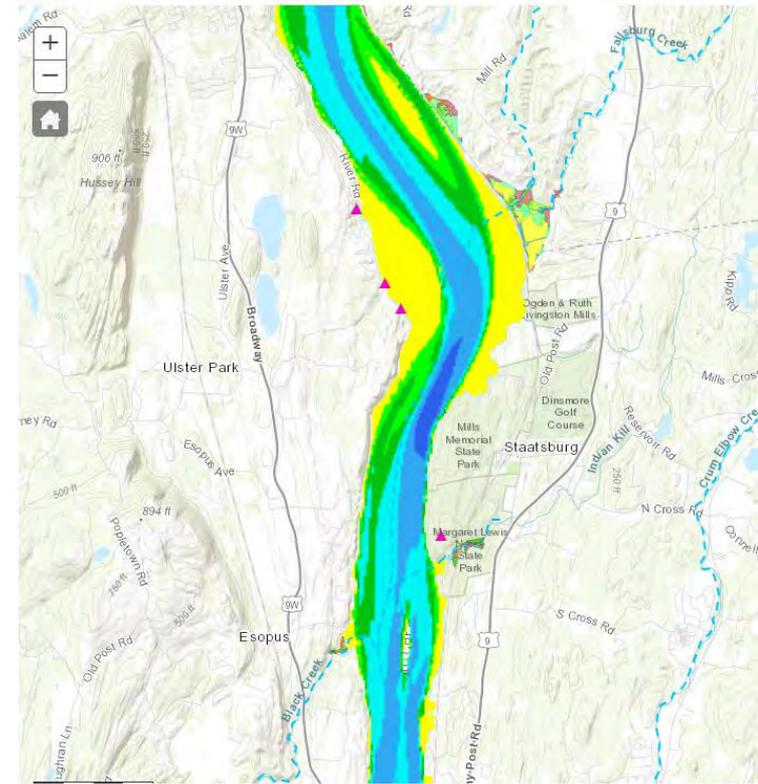




Department of
Environmental
Conservation

Introduction to the Hudson Valley Natural Resource Mapper



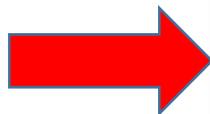
Ingrid Haeckel, *Conservation & Land Use Specialist*
Hudson River Estuary Program and Cornell University

May 15, 2019

Welcome!

Connect to the audio with your phone:

1. Click on the “i” icon, upper left, for call-in details, and
2. Enter your unique participant ID when prompted.

A screenshot of a webex interface. The top menu bar includes 'File', 'Edit', 'Share', 'View', 'Communicate', 'Participant', 'Event', and 'Help'. A red circle highlights a small 'i' icon in the upper left corner of the interface. Below the menu is a section titled 'Event Information' containing a table of details.

Topic:	CSC Webinar: Driving Sustainab...
Location:	https://meetny.webex.com/mee...
Event number:	646 956 626
US Toll Free:	1-844-633-8697
Local:	1-518-549-0500
Access code:	646 956 626
Current host:	Dazzle Ekblad
Current presenter:	Dazzle Ekblad

Problems or technical issues?

Use WebEx Chat

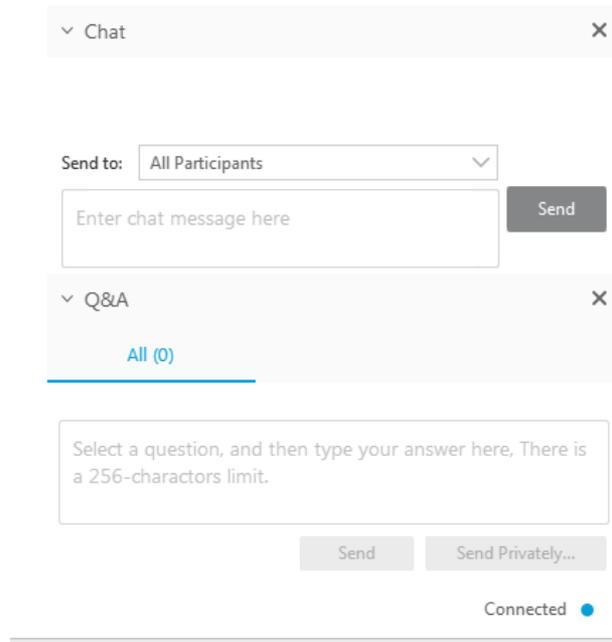
Questions for the presenter?

Use WebEx Q&A



Other Notes:

- Participants are muted.
- The webinar is being recorded.
- Please take the survey at the end!



Today's Webinar:

- Program background
- Navigating the Mapper
- Contents
- Applications
- Q & A (15 min.)



The Hudson River Estuary Program

Working to achieve key benefits:

- clean water
- resilient communities
- vital estuary ecosystem
- fish, wildlife, and habitat
- natural scenery
- education, access, recreation, and inspiration



- **Improve understanding** of natural areas and their benefits.
- **Fill in gaps** in biological data.
- **Provide technical assistance** for incorporating data and conservation principles into local planning.



Photo by Ingrid Haeckel

Recommended Conservation Framework:

identify what you have



prioritize



plan, protect, manage

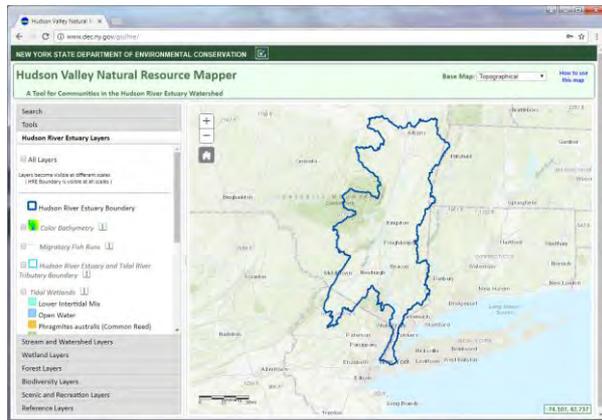
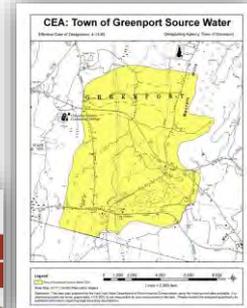
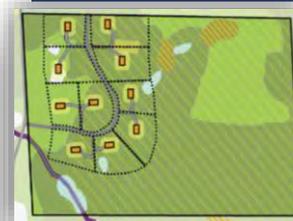


Photo by Laura Heady



Department of Environmental Conservation

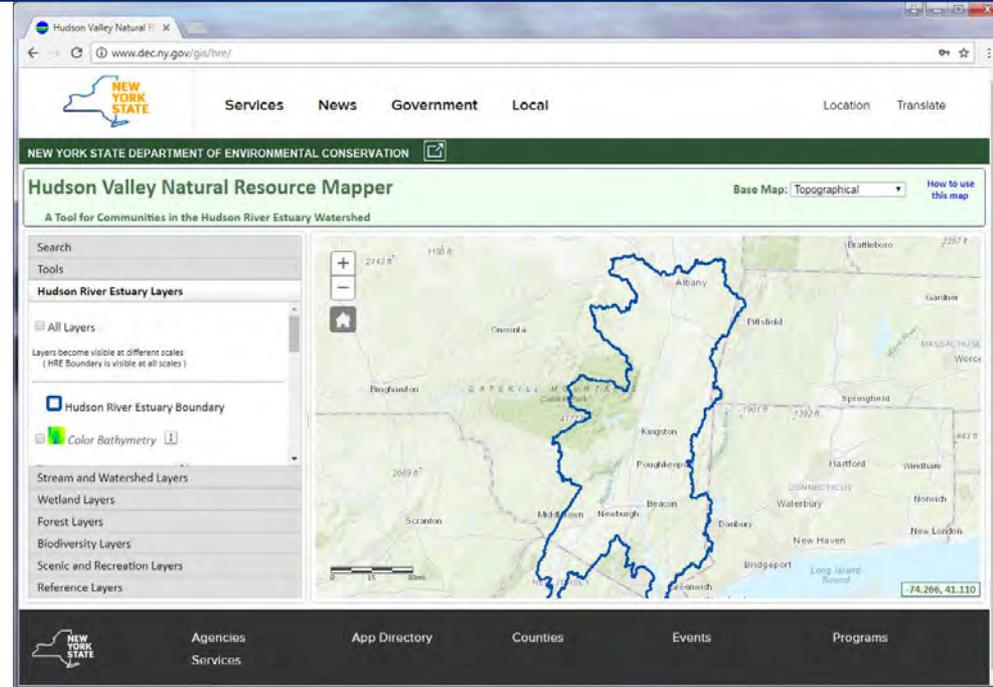
Hudson Valley Natural Resource Mapper

8

An online, interactive mapper to view and query data for:

- Hudson River estuary
- streams and watersheds
- wetlands
- forests
- biodiversity
- scenic and recreation areas

Create custom, printable maps



www.dec.ny.gov/lands/112137.html



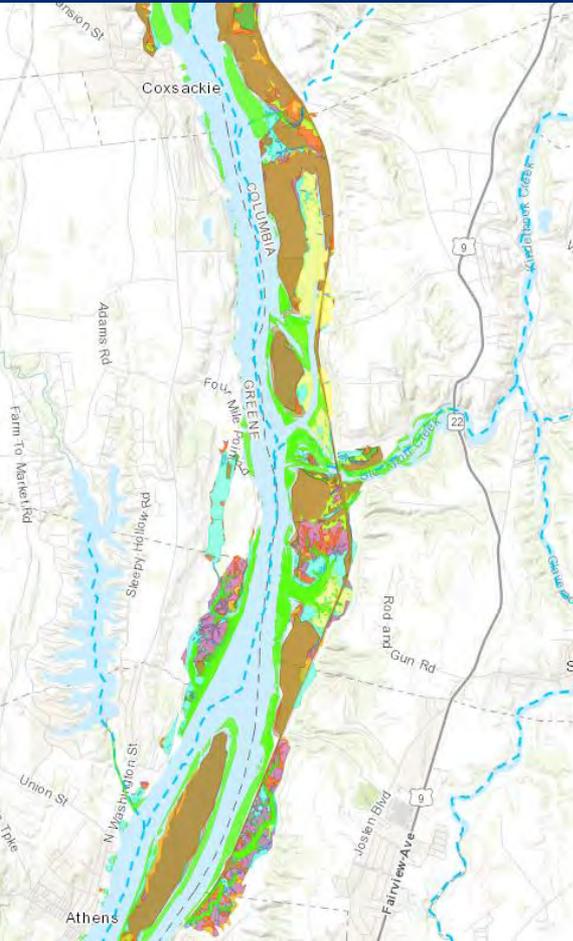
Cornell University



Department of
Environmental
Conservation

Natural Resource Mapper Goals

9



- provide access to a broad suite of habitat and water resource data sets in one easy-to-use tool.
- home for unique Hudson Valley data.
- visualize regional context and interconnectedness of resources.
- primary audiences: municipal officials, watershed groups, land trusts, consultants.

What about the Environmental Resource Mapper?¹⁰

VS

The screenshot shows the 'Hudson Valley Natural Resource Mapper' interface. The browser address bar displays 'www.dec.ny.gov/gis/hvnr'. The page header includes the New York State logo and navigation links for 'Services', 'News', 'Government', and 'Local'. Below the header, the title 'Hudson Valley Natural Resource Mapper' is displayed, along with a 'Base Map: Topographical' dropdown and a 'How to use this map' link. The main content area features a map of the Hudson Valley region with a blue outline of the Hudson River Estuary. A left-hand sidebar contains a search bar, a 'Tools' section, and a 'Hudson River Estuary Layers' section with a list of layers including 'All Layers', 'Hudson River Estuary Boundary', 'Stream and Watershed Layers', 'Wetland Layers', 'Forest Layers', 'Biodiversity Layers', 'Scenic and Recreation Layers', and 'Reference Layers'. The bottom of the page has a footer with the New York State logo and links for 'Agencies', 'App Directory', 'Counties', 'Events', and 'Programs'.

The screenshot shows the 'Environmental Resource Mapper' interface. The browser address bar displays 'www.dec.ny.gov/gis/erm/'. The page header includes the New York State logo and navigation links for 'Services', 'News', 'Government', and 'Local'. Below the header, the title 'Environmental Resource Mapper' is displayed, along with a 'Base Map: Topographical' dropdown and a 'Using this map' link. The main content area features a map of the Hudson Valley region with a blue outline of the Hudson River Estuary. A left-hand sidebar contains a search bar, a 'Tools' section, and a 'Layers and Legend' section with a list of layers including 'All Layers', 'Unique Geological Features', 'Watershed Classifications for Rivers/Streams', 'Watershed Classifications for Lakes', 'Other Wetland Layers', 'Reference Layers', 'Tell Me More...', 'Need A Permit?', and 'Contacts'. The bottom of the page has a footer with the New York State logo and links for 'Agencies', 'App Directory', 'Counties', 'Events', and 'Programs'.

www.dec.ny.gov/lands/112137.html

Department of Environmental Conservation

Recreation Nature Prevent & Control Pollution Regulatory News & Learning Search

Home » Lands and Waters » Oceans & Estuaries » Hudson River Estuary Program » Hudson Valley Natural Resource Mapper

Hudson Valley Natural Resource Mapper

A Tool for Viewing Natural Features in the Hudson River Estuary Watershed

NEW: A Stream Condition Index is now available under Stream and Watershed Layers.

The Hudson Valley Natural Resource Mapper is an online, interactive tool designed to help identify and understand important habitat and water resources, the connections between them, and their broader regional context. The mapper also highlights Hudson River recreation sites and other areas where residents and visitors can enjoy the region's natural beauty. By...

Launch Mapper

Fact Sheet

Webinar recording

Important Links

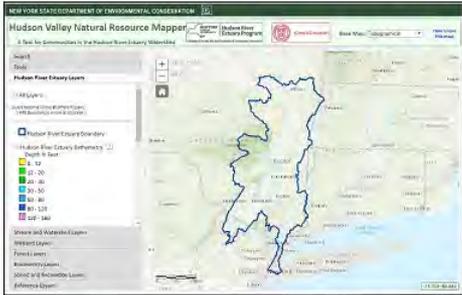
- Conservation and Land Use Program for the Hudson River Estuary
- Clean Water for the Hudson River Estuary
- Access to the Hudson River Estuary

Contact for this Page

The Hudson River Estuary Program
NYSDEC Region 3
21 S Putt Corners Rd
New Paltz, NY 12561
845-256-3016
Send us an email

Map Covers

Hudson River





Hudson Valley Natural Resource Mapper

A Tool for Communities in the Hudson River Estuary Watershed

Search by location

search clear

This tool is intended for general information and planning purposes and does not indicate the extent of DEC regulatory authority. It contains data compiled from numerous sources and may not be complete or accurate. Any resource shown on a map should be verified for legal purposes, including environmental review. Contact your DEC regional office for assistance with regulatory questions. Hudson River Estuary Program staff can assist with interpreting and using the data provided.

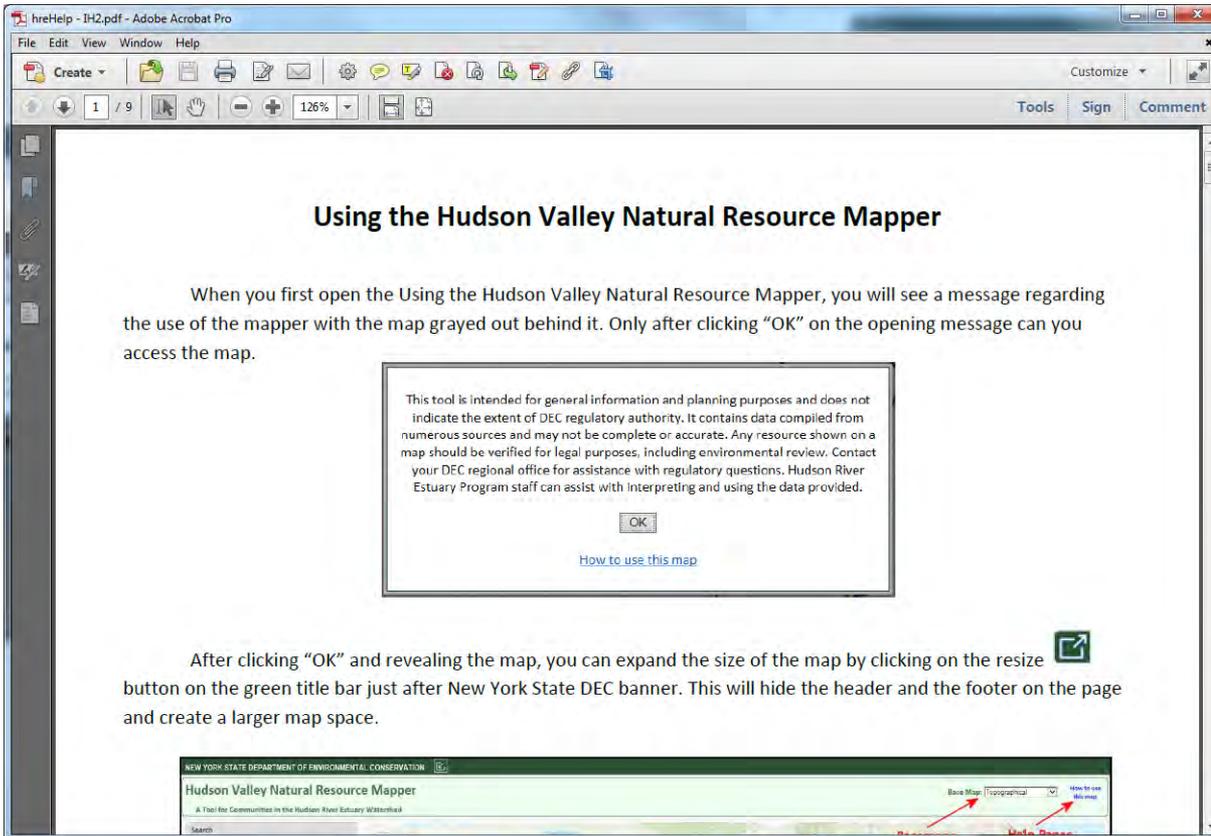
[How to use this map](#)

Disclaimer

Open Map

Instructions





The screenshot shows a window titled 'hreHelp - IH2.pdf - Adobe Acrobat Pro'. The document content is as follows:

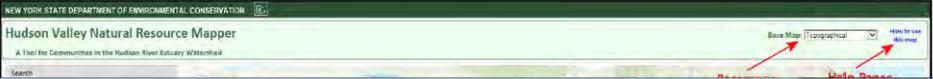
Using the Hudson Valley Natural Resource Mapper

When you first open the Using the Hudson Valley Natural Resource Mapper, you will see a message regarding the use of the mapper with the map grayed out behind it. Only after clicking “OK” on the opening message can you access the map.

