



Department of
Environmental
Conservation

New York's Top AIS Priority: An Update on Watercraft Inspection Steward Programs

NYSFOLA Annual Meeting
May 4, 2018

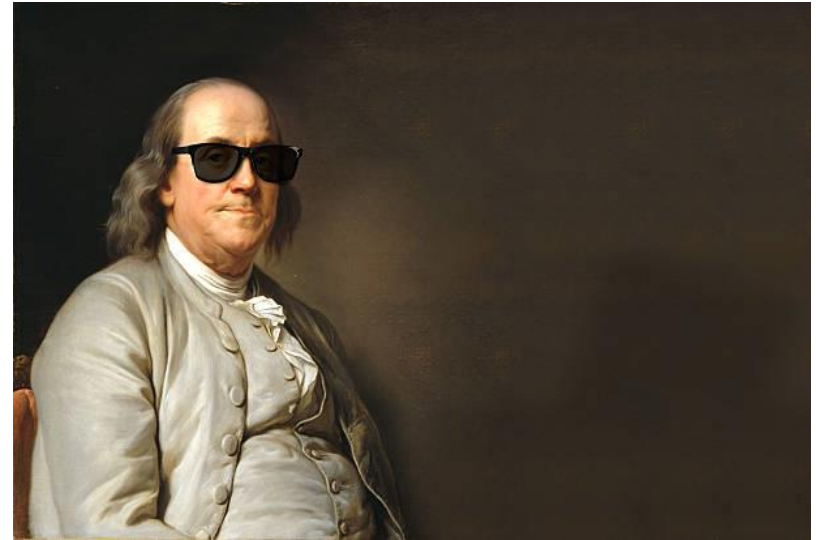
Goal



Stop the introduction and spread of aquatic invasive species into and within New York State's waters

Prevention is key

- Reduce economic, ecological, and human health impacts
- Or never have them happen at all!



Ben Franklin –the forefather of boat steward programs

Prevention: Regulatory Efforts

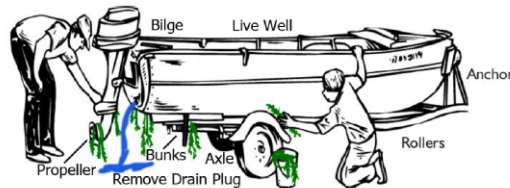
- Amendment to Article 3 of the Navigation Law – “AIS spread prevention signs at public boat launches”
- 6 NYCRR Part 59.4 (DEC) & 9 NYCRR Part 377.1 (Parks) – “AIS spread prevention regulations for boat launching/retrieving at DEC and Parks-owned sites”

PROTECT YOUR WATERS!

Prevent the Spread of Invasive Species

Invasive Plants and Animals Can Impact Boating, Fishing, Swimming and the Environment

REMOVE any visible mud, plants, fish or animals before transporting equipment.



ELIMINATE water from equipment before transporting.

CLEAN & DRY anything that comes into contact with water (boats, trailers, waders, equipment, dogs, etc.).

NEVER release plants, fish or animals into a body of water unless they came out of that body of water.



**STOP AQUATIC
HITCHHIKERS!**
www.ProtectYourWaters.net

For further information scan this QR code with a smartphone, or visit:
www.dec.ny.gov/animals/48221.html



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
625 BROADWAY, ALBANY, NY 12233-4753
www.dec.ny.gov

Prevention: Regulatory Efforts

6 NYCRR Part 575

“Regulated and Prohibited
Plants and Animals”

6 NYCRR Part 576

“Reasonable Precautions to
Prevent Spread of AIS”



Prevention: Watercraft Inspection Steward Program (WISP)

Supports NYS regulatory efforts

Statewide AIS spread prevention grant program: \$2.2M (three years)



CIRCLE JERKS

Prevention: Watercraft Inspection Steward Program (WISP)

Major players

- NYS Parks (OPRHP)
- Adirondack Watershed Institute – ADK AIS spread prevention program five year contract (NYSDEC participation since 2015)
- Finger Lakes PRISM/Institute
- Lower Hudson PRISM
- Capital-Mohawk PRISM
- Catskill Regional Invasive Species Partnership (CRISP)



