Working to achieve key benefits:

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

1. identify what you have
2. prioritize
3. plan, protect, manage
Interactive Online Maps

Note: The State Lands Interactive Mapper (SLIM) has been replaced by the DECinfo Locator.

The following interactive online maps are available on the DEC website.

DECinfo Locator

DECinfo Locator is an interactive map that lets you access many DEC documents and other public data about the environmental quality of specific sites in New York State, as well as information about sites for outdoor recreation. More than 50 data layers are available at this time.

NYSHABS Mapper

View DEC's NYSHABS notification map to view locations of current freshwater HABs in New York State. Each yellow dot on the map represents a HAB reported in the past two weeks. Click on a dot for more information, including the date it was reported, the waterbody name, and pictures. Click on the arrow at the bottom of the screen to view a list of reported HABs.

Environmental Resource Mapper

The Environmental Resource Mapper is an interactive mapping application that can be used to identify some of New York State's natural resources and environmental features that are state protected, or of conservation concern.

New York Nature Explorer

New York Nature Explorer, a gateway to biodiversity information, is an online tool for finding out about the animals, plants, and habitats in your neighborhood or area of interest. Users may choose a county, town, or watershed, or they may specify their own location on a map, and they will receive a list of the animals, plants, and significant natural communities that have been found there.

Hudson Valley Natural Resource Mapper
40+ geographic data sets:

- Estuary
- Streams and Watersheds
- Wetlands
- Forests
- Biodiversity
- Scenic and Recreation

www.dec.ny.gov/gis/hre
What about the Environmental Resource Mapper?

- **Regional coverage**
- **Focus on planning**

VS

- **Statewide coverage**
- **Do I need a permit?**
Landing Page on DEC website

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

Click to enter the Hudson Valley Natural Resource Mapper

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 bringing together information about natural features such as streams, wetlands, and large forests, as well as recreation amenities and existing protected lands, communities can begin to identify conservation priorities and strategies that can be incorporated into local land-use planning. This process will help ensure that future generations continue to enjoy the numerous benefits provided by the Hudson Valley’s natural systems.

NEW Forest Condition Index and Core Forest layers are now available under Biodiversity Layers. The old Large Forest layer has been removed.
Updates to the HUC8, HUC10, and HUC12 Watershed land cover statistics are available under Stream and Watershed Layers.
Updates to the Assessed Road-Stream Crossings are now available under Stream and Watershed Layers.
Updates to the Known Important Areas for Rare Animals and Rare Plants are now available under Biodiversity Layers.
Critical Environmental Areas are now available under Reference Layers.

Fact Sheet
Webinar
Launch Mapper
Recent Updates
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.

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 Hudson Valley Natural Resource Mapper is a tool for communities in the Hudson River Estuary Watershed. It allows users to search, tools, expand tabs for map layers and functions, and adjust the base maps. The map shows the Hudson River Estuary and surrounding areas, with options for zooming and selecting different layers and functions.
10

**Layers become visible at different scales**

- Italics = not visible yet (zoom in or out)
- Turn individual layers on
- Scroll

Hudson Valley Natural Resource Mapper
A Tool for Communities in the Hudson River Estuary Watershed

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

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 always)

- Hudson River Estuary Boundary
- Hudson River Estuary Bathymetry

Hudson River Bathymetry
Depth in Feet
- 0 - 12
- 12 - 20
- 20 - 30

Stream and Watershed Layers

- [Layer Info]
Bathymetry – water bottom elevation

The elevation of the water bottom in the Hudson River Estuary constrains the use of the 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. In shallower areas such as the Hudson River Estuary, the water bottom may be rocky or muddy with a variety of vegetation.

Water depth is provided in feet below sea level. Tides in the estuary cause water depth to vary with the tide. The North American Vertical Datum 1988 (NVYD88) is the same vertical reference as used on navigational charts. Water depths shown on this Mapper will appear ~2.5 feet greater than the depth reported at the shoreline.