This tool is intended for general information and planning purposes and does not indicate the extent of DEC regulatory authority. It contains data compiled from numerous sources and may not be complete or accurate. Any resource shown on a map should be verified for legal purposes, including environmental review. Contact your DEC regional office for assistance with regulatory questions. Hudson River Estuary Program staff can assist with interpreting and using the data provided.

[How to use this map](#)

After clicking “OK” and revealing the map, you can expand the size of the map by clicking on the resize  button on the green title bar just after New York State DEC banner. This will hide the header and the footer on the page and create a larger map space.



The screenshot shows the application interface with a green title bar. The title bar contains the text 'HUDSON VALLEY NATURAL RESOURCE MAPPER' and a 'How to use this map' link. Below the title bar, there is a search bar and a 'Base Map' dropdown menu set to 'Topographical'. A red arrow points to the 'How to use this map' link, and another red arrow points to the 'Base Map' dropdown menu.



Services

News

Government

Local

Full Screen

Location

Translate

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION



Hudson Valley Natural Resource Mapper

A Tool for Communities in the Hudson River Estuary Watershed



Hudson River Estuary Program



Cornell University

Base Map: Topographical

How to use this map

Search

Tools

Hudson River Estuary Layers

All Layers

Layers become visible at different scales
(HRE Boundary is visible at all scales)

Stream and Watershed Layers

Wetland Layers

Forest Layers

Biodiversity Layers

Scenic and Recreation Layers

Reference Layers



Agencies
Services

App Directory

Counties

Events

Programs

Exit Full Screen



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Hudson Valley Natural Resource Mapper

A Tool for Communities in the Hudson River Estuary Watershed



Hudson River Estuary Program



Cornell University

Base Map: Topographical

[How to use this map](#)

Search

Tools

Hudson River Estuary Layers

All Layers

Layers become visible at different scales
(HRE Boundary is visible at all scales)

Hudson River Estuary Boundary

Hudson River Estuary Bathymetry i

Depth in Feet

0 - 12

12 - 20

20 - 30

Stream and Watershed Layers

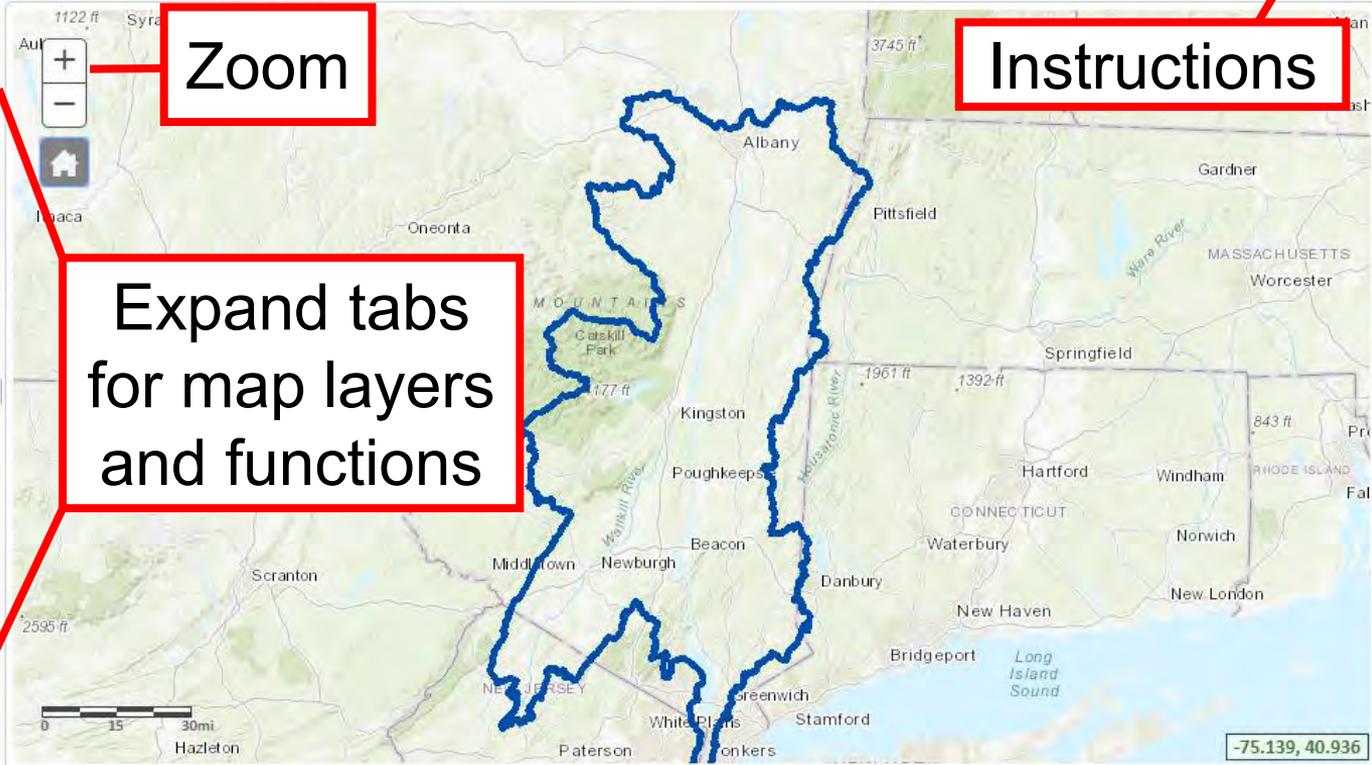
Wetland Layers

Forest Layers

Biodiversity Layers

Scenic and Recreation Layers

Reference Layers



Zoom

Instructions

Expand tabs for map layers and functions



Hudson Valley Natural Resource Mapper

A Tool for Communities in the Hudson River Estuary Watershed

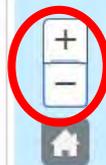


Base Map: Topographical

[How to use this map](#)

Search

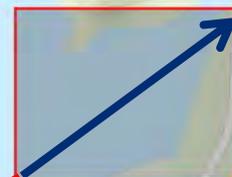
Search by Location



Manual
Zoom

Use mouse
wheel to zoom
Forward = in
Backward = out

OR
Shift + drag
= zoom in
Ctrl+Shift+drag
= zoom out



Forest Layers

Biodiversity Layers

Scenic and Recreation Layers

Reference Layers

0 300 600ft

-73.941, 41.834

Search Tool



Hudson Valley Natural Resource Mapper

A Tool for Communities in the Hudson River Estuary Watershed

Search

Hudson River Estuary Program



Cornell University

Base Map: Topographical

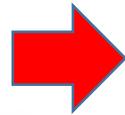
[How to use this map](#)

Search

Search by Location

search clear

- Address
- Municipalities
- Place Names
- Counties
- Zip Codes



Search

Search by Location

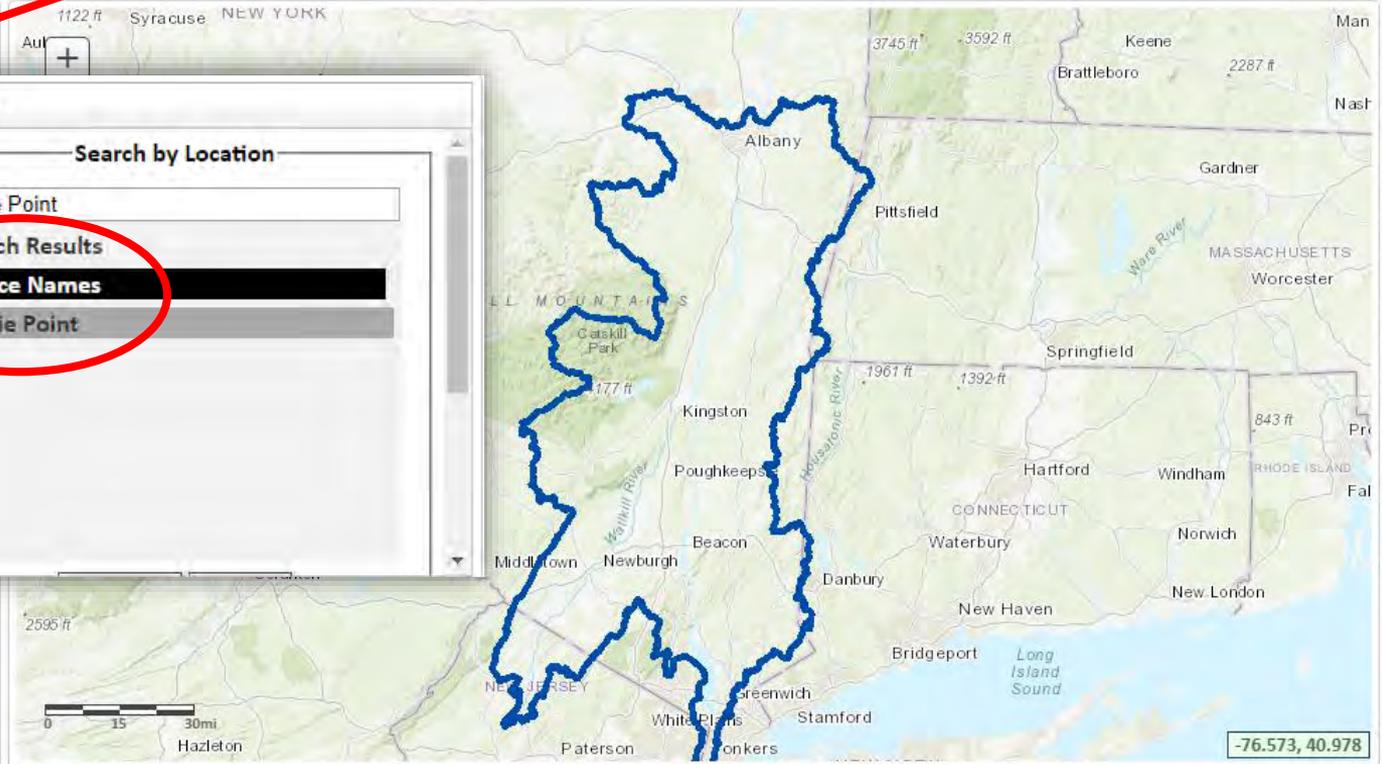
Norrie Point

Search Results

Place Names

Norrie Point

- Tools
- Hudson River Estuary Layers
- Stream and Watershed Layers
- Wetland Layers
- Forest Layers
- Biodiversity Layers
- Scenic and Recreation Layers
- Reference Layers





Hudson Valley Natural Resource Mapper

A Tool for Communities in the Hudson River Estuary Watershed



Base Map: Topographical

[How to use this map](#)

Search

Search by Location

- Address
- Municipalities
- Place Names
- Counties
- Zip Codes

Tools

Hudson River Estuary Layers

Stream and Watershed Layers

Wetland Layers

Forest Layers

Biodiversity Layers

Scenic and Recreation Layers

Reference Layers

Clear search
(remove red dot)

0 100 200ft

-76.557, 40.903

Base Map Options



Hudson Valley Natural Resource Mapper

A Tool for Communities in the Hudson River Estuary Watershed



Base Map: Topographical

- Topographical
- Satellite
- Satellite with Labels
- Streets
- Terrain
- Satellite
- NYS Aerial
- NYS Aerial w Streets
- Light Gray
- Open Streets Map
- Dark Gray
- Oceans
- National Geographic

[How to use this map](#)

Search

Search by Location

Norrie Point

Search Results

Place Names

Norrie Point

Tools

Hudson River Estuary Layers

Stream and Watershed Layers

Wetland Layers

Forest Layers

Biodiversity Layers

Scenic and Recreation Layers

Reference Layers



Base Map Options

Hudson Valley Natural Resource Mapper

A Tool for Communities in the Hudson River Estuary Watershed



Hudson River Estuary Program



Cornell University

Base Map: NYS Aerial

[How to use this map](#)

Search

Search by Location

Norrie Point

- Address
- Municipalities
- Place Names
- Counties
- Zip Codes

Clear search



- Tools
- Hudson River Estuary Layers
 - Stream and Watershed Layers
 - Wetland Layers
 - Forest Layers
 - Biodiversity Layers
 - Scenic and Recreation Layers
 - Reference Layers

-73.952, 41.828

Print Map

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Hudson Valley
A Tool for Communities

Search

Tools

Printing Tool

Printout Title:
Norrie Point

Author Information:

Printout Template:
8.5 x 11.0 Portrait
8.5 x 11.0 Portrait
8.5 x 11.0 Landscape
11.0 x 17.0 Portrait
11.0 x 17.0 Landscape
8.3 x 11.7 Portrait
8.3 x 11.7 Landscape
11.7 x 16.5 Portrait
11.7 x 16.5 Landscape
8.3 x 11.4 Print Map (PDF)
Print Map (Image)

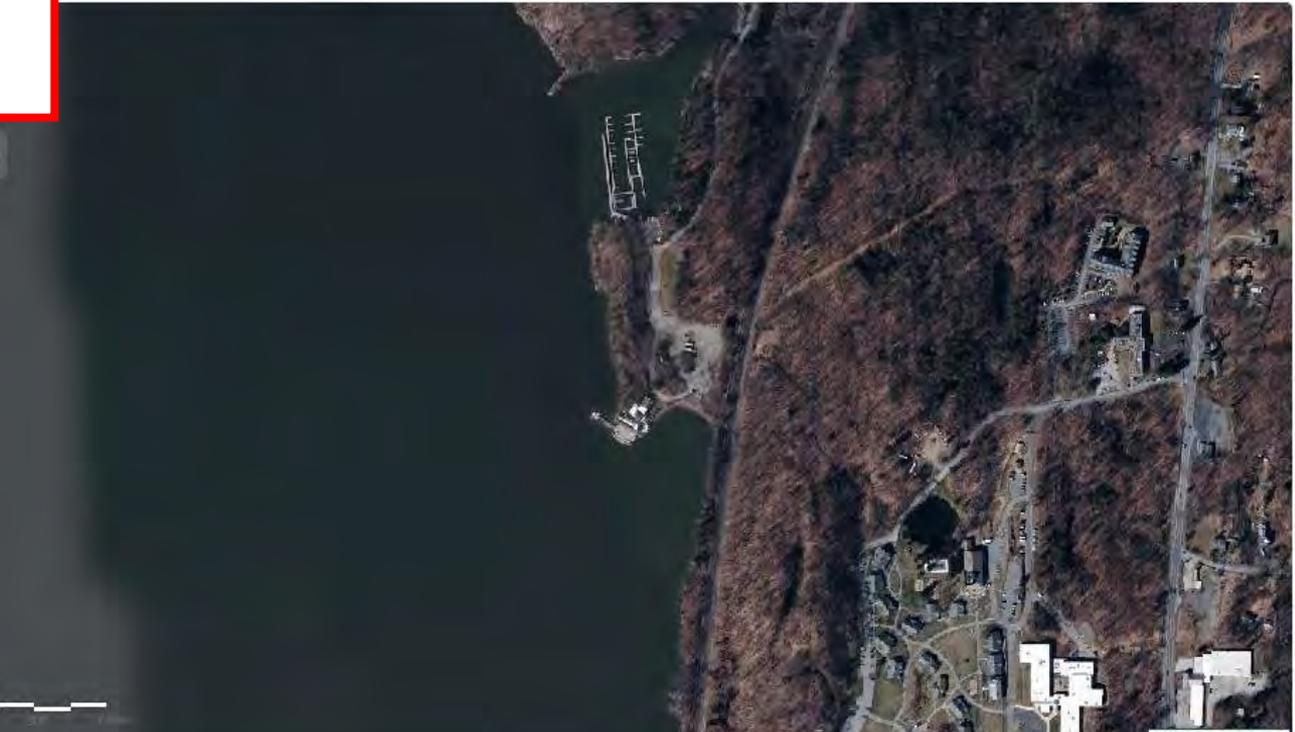
Biodiversity Layers
Scenic and Recreation Layers
Reference Layers

NEW YORK STATE OF OPPORTUNITY
Hudson River Estuary Program
A Program of the New York State Department of Environmental Conservation

Cornell University

Base Map: NYS Aerial

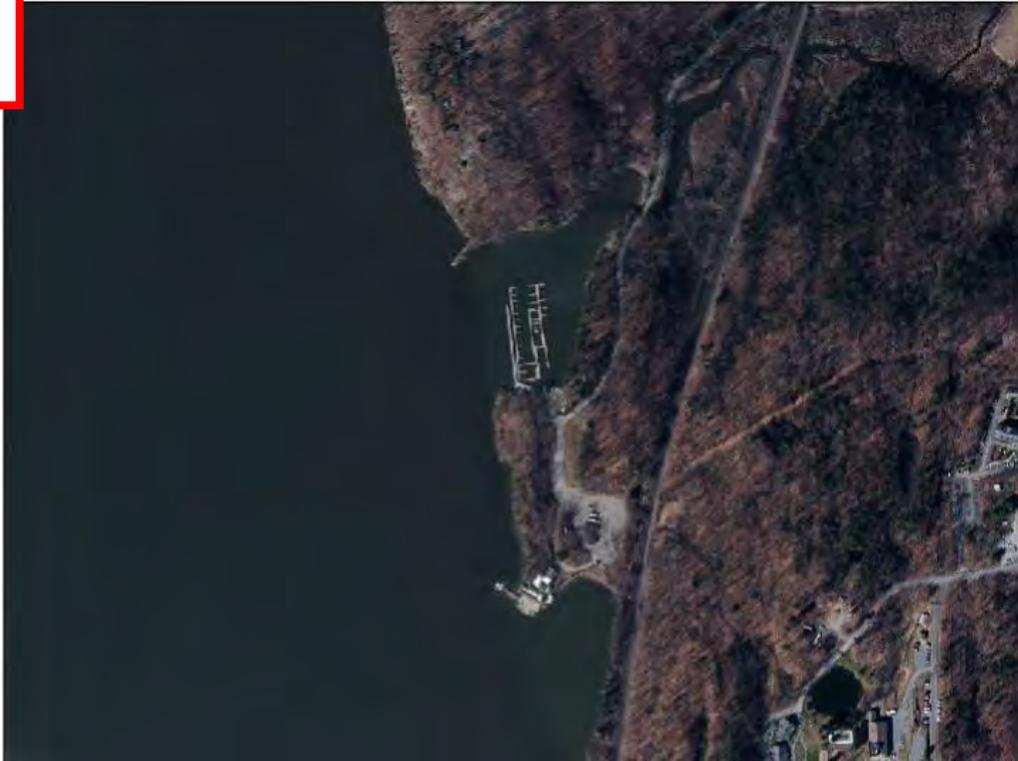
How to use this map



-73.952, 41.830

Note: does not include a legend.