Prevention: WISP

2017

- Coverage at 187 locations
- More coverage on the Hudson River and Mohawk River
- Coverage at Croton and Ossining (Croton River Hydrilla infestation)
- Pilot run of standardized data collection software and the start of minimum standardized data collection discussion



Prevention: WISP

2017

Adirondack AIS Spread Prevention Program:

- Deployed decontamination stations at strategic locations where there are small-bodied AIS or high risk of spread
- Along the western shore of Lake Champlain
- Great Sacandaga Lake
- Access points along upper Hudson River
- Saratoga Lake
- Spread hubs (based on data collected)



Prevention: WISP

2018

- Coverage at more than 200 locations
- Additional coverage on the Hudson River and Mohawk River
- Additional coverage in the Catskills and Western New York
- More major players using standardized data collection software and contributing to statewide database
- First season for Western NY PRISM



J. Clayton, NYSDEC

Prevention: Data standardization and centralized database (WISPA)

OPRHP, NYSDEC and New York Natural Heritage Program (NYNHP) collaboration



J. Clayton, NYSDEC

Watercraft Inspection Stewards Program App “WISPA”

- Many different boat launch steward programs across the state
- Some remote locations
- Paper forms lost/wet (LEGIBILITY)
- Data-entry post season
- Time delay in viewing “big picture”
- Aggregating the data to create the statewide “Big Picture” challenging

014 New York State Parks Boat Stewardship Program				
Boat Launch: WILSON HILL			Weather AM: Sunny	
Waterbody: ST. LAWRENCE RIV.			Organism Type ²	Did Patron take AIS Spread Prevention Steps? ³
Time of Launch/Retrieval (Circle AM/PM)		Organisms Found? (Circle Y/N/D*)		
Launching	8:10 am/pm	Yes/No/D	4V, 2M	BB, DB
Retrieving				



Photos courtesy of NYS Parks



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WISPA: 2017 Pilot

- Partnership: 6 agencies tested the app
- ESRI Survey123 platform for tablets (>30K records collected!)
- ArcGIS Online web apps for data display/download

The screenshot shows a mobile application window titled "Survey123 for ArcGIS". The app is titled "NYS Watercraft Inspection Survey 2.4". It displays a "Welcome!" message and the user's login information: "You are signed in as: Matt Brincka, with the: New York OPRHP". A red asterisk indicates required fields. The form includes the following sections:

- Select launch name:** A dropdown menu with "Canandaigua" selected.
- Previous contact with a boat launch steward?** Radio buttons for "Yes" and "No".
- Select launch direction:** Radio buttons for "Launching" and "Retrieving".
- Group size:** A numeric input field with "1" and minus/plus buttons.
- Select watercraft type:** Radio buttons for "Motorboat", "Kayak", "Canoe", and "PWC".

A blue bar at the bottom right contains a white checkmark icon.

The Survey

- Core of standardized questions
- Some customized questions
- Data can be saved in “outbox” until access to internet allows uploading to cloud



J. Clayton, NYSDEC

Some equipment needed to be part of the WISPA program

- Samsung Galaxy tablet Tab A = approximately \$100 each
- Screen protector and ruggedized “box”
- AGOL (ArcGIS OnLine) account for map editing and data revisions
- At least one person with your organization has training in using the app in order to train and troubleshoot on behalf of stewards



Consistency

Standardized data collection and database

Standardized education and outreach products

Standardized training for stewards

Standardized signs

AIS disposal stations

STOP THE INVASION

PROTECT NEW YORK FROM INVASIVE SPECIES

ATTENTION BOATERS

Illustration by: Sean P. H.

New regulations protect the waters you enjoy from aquatic invasive species.

Aquatic invasive species (AIS) are non-native plants and animals that spoil boating and fishing, threaten native plants and animals, and destroy habitat. They are difficult and costly to remove, so let's keep them out!

All boaters in New York State must:

- Inspect floating docks, watercraft, trailers and equipment, and remove visible plant and animal material.
- Drain, and if possible, flush your boat's bilge, live well, bait well and other water-holding compartments after use.

