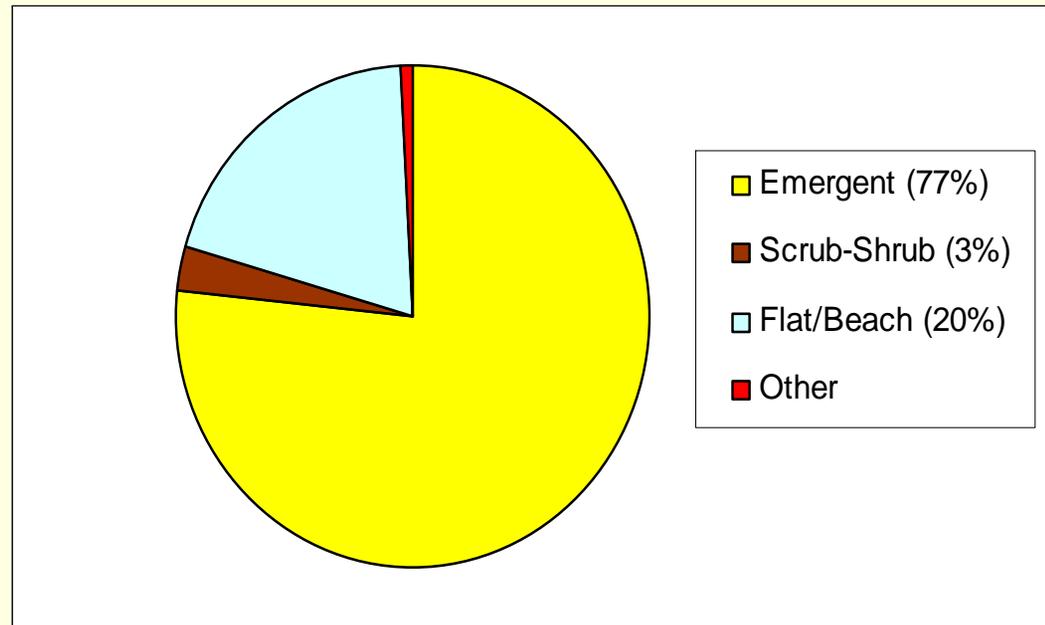
Palustrine Wetlands = 1.486M a.



- Forested = 892,019 acres
 - 60%
- Scrub-Shrub = 257,411
 - 17%
- Emergent = 219,944
 - 15%
- Farmed = 21,731
 - 1%
- Pond = 94,741
 - 6%

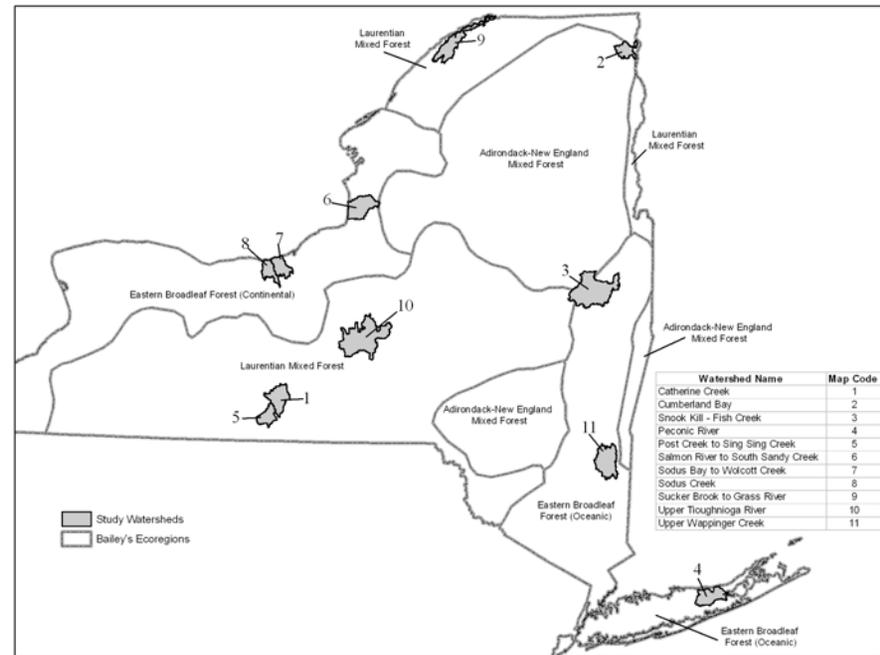
Estuarine Wetlands = 36,161 a.

- Emergent
 - 27,684 acres
- Scrub-Shrub
 - 1,077 acres
- Flat/Beach
 - 7,074 acres
- Other
 - 326 acres



Watershed-based Wetland Characterizations and Preliminary Functional Assessments

- 11 Small Watersheds
 - Funded by NYSDEC
 - Completed in 2006
- NYC Water Supply Watersheds
 - Funded by NYCDEP
 - Catskill
 - Delaware
 - Croton



Forthcoming NWI Reports

■ Long Island Wetlands

- NWI Status
- Recent Trends – “Inventory of Change”
- Historic Trends (early 1900s to present)
- Wetland Characterization and Preliminary Functional Assessment
- Inventory of Potential Wetland Restoration Sites
- Report due in summer 2010

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- **Eastern Long Island Sound Eelgrass Inventory**
 - Fishers Island and North Fork (June 2010)
 - **West of Hudson Watershed**
 - Characterization and Functional Assessment including lost/gain in functions re: trends (Sept. 2010)
 - **Historic Wetland Trends for Buffalo Area**
 - Include general assessment of lost functions (Fall 2010)
 - **Wetland Changes in Shinnecock Bay Estuary**
 - Since 1930s (December 2010)

Summary

- The NWI has been very active in New York
 - Updating data
 - Producing special products
 - All data are or will be available online
- We are updating our regional website to provide links to most NWI reports
 - <http://www.fws.gov/northeast/wetlands/>

For additional information

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