Norrie Point



Hudson Valley Natural Resource Mapper

A Tool for Communities in the Hudson River Estuary Watershed



Hudson River Estuary Program



Cornell University

Base Map: Topographical

How to use this map

Search

Tools

Hudson River Estuary Layers

All Layers

Layers become visible at different scales
(HRE Boundary is visible at all scales)

Hudson River Estuary Boundary

Hudson River Estuary Bathymetry

Depth in Feet

0 - 12

12 - 20

20 - 30

Stream and Watershed Layers

Wetland Layers

Forest Layers

Biodiversity Layers

Scenic and Recreation Layers

Reference Layers



Home extent

Map Layers

Turn on all layers in group

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Resource Mapper

Hudson River Estuary Watershed



Base Map: Topographical

How to use this map

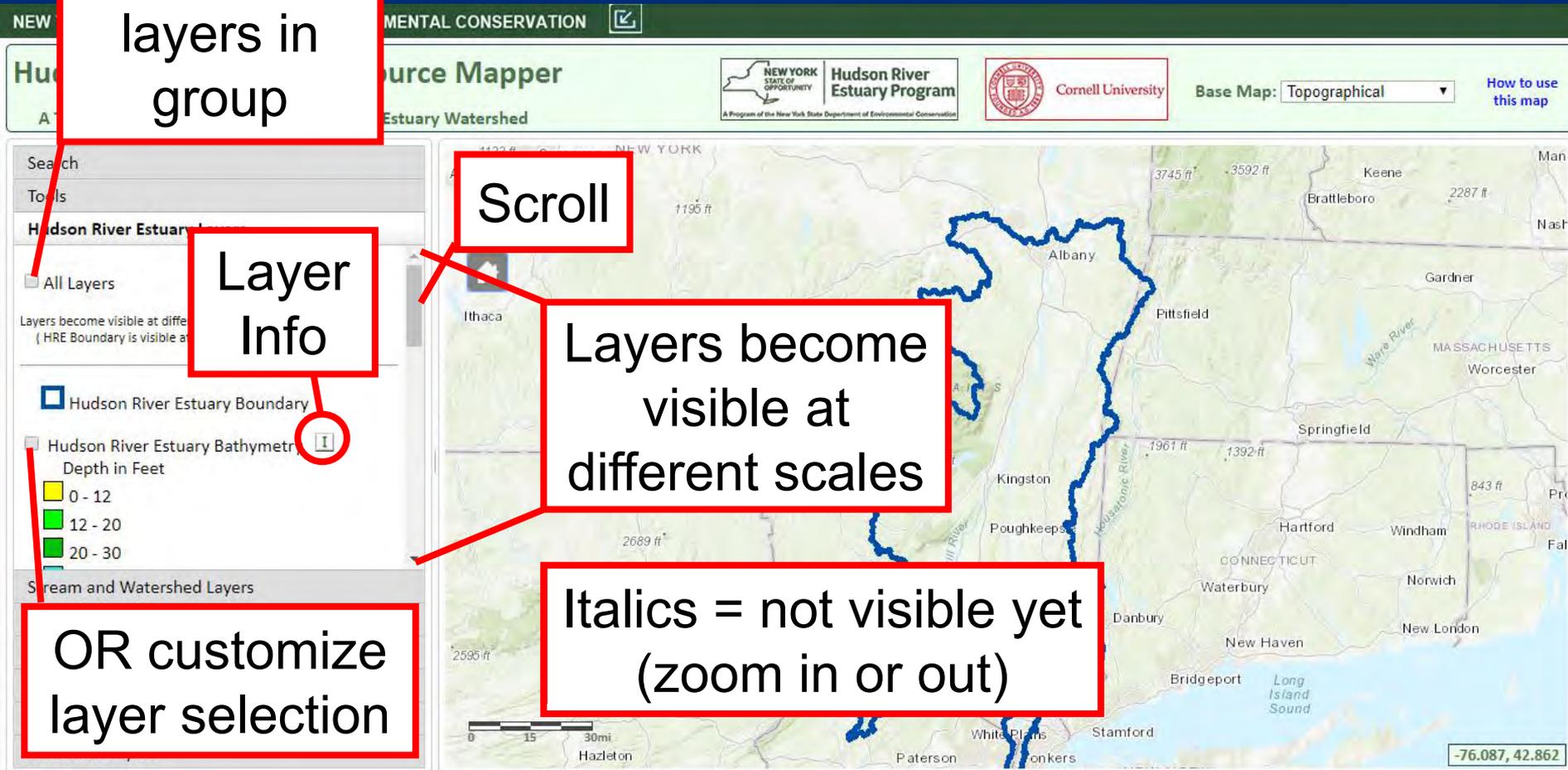
Layer Info

Scroll

Layers become visible at different scales

Italics = not visible yet
(zoom in or out)

OR customize layer selection



Bathymetry – water bottom elevation

The elevation of the water bottom in the Hudson River Estuary constrains the use of nature of the water limits light penetration to a few meters. Animals that depend on limited by water depth – deep draft vessels are confined to the navigation channel. C

Water depth is provided in feet below sea level. Tides in the estuary cause water depth the North American Vertical Datum 1988 (NVD88). This is the same vertical reference navigational charts. Water depths shown on this Mapper will appear ~2.5 feet greater

Publication Year: 2008

Publisher: Hudson River National Estuarine Research Reserve and NYS Department of

For more information: [NY Department of Environmental Conservation](#)

Link to GIS Data Download: [GIS.NY.GOV](#)

Hudson River Estuary and Tidal Tributary Boundary

Approximate boundary of the Hudson River Estuary shoreline based on interpretation of 1995-1997 air photos.

Publication Year: 2002

Publisher: Hudson River National Estuarine Research Reserve and NYS Department of Environmental Conservation

Link to GIS Data Download: [CUGIR](#)

NYSDOS Significant Coastal Fish and Wildlife Habitat Areas

DEC has identified and evaluated coastal habitats throughout the state's coastal regions, providing recommendations to the New York State Department of State (NYSDOS) so that the most important or "significant" habitats may be designated for protection in accordance with the Waterfront Revitalization and Coastal Resources Act. The Significant Coastal Fish and Wildlife Habitats (SCFWFs) are useful for planning at the local level because they describe the highest quality habitats on the Hudson, outlining fish and wildlife values and activities that may have large impacts on the habitats. State and federal law requires that some projects may be reviewed for consistency with coastal policies on significant fish and wildlife habitat. Contact the NYSDOS Office of Planning &

Layer description
Publication year
Publisher
Links
GIS data download

reach the estuary floor. The turbid their life cycle. Vessel navigation is influenced by water depth.

In this Mapper is water depth relative to the vertical datum used in NOAA

Data Layers: Estuary

- tidal wetlands
- submerged aquatic vegetation
- migratory fish runs
- significant coastal fish and wildlife habitats
- bathymetry



Hudson River Tidal Wetlands and SAV

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION



Hudson Valley Natural Resource Mapper

A Tool for Communities in the Hudson River Estuary Watershed



Base Map: Topographical

[How to use this map](#)

Search

Tools

Hudson River Estuary Layers

- Tidal Wetlands I
- Lower Intertidal Mix
 - Open Water
 - Phragmites australis (Common Reed)
 - Salt Meadow
 - Scrub/Shrub
 - Spartina alterniflora (Smooth Cordgrass)
 - Submerged Aquatic Vegetation
 - Trapa natans (Water Chestnut)
 - Typha angustifolia (Narrowleaf Cattail)
 - Unvegetated Flats

Stream and Watershed Layers

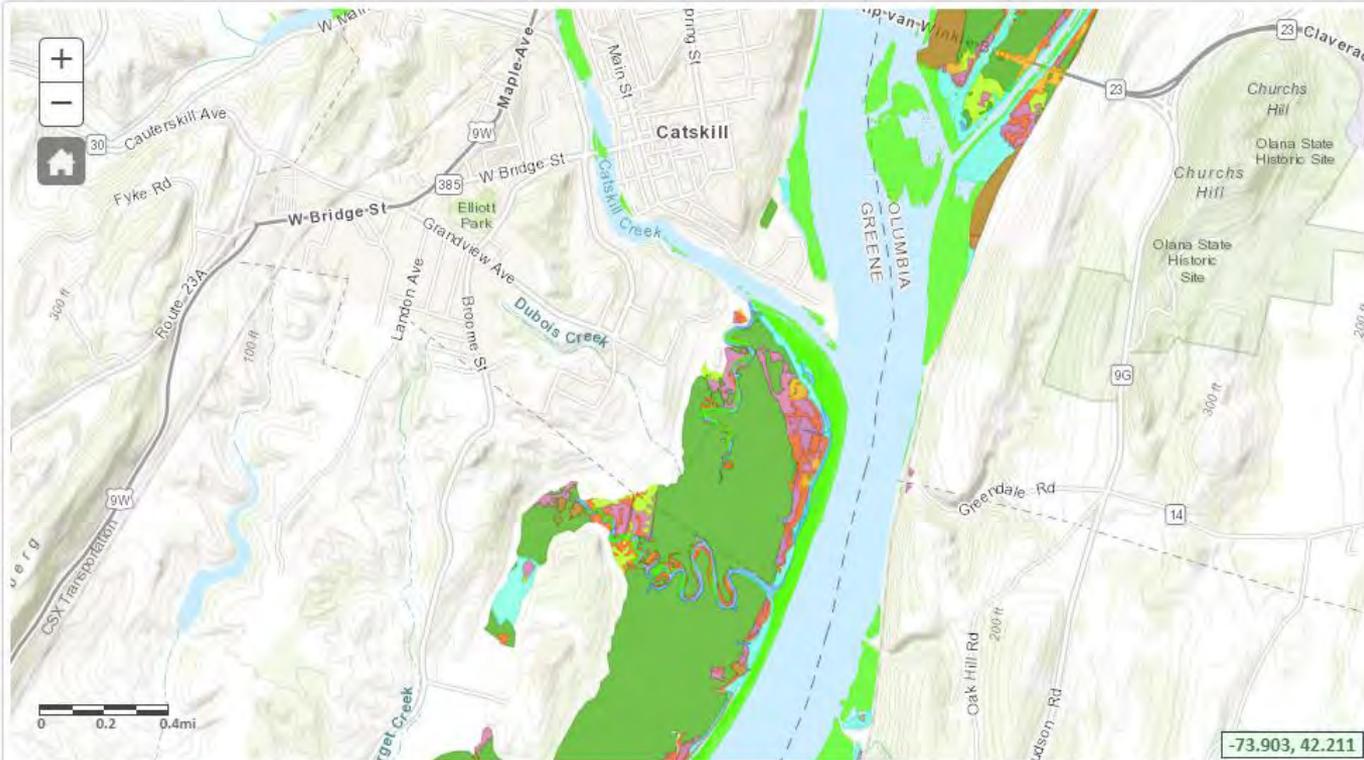
Wetland Layers

Forest Layers

Biodiversity Layers

Scenic and Recreation Layers

Reference Layers



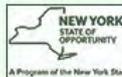
Significant Coastal Fish and Wildlife Habitats

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION



Hudson Valley Natural Resource Mapper

A Tool for Communities in the Hudson River Estuary Watershed



Hudson River Estuary Program

A Program of the New York State Department of Environmental Conservation



Base Map: Topographical

[How to use this map](#)

Search

Tools

Hudson River Estuary Layers

- Trapa natans* (Water Chestnut)
- Typha angustifolia* (Narrowleaf Cattail)
- Unvegetated Flats
- Upland
- Upper Intertidal Mix
- Wooded Swamp

Documented Submerged Aquatic Vegetation [I](#)

NYSDOS Significant Coastal Fish and Wildlife Habitats [I](#)

Stream and Watershed Layers

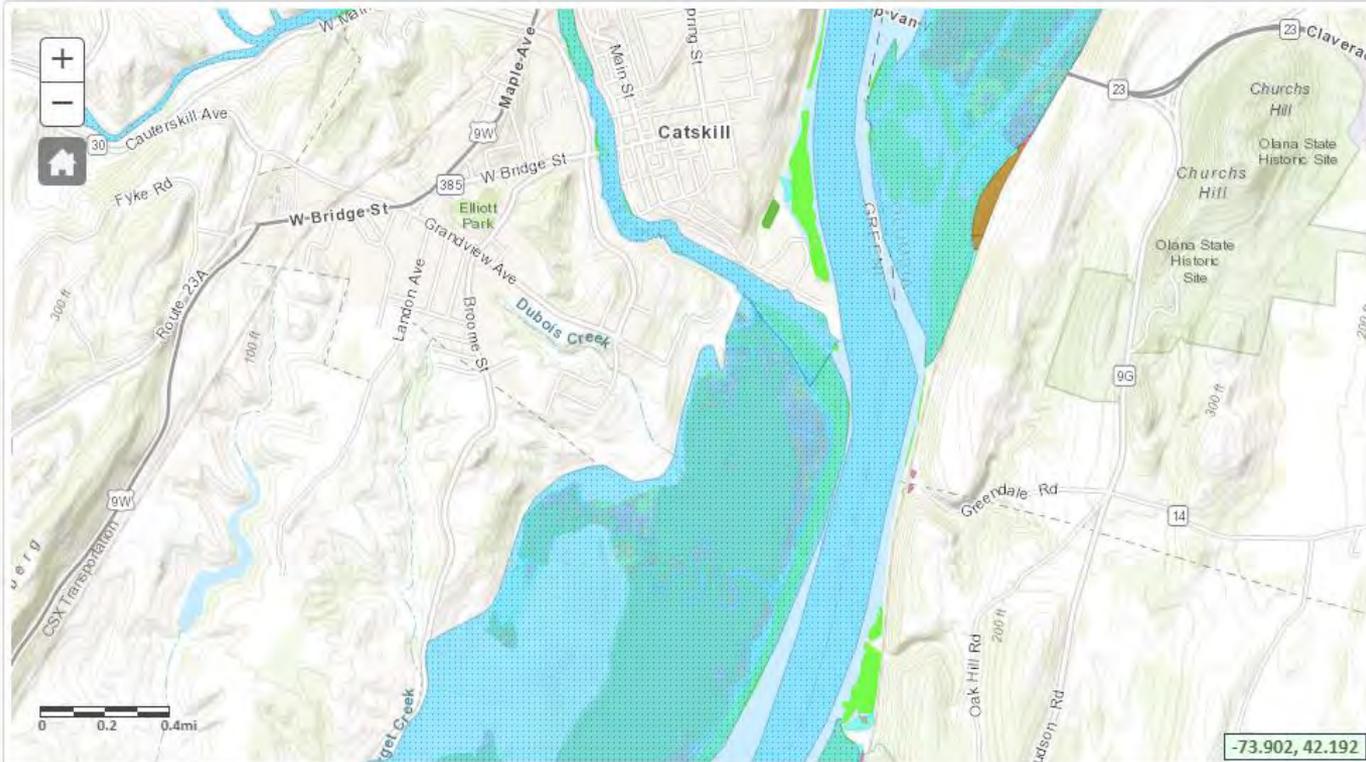
Wetland Layers

Forest Layers

Biodiversity Layers

Scenic and Recreation Layers

Reference Layers



Querying Data Layers

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Hudson River
Estuary Program

Cornell University

Base M

Hudson Valley Natural Resource Mapper

A Tool for Communities in the Hudson River Estuary Watershed

Search

Tools

Hudson River Estuary Layers

- Trapa natans (Water Chestnut)
- Typha angustifolia (Narrowleaf Cattail)
- Unvegetated Flats
- Upland
- Upper Intertidal Mix
- Wooded Swamp

 Documented Submerged Aquatic Vegetation [I](#) NYSDOS Significant Coastal Fish and Wildlife Habitats [I](#)

Stream and Watershed Layers

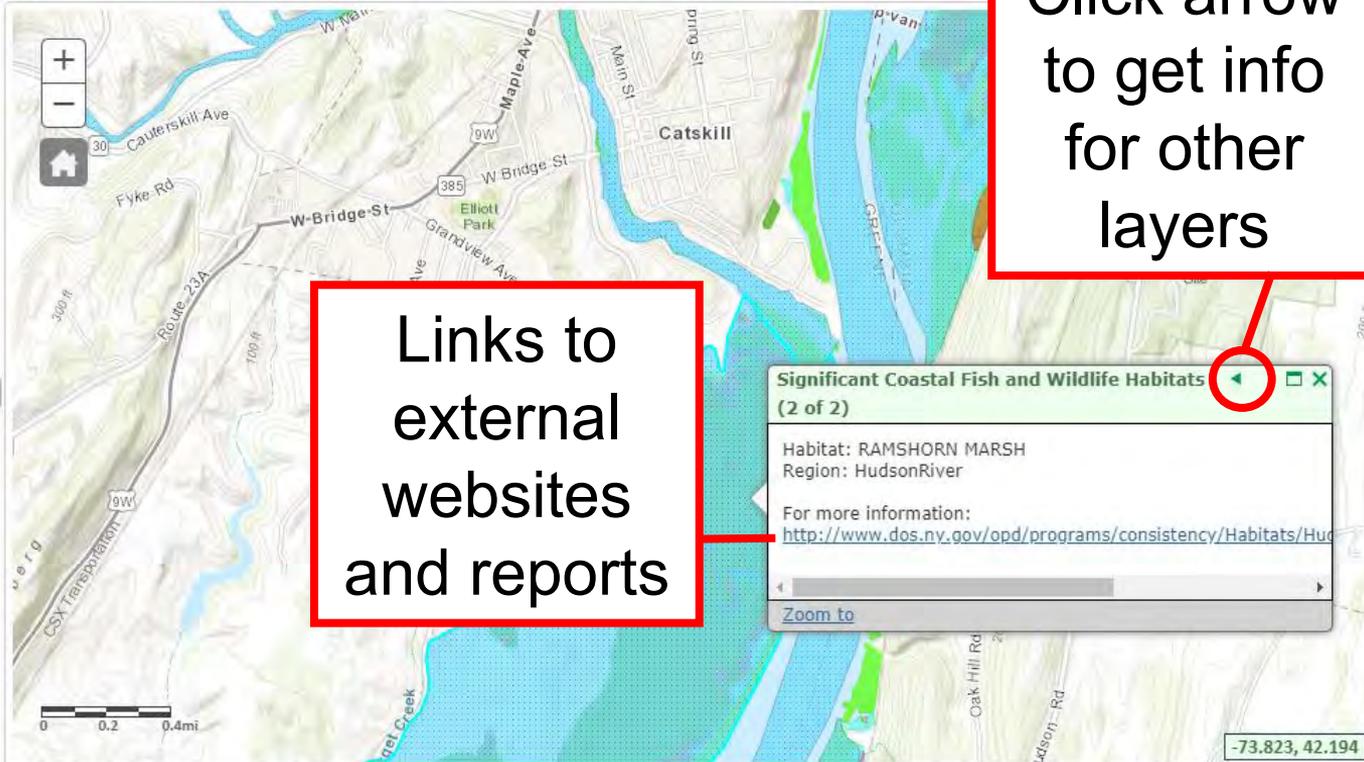
Wetland Layers

Forest Layers

Biodiversity Layers

Scenic and Recreation Layers

Reference Layers



Querying Data Layers

Link to online
Coastal Fish
and Wildlife
Habitat
Descriptions

COASTAL FISH AND WILDLIFE RATING FORM

Name of area: **Ramshorn Marsh**
 Designated: **November 15, 1987**
 Revised: **August 15, 2012**
 County: **Greene**
 Town(s): **Catskill**
 7.5' Quadrangles: **Cementon, NY; Hudson South, NY**