Publication Year: 2008
Publisher: Hudson River National Estuarine Research Reserve and NYS Department of Environmental Conservation
For more information: NY Department of Environmental Conservation
Link to GIS Data Download: GIS.NY.GOV

Hudson River Estuary and Tidal Tributary Boundary


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 “Significant” habitats may be designated for protection in accordance with the Waterfront Revitalization and Coastal Resources Act. The Significant Coastal Fish and Wildlife Habitats (SCFWHs) 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 &
Live Demo!

- Zoom in
- Change Base Map
- Measure/Print Tools
Data Layers: Estuary

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

Photo by Laura Heady
Migratory Fish Runs
Data Layers: Streams and Watersheds

- watershed boundaries
- biomonitoring data
- DEC stream classifications
- Priority Waterbody List
- dams
- priority road-stream crossings
- stream condition index
- riparian areas
- FEMA flood zones
Stream Classifications

Hudson Valley Natural Resource Mapper
A Tool for Communities in the Hudson River Estuary Watershed

Stream and Watershed Layers
- Minor Impacts
- Threatened
- Needs Verification
- No Known Impact
- UnAssessed
- DEC Stream Classification and Trout Status
  - Other Stream
  - Known Trout Stream
- Stream Condition Index
  - Highest Condition
  - High Condition
  - Average Condition
  - Low Condition
- 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

DEC Stream Class and Trout Status
(1 of 3)

Pan-2x1am: 863-702.1
Classification: C
Standard: C(TS)
Zoom To
### Mill Creek and trib (1301-0246)

<table>
<thead>
<tr>
<th>Waterbody Location Information</th>
<th>NoKnownImpct</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Water Index No.</strong></td>
<td>H-224</td>
</tr>
<tr>
<td><strong>Hydro Unit Code:</strong></td>
<td>River</td>
</tr>
<tr>
<td><strong>Waterbody Size:</strong></td>
<td>40.9 Miles</td>
</tr>
<tr>
<td><strong>Seg Description:</strong></td>
<td>entire stream and trib</td>
</tr>
<tr>
<td><strong>Drain Basin:</strong></td>
<td>Lower Hudson River</td>
</tr>
<tr>
<td><strong>Str Class:</strong></td>
<td>C(TS)</td>
</tr>
<tr>
<td><strong>Reg/County:</strong></td>
<td>Troy (42)</td>
</tr>
<tr>
<td><strong>Quad Map:</strong></td>
<td>TROY SOUTH (K-26-1)</td>
</tr>
</tbody>
</table>

#### Water Quality Problem/Issue Information

- **Use(s) Impacted:** NO USE IMPAIRMENT
- **Type of Pollutant(s):**
  - Known: -
  - Suspected: -
  - Possible: -
- **Source(s) of Pollutant(s):**
  - Known: -
  - Suspected: -
  - Possible: -

#### Resolution/Management Information

- **Issue Resolvability:** 8 (No Known Use Impairment)
- **Verification Status:** (Not Applicable for Selected RESOLVABILITY)
- **Lead Agency/Office:** n/a
- **TMDL/303(d) Status:** n/a
- **Resolution Potential:** n/a

#### Further Details

Water Quality Sampling:
A biological (macroinvertebrate) survey of Mill Creek at multiple sites between Rensselaer and Still was conducted in 2001. Sampling results indicated mostly non-impacted water quality conditions. At the most downstream end of the stream in the City of Rensselaer moderate impacts were indicated, likely the result of urban runoff and municipal/industrial sources. The assessment of this stream as having No Known Impacts reflects the condition in over 90% of the reach. Impacts in the lower mile of the creek are included in the receiving Hudson River (and tidal tributaries) segment. (DEC/DOW, BWAM/SBU, June 2005)

High turbidity was observed in the lower reach of Mill Creek in 2001. An investigation traced the turbidity to a construction site. Subsequent action by the DEC Regional Office resulted in a SPDES permit for the site, erosion and sedimentation controls and post-construction measures to limit future impacts. (DEC/DOW, BWAM/SBU, June 2005)

**Segment Description**
This segment includes the entire stream and all trib. The waters of the stream are Class C (C(TS)). Tribs to this trib are the Mill Creek Estuary trib, Rensselaer Trib, and Still Trib. (DEC/DOW, BWAM/SBU, June 2005)
FEMA Flood Hazard Areas

