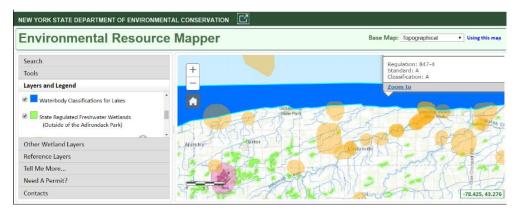
Project Planning Tools for NY's Great Lakes Watershed

Watersheds are complex and dynamic systems, and many tools and resources have been developed to help answer questions about their functions, processes, and management needs. These tools may help you answer common questions about our shared water and land resources.

INTEGRATED RESOURCE MANAGEMENT TOOLS

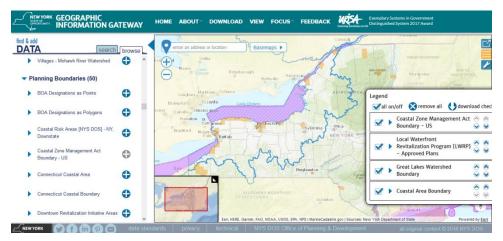
Where are protected species and resources located, that I need to consider for permitting?

• NYSDEC's <u>Environmental Resources Mapper</u> can be used to identify some of New York State's natural resources and environmental features that are state or federally protected, or of conservation concern.



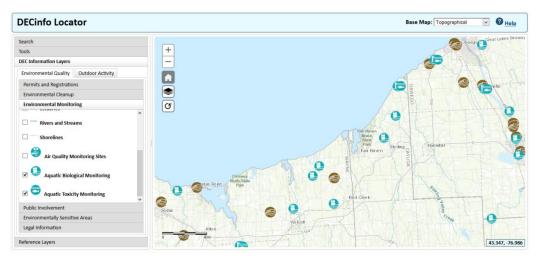
Where can I download and explore geographic data that will help inform local land use planning?

 NYS Department of State's (<u>DOS) Geographic Information Gateway</u> is a one stop, state-of-theart website providing public access to data, real-time information, interactive tools, and expert knowledge relevant to the Office of Planning and Development's activities throughout New York State.



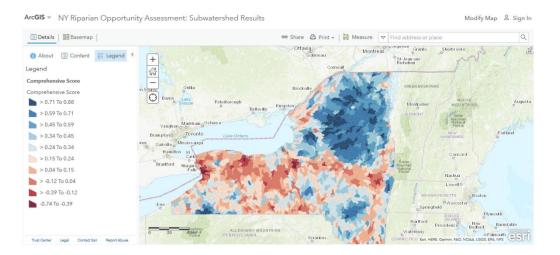
Where can I find environmental data and public documents related to my project?

 <u>DECinfo Locator</u> is an interactive map that lets you access 65 layers of DEC documents and public data about the environmental quality of specific sites in New York State, as well as outdoor recreation information.



How healthy is my watershed and/or catchment?

• <u>NY's Riparian Restoration Opportunity Assessment</u> can be used to view and compare ecosystem health and stress factors at the sub-watershed and catchment scales.



Where are barriers to aquatic organism passage that should be considered in habitat restoration and infrastructure planning?

- Exercise to Creat Lakes fish migration

 Opening Control
 Opening Control
 Opening Control

 Opening Control
 Opening Control
 Opening Control

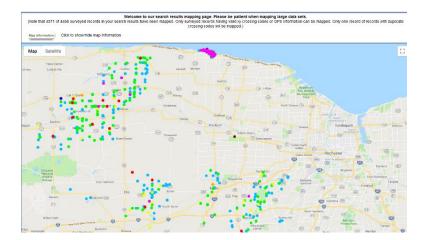
 Opening Control
 Opening Control
 Opening Control
 Opening Control

 Opening Control
 Opening Control
 Opening Control
 Opening Control
 Opening Control

 Opening Control
 Opening Control
 Opening Control
 Opening Control
 Opening Control
 Opening Control