<u>Assessment Criteria</u>	<u>Score</u>
Ecosystem Rarity (ER) – the uniqueness of the plant and animal community in the area and the physical, structural and chemical features supporting this community.	
ER Assessment – One of the largest tidal swamps in the Hudson Valley; a rare ecosystem type in New York State.	64
Species Vulnerability (SV) – the degree of vulnerability throughout its range in New York State of a species residing in the ecosystem or utilizing the ecosystem for its survival.	
SV Assessment – Bald eagle (T); wood turtle (SC) Additive Division: 25+ 16/2= 33	33
Human Use (HU) – the conduct of significant, demonstrable commercial, recreational, or educational wildlife-related human use, either consumptive or non-consumptive, in the area or directly dependent upon the area.	
HU Assessment – Recreational uses (birdwatching, waterfowl hunting and bass fishing).	9
Population Level (PL) – the concentration of a species in the area during its normal, recurring period of occurrence, regardless of the length of that period of occurrence.	
PL Assessment – Concentrations of various fish and wildlife species in this habitat are unusual in the Hudson Valley ecological region.	9

Replaceability (R) – ability to replace the area, either on or off site, with an equivalent replacement for the same fish and wildlife and uses of those same fish and wildlife, for

Migratory Fish Runs

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION



Hudson Valley Natural Resource Mapper

A Tool for Communities in the Hudson River Estuary Watershed



Hudson River
Estuary Program

A Program of the New York State Department of Environmental Conservation



Cornell University

Base Map: Topographical

How to use
this map

Search

Tools

Hudson River Estuary Layers

Layers become visible at different scales
(HRE Boundary is visible at all scales)

Hudson River Estuary Boundary

Hudson River Estuary Bathymetry

Depth in Feet

0 - 12

12 - 20

20 - 30

30 - 50

50 - 80

Stream and Watershed Layers

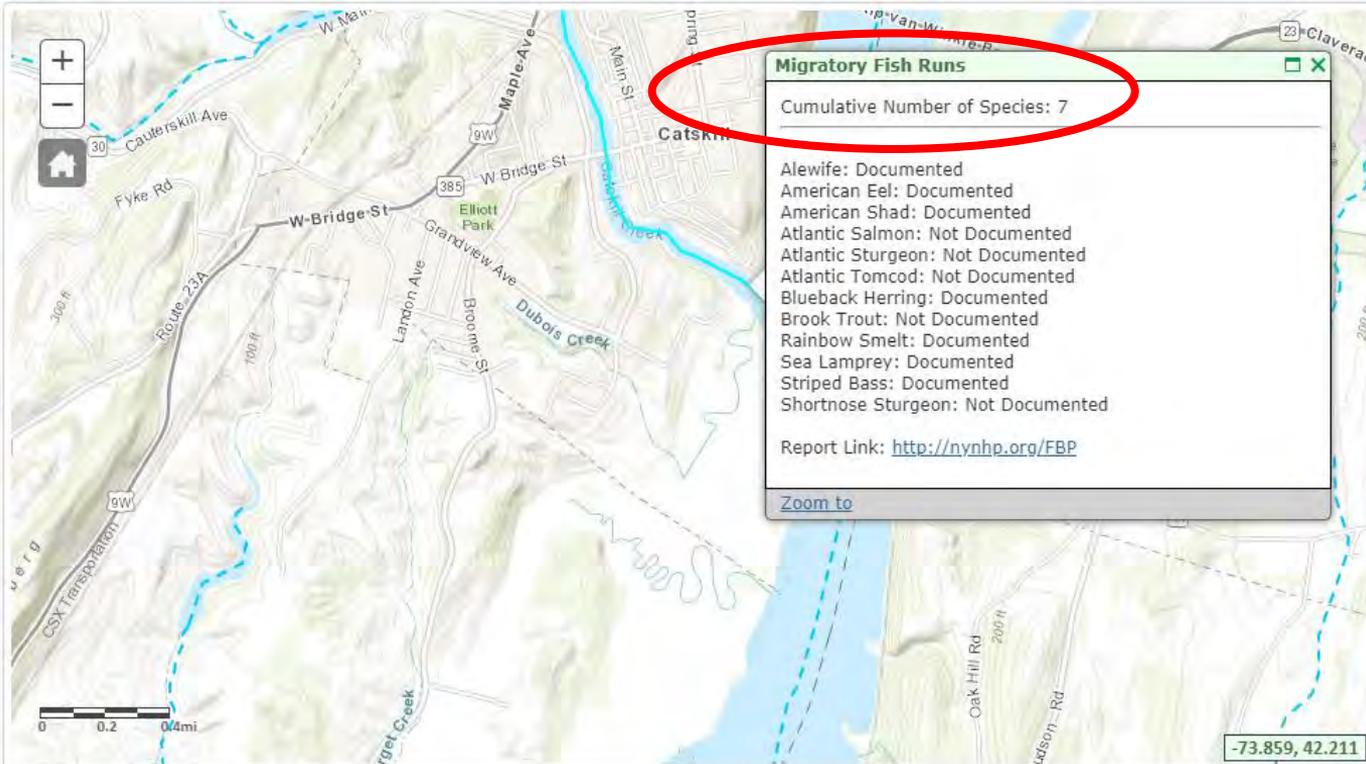
Wetland Layers

Forest Layers

Biodiversity Layers

Scenic and Recreation Layers

Reference Layers



Migratory Fish Runs

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION



Hudson Valley Natural Resource Mapper

A Tool for Communities in the Hudson River Estuary Watershed



Hudson River
Estuary Program

A Program of the New York State Department of Environmental Conservation



Cornell University

Base Map: Topographical

[How to use
this map](#)

Search

Tools

Hudson River Estuary Layers

120 - 180

Migratory Fish Runs **I**

Hudson River Estuary and Tidal River
Tributary Boundary **I**

Tidal Wetlands **I**

Lower Intertidal Mix

Open Water

Phragmites australis (Common Reed)

Salt Meadow

Scrub/Shrub

Stream and Watershed Layers

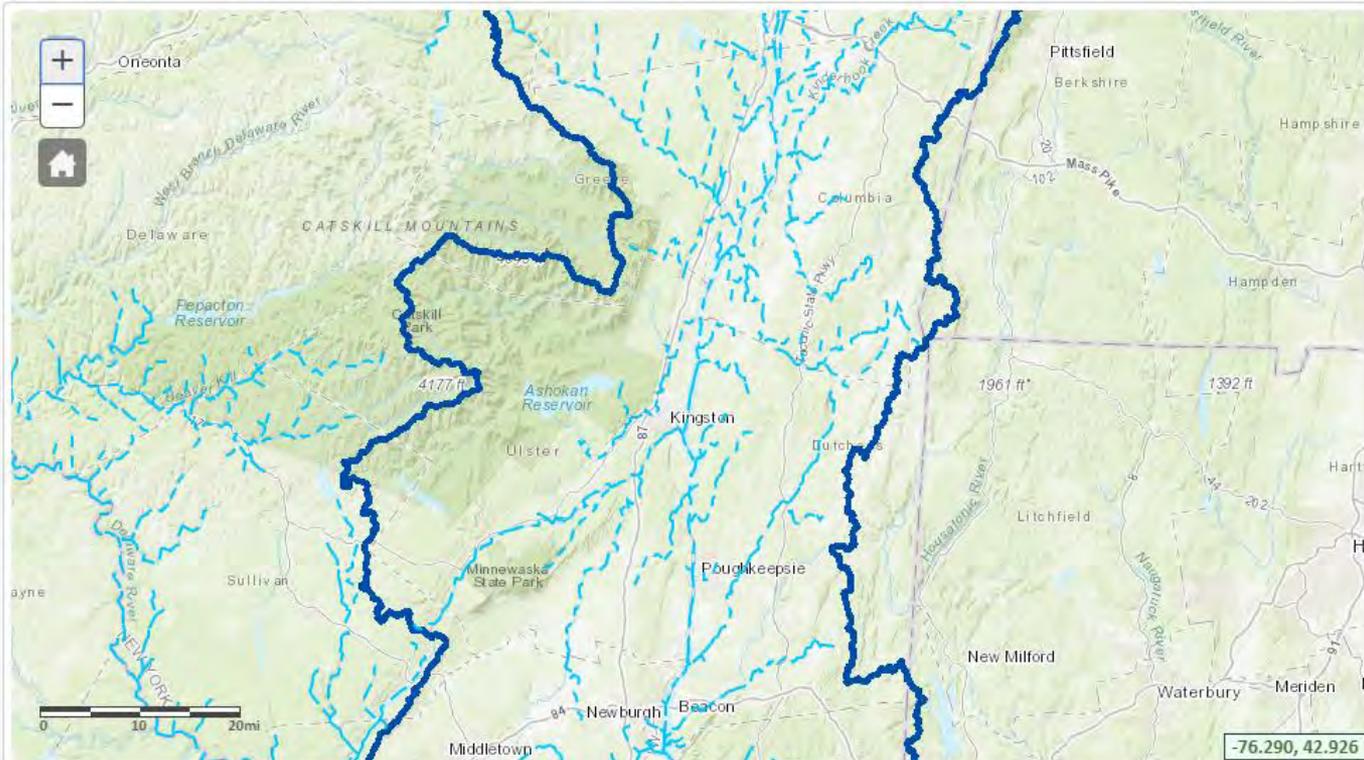
Wetland Layers

Forest Layers

Biodiversity Layers

Scenic and Recreation Layers

Reference Layers



Data Layers: Streams and Watersheds

- watershed boundaries
- biomonitoring data
- DEC stream classifications
- Priority Waterbody List
- dams
- priority road-stream crossings
- riparian buffer areas
- FEMA flood hazard zones
- Stream Condition Index



Photo by Ingrid Haeckel

Watersheds

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION



Hudson Valley Natural Resource Mapper

A Tool for Communities in the Hudson River Estuary Watershed



Base Map: Topographical

[How to use this map](#)

Search

Tools

Hudson River Estuary Layers

Stream and Watershed Layers

All Layers

Layers become visible at different scales

Watersheds (HUC8) [i](#)

Watersheds (HUC10) [i](#)

Watersheds (HUC12) [i](#)

Riparian Buffer Areas [i](#)

DEC Designated Points [i](#)

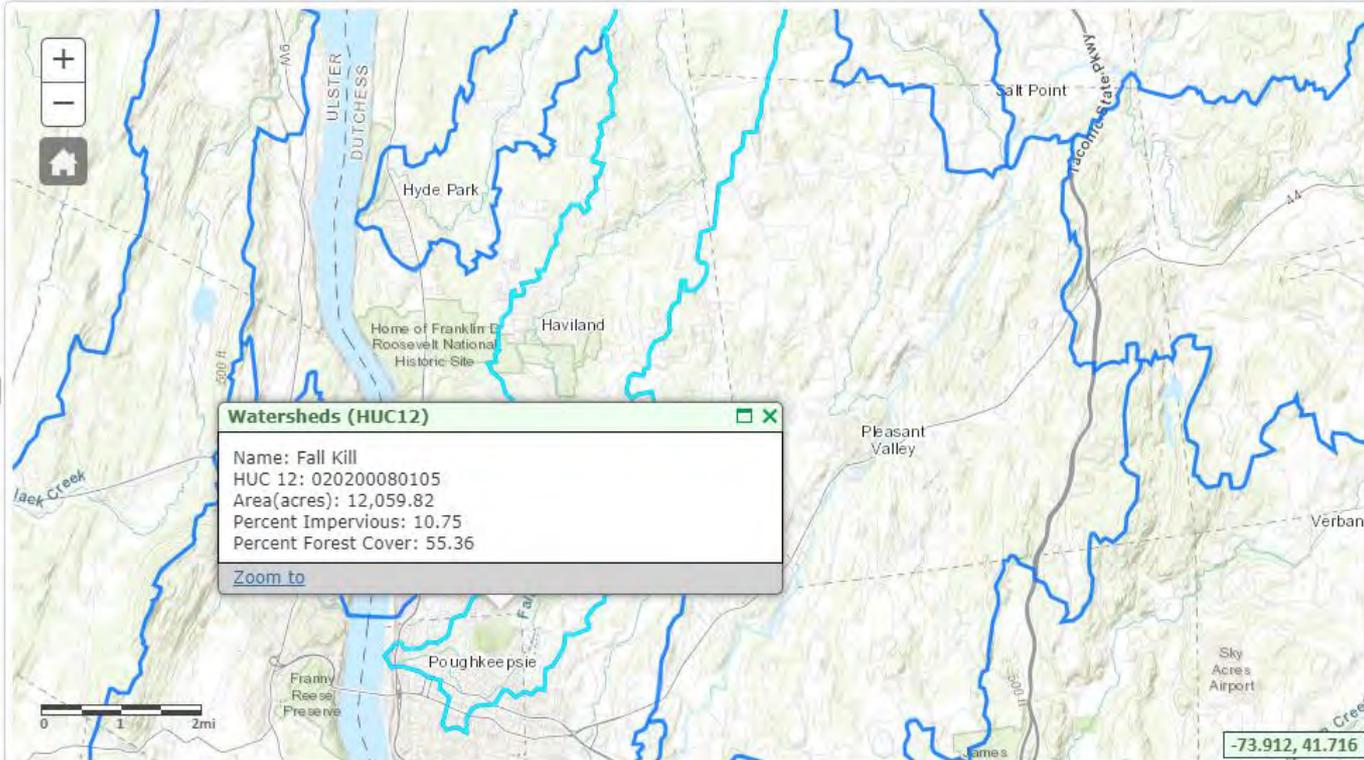
Wetland Layers

Forest Layers

Biodiversity Layers

Scenic and Recreation Layers

Reference Layers



Stream Biomonitoring Data

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION



Hudson Valley Natural Resource Mapper

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Hudson River
Estuary Program

A Program of the New York State Department of Environmental Conservation



Cornell University

Base Map: Topographical

How to use
this map

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Hudson River Estuary Layers

Stream and Watershed Layers

DEC Biomonitoring Points i

● Severe Impact

● Moderate Impact

● Slight Impact

● Non-impacted

◆ DEC Dam Inventory i

★ Priority Road-Stream Crossings i

Priority Waterbody List - Streams i

— Impaired

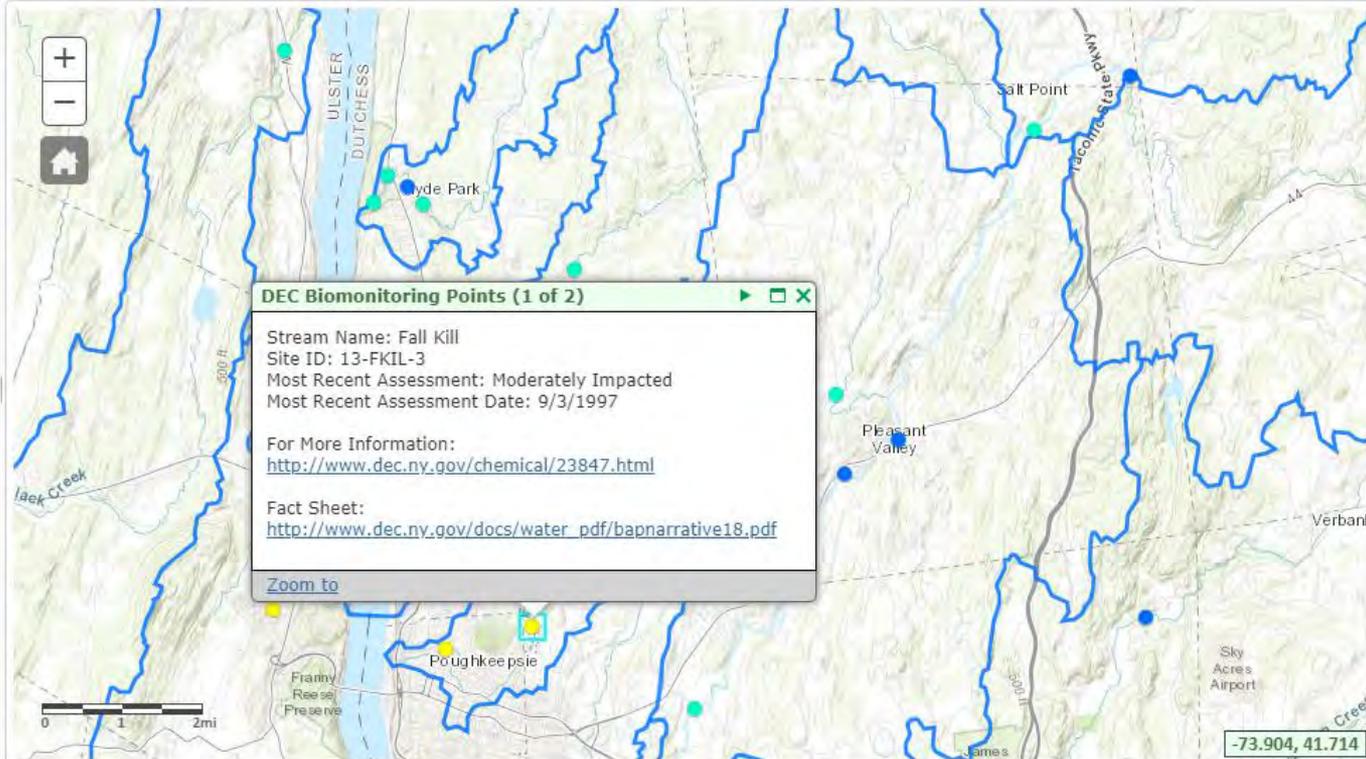
Wetland Layers

Forest Layers

Biodiversity Layers

Scenic and Recreation Layers

Reference Layers



DEC Stream Classifications

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION



Hudson Valley Natural Resource Mapper

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Base Map: Topographical

[How to use this map](#)

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Tools

Hudson River Estuary Layers

Stream and Watershed Layers

Impacts

- Minor Impacts
- Threatened
- Needs Verification
- No Known Impact
- UnAssessed

DEC Stream Classification and Trout Status

- Other Stream
- Known Trout Stream

FEMA - Flood Hazard Zones

Wetland Layers

Forest Layers

Biodiversity Layers

Scenic and Recreation Layers

Reference Layers



Priority Waterbody List

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION



Hudson Valley Natural Resource Mapper

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Hudson River
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Base Map: Topographical

