PAUL SMITH'S COLLEGE
Adirondack Watershed Institute

Stewardship Program 2018 Final Report

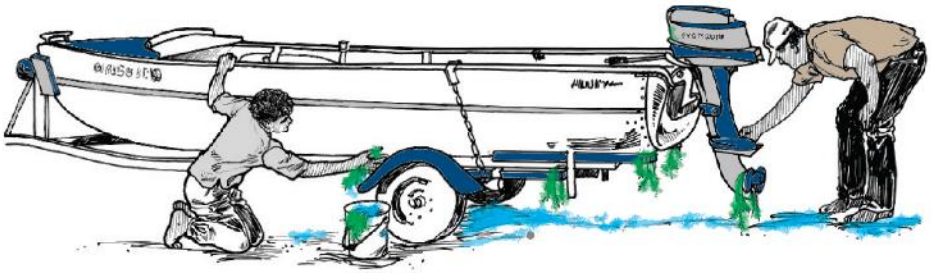
PAUL SMITH'S COLLEGE

AWI 2019-02

PAUL SMITH'S COLLEGE
Adirondack Watershed Institute

2018 Adk AIS Prevention Program

191,493 - People Greeted and Educated



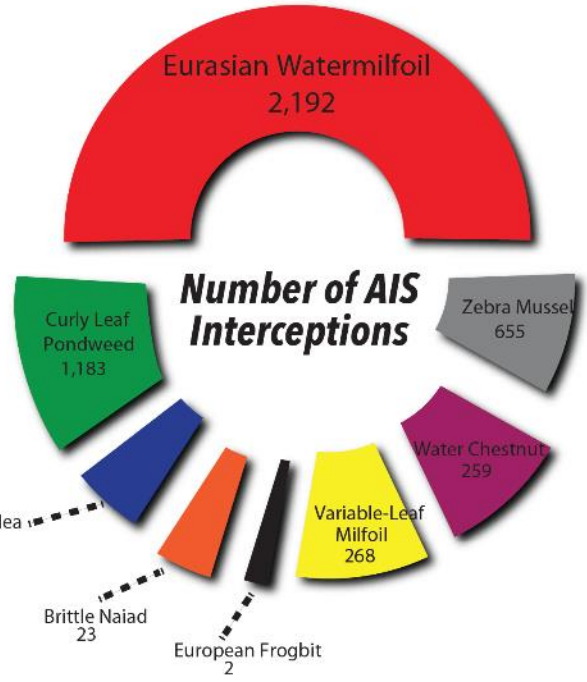
98,216 - Boat Inspections
4,617 - AIS intercepted
3,455 - Boat Decontaminations
3.7% - Boats Carrying AIS
9.4% - Boats Carrying Any Organism
417 - Unique Previous Waterbodies

152 - Watershed & Decontamination Stewards
27 - Decontamination Stations
72 - Boat Launches
83.3% - Boat Registrations from NY
53 - States and Provinces as Origin Points

Lake Champlain Basin Program

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

Great Lakes RESTORATION



www.adkcleanboats.com

Graphic by Jake Sporn

PAUL SMITH'S COLLEGE
Adirondack Watershed Institute

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The 2018 Adirondack Watershed Institute Stewardship Program was funded by:

Other Funders:

Adirondack White Lake Association
Osgood Pond Association
St. Regis Foundation
Town of Arietta, New York
Town of Lake Pleasant, New York

Partner Organizations:

APIPP
Adirondack Lakes Alliance
Adirondack Park Agency
NYS DOT
Lake George Park District
Natural Heritage Trust
Adirondack Local Government Review Board
FUND for Lake George
Adirondack Council
Lake George Association
New York Sea Grant
Eastern NY Marine Trades Association
Adirondack Association of Towns and Villages
NYS Conservation Council
Rainbow Lake Association
Long Lake Association
Raquette Lake Association
Alpin Haus

Steward Lydia Harvey at Lake Champlain.

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Photographs: Jake Sporn

Table 1: Abbreviations List.

Abbreviation	Complete Text
ADK	Adirondack Mountain Club
AIS	Aquatic Invasive Species
ALA	Adirondack Lakes Alliance
APA	Adirondack Park Agency
APIPP	Adirondack Park Invasive Plant Program
AWI	Paul Smith's College Adirondack Watershed Institute
AWI	Adirondack Watershed Institute Stewardship Program
ECOS	Environmentally Clean Operating System
EPA GLRI	United States Environmental Protection Agency Great Lakes Restoration Initiative
EPF	Environmental Protection Fund
ESF	State University of New York College of Environmental Science & Forestry
ESSLA	East Shore Schroon Lake Association
EWM	Eurasian watermilfoil
LCBP	Lake Champlain Basin Program
LGPC	Lake George Park Commission
NHT	Natural Heritage Trust
NYS	New York State
NYSDEC	New York State Department of Environmental Conservation
NYSDOT	New York State Department of Transportation
PSC	Paul Smith's College
S.A.V.E. Lake George Partnership	Stop Aquatic inVasives from Entering Lake George Partnership
Steward	Adirondack Watershed Institute Steward
US FWS	U.S. Fish & Wildlife Service
USLA & USLF	Upper Saranac Lake Association & Upper Saranac Foundation
VIC	Paul Smith's College Visitor Interpretive Center

Abstract

This report summarizes data and program highlights for the 2018 field season of Paul Smith's College Adirondack Watershed Institute Stewardship Program located in Paul Smiths, NY. In 2018, the AWI hired 113 watershed stewards stationed at 66 different boat launches and 23 decontamination stations throughout the Adirondack Park and beyond. This allowed the AWI to implement a landscape-scale, coordinated aquatic invasive species (AIS) spread prevention program. Boat inspection and decontamination programs managed and funded by cooperating lake associations placed 39 stewards at 10 additional locations, for a combined total of 152 stewards at 72 launches and 27 decontamination stations. Under a contract with the New York State Department of Environmental Conservation (NYSDEC), the AWI managed the New York State AIS Prevention Program, funded by an appropriation from New York State's Environmental Protection Fund, for the fourth consecutive year. The AWI has stationed watershed stewards funded by a variety of agencies and foundations across the Adirondack Park since 2000. This report includes data from partner watercraft programs sponsored by municipalities, comprising 10% of all watercraft inspections.

AWI stewards educated 171,210 visitors about AIS issues and spread prevention techniques while inspecting 87,865 watercraft. Stewards discovered and removed 4,582 confirmed AIS, encompassing 4.1% of all watercraft inspected. Partner programs were AWI-supervised and trained, but operated independently at Brant Lake, Canada Lake, Caroga Decontamination Station, Loon Lake, Paradox Lake, Northern Schroon/Paradox Decontamination Station, Town of Horicon Decontamination Station, and Schroon Lake. With partner programs' inspection figures included, a total of 98,216 watercraft were inspected, 191,493 people educated, and 4,617 confirmed AIS removed from watercraft, representing an overall watercraft AIS transport rate of 3.7%. Stewards decontaminated 3,455 watercraft at 27 decontamination stations.

A comparative analysis of data from 72 AWI and partner program boat launches revealed variation in visitor reception to inspection, AIS transport rate, percentage of visitors taking AIS spread prevention measures, and types of watercraft launched. Visitors reported using their watercraft within the previous two weeks on over 410 different water bodies throughout the United States and Canada. This report includes a review of public education and outreach efforts and outcomes.

In 2018, major funding for the AWI was provided by the New York State Environmental Protection Fund, the United States Environmental Protection Agency Great Lake Restoration Initiative (EPA GLRI), and the Lake Champlain Basin Program (LCBP). Other funding sources included the Adirondack White Lake Association, the Black Lake Association, the Brantingham Community Association, the Lake Placid Shore Owners' Association (LPSOA), the Osgood Pond Association, the Upper Saranac Foundation (USF), the Lake Champlain Basin Program (LCBP), the Towns of Arietta, Lake Pleasant, and Long Lake, and Paul Smith's College.

Quiet morning on Saranac River.

Introduction

Eric Holmlund, PhD
Director, Adirondack Watershed Institute Stewardship Program

The AWI and the Stewardship Program

The Stewardship Program is the education, outreach and spread prevention arm of Paul Smith's College's comprehensive environmental science, education, and management program, the Adirondack Watershed Institute (AWI). The AWI is the only organization in the Adirondack Park offering a full range of environmental services including general environmental science, water quality monitoring, fisheries program management, aquatic invasive species (AIS) monitoring, ongoing AIS infestation management, AIS infestation rapid response, large-scale public outreach, data analytics and support services, and AIS spread prevention. AWI staff members coordinate and maximize the impact of AIS prevention, management and response activity by sharing information between the complementary aspects of the program.

Steward Ben McInerney inspects a boat at Indian Lake.

Paul Smith's College's AWI pursues a threefold mission—(1) researching terrestrial and aquatic ecosystems and the impacts of human activity on the natural environment, (2) enhancing the education of PSC students, and (3) engaging the communities of the Adirondacks in stewardship of natural resources—by directing scientific, educational, and spread-prevention resources to address the persistent ecological and social challenges wrought by various mechanisms of ecological change including the spread of aquatic invasive species. The AWI pursues this mission through a highly collaborative strategy, sharing resources, support and expertise with communities, municipalities and state and federal agencies across the Adirondack region, New York State and Vermont.

The Stewardship Program initiated services in 2000 on one northern Adirondack lake chain, the St. Regis Lakes, and has since expanded its coverage to 66 locations across the entire North Country region. Our 2018 field season featured boat inspection and outreach from South Bay in the southeast to Black Lake near the St. Lawrence River in the northwest, and from White Lake in the southwest to Plattsburgh on Lake Champlain in the northeast.

An infested boat exiting Lake Champlain.

In 2018, Paul Smith's College was awarded a 5-year contract with the State of New York to implement and administer the Adirondack Aquatic Invasive Species Spread Prevention Program (AAISSPP), funded by the New York State Environmental Protection Fund. The AWI chairs the AAISSPP steering committee, including the Adirondack Park Invasive Plant Program (APIPP), the Adirondack Lakes Alliance (ALA), New York State Department of Environmental Conservation (NYSDEC), the Adirondack Park Agency (APA), New York State Department of Transportation (NYSDOT), representatives from local government, environmental organizations, lake associations,

the Lake George Park Commission (LGPC), New York Sea Grant, and the Lake Champlain Basin Program (LCBP). In a region as large and jurisdictionally complex as the Adirondacks, the AWI recognizes that strategic partnership is the most effective path forward to forge truly effective and enduring responses to the landscape-level disruption posed by the spread of invasive species.

The Adirondack Region and the Threat of Aquatic Invasive Species

The Adirondack Region is home to globally significant wetlands, approximately 2,800 lakes and ponds, and over 30,000 miles of rivers and streams. With an abundance of high-quality water resources comparatively uninvaded by the scores of invasive species in other state waters, the Adirondacks present a crucial opportunity for stewardship. The Park protects almost six million acres of forests, mountains and waterways, attracting hundreds of thousands of visitors and seasonal residents annually. Most prominent among the many attractions of the region are its opportunities in snow-free months for aquatic recreation, including paddling, sailing, motorboating, swimming, diving, camping, and fishing. Visitors to the Adirondack Park expend $1.2 billion annually, with nearly 70% expressing an interest in water based recreational activities such as swimming, fishing or boating (PlaceMaking, 2018). While productive from a socioeconomic perspective, many of these activities can, and have, spread a small but significant number of AIS over the past two decades to over 100 Adirondack lakes.

DATA SOURCE: UVM, LCBP, Lake Champlain Sea Grant, Great Lakes Environmental Research Laboratory, Lafontaine and Costan 2002, and Strayer 2012. Lake Champlain data current as of 2014.

Figure 1. Regional AIS threats to the Adirondack Park.

Overland transport of AIS propagules by recreational watercraft has been clearly established as a primary vector in the spread of AIS across North America (Leung, Bossenbroek, & Lodge, 2001) (Johnson, Ricciardi, & Carlton, 2001) (Drury & Rothlisberger, 2008). Hand removal and high-pressure hot water boat decontamination measures taken by either paid boat stewards or boat owners to remove AIS propagules are effective means of reducing the risk of AIS spread by recreational watercraft (Rothlisberger J. , Chadderton, McNulty, & Lodge, 2010) (Comeau, Rainville, Baldwin, & Austin, 2001) (Morse, 2009).

Invasive spiny waterflea sampled at Indian Lake.

New AIS continue to make inroads in NYS each season, including continued, mounting infestation of Asian clam (*Corbicula fluminea*) in Lake George, expanding to a total of 23 sites in 2017, detection of spiny waterflea (*Bythotrephes longimanus*) in Indian Lake in 2016, along with the continued management of *Hydrilla verticillata* in Cayuga Lake, Tinker Pond, Prospect Park Lake, Erie Canal, Creamery Pond, and the Lower Croton River. While the Adirondack Park has 103 waterways infested with six aquatic invasive plant species and three aquatic invasive animal species, it is surrounded by highly visited waterways with dozens more AIS not yet present in the region (Quirion, Vennie-Vollrath, & Simek, 2017).

Boat Steward Programs in New York State

Watercraft inspector/boat steward programs have emerged as the strategy of choice over the past decade to decrease the spread of aquatic invasive species (AIS) in New York State via the vector of overland transport of recreational watercraft. Overland transport of AIS propagules by recreational watercraft has been clearly established as a primary vector in the spread of AIS across North America (Leung, Bossenbroek, & Lodge, 2001) (Johnson, Ricciardi, & Carlton, 2001) (Drury & Rothlisberger, 2008). Hand removal and high-pressure hot water boat decontamination measures taken by either paid boat stewards or boat owners to remove AIS propagules are effective means of reducing the risk of AIS spread by recreational watercraft (Rothlisberger J. , Chadderton, McNulty, & Lodge, 2010) (Comeau, Rainville, Baldwin, & Austin, 2001) (Morse, 2009). Boat steward programs were identified as essential elements of Adirondack AIS spread prevention in an influential white paper published in 2014 by a joint team including APIPP, the Lake George Association, the Lake Champlain Basin Program, and the Adirondack Watershed Institute (Johnstone, et al., 2014). The document analyzed AWI, LCBP, and LGA boat steward data to establish clear vector pathways in the Adirondack Park arising from overland transport of recreational watercraft. This white paper served as the primary guidance resource for NYSDEC as it designed its Environmental Protection Fund–financed regional spread prevention program proposal.

Steward Ben Coolidge decontaminates a boat at Lake Champlain's Peru launch.

The New York State AIS Management Plan released in 2015 maintains that "effective prevention strateg[ies]. . . will include" education and outreach components (NYSDEC Bureau of Fisheries, 2015). The NYS AIS management plan also specifically calls for the "immediate action" of expanding boat launch steward programs. This priority was facilitated by the release of New York State Environmental Protection Fund-allocated grant and contract opportunities designed to establish, continue or expand boat launch steward programs in various important locations across the state, including the Adirondack Park. New York State has thus articulated the need for and funded at significant levels boat steward programs as a high-priority AIS spread prevention strategy.

A boater assists South Bay steward Bruce Farquhar with removing AIS plants at Lake Champlain.

As called for by the NYS AIS Management Plan, New York State Department of Environmental Conservation funds AIS spread prevention programs employing visual inspection, hand removal, and high pressure/hot water decontamination stations, to address regional AIS spread and proliferation. Stewardship/ watercraft inspection and decontamination programs help reduce the inadvertent introduction of new AIS to the Adirondacks, including species such as Brazilian elodea, hydrilla, quagga mussel, and round goby. Although the threat of AIS

introduction and expansion justifies alarm, there are hundreds of waterways in the Adirondack region with few or no AIS at present, which underscores both the opportunity as well as the obligation for concerted, coordinated AIS spread prevention activity.

Steward Kristel Guimara speaks with a boater at the Second Pond launch.

Paul Smith's College has an established history offering a boat steward program aligning with the emerging state strategy on AIS for almost two decades. Paul Smith's College began implementing AIS spread prevention programs on various Adirondack regional waterways each boating season in 2000. The AWI Stewardship Program was initiated with private funding from the St. Regis Lakes. The program expanded slowly between 2000 and 2010, gradually expanding to include, in order, Upper Saranac Lake (2001), Lake Placid (2002), Rainbow Lake (2005), Second Pond (2005), Long Lake (2008), Osgood Pond (2008), Raquette Lake (2008), Tupper Lake (2009), Great Sacandaga Lake (2009), and Saratoga Lake (2010). Each of these contracts was funded by private association dollars, the Lake Champlain Basin Program, or municipalities. In 2011, Paul Smith's was awarded the first of nine Great Lakes Restoration Initiative grants, which included greatly expanded boat steward coverage in the Lake Ontario basin from 2011 to 2018. This resulted in the addition of 9 more locations. In 2015, Paul Smith's College AWI received a contract from New York State Department of Environmental Conservation (EPF funding) to expand further, adding an additional 45 locations, including decontamination stations.

Numerous boat steward programs have been implemented in New York State to address AIS spread prevention following the AWI's pioneering effort. The Lake Champlain Basin Program initiated a boat steward program focused on both the Vermont and New York sides of the lake in 2007. The Lake George Association began a boat steward program in 2008, which evolved into the Lake George Park Commission program in 2014. New York State's Office of Parks, Recreation and Historic Preservation began developing boat steward programs in 2014. Federally funded boat steward programs in the Finger Lakes began in 2014. Both of these initiatives were funded by the Great Lakes Restoration Initiative. In 2008, NYSDEC established eight Partnerships for Regional Invasive Species Management units, which the agency enacted in 2008, modeled after the program after the Adirondack Park Invasive Plant Program, initiated in 1998. In 2018, NYSDEC began funding pilot boat steward programs in each of the PRISMs across the state. It is in this annually expanding context of state-wide boat steward programs that the AWI Stewardship Program continues to both thrive and provide leadership and support for new initiatives.

Steward Nate Brault removes a large amount of invasive milfoil from a personal watercraft at Lake Champlain's Plattsburgh boat launch.

AIS Pathways in the Park

AWI Stewardship Program data analysis has identified patterns in the sources of inbound boat traffic to each lake where stewards are present over approximately a dozen years of service. These pathways are implicated in the introduction and spread potential of invasive organisms transported on watercraft and trailers from source lakes to destination waterways. Not only has this information on AIS transport pathways allowed scientists and managers to understand and disrupt potential invasion routes within the Adirondack Region, but the findings provide crucial information about source waters of AIS from elsewhere in New York State and beyond. This understanding of source-water threats to the Adirondacks represents one of the important and emergent strategies to engage communities and natural resource managers in different parts of the state in order to contain existing infestations and to provide greater impact to state-wide AIS spread prevention initiatives.

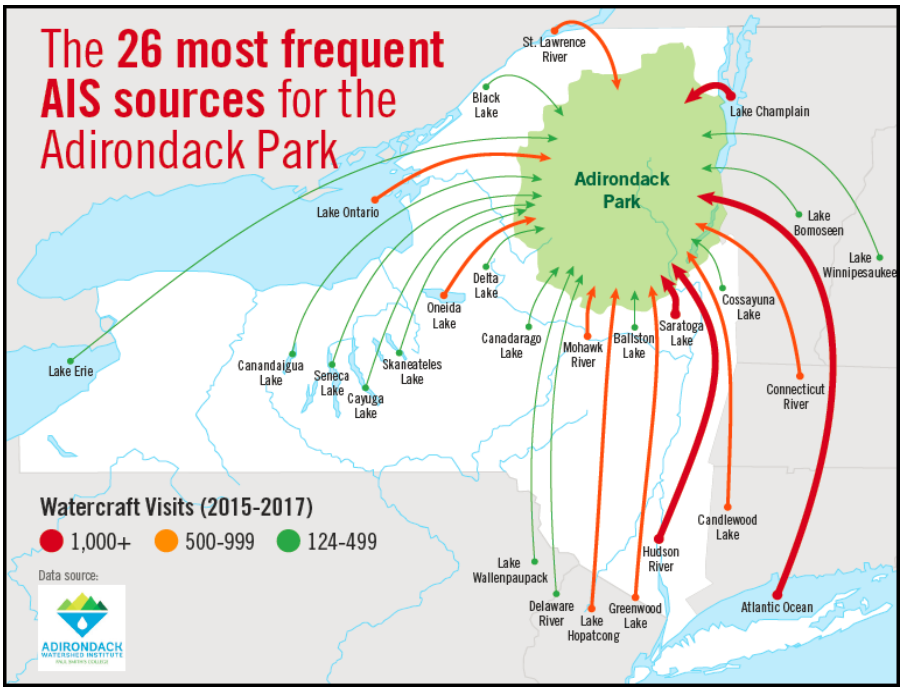


Figure 2. Top 26 AIS sources outside the Adirondack Park.

Invasive curly-leaf pondweed at Westport launch on Lake Champlain.

As a result of this pathway analysis, program capacity, history, and strategic partnerships, Paul Smith's College received a 5-year contract to implement a boat inspection and decontamination program in the Adirondacks in 2018. This contract expires after the 2022 field season. This unprecedented level of engagement and support from NYSDEC, the Governor's office, the state legislature, and the federal Great Lakes Restoration Initiative has allowed AWI to refine its program system and approaches and to improve and increase its involvement with New York State's statewide strategy to establish AIS spread prevention, inspection and decontamination stations at locations from the Niagara River to Long Island. As the oldest, best resourced, and largest single AIS spread prevention program in New York State, the AWI Stewardship Program is in a unique position to share insight, best practices, and technical support with state agencies and regional invasive species management programs across New York State.

Program Elements and Scope

The 2018 field season of the AWI Stewardship Program featured the solidification and maturation of the program as a contracted collaborator with NYSDEC under a multi-year commitment. This degree of funding security allowed the program to invest in personnel, equipment, and multi-year planning arising from continued and enhanced professional relationships with managers at state agencies. 2018 saw yet another increase in scope over the program's robust year of service in 2017. 121 AWI stewards and staff, supported by a budget of almost $2 million, delivered an integrated AIS spread

prevention program at nearly 70 separate locations in all regions of the 6,000,000-acre Adirondack Park. The AWI administered a composite budget derived from over one dozen sources, including a contract with New York State, a Great Lakes Restoration Initiative award from the US EPA, support from the Lake Champlain Basin Program, and contracts with several lake associations, foundations and municipal entities. The AWI coordinated the local and regional imperatives of each funding source and stakeholder group into an integrated, regionally coherent program. In addition, the AWI combined efforts with a range of administratively separate AIS spread prevention programs including those offered by the Lake Champlain Basin Program, the Lake George Park Commission and a number of Adirondack lake associations including the Schroon and East Shore Schroon Lake Associations, Loon Lake Association, Town of Caroga, Canada, Brant and Paradox Lake Associations.

Steward Annalisa Myer enjoys the view from her steward post at the Village launch on Raquette Lake.

The 2018 field season enacted the fourth year of the Adirondack AIS Prevention Program, a New York State-funded initiative to deploy and staff decontamination equipment at 23 decontamination stations and dozens of boat inspection stations sited strategically around the Park. The AWI worked closer than ever with the Adirondack Park Invasive Plant Program and New York's Department of Environmental Conservation's Invasive Species Unit, Albany DEC staff, The DOT, the NYS Department of Fisheries, and Regions 5 and 6 staff to plan, troubleshoot, and monitor the enhanced and expanded AIS spread prevention program. AWI watercraft inspectors were trained to use high-pressure hot water decontamination equipment on high- risk boats failing New York State's "arrive clean, drained and dry" standard. Watercraft inspectors at 66 inspection locations at boat launches across the Park were able to refer high-risk watercraft to nearby decontamination facilities, thereby providing the greatest degree of access yet to boat decontamination in the Adirondack Region.

Steward Maranda Wells decontaminates a boat at the Ticonderoga launch on Lake Champlain.

Once again, the AWI supported the data intake and analysis efforts of lake steward/boat inspector programs across the state and within the Adirondack Park. AWI compiles and performs routine analysis of data for several collaborating programs in the Adirondack Park as a service to the community. We provide this service to Blue Mountain Lake, Schroon Lake, Loon Lake, Paradox Lake, Brant Lake, Canada Lake and Caroga Decontamination Station, as well as other New York State programs including Schroon and Loon Lakes. The reports of our Data Analysis Support Services can be found in one of the appendices. This service allows the AWI to access and incorporate data from programs

all across the state, allowing the AIS management community to better coordinate and synergize AIS prevention efforts.

Overview of the 2018 report

This report contains chapters and components summarizing the program's findings, activities and diverse functions. The Program Description chapter provides an overview of the scope, training, and methods employed by our watercraft inspectors. The Summary of Results chapter presents and interprets composite data and results obtained by watercraft inspectors and decontamination station operators for the 2018 field season, including analysis of the AIS spread pathways determined from the analysis of previously visited water bodies. The Program Discussion chapter provides descriptions, discussion, and recommendations pertaining to the two largest elements of the 2018 program: the Great Lakes Restoration Initiative and the Adirondack AIS Spread Prevention Program, funded by New York State.

The report continues with summaries and results from the environmental education and outreach programs designed to increase the reach and relevance of the AWI's mission and activities. The longest section of the annual report is comprised of over 40 comprehensive Location Summaries, which provide condensed summaries of data, maps, and results for the primary locations of watercraft inspection and decontamination stations. These summaries will be useful overviews of watercraft inspection program outcomes for those interested in particular water bodies and locations. They include summaries for our data support service lakes. The report concludes with appendices detailing our seasonal staff and listing the education and outreach events conducted and attended by our seasonal staff.

Overhead view of the 90-Miler Canoe Race from Old Forge to Saranac Lake.

Overview of Steward Locations

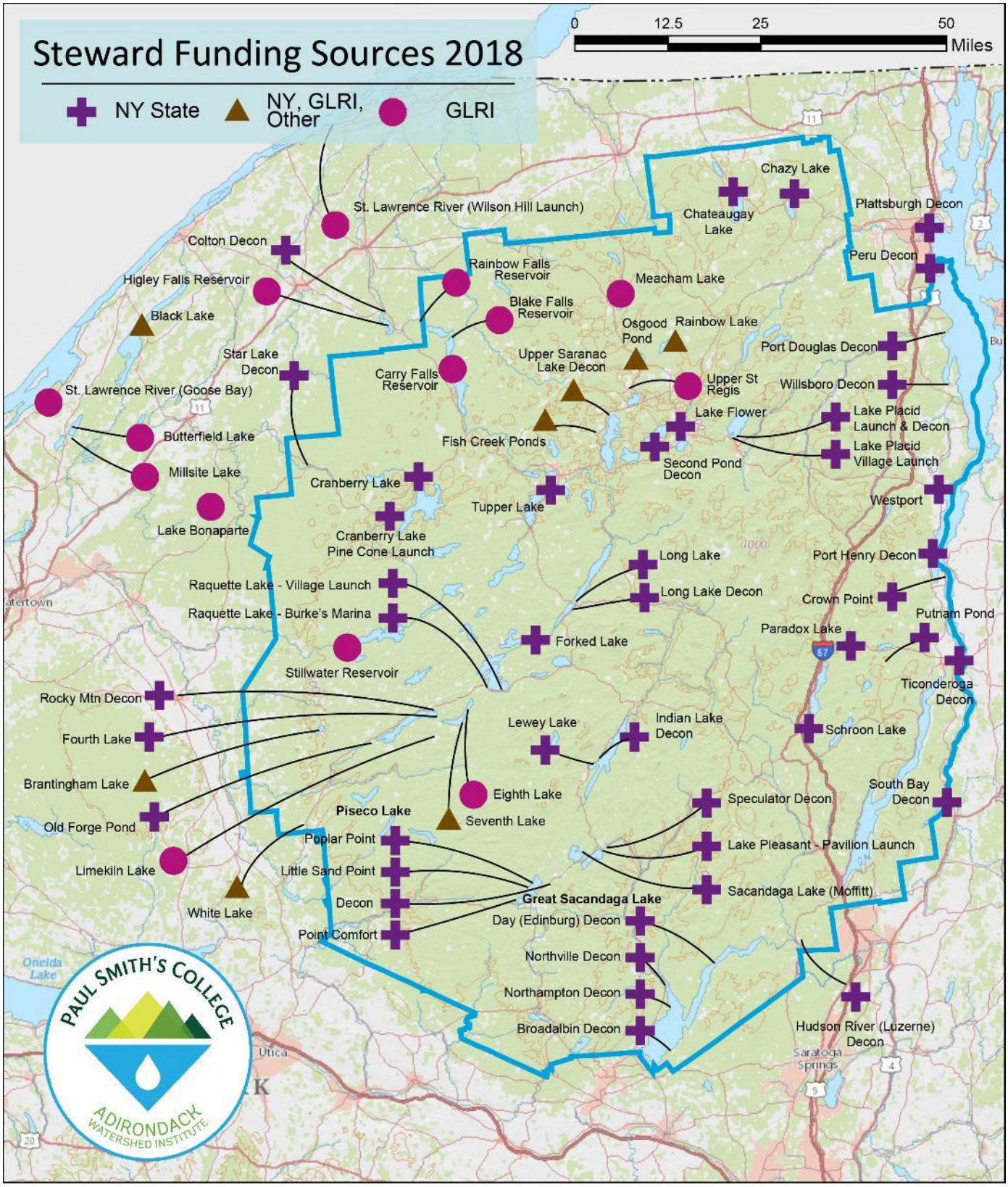


Figure 3. Overview map of AWI steward locations and funding sources, 2018. (Excludes partner programs.)

Program Description and Methods

Sue O'Reilly
Data Manager, Adirondack Watershed Institute Stewardship Program

Program Background

The Stewardship Program is the public education and AIS spread prevention element of the AWI. The AWI works to improve the quality of ecosystems through environmental research and management of AIS infestations across the Adirondack Park. The AWI mission involves providing on-site stewardship of terrestrial and aquatic natural resources, primarily through public education, field monitoring, and service work. The AWI works closely with state environmental agencies and local advocacy groups, such as lake associations and regional environmental organizations, to protect the integrity of native ecosystems from the negative effects of AIS. Since 2000, when the AWI began posting stewards at Upper St. Regis Lake and on St. Regis Mountain, the program has gradually expanded through the central and western Adirondacks and now stretches into St. Lawrence County and along the shore of Lake Champlain. For 19 years, the program has built relationships with lake associations and the NYS DEC resource managers, Forest Rangers, Division of Operations, and Bureau of Fisheries as AIS prevention has emerged as a top priority among the scientific, property owner, and tourism communities of the region.

Table 2. Total number of days covered and typical weekly coverage level at each location, 2018. Site closing dates varied.

2018 AWI Locations	Days Covered	Steward Coverage
Big Moose Lake	1	-
Black Lake	78	5 days/week
Blake Falls Reservoir	3	-
Brantingham Lake	23	3 days/week
Buck Pond (Rainbow Lake)	65	5 days/week
Butterfield Lake	45	3 days/week
Carry Falls Reservoir (North)	41	3-5 days/week
Carry Falls Reservoir (South)	1	-
Chateaugay Lake	76	5 days/week
Chateaugay Lake Decontamination Station 7/4 - Opening Date	48	5 days/week
Chazy Lake	63	5 days/week
Colton Decontamination Station	49.5	5 days/week
Cranberry Lake - Pine Cone Launch	23	-
Cranberry Lake - State Launch	100	5 days/week
Eighth Lake	44	3-4 days/week
Fish Creek Ponds	107	7 days/week
Forked Lake	64	5 days/week
Fourth Lake - Alger Island	10	-
Fourth Lake - Inlet	127	5-7 days/week
Great Sacandaga Lake - Broadalbin	99	5 days/week
Great Sacandaga Lake - Broadalbin Decontamination Station 6/29 - Opening Date	70.5	5 days/week

2018 AWI Locations	Days Covered	Steward Coverage
Great Sacandaga Lake - Day	67	5 days/week
Great Sacandaga Lake - Day Decontamination Station 7/27 - Opening Date	22.5	5 days/week
Great Sacandaga Lake - Northampton	69	5 days/week
Great Sacandaga Lake - Northampton Decontamination Station 6/29 - Opening Date	43.5	5 days/week
Great Sacandaga Lake - Northville	103	5 days/week
Great Sacandaga Lake - Northville Decontamination Station 5/26 - Opening Date	102.5	5 days/week
Higley Flow (Higley Falls Reservoir)	42	5 days/week
Hudson River - Luzerne	72	5 days/week
Hudson River - Luzerne Decontamination Station 5/26 - Opening Date	69.5	5 days/week
Indian Lake	98	5-7 days/week
Indian Lake Decontamination Station 8/11 - Opening Date	38.5	5 days/week
Lake Adirondack	2	-
Lake Bonaparte	32	5 days/week
Lake Champlain - Crown Point	68	5 days/week
Lake Champlain - Peru	73	5 days/week
Lake Champlain - Peru Decontamination Station 5/27 - Opening Date	71	5 days/week
Lake Champlain - Plattsburgh	68	5 days/week
Lake Champlain - Plattsburgh Decontamination Station 7/27 - Opening Date	24	5 days/week
Lake Champlain - Port Douglas	60	5 days/week
Lake Champlain - Port Douglas Decontamination Station 7/27 - Opening Date	16	5 days/week
Lake Champlain - Port Henry	114	5 days/week
Lake Champlain - Port Henry Decontamination Station 6/1 - Opening Date	102.5	5 days/week
Lake Champlain - South Bay	98	5 days/week
Lake Champlain - South Bay Decontamination Station 7/4 - Opening Date	71	5 days/week
Lake Champlain - Ticonderoga	115	5 days/week
Lake Champlain - Ticonderoga Decontamination Station 5/26 - Opening Date	115	5 days/week
Lake Champlain - Westport	102	5 days/week
Lake Champlain - Willsboro	63	5 days/week
Lake Champlain - Willsboro Decontamination Station 5/26 - Opening Date	63	5 days/week

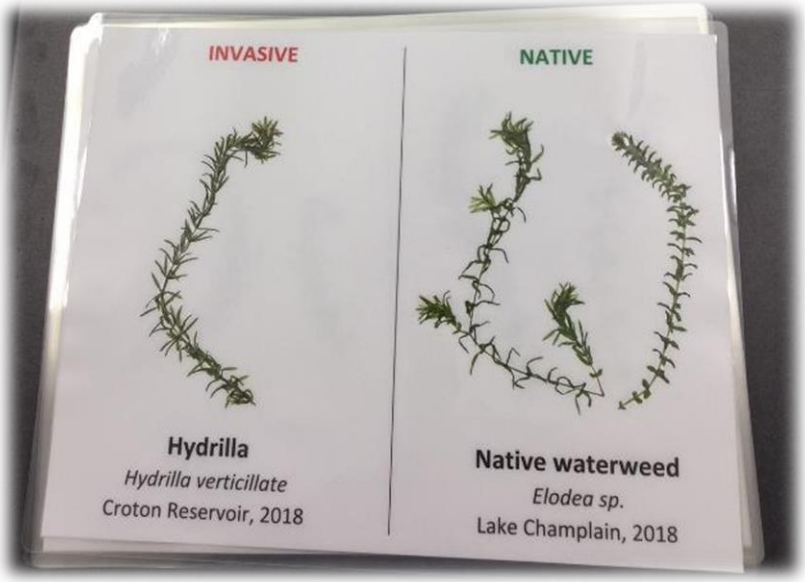
2018 AWI Locations	Days Covered	Steward Coverage
Lake Flower	103	5 days/week
Lake Placid - State Launch	150	7 days/week
Lake Placid - State Launch Decontamination Station 6/6 - Opening Date	118	7 days/week
Lake Placid - Village Launch	91	7 days/week
Lake Pleasant - Pavilion Launch	72	5 days/week
Lewey Lake	30	2-3 days/week
Limekiln Lake	37	3 days/week
Long Lake	95	7 days/week
Long Lake Decontamination Station 6/29 - Opening Date	24	3 days/week
Meacham Lake	51	5 days/week
Millsite Lake	25	2 days/week
Old Forge Pond	10	-
Osgood Pond	48	3-4 days/week
Oxbow Lake	1	-
Paradox Lake	96	5 days/week
Piseco Decontamination Station 5/26 - Opening Date	72	5 days/week
Piseco Lake - Little Sand	63	5 days/week
Piseco Lake - Point Comfort	83	5-7 days/week
Piseco Lake - Poplar Point	97	5-7 days/week
Putnam Pond	29	5 days/week
Rainbow Falls Reservoir	4	-
Raquette Lake - Burke's Marina	24	2-3 days/week
Raquette Lake - Village Launch	99	7 days/week
Rocky Mountain Decontamination Station 7/4 - Opening Date	67	5 days/week
Sacandaga Lake (Moffitt Beach)	124	7 days/week
Second Pond	116	5 days/week
Second Pond Decontamination Station 5/26 - Opening Date	62	5 days/week
Seventh Lake	94	7 days/week
Seventh Lake (Eighth Lake Campground)	29	2-3 days/week
Speculator Decontamination Station 5/26 - Opening Date	73.5	5 days/week
Star Lake Decontamination Station 7/4 - Opening Date	44	5 days/week
Stillwater Reservoir	73	5-7 days/week
St. Lawrence River - Goose Bay	17	1-2 days/week
St. Lawrence River - Wilson Hill	92	7 days/week
Tupper Lake	89	5 days/week

2018 AWI Locations	Days Covered	Steward Coverage
Upper Saranac Lake	131	7 days/week
Upper Saranac Lake Decontamination Station 5/26 - Opening Date	126	7 days/week
Upper St. Regis Lake	97	7 days/week
White Lake	30	2 days/week

Steward Training

Boat launch stewards participated in a week-long staff training program to familiarize them with inspection methods, data collection protocol, safety, AIS identification and ecology, AIS spread prevention steps, public education techniques, and the natural and cultural history of the Adirondack Park. For the twelfth year, the AWI hosted steward training for other programs such as the LCBP, our Schroon region partners, and volunteer stewards from nearby lake associations. Participants traveled to Paul Smith's College to experience this multiple-element training. Staffers from the AWI, Adirondack Park Invasive Plant Program (APIPP), DEC, LCBP, and SUNY Oneonta gave hands-on training sessions on AIS identification and ecology, public interaction and education skills, and data collection procedures. In addition, trainees benefited from presentations by the LCBP, the NYSDEC and the Adirondack Park Agency (APA).

The AWI stewards also participated in sexual harassment awareness training delivered by a trained sexual violence counselor from Planned Parenthood. Staff training throughout the season on different topics is important to encourage ongoing education and positive morale. The Regional Supervisors began orientation and training one week before the stewards to create schedules, organize outreach events and begin other pre-season preparation work in their areas.



Training materials made from preserved plants used to familiarize stewards with AIS identification.

Watercraft Inspector Methods

Beginning on Memorial Day weekend, AWI had full coverage for the 12 weeks from May 26th to August 20th, and then partial coverage for an additional 11 weeks through November 1st as staff was available. AWI was able to maintain full coverage at selected locations during the later season. Every year, many seasonal staff members return to their university studies in the latter half of August, which requires our managers to adjust coverage. Stewards inspected watercraft and educated visitors at more than 60 locations including 46 different waterbodies. Stewards worked from 7:30 AM to 4:00 PM with one hour off for breaks and lunch. Some locations chosen by NYSDEC also had a second shift from 11:00 AM to 7:30 PM. This was the fourth season that the AWI provided additional coverage at selected locations after Labor Day Weekend. Some boat launches were covered seven days per week while others were staffed part of the week, maximizing coverage during high-use periods (Table 2). Boat ramps were selected by AIS spread prevention risk assessment data by NYSDEC upon recommendation by AWI, APIPP and the LCBP. Stewards were instructed to gather visible data on each visitor party, including group size, type of watercraft, state of boat registration, and time; greet each group whether launching or retrieving, offer a short educational message, share brochures and

resources, and perform a careful boat inspection including removal of all visible transported materials (vegetation, mud, organisms, etc.) and draining all standing water. If a boat did not meet the New York State regulation "Clean, Drained, Dry" standard, boat operators were referred to a nearby decontamination station for voluntary boat decontamination. Stewards shaped their approach according to the characteristics of the particular boat launch, their assessment of visitor background and receptivity, and environmental considerations.

Staff coverage at individual boat launches depended upon visitor use patterns and resource availability (Table 2). Standard coverage at DEC-funded locations was 5 days per week from Thursday to Monday. Stewards were present seven days per week at some locations where additional funding was available such as Fish Creek Ponds, Lake Placid State and Village Launches, Long Lake, Raquette Lake, and Upper Saranac Lake. At a number of sites, including Big Moose Lake, Lake Adirondack, and Oxbow Lake, a steward was present on only a few days for educational purposes or event coverage. Decontamination stations (with high-pressure, hot water decontamination wash equipment) commenced service on different dates during the summer as site preparation activities, signage, and equipment became operational. The stations were open a minimum of five days per week after service began.

Steward table display with educational literature and AIS samples.

Each steward set up a workstation, depending on the site layout and amenities present at each location, which included an informational table, a chair, a sandwich board sign positioned to alert visitors to the steward's presence and a tent for protection from the elements and biting insects. Each table included brochures, handouts, maps, plant samples, identification guides, and other resources to expand the boaters' knowledge of AIS and appropriate spread prevention measures. Stewards engaged visitors by displaying live aquatic plant samples and other props such as water chestnut nutlets, Asian clam shells, and preserved spiny waterflea samples at every table. The stewards enhanced their table displays during Invasive Species Awareness Week, the second week in July, by creating posters and other special exhibits. The stewards wore an AWI nametag and a dark blue polo shirt displaying the AWI logo. Depending on the weather, they also wore a blue fleece with the AWI logo.


Native and invasive plants displayed for boater education.

Pressure washing units were stored and locked in either metal storage containers or a wooden storage shed, depending on the location. These storage facilities also housed signs, personal protective equipment, cones and other gear such as lower unit flushers, buckets, and tarps. Personal protective equipment provided to the decontamination station operators included tinted safety glasses, face shields, gloves, ear protection, high visibility orange vests, and hard hats. ABC type fire extinguishers were provided at

all decontamination sites. Signs and cones were set up and taken down each day at the beginning and end of shifts. NYS DOT signs could also be opened and closed in many locations to avoid confusion when stations were not in operation. Technicians would set up the pressure washing units at the beginning of their shift and run the unit to ensure that it was ready for use. Units were allowed time to cool before being placed into the storage containers and locked for the night. Cones and signs were set up in a way that allowed for inspections and decontaminations to take place at the same time if needed. Oil absorbent socks were placed along infiltration basins to wick up any oil that might be washed off during decontamination. An effort was made at all times to not obstruct the flow of traffic and to keep all involved at safe distance from moving vehicles.