More about preventing the spread of AIS:
www.dec.ny.gov/animals/48221.html

Examples of AIS in NY

Water Chestnut

- Fan-shaped leaves with toothed edges
- Sharp-edged seeds can cut feet
- Dense floating mats impede boating, fishing and swimming

H. Smith, NYDEC

Zebra Mussel

- Tiny D-shaped or oval striped shells
- Can cover hard surfaces like docks and mooring lines
- Shells can cut feet

A. Benson, USGS, Bugwood.org

Eurasian Watermillet

- 4-6 feathery leaves around stem, blunt-tipped, as if snipped off
- New plants sprout from fragments
- Most common and widely distributed AIS in NY
- Dense plants impede boating, fishing and swimming

C. Lowel, ACORN, Bugwood.org

Spiny Waterflea

- Tiny crustacean with long, barbed tail
- Competes with small fish for food
- Can clog guides of fishing rods

E. DeBolt, UGA

Hydrilla

- 4-8 blade-like, slightly toothed leaves around stem
- Dense plants impede boating, fishing and swimming
- Tolerates both fresh and brackish water

Tim Egan, Connecticut Department of Environmental Protection

More information about AIS:
www.dec.ny.gov/animals/99141.html

STOP THE INVASION

BOAT STEWARD PROGRAMS

Aquatic Invasive Species Education and Outreach



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Aquatic invasive species (AIS) are non-native aquatic plants and animals that can cause environmental and economic harm and harm to human health. Many AIS have been found in the lakes, ponds, and rivers of New York. These plants and animals are often transported from waterbody to waterbody on watercraft and equipment. Boat stewards perform a vital function in protecting New York State's waters and raising public awareness about aquatic invaders.

Who are boat stewards?

Boat stewards are volunteers or paid members of the community who provide boaters and other water recreationists with important information about what precautions can be taken to reduce the likelihood of spreading AIS. They help people learn how to inspect, clean, drain, and treat watercraft and equipment. Stewards will also ask where you last launched and can sometimes determine what invasive species are found in the lake or pond you visited through the iMapInvasives website. Stewards have a wealth of knowledge about AIS and are happy to answer your questions.

Why are boat steward programs necessary?

New York has more than 7,000 lakes, ponds, and rivers that could potentially be exposed to dozens of harmful aquatic invasive species (www.dec.ny.gov/animals/50272.html).

One of the main pathways for transfer of aquatic invasive species between waterbodies is recreational water vehicles (boats, canoes, kayaks, and jet skis). Aquatic invasive plants and animals such as hydrilla, water chestnut, Eurasian watermillet, zebra mussels, and Asian clams are easily transported on boats, boat trailers, and recreational gear.

The regulation, [NYCRR Part 576](http://www.dec.ny.gov/animals/99141.html), requires water recreationists to take reasonable precautions to prevent the spread of aquatic invasive species (www.dec.ny.gov/animals/99141.html). In support of this regulation, New York is expanding boat steward programs across the state, particularly in popular, high-use areas. In-person interactions with boaters, anglers, and other recreational water users raises awareness about aquatic invasive species and practices (cleaning, draining, and treating) that reduce the chance of spreading aquatic invaders.

Where are boat steward programs located?

Over the last few years, boat steward programs have expanded from the Finger Lakes and Adirondack Regions to Western New York, the Catskills, the Mohawk and Hudson Rivers, and Long Island. More than 120 locations have active boat stewards. The programs are administered by academic institutions, lake associations, Soil and Water Conservation Districts, Cornell Cooperative Extension, NYS Office of Parks, Recreation and Historic Preservation (Parks), and Regional Partnerships for Invasive Species Management (PRISMs) at both public and private launches.

For more information, or to sign-up for email updates from NYDEC, visit our website: www.dec.ny.gov

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Aquatic Invasive Species B... x +

http://www.dec.ny.gov/animals/107807.html

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Aquatic Invasive Species Boat Stewards

New York has more than 7,000 lakes, ponds, and rivers that could potentially be exposed to dozens of harmful [aquatic invasive species \(AIS\)](#) that have already been introduced and many more species that pose a threat. In July 2015, New York released its updated [Aquatic Invasive Species Management Plan](#) to help prevent the introduction and spread of aquatic invasive species into and within New York State's waters.