How to use
this map

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Hudson River Estuary Layers

Stream and Watershed Layers

Priority Waterbody List - Streams 1

Impaired

Minor Impacts

Threatened

Needs Verification

No Known Impact

UnAssessed

Priority Waterbody List - Lakes and

Reservoirs 1

Impaired

Minor Impacts

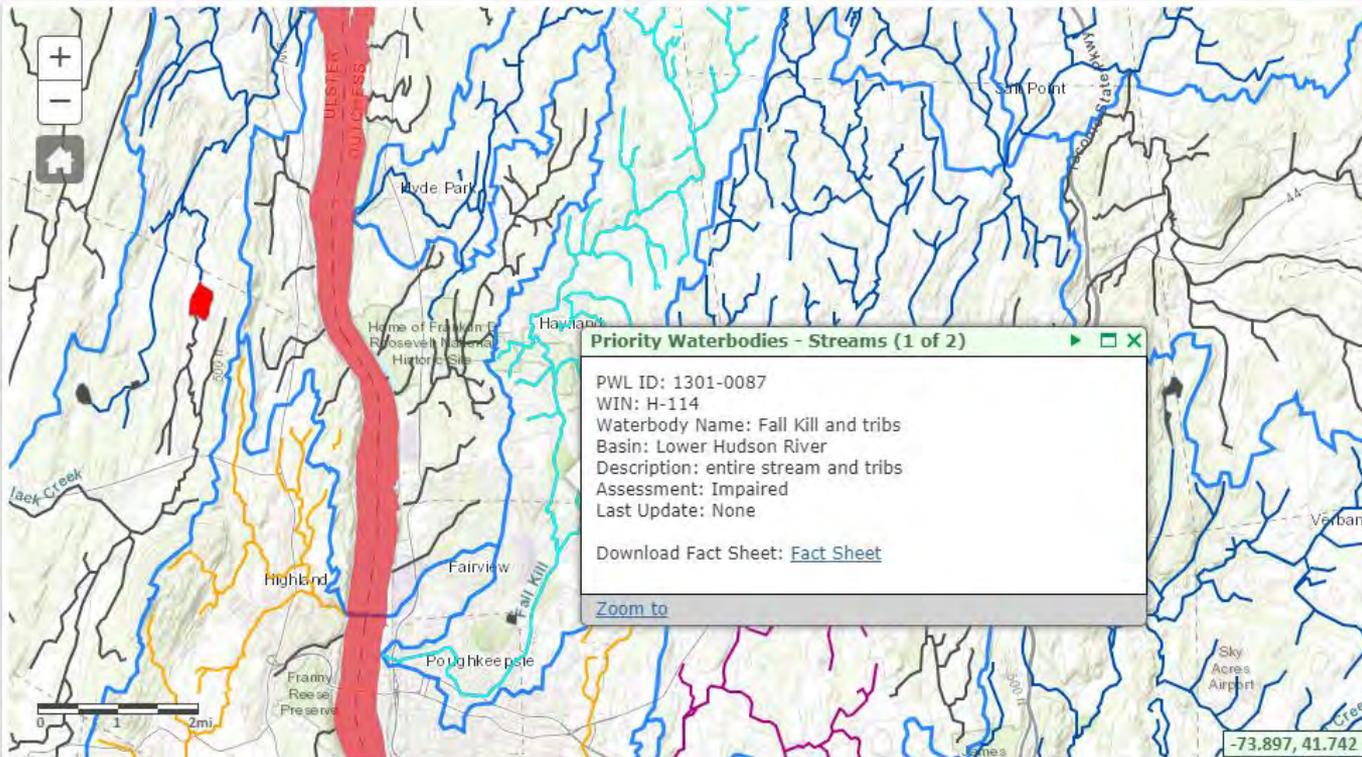
Wetland Layers

Forest Layers

Biodiversity Layers

Scenic and Recreation Layers

Reference Layers



Priority Waterbody List

Link to online
Priority
Waterbody
List segment
descriptions

Fall Kill and tribs (1301-0087)

Impaired Seg

Waterbody Location Information

Revised: 02/19/2008

Water Index No:	H-114	Drain Basin:	Lower Hudson River
Hydro Unit Code:	02020008/010	Str Class:	C
Waterbody Type:	River	Reg/County:	3/Dutchess Co. (14)
Waterbody Size:	41.3 Miles	Quad Map:	POUGHKEEPSIE (O-25-1)
Seg Description:	entire stream and tribs		

Water Quality Problem/Issue Information (CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
AQUATIC LIFE	Impaired	Known
RECREATION	Impaired	Known
Aesthetics	Stressed	Known

Type of Pollutant(s)

Known: Aesthetics (debris/trash), Pathogens
 Suspected: NUTRIENTS (phosphorus), D.O./Oxygen Demand, Silt/Sediment, Unknown Toxicity
 Possible: ---

Source(s) of Pollutant(s)

Known: URBAN/STORM RUNOFF
 Suspected: MUNICIPAL, Industrial
 Possible: Other Sanitary Disch

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))

Verification Status: 4 (Source Identified, Strategy Needed)

Priority Stream Barriers

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION



Hudson Valley Natural Resource Mapper

A Tool for Communities in the Hudson River Estuary Watershed



Hudson River
Estuary Program



Cornell University

Base Map: Topographical

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Stream and Watershed Layers

DEC Dam Inventory

Priority Road-Stream Crossings

Priority Waterbody List - Streams

- Impaired
- Minor Impacts
- Threatened
- Needs Verification
- No Known Impact
- UnAssessed

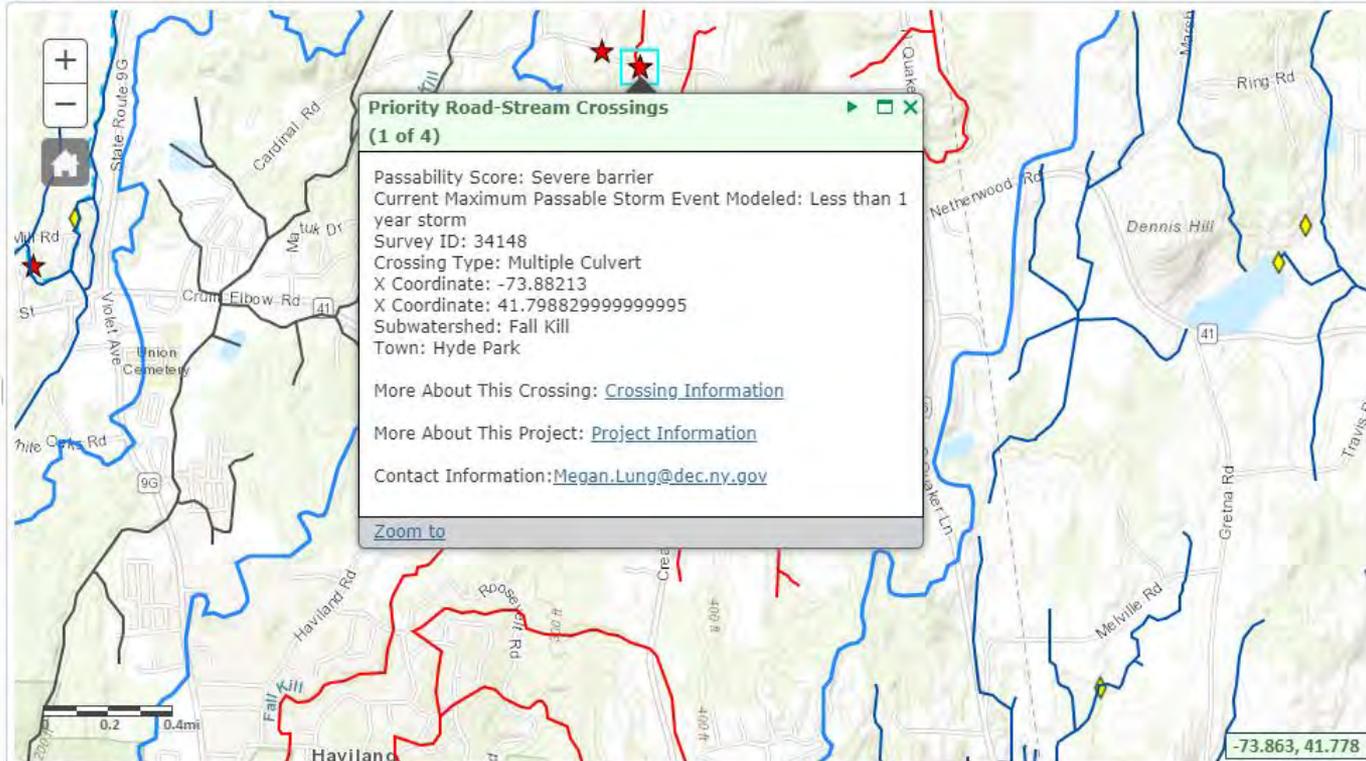
Wetland Layers

Forest Layers

Biodiversity Layers

Scenic and Recreation Layers

Reference Layers



Priority Stream Barriers



North Atlantic Aquatic Connectivity Collaborative

[Search Crossings](#) [Login](#)

Data Set: **NAACC** (after 6/1/2015)

Survey Id: **34148** Crossing Code: **xy4179887873882198**

AOP Course Screen: **No AOP** NAACC Aquatic Passability Score: **0.16**

Data checked and accurate by **Jen Rubbo** on **08-10-2016**



[xy4179887873882198\(downstream\)07-14-2016.jpg](#)



[xy4179887873882198\(inlet\)07-14-2016.jpg](#)



[xy4179887873882198\(outlet\)07-14-2016.jpg](#)



Riparian Areas

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION



Hudson Valley Natural Resource Mapper

A Tool for Communities in the Hudson River Estuary Watershed



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Riparian Buffer Areas i

DEC Biomonitoring Points i

● Severe Impact

● Moderate Impact

● Slight Impact

● Non-impacted

◆ DEC Dam Inventory i

★ Priority Road-Stream Crossings i

■ Priority Watershed List - Streams i

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Forest Layers

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Reference Layers



FEMA Flood Hazard Areas

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Base Map: Topographical

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Hudson River Estuary Layers

Stream and Watershed Layers

- Other Stream
- Known Trout Stream
- FEMA - Flood Hazard Zones 
- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee

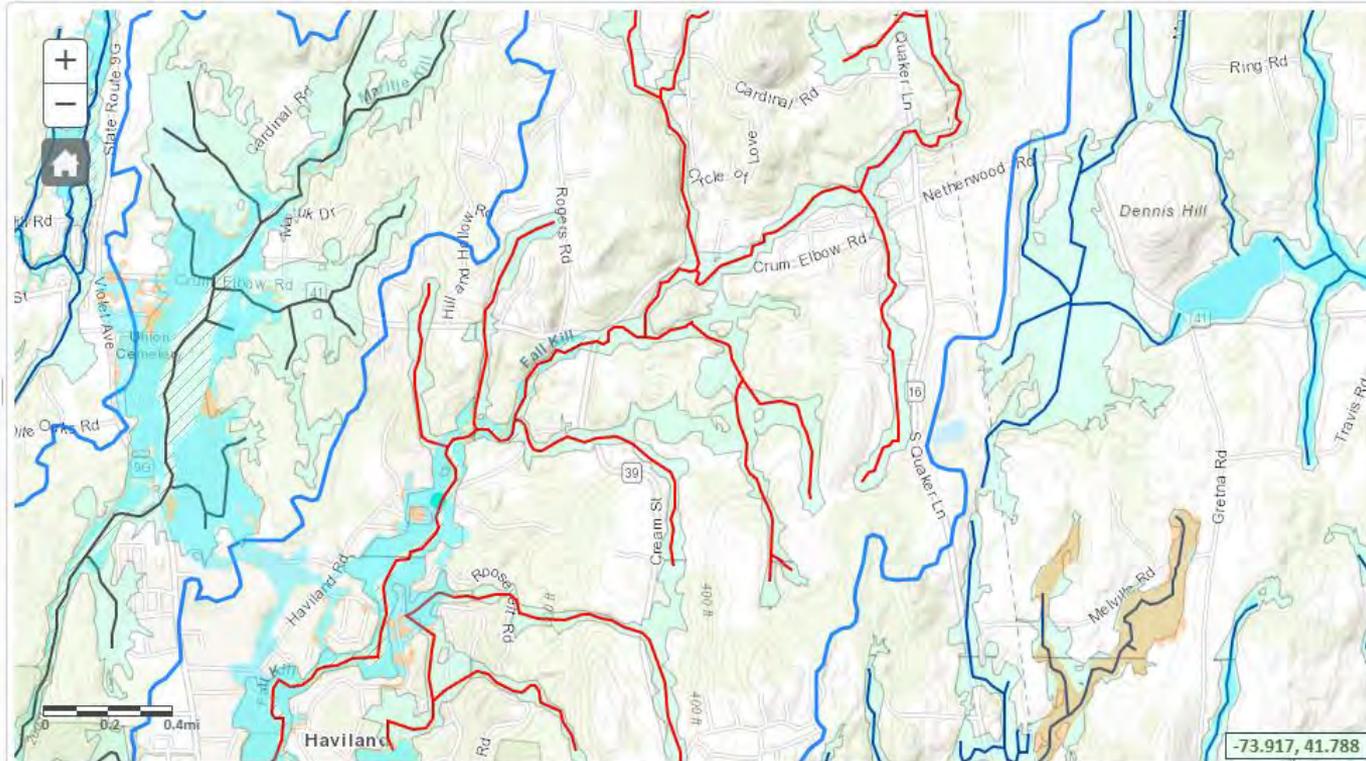
Wetland Layers

Forest Layers

Biodiversity Layers

Scenic and Recreation Layers

Reference Layers



NEW! Stream Condition Index

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION



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Base Map: Topographical

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Hudson River Estuary Layers

Stream and Watershed Layers

DEC Stream Classification and Trout Status

Stream Condition Index

Highest Condition

High Condition

Average Condition

Low Condition

FEMA - Flood Hazard Zones

1% Annual Chance Flood Hazard

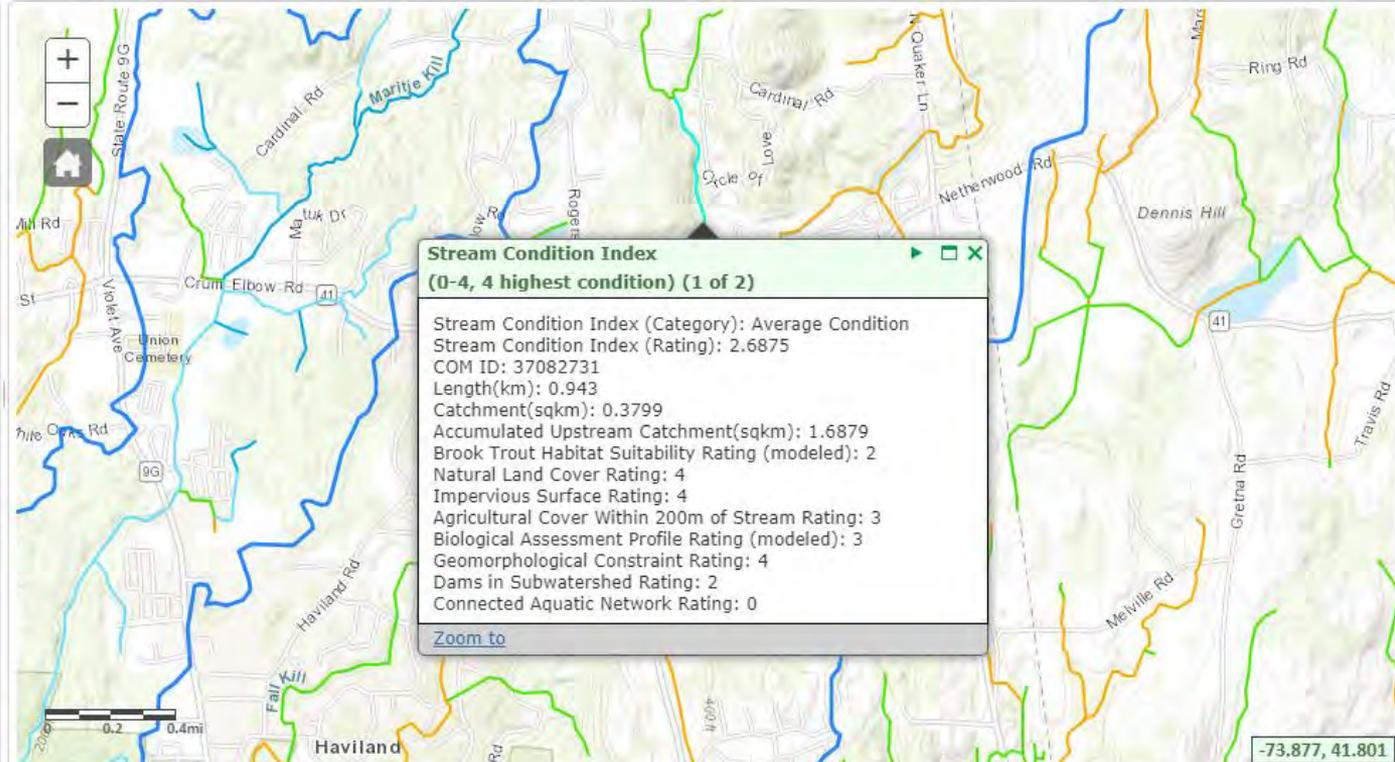
Wetland Layers

Forest Layers

Biodiversity Layers

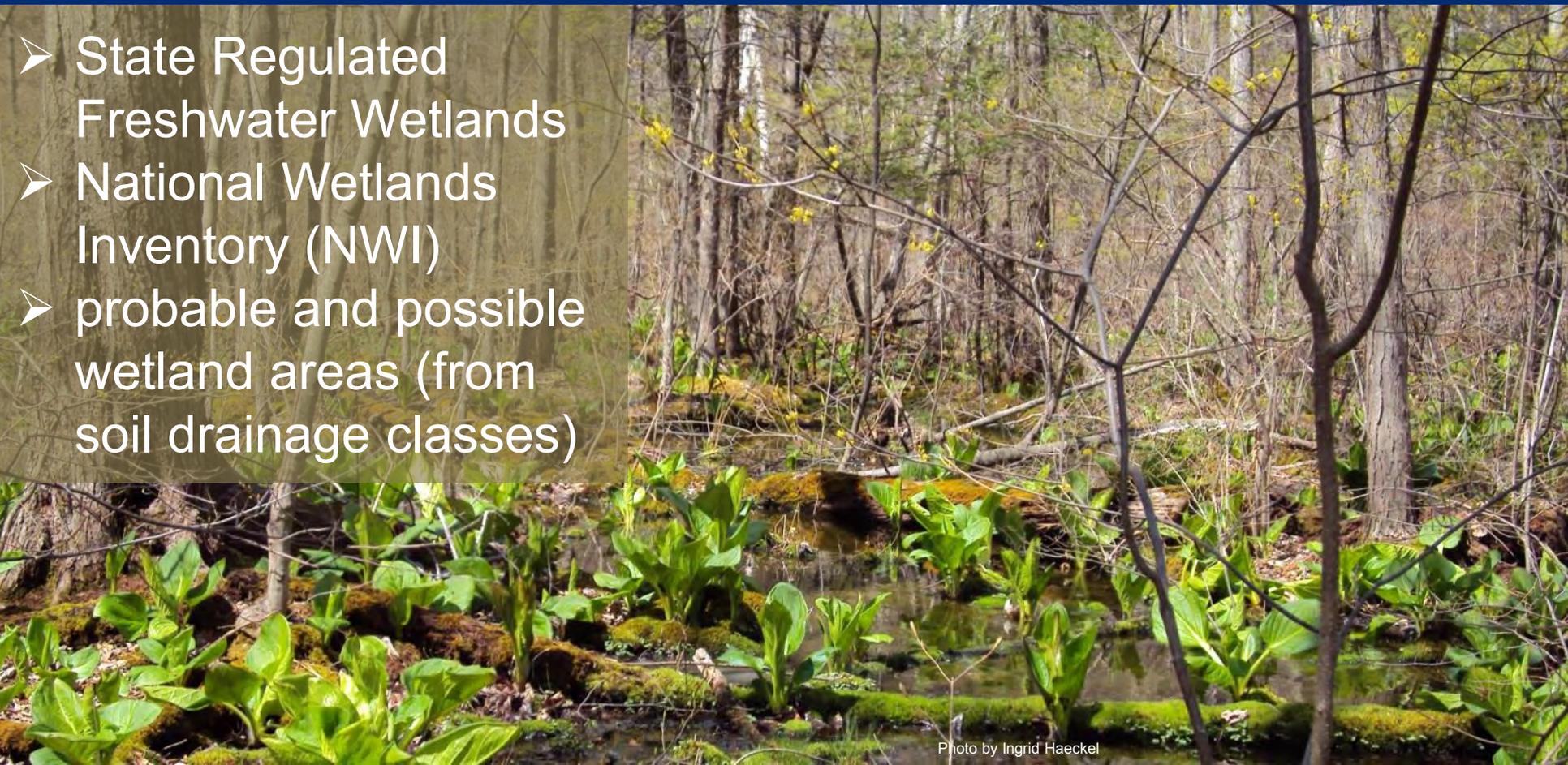
Scenic and Recreation Layers

Reference Layers



Data Layers: Wetlands

- State Regulated Freshwater Wetlands
- National Wetlands Inventory (NWI)
- probable and possible wetland areas (from soil drainage classes)