Stewards provided boaters and visitors with interpretive materials concerning AIS and conducted a short survey. The survey questions included what body of water boaters had most recently visited in the past two weeks with their watercraft and what steps were taken to prevent the transport of AIS between waterbodies. Boater responses were recorded on an iPad using the state's Watercraft Inspection Survey Program Application (WISPA) and uploaded wirelessly to a server for weekly download and analysis by the Data Manager.

All stewards provided a courtesy inspection of boats entering and leaving through the boat launch. Stewards performed a visual inspection of propellers, outdrives, trailer bunks, axles, live wells, bilges, areas containing standing water, and any other locations potentially harboring AIS. Stewards also asked visitors to lower their motors to a vertical position to eliminate standing water and drain their bilges into a bucket provided by the steward. Stewards offered informational literature on AIS and educated boaters how to prevent infecting other waterways. Although the stewards performed courtesy inspections for visitors, they also recommended that boaters take responsibility for washing and inspecting their boats offsite. Boaters were asked about their awareness of the state's AIS transport regulations and education was provided if needed.

Steward Jill Zajac inspects a boat at Fourth Lake.

The inspection and decontamination process varied to some extent by the functional characteristics of each location. Decontamination stations were either located at high-risk boat launches or along busy roadways. Any boat that failed to meet New York State's Clean, Drained, Dry standard was requested to comply with a voluntary decontamination at the adjacent or regional decontamination station. In an attempt to keep the process quick and give boaters a positive experience, only the part of the vessel that failed inspection was decontaminated. Stewards picked off visible plants when they could be completely removed by hand.

Stewards conducted decontaminations by moving from the inside to the outside of each vessel. Internal compartments found with standing water were flushed with low-pressure hot water (140 degrees F). This includes bilges, ballasts, and live-wells as well as any other area where standing water may have accumulated. If rigging, fishing lines or other gear was found to need decontamination, the items were removed from the vessel if possible, and placed on the ground for high-pressure hot water decontamination. If equipment was considered too delicate for high pressure, then low-pressure hot water was used.

Steward Bruce Farquhar decontaminates a boat at South Bay on Lake Champlain.

Outboards and lower units found with standing water in them underwent a flushing process, which consisted of low pressure hot water introduced to the lower unit via flushing muffs, the boater starting the motor, and running the motor until the cooling water discharge was 140 degrees F. Temperature could be adjusted on the LANDA units and was measured with a laser thermometer or by observation of sufficient steam water vapor. Lastly, hulls that required decontamination were carefully washed with high pressure hot water. Technicians directed wash water to remove surface organisms by holding the wash wand at a 45-degree angle to the hull of the boat and slowly sweeping in one direction. Technicians used various decontamination methods to most effectively clean various features on watercraft, such as pontoons, outdrives, and other equipment.

Program Administrative Structure and Procedural Overview

The program was managed by a Director, Assistant Director, Decontamination Services Program Manager and Assistant, Program Manager, Data Manager, Marketing & Communications Coordinator, Education & Outreach Coordinator, and Human Resources Assistant in 2018. The Decontamination Services Program Manager's duties primarily included oversight of the decontamination station logistics, including choosing and preparing a site, setting up and tearing down the stations, and maintaining the stations during the summer. The Program Manager directly oversaw the seasonal Regional Supervisors responsible for managing stewards in the nine regions designated throughout the program. The Data Manager downloaded the AWI data weekly and followed up on errors that she found. She also worked with the regional supervisors for additional quality control and maintained the WISPA data for Adirondack partner programs. The Marketing & Communications Coordinator developed branded materials and various print materials for the business outreach program, as well as conducting website management and social media updates on all platforms. The Education & Outreach Coordinator implemented summer education and outreach efforts, planned and conducted academic year school programs, and applied for external funding. The Human Resources Assistant handled human resources paperwork, approved all employee timesheets twice monthly and submitted check request forms, reimbursement forms, and purchase order request forms to the financial office at PSC.

Steward Garrett Fairchild on Raquette Lake.

The stewards were divided into ten regions of approximately 8-14 stewards each. The regions were named by area designations: Champlain North, Champlain South, Cranberry-Long, Fulton Chain, Piseco, Sacandaga, St. Lawrence, Schroon, Paul Smiths, and Tri-Lakes. A staff meeting was held on Mondays at the AWI building at PSC which was attended by the ten Regional Supervisors, either in person or via phone. Weekly staff meetings were held on Thursday or Friday in each region and run by the appropriate Regional Supervisor, which gave the stewards a chance to share information with each other as well as their supervisor. Most stewards lived within driving distance of one of the meeting locations, although a few stewards attended meetings less frequently due to extreme distance or part-time work status. The meetings also provided continued staff training and afforded an opportunity for identification of AIS found during the previous week. The stewards first attempted to identify the AIS samples they collected. Unclear or hard-to-identify samples were transported to PSC for a second review and further identification by the Data Manager or other scientific staff at the AWI. The Regional Supervisors reviewed the survey data for omissions, errors, or irregularities and followed up with the stewards for clarification. One region, Schroon, was comprised mainly of stewards employed by local towns and lake associations. This Regional Supervisor managed all the employees and data and would report to the local designated employers if any problems arose. He did not have weekly staff meetings but did hold a few meetings over the summer to coordinate the various stakeholders.

AWI administrators familiarized stewards with each boat launch workstation during staff training, often with the assistance of lake association members. The Regional Supervisors conducted unannounced site visits during the week to observe and support each steward individually. Eight of the ten AWI regions had a steward designated as Weekend Supervisor for their respective areas. Weekend Supervisors conducted site visits to support and monitor each Steward and participated in outreach activities when the Regional Supervisor was not on duty.

The Stewardship Program had comparable scope in 2018 and 2017, due to the continuation of the Adirondack AIS Spread Prevention Program by New York State's Department of Environmental Conservation. 23 decontamination stations were prepped, equipped and staffed at various dates over the summer, depending on logistics, agency approval, and capacity of the NYSDOT and local Highway Departments. The AWI had its eighth season of GLRI funding. The Director focused on grant administration

Zebra mussels crusted on a native clam at Lake Champlain.

and agency communication and coordination, and the Assistant Director oversaw the Program Manager and Regional Supervisors in the different geographical corners of the park. The Regional Supervisors created and maintained work schedules, ran weekly staff meetings, and conducted most of the site visits for the stewards in their region.

Steward Special Projects

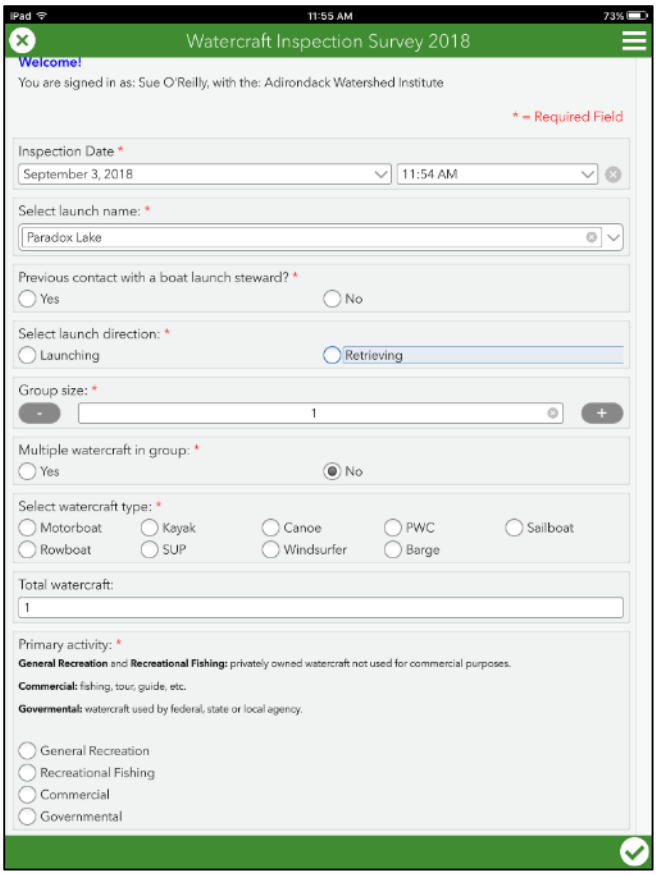
Two stewards spent one day per week working on a special project other than AIS prevention at the boat launches. These projects served as an additional avenue to disseminate the AWI message and to coordinate with partner organizations. One steward monitored loons on Upper and Lower St. Regis Lakes and Spitfire Lake for the Biodiversity Research Institute and another worked as a summit steward educating hikers on St. Regis Mountain.

Networking, Meetings and Outreach Activities

The Director attended regular meetings of APIPP, chaired the Adirondack AIS Committee, met with NYSDEC collaborators, and the LCBP and made several conference and meeting presentations including the Adirondack Lakes Alliance annual symposium, Adirondack Park Local Government Day Conference and the Lake Champlain Research Conference. The Director also made several progress presentations to the New York State Invasive Species Advisory Council, NYSDEC, and the Adirondack AIS Spread Prevention Advisory Committee.

The AWI attended Environmental Protection Fund Lobby Day in the NYS Legislative Office Building in Albany in February. The Schroon Regional Supervisor and the Data Manager conducted a Volunteer Lake Steward Training at the Horicon Town Hall for members of the ESSLA (East Shore Schroon Lake Association), Schroon Lake Association, Brant Lake Association, Paradox Lake Association and Loon Lake. This training allowed AWI to provide consistent information to other areas of the Park. PSC hosted the fourth Adirondack Lakes Alliance Symposium in August. The AWI partnered with the APIPP, Raquette Lake Preservative Foundation, and Blue Mountain Lake Association during the Adirondack Canoe Classic to prevent the spread of AIS along the 90-mile race route, from Old Forge to Saranac Lake. AWI staff also assisted in the safety, organization, and logistics of the St. Regis Canoe Classic race.

The Data Manager coordinated WISPA data collection for both AWI stewards and our Adirondack partner programs. AWI provided iPads and training to the ESSLA, Schroon Lake Association, Brant Lake Association, Paradox Lake Association, Loon Lake Association, and Caroga Decontamination Station for the duration of the season. System management and troubleshooting were conducted as needed with the WISPA support personnel at NYSDEC's Natural Heritage Office. This new tool functioned very well and provided advanced software design capabilities for boat inspection data collection. AWI will continue to work with the WISPA personnel to refine and improve its function in 2019.



Screen capture of the WISPA electronic data collection tool developed by NYSDEC.

Recommendations and Conclusion

The hiring, training and administration of 113 seasonal employees requires fully engaged off-season staff capacity. For 2019, AWI will improve both supervisor and steward training using detailed employee feedback collected during the 2018 season. The newly expanded Education and Outreach program will also allow the AWI to offer outreach and education programming to various Adirondack communities. The AWI plans to increase the number of staff appearances and participation at relevant meetings and events across the Adirondacks and surrounding area during the off-season. During the field season, the weekly staff meetings of regional employees need increased standardization and coordination to facilitate information exchange across the entire program and through all levels of the organization.

The AWI Stewardship Program completed its nineteenth successful season. As always, the professionalism, enthusiasm, and dedication of the stewards provides the backbone of the program. The stewards need to be extremely outgoing and friendly towards the public, mature and responsible enough to handle independent work, and creative enough to avoid boredom with the position. The AWI continues to be involved in outreach beyond boat launch inspections to present the message to all boaters.

Steward Liam Davies inspects a boat at Fourth Lake.

Acknowledgements

The AWI would like to acknowledge the funding support of the New York State Environmental Protection Fund, United States Environmental Protection Agency Great Lakes Restoration Initiative, the Lake Champlain Basin Program, Black Lake Association, the Upper Saranac Lake Foundation, the Lake Placid Shore Owners' Association, Towns of Arietta, Lake Pleasant, Long Lake, and North Elba, and Paul Smith's College. In addition to financial support, the invaluable enthusiasm and contributions of people at each of these agencies and associations has injected creativity, enthusiasm and vision into what we do.

We gratefully rely on the collaboration of our close working group of Brendan Quirion, Erin Vennie-Vollrath, and Zack Simek of APIPP, Meg Modley of LCBP, Ed Griesmer and Jane Smith of the Adirondack Lakes Alliance, Dave Wick, Justin Luyk and Joe Thouin of LGPC. Leading members of the program advisory committee Eric Siy, Fred Monroe, Matt Simpson, Bill Farber, Rocci Aguirre, Jackie Bowen, Tom Williams and Jerry Delaney provided crucial strategic planning guidance. Other members of the program advisory committee from Upper Saranac Lake, the Adirondack Council, SeaGrant, the Adirondack Park Agency, Marine Trades Association, New York State Conservation Council, Adirondack Towns and Villages and others provided guidance and support. We would also like to thank the NYS DEC Invasive Species Coordination Unit: Josh Thiel, Cathy McGlynn, Dave Adams and Emma Antolos. Also, NYS DEC Natural Resources Assistant Commissioner, Judy Drabicki, Region 5 Director Robert Stegemann, and Region 5 operations head Nik McKay were all crucial elements of program success. We had excellent collaboration with NYSDOT as well, particularly John Hallock. In addition, we wish to thank the following supervisors for their collaboration: Rick Wilt, Town of Arietta, Dan Wilt, Town of Lake Pleasant, Brian Wells, Town of Indian Lake, Matt Simpson,

Town of Horicon, John Frey, Town of Inlet, and Clark Seaman, Town of Long Lake. Finally, we would like to thank all other partners, too numerous to mention, that were involved in expanding and developing our program throughout 2018.

Adirondack Association of Towns and Villages
Adirondack Canoe Classic
Adirondack Lakes Alliance
Adirondack Landowners Association
Adirondack Mountain Club
Adirondack Museum
Adirondack North Country Association
Adirondack Park Agency
Big Moose Lake Property Owners' Association
Black Lake Association
Blue Mountain Lake Association
Blue Mountain Lake Boat Livery
Brant Lake Association
BRI's Adirondack Center for Loon Conservation
Burke's Marina
Canada Lakes Conservation Association
Central Adirondack Partnership for the 21st Century
Chateaugay Lakes Association
Cossayuna Lake Improvement Association
Cranberry Lake Boat Club
Curry's Cottages
Dunn's Boat Service
East Shore Schroon Lake Association
Friends of Mt. Arab
Friends of St. Regis Mountain Firetower
Fulton Chain of Lakes Association
Goose Bay Reclamation Corporation
Hamilton County Soil and Water Conservation District
Hollywood Hills Association
Hudson River-Black River Regulating District
Indian Lake Association
Jake Sporn Photography
Jerry Delaney - Saranac Town Board
John Holland – Brant Lake
Keene Central School
Kickerville Station
Lake Bonaparte Association
Lake Colby Association
Lake George Park Commission
Lake Placid Central Schools
Lake Pleasant Marina
Lake Pleasant Sacandaga Association
Limekiln Lake Association
Long Lake Association
Loon Lake Homeowners' Association Newsletter
Lower Saranac Lake Association
NYSDEC Campground Staff
NYSDEC Division of Operations
NYSDEC Region 5 and 6 Forest Rangers and Environmental Conservation Officers
NYSDOT Regions 2 and 7
NYS Office of Parks, Recreation, and Historic Preservation
Osgood Pond Association
Paradox Lake Association
Piseco Common School District
Piseco Lake Association
Pleasant Lake Association
PSC VIC
Raquette Lake Preservation Foundation
Raquette Lake Supply
Raquette Lake Union Free School District
Regional Inlet Invasive Species Plant Program
Rivett's Marine Recreation and Service
Saranac Country Store
Saratoga Lake Association
Schroon Lake Association
Sixth and Seventh Lakes Association
Spencer Boatworks
South Shore Marina
St Regis Foundation
St. Regis Property Owners Association
Stop Aquatic inVasives from Entering Lake George
SUNY College of Environmental Science and Forestry
SUNY Oneonta
The FUND for Lake George
Town of Colton
Twitchell Lake Fish and Game Club
Upper Saranac Lake Association
White Lake Shores Association

Summary of Results

Eric Holmlund, Director, with Sue O'Reilly, Data Manager,
Adirondack Watershed Institute Stewardship Program

The AWI runs the most widely deployed, most extensive and visible AIS education and spread prevention program in the Adirondack region, as well as in New York State. The 2018 boating season featured the continuation of the Adirondack AIS Spread Prevention Program and Lake Ontario Headwaters Watercraft Inspection Program funded by New York State and the federal Great Lakes Restoration Initiative. It also included many continuing partnerships with municipalities and lake- and shore-owner associations.

Considered as a whole, the AWI conducted the most encompassing and integrated AIS spread prevention program in the history of the Adirondack Park. The AWI Stewardship Program initiated service in 2000 with 8 employees covering 1 boat launch, and grew over the years to 113 staff servicing 46 different lakes plus 23 decontamination stations in 2018 (Figure 2).

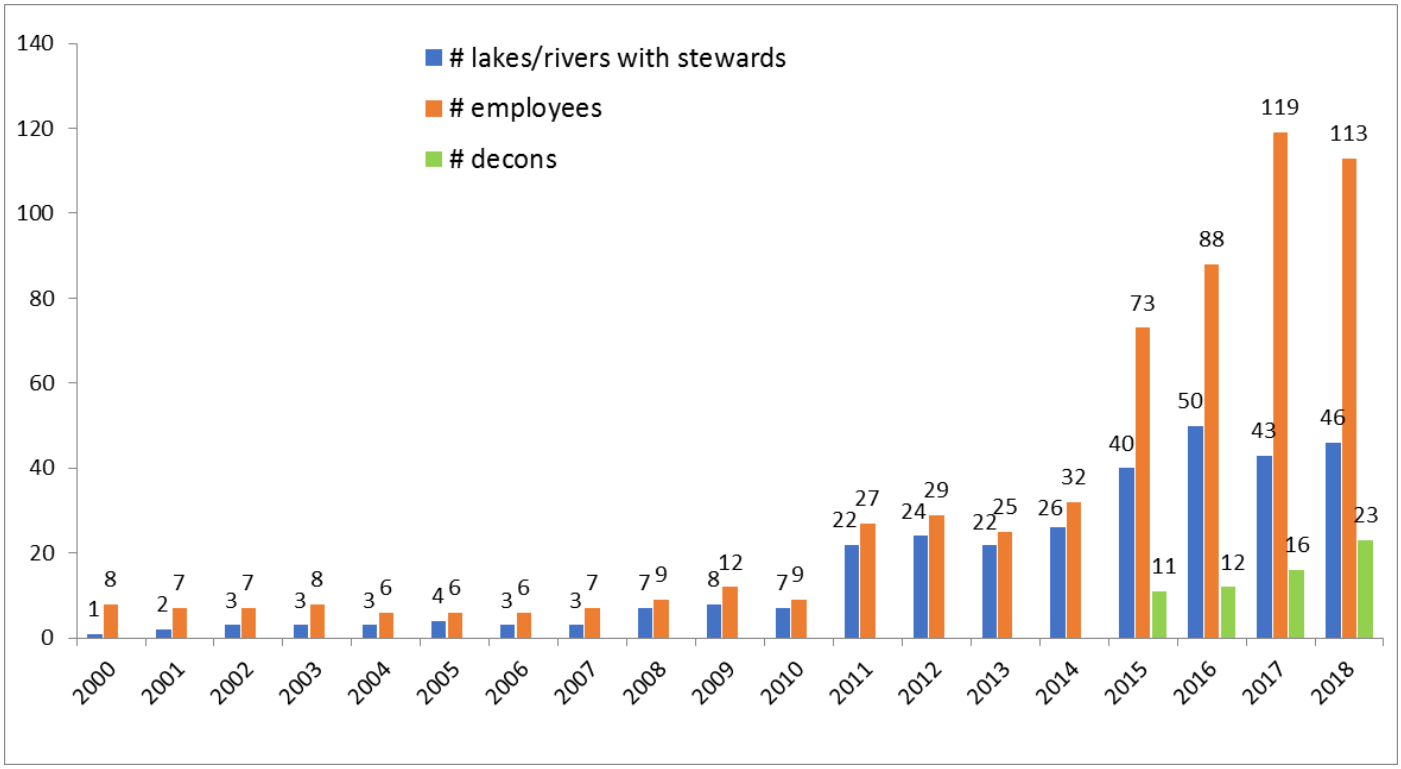


Figure 4. Number of lakes with AWI steward coverage, number of stewards, and number of decontamination stations, 2000-2018.

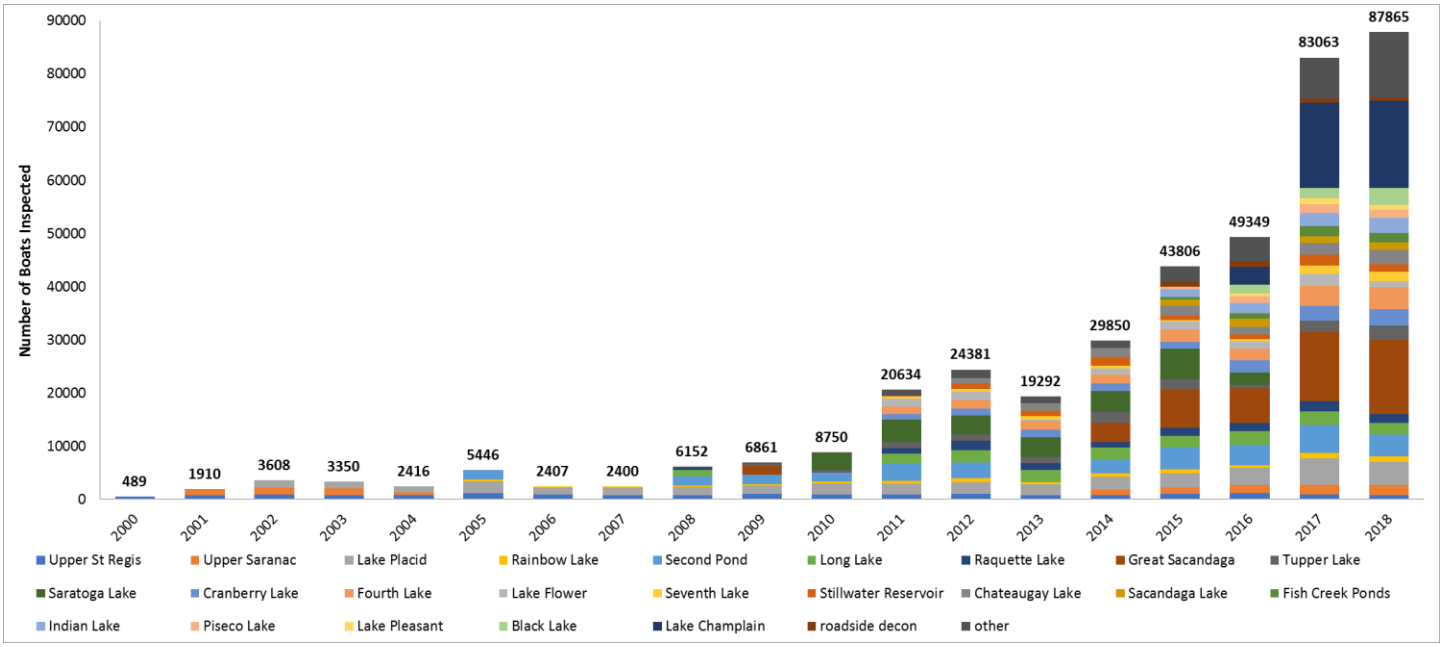


Figure 5. Number of watercraft inspected by AWI stewards, 2000-2018.

Comprehensive Findings

The 2018 field season ran for 23 weeks, from Memorial Day weekend through Labor Day weekend (May 26 – Sept 3, 2018) with extended coverage at many locations through November 1st pending staff availability. Many decontamination stations and steward locations were kept open through the end of October to service boaters in the fall shoulder season. In total, 113 AWI stewards performed 87,865 inspections and contacted 172,761 people with the program's message about AIS spread prevention, boat and equipment hygiene, and the ecological losses caused by the establishment of AIS (Table 3). Adding our partner programs (Brant Lake, Canada Lake, Caroga Lake, Loon Lake, Schroon Lake) inspection figures, totals rise to 98,216 watercraft and 191,493 people. The number of boats inspected at each individual water body varied substantially, ranging from Big Moose Lake, with 2 boats inspected, to Lake Champlain, where coverage at 9 launches inspected a total of 16,986 watercrafts. Numbers of visitors at each site varied with factors such as weather, site popularity, days of steward coverage and ease of accessibility.

Differences in the totals of people and vessels encountered on each lake arise from differences in each lake's morphology, site layout, ramp size and condition, available parking, location and accessibility. Stewards at lakes with hard-surfaced boat ramps are much more likely to encounter a greater proportion of motorboats whereas car top launch sites are dominated by paddle-powered craft such as canoes, kayaks and stand up paddleboards (SUP's). Motorboats represented the majority of boats observed this summer at 68%. Kayaks (16%), personal watercraft (8%), and canoes (6%) represented smaller but substantial percentages of use. Sailboats, rowboats, barges, SUPs and docks rounded out the remainder with percentages at 1% or less (Table 4). The lake with the greatest proportion of motorboats was Lake Champlain with 15,022 motorboats, representing 88% of its total use. Lake Placid was the top location for non-motorized craft (canoes, kayaks, SUP's, rowboats) with a total of 2,279 or 51% of watercraft encountered falling into these categories.

The following infrequently visited locations are not included in the individual location use summaries at the end of this report but are included in the following comprehensive data summary tables: Big Moose Lake, Lake Adirondack, Oxbow Lake, Putnam Pond.

Table 3. Comprehensive data summary, total # of visitors and # of organisms, 2018. (Partner programs at bottom)

Waterbody	total # people	organisms found			total organisms	# boats dirty	# boats w/AIS	# of inspections	% of inspected boats dirty
		entering	leaving	roadside					
Big Moose Lake	2	0	0	--	0	0	0	2	0.0%
Black Lake	6241	116	540	--	656	451	255	3150	14.3%
Blake Falls Reservoir	31	0	1	--	1	1	0	13	7.7%
Brantingham Lake	522	2	2	--	4	4	0	247	1.6%
Buck Pond (Rainbow Lake)	1794	4	5	--	9	9	0	1105	0.8%
Butterfield Lake	1239	17	92	--	109	63	51	661	9.5%
Carry Falls Reservoir	1513	57	11	--	68	56	4	542	10.3%
Chateaugay Lake	6061	19	246	--	265	214	178	2733	7.8%
Chazy Lake	749	7	3	--	10	8	1	382	2.1%
Colton DECON STATION	120	--	--	17	17	9	3	59	15.3%
Cranberry Lake	6988	25	29	--	54	40	24	2996	1.3%
Eighth Lake	938	2	0	--	2	2	1	598	0.3%
Fish Creek Ponds	2942	23	65	--	88	74	13	1741	4.3%
Forked Lake	2075	9	29	--	38	35	5	1302	2.7%
Fourth Lake	8223	102	94	--	196	156	51	4155	3.8%
Great Sacandaga Lake (w/decons)	28683	215	209	--	424	405	57	13967	3.8%
Higley Flow (Higley Falls Reservoir)	1065	7	2	--	9	9	1	422	2.1%
Hudson River - Luzerne	2331	3	1	--	4	4	3	1177	0.3%
Indian Lake	5751	61	49	--	110	110	2	2898	3.8%
Lake Adirondack	201	0	0	--	0	0	0	183	0%
Lake Bonaparte	1868	0	13	--	13	13	12	844	1.5%
Lake Champlain (w/decons)	33324	453	6965	--	7418	3884	2519	16445	23.6%
Lake Flower	2259	49	157	--	206	148	47	1173	12.6%
Lake Placid (w/decon)	7810	459	365	--	824	812	6	4365	18.6%
Lake Pleasant - Pavilion Launch	1089	58	3	--	61	61	0	908	6.7%
Lewey Lake	285	4	6	--	10	10	0	205	4.9%
Limekiln Lake	645	9	0	--	9	5	3	449	1.1%
Long Lake	4607	31	53	--	84	76	12	2222	3.4%
Long Lake DECON STATION	43	--	--	6	6	5	4	27	18.5%
Meacham Lake	786	36	14	--	50	46	3	370	12.4%
Millsite Lake	296	1	14	--	15	10	8	225	4.4%
Old Forge Pond	226	4	5	--	9	7	3	109	6.4%
Osgood Pond	801	9	20	--	29	29	0	600	4.8%
Oxbow Lake	23	0	0	--	0	0	0	13	0%
Paradox Lake	2329	0	2	--	2	2	1	1425	0.1%
Piseco DECON STATION	212	--	--	6	6	6	1	130	4.6%
Piseco Lake	3237	31	41	--	72	70	7	1529	4.6%
Putnam Pond	506	2	4	--	6	6	6	354	1.7%
Rainbow Falls Reservoir	21	1	1	--	2	2	0	11	18.2%
Raquette Lake	2969	36	64	--	100	72	14	1622	4.4%
Rocky Mountain DECON STATION	414	--	--	40	40	24	14	226	10.6%
Sacandaga Lake (Moffitt Beach)	3154	92	53	--	145	138	6	1395	9.9%
Second Pond	7655	89	252	--	341	320	42	4015	8.0%
Seventh Lake	2690	28	33	--	61	58	15	1782	3.3%
Speculator DECON STATION	255	--	--	15	15	13	3	153	8.5%
Star Lake DECON STATION	106	--	--	10	10	9	4	56	16.1%
Stillwater Reservoir	2832	3	0	--	3	2	2	1338	0.1%
St. Lawrence River	3804	79	551	--	630	375	171	1769	21.2%
Tupper Lake	5952	276	1010	--	1286	1112	20	2775	40.1%
Upper Saranac Lake	3283	62	66	--	128	94	15	1862	5.0%
Upper St. Regis Lake	1303	49	24	--	73	71	0	803	8.8%
White Lake	508	0	0	--	0	0	0	332	0%
Brant Lake	4542	2	46	--	48	37	7	2523	1.5%
Canada Lake	2841	11	0	--	11	10	2	1643	0.6%
Caroga DECON STATION	396	--	--	4	4	4	4	226	1.8%
East Caroga Lake (Marina)	778	0	8	--	8	8	6	337	2.4%
Loon Lake	1242	4	3	--	7	6	6	895	0.7%
N Schroon/Paradox DECON STATION	210	--	--	1	1	1	1	146	0.7%
Schroon Lake - Horicon (w/decon)	4574	13	4	--	17	13	6	2413	0.5%
Schroon Lake - Town of Schroon	4149	4	2	--	6	6	1	2168	0.3%
Grand Total	**191493**	**2564**	**11157**	**99**	**13820**	**9215**	**3620**	**98216**	**9.4%**

Table 4. Comprehensive data summary, boat types, 2018. Number of watercraft observed, including those not inspected. PWC = personal watercraft; SUP= stand-up paddleboard; Wind=windsurfer. (Partner programs at bottom)

Waterbody	Boat Type										total # boats
	Barge	Canoe	Dock	Kayak	Motor	PWC	Row	Sail	SUP	Wind	
Big Moose Lake	0	0	0	2	0	0	0	0	0	0	2
Black Lake	1	6	1	55	3015	81	2	2	0	0	3163
Blake Falls Reservoir	0	0	0	6	7	0	0	0	0	0	13
Brantingham Lake	0	6	0	0	162	80	0	1	0	0	249
Buck Pond (Rainbow Lake)	0	244	0	489	319	9	19	9	14	6	1109
Butterfield Lake	0	19	0	132	494	17	6	3	0	0	671
Carry Falls Reservoir	0	23	0	90	391	33	1	2	2	0	542
Chateaugay Lake	0	42	0	329	2045	309	16	3	3	0	2747
Chazy Lake	0	1	0	42	304	37	1	1	0	0	386
Colton DECON STATION	0	2	0	0	55	1	1	0	0	0	59
Cranberry Lake	0	117	2	195	2583	136	3	11	7	0	3054
Eighth Lake	0	175	0	329	65	11	8	0	16	0	604
Fish Creek Ponds	0	253	0	693	635	129	0	1	38	10	1759
Forked Lake	0	606	0	510	155	5	19	1	11	0	1307
Fourth Lake	1	67	3	305	2903	835	3	50	4	0	4171
Great Sacandaga Lake (w/decons)	12	77	25	668	10711	2618	17	96	7	5	14236
Higley Flow (Higley Falls Reservoir)	0	2	1	8	380	76	0	0	1	2	470
Hudson River - Luzerne	1	4	0	76	941	175	0	0	3	0	1200
Indian Lake	0	585	0	848	1319	110	11	16	19	0	2908
Lake Adirondack	0	7	0	171	1	1	0	0	3	0	183
Lake Bonaparte	1	14	0	212	535	83	1	0	0	0	846
Lake Champlain (w/decons)	0	150	13	756	15022	792	34	193	21	5	16986
Lake Flower	1	79	0	161	862	94	1	4	9	1	1212
Lake Placid (w/decon)	8	308	10	1680	2188	5	41	21	249	1	4511
Lake Pleasant - Pavilion Launch	0	107	0	745	21	17	5	2	15	0	912
Lewey Lake	0	34	0	146	21	1	2	0	1	0	205
Limekiln Lake	0	45	0	305	66	28	4	0	1	0	449
Long Lake	3	416	2	271	1341	182	3	14	3	0	2235
Long Lake DECON STATION	0	5	0	1	15	6	0	0	0	0	27
Meacham Lake	0	10	0	82	224	49	5	3	0	0	373
Millsite Lake	0	15	0	143	63	1	5	1	0	0	228
Old Forge Pond	0	0	0	0	80	30	0	0	0	0	110
Osgood Pond	0	190	0	341	55	0	4	0	10	0	600
Oxbow Lake	0	0	0	0	13	0	0	0	0	0	13
Paradox Lake	2	61	3	484	802	54	16	0	2	1	1425
Piseco DECON STATION	0	0	0	5	103	19	0	4	0	0	131
Piseco Lake	0	17	0	261	1084	119	9	38	3	5	1536
Putnam Pond	0	99	0	197	45	4	9	0	0	0	354
Rainbow Falls Reservoir	0	0	0	1	8	0	0	2	0	0	11
Raquette Lake	0	190	0	282	1024	126	1	7	4	0	1634
Rocky Mountain DECON STATION	0	16	0	31	165	11	1	0	2	0	226
Sacandaga Lake (Moffitt Beach)	0	16	0	144	1068	161	7	8	2	0	1406
Second Pond (w/decon)	1	826	0	978	2140	78	9	0	37	12	4081
Seventh Lake	1	300	0	885	455	103	6	4	37	0	1791
Speculator DECON STATION	0	3	0	29	105	16	1	1	1	0	156
Star Lake DECON STATION	0	0	0	1	52	3	0	0	0	0	56
Stillwater Reservoir	0	134	0	203	979	20	1	1	1	0	1339
St. Lawrence River	0	36	0	101	1411	245	8	3	3	0	1807
Tupper Lake	0	307	3	334	1978	143	1	38	6	1	2811
Upper Saranac Lake (w/decon)	0	150	0	163	1434	94	1	28	5	2	1877
Upper St. Regis Lake	1	335	1	198	299	0	0	5	7	0	846
White Lake	0	5	2	83	136	86	0	0	20	0	332
Brant Lake	18	51	0	197	2079	158	35	10	0	0	2548
Canada Lake	0	102	0	812	653	58	11	5	8	0	1649
Caroga DECON STATION	0	27	0	64	124	9	1	1	0	0	226
East Caroga Lake (Marina)	0	1	0	2	299	31	1	3	0	0	337
Loon Lake (w/decon)	14	45	0	233	479	98	15	2	1	8	895
N Schroon/Paradox DECON STATION	0	4	0	1	117	18	5	1	0	0	146
Schroon Lake - Horicon (w/decon)	8	9	0	58	2157	174	2	5	2	0	2415
Schroon Lake - Town of Schroon	18	17	1	138	1623	324	12	31	5	0	2169
Grand Total	**91**	**6360**	**67**	**15676**	**67810**	**8103**	**364**	**631**	**583**	**59**	**99744**
% of all watercraft	0.1%	6.4%	0.1%	15.7%	68.0%	8.1%	0.4%	0.6%	0.6%	0.1%	

Table 5. Summary of organisms removed from watercraft, 2018; BN = brittle naiad; CLP = curly-leaf pondweed; EF = European frogbit; EWM = Eurasian watermilfoil; VLM = variable-leaf milfoil; SWF = spiny waterflea; WC = water chestnut; ZM = zebra mussel; */AIS = aquatic invasive species. (Partner programs at bottom)

Waterbody	organism type									total	% of inspected
	Non-invasive	BN*	CLP*	EF*	EWM*	VLM*	SWF*	WC*	ZM*	AIS	boats with AIS
Big Moose Lake	0	0	0	0	0	0	0	0	0	0	0%
Black Lake	374	0	37	2	217	1	0	2	23	282	8.1%
Blake Falls Reservoir	1	0	0	0	0	0	0	0	0	0	0%
Brantingham Lake	4	0	0	0	0	0	0	0	0	0	0%
Buck Pond (Rainbow Lake)	9	0	0	0	0	0	0	0	0	0	0%
Butterfield Lake	45	0	16	0	38	2	0	0	8	64	7.7%
Carry Falls Reservoir	64	0	2	0	1	0	0	0	1	4	0.7%
Chateaugay Lake	82	0	5	0	177	0	0	0	1	183	6.5%
Chazy Lake	9	0	1	0	0	0	0	0	0	1	0.3%
Colton DECON STATION	14	0	0	0	3	0	0	0	0	3	5.1%
Cranberry Lake	25	0	5	0	11	10	0	0	3	29	0.8%
Eighth Lake	1	0	1	0	0	0	0	0	0	1	0.2%
Fish Creek Ponds	74	0	1	0	9	4	0	0	0	14	0.7%
Forked Lake	33	0	0	0	0	5	0	0	0	5	0.4%
Fourth Lake	127	0	8	0	28	15	0	3	15	69	1.2%
Great Sacandaga Lake (w/decons)	362	2	4	0	30	0	6	11	9	62	1.2%
Higley Flow (Higley Falls Reservoir)	8	0	0	0	0	1	0	0	0	1	0.2%
Hudson River - Luzerne	1	0	0	0	2	0	0	0	1	3	0.3%
Indian Lake	108	0	0	0	0	0	0	1	1	2	0.1%
Lake Adirondack	0	0	0	0	0	0	0	0	0	0	0%
Lake Bonaparte	1	0	0	0	10	2	0	0	0	12	1.4%
Lake Champlain (w/decons)	4028	21	948	0	1469	155	14	229	554	3390	15.3%
Lake Flower	152	0	0	0	28	26	0	0	0	54	4.0%
Lake Placid (w/decon)	816	0	1	0	1	2	0	1	3	8	0.1%
Lake Pleasant - Pavilion Launch	61	0	0	0	0	0	0	0	0	0	0%
Lewey Lake	10	0	0	0	0	0	0	0	0	0	0%
Limekiln Lake	6	0	1	0	2	0	0	0	0	3	0.7%
Long Lake	71	0	0	0	3	6	0	1	3	13	0.5%
Long Lake DECON STATION	2	0	0	0	0	3	0	0	1	4	14.8%
Meacham Lake	47	0	1	0	1	0	0	1	0	3	0.8%
Millsite Lake	5	0	2	0	8	0	0	0	0	10	3.6%
Old Forge Pond	6	0	0	0	0	3	0	0	0	3	2.8%
Osgood Pond	29	0	0	0	0	0	0	0	0	0	0%
Oxbow Lake	0	0	0	0	0	0	0	0	0	0	0%
Paradox Lake	1	0	0	0	1	0	0	0	0	1	0.1%
Piseco DECON STATION	5	0	0	0	0	0	0	0	1	1	0.8%
Piseco Lake	64	0	1	0	4	1	2	0	0	8	0.5%
Putnam Pond	0	0	0	0	6	0	0	0	0	6	1.7%
Rainbow Falls Reservoir	2	0	0	0	0	0	0	0	0	0	0%
Raquette Lake	83	0	5	0	6	5	0	1	0	17	0.9%
Rocky Mountain DECON STATION	25	0	2	0	8	1	0	1	3	15	6.2%
Sacandaga Lake (Moffitt Beach)	138	0	0	0	2	0	1	0	4	7	0.4%
Second Pond	297	0	5	0	27	12	0	0	0	44	1.0%
Seventh Lake	45	0	3	0	4	8	0	1	0	16	0.8%
Speculator DECON STATION	12	0	1	0	0	0	0	0	2	3	2.0%
Star Lake DECON STATION	6	0	0	0	3	0	0	0	1	4	7.1%
Stillwater Reservoir	0	0	0	0	2	1	0	0	0	3	0.1%
St. Lawrence River	434	0	127	0	59	3	0	0	7	196	9.7%
Tupper Lake	1266	0	0	0	4	10	0	3	3	20	0.7%
Upper Saranac Lake	110	0	3	0	6	4	0	1	4	18	0.8%
Upper St. Regis Lake	73	0	0	0	0	0	0	0	0	0	0%
White Lake	0	0	0	0	0	0	0	0	0	0	0%
Brant Lake	41	0	2	0	5	0	0	0	0	7	0.3%
Canada Lake	9	0	0	0	1	0	0	0	1	2	0.1%
Caroga DECON STATION	0	0	0	0	3	0	0	0	1	4	1.8%
East Caroga Lake (Marina)	2	0	0	0	6	0	0	0	0	6	1.8%
Loon Lake	0	0	0	0	5	0	0	1	1	7	0.7%
N Schroon/Paradox DECON STATION	0	0	0	0	0	0	0	0	1	1	0.7%
Schroon Lake - Horicon (w/decon)	10	0	1	0	2	0	0	2	2	7	0.2%
Schroon Lake - Town of Schroon	5	0	0	0	0	0	0	0	1	1	0.05%
Grand Total	**9203**	**23**	**1183**	**2**	**2192**	**280**	**23**	**259**	**655**	**4617**	**3.7%**

Stewards detected and removed organisms at different frequencies depending on location (Table 3). While the average frequency for visible organism transport was nearly 9.5%, the visible organism transport figures ranged from 2% or less at multiple locations to much higher values at locations such as Lake Champlain's Crown Point (52%), Westport (44%) and Ticonderoga (43%). Other locations with noticeably higher than average organism transport rates were Tupper Lake (40%), Goose Bay on the St. Lawrence River (28%), Lake Champlain's South Bay (22%), and Wilson Hill on the St. Lawrence (20%). Visible organism transport rates include watercraft transporting native vegetation. Additional site variability was caused by each boat ramp's proximity to weed beds, differences in traffic volume, wind and wave action, employee diligence, or the layout and physical characteristics of the different boat ramps. It is also worth noting that as the season progressed, more boats were found to be transporting visible organisms as they departed waterways than upon launching, with 11,157 organisms detected on vessels retrieving and 2,564 on vessels launching (Table 3).