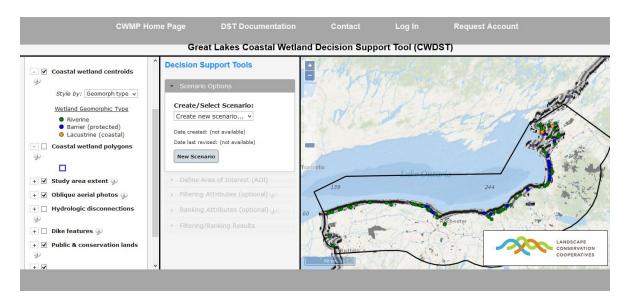
 Exercise Data
 Opening Control
 Opening Control
- The FishWerks tool can help identify barriers that impede fish (and sea lamprey) passage.

• The <u>North Atlantic Aquatic Connectivity Collaborative Assessments</u> identify culverts that impede aquatic organism passage and alter natural hydrology.



Where are coastal wetlands and how are they managed?

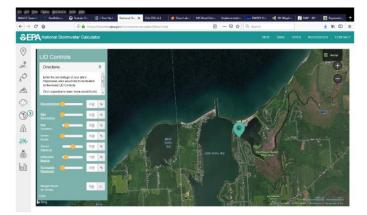
 The <u>Great Lakes Coastal Wetland Monitoring Program Decision Support Tool</u> identifies coastal wetlands throughout the Great Lakes basin, and allows users to access information on coastal wetland biota, habitat and water quality, including aerial imagery.



QUANTIFYING ECOSYSTEM SERVICE BENEFITS

What are the benefits of green infrastructure practices in my community?

 <u>EPA's Stormwater Management calculator</u> and <u>I-tree tools</u> can be used to develop projects and estimate benefits, such as reducing stormwater runoff, improving air and water quality, and enhancing resilience to increased precipitation.



What invasive species threats need to be managed in my region?

- NY's <u>iMapInvasives</u> online mapping tool identifies locations of invasive species observations. Users can also add their own invasive species observations.
- <u>NY's Invasive Species Clearinghouse</u> can also be used to better understand invasive species and how they are managed.



WATER QUALITY

What drinking water resources are located within my community that need to be protected?

 The <u>NY Waters Map</u> provides information on NYS waters including water quality, the causes and sources of impairments and the status of activities underway to restore and protect them. Information on public drinking water systems and links to drinking water reports is also provided. Information on private wells is available from the <u>Dept of Health</u>.



Where can I find information on beach closure history and trends?

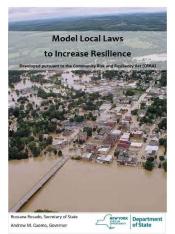
 NYS Beach Water Quality Information is available to plan projects that will address the causes of beach closures at <u>https://ny.healthinspections.us/ny_beaches/</u>

COMMUNITY RESILIENCY and CLIMATE CHANGE

How can coastal development in my community be more resilient?

 In order to build resilience, reduce the risk of future property damage, and minimize habitat impacts, the DEC has compiled general guidelines for coastal design and development projects, available here: <u>https://www.dec.ny.gov/lands/117819.html</u>





What model local laws exist for municipal planning and zoning boards to increase their resiliency?

 Recognizing the risk of climate change, the Department of State worked with the Department of Environmental Conservation and other partners to create model local laws to help local governments be more resilient to sea-level rise, storm surge, and flooding. Model local laws are available at: https://www.dos.ny.gov/opd/programs/resilience/index.html

Where can I access state data on climate change science, impacts, and adaptation actions?

• The <u>NYS Climate Change Science clearinghouse</u> is a gateway for policymakers, local planners, and the public to identify and access documents, data, websites, tools, and maps relevant to climate change adaptation and mitigation across New York State.



What other NYS tools and resources are available to help my community understand risk and mitigate hazards?

 NYS Division of Homeland Security and Emergency Services offers various mappers to visualize up-to-date hazards and risk data to inform hazard mitigation planning across New York State. These tools can be accessed at: <u>https://mitigateny.availabs.org/</u>