State Regulated Freshwater Wetlands

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION



Hudson Valley Natural Resource Mapper

A Tool for Communities in the Hudson River Estuary Watershed



Base Map: Topographical

[How to use this map](#)

Search

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Hudson River Estuary Layers

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Wetland Layers

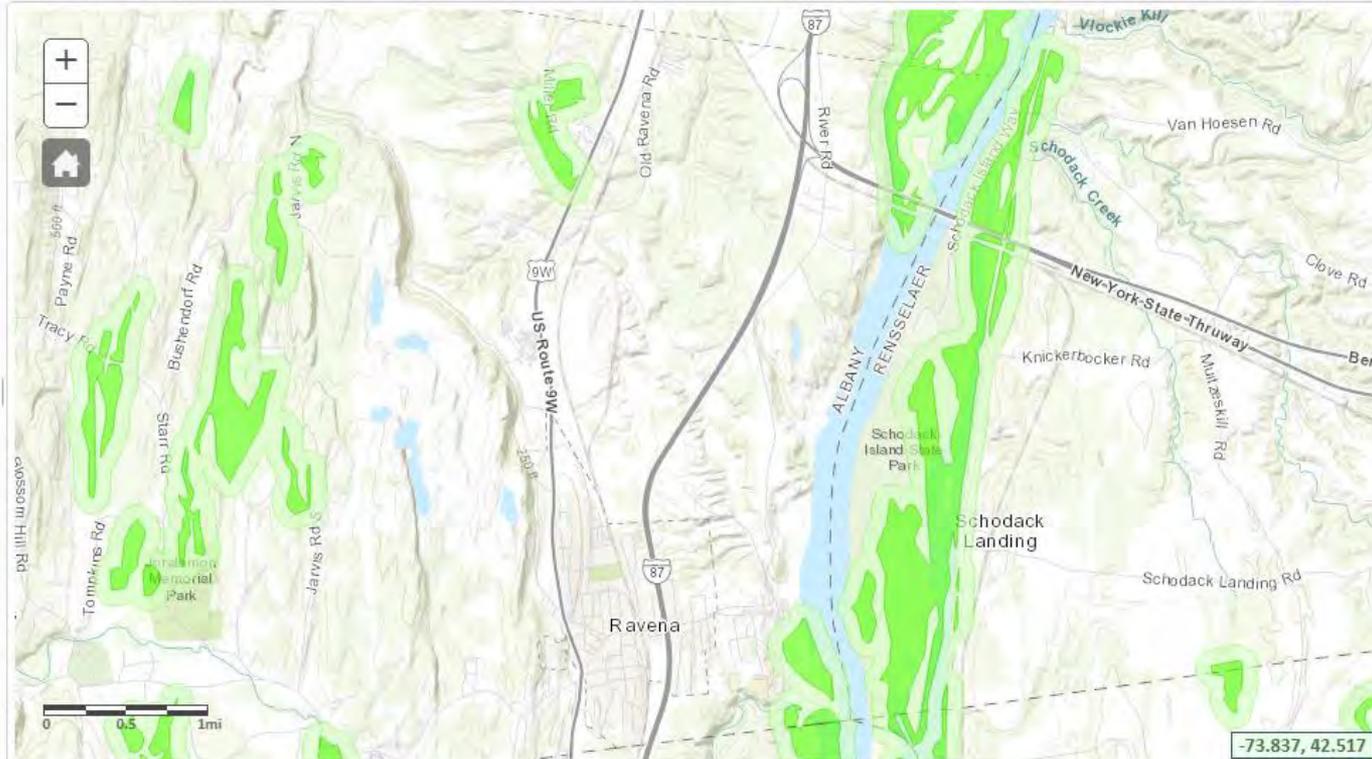
- State Regulated Freshwater Wetlands
- State Regulated Wetland Checkzone
- Wetland Soils
- Probable Wetland Areas
- Possible Wetland Areas
- National Wetlands Inventory
 - Estuarine and Marine Deepwater
 - Estuarine and Marine Wetland
 - Freshwater Emergent Wetland

Forest Layers

Biodiversity Layers

Scenic and Recreation Layers

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National Wetlands Inventory

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION



Hudson Valley Natural Resource Mapper

A Tool for Communities in the Hudson River Estuary Watershed



Base Map: Topographical

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Layers become visible at different scales

Wetland Soils [i](#)

Probable Wetland Areas

Possible Wetland Areas

National Wetlands Inventory [i](#)

Estuarine and Marine Deepwater

Estuarine and Marine Wetland

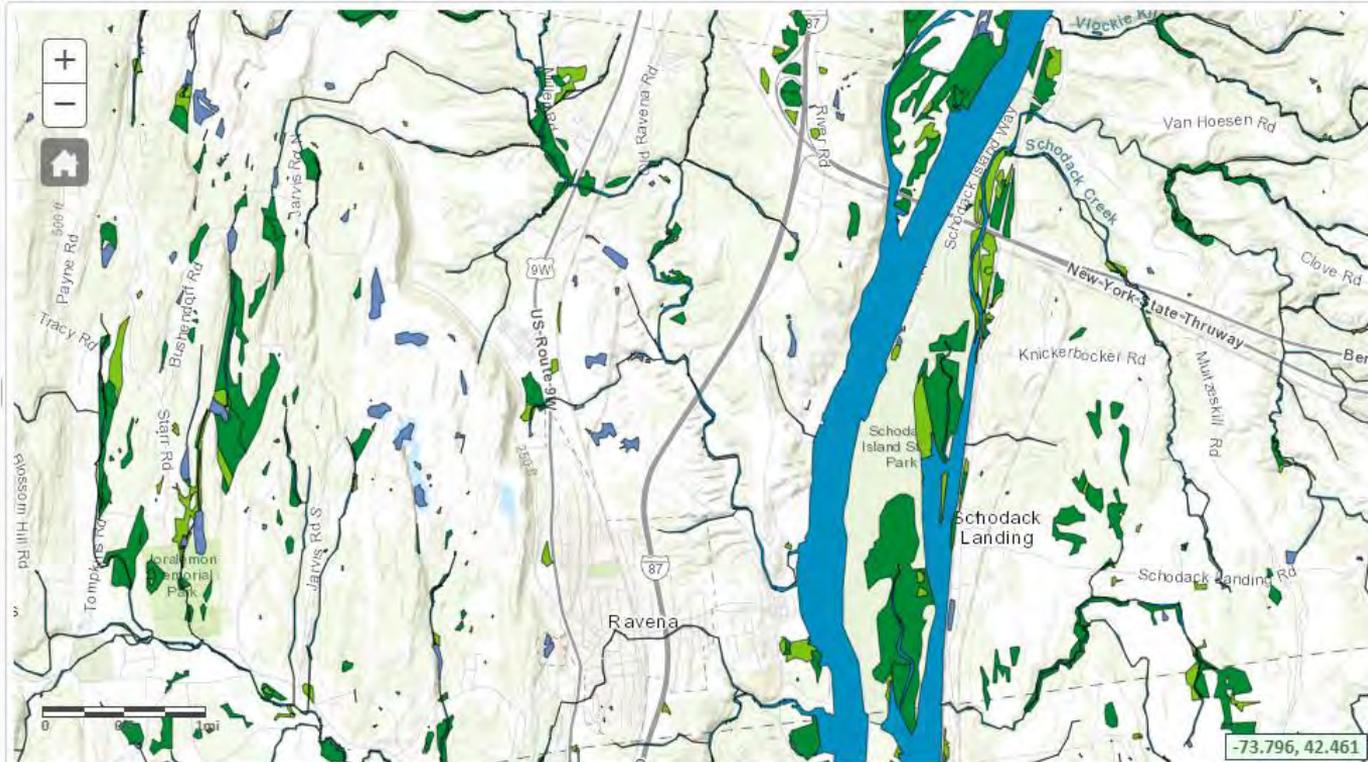
Freshwater Emergent Wetland

Forest Layers

Biodiversity Layers

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Reference Layers



Wetland Soils

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION



Hudson Valley Natural Resource Mapper

A Tool for Communities in the Hudson River Estuary Watershed



Hudson River
Estuary Program

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Cornell University

Base Map: Topographical

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Layers become visible at different scales

Wetland Soils 1

Probable Wetland Areas

Possible Wetland Areas

National Wetlands Inventory 1

Estuarine and Marine Deepwater

Estuarine and Marine Wetland

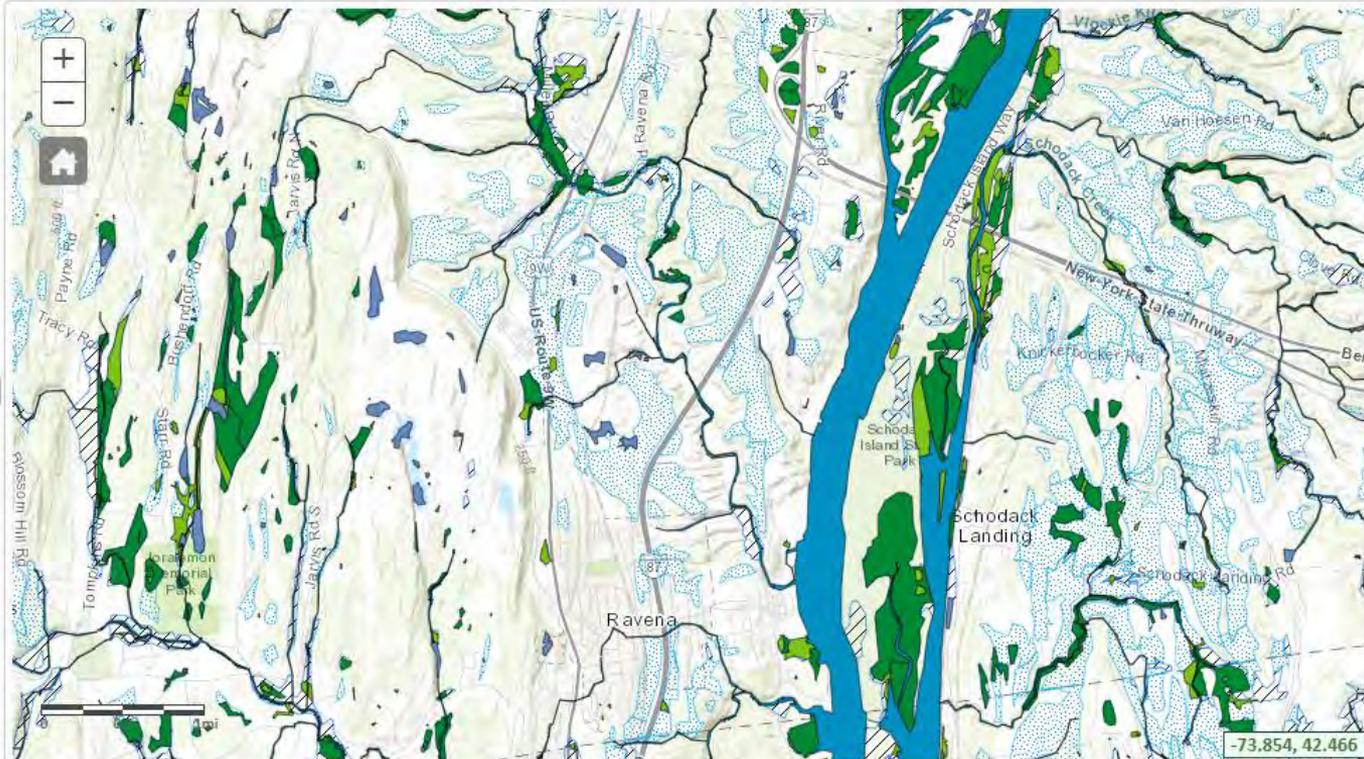
Freshwater Emergent Wetland

Forest Layers

Biodiversity Layers

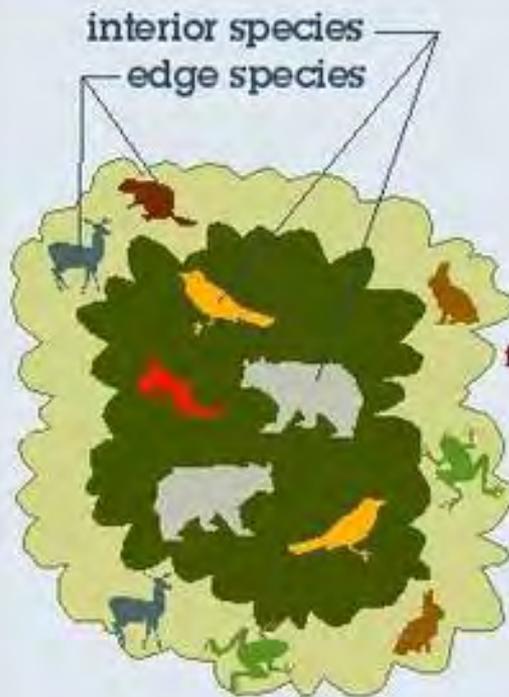
Scenic and Recreation Layers

Reference Layers

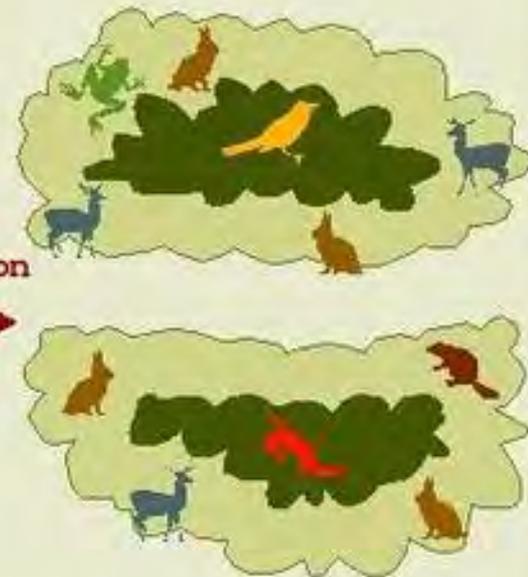


Data Layers: Forests

- large forests
- matrix forests
- linkage zones

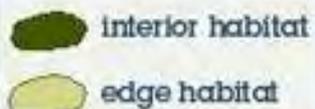


fragmentation



interior habitat and species **decrease**

edge habitat and species **increase**



Large Forests

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION



Hudson Valley Natural Resource Mapper

A Tool for Communities in the Hudson River Estuary Watershed



Hudson River
Estuary Program

A Program of the New York State Department of Environmental Conservation



Cornell University

Base Map: Topographical

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Layers become visible at different scales

Large Forests i

Globally Significant (>15000 acres)

Regionally Significant (6,000-14,999 acres)

Locally Significant (2,000-5,999 acres)

Stepping Stone (200-1,999 acres)

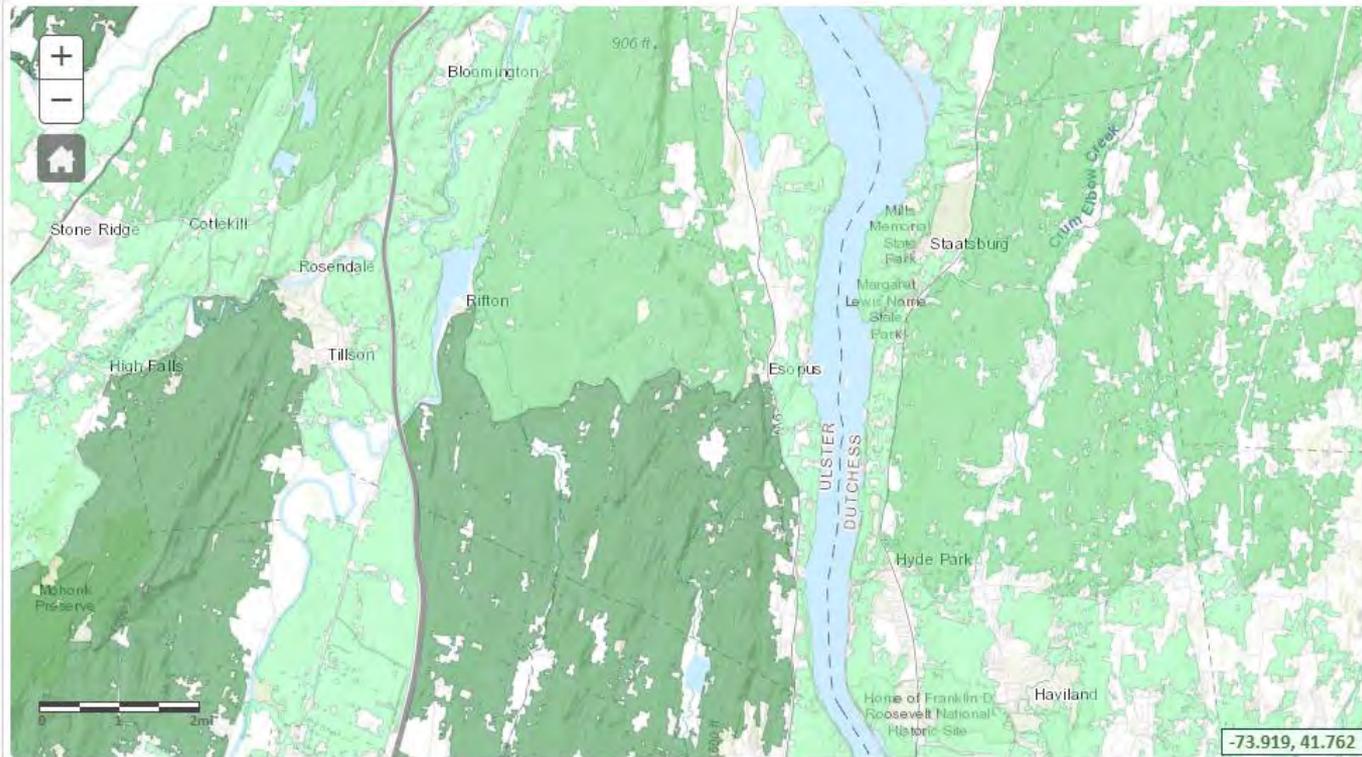
Forest Linkage Zones i

Linkage Zone

Biodiversity Layers

Scenic and Recreation Layers

Reference Layers



Matrix Forests and Forest Linkage Zones

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION



Hudson Valley Natural Resource Mapper

A Tool for Communities in the Hudson River Estuary Watershed



Base Map: Topographical

[How to use this map](#)