In 2018, AWI and partner stewards detected 13,820 organisms on 9,215 vessels as the result of 98,216 inspections (Table 3). Of the organisms observed, 4,617 were confirmed AIS including: EWM (2,192), curly leaf pondweed (1,183), zebra mussels (655), variable leaf milfoil (280), water chestnut (259), spiny waterflea (23), brittle naiad (23), and European frogbit (2) (Table 5). All suspect AIS samples were bagged, labeled and delivered to AWI's Spaulding-Paolozzi Environmental Center Laboratory at PSC for further scrutiny and confirmation of positive identification by the Data Manager or another member of AWI research staff.

Lake Champlain had the greatest number of AIS detected with 3,390 or 15.3% of boats inspected transporting visible AIS (Table 5). The highest numbers were found at the launches located at Ticonderoga (1,569), Westport (592), and South Bay (477). This result is likely attributed to the fact that Lake Champlain has some of the busiest boating traffic in the region and contains several well-established AIS at launch sites where boats can easily encounter the AIS beds.

Table 6. Organism transport rates and AIS spread prevention steps by type of watercraft, 2018.

Type of Watercraft	# boats transporting any organism	% of 9,215 boats transporting any organism	Total # boats inspected	% of all boats transporting any organism	% of groups showing AIS spread prevention awareness
Barge - construction	1	0.01%	84	0.001%	92%
Canoe	472	5.1%	6323	0.5%	63%
Dock	18	0.2%	64	0.02%	78%
Kayak	1157	12.6%	15557	1.2%	65%
Motorboat	7048	76.5%	66611	7.2%	78%
Personal Watercraft	420	4.6%	7956	0.4%	79%
Rowboat	19	0.2%	361	0.02%	74%
Sailboat	41	0.4%	627	0.04%	70%
Stand-up paddleboard	37	0.4%	574	0.04%	58%
Windsurfer	2	0.02%	59	0.002%	63%
Grand Total	**9215**		**98216**	**9.4%**	**81%**

Each type of watercraft transported organisms and AIS at differing rates (Table 6). Non- motorized watercraft (sailboat, canoe, kayak, rowboat, and SUP) were less likely to transport anything (including grass, pine needles, and other organic material), and again were less likely to transport AIS than motorboats. Of the 9,215 vessels transporting any organism, 7,048 or 77% were motorboats. Kayaks transported 1,157 organisms or 12.6% and canoes were responsible for 472 transport instances or 5.1% of the total transport figure. To put

these figures into perspective, 7.2% of all motorboats inspected were transporting visible organisms, 1.2% of kayaks and 0.5% of canoes were found to be transporting a visible organism of any kind.

Table 7. AIS transport rates by type of watercraft, 2018.

Type of Watercraft	BN	CLP	EF	EWM	VLM	SWF	WC	ZM	Total # boats w/ AIS	Total # boats inspected	% of type transporting AIS
Barge - construction	0	0	0	1	0	0	0	0	1	84	1.2%
Canoe	0	1	0	7	1	0	0	0	8	6323	0.1%
Dock	0	0	0	1	1	0	0	8	10	64	15.6%
Kayak	0	5	0	18	4	0	1	3	28	15557	0.2%
Motorboat	22	1137	2	2059	261	21	253	627	3416	66611	5.1%
Personal Watercraft	1	35	0	97	10	1	4	14	139	7956	1.7%
Rowboat	0	1	0	2	0	0	1	0	4	361	1.1%
Sailboat	0	4	0	7	3	1	0	3	14	627	2.2%
Stand-up paddleboard	0	0	0	0	0	0	0	0	0	574	0%
Windsurfer	0	0	0	0	0	0	0	0	0	59	0%
Grand Total	**23**	**1183**	**2**	**2192**	**280**	**23**	**259**	**655**	**3620**	**98216**	**3.7%**

During the 2018 stewarding season AIS were observed on all types of watercraft except for stand-up paddleboards and windsurfers. Docks showed the highest percentage of AIS transport at 15.6%, although only 64 docks were inspected so the number should be read in context. Of the 66,611 motorboats inspected, 3,416 or about 5.1% were transporting AIS. Sailboats had the next highest percentage at 2.2% and personal watercraft at 1.7%. Consistent with past years, 2018 data suggests that motorboats are far more likely to be transporting AIS than canoes, kayaks or other non-motorized vessels (Table 7).

When asked by stewards, an average of 81% of boaters showed AIS spread prevention awareness (Table 8). Boaters were asked if they had taken AIS spread prevention steps prior to arriving at the launch or decontamination station. If a boater said yes and was able to describe the steps without prompting from the steward, this counted as an affirmative response for the "Yes" metric (Table 8). If a boater said, "No, because my boat only goes in this lake," it was also counted as affirmative because the boater was demonstrating the knowledge that their boat was not an AIS transport risk. First launch of the season and frozen boats were included in the affirmative metric for the same reason. While administering the recreational use survey, stewards were trained not to lead the interviewee to a particular answer. For example, when asking if a visitor had taken any steps to prevent the spread of AIS, the steward would not provide examples of such actions, as the visitor might simply default to the offered choices for the sake of providing an answer.

Of the groups surveyed, 25% reported having inspected their vessel for visible AIS, 19% drained the bilge, 13% reported that they had washed it, and 11% let their boat dry prior to launching it. Other spread prevention measures such as draining live-wells and properly disposing of unused bait were reported less frequently. Single-lake boats (28%) and first launch/frozen boats (13%) also comprised significant percentages (Table 8). It is important to note that the percentage of boaters who responded, "Yes" to the spread prevention awareness question varied greatly from lake to lake. Some locations with comparatively few days of coverage yielded results ranging from 100% to 0% of visitor groups showing spread prevention awareness. Several locations with comparatively large sample sizes reported visitor AIS spread prevention awareness well above our 2018 average: Loon Lake (99%), Paradox Lake (99%), and the Broadalbin and Edinburg (Town of Day) launches on Great Sacandaga Lake (97%).

Previously Visited Waterways

Stewards stationed at the launches and decontamination sites asked boaters to identify the last waterway visited by the watercraft within the previous two weeks. The number and diversity of previously visited waterways varied significantly between steward locations. Findings for each individual lake can be found in the Location Use Data Summaries section at the end of this report.

Overall, about 44% of boaters reported that their vessel had last been used in the lake that they were currently launching into or retrieving from. This result follows the trend from the previous two years in which the answer "same lake" ranked as the number 1 answer and the response "none" remained second with 35% of the responses (Table 9).

Combining responses of "same lake" with "none" indicates that 79% of visitors to the lakes in the AWI network did not present a high level of risk of transporting new AIS to individual waterways because either their boat had been out of water for at least two weeks (presumably drying the watercraft and killing any aquatic hitchhikers) or they had simply taken out from a lake only to launch again in that same lake at a later point in time (Table 9).

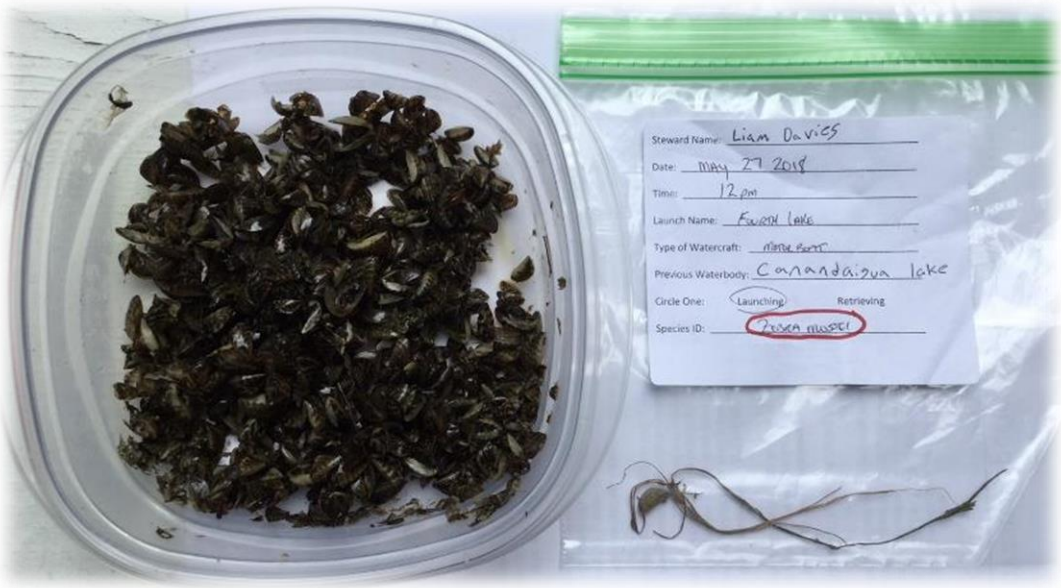
Steward Aperr Naadzenga speaks with a boater at Great Sacandaga Lake's Broadalbin launch.

Table 8. AIS spread prevention information, 2018. Yes = showed AIS spread prevention awareness; Drain = drained bilge; Bait = emptied bait bucket/disposed of unused bait; Livewell = drained livewell; Dry = dried boat; Decon = visited decon station; Same Lake = boat only goes in this lake; First/Frozen = first launch of the season or frozen boat.

Waterbody	# groups showing AIS spread prevention awareness												# groups
	yes	yes %	Inspect	Wash	Drain	Bait	Livewell	Dry	Decon	same lake	first/frozen	didn't ask	asked
Big Moose Lake	0	0%	0	0	0	0	0	0	0	0	0	0	1
Black Lake	2928	94%	1897	240	1902	22	1057	230	8	405	317	18	3123
Blake Falls Reservoir	4	31%	0	2	1	0	0	0	0	0	1	0	13
Brantingham Lake	225	97%	23	32	39	0	0	2	0	83	47	13	233
Buck Pond (Rainbow Lake)	728	95%	315	36	69	4	20	267	6	153	69	13	766
Butterfield Lake	256	44%	91	19	118	0	22	27	0	59	46	8	582
Carry Falls Reservoir	237	49%	14	65	72	1	8	1	2	44	56	13	481
Chateaugay Lake	2356	93%	929	281	482	8	28	518	81	675	499	17	2526
Chazy Lake	267	76%	81	40	50	0	10	37	3	74	77	15	352
Colton DECON STATION	29	49%	6	2	22	0	2	5	0	0	1	0	59
Cranberry Lake	1666	89%	299	433	452	25	67	450	24	578	305	1040	1867
Eighth Lake	232	61%	35	54	11	0	4	28	1	92	46	5	380
Fish Creek Ponds	739	68%	407	154	54	2	7	147	2	63	205	90	1080
Forked Lake	595	78%	117	170	150	0	5	157	0	131	156	4	762
Fourth Lake	2447	61%	185	421	968	0	25	123	60	391	576	16	3984
Great Sacandaga Lake (w/decons)	11573	61%	1391	768	1250	213	206	1201	187	7944	1484	1087	12667
Higley Flow (Higley Falls Reservoir)	345	76%	4	17	19	2	4	17	0	152	155	15	451
Hudson River - Luzerne	594	55%	78	51	96	1	3	59	17	200	198	67	1080
Indian Lake	1837	83%	1299	237	1122	10	118	483	35	226	202	9	2223
Lake Adirondack	50	88%	42	16	42	0	0	24	0	0	8	1	57
Lake Bonaparte	497	68%	70	70	65	35	21	16	0	262	128	2	736
Lake Champlain (w/decons)	12529	83%	4918	2138	4269	96	1223	1462	242	4018	1065	1530	15016
Lake Flower	475	54%	51	102	75	2	5	48	3	160	131	212	886
Lake Placid (w/decon)	2033	70%	327	763	115	22	29	188	71	745	200	635	2901
Lake Pleasant - Pavilion Launch	335	74%	69	54	7	1	0	98	6	54	96	4	454
Lewey Lake	59	47%	8	13	6	2	0	15	0	9	18	0	126
Limekiln Lake	161	59%	44	49	32	0	3	33	2	22	43	0	272
Long Lake	1506	83%	225	440	466	3	23	231	13	331	314	35	1823
Long Lake DECON STATION	5	20%	0	1	0	0	0	0	2	0	2	0	25
Meacham Lake	160	50%	36	61	29	0	5	58	3	16	42	16	317
Millsite Lake	45	31%	19	4	14	0	2	6	0	4	10	4	146
Old Forge Pond	81	74%	4	12	8	0	1	6	0	16	47	1	109
Osgood Pond	163	83%	29	64	4	0	0	39	1	3	46	127	196
Oxbow Lake	13	100%	8	1	13	0	13	2	0	0	0	0	13
Paradox Lake	1123	99%	810	56	193	7	8	90	10	110	171	10	1139
Piseco DECON STATION	117	91%	56	5	6	1	2	3	70	8	22	0	128
Piseco Lake	1059	76%	297	175	107	34	24	130	29	348	237	11	1386
Putnam Pond	208	99%	178	15	11	0	0	76	8	3	21	0	211
Rainbow Falls Reservoir	3	27%	1	0	2	0	0	0	0	0	0	0	11
Raquette Lake	1087	80%	245	437	286	0	10	160	25	206	220	5	1352
Rocky Mountain DECON STATION	78	39%	12	22	51	0	3	18	1	0	3	0	202
Sacandaga Lake (Moffitt Beach)	887	72%	192	138	104	4	21	138	36	223	225	87	1239
Second Pond	1538	65%	626	449	432	3	35	414	21	95	238	811	2366
Seventh Lake	689	59%	166	165	163	0	4	122	5	106	186	5	1158
Speculator DECON STATION	90	66%	21	21	21	3	10	19	10	1	24	1	136
Star Lake DECON STATION	13	24%	2	3	2	0	0	0	2	0	5	1	55
Stillwater Reservoir	592	51%	31	145	214	4	15	147	1	173	79	1	1165
St. Lawrence River	1559	92%	719	52	152	7	62	121	0	601	165	68	1694
Tupper Lake	2148	92%	503	1051	541	6	56	90	18	450	214	119	2323
Upper Saranac Lake	1488	87%	968	182	543	3	37	432	317	128	227	37	1705
Upper St. Regis Lake	362	66%	67	90	100	5	5	91	3	42	74	47	545
White Lake	290	98%	33	14	35	0	0	13	1	155	75	0	295
Brant Lake	2061	86%	843	150	121	12	26	357	19	673	364	49	2386
Canada Lake	999	93%	231	304	50	7	4	136	13	208	309	75	1072
Caroga DECON STATION	168	92%	72	60	4	1	1	8	61	20	41	1	182
East Caroga Lake (Marina)	207	81%	93	10	21	1	0	2	1	90	15	71	257
Loon Lake	722	99%	442	2	130	1	114	4	148	179	96	49	726
N Schroon/Paradox DECON STATION	122	88%	10	5	9	0	1	4	102	2	9	3	139
Schroon Lake - Horicon (w/decon)	2004	90%	322	112	192	7	15	215	75	1110	363	121	2232
Schroon Lake - Town of Schroon	1842	91%	586	105	68	6	62	81	44	874	316	76	2019
Grand Total	**66626**	**81%**	**20547**	**10578**	**15580**	**561**	**3426**	**8849**	**1789**	**22715**	**10289**	**6645**	**81830**
% of groups taking active measures			25%	13%	19%	1%	4%	11%	2%	28%	13%		

Table 9. Top 25 Previously Visited Waterways, 2018 (N =50,400 watercraft)
Only AWI-operated sites included for yearly ranking continuity.

Previously Visited Waterway	total visits 2018	% of total visits	2018 rank	2017 rank	2016 rank
Same Lake - Previous Visit	22254	44.155%	1	1	1
NONE	17597	34.915%	2	2	2
RENTED/BORROWED	1267	2.514%	3	4	3
Saranac Lake Chain	863	1.712%	4	3	4
Fulton Chain of Lakes	531	1.054%	5	8	10
UNKNOWN (boater doesn't know)	522	1.036%	6	7	5
St. Lawrence River	392	0.778%	7	10	6
Lake Champlain	318	0.631%	8	5	9
Lake George	259	0.514%	9	6	8
Hudson River	233	0.462%	10	11	11
Lake Ontario	217	0.431%	11	12	12
Saratoga Lake	197	0.391%	12	9	15
Raquette Lake	184	0.365%	13	18	20
Lake Placid	176	0.349%	14	13	13
Tupper Lake	174	0.345%	15	16	17
Great Sacandaga Lake	169	0.335%	16	14	7
Oneida Lake	157	0.312%	17	15	14
Piseco Lake	148	0.294%	18	19	18
Mirror Lake	138	0.274%	19	26	32
Schroon Lake	126	0.250%	20	17	23
Indian Lake	114	0.226%	21	23	19
Long Lake	114	0.226%	22	29	16
Mohawk River	114	0.226%	23	20	22
Big Moose Lake	101	0.200%	24	32	38
Chateaugay Lake	97	0.192%	25	27	35



Zebra mussels from Canandaigua Lake intercepted at Fourth Lake.

Decontamination Station Results

The New York State DEC issued a new contract for the AWI to continue the Adirondack AIS Spread Prevention Program for the 2018 boating season, to expire at the end of 2022. Performance analysis of outcomes at boat launches, high traffic intersections and gateway locations indicated many of the same asset locations as 2017 along with a continued focus on Lake Champlain and Great Sacandaga Lake, both of which have small bodied invasive organisms.

Seven decontamination stations were sited at existing high traffic NYSDEC public boat launches (designated B in Figure 6 below) on Lake Champlain: Peru, Plattsburgh, Port Douglas, Port Henry, South Bay, Ticonderoga, and Willsboro. Additional stations were located at the Broadalbin, Edinburg/Day, Northampton, and Northville launches on Great Sacandaga Lake, the Hudson River launch at Luzerne, and the launches on Chateaugay Lake, Indian Lake, Lake Placid, Second Pond, and Upper Saranac Lake. Partner-operated stations were also located at Loon Lake and at the Horicon launch on Schroon Lake. Three locations, Colton, Rocky Mountain, and Star Lake, were positioned at so-called gateway locations (G), along highways on the park periphery, as well as partner locations at Caroga and Northern Schroon/Paradox. These sites were intended to intercept trailered watercraft arriving and leaving the Adirondack Park. Three locations were designated at interior roadside (I) locations: Long Lake (Routes 28N/30), Piseco Lake (Route 8) and Speculator (Route 30). Due to limitations in staff and contractor availability, logistic constraints, and workload, the decontamination stations came online at various dates ranging from 5/26/18 (multiple locations) to 8/11/18 (Indian Lake). With the addition of two partner-operated roadside stations at North Schroon/Paradox and Caroga Lake, the number of inspections totaled 38,136 watercraft, with 3,455 decontaminations performed, which removed 2,705 AIS. 11.3% of boats were found to be dirty (carrying organisms or water), while 5.3% of inspected watercraft carried confirmed samples of AIS. The 27 decontamination stations were open a total of 2,010.5 days for an average of 1.7 decontaminations per day open.

Table 10. Decontamination Station overview, 2018. (Red emphasizes high results in each category. Includes partner stations.)

Decontamination Stations (2018)	# Days open	Total inspections	Inspections /day	Decons performed	Decon pct	Decons/ day	Inspections finding orgs	# AIS removed	% Boats w/orgs	% Boats w/AIS	Opening date
Caroga	128	226	1.8	113	50%	0.9	4	4	1.8%	1.8%	5/26/2018
Chateaugay	48	1680	35.0	162	10%	3.4	149	137	8.9%	8.0%	7/4/2018
Colton	49.5	59	1.2	51	86%	1.0	9	3	15.3%	5.1%	7/26/2018
GSL - Broadalbin	70.5	4172	59.2	139	3%	2.0	81	16	1.9%	0.3%	6/29/2018
GSL - Day	22.5	556	24.7	23	4%	1.0	17	1	3.1%	0.2%	7/27/2018
GSL - Northampton	43.5	1685	38.7	108	6%	2.5	69	7	4.1%	0.4%	6/29/2018
GSL - Northville	102.5	4043	39.4	173	4%	1.7	136	25	3.4%	0.6%	5/26/2018
Hudson-Luzerne	69.5	1177	16.9	34	3%	0.5	4	3	0.3%	0.3%	5/26/2018
Indian Lake	38.5	1078	28.0	66	6%	1.7	59	1	5.5%	0.1%	8/11/2018
Champlain - Peru	71	1884	26.5	115	6%	1.6	196	51	10.4%	2.5%	5/27/2018
Champlain - Plattsburgh	24	653	27.2	69	11%	2.9	119	90	18.2%	12.7%	7/27/2018
Champlain - Port Douglas	16	458	28.6	26	6%	1.6	45	16	9.8%	3.1%	7/27/2018
Champlain - Port Henry	102.5	1953	19.1	116	6%	1.1	388	336	19.9%	13.0%	6/1/2018
Champlain - South Bay	71	1302	18.3	54	4%	0.8	302	298	23.2%	15.7%	7/4/2018
Champlain - Ticonderoga	115	3588	31.2	294	8%	2.6	1531	1569	42.7%	30.3%	5/26/2018
Champlain - Willsboro	63	1176	18.7	123	10%	2.0	74	46	6.3%	3.6%	5/26/2018
Lake Placid	118	3238	27.4	204	6%	1.7	651	4	20.1%	0.1%	6/6/2018
Long Lake	24	27	1.1	24	89%	1.0	5	4	18.5%	14.8%	6/29/2018
Loon	148	895	6.0	152	17%	1.0	6	7	0.7%	0.7%	5/14/2018
N Schroon/Paradox	109	146	1.3	144	99%	1.3	1	1	0.7%	0.7%	6/2/2018
Piseco	72	130	1.8	121	93%	1.7	6	1	4.6%	0.8%	5/26/2018
Rocky Mountain	67	226	3.4	216	96%	3.2	24	15	10.6%	6.2%	7/4/2018
Schroon - Horicon	132	2413	18.3	215	9%	1.6	13	7	0.5%	0.2%	5/24/2018
Second Pond	62	3306	53.3	88	3%	1.4	288	38	8.7%	1.1%	5/26/2018
Speculator	73.5	153	2.1	119	78%	1.6	13	3	8.5%	2.0%	5/26/2018
Star Lake	44	56	1.3	48	86%	1.1	9	4	16.1%	7.1%	7/4/2018
Upper Saranac	126	1856	14.7	458	25%	3.6	94	18	5.1%	0.8%	5/26/2018
Overall Figures	**2010.5**	**38136**	**19.0**	**3455**	**9%**	**1.7**	**4293**	**2705**	**11.3%**	**5.3%**	

The decontamination station located at the Upper Saranac Lake boat launch performed the highest number of decontaminations at 458 watercraft from 1,856 inspected watercraft. In addition to motivated stewards, this launch has the advantage of a traffic flow that naturally directs boaters to the decontamination equipment, which is not a feature present at many launches that were built long before decontamination was a consideration. Other busy locations were Ticonderoga on Lake Champlain with 294 decontaminations, Rocky Mountain roadside station with 216, and AWI's partner location at Schroon Lake Horicon with 215. Hand removal of plants was also common at sites such as Ticonderoga. Boaters may not always be willing to take the time to visit decontamination but will often allow the stewards to hand-pull plants from easily accessible places. Technician approach, engagement methods when recommending decontamination to boaters, site layout, and boater receptivity has proven crucial to raising boat compliance with state regulation.

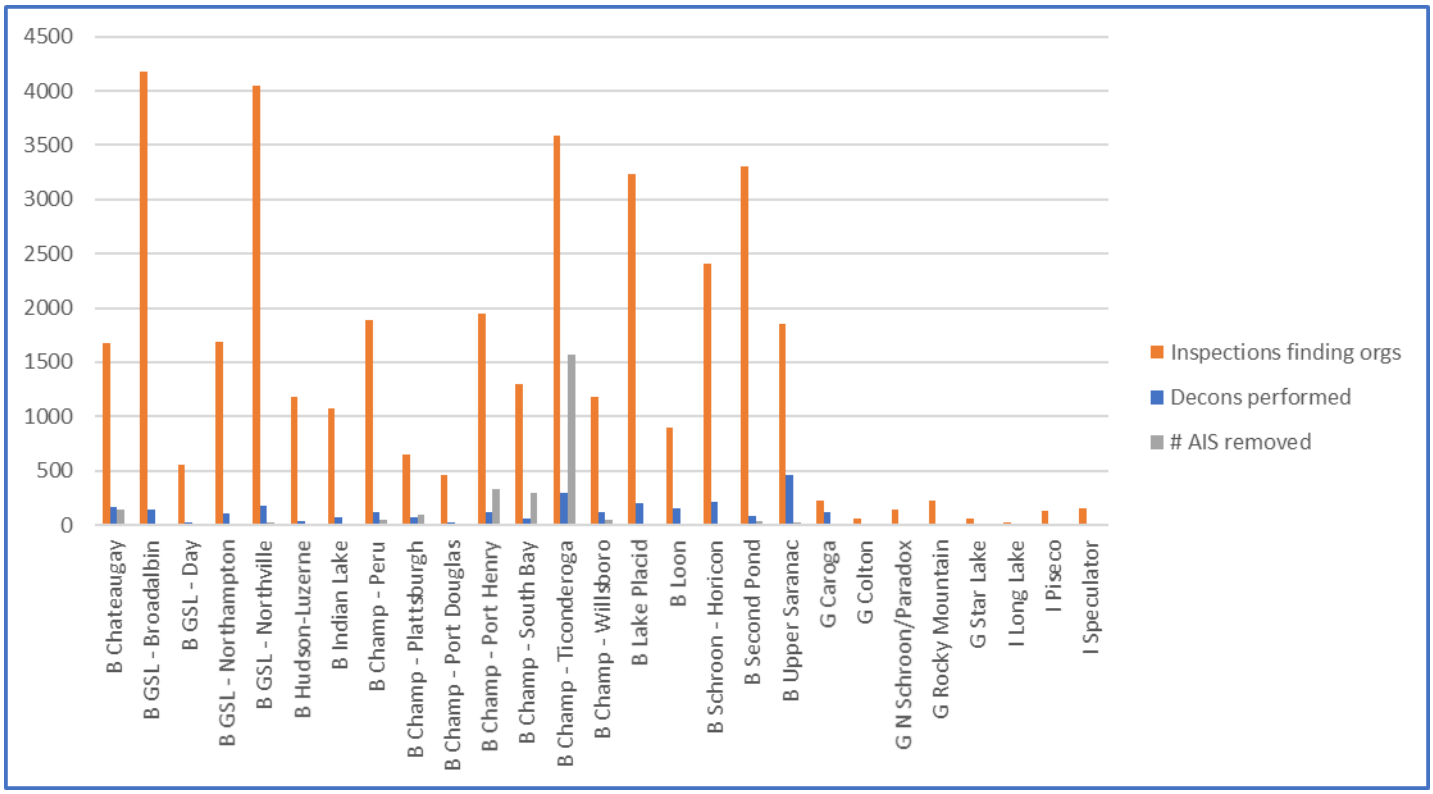


Figure 6. Inspections, decontaminations and AIS removed at decontamination stations, 2018. B = located at boat launch; G = gateway roadside location along perimeter of park; I = interior park roadside location. (Includes partner stations.)

Decontamination station stewards found that Eurasian watermilfoil (*M. Spicatum*) was the most frequently removed aquatic invasive species, with comparatively high counts of the organism removed from watercraft departing boat launches at waterways with known infestations of the plant. Nearly thirteen times the numbers of AIS were removed from watercraft departing inspection stations located at boat launches compared with those launching, which supports the premise that boats *leaving* infested waterways present greater comparative risk for transporting AIS (Table 11).

Table 11. AIS removed from decontamination stations, 2018. BN = brittle naiad, CLP = curly-leaf pondweed; EF=European frogbit; EWM = Eurasian water milfoil; VLM = variable leaf milfoil; SWF = spiny waterflea; WC = water chestnut; ZM = zebra mussel; AIS/* = aquatic invasive species. (Includes partner stations.)

Decontamination Stations	BN*	CLP*	EF*	EWM*	VLM*	SWF*	WC*	ZM*	total AIS removed	launching	retrieving	roadside
Caroga	0	0	0	3	0	0	0	1	4	--	--	4
Chateaugay	0	3	0	134	0	0	0	0	137	2	135	--
Colton	0	0	0	3	0	0	0	0	3	--	--	3
GSL - Broadalbin	0	2	0	9	0	1	2	2	16	14	2	--
GSL - Day	0	0	0	1	0	0	0	0	1	0	1	--
GSL - Northampton	0	0	0	3	0	2	2	0	7	5	2	--
GSL - Northville	1	1	0	13	0	2	4	4	25	21	4	--
Hudson-Luzerne	0	0	0	2	0	0	0	1	3	3	0	--
Indian Lake	0	0	0	0	0	0	0	1	1	1	0	--
Champlain - Peru	0	2	0	35	7	0	0	7	51	15	36	--
Champlain - Plattsburgh	0	9	0	81	0	0	0	0	90	3	87	--
Champlain - Port Douglas	0	2	0	13	0	0	0	1	16	1	15	--
Champlain - Port Henry	2	101	0	159	44	0	1	29	336	14	322	--
Champlain - South Bay	0	45	0	86	1	0	155	11	298	24	274	--
Champlain - Ticonderoga	11	408	0	653	69	0	10	418	1569	42	1527	--
Champlain - Willsboro	0	7	0	32	1	0	0	6	46	7	39	--
Lake Placid	0	0	0	0	1	0	1	2	4	3	1	--
Long Lake	0	0	0	0	3	0	0	1	4	--	--	4
Loon	0	0	0	5	0	0	1	1	7	4	3	--
N Schroon/Paradox	0	0	0	0	0	0	0	1	1	--	--	1
Piseco	0	0	0	0	0	0	0	1	1	--	--	1
Rocky Mountain	0	2	0	8	1	0	1	3	15	--	--	15
Schroon - Horicon	0	1	0	2	0	0	2	2	7	5	2	--
Second Pond	0	5	0	21	12	0	0	0	38	11	27	--
Speculator	0	1	0	0	0	0	0	2	3	--	--	3
Star Lake	0	0	0	3	0	0	0	1	4	--	--	4
Upper Saranac	0	3	0	6	4	0	1	4	18	17	1	--
Overall Figures	**14**	**592**	**0**	**1272**	**143**	**5**	**180**	**499**	**2705**	**192**	**2478**	**35**

Overall, decontamination stations located at boat launches (B) received the most traffic, performed the most decontaminations, and removed the most AIS. We do not conclude, however, that the gateway (G) or interior (I) decontamination stations are not important, or even essential, to the regional spread prevention response. G and I stations are much more visible than those tucked away at boat launches and so serve a vital public education purpose. 2018 results indicate roadside sites acting as resources for stewards to refer boaters to while in transit. The roadside location at Piseco Common School decontaminated 121 vessels out of 130 inspections and while only 6 inspections yielded visible organisms (Table 10), the decontamination procedure presumably removed small-bodied AIS, which have become established in several lakes in the Piseco-Speculator corridor.

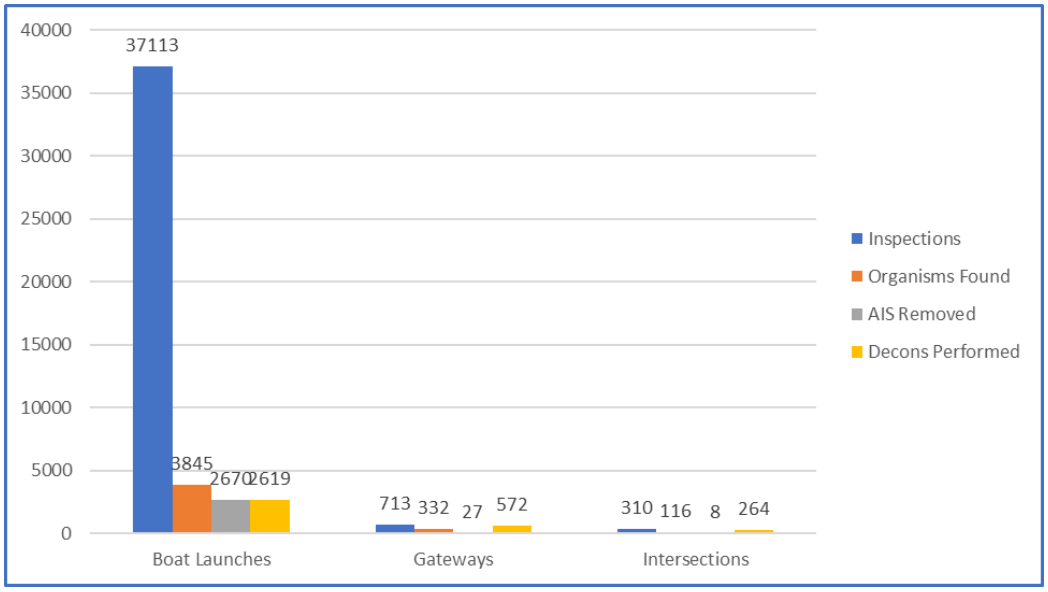


Figure 7. Decontamination station results by category, 2018. (Includes partner stations.)

2018 to 2017 Comparison

The Adirondack Park AIS Prevention Program results vary from 2017 in some important ways. In 2018, the program increased performance in a variety of measures compared with 2017. AIS removal was up over 20%, including very large increases in curlyleaf pondweed, spiny waterflea, water chestnut and zebra mussels. The increase in spiny waterflea is from 17 instances in 2017 to 23 in 2018, leading to the 92% increase. Spiny waterflea detections have risen each year since we began tracking them. AIS detected on retrieving boats increased 31%, and decreased on launching watercraft by 26%, confirming the need to pay maximum attention to exiting watercraft (Figure 8). The program (including partner programs, operated by associations, towns and counties) expanded 14% in number of locations served (increase from 87 to 99 sites), 15% in number of decontamination stations (increase from 20 to 23 locations), hired 6% *fewer* staff, saw 1% more watercraft, removed 20% more AIS, and performed 24% more decontaminations than in 2017 (Figure 9).

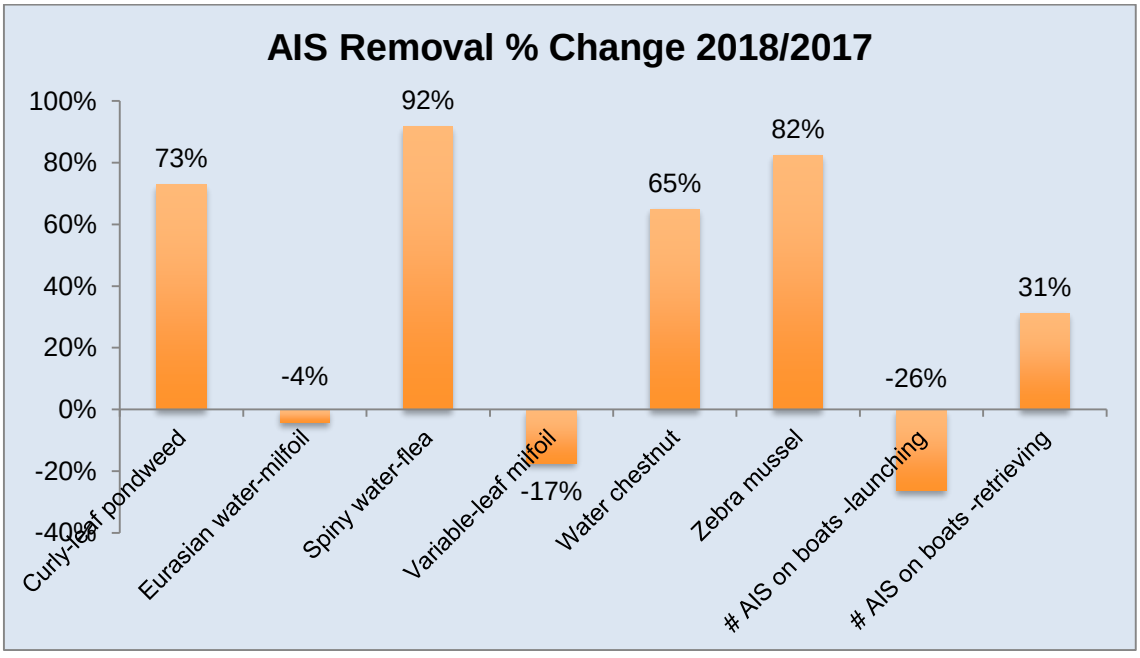


Figure 8: AIS removal comparison, Decontamination stations, 2018 to 2017. (Includes partner stations.)

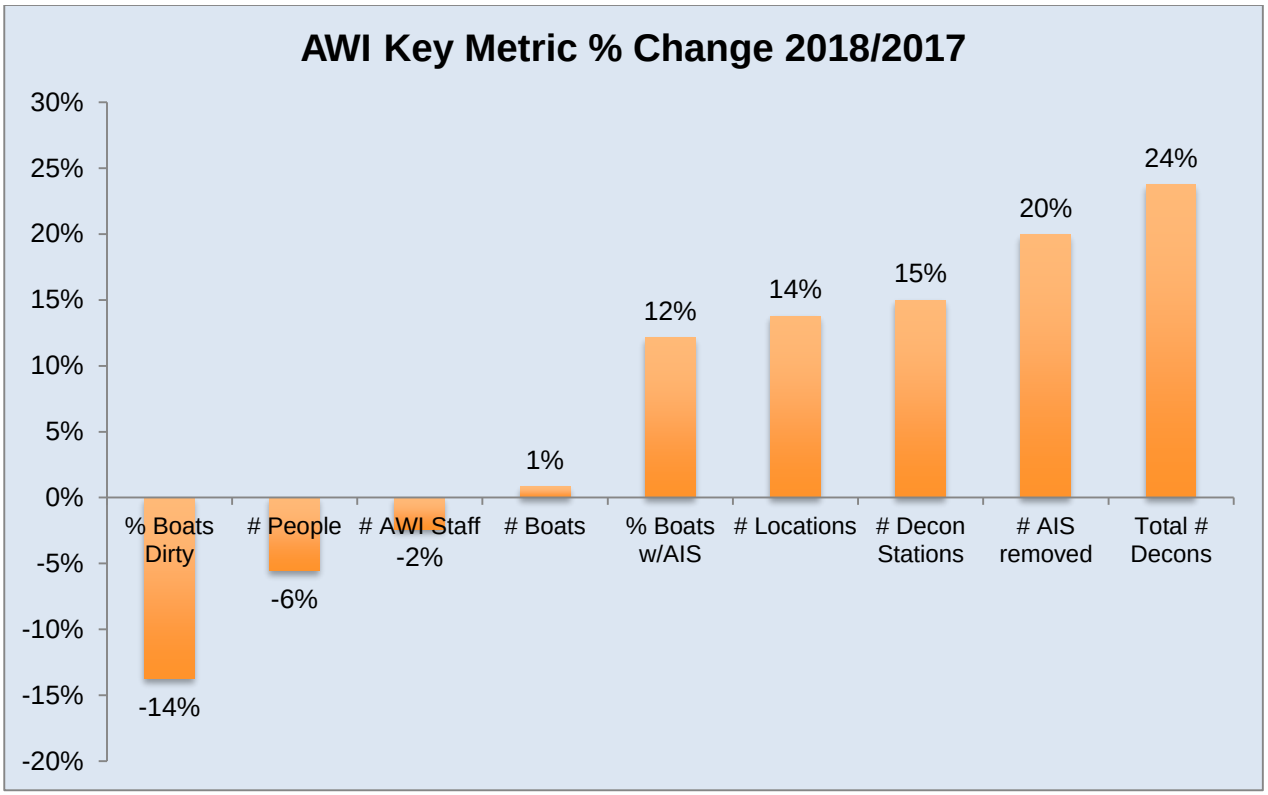
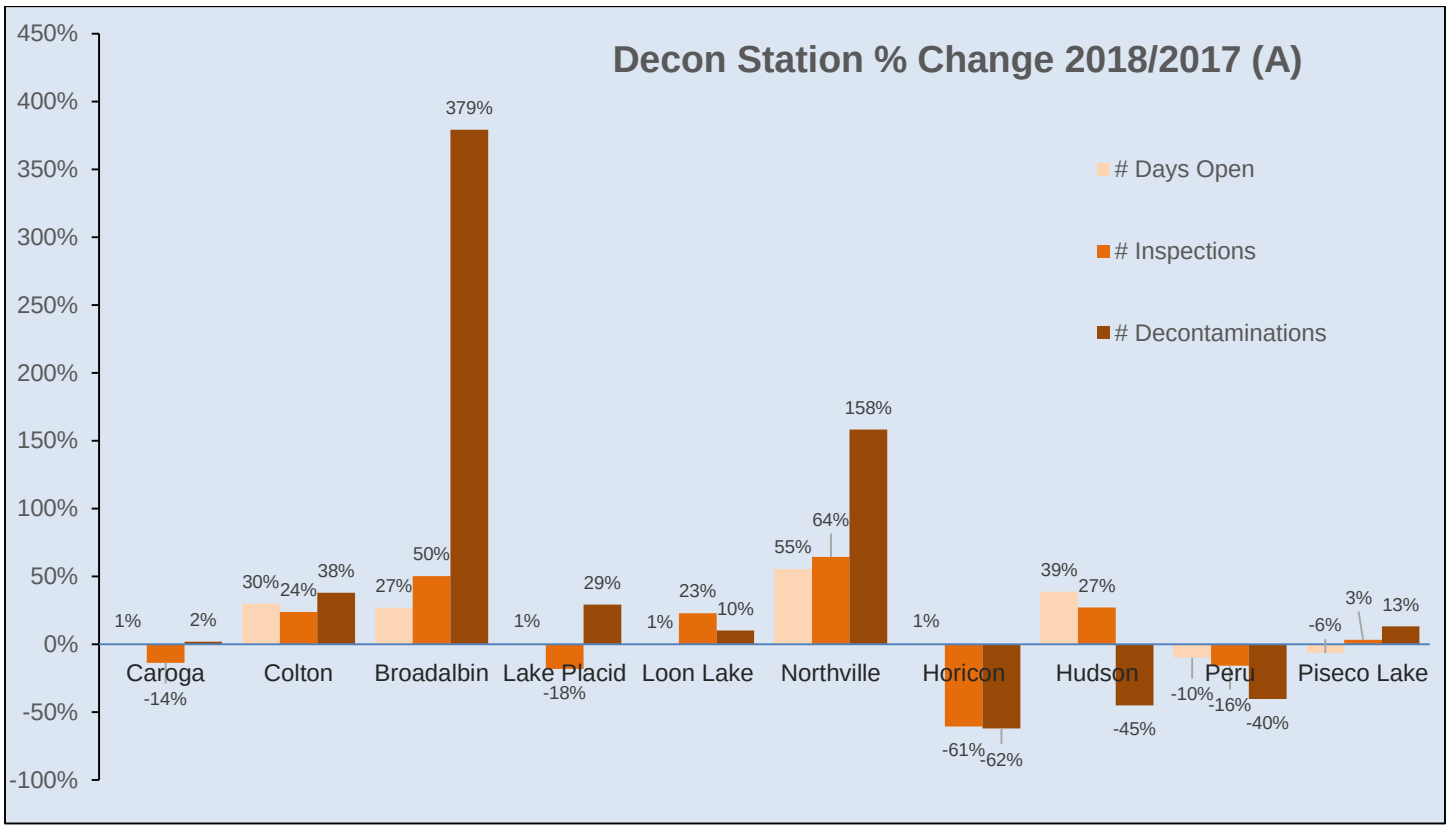


Figure 9: Key metric comparison

When we examine the results of the decontamination stations in 2018 compared with 2017, we see a significant increase in several measures of productivity. Of 27 active stations in 2018, 19 were also in service in 2018, allowing a comparison of outcomes (Figure 10). Decontamination inspections were up at 12 of the 19 stations, declining most precipitously at Star Lake, which was open only 44 days in 2018, compared with 123 in 2017. Conversely, inspections were up dramatically at Ticonderoga, reflecting an increase in days of service from 61 in 2017 to 115 in 2018. Overall decontaminations performed increased to 3,455 from 2,792, an increase of 24%. This is explained in some degree by the increased number of decontamination stations in 2018 (27) compared with 20 in 2017. Average decons per day per location is a helpful direct comparison of performance from year to year; in 2018 this was 1.7, versus 1.8 per day in 2017. Broadalbin (+ 110) and Ticonderoga (+ 225) saw the greatest increases in numbers of decontaminations performed, again reflecting increased days in service at each location. The troubling drop-off in decontaminations performed at Second Pond is a result of site work at the nearby Lake Flower boat launch, which caused increased traffic and parking pressure and disruption at the Second Pond boat launch. The overall, program-wide comparison of outcomes between the two years is positive, with increases in number of days open (+ 56%), number of boat inspections (+ 43%) and number of decontaminations performed (+ 24%).