Hudson Valley Natural Resource Mapper
A Tool for Communities in the Hudson River Estuary Watershed

Stream and Watershed Layers
- Threatened
- Needs Verification
- No Known Impact
- Unassessed
- DEC Stream Classification and Trout Status
  - Other Stream
  - Known Trout Stream
- Stream Condition Index
  - Highest Condition
  - High Condition
  - Average Condition
  - Low Condition
- 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
Data Layers: Wetlands

- State-regulated freshwater wetlands and check zones
- National Wetlands Inventory (NWI)
- Wetland Soils (from soil drainage classes)
Wetland Soils

Hudson Valley Natural Resource Mapper
A Tool for Communities in the Hudson River Estuary Watershed

- State Regulated Freshwater Wetlands
- State Regulated Wetland Checkzone
- Probable Wetland Areas
- Possible Wetland Areas
- National Wetlands Inventory
  - Estuarine and Marine Deepwater
  - Estuarine and Marine Wetland
  - Freshwater Emergent Wetland
  - Freshwater Forested/Shrub Wetland
  - Freshwater Pond
  - Lake
  - Other
  - Riverine

Forest Layers
Biodiversity Layers
Scenic and Recreation Layers
Reference Layers
Data Layers: Forests

- Forest Condition Index
- matrix forests
- linkage zones

Photo by Ingrid Haeckel
NEW! Forest Condition Index

- Identifies forest patches >100 acres and core forests using the most recent land cover data.
- Estimates the condition of each forest patch relative to other forests in the watershed using a variety of region-wide data.
NEW! Forest Condition Index

Hudson Valley Natural Resource Mapper
A Tool for Communities in the Hudson River Estuary Watershed

Forest Condition Index (Percentile)

Description:
This forest patch scores in the 98.5 percentile of Hudson Valley forests.

Forest Condition Index Value (Max 228 points): 173.5
Area in acres: 8,617.90

Notable rankings: This forest patch is in the top 1% for core area index and patch size, and in the top 5% for local connectedness, low man-made stressors, low road density, and 1 other components.

Size Score (Max 24 points): 24
Fragmentation Sub-Index (Max 12 points): 6.5
Connectivity Sub-Index (Max 48 points): 42
Environmental Stress Sub-Index (Max 62 points): 43
Habitat and Ecosystem Value Sub-Index (Max 70 points): 48
Carbon Sequestration Score (Max 12 points): 10

Forest Index Progress Report

Zoom to
Core Forest (>100 meters from forest edge)
Matrix Forests and Linkage Zones

Hudson Valley Natural Resource Mapper
A Tool for Communities in the Hudson River Estuary Watershed

Forest Layers:
- 60-80
- 40-60
- 20-40
- 0-20

Options:
- Core Forests
- Forest Linkage Zones
- Linkage Zone
- Zone continues beyond study area
- Matrix Forest Blocks

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

Photo by Mike Adamovic
Known Important Areas

Hudson Valley Natural Resource Mapper
A Tool for Communities in the Hudson River Estuary Watershed

Biodiversity Layers

- Known Important Areas for Aquatic Animals
- Known Important Areas for Rare Plants
- Known Important Areas for Wetland Animals
- Known Important Areas for Terrestrial Animals
- Important Bat Foraging Areas
- Known Important Coldwater Stream Habitats
- Significant Natural Communities
- Significant Biodiversity Areas in the Hudson River Valley
- Audubon Important Bird Areas

Scenario and Recreation Layers
Reference Layers

Important Bat Foraging Areas
(2 of 2)

This point lies within an Important Bat Foraging Area
For more information:
http://www.dec.ny.gov/animals/31181.html
Zoom In
Known Important Areas

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
identify what you have

prioritize

plan, protect, manage
Environmental 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 into application checklists.
- a compilation and description of naturally occurring resources

- view publicly available data for water resources, habitats, and conservation and public lands

- use mapper as an interactive companion tool
Conservation and Land Use Planning

Town of Blooming Grove
Open Space Inventory
Thank you! Questions?

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Hudson River Estuary Program
ingrid.haeckel@dec.ny.gov

Natural Resource Mapper:
www.dec.ny.gov/lands/112137.html