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Hudson River Estuary Layers

Stream and Watershed Layers

Wetland Layers

Forest Layers

- Large Forests I
 - Globally Significant (>15000 acres)
 - Regionally Significant (6,000-14,999 acres)
 - Locally Significant (2,000-5,999 acres)
 - Stepping Stone (200-1,999 acres)

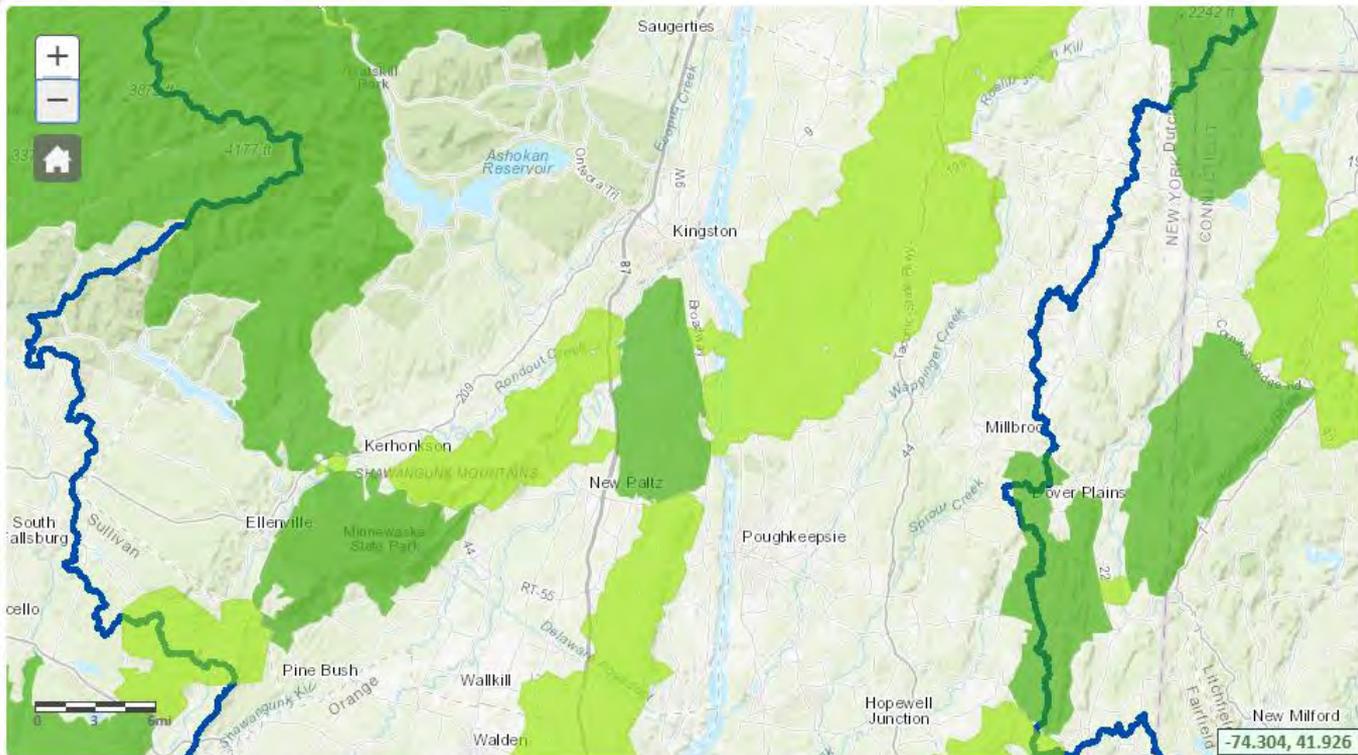
- Forest Linkage Zones** L
 - Linkage Zone
 - Zone continues beyond study area

- Matrix Forest Blocks** I

Biodiversity Layers

Scenic and Recreation Layers

Reference Layers



Data Layers: Biodiversity

- significant biodiversity areas
- Audubon important bird areas
- known important areas for rare plants and rare animals
- significant natural communities



Significant Biodiversity Areas and Audubon IBAs

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION



Hudson Valley Natural Resource Mapper

A Tool for Communities in the Hudson River Estuary Watershed



Base Map: Topographical

How to use this map

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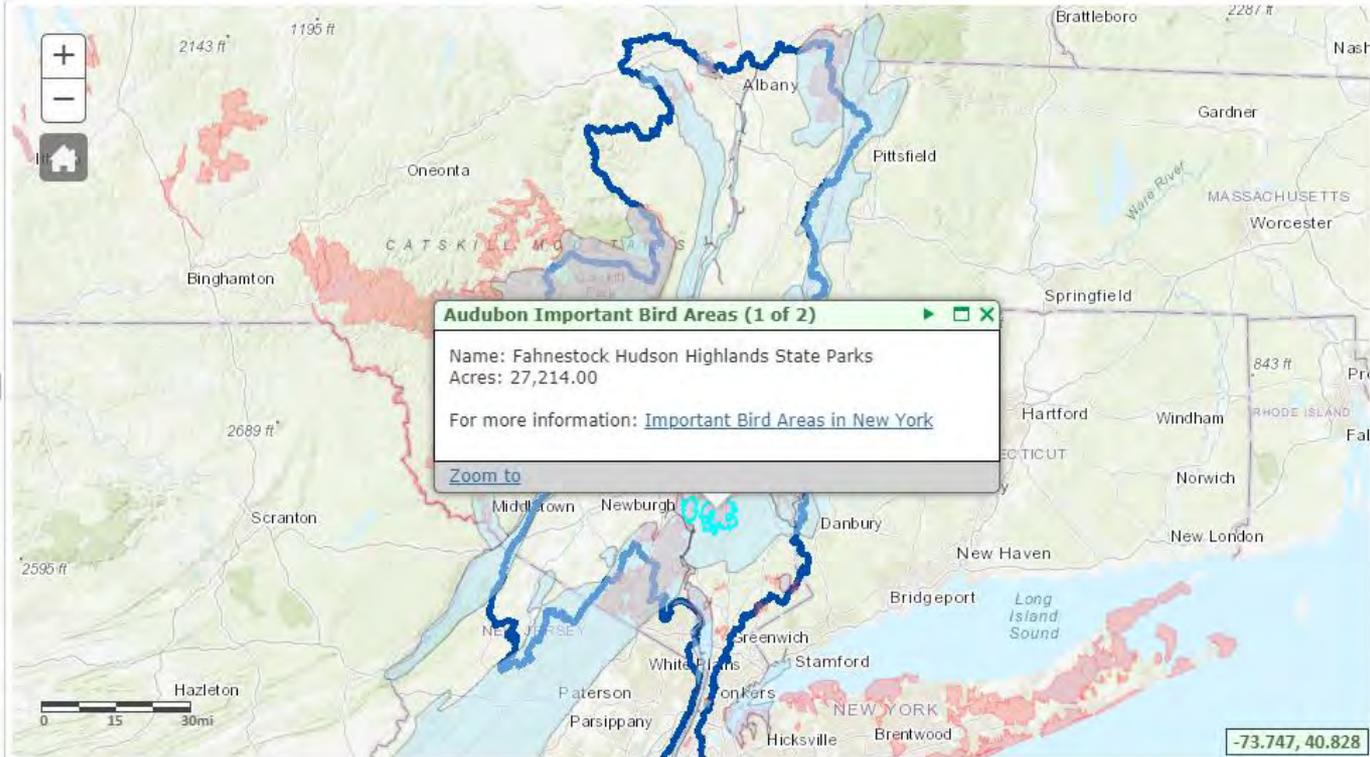
Forest Layers

Biodiversity Layers

- Known Important Areas for Rare Animals
- Known Important Areas for Rare Plants
- Significant Natural Communities
- Audubon Important Bird Areas
- Significant Biodiversity Areas in the Hudson Valley

Scenic and Recreation Layers

Reference Layers



Known Important Areas and Significant Communities

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION



Hudson Valley Natural Resource Mapper

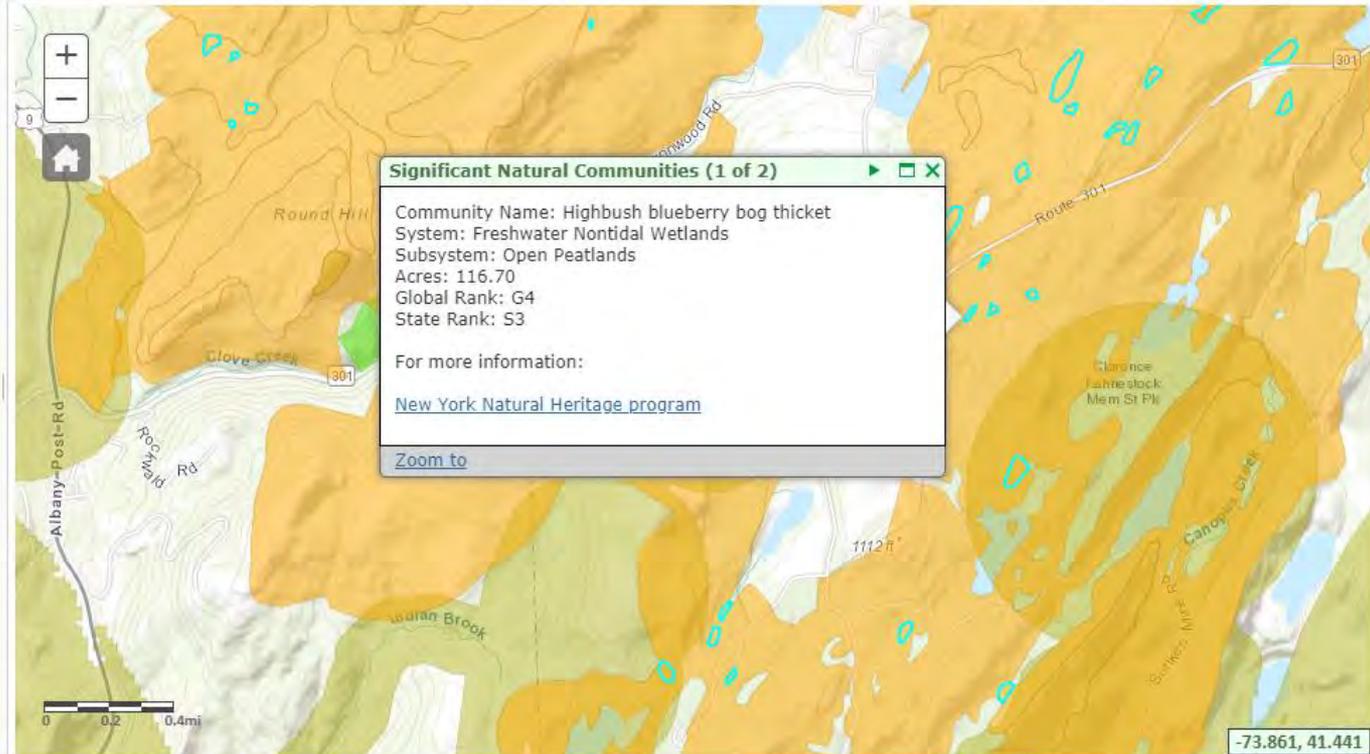
A Tool for Communities in the Hudson River Estuary Watershed



Base Map: Topographical

[How to use this map](#)

- Search
- Tools
- Hudson River Estuary Layers
- Stream and Watershed Layers
- Wetland Layers
- Forest Layers
- Biodiversity Layers**
- Known Important Areas for Rare Animals
- Known Important Areas for Rare Plants
- Significant Natural Communities
- Audubon Important Bird Areas
- Significant Biodiversity Areas in the Hudson Valley
- Scenic and Recreation Layers
- Reference Layers



Known Important Areas and Significant Communities


[Services](#)
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[Government](#)
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[Translate](#)

Department of
Environmental Conservation

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[Nature](#)
[Prevent & Control Pollution](#)
[Regulatory](#)
[News & Learning](#)
[Search](#)

[Home](#) » [Animals, Plants, Aquatic Life](#) » [Biodiversity & Species Conservation](#) » [New York Natural Heritage Program](#) » Request Natural Heritage Information

Request Natural Heritage Information

New York Natural Heritage makes its data available to inform biodiversity conservation, natural resource management, land protection, land use decisions, environmental assessment, and project review.

Note that information regarding the locations of rare species is considered sensitive. The distribution of information which identifies the locations of rare species or their habitats may lead to the collection or disturbance of the animals and plants at those locations. NYSDEC has the legal authority, under New York State Environmental Conservation Law, to restrict access to such information, and has adopted a policy regarding the release of information compiled by the New York Natural Heritage Program. Under this policy, the level of detail provided about the locations and identities of rare species may be limited in order to protect the sensitive resources.

- **Part I of an Environmental Assessment Form (EAF).** If you are completing Part 1 of either the Short Form EAF or Long Form EAF as part of the SEQR process, please see [Completing Part 1 of an Environmental Assessment Form](#) below.
- **Project Screening.** If you need information on the presence of rare or listed plants and animals or of significant natural communities that may be impacted by a proposed development, project, or activity, see [How to Obtain Information for a Project Site](#) below.
- **Other Uses.** If you would like to apply Natural Heritage information in any of the following activities, please contact NY Natural Heritage at NaturalHeritage@dec.ny.gov or (518) 402-8935 (and leave message).
 - municipal or regional planning
 - natural resource inventory or management
 - open space inventory or protection
 - environmental or biodiversity conservation

Important Links

[Environmental Resource Mapper](#)

Links Leaving DEC's Website

[Natural Heritage Project Screening Request Form](#)

Contact for this Page

NYSDEC-DFW
NY Natural Heritage Program
625 Broadway, 5th Floor
Albany, NY 12233-4757
518-402-8935

This Page Covers



Data Layers: Scenic and Recreation

- Hudson River fishing access and boat launches
- DEC Lands
- State Parks
- Scenic Areas of Statewide Significance



Fishing and Boat Launch Sites

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION



Hudson Valley Natural Resource Mapper

A Tool for Communities in the Hudson River Estuary Watershed



Base Map: Topographical

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Scenic and Recreation Layers