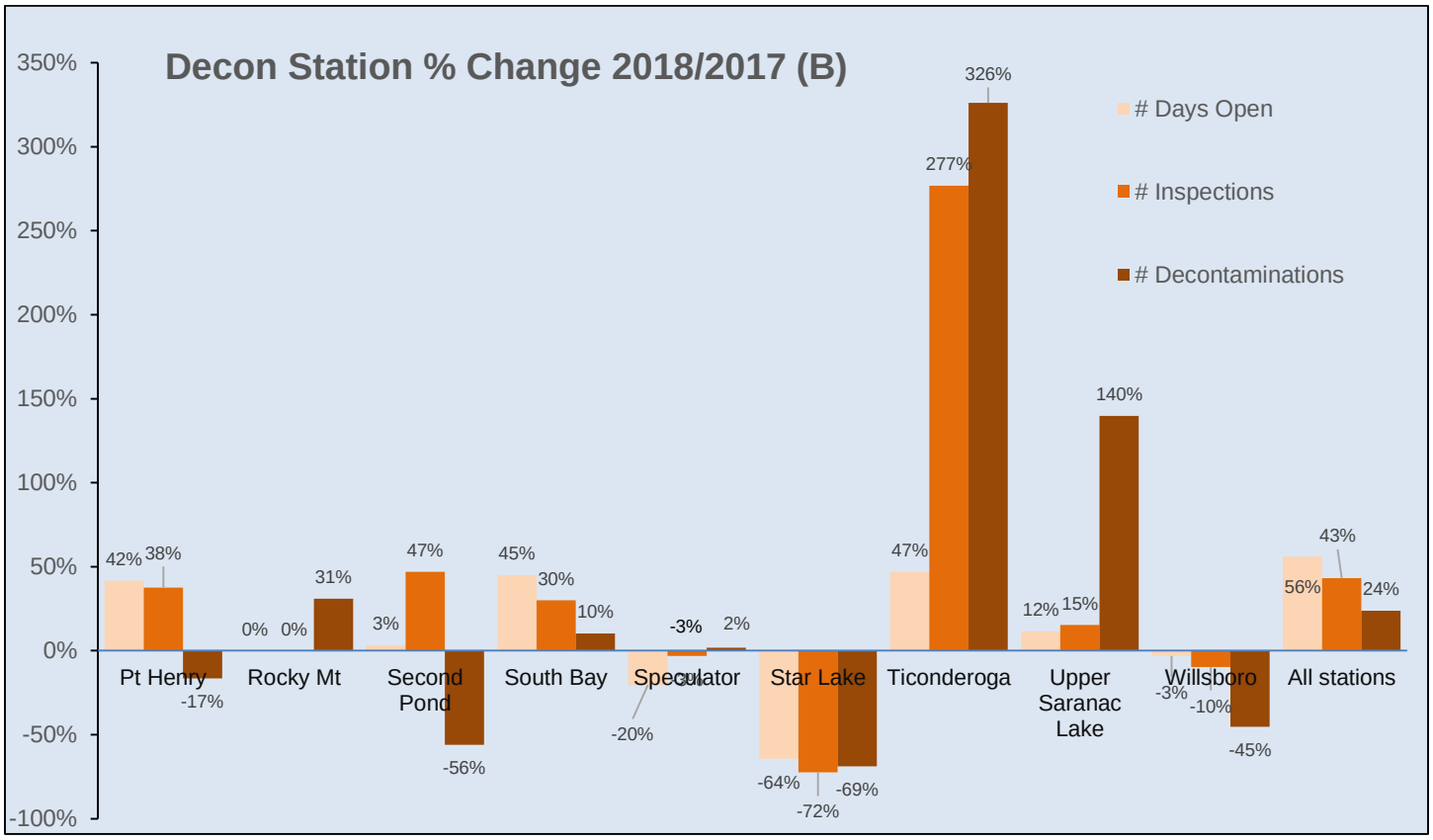


Figure 10: (A and B) Year over year performance comparison, Decontamination stations, 2018 to 2017. (Includes partner stations.)

Watershed Steward Network Analysis

The AWI examined various dimensions of boat activity and findings to better understand how the boat launches function as a landscape-scaled system. By analyzing visitor responses to the question about where their boat has been last within the preceding two weeks, we were able to tally the number of confirmed outbound trips between lakes in the network of waterways with stewards by considering the previous visits (inbound) as confirmed *outbound* visits from the originating lake. For example, a visitor to Lake Placid states to the watershed steward that their boat was last used in Saratoga Lake, which represents a confirmed outbound trip from Saratoga Lake to Lake Placid. By plotting the three most frequently occurring outbound trip connections to lakes within our steward network, we begin to understand the pattern of most frequent interconnections among the lakes. Such information is helpful in determining, in consultation with the NYSDEC and APIPP, the optimal placement of stewards. We included data from cooperating steward programs to create a model of regional boat launch visit interconnection with implications for AIS spread (DeBolt, Holmlund, Johnstone, Rohne, & Smith, 2014).

An analysis of outbound boat traffic both within the Adirondack system of waterways and with significant signals from outside the region yields a complex representation of the potential AIS transport connections created between the waterways by operators of recreational watercraft (Figure 11). Many visitors visit several nearby lakes over the course of the summer. When considered at the landscape level, we can see how AIS in one lake could be transported via recreational watercraft to other lakes over the subsequent two weeks.

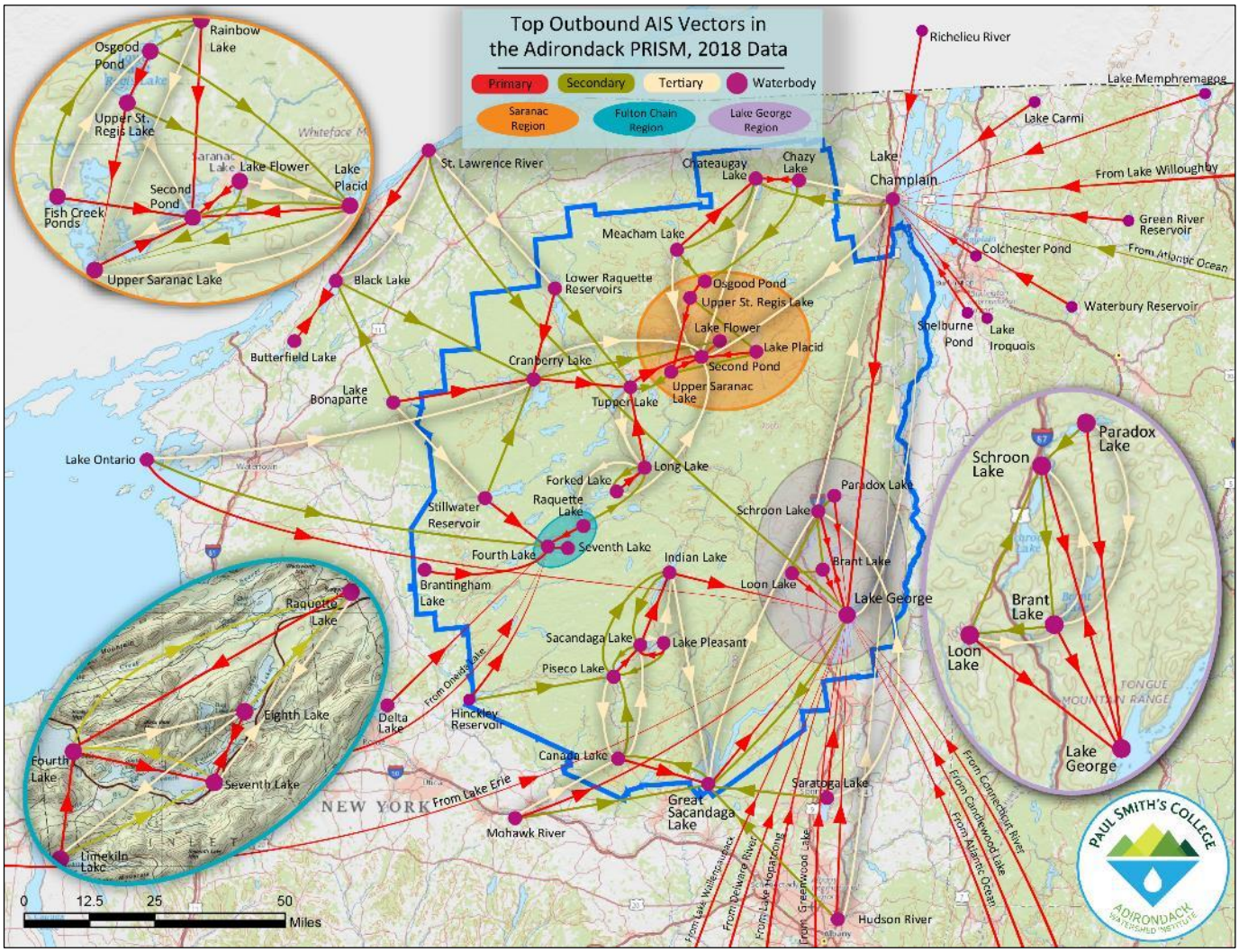


Figure 11. Top 3 Outbound AIS Pathways in the Adirondack PRISM, 2018. Includes data from the Brant Lake Association, Canada Lake Association, ESSLA, LCBP, LGPC, Paradox Lake Association and Schroon Lake Association.

2018 AWI AIS pathway data indicate connectivity both within the Park and with source-waters outside the Park. Every water body within the Park is connected to dozens if not hundreds of previously visited lakes and rivers. This map presents the top three occurring outbound pathways from approximately 70 significant water ways. Inputs external to the Adirondack Park include Vermont lakes, the St. Lawrence River, Lake Ontario, Lake Erie, the Finger Lakes, the Mohawk and Hudson Rivers, and the Atlantic Ocean, all of which contain species not established in the Adirondack Park, thus providing a significant threat of invasion to currently constituted ecosystems. Internal connections reveal subordinate systems of associated lakes, including the Sacandaga-Saratoga-Lake George-Champlain network, which is associated with the north-south I-87 corridor, the Saranac Chain network, the Fulton Chain network, and a network centered on Lake Pleasant. Each of these subordinate networks is linked to the others by key bridge or linkage lakes, such as Long Lake, Chateaugay Lake, and Cranberry Lake.

AIS pathway information is useful when one considers hypothetical AIS spread scenarios. For example, the secondary outbound pathway, in our data set, of the Mohawk River is Great Sacandaga Lake. If AIS is introduced into Great Sacandaga Lake from the Mohawk River, the next most likely destination (GSL's primary outbound pathway) is Lake George. Lake George's tertiary outbound pathway is Lake Champlain. Lake Champlain's primary outbound pathway is Lake George, forming a circle. AIS in Lake Champlain travel via a secondary pathway to Chateaugay and Chazy Lake and hence to the Saranac Lake region. Our top outbound AIS pathway map shows the *pattern* of pathways for the highest numbers (most likely) of outbound visits.

This information provides insight into how organisms introduced in one water body potentially threaten other, associated water bodies. This provides essential information when managers are making decisions about the deployment of AIS spread prevention assets across the entire region. It also suggests pinch points, or points of opportunity to interrupt AIS spread through trailered watercraft via strategically stationed inspection and decontamination sites.

We cannot focus on water bodies in isolation: optimization of regional spread prevention requires analysis of AIS spread vectors and pathways functioning as systemic outgrowth of repeated and predictable visitor behavior. Note that this functional network has emerged as a comparatively stable pattern in our analysis of data for each of the past three years (Figure 12). The shape and direction of the sub-networks has remained stable each year while data derived from the 2017 and 2018 program expansions filled in some of the previously unknown vector/pathway network details.

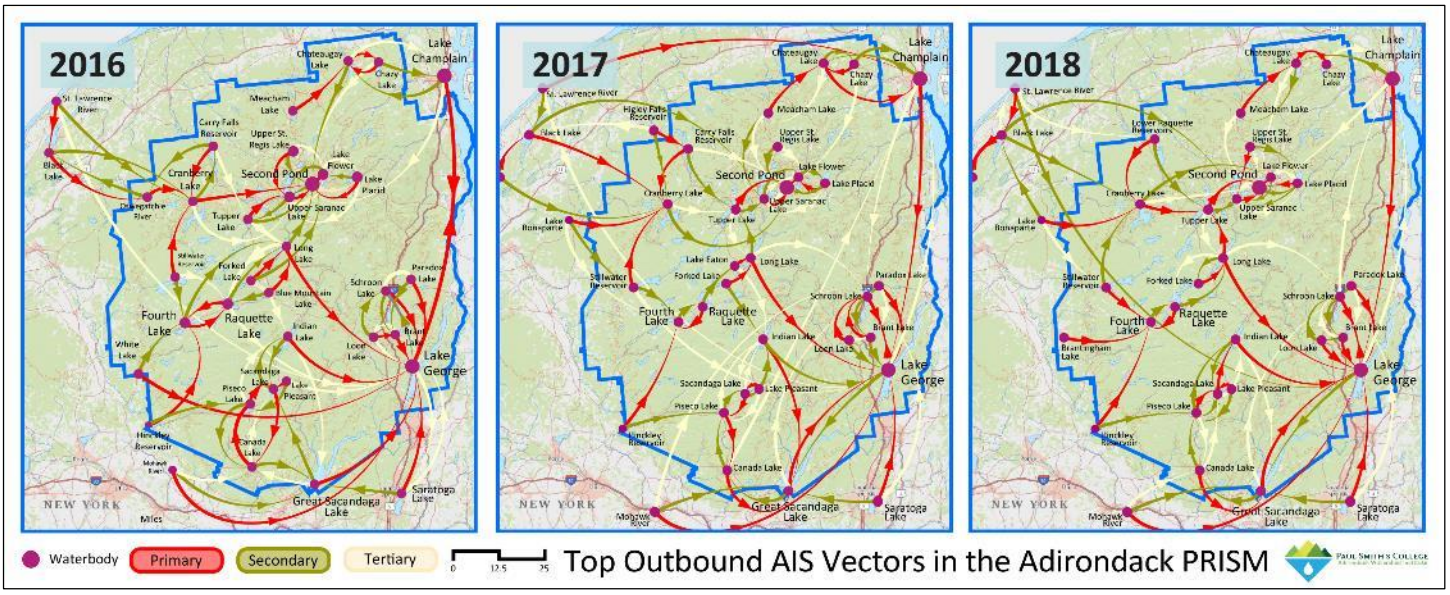


Figure 12: 2016-2018 Outbound Vector Pathway Network Comparison

We constructed a map weighing connecting vectors by *frequency* of cross-network visits, and thus ascertained relative return on investment for particular stations. Figure 13 shows the thickest (highest frequency of visits) red vector pathway arrows to and from Great Sacandaga Lake, Saratoga, Lake George and Lake Champlain, as one would expect. Thick, high traffic arrows also from Hudson River to Lake George, St. Lawrence – Black Lake, Mohawk River – Lake George, Atlantic Ocean – Lake George, and Lake Hopatcong (NJ) – Lake George. Arrows are thinner (representing fewer potential transport events, a.k.a. launched boats) in the interior Adirondack waterways, corresponding to smaller totals for visits as well as generally more homogeneous previous-visit profiles. The traffic-weighted vector pathway map justifies the high investment that NYSDEC has made in boat decontamination equipment around Lakes Champlain, George, and Great Sacandaga. The traffic-weighted vector map should not be employed, however, to "write off" or ignore interior Adirondack lakes, which remain vulnerable to new invasions, and worth protecting for other reasons.

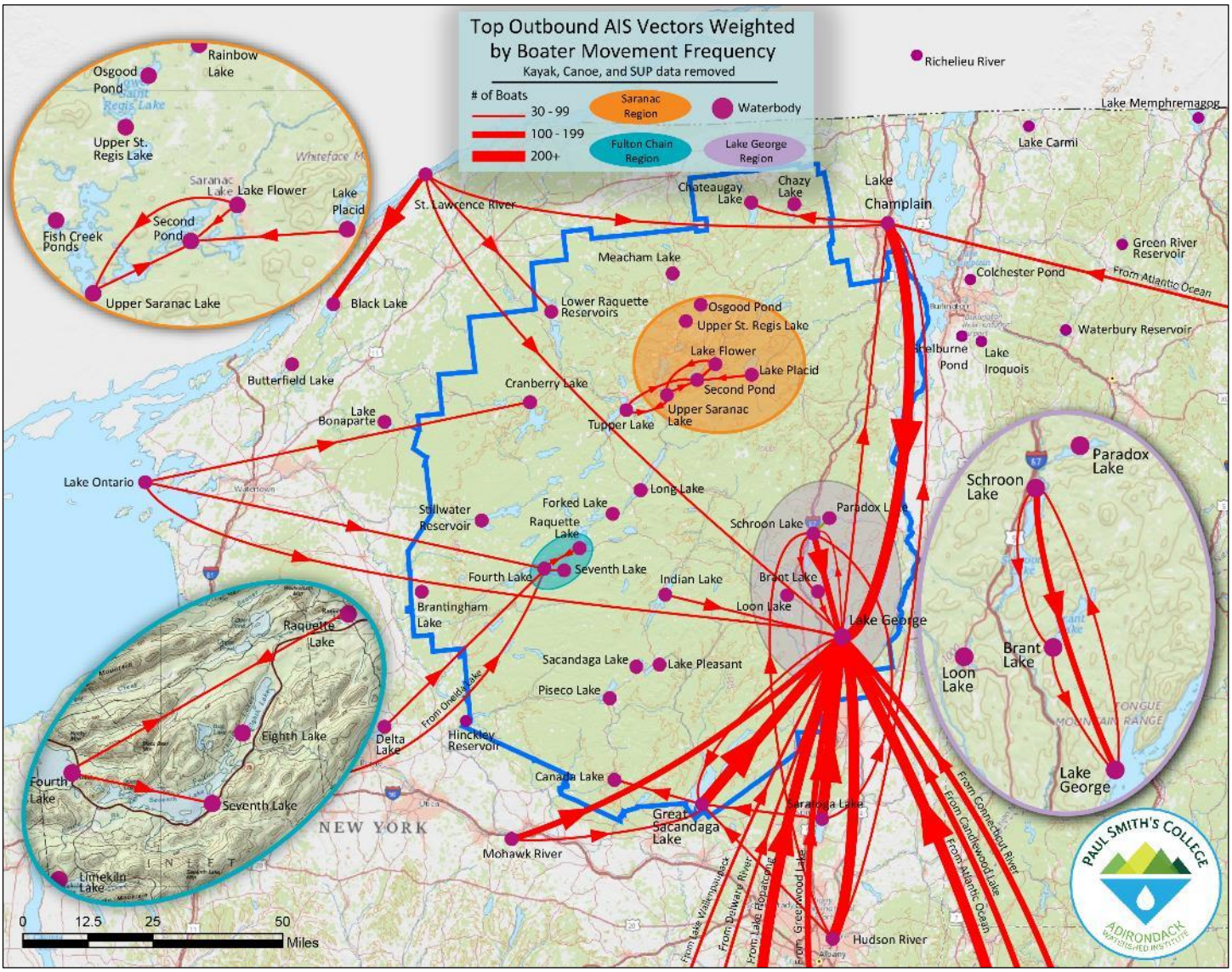


Figure 13: AIS Vectors Weighted by Number of Visits

Finally, we created a map showing the same vectors weighted by AIS presence/absence at source lakes compared to destination lakes (Figure 14). This analysis shows, for example, heavy arrows converging on Fourth Lake, indicating that several of its source lakes have AIS present which have not been established

in Fourth Lake. This illustrates how vulnerable Fourth Lake is, relative to other lakes in the network. Of course, Fourth Lake, if invaded, would then present a new risk to all the other lakes in the network to which it is connected by spread vectors. Other lakes showing particular vulnerability through this analysis include Cranberry Lake, Chateaugay Lake, Great Sacandaga Lake, Lower Raquette Reservoirs, Second Pond, Schroon Lake (from Lake George), and Lake George itself, which is vulnerable to the AIS present in the Hudson River and Lake Champlain. Lest we forget that things could get worse in Lake Champlain, the map shows it as exposed to the aquatic invaders it doesn't already have from the St. Lawrence River.

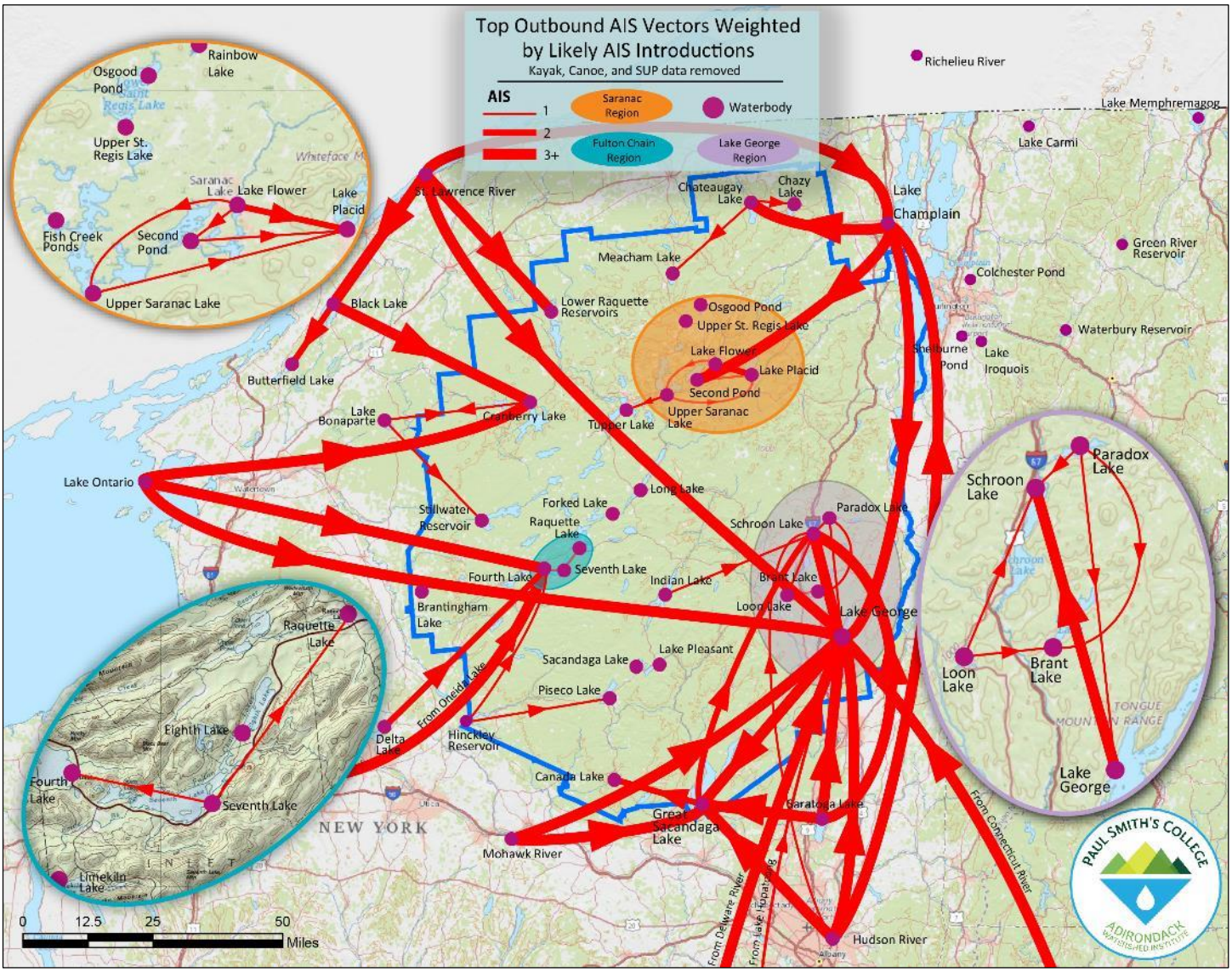


Figure 14: AIS Vectors Weighted by Likely Risk of AIS Introduction (Source Lakes vs. Destination Lakes)

Discussion and Recommendations

State agency resource managers need to make resource allocation decisions based on well-informed regional risk management with the goal of minimizing the spread of AIS. At the landscape level, resource managers cannot allocate limited resources according *only* to convenience, opportunity, preference, assumption, or public wishes. Managers recognize that each boat ramp presents a unique combination of risk, visitor use patterns, and endemic ecology. Simultaneously, we must carefully analyze the interactions between the ecology and user patterns of each of the region's waterways. Finally, we have arrived at a stage in state-wide and regional AIS invasion management where we need to begin to prioritize the pre-emption of

invasions at their sources, or at the boundaries of our regional or state areas of concern. Truly, invasive species are everyone's problem, and as such, they respect no political or jurisdictional boundary. Aquatic invaders go everywhere we are free to go, impelling us to design interventions based on proactive initiatives to stop them at their sources.

The administration of the Adirondack AIS Spread Prevention program over four years has led to several observations, conclusions and recommendations.

- Adirondack waterways are faced by the clear and present threat of continual and new aquatic invasions from locations both close at hand and comparatively distant.
- The defensive and atomistic focus of protecting individual lakes from AIS is insufficient and ultimately ineffective. Regional, coordinated intervention focusing on inspection and decontamination of exiting watercraft protects an entire system from overland AIS transport.
- Logistically connected but geographically distant waterways provide opportunities for coordinated management initiatives between agencies and communities across New York State and neighboring states
- Visitors consistently report high levels of knowledge and engagement with AIS spread prevention best practices and the New York State AIS transport ban, yet Adirondack lakes continue to experience new AIS invasions. More needs to be done.
- Knowledge of subnetworks of associated lakes, spread hubs, and linkage pathways can effectively guide management of the interconnected system of water bodies
- While AIS transport rates are fairly small (average 3% of boats), and boats posing risk of AIS introduction are comparatively few (~20% of boats), AIS invasions continue to occur. This provides opportunity to focus intervention on high-risk watercraft.
- High pressure, hot water decontamination is feasible and increasingly welcomed by the boating public.
- Increasing regional coverage by boat inspectors and decontamination standards provides needed opportunities for the public to comply with New York State AIS transport regulations and best practices.

Every year, as the AWI provides services to more communities and locations, the data the program gather become completer and more robust. With the acquisition of data from locations not represented in years past, the AWI was able to update and improve spread vector-pathway network maps. We have prepared single-lake inbound vector maps for most of the waterways we serve. These may be found in the Location Use Data Summaries at the end of this report. The AWI continues to integrate its own data and the data from cooperating watercraft inspector programs, such as the LGPC, the LCBP, the ESSLA, the Loon Lake Association, and others. The composite analysis suggests that pressure from surrounding waterways continues as boaters venture into and amid the Adirondack Park Forest Preserve to recreate, fish, and paddle.

As the AWI refines the boat decontamination aspect of AIS spread prevention in the Adirondacks, the organization tailors and evolves the conservation messages it disseminates while calibrating its engagement protocols to align with updated directives from our partners in New York State agencies. The NYSDEC office of Invasive Species Coordination and APIPP provide our program with guidance based on AIS prevention data and priorities articulated by various state agencies. In 2018, the DEC has become increasingly active in assessing, coordinating, and directing outreach materials, messaging, and visual continuity across spread prevention programs statewide. We anticipate NYSDEC's continued focus on decontamination of watercraft exiting waterways with small-bodied AIS present to be expanded and institutionalized throughout NYS in 2018. We also anticipate an ever-greater attention to regional level

inspection and decontamination facilities being placed at or planned for the sides of major highways and travel routes both within and around the Adirondack Park, and eventually, the state.

While new and ongoing infestations command public attention, we recognize that lakes with *and* without current AIS infestations need to have continued steward coverage to detect, remove, and refer boaters based on AIS that boat inspectors encounter on watercraft. Some decontamination sites need to be strategically and/or centrally located within a convenient radius (15 to 20-minute drive time) to service these referrals. Thanks to the NYSDEC Adirondack program, the public now has a well-established network of decontamination stations available at convenient times and in many convenient locations. There is room, however, for increased decontamination resources in the western half of the park. The AWI uses the NYS AIS transport regulation to help the boating public understand the role that the watercraft inspection and decontamination sites play in protecting natural resources. The increasing scope of the Adirondack AIS Prevention Program offers the public with many opportunities to take environmentally responsible and logistically convenient measures to stop AIS. However, more frequent and publicized enforcement of the regulation may be necessary to encourage all members of the public to modify their behavior.

Conclusion

The AWI was able to implement, in 2018, the largest AIS spread prevention program both in its own history and in the history of the Adirondack Park. Thanks to increased leadership, collaboration, and resources provided by New York State agencies, primarily the NYSDEC, the AWI has built, with its partners in municipalities and lake associations, a spread prevention program that has attracted attention, admiration, and good-natured envy across the state. For 2019, we hope to both continue the AWI role in this regional program, and to increase our partnership and collaboration with NYSDEC, OPRHP, Cornell University's Invasive Species unit, and the other Partnerships for Regional Invasive Species Management across the state. We would like to recognize the continual collaboration and support of APIPP, the Lake Champlain Basin Program, the Adirondack Lakes Alliance, the FUND for Lake George, the Local Government Review Board, and the Lake George Park Commission. These groups are AWI's most frequent collaborators. Key New York State agency collaborators include NYSDEC, NYSDOT, and the Adirondack Park Agency.

Steward Ben Coolidge decontaminates a boat at the Peru launch on Lake Champlain.

Unfortunately, as invasive species continue to spread to waterways across the state and region, the integrity and quality of Adirondack lakes and rivers are becoming increasingly singular, and increasingly worthy of protection. Long-time Adirondack visitors, residents, and resource managers have recognized the importance of the integrity of Adirondack ecosystems for a century or more. Now, under contemporary threats of climate change, air and water quality challenges, and competing visions of use and management, both the peril and the purity of the waterways of the Adirondacks attest to the region's importance at the state, regional, and even national levels. The AWI welcomes its role as an important part of the story of Adirondack conservation, while simultaneously working to connect with similar AIS prevention programs across the country and internationally in order to develop best, lasting management practices for the benefit of the human and non-human ecosystem dimensions.

Program Discussion and Conclusion (GLRI & AAISSPP)

Eric Holmlund, Director,
Adirondack Watershed Institute Stewardship Program

Great Lakes Restoration Initiative: Lake Ontario Headwaters Watercraft Inspection Program

Introduction

Eastern Lake Ontario and the St. Lawrence River serve as the chief points of entry connecting the Atlantic Ocean with North America's globally significant inland waterways comprised of the Great Lakes and connecting tributaries. For decades, transoceanic shipping has been the most consequential vector for introducing invasive species into the Laurentian Great Lakes, resulting in the highest rate of introduction of new invasive species to freshwater systems in the world (Ricciardi, 2006). Once established in the Great Lakes, secondary dispersal overland via recreational watercraft soon threaten inland waterways (Johnson, Ricciardi, & Carlton, 2001). Watercraft inspection and hand removal of aquatic invasive species are effective means of reducing the risk of introduction of new invasive organisms into inland waterways (Rothlisberger J. D., Chadderton, McNulty, & Lodge, 2010). Carefully designed and implemented AIS prevention public awareness campaigns with public outreach have shown promise in achieving the outcome of increased public adoption of Clean-Drain-Dry prevention protocol (Seekamp, et al., 2016). Boat steward programs are increasingly common strategies to protect the natural heritage of lakes, ponds and rivers throughout the Great Lakes catchment. Between 2010 and 2017, $446 million in federal funds have been invested in invasive species projects including AIS spread prevention activities and programs (GLRI, 2018). Since 2011, Paul Smith's College has received a series of awards to implement boat inspection and education programs at various sites in the Eastern Lake Ontario watershed along tributaries originating in the Adirondack Park and entering either Lake Ontario or the St. Lawrence River. In 2018, the GLRI-funded program included boat steward activity at sites in the Black River, St. Regis River, Raquette River, Indian River and St. Lawrence River watersheds.

Steward Jordan Spordone at Upper St. Regis Lake.

The GLRI was established in 2010 to consolidate, coordinate, target, and advance multiple-facet efforts to protect and improve the quality of the largest fresh surface-water ecosystem in the world. GLRI works through seven federal departments and multiple services, centers, and agencies to deploy federal support to projects falling within their complementary missions and priorities. One of the high-profile priorities is addressing the disruption and degradation caused by invasive species introduction and proliferation. Invasive species threaten ecosystems by outcompeting native species for habitat, and ultimately disrupt the flow of energy through food webs. As habitat and ecosystem restoration efforts are expanded in the Great Lakes, prevention of new infestations into these watersheds becomes increasingly critical. Preventing the spread of AIS in the headwater regions of the Great Lakes provides protection for each respective watershed as well as that of Lake Ontario and the interconnected Great Lakes- St. Lawrence Seaway system. Preventing an infestation upstream protects ecosystems at all levels in a watershed (Johnson & Padilla, 1996). By intercepting AIS at the headwaters, boat inspectors eliminate threats that could potentially move downstream to infest high priority resources such as riparian areas and coastal wetlands.

Watershed stewards provide courtesy boat inspections, and information regarding the threat of AIS to waterway users in attempt to encourage them to adopt new behaviors when transporting their vessels between waterways. Stewards also provide outreach and attend community events to spread the message of AIS awareness and spread prevention at locations other than the boat launch. Stewards and other AWI staff attend community and inter-agency events and workgroup meetings throughout the summer and other times of the year to network and collaborate with partners in the Great Lakes watershed. A complete list of outreach and meetings attended is included in an appendix of this report.

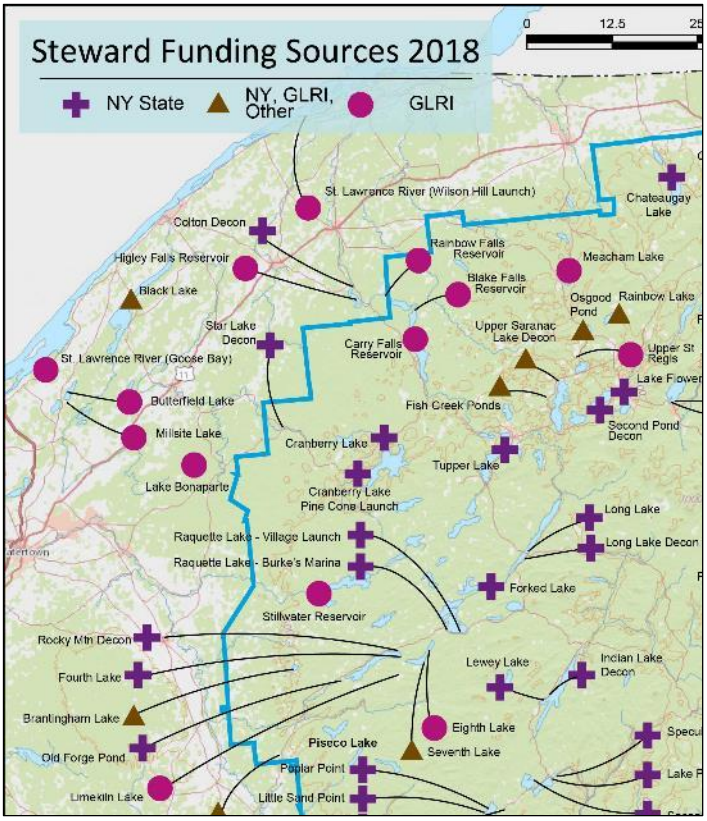


Figure 15. 2018 GLRI funded watercraft inspection locations noted by pink circles.

2018 GLRI Review

During the 2018 season, the AWI again provided highly trained, properly equipped and carefully supervised boat stewards at 18 boat launches in the Lake Ontario/St. Lawrence River watersheds. Expanded coverage hours at two sites was made possible with the final year of a three-year grant provided through New York State's AIS Spread Prevention Program. The message of the AWI continued to reach new and familiar users in hopes to encourage positive changes in AIS spread prevention behavior. Stewards worked to inform Adirondack communities and visitors about the threat that AIS pose to ecosystems, fisheries, recreation and the local and regional economy.

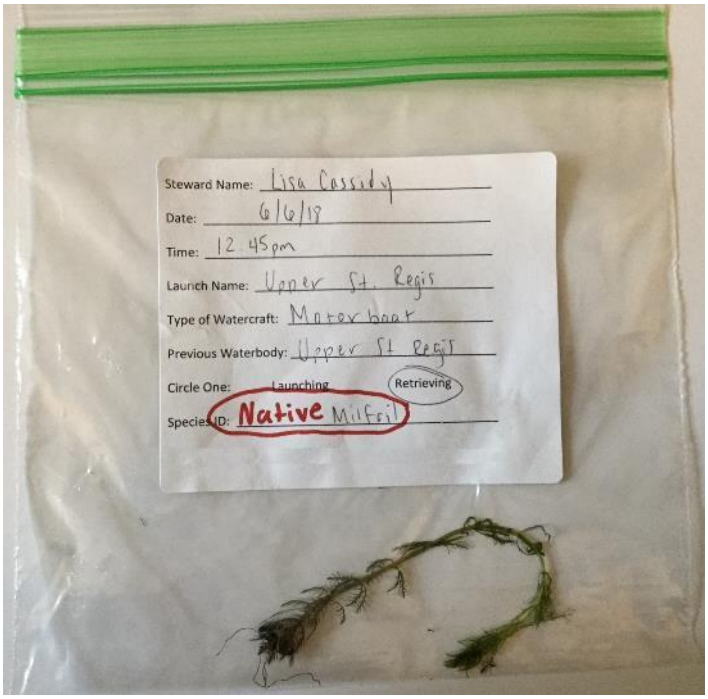
Decontamination stations were regionally (if not always conveniently) available for referral whenever boat stewards discovered evidence of AIS on boats and trailers. These stations are funded via the New York State Department of Environmental Conservation funded Adirondack AIS Spread Prevention Program, also implemented by the AWI. (visit www.adkcleanboats.org to learn more) "Decon" stations provided high-pressure hot water decontamination service to boaters who failed to meet the New York State clean, drained, dry regulation (6 NYCRR Part 576) and also to those who requested the service as a courtesy. Large-scale projects like this demonstrate the AWI's ability to collaborate with state agencies, municipalities, and

environmental organizations, to offer the most comprehensive and integrated AIS spread prevention program in the Adirondack Park to date.

Table 12. GLRI data summary, boat types, 2018. Quantity of watercraft type observed at each boat launch site, including those not inspected. PWC = personal watercraft; SUP= stand-up paddleboard; Wind = windsurfer.