One of the main pathways for transfer of aquatic invasive species between waterbodies is recreational water vehicles (boats, canoes, kayaks, and jet skis). For this reason the top priority of the statewide AIS management plan is to expand the coverage of boat stewardship programs across the state, particularly in popular, high-use areas. In-person interactions with boaters, anglers, and other recreational water users raises awareness about aquatic invasive species and practices (cleaning, draining, and treating) that reduce the chance of spreading aquatic invaders. Read more about the [practices required to prevent the spread of AIS](#) (PDF, 340 KB).

In 2016 more than 120,000 boats were inspected and boat stewards talked with more than 140,000 water recreationists.

Who are Boat Stewards and What Do They Do?


Boat stewards are volunteers or paid members of your community who help protect New York State's waters. An encounter with a steward will involve being asked if you already practice preventive measures and receiving instruction about how to inspect and "clean, drain, and treat" your watercraft and equipment. You will also be asked which waterbody you last visited so that the steward can determine if you are coming from infested waters and what species are there. Boat stewards will have access to this information for many lakes and ponds through the [iMapInvasives website](#) (leaves DEC website). Boat stewards have a wealth of information about aquatic invasive species. Feel free to ask them questions!

Resources for Boat Steward Programs


Setting up and maintaining a boat steward program can seem daunting. NYSDEC, NYS OPRHP (Parks), New York Sea Grant (NYSG), and several other partners have teamed up to provide support for boat steward programs. This team of agencies is making every effort to standardize the training, messaging, and information that is distributed throughout the state. The following resources are available for organizations interested in learning more about what is involved in developing a program and how to improve existing programs.

Funding and Personnel

New York State Waters & Invasive Species Program Handbook (PDF, 1.1 MB)



Kayakers at Round Lake



ZENworks

1:26 PM 4/4/2017

Dedicated webpage for Boat Steward Programs



Department of Environmental Conservation

Boat Steward Training Programs 2018

- Western New York
- Adirondack Watershed Institute
- Parks/NYSeaGrant
- Finger Lakes Institute
- Catskill Regional Invasive Species Partnership



J. Clayton, NYSDEC



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Season kickoff Memorial Day weekend



J. Clayton, NYSDEC



J. Clayton, NYSDEC

Thank you!

Cathy McGlynn
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Bureau of Invasive Species and
Ecosystem Health
Invasive Species Coordination Section
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Watercraft Inspection Steward Program Application Overview

John Marino
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iMapInvasives.org

The NY Natural Heritage Program is a partnership between the NYS Department of Environmental Conservation (NYSDEC) and the State University of New York College of Environmental Science and Forestry (SUNY ESF).