All Layers

Layers become visible at different scales

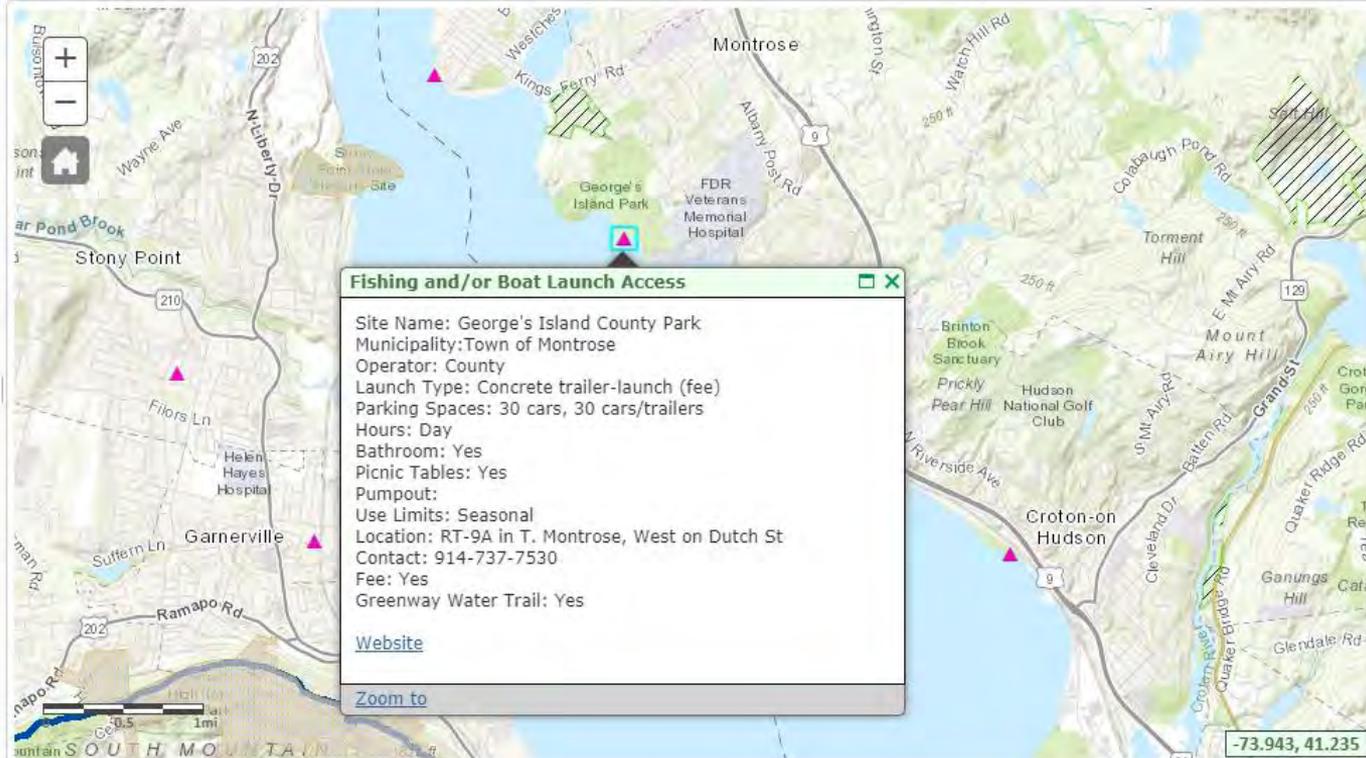
 Fishing and/or Boat Launch Access 

 NYS Parks and Historic Sites 

 DEC Lands 

 Scenic Areas of Statewide Significance 

Reference Layers



Reference Layers; NY Protected Areas

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION



Hudson Valley Natural Resource Mapper

A Tool for Communities in the Hudson River Estuary Watershed



Hudson River
Estuary Program



Cornell University

Base Map: Topographical

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Forest Layers

Biodiversity Layers

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Counties

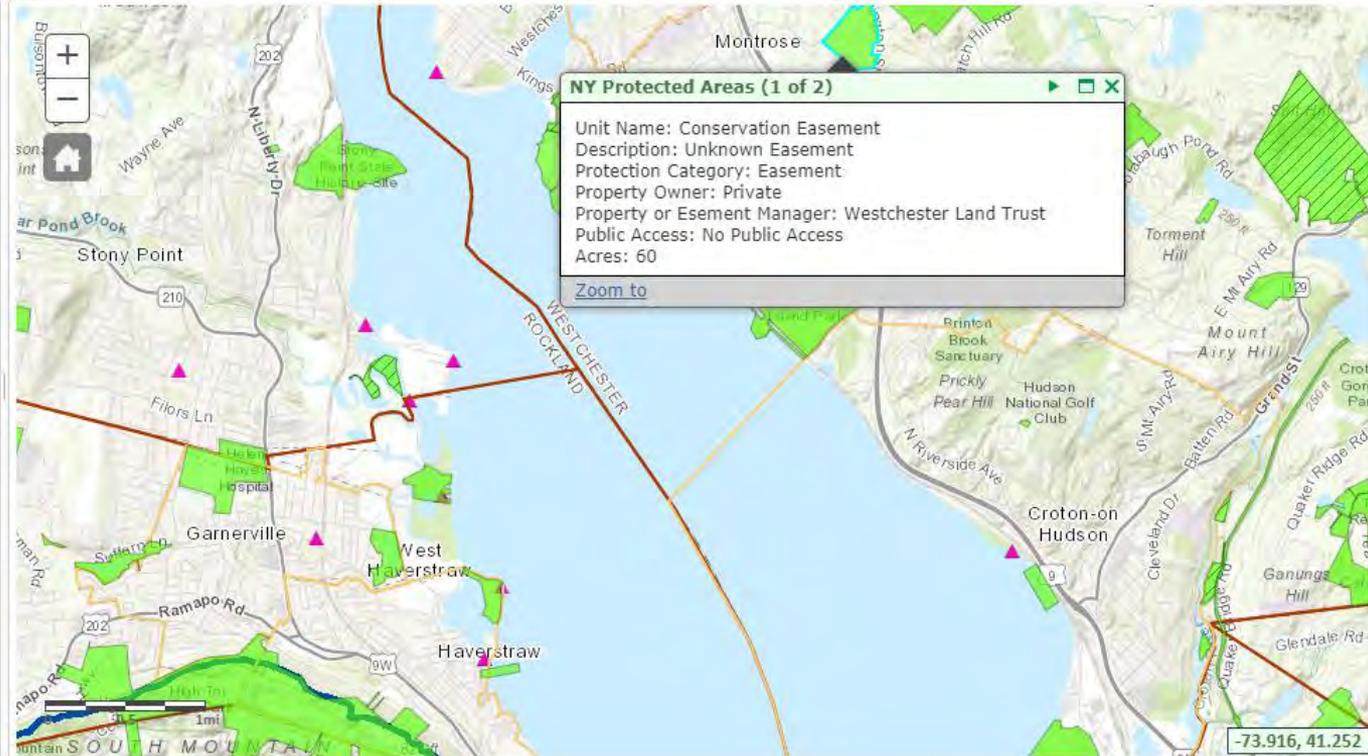
Cities

Towns

Villages

Tax Parcels

NY Protected Areas



Troubleshooting Tips...

- If not displaying properly, restart browser
- Turn on layers individually for faster loading time
- Turn off layers you're not using
- Turn off tools you're not using (e.g., measure tools)
- If pop-up window is blocking your view, try clicking on a different part of the feature or moving map window slightly
- Please report any issues you encounter



Some uses for the Natural Resource Mapper

identify what
you have

prioritize

plan, protect,
manage

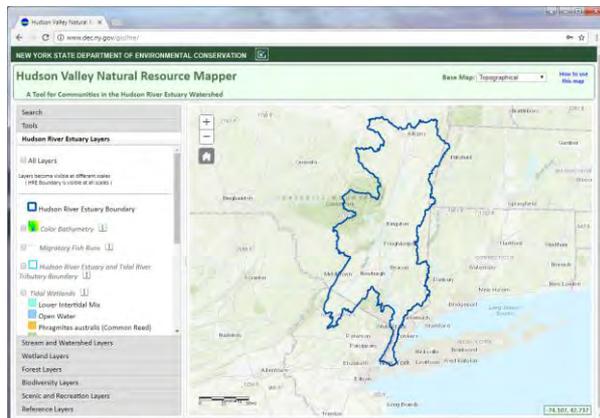
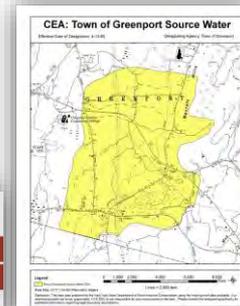


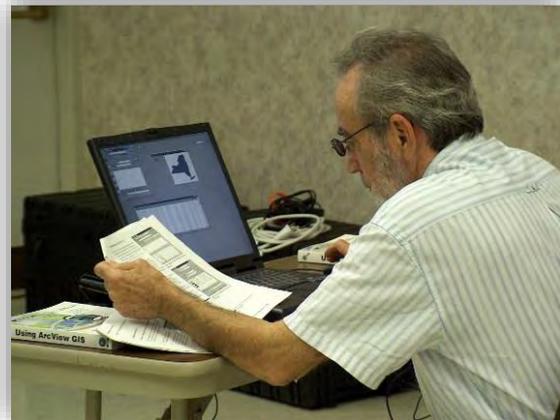
Photo by Laura Heady



Department of
Environmental
Conservation

Project review

- Use the mapper as a preliminary screening tool to identify resources on and near a site prior to initial meeting with applicant
- Conduct site visits to verify features and identify resources that may not appear on maps



Incorporate information to application checklists

Example from the Town of Rhinebeck

- streams, wetlands, and waterbodies?
- potential for significant habitats?
- wildlife corridors?
- adjacent to recreation areas?

Example Checklist available in Appendix H of
Creating a Natural Resources Inventory



Department of
Environmental
Conservation

Town of Rhinebeck Site Resource Analysis Assessment

Name of subdivision: _____

Address: _____

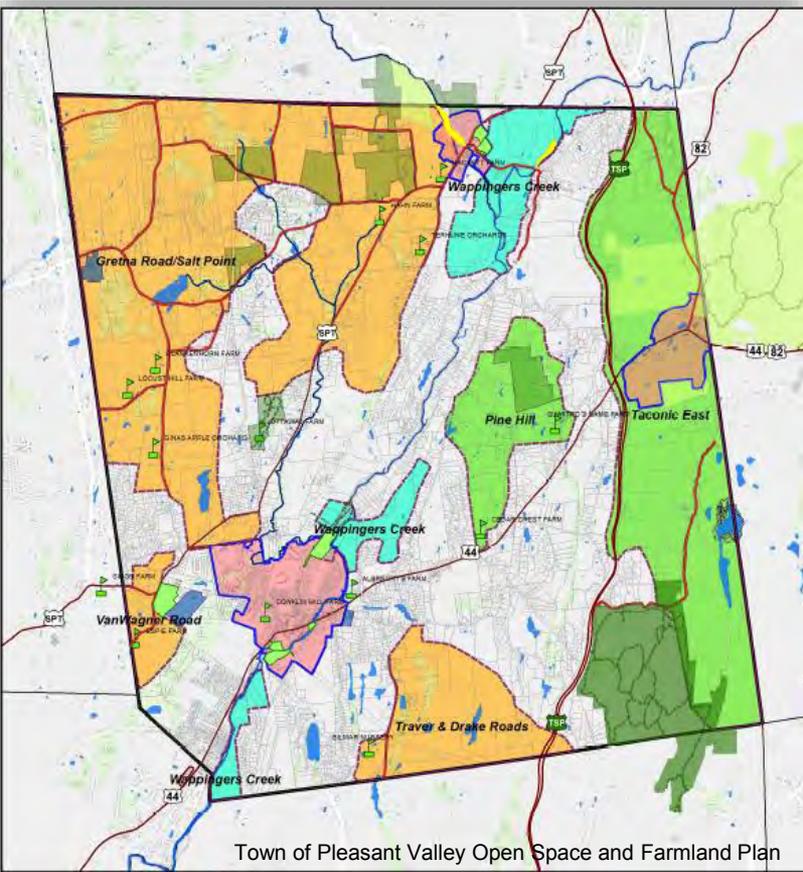
	Yes	No	Not Sure
Are there streams, wetlands, waterbodies or watercourses that require protective buffer areas?			
Is there active farmland on the parcel(s)?			
Will the active farmland be preserved?			
Is there active farmland contiguous to or within 500 feet of the subject parcel(s)?			
Is this an Agricultural Exempt parcel(s)?			
Are there ridgelines that the Town desires to be kept clear of development?			
Could development alter the visual character from off-site areas dramatically?			
Could development alter viewshed vantage points within the property?			
Have visual mitigation measures been discussed?			
Are there high quality trees and significant groups of trees that should be preserved?			
Is there the potential for significant wildlife habitats or wildlife migration areas?			
Do any of these significant natural areas extend into abutting properties?			
Have mitigation measures been discussed?			
Are there stone walls and rock outcrops on the site?			
Is the parcel adjacent to a public recreational area?			
Are there possibilities for walkway, bikeway and/or trail connections?			
Are there special cultural, archaeological and/or historic features that should be preserved?			
Is the parcel adjacent to or within a National, State or locally designated Historic site or district?			
Is the parcel adjacent to or within an officially designated Scenic District or Scenic Road?			
Is the parcel adjacent to or within an officially designated Critical Environmental Area (CEA)?			
Is the parcel within the Local Waterfront Revitalization Area?			
Can the development be connected to a community water supply system?			
Can the development be connected to a community sewage disposal system?			
Will affordable housing be addressed by the subdivision?			

Priority resources that should be preserved on the site:

Recommendations:

Date of Planning Board site visit: _____

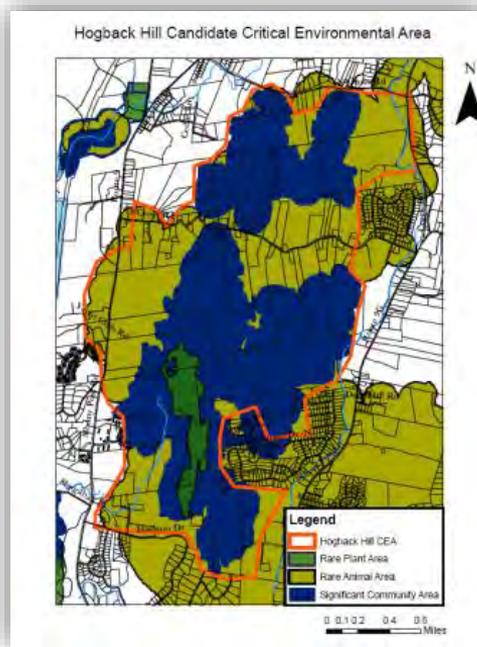
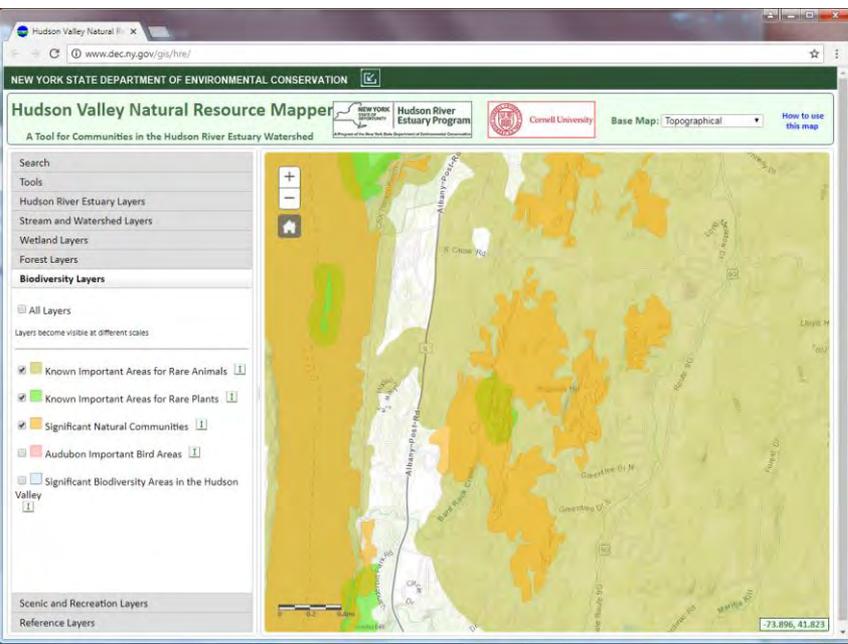
Identify conservation priorities



- What are the highest quality areas?
- What areas are unique or rare?
- What are the regional priorities?
- What does the community value?
- Where do multiple values overlap?
- Where are lands already protected?

Define Critical Environmental Areas (CEAs) or Conservation Overlay Districts

Example from the Town of Hyde Park



Hogback Hill CEA:

- large forest
- significant forest and wetland communities
- Blanding's turtle habitat



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Environmental
Conservation

Inform watershed assessment and monitoring

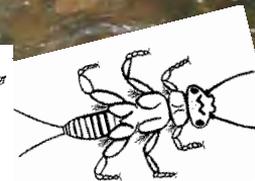
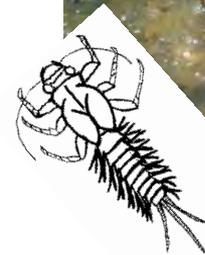
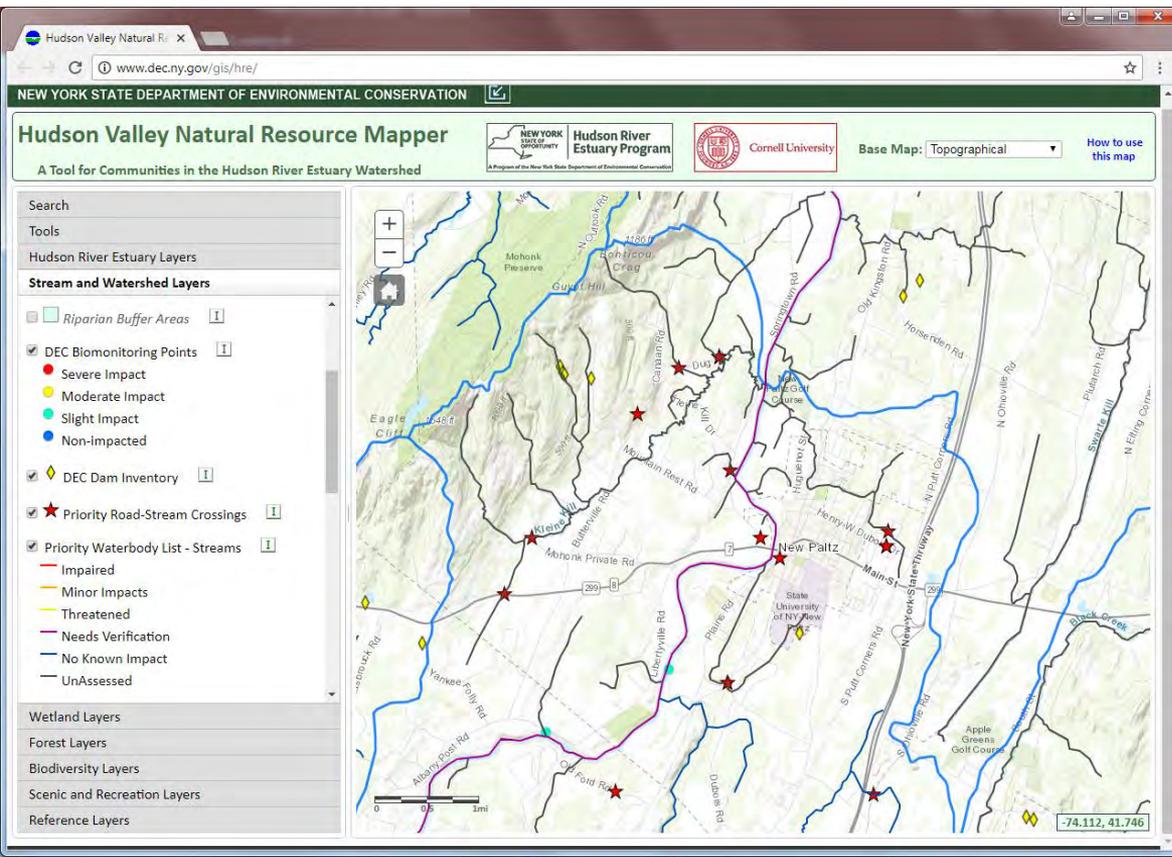


Photo: Alene Onion

Additional Online Maps from NYSDEC:

<https://www.dec.ny.gov/pubs/42937.html>

- Environmental Resource Mapper
- DEC Info Locator
 - Environmental Quality Map
 - Outdoor Recreation Opportunities Map

Municipal technical assistance & grants:

- natural resources inventories
- open space planning
- watershed planning
- streamside tree/shrub plantings
- dam removal
- culvert replacement
- green infrastructure
- sustainable shoreline strategies
- climate change adaptation planning



Thank you! Questions? (Please use WebEx Chat)



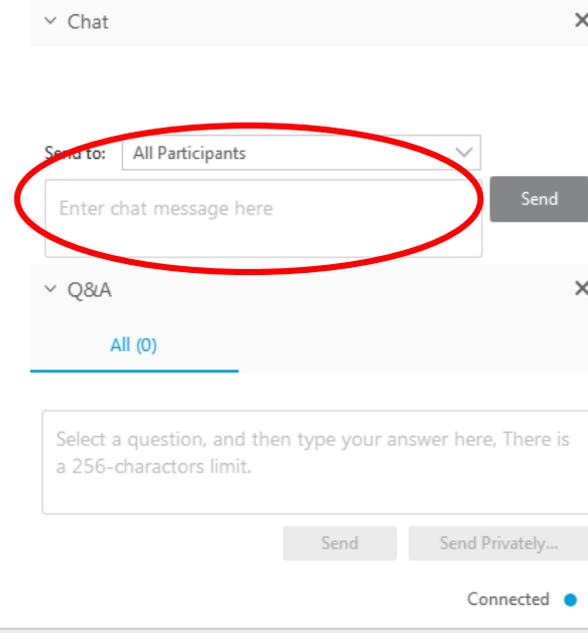
Ingrid Haeckel

Conservation & Land Use Specialist

ingrid.haeckel@dec.ny.gov

Hudson River Estuary Program
and Cornell University

➤ Please take the
short end survey!



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