Waterbody	Boat Type										total # boats
	Barge	Canoe	Dock	Kayak	Motor	PWC	Row	Sail	SUP	Wind	
Black Lake	1	6	1	55	3015	81	2	2	0	0	3163
Blake Falls Reservoir	0	0	0	6	7	0	0	0	0	0	13
Butterfield Lake	0	19	0	132	494	17	6	3	0	0	671
Carry Falls Reservoir (North)	0	23	0	90	383	33	1	2	2	0	534
Carry Falls Reservoir (South)	0	0	0	0	8	0	0	0	0	0	8
Eighth Lake	0	175	0	329	65	11	8	0	16	0	604
Higley Flow (Higley Falls Reservoir)	0	2	1	8	380	76	0	0	1	2	470
Lake Bonaparte	1	14	0	212	535	83	1	0	0	0	846
Limekiln Lake	0	45	0	305	66	28	4	0	1	0	449
Meacham Lake	0	10	0	82	224	49	5	3	0	0	373
Millsite Lake	0	15	0	143	63	1	5	1	0	0	228
Rainbow Falls Reservoir	0	0	0	1	8	0	0	2	0	0	11
Seventh Lake	1	168	0	679	447	103	6	4	35	0	1443
Seventh Lake (Eighth Lake Campground)	0	132	0	206	8	0	0	0	2	0	348
Stillwater Reservoir	0	134	0	203	979	20	1	1	1	0	1339
St. Lawrence River - Goose Bay	0	1	0	15	162	50	0	1	0	0	229
St. Lawrence River - Wilson Hill	0	35	0	86	1249	195	8	2	3	0	1578
Upper St. Regis Lake	1	335	1	198	299	0	0	5	7	0	846
Grand Total	**4**	**1114**	**3**	**2750**	**8392**	**747**	**47**	**26**	**68**	**2**	**13153**

Throughout the 2018 season, 13,153 watercrafts were observed at 18 locations funded by GLRI in Lake Ontario/St. Lawrence River watersheds (Table 12). Stewards shared the AIS prevention message with 25,272 boaters at different launches in GLRI watersheds. 1,701 organisms were detected as a result of 12,977 inspections. The percentage of dirty boats stewards encountered at GLRI sites was 9% (Table 13). The AWI defines "dirty boats" as boats that pose a high risk to transport AIS because they failed to meet the clean, drain, dry standard. Organisms present on the hull or trailer, standing water in bilges and live wells are a few examples of instances that would result in a boat classified a boat as "dirty." Watercrafts were more three times as likely to be found with organisms when leaving as opposed to entering waterways. Stewards found organisms on a high percentage of watercrafts at Goose Bay on the St. Lawrence River, Wilson Hill on the St. Lawrence River, Black Lake, and Rainbow Falls Reservoir (Raquette River). Stewards found comparatively fewer organisms on watercrafts at Higley Flow, Stillwater Reservoir, Seventh and Eighth Lakes, Millsite Lake, and Lake Bonaparte. Site characteristics (weed beds close to the boat launch) contributed to this discrepancy.

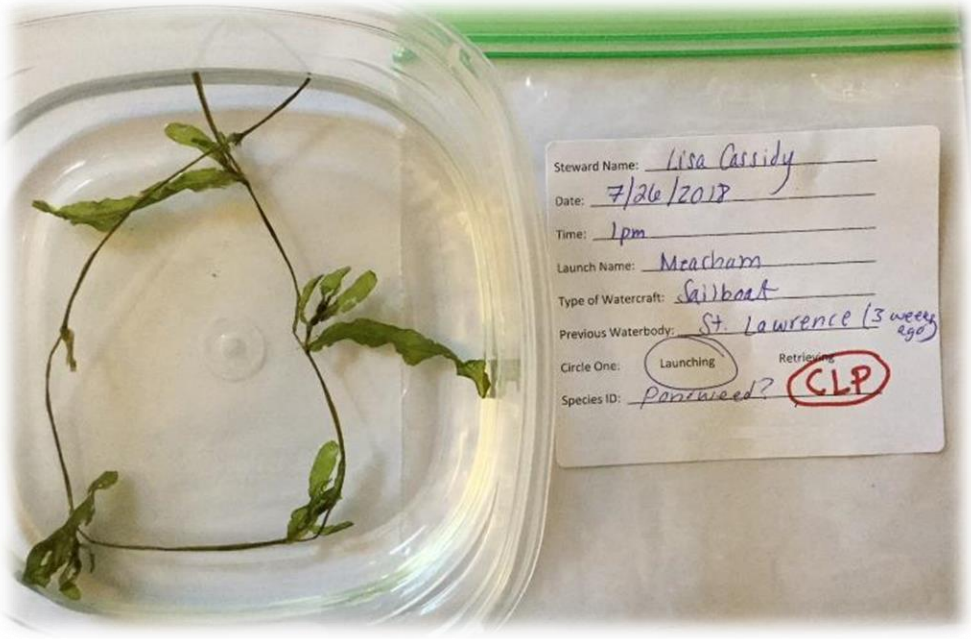


Stewards sent any unknown samples found on boats to the AWI lab for species confirmation.

Table 13. Total # of visitors and # of organisms removed from watercraft entering and leaving GLRI funded boat launch sites, 2018.

Waterbody	total # people	organisms found		total organisms	# boats dirty	# boats w/AIS	# of inspections	% of inspected boats dirty
		entering	leaving					
Black Lake	6241	116	540	656	451	255	3150	14%
Blake Falls Reservoir	31	0	1	1	1	0	13	7.7%
Butterfield Lake	1239	17	92	109	63	51	661	9.5%
Carry Falls Reservoir (North)	1492	57	10	67	55	4	534	10.3%
Carry Falls Reservoir (South)	21	0	1	1	1	0	8	12.5%
Eighth Lake	938	2	0	2	2	1	598	0.3%
Higley Flow (Higley Falls Reservoir)	1065	7	2	9	9	1	422	2.1%
Lake Bonaparte	1868	0	13	13	13	12	844	1.5%
Limekiln Lake	645	9	0	9	5	3	449	1.1%
Meacham Lake	786	36	14	50	46	3	370	12.4%
Millsite Lake	296	1	14	15	10	8	225	4.4%
Rainbow Falls Reservoir	21	1	1	2	2	0	11	18.2%
Seventh Lake	2195	28	33	61	58	15	1434	4.0%
Seventh Lake (Eighth Lake Campground)	495	0	0	0	0	0	348	0%
Stillwater Reservoir	2832	3	0	3	2	2	1338	0.1%
St. Lawrence River - Goose Bay	384	12	85	97	64	45	226	28.3%
St. Lawrence River - Wilson Hill	3420	67	466	533	311	126	1543	20.2%
Upper St. Regis Lake	1303	49	24	73	71	0	803	8.8%
Grand Total	**25272**	**405**	**1296**	**1701**	**1164**	**526**	**12977**	**9.0%**

Stewards found and removed a variety of organisms from boats at the GLRI-funded locations. Black Lake produced the most boats with confirmed AIS (255), followed St. Lawrence River (Wilson Hill – 126; Goose Bay – 45), and Butterfield Lake (51). (Table 13). The percentage of boats inspected with organisms present in GLRI regions was 9% (a decrease from 2017 rate of 10.7%), which is close to the AWI program-wide average of 9.4%. However, 4% of GLRI program inspected boats (526/12,977) were transporting confirmed AIS, which is 8% higher than the program wide total of 3.7%.



Invasive curly-leaf pondweed intercepted at Meacham Lake.

Stewards asked each visitor group whether they had taken AIS spread prevention measures prior to arrival (Table 14). 73% of groups gave responses demonstrating AIS spread prevention awareness, up 9% from 67% in 2017. There was large variability in visitor adoption of active spread prevention behavior between sites, which suggests segmentation of user groups by location. Inspecting (29%) and draining bilges prior to launching (26%) were the two most frequently reported spread prevention measures, followed by draining the bilge of the watercraft. Please refer to the Summary of Results earlier in this report and the Location Summaries at the report's end for further breakdown and discussion of GLRI data by location.

Table 14. AIS spread prevention behavior, GLRI, 2018. Yes = showed AIS spread prevention awareness; I = inspected boat; WB = washed boat; DB = drained bilge; BB = emptied bait bucket; LW = drained livewell; Dis = disposed of unused bait; Dry = dried boat; Same Lake = boat only goes in this lake; First/Frozen = first launch of the season or frozen boat.

Waterbody	# groups showing AIS spread prevention awareness												# groups asked
	yes	yes %	Inspect	Wash	Drain	Bait	Livewell	Dry	Decon	same lake	first/frozen	didn't ask	
Black Lake	2928	94%	1897	240	1902	22	1057	230	8	405	317	18	3123
Blake Falls Reservoir	4	31%	0	2	1	0	0	0	0	0	1	0	13
Butterfield Lake	256	44%	91	19	118	0	22	27	0	59	46	8	582
Carry Falls Reservoir (North)	231	49%	14	64	70	1	7	1	2	44	53	13	473
Carry Falls Reservoir (South)	6	75%	0	1	2	0	1	0	0	0	3	0	8
Eighth Lake	232	61%	35	54	11	0	4	28	1	92	46	5	380
Higley Flow (Higley Falls Reservoir)	345	76%	4	17	19	2	4	17	0	152	155	15	451
Lake Bonaparte	497	68%	70	70	65	35	21	16	0	262	128	2	736
Limekiln Lake	161	59%	44	49	32	0	3	33	2	22	43	0	272
Meacham Lake	160	50%	36	61	29	0	5	58	3	16	42	16	317
Millsite Lake	45	31%	19	4	14	0	2	6	0	4	10	4	146
Rainbow Falls Reservoir	3	27%	1	0	2	0	0	0	0	0	0	0	11
Seventh Lake	593	60%	148	144	159	0	2	108	5	67	172	5	988
Seventh Lake (Eighth Lake Campground)	96	56%	18	21	4	0	2	14	0	39	14	0	170
Stillwater Reservoir	592	51%	31	145	214	4	15	147	1	173	79	1	1165
St. Lawrence River - Goose Bay	215	100%	132	12	134	0	48	20	0	51	20	7	216
St. Lawrence River - Wilson Hill	1344	91%	587	40	18	7	14	101	0	550	145	61	1478
Upper St. Regis Lake	362	66%	67	90	100	5	5	91	3	42	74	47	545
Grand Total	**8070**	**73%**	**3194**	**1033**	**2894**	**76**	**1212**	**897**	**25**	**1978**	**1348**	**202**	**11074**
% of groups taking active measures			29%	9%	26%	1%	11%	8%	0%	18%	12%		

Table 15. Organisms removed from watercraft, GLRI, 2018; CLP = curly-leaf pondweed; EF = European frogbit; EWM = Eurasian watermilfoil; VLM = variable-leaf milfoil; WC = water chestnut; ZM = zebra mussel; * and AIS = aquatic invasive species.

Waterbody	organism type							total AIS	% of inspected boats with AIS
	Non-invasive	CLP*	EF*	EWM*	VLM*	WC*	ZM*		
Black Lake	374	37	2	217	1	2	23	282	8.1%
Blake Falls Reservoir	1	0	0	0	0	0	0	0	0%
Butterfield Lake	45	16	0	38	2	0	8	64	7.7%
Carry Falls Reservoir (North)	63	2	0	1	0	0	1	4	0.7%
Carry Falls Reservoir (South)	1	0	0	0	0	0	0	0	0%
Eighth Lake	1	1	0	0	0	0	0	1	0.2%
Higley Flow (Higley Falls Reservoir)	8	0	0	0	1	0	0	1	0.2%
Lake Bonaparte	1	0	0	10	2	0	0	12	1.4%
Limekiln Lake	6	1	0	2	0	0	0	3	0.7%
Meacham Lake	47	1	0	1	0	1	0	3	0.8%
Millsite Lake	5	2	0	8	0	0	0	10	3.6%
Rainbow Falls Reservoir	2	0	0	0	0	0	0	0	0%
Seventh Lake	45	3	0	4	8	1	0	16	1.0%
Seventh Lake (Eighth Lake Campground)	0	0	0	0	0	0	0	0	0%
Stillwater Reservoir	0	0	0	2	1	0	0	3	0.1%
St. Lawrence River - Goose Bay	42	31	0	19	2	0	3	55	19.9%
St. Lawrence River - Wilson Hill	392	96	0	40	1	0	4	141	8.2%
Upper St. Regis Lake	73	0	0	0	0	0	0	0	0.0%
Grand Total	**1106**	**190**	**2**	**342**	**18**	**4**	**39**	**595**	**4.1%**
Organisms as % of inspections	9%	2%	0%	3%	0.1%	0%	0.3%		

Of the 595 AIS removed from watercraft in the GLRI program, Eurasian watermilfoil (*Myriophyllum spicatum*) was the most numerous (342 instances), followed by curly-leaf pondweed (*Potamageton crispus;* 190) and zebra mussels (*Dreissena polymorpha*; 39). Other AIS removed included European frogbit (*Hydrocharis morsus-ranae*), water chestnut (*Trapa natans*), and variable leaf milfoil (*Myriophyllum heterophyllum*). Overall AIS transport rate is 4.1%, similar to the overall program rate of 3.7% (Table 15).

Looking Forward

The AWI AIS spread prevention program funded by GLRI is closely coordinated with similar boat steward programs funded by New York State and the efforts of the St. Lawrence Eastern Ontario Partnership for Regional Invasive Species Management (SLELO PRISM), which is part of the New York State-coordinated approach to invasive species management. AWI helps coordinate and link these separate funding streams in conjunction with New York State. AWI deploys boat steward resources to avoid duplication and to prioritize high traffic or high value waterways. We have been able to include an ever increasing number of partners in the St. Lawrence and Lake Ontario watersheds as a result of the GLRI award, for example the Brantingham Lake Association, and the Indian River Lakes Land Conservancy in 2018. In the future, AWI intends to perform outreach to the users at all of our program locations with ever-increasing efficacy and frequency, given external funding.

As AWI has reached the 8-year mark of working in GLRI-served locations, we have witnessed increasing community acceptance and support each year. Previous relationships with state agencies, lake associations, outfitters, marinas and other local businesses have become stronger and new relationships continue to blossom. AWI is pleased to offer services for these regions which preserve native ecosystems and waterways which in turn helps local communities and economies to flourish.

However, the future of EPA funding via the GLRI is uncertain. At the end of this program season, our last award for this program expires. No new request for applications has been released by the EPA as of this writing. If we do not have an opportunity to apply for a new round of EPA grant support, GLRI investment in our AIS prevention program, sustained over 8 successive years, will come to a close.

In sum, AWI delivered another successful summer in the Great Lakes and St. Lawrence River watersheds, extending our work with a growing number of partners, and creating an increasingly comprehensive and widely deployed network of AIS spread prevention boat inspectors. With each public interaction, our GLRI AIS prevention program enhances awareness of the threat of AIS to our waterways and way of life. Our stewards worked diligently and passionately to forge relationships with and inspire visitors and residents to take the steps to ensure the future quality of the region's international significant freshwater resources.

Steward Ana Shore at Seventh Lake.

2018 Adirondack AIS Spread Prevention Program

Eric Holmlund, Director
Jeff Sann, Decontamination Services Program Manager
Adirondack Watershed Institute Stewardship Program

Steward Molly Jordan decontaminates a boat at the Upper Saranac Lake launch.

Introduction

2018 was a noteworthy year for vessel inspection and decontamination in the Adirondacks as the AWI and NYSDEC partnered to execute the first year of a multi-year contract awarded to AWI in the spring of 2018. The Adirondack Aquatic Invasive Species Spread Prevention Program (AAISSPP) uses the New York State Environmental Protection Fund to support AIS spread prevention activity across a majority of the Adirondack Park. Directed by the NYSDEC and implemented by the AWI, the program demonstrates the commitment of New York State to support coordinated protection in the fight against the spread of AIS. NYSDEC's Invasive Species Unit effectively used valuable program knowledge gathered throughout the implementation of the Adirondack Park Invasive Species Spread Prevention Pilot Program (2015-2017) to re-deploy and re-invest in several existing and new vessel decontamination locations. New decontamination stations were prepared and deployed at Chateaugay Lake, Edinburgh, Indian Lake, Long Lake, Northampton Beach Campground, and Rocky Mountain Trailhead. The new multi-year contract identifies AWI as the lead staffing and supervising agency, but continues the partnerships formed under the previous year's programs to include multiple stakeholders and agencies in the implementation of required services. Under the guidance of the Invasive Species Unit, the AWI placed boat decontamination and inspection stations in strategic locations intended to interrupt the spread of AIS, especially small-bodied aquatic invasive animals such as the spiny water-flea *(Bythotrephes longimanus*).

New York State has aggressively supported the growth of the AWI managed Adirondack AIS Spread Prevention Program on a pilot and then permanent basis since 2015, allocating over $12 million in grants and contracts for boat steward programs in the Adirondack region alone. This significant investment in seasonal boat inspectors and decontamination equipment is intended to protect vulnerable waterbodies from AIS through direct, steward-performed propagule removal from watercraft that otherwise would be launched into lakes, ponds and rivers, and through visitor-performed AIS spread prevention measures adopted autonomously. Annually, the AWI spread prevention program analyzes and reports data counts of watercraft inspections, AIS detections, and AIS spread prevention behavior by visitors.

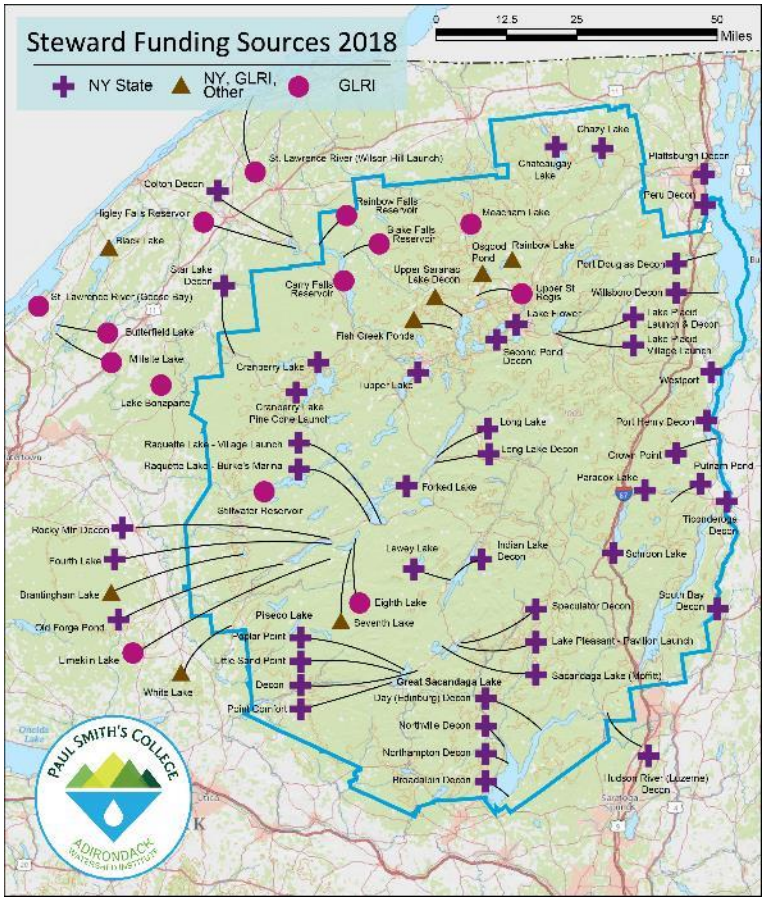


Figure 16. AWI-operated Adirondack AIS Spread Prevention Program locations, 2018. Indicated by the + sign. (Partner programs not included in figure.)

In the summer of 2018, AWI's vessel decontamination strategy was again concentrated on exit decontaminations of vessels leaving waterways with confirmed small-bodies AIS infestations. This approach focuses decontamination efforts at launches on waterways with the greatest threat of spreading small bodied AIS and places stewards at launches to inspect, educate and refer boats to decontamination stations when necessary. Many forms of AIS can be hand-removed by stewards as they are discovered on boats. Small-bodied AIS are often suspended in standing water inside internal compartments of the vessel. AWI's decontamination services provide the additional capabilities needed to eliminate this threat, primarily through displacement via flushing and/or application of lethal heat via hot water immersion. Decontaminating upon retrieval eliminates the threat of introduction before travel to the next waterway and provides protection for virtually every other lake the boater could be traveling to. Exit decontamination achieves spread prevention for all subsequently visited lakes, regardless of the presence or absence of inspection or decontamination services.

Expanded Stewardship

The 2018 season marked end of the NYSDEC Local Grants Program in which several Adirondack municipalities were awarded funding to place stewards and decontamination sites strategically within their communities. Many of these partner municipalities contracted or coordinated with AWI in efforts to standardize messaging, inspection protocols and procedures, and decontamination standards. Once again, combining these partnerships with additional funding through GLRI programs and the NYSDEC's Adirondack Parks AIS Prevention Program, AWI was able to provide services and assistance in both familiar and new locations.

Stewards Sean Hillery and Quinn Davis at the Rocky Mountain Decontamination Station in Old Forge.

In the spring and through the summer of 2018, the AWI hired and trained approximately 115 seasonal staff to fulfill its commitments to several AIS prevention programs including the Adirondack AIS Prevention Program. AWI was also funded by a US EPA Great Lakes Restoration Initiative grant, a Lake Champlain Basin Program grant, and contracts with several lake associations and agencies. Stewardship plays a crucial role in the preservation of our natural communities and is an essential foundation of the decontamination model. Under the current voluntary parameters of the decontamination program, stewards are the first line of defense for inspections at each individual launch, thus their people skills and interpretive message heavily influence the use of decontamination service. Most importantly, they spread the message of prevention to each waterway user in attempt to get each user to inspect his or her vessel between launches.

Watercraft Decontamination

As part of the Adirondack AIS Prevention program's first year, NYSDEC purchased several Landa Environmentally Clean Operating System (ECOS) hot water pressure washing units. ECOS units were chosen because they feature capabilities that make operating decontamination sites possible in an area as remote and undeveloped as the Adirondacks, particularly NYSDEC boat launches. ECOS units feature on-board 440-gallon supply tanks, wash water collection, filtration and recirculation to recycle and reuse wash water and the ability to be moved as the entire unit is trailer mounted. The ability of the ECOS units to collect wash water also allows for wash stations to be placed in closer proximity to boat ramps because there is no discharge of water into the environment. Adding these 9 units to the already well-equipped fleet of pressure washers provided AWI with the tools to adequately service the boating public and the ability to be flexible and effective through instances of equipment down time. In addition to the equipment provided for AWI through the Adirondack AIS Prevention Program, several organizations throughout the region were able to

Steward Bronson Liguori decontaminates a boat at Upper Saranac Lake.

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provide equipment or staffing through alternate funding avenues. These organizations included; The Loon Lake Association, ESSLA (Horicon), Lake Placid Shore Owners' Association, The Town of Arietta, The Town of Lake Pleasant, The Town of Caroga, The Paradox Lake Association, The Long Lake Association, Dunn's Boat Service and the AWI itself.

Technicians for many of these locations were AWI staff (or trained by AWI staff) and collected data in cooperation with AWI protocol in attempt to keep data and messages consistent. Despite nearby bridge reconstruction, NYSDEC granted AWI permission to place an unassigned MHC unit from their resources at the Second Pond Boat Launch. AWI was also able to partner with the Long Lake Association, The Town of Long Lake and NYSDEC to pool resources and deploy an AWI owned MHC unit to service the Long Lake Region.

Certain sites selected by NYSDEC were new locations that had not been previously equipped with decontamination structures. Some previously equipped sites were selected to be upgraded to increase use or efficiency. As a result, a series of site visits facilitated by APIPP was conducted, involving program stakeholders to coordinate expectations for each site. APIPP prepared detailed site profiles, identifying site modifications and needed alterations. When choosing a new site, numerous factors had to be taken into account such as: parking and queue space, runoff and infiltration of wash water, wetland delineation, traffic flow and a continuously growing demand for locations that would encourage use of decontamination upon exiting the waterway. NYSDEC took the lead in contracting or providing site preparations, storage structures and working with NYSDOT in order to ensure safety and compliance with traffic regulations. NYSDOT also provided work and materials for the Rocky Mountain Trailhead site in Inlet, NY. As NYSDEC partners finished site work, sheds were placed and pressure washers were delivered as available, resulting in different opening dates based on multiple elements.

The 9 additional ECOS units provided by DEC were deployed at launches where logistical challenges were either anticipated or had been apparent in past seasons. Other locations were able to continue to use the previously purchased MHC-style units which operate using a tank-fed water supply. Tanks are filled from adjacent waterbodies utilizing gasoline powered water transfer pumps. ECOS unit water exchanges took place at nearby NYSDEC campground facilities and in one case a New York State Parks and Recreation facility. During vessel decontamination, used wash water is collected, filtered and recirculated back to the ECOS unit supply tanks for re-use. This process elongates the time between water fill ups but also, over time, produces water which can smell foul. AWI staff monitor water and filter conditions to produce an efficient and conservative approach to water use. AWI performed the water exchange process with a truck purchased to execute the duties of this program through the Adirondack AIS Prevention Program.

Table 16. Lake utilizing the seal system and the associated seal codes.

2018 Boat Seal Codes	
ADK-BRANT	Brant Lake
ADK-CHAMPLA	Lake Champlain-Peru
""	Lake Champlain - Plattsburgh
""	Lake Champlain- Ticonderoga
""	Lake Champlain- Wilcox Dock
ADK-CHATEAUG	Chateaugay Lake
ADK-CHAZY	Chazy Lake
ADK-CRANBERR	Cranberry Lake
ADK-FISHCP	Fish Creek Ponds
ADK-FULTON4	Fourth Lake (Fulton Chain)
ADK-GREATSL	Great Sacandaga- Broadalbin
""	Great Sacandaga- Day
""	Great Sacandaga- Northampton
""	Great Sacandaga- Northville
ADK-FLOWER	Lake Flower
ADK-PLACID	Lake Placid
ADK-LOON	Loon Lake
ADK-LONG	Long Lake
ADK-OSGOOD	Osgood Pond
ADK-PARADOX	Paradox Lake
ADK-RAINBOW	Rainbow Lake
ADK-RAQUETTE	Raquette Lake
""	Raquette Lake- Burkes Marina
ADK-SACANDAG	Sacandaga Lake -Moffitt Beach
ADK-SARATOGA	Saratoga Lake
ADK-SCHROON	Schroon Lake
ADK-SECOND P	Second Pond
ADK-FULTON7	Seventh Lake (Fulton Chain
ADK-STILLWATER	Stillwater Reservoir
ADK-TUPPER	Tupper Lake
ADK-UP SARAN	Upper Saranac Lake
ADK-UP ST RE	Upper St. Regis Lake

Stewards at dozens of boat launches advised boaters on decontamination station location, purpose and effectiveness. AWI and APIPP staff produced rack cards showcasing locations of new decontamination stations and funded radio advertisements featuring the message of AIS prevention. The AWI continued to maintain and update a website, adkcleanboats.org, to provide information such as location and hours of operation of stations. Existing roadside signage included overlays substituting the negatively-perceived word "inspection" with the more neutral "wash station." Decon stations located at boat launches also featured new signs which read "Before boating elsewhere, please have your boat washed," which were positioned for boaters to read as they were docking their vessels upon retrieval. Smaller reproductions of the previous I-87 billboard were installed at stations to demonstrate the unified approach throughout the park. Feedback from staff suggests that the boating public is still becoming familiar with the decontamination aspect of the services offered by AWI.

Steward Maranda Wells performs a bilge flush at Lake Champlain's Ticonderoga launch.

The summer of 2018 marked the fourth consecutive summer where boat decontamination sites were present throughout the Adirondack Park. Many boaters seem to be comfortable and receptive to the services and other boaters appeared to still be "warming up" to the idea. In many cases, boaters asked for their vessel to be decontaminated even after passing inspection. Boaters were provided this service unless there was a higher priority need for the technician to perform an AIS decontamination on another vessel. Many boaters wanted to utilize the resource of the boat wash to ensure their vessel would not be a vector for AIS, while others wanted to see the stations in use and learn proper measures they could take to decontaminate their vessels at home. The increased investment for 2018 and beyond yields a program with an inviting and aesthetically pleasing appearance at decon stations. AWI hopes for this trend to continue with new NYSDEC efforts to unify program messaging throughout the Adirondacks and New York State. The investment made in this program, and by all partners involved, demonstrated to the public the seriousness of the threat of AIS along with New York State's commitment to protecting Adirondack lakes and waterways.

Steward Aperr Naadzenga decontaminates a boat at Great Sacandaga Lake's Broadalbin launch.

Program Discussion and Conclusion

The AWI continues to increase its capacity and expertise relating to the deployment of a large, sufficiently staffed, and well-equipped spread prevention program. Keeping boat washing equipment operational, transporting it to and from boat launches, and keeping water tanks filled with clean water kept our support staff engaged and busy. The most difficult issues to manage, however, are the human issues related to the deployment of well over 100 seasonal staff in remote locations where they interact with thousands of visitors, some of whom prove to be difficult or even threatening.

As our program reaches higher staff numbers and deploys staff farther from AWI headquarters, we have worked with a wide range of staff abilities and willingness to perform their duties at the highest level. We continue to diversify our team, hiring retirees, local residents, graduate students, mid career job seekers, as well as our traditional workforce of college students. This mix has turned out to be a tremendous advantage as it gives us the resources of maturity and local knowledge, as well as a cadre of staff who are able to work into the fall, after the college students have returned to their studies. However, while the positions we offer are comparatively well-paying and professionally fulfilling, the day-to-day work experience leaves some of our staff feeling disengaged and discouraged. Overall, however, AWI staff has been able to provide high effort and staff professionalism at boat launches and decontamination stations by supervising and supporting field staff increasingly regularly.

Steward Jill Zajac talks to a boater at Fourth Lake.

Recommendations

The Adirondack AIS Prevention Program is a represents the enactment and coordination of the efforts of many partnerships, agencies and concerned individuals. The program's long term approach demonstrates that NYSDEC understands vessel decontamination is a necessary and valued public service. With the slated opening of the Glens Falls Rest Area Station for late spring of 2019, closely aligning the voluntary park-wide decontamination partnership with the mandatory program of the Lake George Park Commission is an increasingly important priority. Increased protocol uniformity among decontamination sites throughout the park will enhance effectiveness and use regardless of the agency providing the service. We suggest that wherever possible, standardizing the messaging in signs and publications as well as the general appearance of the sites will effectively increase awareness of program identity and intended function across programs.

In 2018, the AWI identified, organized and prepared for many of the challenges that arose in 2017. As a result, many of the issues were resolved prior to the start of the field season, and other new opportunities for growth presented themselves. In 2017, there were several instances of boats arriving at AWI inspection sites with green seals indicating no AIS, but upon inspection, stewards found standing water or visible AIS. In 2018, fewer instances of this issue were reported. This indicates that we must continue to advocate for diligence from

our staff, considering the added security of redundant inspections. All of these episodes reinforce the importance of improving employee training and continued supervision.

Every year just before the beginning of the boating season, AWI holds an annual comprehensive training at PSC for its stewards and for any other lake-steward programs throughout the Adirondacks and NYS. This training covers a broad spectrum of the typical situations stewards will encounter and how best to handle them. This general training focuses on watercraft inspection, invasive species ecology and interpretative techniques. For the 2018 season, AWI differentiated boat inspection stewards from decontamination technicians in attempt to improve performance and accountability. In 2019, AWI will hire and train more decontamination technicians than boat inspectors. As a result, AWI anticipates delegating significantly more training time and materials to the proper training of decontamination technicians.

Vessel decontamination continues to be considered by the public as a valued service throughout the Adirondacks and much of New York State. Stewards and decontamination stations are critical elements in achieving public awareness and compliance with the New York State AIS Transport Regulation. Many local communities are finding success in funding these services through a variety of sources. To achieve success and continuity among practices, AWI recommends coordination and standardization among existing decontamination programs statewide. AWI is committed to helping in implementation of additional sites beyond its own by sharing knowledge and resources whenever available.

Table 17. Decontamination Station opening and closing dates and total days of coverage by site; coverage varied due to staff availability. (Includes partner programs.)

Decontamination Station	Opening Date	Closing Date	Days of Coverage
Caroga	5/26/2018	9/30/2018	128
Chateaugay	7/4/2018	9/30/2018	48
Colton	7/26/2018	10/15/2018	49.5
GSL - Broadalbin	6/29/2018	10/17/2018	70.5
GSL - Day	7/27/2018	8/27/2018	22.5
GSL - Northampton	6/29/2018	9/3/2018	43.5
GSL - Northville	5/26/2018	10/21/2018	102.5
Hudson-Luzerne	5/26/2018	10/8/2018	69.5
Indian Lake	8/11/2018	10/8/2018	38.5
Champlain - Peru	5/27/2018	9/29/2018	71
Champlain - Plattsburgh	7/27/2018	9/3/2018	24
Champlain - Port Douglas	7/27/2018	8/17/2018	16
Champlain - Port Henry	6/1/2018	10/22/2018	102.5
Champlain - South Bay	7/4/2018	10/8/2018	71
Champlain - Ticonderoga	5/26/2018	11/2/2018	115
Champlain - Willsboro	5/26/2018	9/2/2018	63
Lake Placid	6/6/2018	10/9/2018	118
Long Lake	6/29/2018	8/19/2018	24
Loon	5/14/2018	10/8/2018	148
N Schroon/Paradox	6/2/2018	10/8/2018	109
Piseco	5/26/2018	9/3/2018	72
Rocky Mountain	7/4/2018	10/6/2018	67
Schroon - Horicon	5/24/2018	10/8/2018	132
Second Pond	5/26/2018	9/3/2018	62
Speculator	5/26/2018	9/3/2018	73.5
Star Lake	7/4/2018	10/6/2018	44
Upper Saranac	5/26/2018	10/8/2018	126

Education and Outreach

Jaime Parslow, Environmental Education and Outreach Coordinator
Jake Sporn, Marketing and Communication Coordinator
Adirondack Watershed Institute Stewardship Program

Environmental Educator Jaime Parslow with Saranac Lake teacher and students at the Water Shield Workshop on Lower St. Regis Lake.

In 2018 the AWISP hired a full time Education and Outreach Coordinator to provide year-round programming and educational enrichment for the Adirondack community. The AWI Environmental Education Program seeks to promote the importance of healthy watersheds thereby keeping AIS spread prevention messaging in the forefront of the public mind. The EEO Coordinator is responsible for the design, recruitment, promotion, facilitation and execution of environmental education programming in accordance with the AWI mission. In addition to raising awareness, outreach and education efforts build collaborative relationships between our program and the many communities, agencies, schools and other partners we work with. In addition, the AWI attended a number of events and workshops designed to increase public awareness and knowledge regarding AIS and AIS spread prevention measures, in the hopes of cultivating partnerships and effecting positive behavior changes. In 2018 AWI staff attended, participated or facilitated 79 events bringing us closer to the goal of reducing the spread of AIS. In addition to traditional outreach and education programs the AWI maintained a strong social media presence and was featured in multiple news stories. The following report highlights our growing environmental education program and business outreach program. For a full listing of events attended and social media analytics please refer to the calendar in Appendix B.

Table 18: Outreach events by type and number attended.

Type of Outreach	# of events attended
Career Fairs	5
Community Outreach Events	19
Environmental Education Workshops & Trainings	26
Meetings & Conferences	29

Environmental Education

Environmental education is an important tool that can engage students in sound stewardship practices, increase environmental literacy, and connect students to the environment in meaningful ways. The AWI offers a selection of environmental education programming to promote the stewardship of natural resources.

Regional Supervisor Justice Parker with young participants at the Saratoga Lake Water Shield Workshop.

The **Water Shield Workshop** is a place-based, educational experience that is highly customizable to fit the objectives and goals of the intended audience. Our workshops incorporated local watershed maps, created by AWI Executive Director Dan Kelting, which helped increase the program's relevance to audiences, and to relate our messaging to disparate locations. Our education programs have a "holistic" watershed approach, not only focusing on AIS, but the overall health and integrity of a watershed.

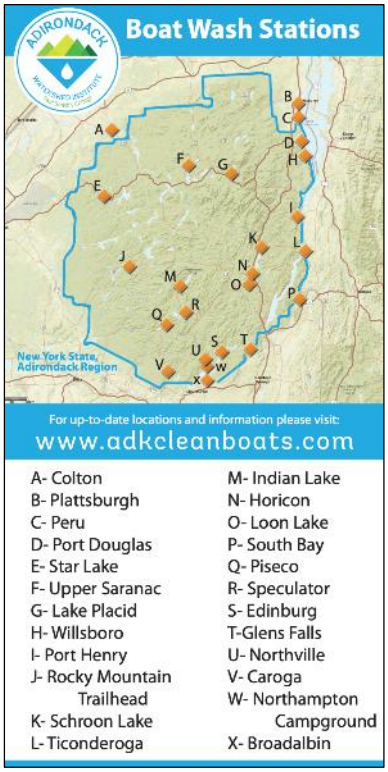
The AWI facilitated 12 education workshops for lake associations and school groups. In past years, the Water Shield Workshops included a land and water-based curriculum during the summer at public waterways across the region. In 2018, AWI extended its workshop season by hosting workshops at schools that utilized land-only modules, allowing the program to provide valuable classroom instruction onsite, during the school year. These new school programs established and deepened relationships with local AP Environmental Science teachers and classes. Topics of study included limnology, sources of point and non-point source pollution, AIS, watershed stewardship, and general watershed education. In 2018, the AWI enjoyed progressive growth within our education program. In addition to traditional workshops, we developed programming at the request of the Saratoga Lake Protection and Improvement District to engage school districts in Saratoga to investigate environmental issues arising in the Saratoga Lake Watershed. The AWI has increased its capacity to educate the public about the importance of AIS spread prevention and healthy watersheds.

Environmental Educator Jaime Parslow with lake association participants at the Schroon Lake Water Shield Workshop.

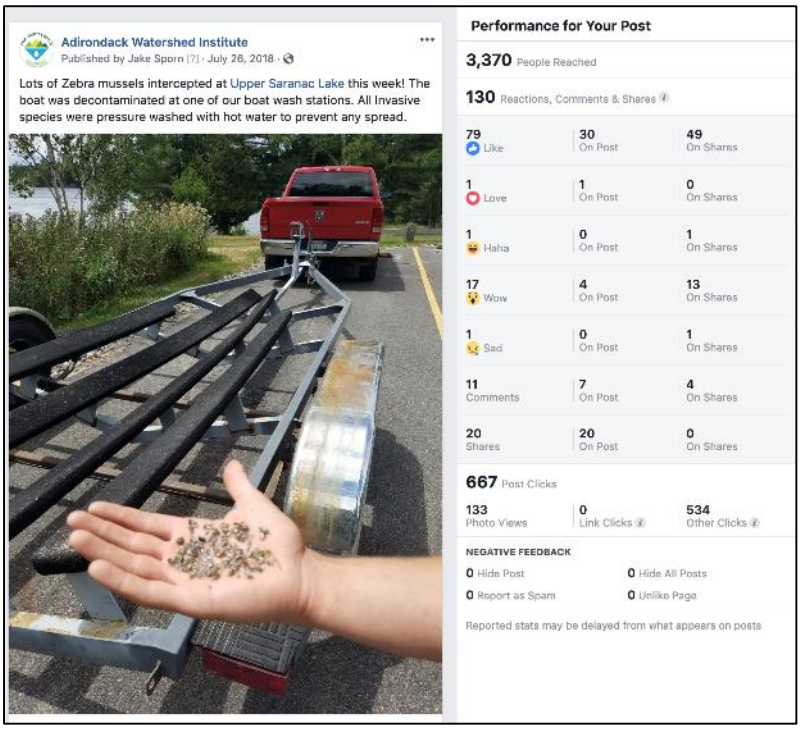
Business Outreach

The AWI continued to develop and offer a business outreach program in 2018 designed to build awareness and partnerships with private sector enterprises and corporations. It is necessary to involve regional businesses to build sustainable and creative engagement with these potentially influential partners. The business community is in position to influence millions of customers, many of whom visit the Adirondack Park for recreation or business. In addition, the business community understands the impact of high-quality environmental conditions and resources on the viability of private sector enterprises involving real estate, recreation, tourism, transportation, retail, and supporting businesses. Business people understand that their bottom lines are linked to the bottom line of environmental quality.

The AWI contracts with Paradox Consulting to create partnerships with regional small- and medium-sized businesses. So far, nearly 70 businesses have enthusiastically agreed to lend their symbolic support to the program, endorsing it by asking the AWI to post their business logos on a business supporter webpage. A smaller number of these enterprises have worked with Paradox on behalf of the AWI to create and implement novel customer outreach programs, including a boat owner outreach program, supplying AIS spread prevention materials to each customer that has their boat stored and/or serviced at the boat dealer. Members of the outreach program also have the option of displaying flyers, banners and standalones around their businesses or simply at their point of sale. As the program develops, we will work with key business partners to more materially support the activities of the AWI, including spread prevention.



Informational rack card distributed to business partners for boater awareness.



A post sharing news of a zebra mussel interception on the AWI Facebook account.

Social Media/Publications

Through social media a more diversified audience can be targeted and made aware of AWI programs and efforts. Using mainly Facebook, Instagram and Flickr as social platforms, 133,400 additional individuals were reached with program messaging through Facebook, 2,581 meaningful engagements on Instagram and 65,000 image views on Flickr for the 2018 season. Year to year the numbers of interactions and delivered messages have increased, in effect, building these platforms as important touchpoints for disseminating AWI programs and messaging.

Beyond social media, traditional media providers have picked up and reported on AWI programming throughout New York State. Overall 13 different media outlets published 19 forms of media on the AWI's involvement in the invasive species subject matter.

Conclusion

As AIS continue to threaten the ecological and economical integrity of our treasured waterways and surrounding communities, outreach and educational programs are an important method for increasing public awareness and knowledge of the threats and negative impacts of AIS. The AWI Stewardship Program enjoyed a productive season which reached multiple resource user groups with important AIS spread prevention messaging. The AWI would like to thank the following schools and organizations in their continued support of its education programs: SLIPD, ESSLA, Lake Placid High School, Plattsburgh High School, Saranac Lake High School, St. Regis Falls Central School District, and Tupper Lake Central School.