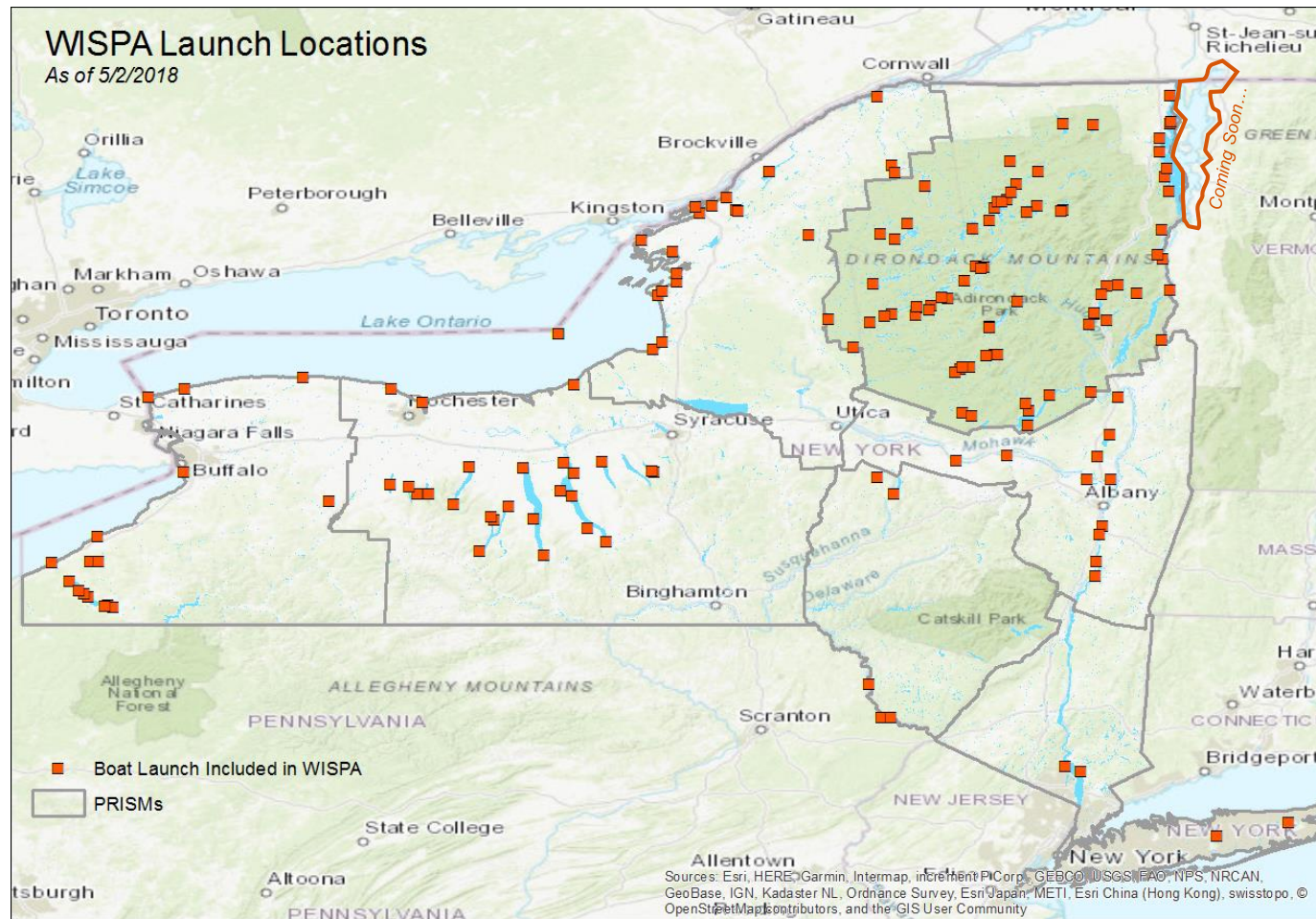
New York
Natural Heritage
Program



**Department of
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WISPA Launch Locations

As of 5/2/2018



Department of
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What Kind of Data Is Collected?

- When did the inspection occur
- Where the boat launch and the steward were located
- Was the watercraft launching or retrieving
- What type of watercraft was inspected
- Did the operator agree to an inspection?
 - If so, were any invasive species detected (if so, which invasive[s])?
- Was a Watercraft Decontamination performed?



How Does It Work?

- Field data collection survey application (Survey123)
 - Requires internet connectivity for setup
 - Works offline once configured for data collection
 - Internet connectivity required for data upload
- Central GIS database (ArcGIS Online)
- Data Dashboard (ArcGIS Online)
- Data Editor Maps (ArcGIS Online)