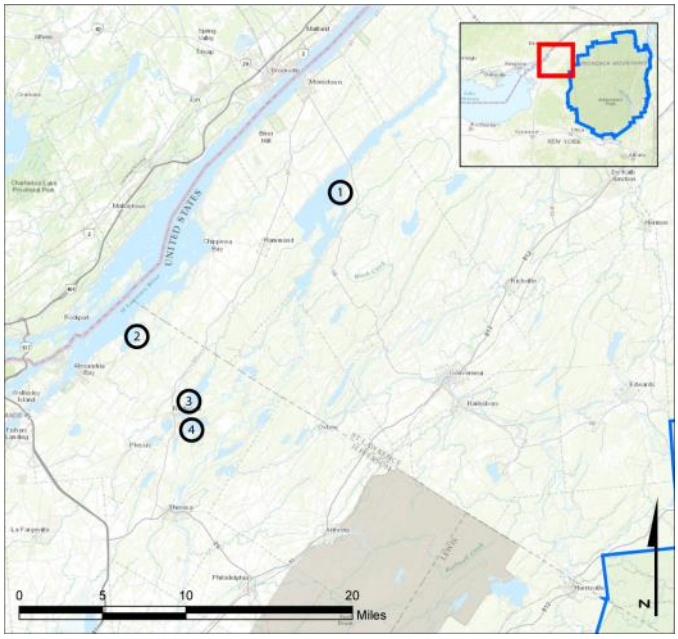
AWI stewards worked the 90-Miler Canoe Race to inspect boats for invasives and cheer on the paddlers.

Location Use Data Summaries

Black Lake, Goose Bay (St. Lawrence River) and Indian River Lakes

AIS intercepted: 411
Boats inspected: 4,262
Number of visitors: 8,160
Boats failing inspection: 13.8%
Visitors showing spread prevention awareness: 85%
Number of previously visited waterways: 89

AIS Present in Waterbodies: Eurasian watermilfoil, curly-leaf pondweed, zebra mussels, European frogbit
Stewardship History: 2016-present
Partnerships: Black Lake Association; Goose Bay Reclamation Corporation; New York State Office of Parks, Recreation and Historic Preservation



1–Black Lake; 2–Goose Bay; 3–Butterfield Lake; 4–Millsite Lake

Watercraft	Boat Type										total # boats observed	total # boats inspected
	Barge	Canoe	Dock	Kayak	Motor	PWC	Row	Sail	SUP	Wind		
Black Lake	1	6	1	55	3015	81	2	2	0	0	3163	3150
percentage of total boats	0%	0%	0%	2%	95%	3%	0%	0%	0%	0%	100%	100%
Butterfield Lake	0	19	0	132	494	17	6	3	0	0	671	661
percentage of total boats	0%	3%	0%	20%	74%	3%	1%	0%	0%	0%	100%	99%
Millsite Lake	0	15	0	143	63	1	5	1	0	0	228	225
percentage of total boats	0%	7%	0%	63%	28%	0%	2%	0%	0%	0%	100%	99%
St. Lawrence River - Goose Bay	0	1	0	15	162	50	0	1	0	0	229	226
percentage of total boats	0%	0%	0%	7%	71%	22%	0%	0%	0%	0%	100%	99%
totals	**1**	**41**	**1**	**345**	**3734**	**149**	**13**	**7**	**0**	**0**	**4291**	**4262**
percentage of total boats	**0%**	**1%**	**0%**	**8%**	**87%**	**3%**	**0%**	**0%**	**0%**	**0%**	**100%**	**99%**

Boats observed at launch, including those not inspected. PWC=personal watercraft, SUP=stand-up paddleboard, Wind=windsurfer.

	total # visitors	organisms found			total organisms	# boats dirty	# boats w/AIS	# of inspections	% of inspected boats dirty	% of inspected boats w/AIS
		entering	leaving	roadside						
Black Lake	6241	116	540	--	656	451	255	3150	14.3%	8.1%
Butterfield Lake	1239	17	92	--	109	63	51	661	9.5%	7.7%
Millsite Lake	296	1	14	--	15	10	8	225	4.4%	3.6%
St. Lawrence River - Goose Bay	384	12	85	--	97	64	45	226	28.3%	19.9%
totals	**8160**	**146**	**731**	**--**	**877**	**588**	**359**	**4262**	**13.8%**	**8.4%**

Boats dirty = watercraft with any organic material, invasive, non-invasive or unknown.

Visitor Responses	AIS spread prevention awareness											# groups asked
	yes	Inspect	Wash	Drain	Bait	LW	Dry	Decon	same lake	first/frozen	didn't ask	
Black Lake	2928	1897	240	1902	22	1057	230	8	405	317	18	3123
percentage of total groups asked	94%	61%	8%	61%	1%	34%	7%	0%	13%	10%	NA	
Butterfield Lake	256	91	19	118	0	22	27	0	59	46	8	582
percentage of total groups asked	44%	16%	3%	20%	0%	4%	5%	0%	10%	8%	NA	
Millsite Lake	45	19	4	14	0	2	6	0	4	10	4	146
percentage of total groups asked	31%	13%	3%	10%	0%	1%	4%	0%	3%	7%	NA	
St. Lawrence River - Goose Bay	215	132	12	134	0	48	20	0	51	20	7	216
percentage of total groups asked	100%	61%	6%	62%	0%	22%	9%	0%	24%	9%	NA	
totals	**3444**	**2139**	**275**	**2168**	**22**	**1129**	**283**	**8**	**519**	**393**	**37**	**4067**
percentage of total groups asked	**85%**	**53%**	**7%**	**53%**	**1%**	**28%**	**7%**	**0%**	**13%**	**10%**	**NA**	

Yes = showed AIS spread prevention awareness; Drain = drained bilge; Bait = emptied bait bucket/disposed of bait; LW = drained livewell; Dry = dried boat; Decon = visited decon station; Same Lake = boat only goes in this lake; First/Frozen = first launch of the season or frozen boat.

Organisms Removed	Organism Type									total # AIS	% of inspected boats w/AIS
	Non-invasive	BN*	CLP*	EF*	EWM*	VLM*	SWF*	WC*	ZM*		
Black Lake	374	0	37	2	217	1	0	2	23	282	8.1%
percentage of total orgs	57%	0%	6%	0%	33%	0%	0%	0%	4%		
Butterfield Lake	45	0	16	0	38	2	0	0	8	64	7.7%
percentage of total orgs	41%	0%	15%	0%	35%	2%	0%	0%	7%		
Millsite Lake	5	0	2	0	8	0	0	0	0	10	3.6%
percentage of total orgs	33%	0%	13%	0%	53%	0%	0%	0%	0%		
St. Lawrence River - Goose Bay	42	0	31	0	19	2	0	0	3	55	19.9%
percentage of total orgs	43%	0%	32%	0%	20%	2%	0%	0%	3%		
totals	**466**	**0**	**86**	**2**	**282**	**5**	**0**	**2**	**34**	**411**	**8.4%**
percentage of total orgs	**53%**	**0%**	**10%**	**0%**	**32%**	**1%**	**0%**	**0%**	**4%**		

Non-invasive = native aquatic or terrestrial material; BN = brittle naiad; CLP = curly-leaf pondweed; EF = European frogbit; EWM = Eurasian watermilfoil; VLM = variable-leaf milfoil; SWF = spiny waterflea; WC= water chestnut; ZM = zebra mussel; */AIS = aquatic invasive species.

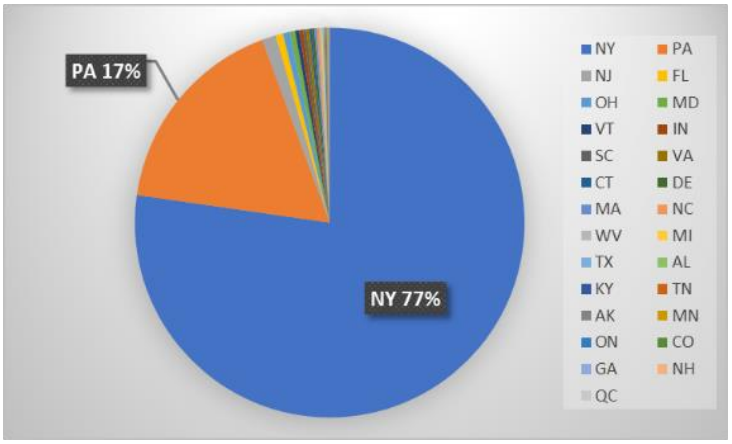
Aquatic Invasive Species Intercepted by Stewards	# found on boats launching	Previous Waterway	# found on boats retrieving	Previous Waterway
curly-leaf pondweed	19	Black Lake: *None* (5), Black Lake (2), Oneida Lake (1), St. Lawrence River (1) Butterfield Lake: St. Lawrence River (2), Butterfield Lake (1), *None* (1) St. Lawrence River: St. Lawrence River (5), *None* (1)	67	Black Lake (28) Butterfield Lake (12) Millsite Lake (2) St. Lawrence River (25)
European frogbit	0	N/A	2	Black Lake (2)
Eurasian watermilfoil	41	Black Lake: Black Lake (20), St. Lawrence River (9), *None* (5), Lake Ontario (1), Oneida Lake (1) Butterfield Lake: Butterfield Lake (1), *None* (1), St. Lawrence River (1) St. Lawrence River: St. Lawrence River (2)	241	Black Lake (181) Butterfield Lake (35) Millsite Lake (8) St. Lawrence River (17)
variable-leaf milfoil	1	Black Lake: Lake Bonaparte (1)	4	Butterfield Lake (2) St. Lawrence River (2)
water chestnut	1	Black Lake: *None (1)*	1	Black Lake (previously in Hudson River)
zebra mussel	9	Black Lake: *None* (4), Black Lake (2) Butterfield Lake: Butterfield Lake (2) St. Lawrence River: St. Lawrence River (1)	25	Black Lake (17) Butterfield Lake (6) St. Lawrence River (2)
Totals	**71**		**340**	

Previous Waterways for Launching Boats	# visits
NONE	954
SAME LAKE - PREVIOUS VISIT	776
St. Lawrence River	132
unspecified lake in New York	53
Lake Ontario	30
Black Lake	24
Butterfield Lake	22
Oneida Lake	20
NOT ASKED	15
Oswegatchie River	13
RENTAL	13
Lake Bonaparte	10
Red Lake, Theresa, NY	10
Black River	7
Conesus Lake	7
Canandaigua Lake	6
Lake Champlain	6
Susquehanna River, NY	6
UNKNOWN (boater doesn't know)	6
Cayuga Lake	5
Cranberry Lake	5
Honeoye Lake	5
Hyde Lake, Theresa, NY	5
Lake Erie	5
Saratoga Lake	5
Seneca Lake	5
Silver Lake, Perry, NY	5
Susquehanna River, PA	5
Chateaugay Lake	3
Delta Lake	3
Erie Canal	3
Allegheny River, PA	2
Canadarago Lake	2

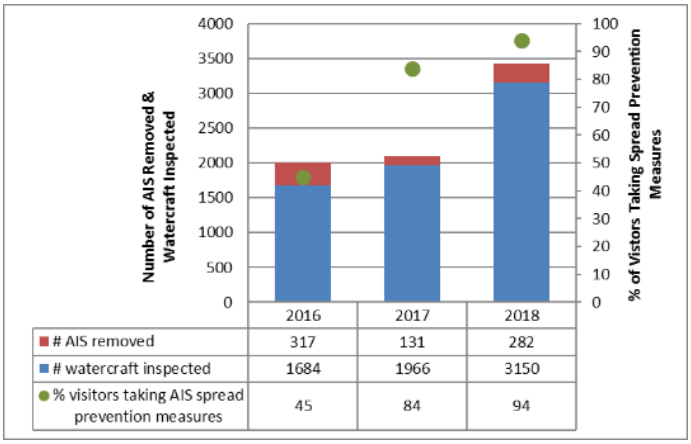
Previous Waterways for Launching Boats	# visits
Chautauqua Lake	2
Grasse River	2
Hammond Lake, Tioga Township, PA	2
Harvey's Lake, Harveys Lake, PA	2
Higley Falls Reservoir	2
Indian River, NY	2
Keuka Lake	2
Lake Pleasant	2
Lake Wallenpaupack, Wayne Cty, PA	2
Lake Wilhelm , Sandy Lake Twsp, PA	2
Niagara River	2
Oswego River	2
Seneca River	2
Sixberry Lake, Theresa, NY	2
Sylvia Lake, Gouverneur, NY	2
Bear Lake, Thornhurst Township, PA	1
Caesar Creek, Wayne Township, OH	1
Carry Falls Reservoir	1
Cazenovia Lake	1
Chippewa Lake, Medina, OH	1
Connecticut River, CT	1
Cross Lake, Onondaga County, NY	1
Dexter Lake, Waverly, NY	1
Finger Lakes (unspecified)	1
Foster Joseph Sayers Lake, PA	1
Gouldsboro Lake, PA	1
Great Sacandaga Lake	1
Keystone Lake, Westport, OK	1
Lake Alice, Chazy, NY	1
Lake Carey, Lemon Township, PA	1
Lake Henry, Lake Township, PA	1
Lake Michigan, IN	1

Previous Waterways for Launching Boats	# visits
Lake of the Woods, Theresa, NY	1
Lake Winola, Overfield Township, PA	1
Leaser Lake, Lynn Township, PA	1
Long Island Sound	1
Meacham Lake	1
Merrill Creek Reservoir, Harmony, NJ	1
Middle Saranac Lake	1
Millsite Lake, Theresa, NY	1
Moon Lake, Theresa, NY	1
Mosquito Creek Lake, Greene, OH	1
Mud Lake, De Peyster, NY	1
Muskellunge Lake, Theresa, NY	1
Nantahala River, Nantahala, NC	1
Oak Orchard Creek, Carlton, NY	1
Otsego Lake	1
Oxbow Lake	1
Pamunkey River, New Kent, VA	1
Payne Lake, Antwerp, NY	1
Pompton River, NJ	1
Potomac River, VA	1
Prairie Creek Reservoir, Perry Twsp, IN	1
Raquette Lake	1
Round Lake, Saratoga County, NY	1
Salmon River	1
Senecaville Lake, Seneca Twsp, OH	1
Stark Falls Reservoir	1
Stillwater Reservoir	1
Sylvan Lake, Ross Township, PA	1
Tupper Lake	1
unspecified lake in Pennsylvania	1
unspecified lake in Virginia	1
Upper Saranac Lake	1
TOTAL BOATS	**2247**

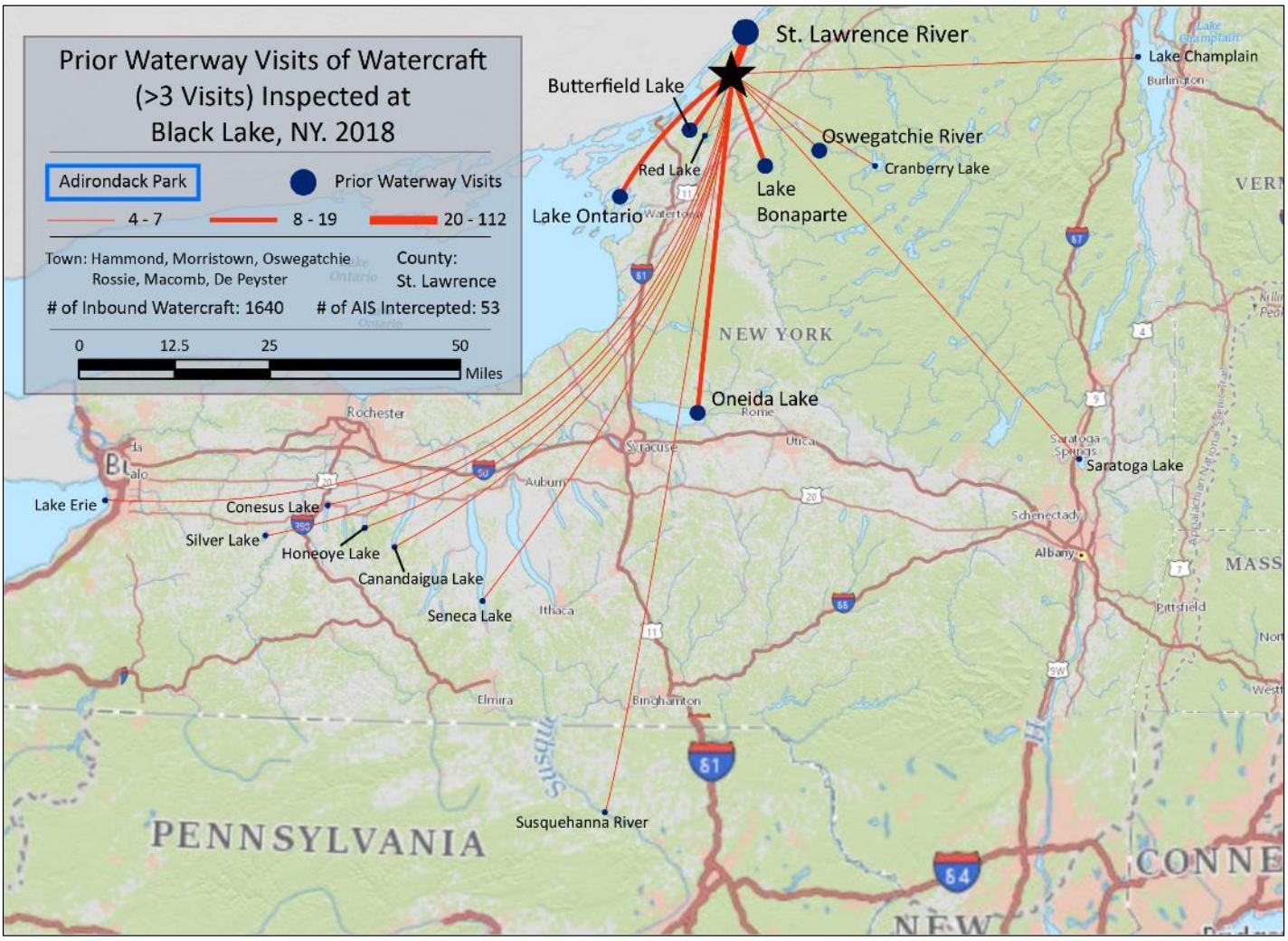
State of Motorized Boat Registration (n=3,818)



Historical Trends (Black Lake only)



Location	First Day	Last Day	Total Days
Black Lake	26 May	7 Oct	78
Butterfield Lake	26 May	10 Oct	45
Millsite Lake	28 May	27 Sept	25
St. Lawrence River - Goose Bay	27 May	12 Aug	17

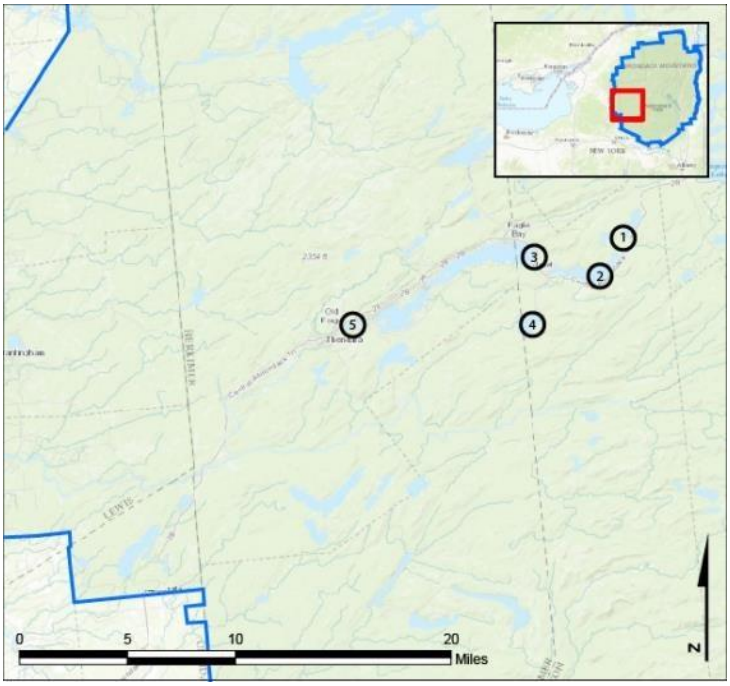


Goose Bay Boat Launch

Black River Watershed

AIS intercepted: 92
Boats inspected: 7,298
Number of visitors: 13,007
Boats failing inspection: 3.3%
Visitors showing spread prevention awareness: 61%
Number of previously visited waterways: 104

AIS Present in Waterbodies: Eurasian watermilfoil (Seventh), variable-leaf milfoil (Old Forge Pond, Fourth, Seventh, Stillwater)
Partnerships: Fulton Chain of Lakes Association, Sixth and Seventh Lakes Association, Limekiln Lake Association
Funding: Great Lakes Restoration Initiative



1-Eighth Lake; 2-Seventh Lake; 3-Fourth Lake; 4-Limekiln Lake; 5-Old Forge Pond

Watercraft	Boat Type										total # boats observed	total # boats inspected
	Barge	Canoe	Dock	Kayak	Motor	PWC	Row	Sail	SUP	Wind		
Eighth Lake	0	175	0	329	65	11	8	0	16	0	604	598
percentage of total boats	0%	29%	0%	54%	11%	2%	1%	0%	3%	0%	100%	99%
Fourth Lake - Alger Island	0	16	0	25	2	0	0	0	0	0	43	43
percentage of total boats	0%	37%	0%	58%	5%	0%	0%	0%	0%	0%	100%	100%
Fourth Lake - Inlet	1	51	3	280	2901	835	3	50	4	0	4128	4112
percentage of total boats	0%	1%	0%	7%	70%	20%	0%	1%	0%	0%	100%	100%
Lewey Lake	0	34	0	146	21	1	2	0	1	0	205	205
percentage of total boats	0%	17%	0%	71%	10%	0%	1%	0%	0%	0%	100%	100%
Limekiln Lake	0	45	0	305	66	28	4	0	1	0	449	449
percentage of total boats	0%	10%	0%	68%	15%	6%	1%	0%	0%	0%	100%	100%
Old Forge Pond	0	0	0	0	80	30	0	0	0	0	110	109
percentage of total boats	0%	0%	0%	0%	73%	27%	0%	0%	0%	0%	100%	99%
Seventh Lake	1	168	0	679	447	103	6	4	35	0	1443	1434
percentage of total boats	0%	12%	0%	47%	31%	7%	0%	0%	2%	0%	100%	99%
Seventh Lake (Eighth Lake Cpgd)	0	132	0	206	8	0	0	0	2	0	348	348
percentage of total boats	0%	38%	0%	59%	2%	0%	0%	0%	1%	0%	100%	100%
totals	**2**	**621**	**3**	**1970**	**3590**	**1008**	**23**	**54**	**59**	**0**	**7330**	**7298**
percentage of total boats	**0%**	**8%**	**0%**	**27%**	**49%**	**14%**	**0%**	**1%**	**1%**	**0%**	**100%**	**99.6%**

Boats observed at launch, including those not inspected. PWC=personal watercraft, SUP=stand-up paddleboard, Wind=windsurfer.

	total # visitors	organisms found			total organisms	# boats dirty	# boats w/AIS	# of inspections	% of inspected boats dirty	% of inspected boats w/AIS
		entering	leaving	roadside						
Eighth Lake	938	2	0	--	2	2	1	598	0.3%	0.2%
Fourth Lake - Alger Island	59	0	0	--	0	0	0	43	0.0%	0%
Fourth Lake - Inlet	8164	102	94	--	196	156	51	4112	3.8%	1.2%
Lewey Lake	285	4	6	--	10	10	0	205	4.9%	0%
Limekiln Lake	645	9	0	--	9	5	3	449	1.1%	0.7%
Old Forge Pond	226	4	5	--	9	7	3	109	6.4%	2.8%
Seventh Lake	2195	28	33	--	61	58	15	1434	4.0%	1.0%
Seventh Lake (Eighth Lake Cpgd)	495	0	0	--	0	0	0	348	0.0%	0%
totals	**13007**	**149**	**138**	**--**	**287**	**238**	**73**	**7298**	**3.3%**	**1.0%**

Boats dirty = watercraft with any organic material, invasive, non-invasive or unknown.

Visitor Responses	AIS spread prevention awareness											# groups asked
	yes	Inspect	Wash	Drain	Bait	LW	Dry	Decon	same lake	first/frozen	didn't ask	
Eighth Lake	232	35	54	11	0	4	28	1	92	46	5	380
percentage of total groups asked	61%	9%	14%	3%	0%	1%	7%	0%	24%	12%	NA	
Fourth Lake - Alger Island	13	1	5	1	0	0	1	0	1	5	0	28
percentage of total groups asked	46%	4%	18%	4%	0%	0%	4%	0%	4%	18%	NA	
Fourth Lake - Inlet	2434	184	416	967	0	25	122	60	390	571	16	3956
percentage of total groups asked	62%	5%	11%	24%	0%	1%	3%	2%	10%	14%	NA	
Lewey Lake	59	8	13	6	2	0	15	0	9	18	0	126
percentage of total groups asked	47%	6%	10%	5%	2%	0%	12%	0%	7%	14%	NA	
Limekiln Lake	161	44	49	32	0	3	33	2	22	43	0	272
percentage of total groups asked	59%	16%	18%	12%	0%	1%	12%	1%	8%	16%	NA	
Old Forge Pond	81	4	12	8	0	1	6	0	16	47	1	109
percentage of total groups asked	74%	4%	11%	7%	0%	1%	6%	0%	15%	43%	NA	
Seventh Lake	593	148	144	159	0	2	108	5	67	172	5	988
percentage of total groups asked	60%	15%	15%	16%	0%	0%	11%	1%	7%	17%	NA	
Seventh Lake (Eighth Lake Cpgd)	96	18	21	4	0	2	14	0	39	14	0	170
percentage of total groups asked	56%	11%	12%	2%	0%	1%	8%	0%	23%	8%	NA	
totals	**3669**	**442**	**714**	**1188**	**2**	**37**	**327**	**68**	**636**	**916**	**27**	**6029**
percentage of total groups asked	**61%**	**7%**	**12%**	**20%**	**0%**	**1%**	**5%**	**1%**	**11%**	**15%**	**NA**	

Yes = showed AIS spread prevention awareness; Drain = drained bilge; Bait = emptied bait bucket/disposed of bait; LW = drained livewell; Dry = dried boat; Decon = visited decon station; Same Lake = boat only goes in this lake; First/Frozen = first launch of the season or frozen boat.

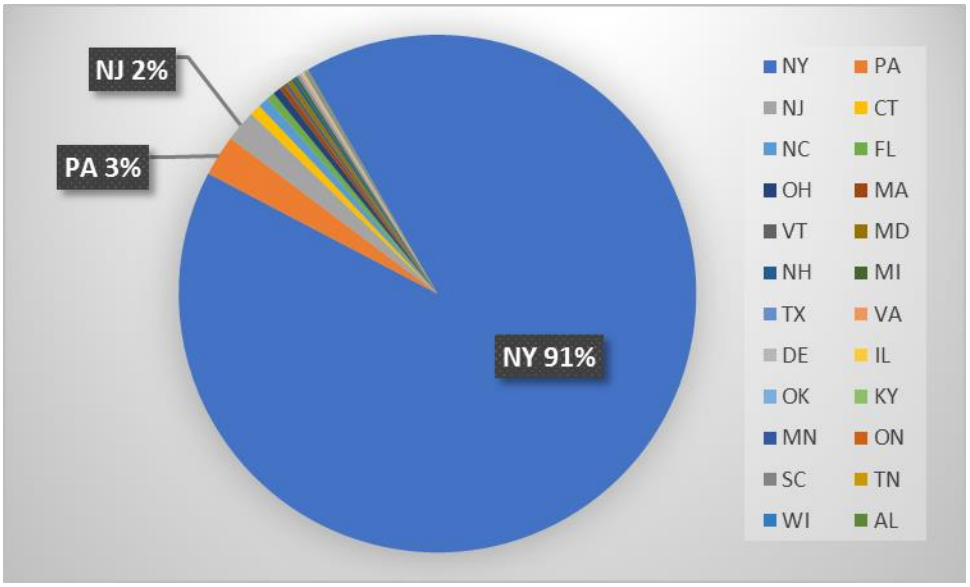
Location	First Day	Last Day	Total Days
Eighth Lake	26 May	17 Aug	44
Fourth Lake - Alger Island	28 May	29 Jun	10
Fourth Lake - Inlet	26 May	1 Nov	127
Lewey Lake	2 Jun	11 Aug	30
Limekiln Lake	26 May	18 Aug	37
Old Forge Pond	2 Jun	30 Jun	10
Seventh Lake	26 May	1 Sept	94
Seventh Lake (Eighth Lake Cpgd)	26 May	9 Aug	29

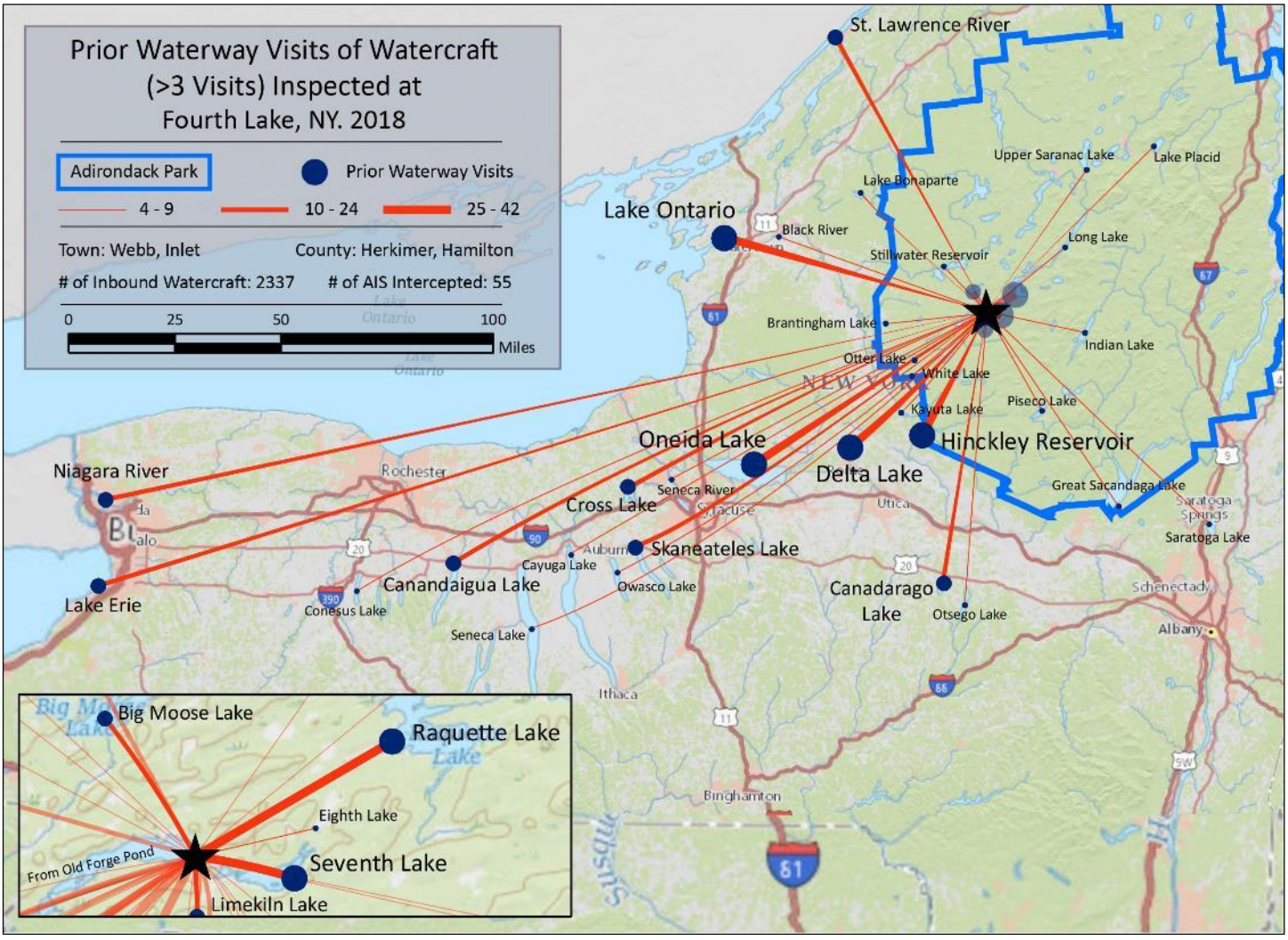
Organisms Removed	Organism Type									total # AIS	% of inspected boats w/AIS
	Non-invasive	BN*	CLP*	EF*	EWM*	VLM*	SWF*	WC*	ZM*		
Eighth Lake	1	0	1	0	0	0	0	0	0	1	0.2%
percentage of total orgs	50%	0%	50%	0%	0%	0%	0%	0%	0%		
Fourth Lake - Alger Island	0	0	0	0	0	0	0	0	0	0	0%
percentage of total orgs	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Fourth Lake - Inlet	127	0	8	0	28	15	0	3	15	69	1.2%
percentage of total orgs	65%	0%	4%	0%	14%	8%	0%	2%	8%		
Lewey Lake	10	0	0	0	0	0	0	0	0	0	0%
percentage of total orgs	100%	0%	0%	0%	0%	0%	0%	0%	0%		
Limekiln Lake	6	0	1	0	2	0	0	0	0	3	0.7%
percentage of total orgs	67%	0%	11%	0%	22%	0%	0%	0%	0%		
Old Forge Pond	6	0	0	0	0	3	0	0	0	3	2.8%
percentage of total orgs	67%	0%	0%	0%	0%	33%	0%	0%	0%		
Seventh Lake	45	0	3	0	4	8	0	1	0	16	1.0%
percentage of total orgs	74%	0%	5%	0%	7%	13%	0%	2%	0%		
Seventh Lake (Eighth Lake Cpgd)	0	0	0	0	0	0	0	0	0	0	0%
percentage of total orgs	0%	0%	0%	0%	0%	0%	0%	0%	0%		
totals	**195**	**0**	**13**	**0**	**34**	**26**	**0**	**4**	**15**	**92**	**1.0%**
percentage of total orgs	**68%**	**0%**	**5%**	**0%**	**12%**	**9%**	**0%**	**1%**	**5%**		

Non-invasive = native aquatic or terrestrial material; BN = brittle naiad; CLP = curly-leaf pondweed; EF = European frogbit; EWM = Eurasian watermilfoil; VLM = variable-leaf milfoil; SWF = spiny waterflea; WC= water chestnut; ZM = zebra mussel; */AIS = aquatic invasive species.

Aquatic Invasive Species Intercepted by Stewards	# found on boats launching	Previous Waterway	# found on boats retrieving	Previous Waterway
curly-leaf pondweed	13	Eighth Lake: Lake Ontario (1) Fourth Lake: Lake Ontario (3), *None* (2), Lake Erie (1), St. Lawrence River (1), *Unknown* (1) Limekiln Lake: *None* (1) Seventh Lake: Cazenovia Lake (1), *None* (1)	0	N/A
Eurasian watermilfoil	30	Fourth Lake: *None* (6), Lake Ontario (5), Oneida Lake (3), Seneca Lake (3), St. Lawrence River (3), Canadarago Lake (1), Conesus Lake (1), Fulton Chain (1), Owasco Lake (1), Saratoga Lake (1), Seneca River (1) Limekiln Lake: Butterfield Lake (1), Seneca Lake (1) Seventh Lake: Fulton Chain (1), *None* (1)	4	Fourth Lake - previously in Canandaigua Lake and St. Lawrence River (2) Seventh Lake (2)
variable-leaf milfoil	3	Fourth Lake: Fourth Lake (1), Kayuta Lake (1), Lake Ontario (1)	23	Fourth Lake (12) Old Forge Pond (3) Seventh Lake (8)
water chestnut	4	Fourth Lake: Fourth Lake - previously in Canandaigua (1), *None* (1), Seneca River (1) Seventh Lake: Saranac Lake Chain - previous unknown (1)	0	N/A
zebra mussel	15	Fourth Lake: Lake Ontario (4), Oneida Lake (3), Seneca Lake (3), *None* (2), Canadarago Lake (1), Canandaigua Lake (1), Seneca River (1)	0	N/A
Totals	**65**		**27**	

State of Motorized Boat Registration
(n=4,554)



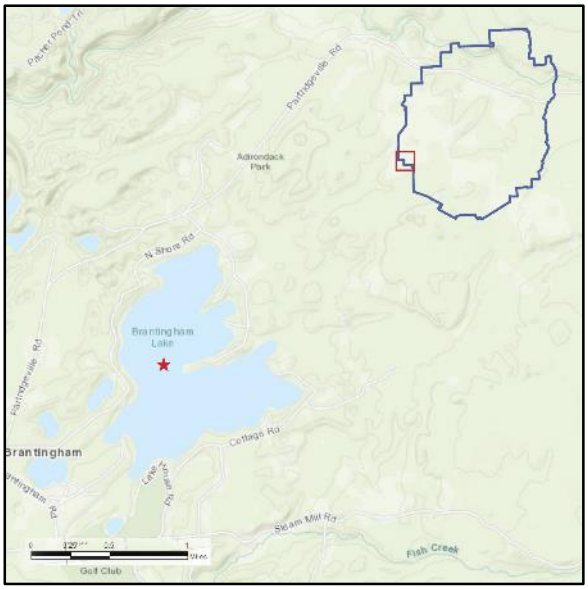


Brantingham Lake

AIS intercepted: 0
Boats inspected: 247
Dates of Operation: July 7 – August 26
Number of visitors: 522
Boats failing inspection: 1.6%

Total Number of Days Covered: 23
Weekly Coverage: 3 days
Visitors showing spread prevention awareness: 97%
Number of previously visited waterways: 16

AIS Present in Waterbody: None
Stewardship History: First year
Partnership: Brantingham Lake Community Association



Watercraft	Boat Type										total # boats observed	total # boats inspected
	Barge	Canoe	Dock	Kayak	Motor	PWC	Row	Sail	SUP	Wind		
# of boats observed	0	6	0	0	162	80	0	1	0	0	249	247
percentage of total boats	0%	2%	0%	0%	65%	32%	0%	0%	0%	0%	100%	99%

Boats observed at launch, including those not inspected. PWC=personal watercraft, SUP=stand-up paddleboard, Wind=windsurfer.

total # visitors	organisms found			total organisms	# boats dirty	# boats w/AIS	# of inspections	% of inspected boats dirty	% of inspected boats w/AIS
	entering	leaving	roadside						
522	2	2	--	4	4	0	247	1.6%	0%

Boats dirty = watercraft with any organic material, invasive, non-invasive or unknown.

Visitor Responses	AIS spread prevention awareness											# groups asked
	yes	Inspect	Wash	Drain	Bait	LW	Dry	Decon	same lake	first/frozen	didn't ask	
# of groups	225	23	32	39	0	0	2	0	83	47	13	233
percentage of total groups asked	97%	10%	14%	17%	0%	0%	1%	0%	36%	20%	NA	

Yes = showed AIS spread prevention awareness; Drain = drained bilge; Bait = emptied bait bucket/disposed of bait; LW = drained livewell; Dry = dried boat; Decon = visited decon station; Same Lake = boat only goes in this lake; First/Frozen = first launch of the season or frozen boat.

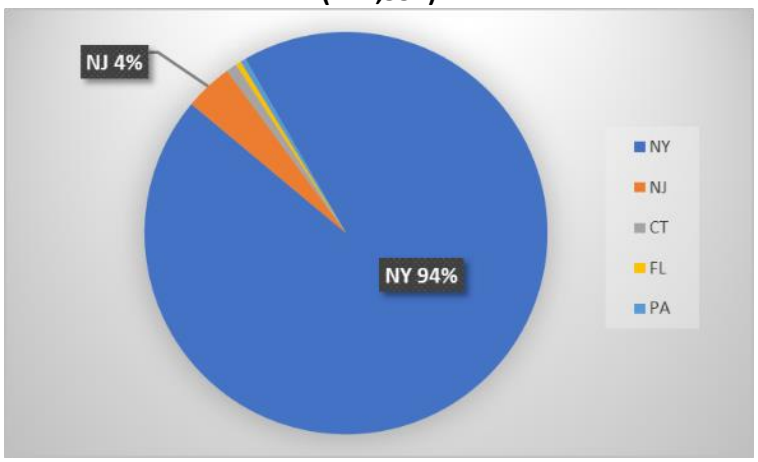
Organisms Removed	Organism Type									total # AIS	% of inspected boats w/AIS
	Non-invasive	BN*	CLP*	EF*	EWM*	VLM*	SWF*	WC*	ZM*		
# of organisms	4	0	0	0	0	0	0	0	0	0	0%
percentage of total orgs	100%	0%	0%	0%	0%	0%	0%	0%	0%		

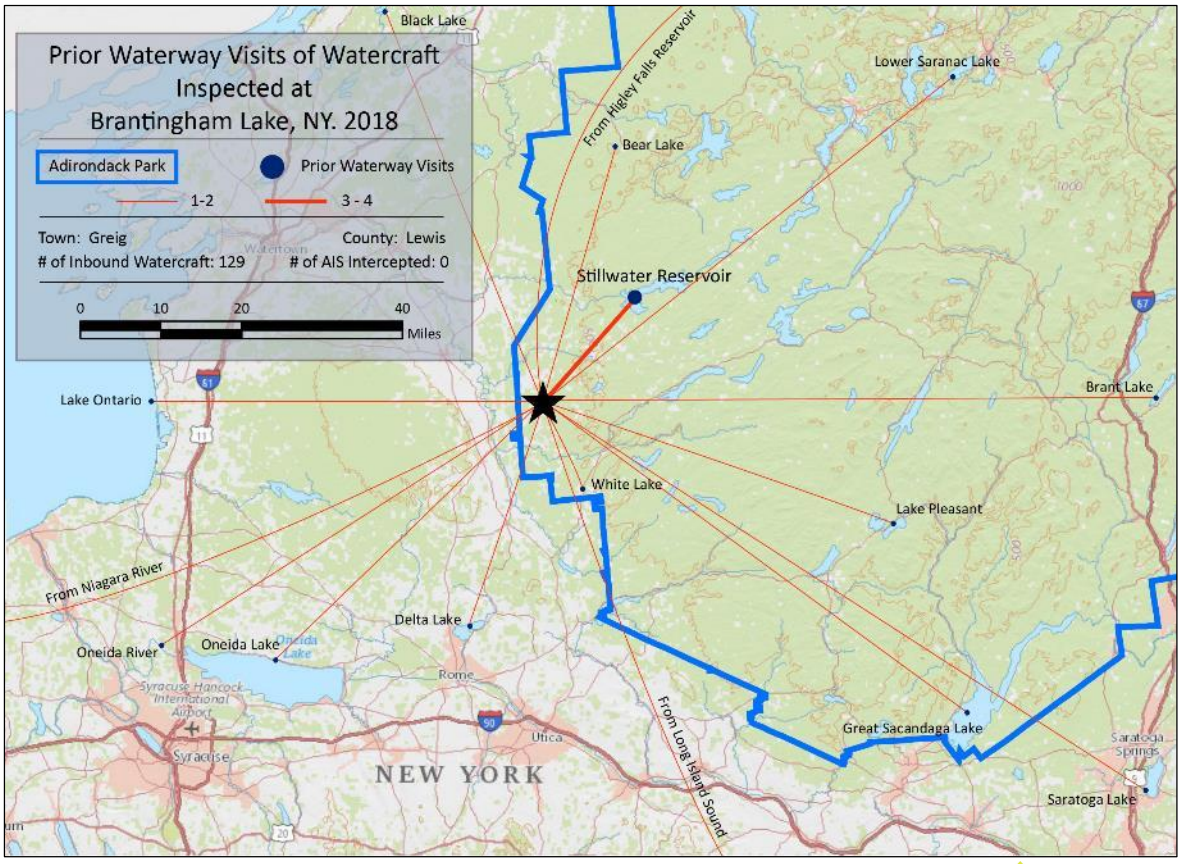
Non-invasive = native aquatic or terrestrial material; BN = brittle naiad; CLP = curly-leaf pondweed; EF = European frogbit; EWM = Eurasian watermilfoil; VLM = variable-leaf milfoil; SWF = spiny waterflea; WC= water chestnut; ZM = zebra mussel; */AIS = aquatic invasive species.

Previous Waterways for Launching Boats	# visits
NONE	58
SAME LAKE - PREVIOUS VISIT	44
Stillwater Reservoir	4
unspecified lake in New York	4
Black Lake	2
Lake Ontario	2
Bear Lake, Fine, NY	1
Brant Lake	1
Delta Lake	1
Great Sacandaga Lake	1
Higley Falls Reservoir	1

Previous Waterways for Launching Boats	# visits
Lake Pleasant	1
Long Island Sound	1
Lower Saranac Lake	1
Niagara River	1
NOT ASKED	1
Oneida Lake	1
Oneida River	1
RENTAL	1
Saratoga Lake	1
UNKNOWN (boater doesn't know)	1
White Lake, Forestport, NY	1
TOTAL BOATS	**130**

State of Motorized Boat Registration
(n=4,554)



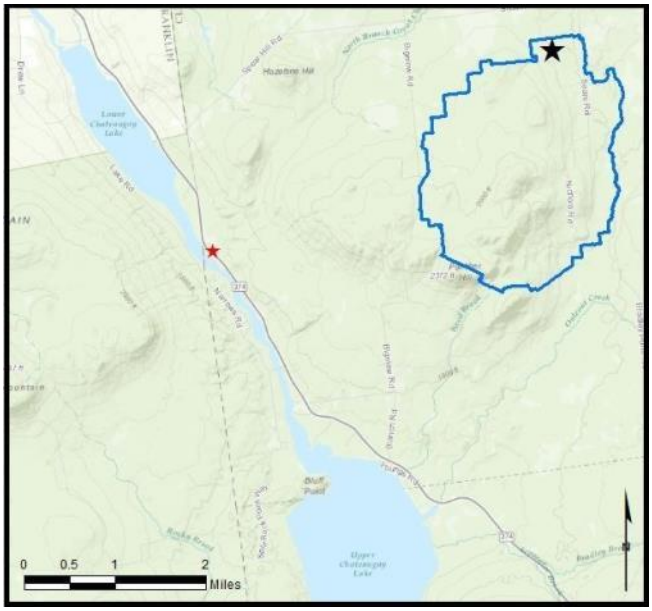


Chateaugay Lake

AIS intercepted: 183
Boats inspected: 2,733
Dates of Operation: May 26 – September 30
Number of visitors: 6,061
Boats failing inspection: 7.8%

Total Number of Days Covered: 76
Weekly Coverage: 5 days
Visitors showing spread prevention awareness: 93%
Number of previously visited waterways: 48

AIS Present in Waterbody: Eurasian watermilfoil, curly-leaf pondweed
Stewardship History: 2012 – present
Partnership: Chateaugay Lakes Association



Watercraft	Boat Type										total # boats observed	total # boats inspected
	Barge	Canoe	Dock	Kayak	Motor	PWC	Row	Sail	SUP	Wind		
# of boats observed	0	42	0	329	2045	309	16	3	3	0	2747	2733
percentage of total boats	0%	2%	0%	12%	74%	11%	1%	0%	0%	0%	100%	99%

Boats observed at launch, including those not inspected. PWC=personal watercraft, SUP=stand-up paddleboard, Wind=windsurfer.

total # visitors	organisms found			total organisms	# boats dirty	# boats w/AIS	# of inspections	% of inspected boats dirty	% of inspected boats w/AIS
	entering	leaving	roadside						
6061	19	246	--	265	214	178	2733	7.8%	6.5%

Boats dirty = watercraft with any organic material, invasive, non-invasive or unknown.

Visitor Responses	AIS spread prevention awareness											# groups asked
	yes	Inspect	Wash	Drain	Bait	LW	Dry	Decon	same lake	first/frozen	didn't ask	
# of groups	2356	929	281	482	8	28	518	81	675	499	17	2526
percentage of total groups asked	93%	37%	11%	19%	0%	1%	21%	3%	27%	20%	NA	

Yes = showed AIS spread prevention awareness; Drain = drained bilge; Bait = emptied bait bucket/disposed of bait; LW = drained livewell; Dry = dried boat; Decon = visited decon station; Same Lake = boat only goes in this lake; First/Frozen = first launch of the season or frozen boat.

Organisms Removed	Organism Type									total # AIS	% of inspected boats w/AIS
	Non-invasive	BN*	CLP*	EF*	EWM*	VLM*	SWF*	WC*	ZM*		
# of organisms	82	0	5	0	177	0	0	0	1	183	6.5%
percentage of total orgs	31%	0%	2%	0%	67%	0%	0%	0%	0%		

Non-invasive = native aquatic or terrestrial material; BN = brittle naiad; CLP = curly-leaf pondweed; EF = European frogbit; EWM = Eurasian watermilfoil; VLM = variable-leaf milfoil; SWF = spiny waterflea; WC= water chestnut; ZM = zebra mussel; */AIS = aquatic invasive species.

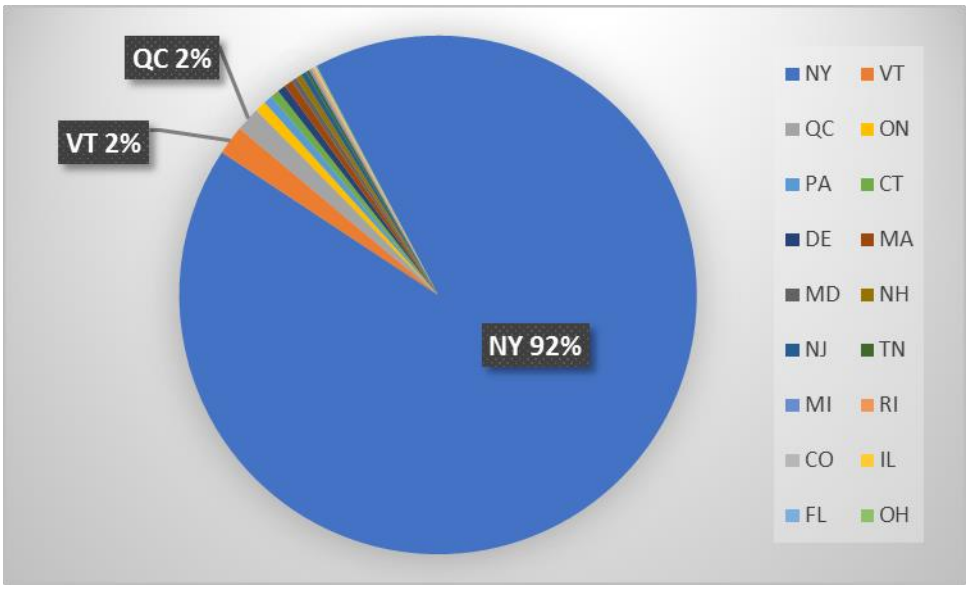
Aquatic Invasive Species Intercepted by Stewards	# found on boats launching	Previous Waterway	# found on boats retrieving	Previous Waterway
curly-leaf pondweed	0	N/A	5	Chateaugay Lake
Eurasian watermilfoil	8	Chateaugay Lake (3), *None* (3), Candlewood Lake CT (1), Lake Champlain (1)	169	Chateaugay Lake
zebra mussel	1	*None* (1)	0	N/A
Totals	**9**		**174**	

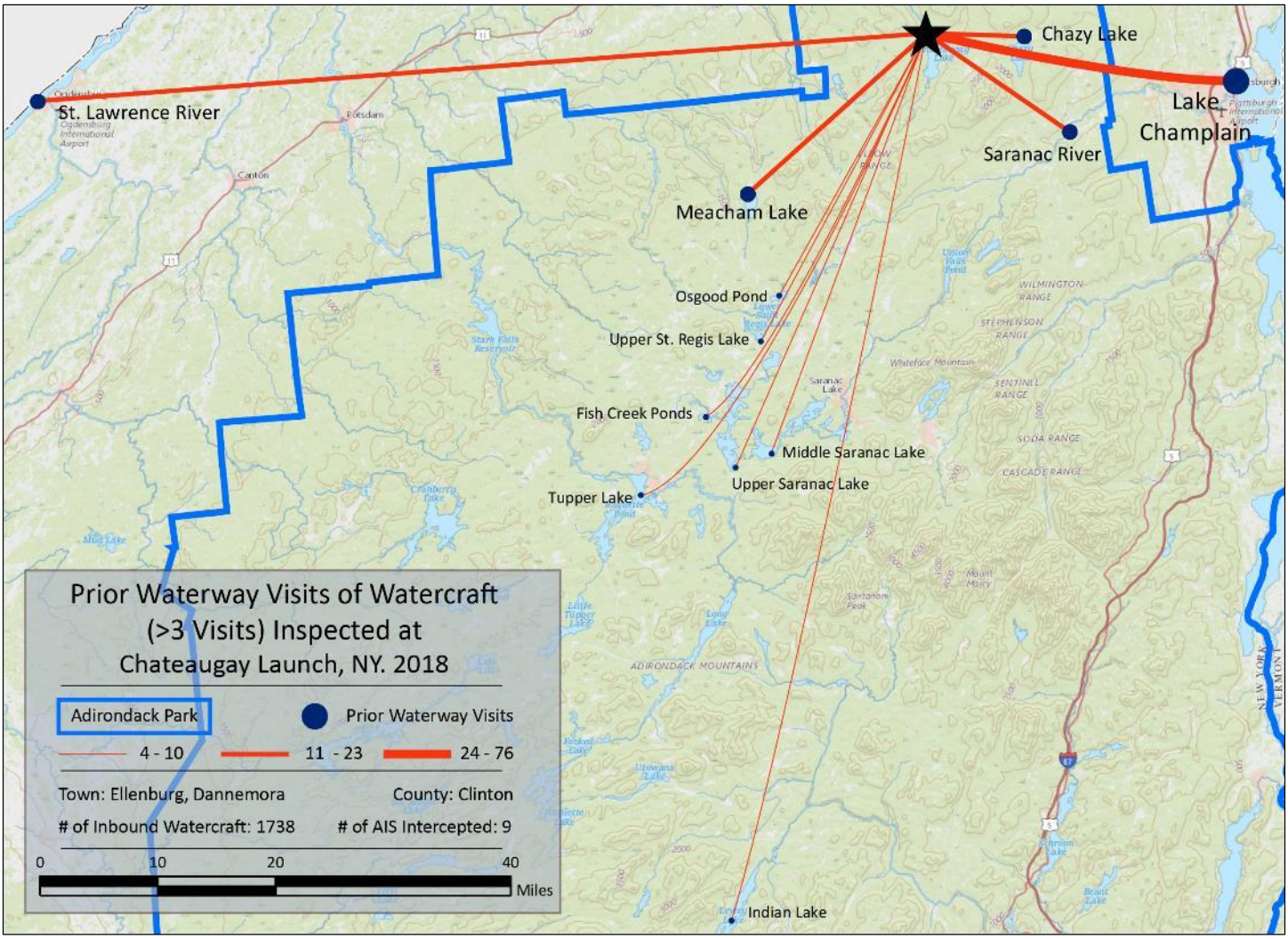
Previous Waterways for Launching Boats	# visits
SAME LAKE - PREVIOUS VISIT	775
NONE	685
Lake Champlain	76
St. Lawrence River	23
Saranac River	22
Chazy Lake	20
Meacham Lake	20
UNKNOWN (boater doesn't know)	11
unspecified lake in New York	9
Middle Saranac Lake	8
Upper Saranac Lake	8
Fish Creek Ponds	7
Osgood Pond	6
NOT ASKED	5
Indian Lake	4
RENTAL	4
Tupper Lake	4
Upper St. Regis Lake	4
Deer River Flow, Duane, NY	3

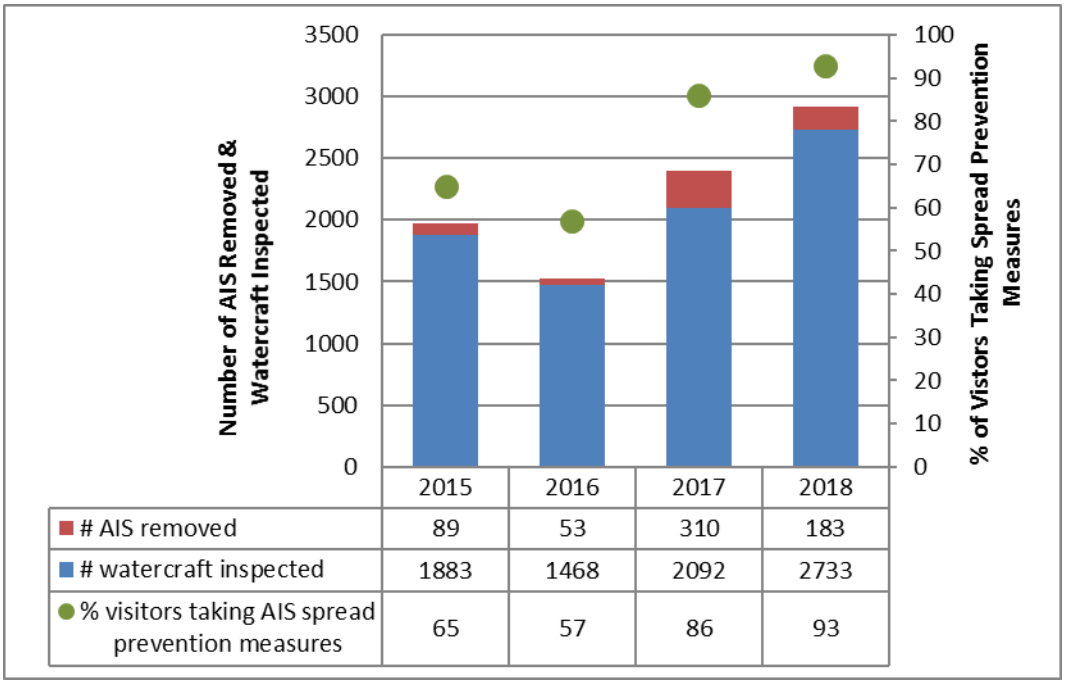
Previous Waterways for Launching Boats	# visits
Franklin Falls Pond	3
Lake George	3
unspecified lake in the Adirondacks	3
Church Pond, Brighton, NY	2
Fern Lake, Black Brook, NY	2
Lake Placid	2
Little Lake, Peterborough, ON	2
Loon Lake (Franklin County)	2
Lower Saranac Lake	2
Oneida Lake	2
Taylor Pond, Black Brook, NY	2
unspecified lake in Massachusetts	2
Black Lake	1
Blake Falls Reservoir	1
Candlewood Lake, Brookfield, CT	1
Chazy River, NY	1
Cranberry Lake	1
Follensby Clear Pond	1
Forge Pond, Westford, MA	1

Previous Waterways for Launching Boats	# visits
Fourth Lake	1
Hoel Pond	1
Hudson River	1
Lake Colby	1
Lake Flower	1
Lake Huron, ON	1
Lake Ontario	1
Lake Sunapee, Sunapee, NH	1
Lake Titus, Malone, NY	1
Lake Wallenpaupack, PA	1
Long Pond, Santa Clara, NY	1
Mountain View Lake	1
Potomac River, MD	1
Saratoga Lake	1
Silver Lake, Black Brook, NY	1
Spitfire Lake, Brighton, NY	1
Squam Lake, Holderness, NH	1
Union Falls Pond, Black Brook, NY	1
unspecified lake in Connecticut	1
TOTAL BOATS	**1747**

State of Motorized Boat Registration
(n=2,301)







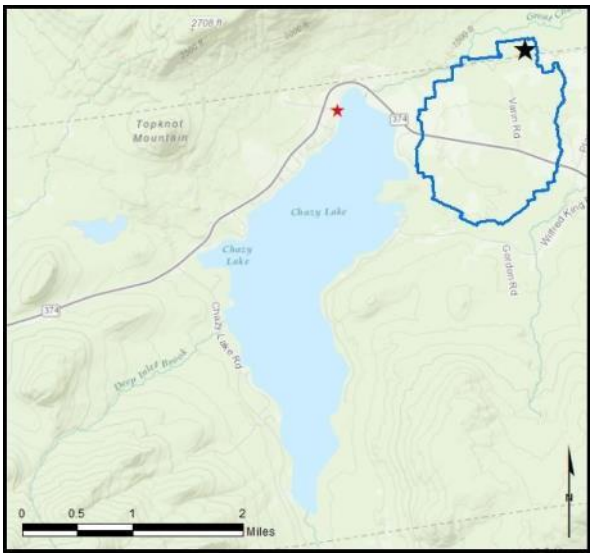
	2015	2016	2017	2018
# AIS removed	89	53	310	183
# watercraft inspected	1883	1468	2092	2733
% visitors taking AIS spread prevention measures	65	57	86	93

Chazy Lake

AIS intercepted: 1
Boats inspected: 382
Dates of Operation: May 26 – August 20
Number of visitors: 749
Boats failing inspection: 2.1%

Total Number of Days Covered: 63
Weekly Coverage: 5 days
Visitors showing spread prevention awareness: 76%
Number of previously visited waterways: 13

AIS Present in Waterbody: Eurasian watermilfoil
Stewardship History: 2014 - present
Partnership: Chazy Lake Association



Watercraft	Boat Type										total # boats observed	total # boats inspected
	Barge	Canoe	Dock	Kayak	Motor	PWC	Row	Sail	SUP	Wind		
# of boats observed	0	1	0	42	304	37	1	1	0	0	386	382
percentage of total boats	0%	0%	0%	11%	79%	10%	0%	0%	0%	0%	100%	99%

Boats observed at launch, including those not inspected. PWC=personal watercraft, SUP=stand-up paddleboard, Wind=windsurfer.

total # visitors	organisms found			total organisms	# boats dirty	# boats w/AIS	# of inspections	% of inspected boats dirty	% of inspected boats w/AIS
	entering	leaving	roadside						
749	7	3	--	10	8	1	382	2.1%	0.3%

Boats dirty = watercraft with any organic material, invasive, non-invasive or unknown.

Visitor Responses	AIS spread prevention awareness											# groups asked
	yes	Inspect	Wash	Drain	Bait	LW	Dry	Decon	same lake	first/frozen	didn't ask	
# of groups	267	81	40	50	0	10	37	3	74	77	15	352
percentage of total groups asked	76%	23%	11%	14%	0%	3%	11%	1%	21%	22%	NA	

Yes = showed AIS spread prevention awareness; Drain = drained bilge; Bait = emptied bait bucket/disposed of bait; LW = drained livewell; Dry = dried boat; Decon = visited decon station; Same Lake = boat only goes in this lake; First/Frozen = first launch of the season or frozen boat.

Organisms Removed	Organism Type									total # AIS	% of inspected boats w/AIS
	Non-invasive	BN*	CLP*	EF*	EWM*	VLM*	SWF*	WC*	ZM*		
# of organisms	9	0	1	0	0	0	0	0	0	1	0.3%
percentage of total orgs	90%	0%	10%	0%	0%	0%	0%	0%	0%		

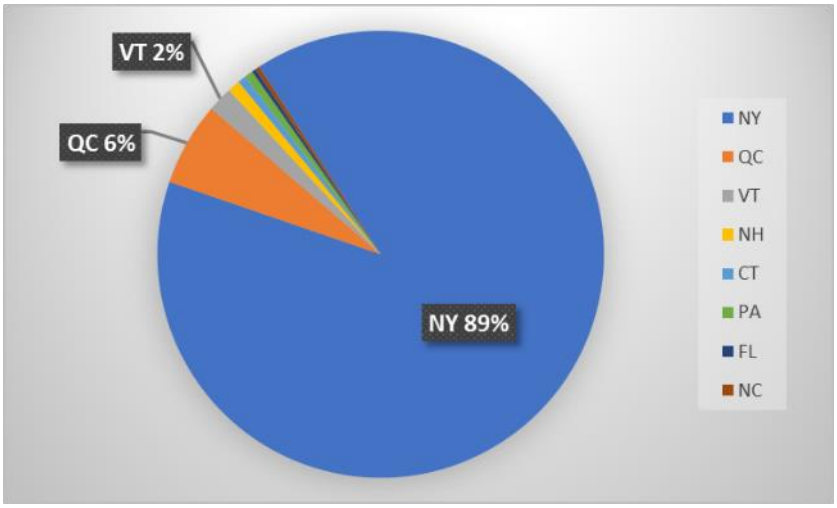
Non-invasive = native aquatic or terrestrial material; BN = brittle naiad; CLP = curly-leaf pondweed; EF = European frogbit; EWM = Eurasian watermilfoil; VLM = variable-leaf milfoil; SWF = spiny waterflea; WC= water chestnut; ZM = zebra mussel; */AIS = aquatic invasive species.

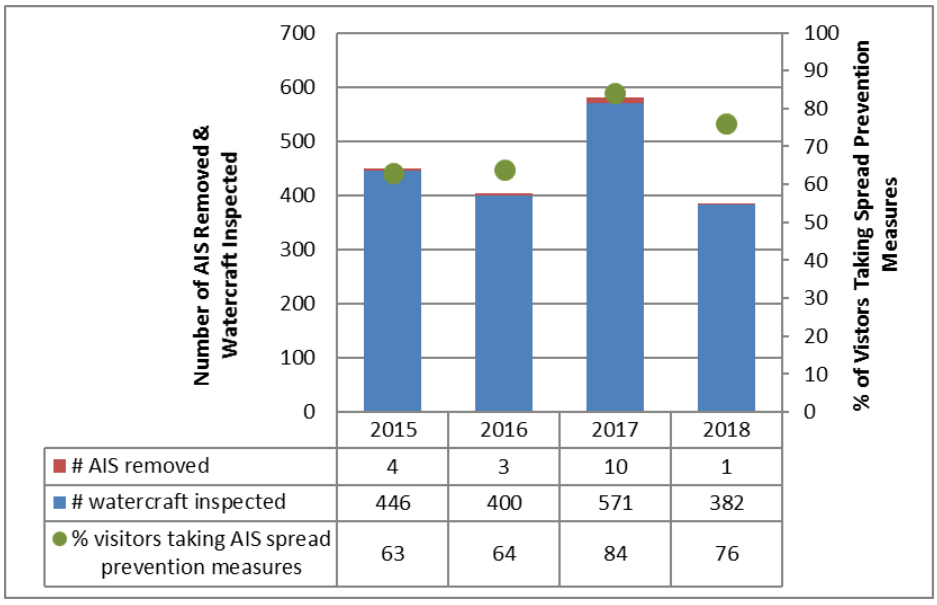
Aquatic Invasive Species Intercepted by Stewards	# found on boats launching	Previous Waterway	# found on boats retrieving	Previous Waterway
curly-leaf pondweed	1	Lake Champlain (1)	0	N/A
Totals	**1**		**0**	

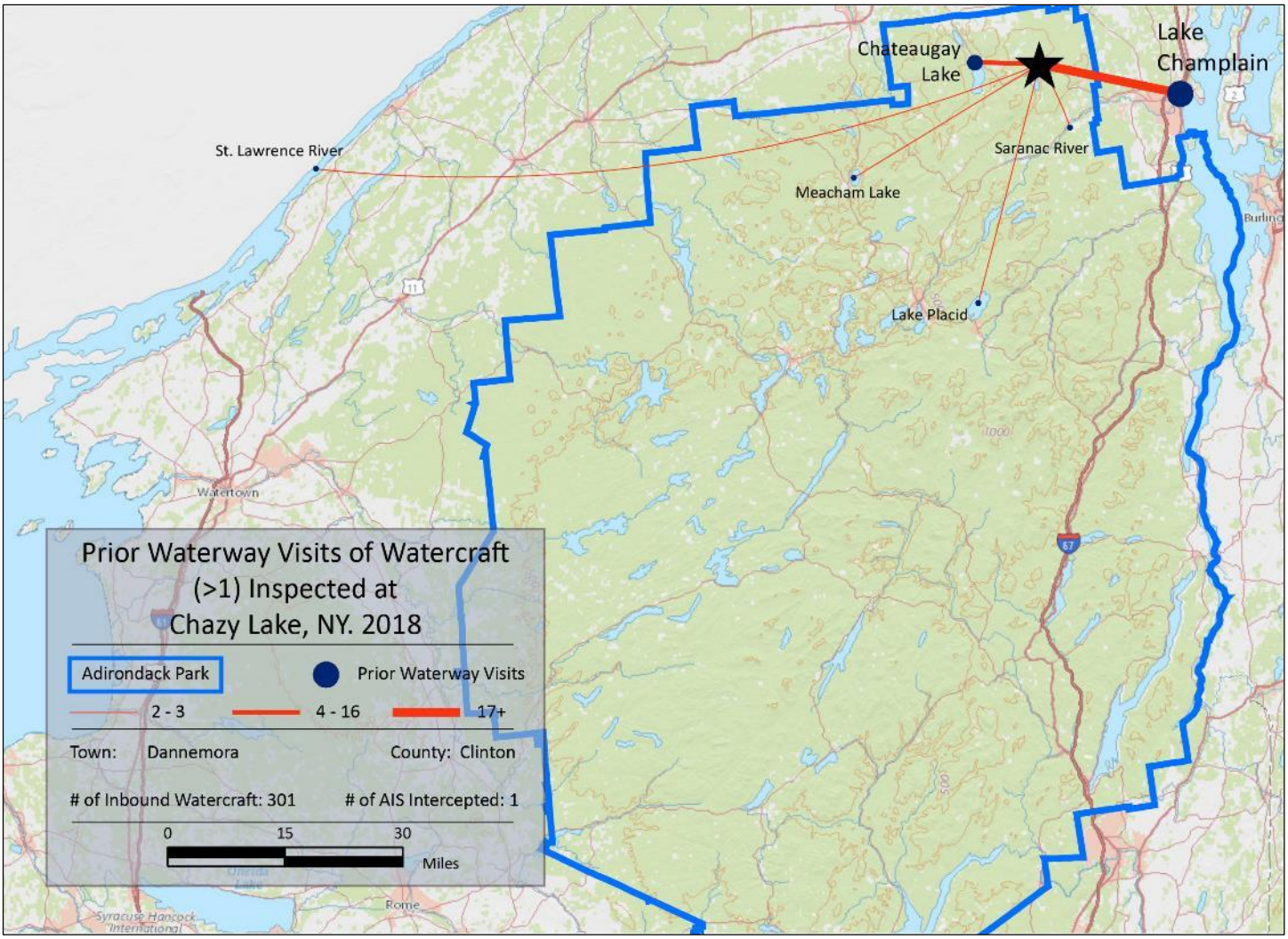
Previous Waterways for Launching Boats	# visits
SAME LAKE - PREVIOUS VISIT	126
NONE	112
Lake Champlain	17
Chateaugay Lake	15
NOT ASKED	15
St. Lawrence River	3
Lake Placid	2
Meacham Lake	2
Saranac River	2

Previous Waterways for Launching Boats	# visits
UNKNOWN (boater doesn't know)	2
unspecified lake in Quebec	2
Caspian Lake, Greensboro, VT	1
Cazenovia Lake	1
Great Sacandaga Lake	1
Lake George	1
Lower Saranac Lake	1
Lower St. Regis Lake	1
Tupper Lake	1
TOTAL BOATS	**305**

State of Motorized Boat Registration
(n=331)







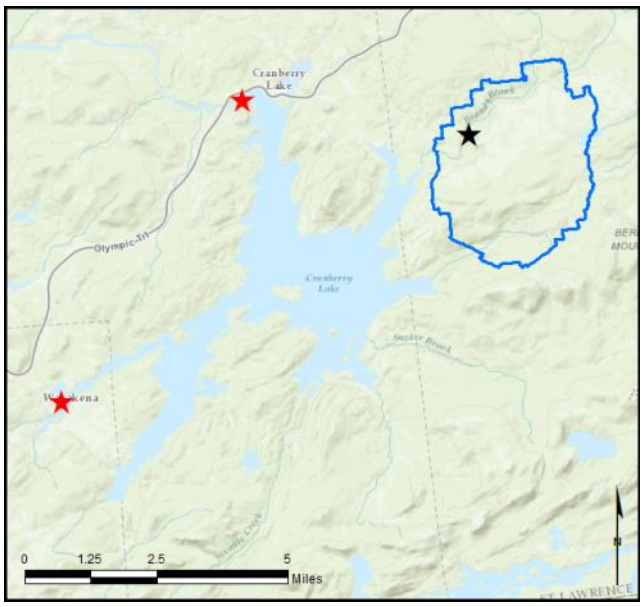
Chazy Lake Boat Launch

Cranberry Lake

AIS intercepted: 29
Boats inspected: 2,996
Dates of Operation: May 26 – November 1
Number of visitors: 6,988
Boats failing inspection: 1.3%

Total Number of Days Covered: State Launch 100
Pine Cone Launch 23
Weekly Coverage: 5 days (State)
Visitors showing spread prevention awareness: 89%
Number of previously visited waterways: 75

AIS Present in Waterbody: variable-leaf milfoil
Stewardship History: 2011 - present
Partnership: Cranberry Lake Boat Club



Watercraft	Boat Type										total # boats observed	total # boats inspected
	Barge	Canoe	Dock	Kayak	Motor	PWC	Row	Sail	SUP	Wind		
Pine Cone Launch	0	10	0	23	75	0	0	0	1	0	109	109
percentage of total boats	0%	9%	0%	21%	69%	0%	0%	0%	1%	0%	100%	100%
State Launch	0	107	2	172	2508	136	3	11	6	0	2945	2887
percentage of total boats	0%	4%	0%	6%	85%	5%	0%	0%	0%	0%	100%	98%
totals	**0**	**117**	**2**	**195**	**2583**	**136**	**3**	**11**	**7**	**0**	**3054**	**2996**
percentage of total boats	**0%**	**4%**	**0%**	**6%**	**85%**	**4%**	**0%**	**0%**	**0%**	**0%**	**100%**	**98%**

Boats observed at launch, including those not inspected. PWC=personal watercraft, SUP=stand-up paddleboard, Wind=windsurfer.

	total # visitors	organisms found			total organisms	# boats dirty	# boats w/AIS	# of inspections	% of inspected boats dirty	% of inspected boats w/AIS
		entering	leaving	roadside						
Pine Cone Launch	218	0	1	--	1	1	1	109	0.9%	0.9%
State Launch	6770	25	28	--	53	39	23	2887	1.4%	0.8%
totals	**6988**	**25**	**29**	**--**	**54**	**40**	**24**	**2996**	**1.3%**	**0.8%**

Boats dirty = watercraft with any organic material, invasive, non-invasive or unknown.

Visitor Responses	AIS spread prevention awareness											# groups asked
	yes	Inspect	Wash	Drain	Bait	LW	Dry	Decon	same lake	first/frozen	didn't ask	
Pine Cone Launch	73	34	14	18	7	6	19	1	6	25	23	74
percentage of total groups asked	99%	46%	19%	24%	9%	8%	26%	1%	8%	34%	NA	
State Launch	1593	265	419	434	18	61	431	23	572	280	1017	1793
percentage of total groups asked	89%	15%	23%	24%	1%	3%	24%	1%	32%	16%	NA	
totals	**1666**	**299**	**433**	**452**	**25**	**67**	**450**	**24**	**578**	**305**	**1040**	**1867**
percentage of total groups asked	**89%**	**16%**	**23%**	**24%**	**1%**	**4%**	**24%**	**1%**	**31%**	**16%**	**NA**	

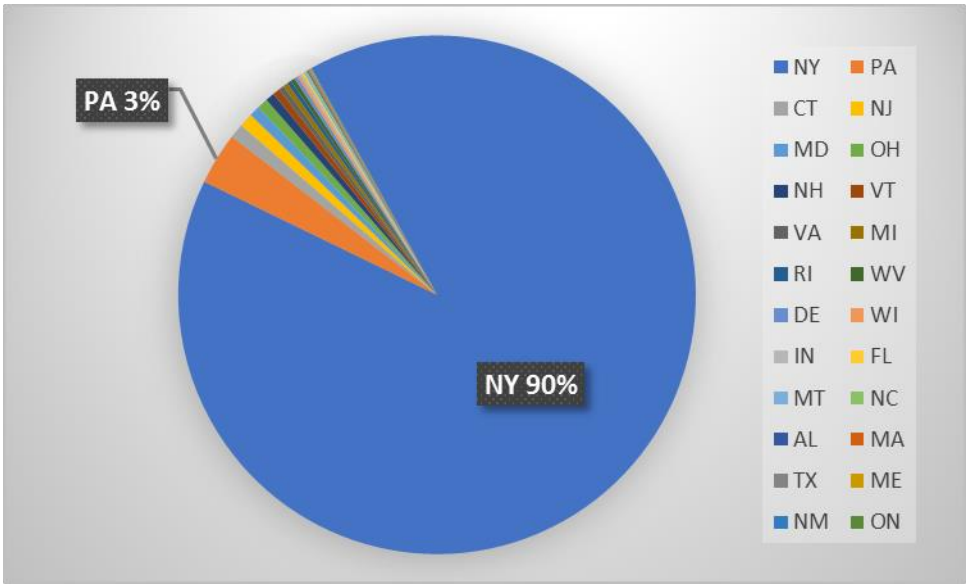
Yes = showed AIS spread prevention awareness; Drain = drained bilge; Bait = emptied bait bucket/disposed of bait; LW = drained livewell; Dry = dried boat; Decon = visited decon station; Same Lake = boat only goes in this lake; First/Frozen = first launch of the season or frozen boat.

Organisms Removed	Organism Type									total # AIS	% of inspected boats w/AIS
	Non-invasive	BN*	CLP*	EF*	EWM*	VLM*	SWF*	WC*	ZM*		
Pine Cone Launch	0	0	0	0	0	1	0	0	0	1	0.9%
percentage of total orgs	0%	0%	0%	0%	0%	100%	0%	0%	0%		
State Launch	25	0	5	0	11	9	0	0	3	28	0.8%
percentage of total orgs	47%	0%	9%	0%	21%	17%	0%	0%	6%		
totals	**25**	**0**	**5**	**0**	**11**	**10**	**0**	**0**	**3**	**29**	**0.8%**
percentage of total orgs	**46%**	**0%**	**9%**	**0%**	**20%**	**19%**	**0%**	**0%**	**6%**		

Non-invasive = native aquatic or terrestrial material; BN = brittle naiad; CLP = curly-leaf pondweed; EF = European frogbit; EWM = Eurasian watermilfoil; VLM = variable-leaf milfoil; SWF = spiny waterflea; WC= water chestnut; ZM = zebra mussel; */AIS = aquatic invasive species.