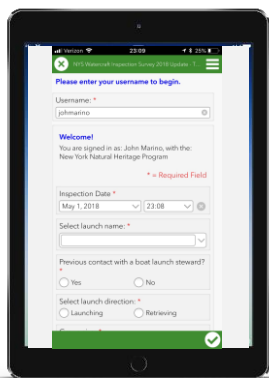


How It Works

WISPA Data Collection

Survey123

- Tool which boat launch stewards use to collect and upload data



ArcGIS
Online
NYSDEC

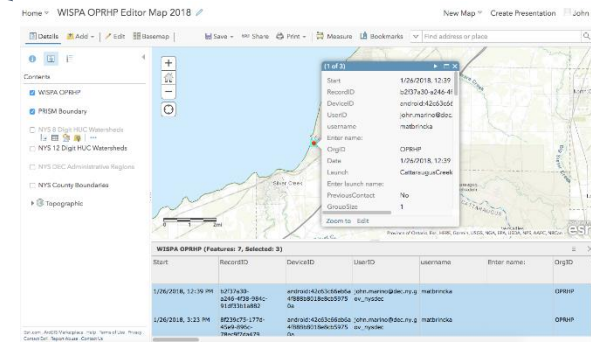
Dashboard

- Viewable by program coordinators
- Allows for view-only of all state data



Editor Map

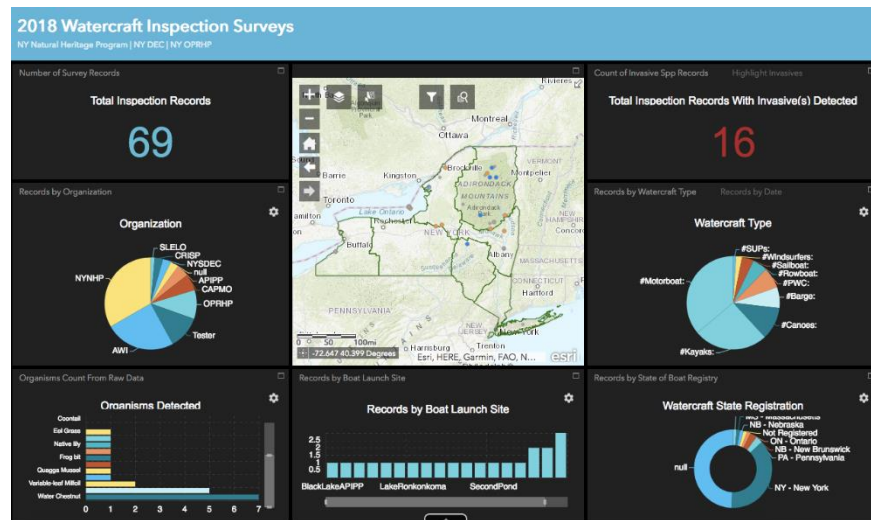
- Configured for each organization
- Allows for data editing of own organization's data



Data Viewing

Dashboard

- At-a-glance view of statewide data
- Filter by date or organization
- Data in charts and graphs matches the data visible in the map

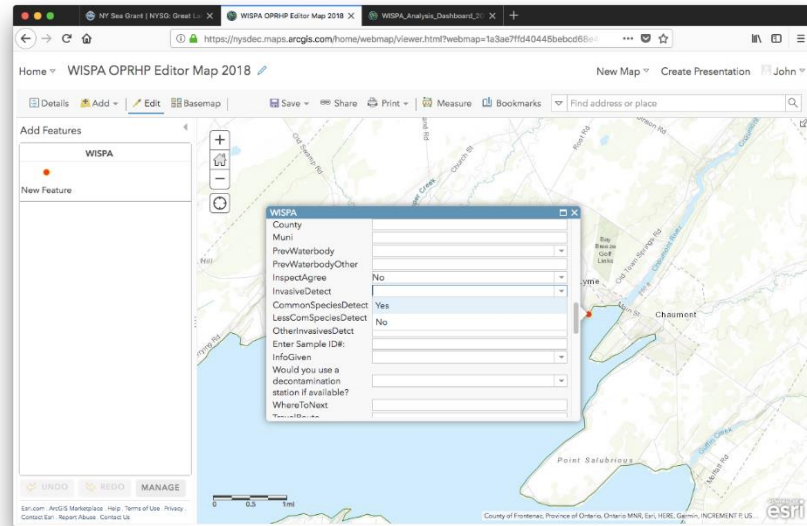


Dashboard Demo

Data Editing

Editor Map

- View and edit all data submitted by stewards from the user's organization
- Export data to different formats for detailed/custom analysis



How To Get Started? *(For 2019)*

- Contact Cathy McGlynn
- Tablets/mobile devices for boat launch stewards
- Coordinate with NYNHP to get launch locations and boat launch steward names loaded into WISPA
- Program coordinator needs access to an ArcGIS Online Organization Account to view/edit data
 - Data dashboard
 - Editor map



Thank you!

John Marino
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New York Natural Heritage Program – iMapInvasives Team
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iMapInvasives.org



WISPA Coordinators Meeting April 6, 2018
 Photo: Meg Wilkinson

The NY Natural Heritage Program is a partnership between the NYS Department of Environmental Conservation (NYSDEC) and the State University of New York College of Environmental Science and Forestry (SUNY ESF).



New York
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 Program



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