Aquatic Invasive Species Intercepted by Stewards	# found on boats launching	Previous Waterway	# found on boats retrieving	Previous Waterway
curly-leaf pondweed	3	Cranberry Lake (1), Lake Ontario (1), *Rental* (1)	2	Cranberry Lake
Eurasian watermilfoil	10	Lake Ontario (4), Conesus Lake (1), Lake Champlain (1), Lake Ontario (1), *Rental* (1), Seneca Lake (1), St. Lawrence River (1), unspecified lake in Jefferson County (1)	1	Cranberry Lake (previously in Lake Champlain)
variable-leaf milfoil	2	*None* (1), Oswagatchie River (1)	8	Cranberry Lake
zebra mussel	2	Conesus Lake (1), Lake Ontario (1)	1	Cranberry Lake (previously in Lake Champlain)
Totals	**17**		**12**	

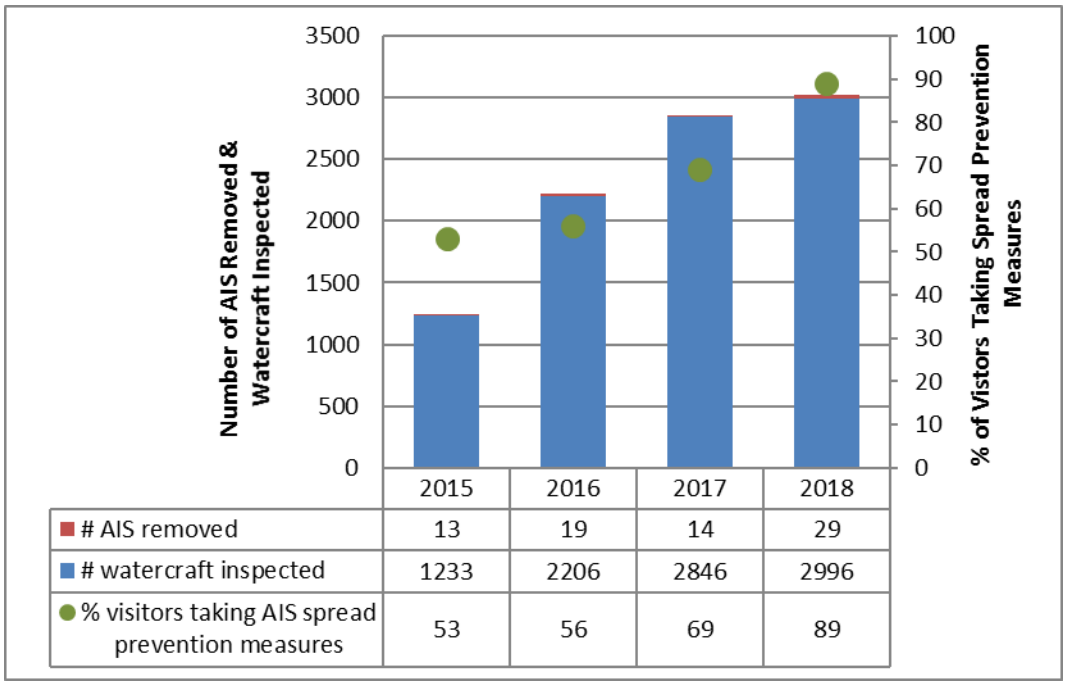
State of Motorized Boat Registration
(n=2,677)

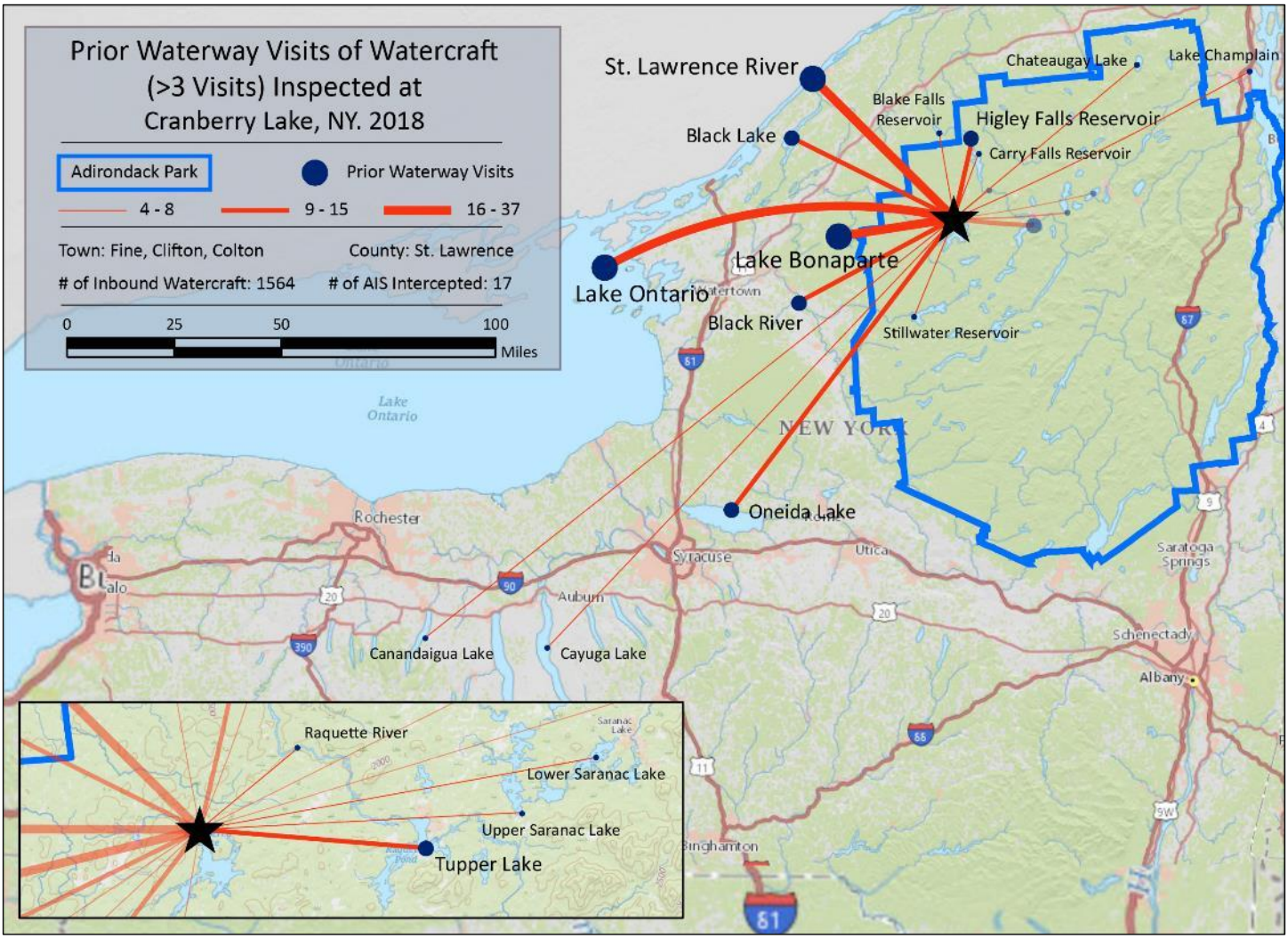


Previous Waterways for Launching Boats	# visits
NONE	577
SAME LAKE - PREVIOUS VISIT	515
Lake Ontario	37
unspecified lake in New York	30
Lake Bonaparte	29
St. Lawrence River	28
RENTAL	17
Tupper Lake	15
UNKNOWN (boater doesn't know)	13
Oneida Lake	12
Black Lake	11
Black River	10
Higley Falls Reservoir	10
Lake Champlain	8
Carry Falls Reservoir	7
Canandaigua Lake	6
Lower Saranac Lake	6
Stillwater Reservoir	6
Chateaugay Lake	5
Raquette River	5
Blake Falls Reservoir	4
Cayuga Lake	4
Upper Saranac Lake	4
Blue Mountain Lake	3
Butterfield Lake	3
Conesus Lake	3
Lake Erie	3

Previous Waterways for Launching Boats	# visits
Long Island Sound	3
Lows Lake	3
Oswegatchie River	3
Otisco Lake	3
Raquette Lake	3
Atlantic Ocean	2
Erie Canal	2
Glenwood Lake, Ridgeway, NY	2
Indian Lake	2
Keuka Lake	2
Lake Flower	2
Lake George	2
Long Lake	2
Mirror Lake	2
Mohawk River	2
Raystown Lake, Juniata Township, PA	2
Seneca Lake	2
Silver Lake, Perry, NY	2
Skaneateles Lake	2
St. Regis River	2
Upper St. Regis Lake	2
Beltzville Lake, PA	1
Big Moose Lake	1
Blue Marsh Lake, Berks, PA	1
Buck Pond (Rainbow/Kushaqua)	1
Canada Lake	1
Canadarago Lake	1

Previous Waterways for Launching Boats	# visits
Charleston Lake, Athens, ON	1
Delta Lake	1
Finger Lakes (unspecified)	1
Fish Creek Ponds	1
Fourth Lake	1
Fulton Chain of Lakes (unspecified)	1
Hinckley Reservoir	1
Honeoye Lake	1
Hudson River	1
Hyde Lake, Theresa, NY	1
Lake Hopatcong, Jefferson, NJ	1
Lake Nockamixon, Bucks County, PA	1
Lake Sunapee, Sunapee, NH	1
Lake Winola, Overfield Township, PA	1
Moodus Reservoir, East Haddam, CT	1
Owasco Lake	1
Pickwick Lake, Florence, AL	1
Pine Lake, Hiles, WI	1
Red Lake, Theresa, NY	1
Rushford Lake	1
Salmon River	1
Saratoga Lake	1
Schroon Lake	1
Susquehanna River, PA	1
Thompson Pond, Spencer, MA	1
Union Falls Pond, Black Brook, NY	1
unspecified lake in Jefferson County	1
TOTAL BOATS	**1451**





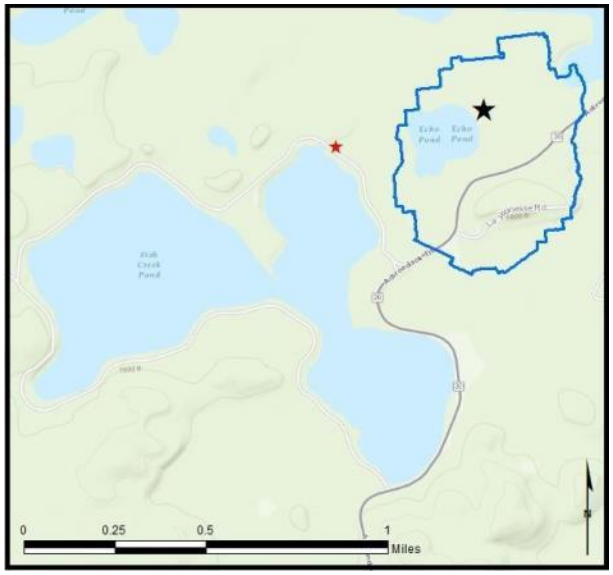
Cranberry Lake Boat Launch

Fish Creek Ponds

AIS intercepted: 14
Boats inspected: 1,741
Dates of Operation: May 26 – October 8
Number of visitors: 2,942
Boats failing inspection: 4.3%

Total Number of Days Covered: 107
Weekly Coverage: 7 days
Visitors showing spread prevention awareness: 68%
Number of previously visited waterways: 46

AIS Present in Waterbody: Eurasian watermilfoil, variable-leaf milfoil
Stewardship History: 2014 - present
Partnership: Upper Saranac Lake Association, Upper Saranac Foundation



Watercraft	Boat Type										total # boats observed	total # boats inspected
	Barge	Canoe	Dock	Kayak	Motor	PWC	Row	Sail	SUP	Wind		
# of boats observed	0	253	0	693	635	129	0	1	38	10	1759	1741
percentage of total boats	0%	14%	0%	39%	36%	7%	0%	0%	2%	1%	100%	99%

Boats observed at launch, including those not inspected. PWC=personal watercraft, SUP=stand-up paddleboard, Wind=windsurfer.

total # visitors	organisms found			total organisms	# boats dirty	# boats w/AIS	# of inspections	% of inspected boats dirty	% of inspected boats w/AIS
	entering	leaving	roadside						
2942	23	65	--	88	74	13	1741	4.3%	0.7%

Boats dirty = watercraft with any organic material, invasive, non-invasive or unknown.

Visitor Responses	AIS spread prevention awareness											# groups asked
	yes	Inspect	Wash	Drain	Bait	LW	Dry	Decon	same lake	first/frozen	didn't ask	
# of groups	739	407	154	54	2	7	147	2	63	205	90	1080
percentage of total groups asked	68%	38%	14%	5%	0%	1%	14%	0%	6%	19%	NA	

Yes = showed AIS spread prevention awareness; Drain = drained bilge; Bait = emptied bait bucket/disposed of bait; LW = drained livewell; Dry = dried boat; Decon = visited decon station; Same Lake = boat only goes in this lake; First/Frozen = first launch of the season or frozen boat.

Organisms Removed	Organism Type									total # AIS	% of inspected boats w/AIS
	Non-invasive	BN*	CLP*	EF*	EWM*	VLM*	SWF*	WC*	ZM*		
# of organisms	74	0	1	0	9	4	0	0	0	14	0.7%
percentage of total orgs	84%	0%	1%	0%	10%	5%	0%	0%	0%		

Non-invasive = native aquatic or terrestrial material; BN = brittle naiad; CLP = curly-leaf pondweed; EF = European frogbit; EWM = Eurasian watermilfoil; VLM = variable-leaf milfoil; SWF = spiny waterflea; WC= water chestnut; ZM = zebra mussel; */AIS = aquatic invasive species.

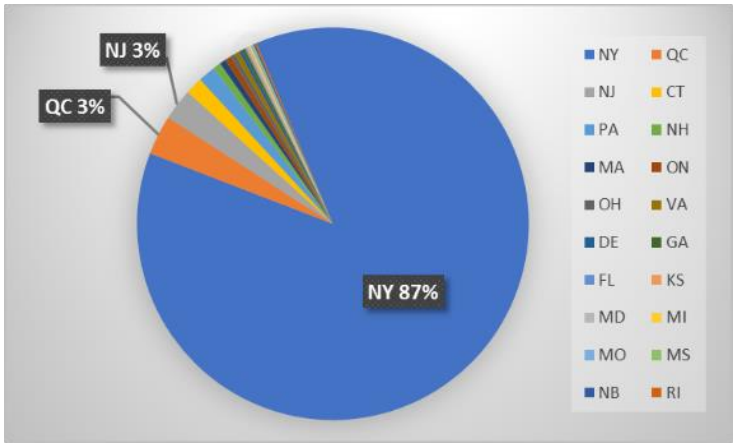
Aquatic Invasive Species Intercepted by Stewards	# found on boats launching	Previous Waterway	# found on boats retrieving	Previous Waterway
curly-leaf pondweed	1	Lake Erie (1)	0	N/A
Eurasian watermilfoil	1	*None* (1)	8	Fish Creek Ponds
variable-leaf milfoil	0	N/A	4	Fish Creek Ponds
Totals	**2**		**12**	

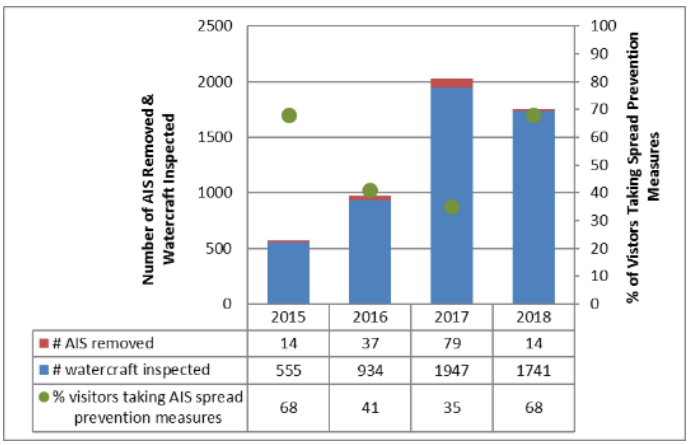
Previous Waterways for Launching Boats	# visits
NONE	477
SAME LAKE - PREVIOUS VISIT	209
unspecified lake in New York	41
Rollins Pond	24
RENTAL	18
NOT ASKED	16
Tupper Lake	11
Lower Saranac Lake	9
Upper Saranac Lake	9
Follensby Clear Pond	8
Lake Champlain	8
Lake Placid	7
Lower St. Regis Lake	7
Raquette River	6
Lake Clear	5
Lake George	5
UNKNOWN (boater doesn't know)	5
Black Lake	4

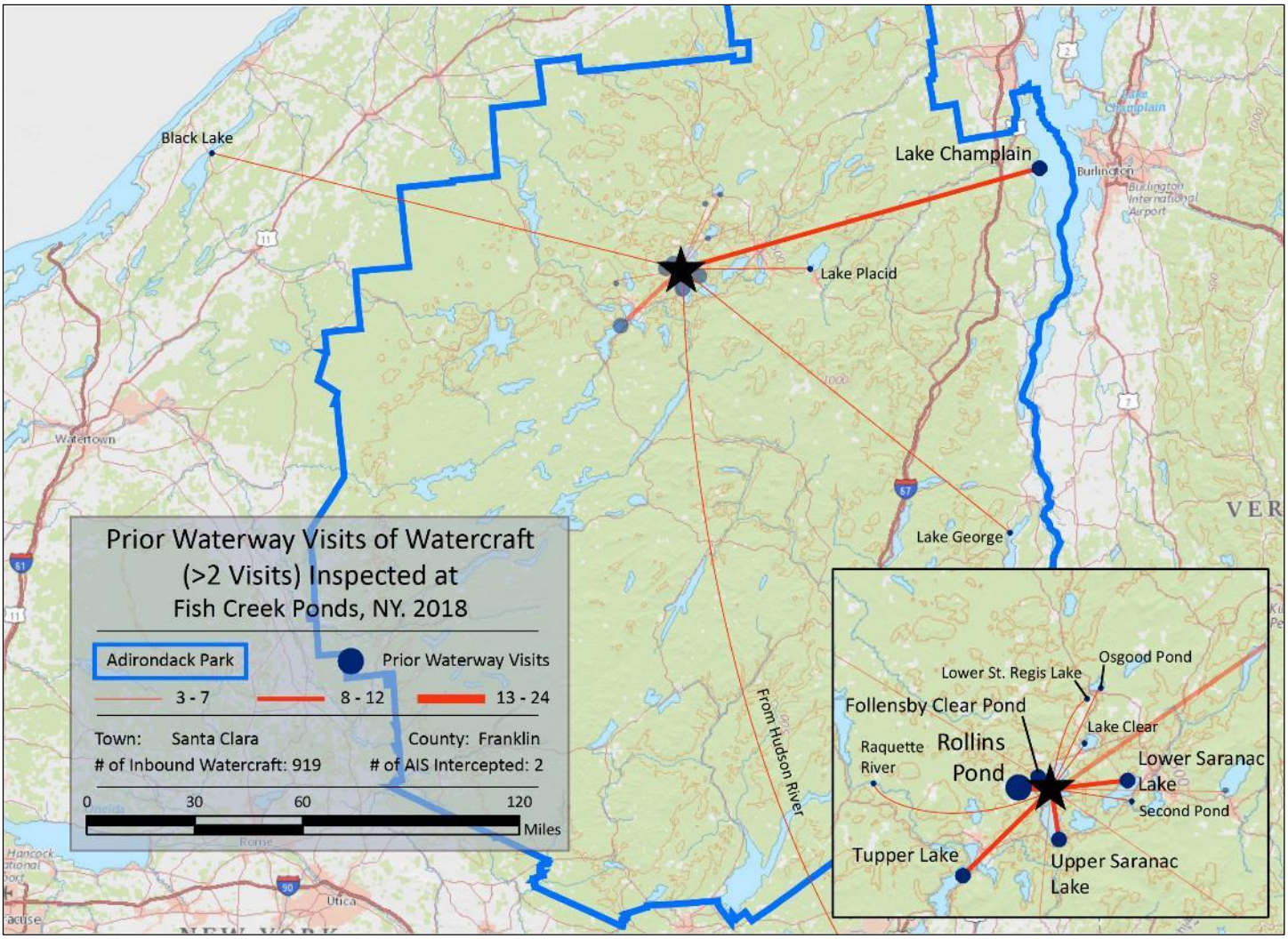
Previous Waterways for Launching Boats	# visits
Hudson River	3
Osgood Pond	3
Second Pond	3
Canada Lake	2
Canandaigua Lake	2
Chazy Lake	2
Great Sacandaga Lake	2
Henderson Lake, Newcomb, NY	2
Keuka Lake	2
Lake Alice, Chazy, NY	2
Lake Erie	2
Lake Flower	2
Oswego River	2
Polliwog Pond, Santa Clara, NY	2
Raquette Lake	2
Saranac River	2
Skaneateles Lake	2
Cayuga Lake	1

Previous Waterways for Launching Boats	# visits
Cazenovia Lake	1
Chateaugay Lake	1
Cranberry Lake	1
Cuba Lake, Cuba, NY	1
Delaware River, NJ	1
East Sidney Lake, Franklin, NY	1
First Lake	1
Fulton Chain of Lakes (unspecified)	1
Greenwood Lake, West Milford, NJ	1
Honeoye Lake	1
Lake Ontario	1
Long Pond, Santa Clara, NY	1
Ottawa River, QC	1
Schroon Lake	1
Third Lake	1
unspecified lake in New Brunswick	1
unspecified lake in Quebec	1
Waterbury Reservoir, Waterbury, VT	1
TOTAL BOATS	**925**

State of Motorized Boat Registration (n=768)







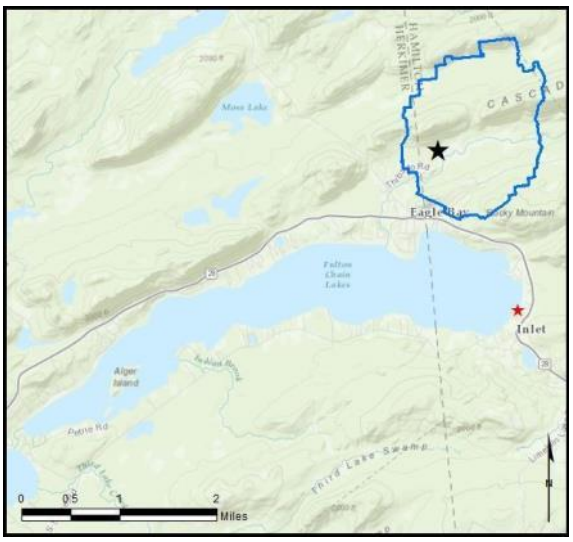
Fish Creek Boat Launch

Fourth Lake

AIS intercepted: 69
Boats inspected: 4,155
Dates of Operation: May 26 – November 1
Number of visitors: 8,223
Boats failing inspection: 3.8%

Total Number of Days Covered: Inlet (State) 127
Alger Island 10
Weekly Coverage: 5-7 days (Inlet)
Visitors showing spread prevention awareness: 61%
Number of previously visited waterways: 85

AIS Present in Waterbody: variable-leaf milfoil
Stewardship History: 2011 - present
Partnership: Fulton Chain of Lakes Association



Watercraft	Boat Type										total # boats observed	total # boats inspected
	Barge	Canoe	Dock	Kayak	Motor	PWC	Row	Sail	SUP	Wind		
Alger Island	0	16	0	25	2	0	0	0	0	0	43	43
percentage of total boats	0%	37%	0%	58%	5%	0%	0%	0%	0%	0%	100%	100%
Inlet (State Launch)	1	51	3	280	2901	835	3	50	4	0	4128	4112
percentage of total boats	0%	1%	0%	7%	70%	20%	0%	1%	0%	0%	100%	100%
totals	**1**	**67**	**3**	**305**	**2903**	**835**	**3**	**50**	**4**	**0**	**4171**	**4155**
percentage of total boats	**0%**	**2%**	**0%**	**7%**	**70%**	**20%**	**0%**	**1%**	**0%**	**0%**	**100%**	**99.6%**

Boats observed at launch, including those not inspected. PWC=personal watercraft, SUP=stand-up paddleboard, Wind=windsurfer.

	total # visitors	organisms found			total organisms	# boats dirty	# boats w/AIS	# of inspections	% of inspected boats dirty	% of inspected boats w/AIS
		entering	leaving	roadside						
Alger Island	59	0	0	--	0	0	0	43	0.0%	0%
Inlet (State Launch)	8164	102	94	--	196	156	51	4112	3.8%	1.2%
totals	**8223**	**102**	**94**	**--**	**196**	**156**	**51**	**4155**	**3.8%**	**1.2%**

Boats dirty = watercraft with any organic material, invasive, non-invasive or unknown.

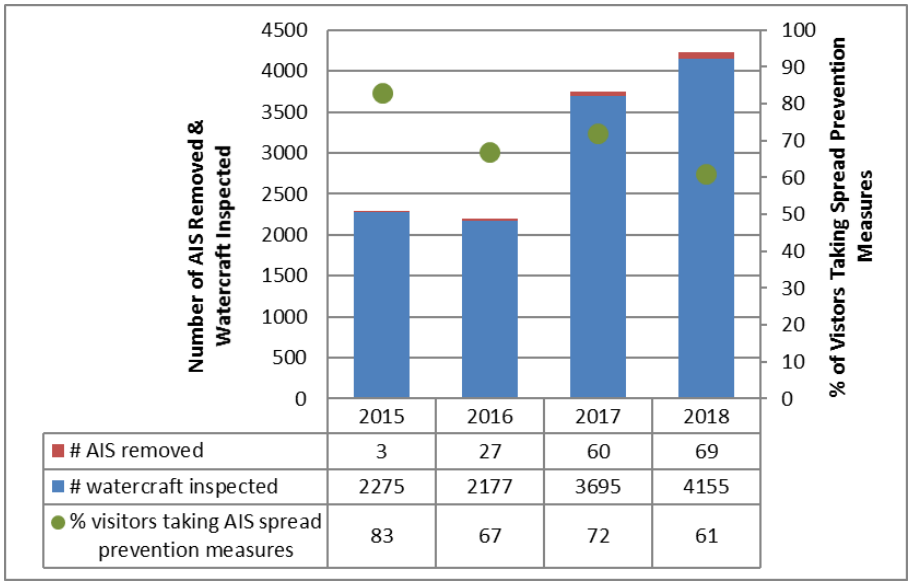
Visitor Responses	AIS spread prevention awareness											# groups asked
	yes	Inspect	Wash	Drain	Bait	LW	Dry	Decon	same lake	first/frozen	didn't ask	
Alger Island	13	1	5	1	0	0	1	0	1	5	0	28
percentage of total groups asked	46%	4%	18%	4%	0%	0%	4%	0%	4%	18%	NA	
Inlet (State Launch)	2434	184	416	967	0	25	122	60	390	571	16	3956
percentage of total groups asked	62%	5%	11%	24%	0%	1%	3%	2%	10%	14%	NA	
totals	**2447**	**185**	**421**	**968**	**0**	**25**	**123**	**60**	**391**	**576**	**16**	**3984**
percentage of total groups asked	**61%**	**5%**	**11%**	**24%**	**0%**	**1%**	**3%**	**2%**	**10%**	**14%**	**NA**	

Yes = showed AIS spread prevention awareness; Drain = drained bilge; Bait = emptied bait bucket/disposed of bait; LW = drained livewell; Dry = dried boat; Decon = visited decon station; Same Lake = boat only goes in this lake; First/Frozen = first launch of the season or frozen boat.

Organisms Removed	Organism Type									total # AIS	% of inspected boats w/AIS
	Non-invasive	BN*	CLP*	EF*	EWM*	VLM*	SWF*	WC*	ZM*		
Alger Island	0	0	0	0	0	0	0	0	0	0	0%
percentage of total orgs	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Inlet (State Launch)	127	0	8	0	28	15	0	3	15	69	1.2%
percentage of total orgs	65%	0%	4%	0%	14%	8%	0%	2%	8%		
totals	**127**	**0**	**8**	**0**	**28**	**15**	**0**	**3**	**15**	**69**	**1.2%**
percentage of total orgs	**65%**	**0%**	**4%**	**0%**	**14%**	**8%**	**0%**	**2%**	**8%**		

Non-invasive = native aquatic or terrestrial material; BN = brittle naiad; CLP = curly-leaf pondweed; EF = European frogbit; EWM = Eurasian watermilfoil; VLM = variable-leaf milfoil; SWF = spiny waterflea; WC= water chestnut; ZM = zebra mussel; */AIS = aquatic invasive species.

Aquatic Invasive Species Intercepted by Stewards	# found on boats launching	Previous Waterway	# found on boats retrieving	Previous Waterway
curly-leaf pondweed	8	Lake Ontario (3), *None* (2), Lake Erie (1), St. Lawrence River (1), *Unknown* (1)	0	N/A
Eurasian watermilfoil	26	*None* (6), Lake Ontario (5), Oneida Lake (3), Seneca Lake (3), St. Lawrence River (3), Canadarago Lake (1), Conesus Lake (1), Fulton Chain (1), Owasco Lake (1), Saratoga Lake (1), Seneca River (1)	2	Fourth Lake (previously in Canandaigua Lake and St. Lawrence River)
variable-leaf milfoil	3	Fourth Lake (1), Kayuta Lake (1), Lake Ontario (1)	12	Fourth Lake
water chestnut	3	Fourth Lake - previously in Canandaigua (1), *None* (1), Seneca River (1)	0	N/A
zebra mussel	15	Lake Ontario (4), Oneida Lake (3), Seneca Lake (3), *None* (2), Canadarago Lake (1), Canandaigua Lake (1), Seneca River (1)	0	N/A
Totals	**55**		**14**	

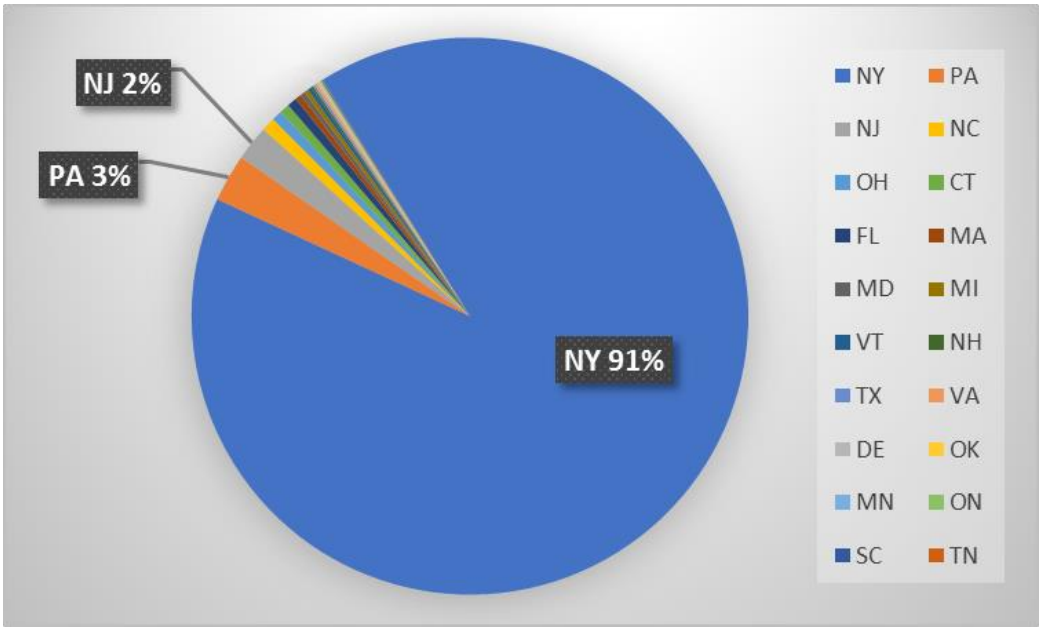


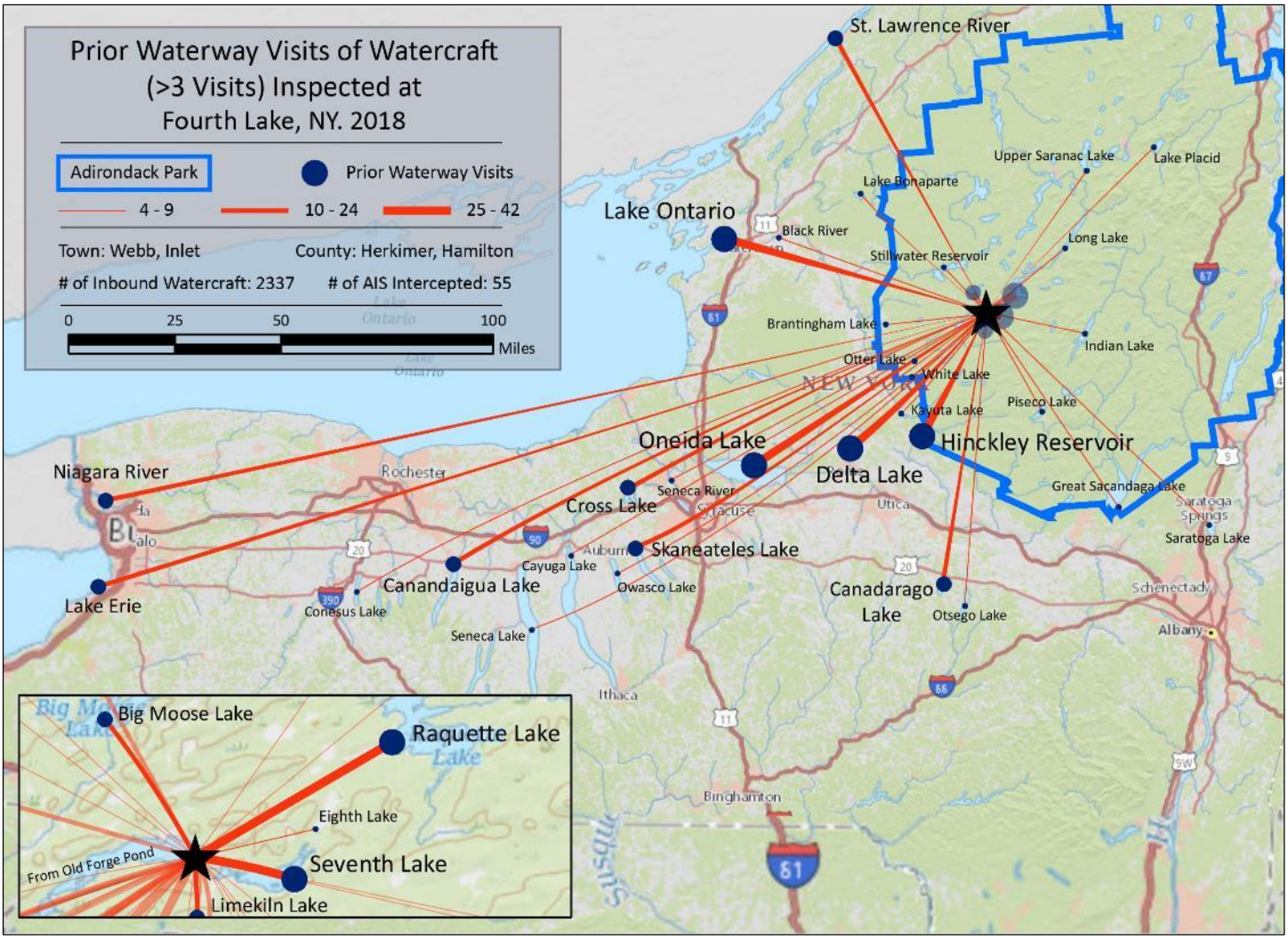
Previous Waterways for Launching Boats	# visits
NONE	1173
SAME LAKE - PREVIOUS VISIT	527
NOT ASKED	56
Oneida Lake	42
Delta Lake	41
Lake Ontario	41
Raquette Lake	35
Hinckley Reservoir	27
Seventh Lake	27
Limekiln Lake	24
St. Lawrence River	22
Big Moose Lake	19
Canandaigua Lake	18
Skaneateles Lake	12
Cross Lake, Onondaga County, NY	11
Lake Erie	11
Niagara River	11
Canadarago Lake	10
Cayuga Lake	9
Great Sacandaga Lake	9
Indian Lake	8
Kayuta Lake	8
Piseco Lake	8
Seneca Lake	8
Stillwater Reservoir	8
unspecified lake in New York	8
Black River	6
Brantingham Lake, Greig, NY	6
Conesus Lake	6
Saratoga Lake	6
Lake Bonaparte	5
Lake Placid	5

Previous Waterways for Launching Boats	# visits
Old Forge Pond, Old Forge, NY	5
Otter Lake, Forestport, NY	5
Seneca River	5
UNKNOWN (boater doesn't know)	5
Upper Saranac Lake	5
White Lake, Forestport, NY	5
Long Lake	4
Otsego Lake	4
Owasco Lake	4
RENTAL	4
Cazenovia Lake	3
Erie Canal	3
First Lake	3
Honeoye Lake	3
Hudson River	3
Keuka Lake	3
Lake Flower	3
Mohawk River	3
Sixth Lake, Inlet, NY	3
Susquehanna River, NY	3
Tupper Lake	3
Candlewood Lake, Brookfield, CT	2
Eighth Lake	2
Lake Champlain	2
Lake George	2
Lake Wallenpaupack, PA	2
Little Safford Lake, Webb, NY	2
Long Island Sound	2
Otisco Lake	2
Quiver Pond, Webb, NY	2
Salmon River Reservoir, Redfield, NY	2
Silver Lake, Perry, NY	2

Previous Waterways for Launching Boats	# visits
unspecified lake near Buffalo	2
Upper Little York Lake, Cortland, NY	2
Beltzville Lake, PA	1
Chateaugay Lake	1
Connecticut River, VT	1
Copake Lake, Copake Lake, NY	1
Cranberry Lake	1
Cuba Lake, Cuba, NY	1
Fish Creek Ponds	1
Fourth Lake	1
Greenwood Lake, West Milford, NJ	1
Guilford Lake, Guilford, NY	1
Lake Eaton	1
Lake Gaston, Littleton, NC	1
Lake Moraine	1
Lake Pleasant	1
Moose River, NY	1
Nicks Lake, Webb, NY	1
North Lake, Ohio, NY	1
Oswego River	1
Quaker Lake, Coldspring, NY	1
Raquette River	1
Raystown Lake, Juniata Township, PA	1
Rushford Lake	1
Salmon River	1
Shenango River Reservoir, PA	1
Soft Maple Reservoir, Croghan, NY	1
Third Lake	1
unspecified lake in North Carolina	1
unspecified lake near Cortland	1
unspecified private lake in Oxford	1
Waneta Lake, Rockland, NY	1
TOTAL BOATS	**2342**

State of Motorized Boat Registration
(n=3,699)





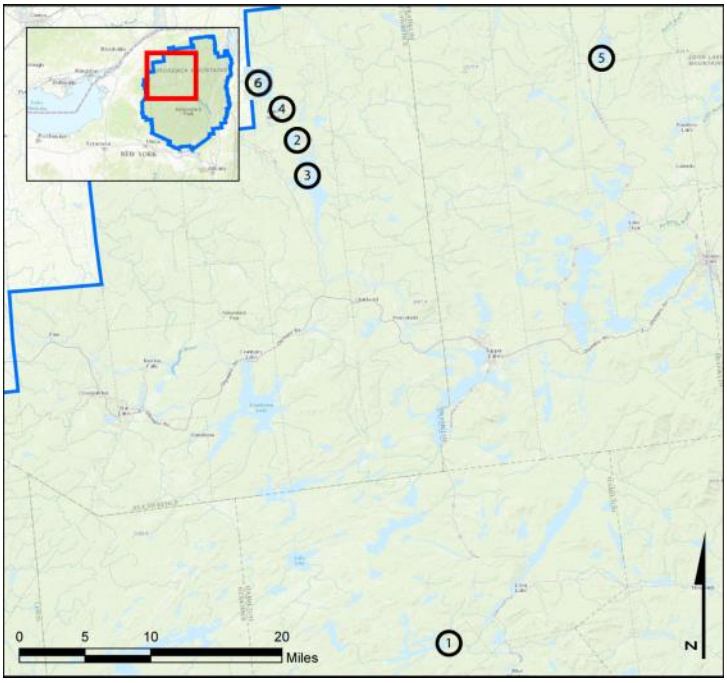
Fourth Lake Boat Launch

GLRI North Lakes

AIS intercepted: 13
Boats inspected: 2,660
Number of visitors: 5,491
Boats failing inspection: 5.6%
Visitors showing spread prevention awareness: 66%
Number of previously visited waterways: 65

AIS Present in Waterbodies: Eurasian watermilfoil (Meacham), variable-leaf milfoil (Carry Falls, Forked)

Funding: Great Lakes Restoration Initiative (US EPA)



1-Forked Lake; 2-Blake Falls Reservoir; 3-Carry Falls Reservoir; 4-Rainbow Falls Reservoir; 5-Meacham Lake; 6-Higley Flow

Watercraft	Boat Type										total # boats observed	total # boats inspected
	Barge	Canoe	Dock	Kayak	Motor	PWC	Row	Sail	SUP	Wind		
Blake Falls Reservoir	0	0	0	6	7	0	0	0	0	0	13	13
percentage of total boats	0%	0%	0%	46%	54%	0%	0%	0%	0%	0%	100%	100%
Carry Falls Reservoir (North)	0	23	0	90	383	33	1	2	2	0	534	534
percentage of total boats	0%	4%	0%	17%	72%	6%	0%	0%	0%	0%	100%	100%
Carry Falls Reservoir (South)	0	0	0	0	8	0	0	0	0	0	8	8
percentage of total boats	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	100%	100%
Forked Lake	0	606	0	510	155	5	19	1	11	0	1307	1302
percentage of total boats	0%	46%	0%	39%	12%	0%	1%	0%	1%	0%	100%	100%
Higley Flow (Higley Falls Reservoir)	0	2	1	8	380	76	0	0	1	2	470	422
percentage of total boats	0%	0%	0%	2%	81%	16%	0%	0%	0%	0%	100%	90%
Meacham Lake	0	10	0	82	224	49	5	3	0	0	373	370
percentage of total boats	0%	3%	0%	22%	60%	13%	1%	1%	0%	0%	100%	99%
Rainbow Falls Reservoir	0	0	0	1	8	0	0	2	0	0	11	11
percentage of total boats	0%	0%	0%	9%	73%	0%	0%	18%	0%	0%	100%	100%
totals	**0**	**641**	**1**	**697**	**1165**	**163**	**25**	**8**	**14**	**2**	**2716**	**2660**
percentage of total boats	**0%**	**24%**	**0%**	**26%**	**43%**	**6%**	**1%**	**0%**	**1%**	**0%**	**100%**	**98%**

Boats observed at launch, including those not inspected. PWC=personal watercraft, SUP=stand-up paddleboard, Wind=windsurfer.

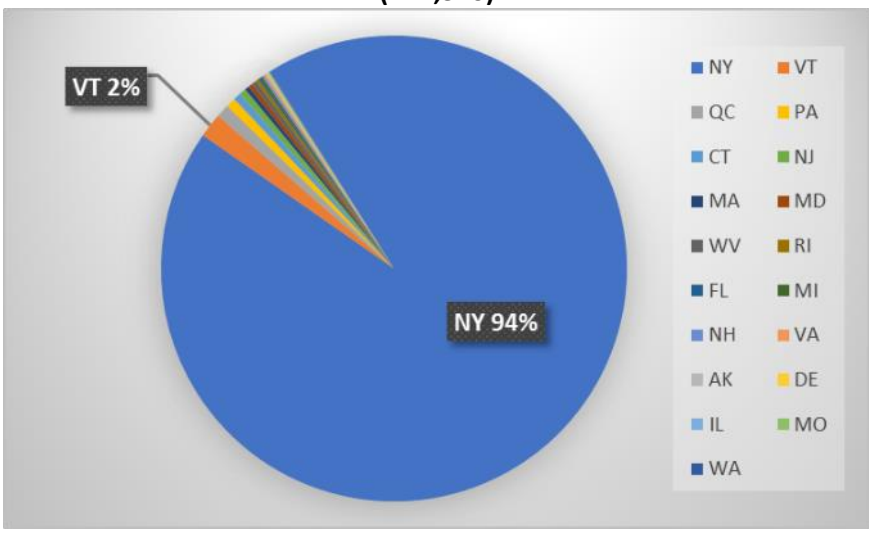
	total # visitors	organisms found			total organisms	# boats dirty	# boats w/AIS	# of inspections	% of inspected boats dirty	% of inspected boats w/AIS
		entering	leaving	roadside						
Blake Falls Reservoir	31	0	1	--	1	1	0	13	7.7%	0%
Carry Falls Reservoir (North)	1492	57	10	--	67	55	4	534	10.3%	0.7%
Carry Falls Reservoir (South)	21	0	1	--	1	1	0	8	12.5%	0%
Forked Lake	2075	9	29	--	38	35	5	1302	2.7%	0.4%
Higley Flow (Higley Falls Reservoir)	1065	7	2	--	9	9	1	422	2.1%	0.2%
Meacham Lake	786	36	14	--	50	46	3	370	12.4%	0.8%
Rainbow Falls Reservoir	21	1	1	--	2	2	0	11	18.2%	0%
totals	**5491**	**110**	**58**	**--**	**168**	**149**	**13**	**2660**	**5.6%**	**0.5%**

Boats dirty = watercraft with any organic material, invasive, non-invasive or unknown.

Visitor Responses	AIS spread prevention awareness											# groups asked
	yes	Inspect	Wash	Drain	Bait	LW	Dry	Decon	same lake	first/frozen	didn't ask	
Blake Falls Reservoir	4	0	2	1	0	0	0	0	0	1	0	13
percentage of total groups asked	31%	0%	15%	8%	0%	0%	0%	0%	0%	8%	NA	
Carry Falls Reservoir (North)	231	14	64	70	1	7	1	2	44	53	13	473
percentage of total groups asked	49%	3%	14%	15%	0%	1%	0%	0%	9%	11%	NA	
Carry Falls Reservoir (South)	6	0	1	2	0	1	0	0	0	3	0	8
percentage of total groups asked	75%	0%	13%	25%	0%	13%	0%	0%	0%	38%	NA	
Forked Lake	595	117	170	150	0	5	157	0	131	156	4	762
percentage of total groups asked	78%	15%	22%	20%	0%	1%	21%	0%	17%	20%	NA	
Higley Flow (Higley Falls Reservoir)	345	4	17	19	2	4	17	0	152	155	15	451
percentage of total groups asked	76%	1%	4%	4%	0%	1%	4%	0%	34%	34%	NA	
Meacham Lake	160	36	61	29	0	5	58	3	16	42	16	317
percentage of total groups asked	50%	11%	19%	9%	0%	2%	18%	1%	5%	13%	NA	
Rainbow Falls Reservoir	3	1	0	2	0	0	0	0	0	0	0	11
percentage of total groups asked	27%	9%	0%	18%	0%	0%	0%	0%	0%	0%	NA	
totals	**1344**	**172**	**315**	**273**	**3**	**22**	**233**	**5**	**343**	**410**	**48**	**2035**
percentage of total groups asked	**66%**	**8%**	**15%**	**13%**	**0%**	**1%**	**11%**	**0%**	**17%**	**20%**	**NA**	

Yes = showed AIS spread prevention awareness; Drain = drained bilge; Bait = emptied bait bucket/disposed of bait; LW = drained livewell; Dry = dried boat; Decon = visited decon station; Same Lake = boat only goes in this lake; First/Frozen = first launch of the season or frozen boat.

State of Motorized Boat Registration
(n=1,310)

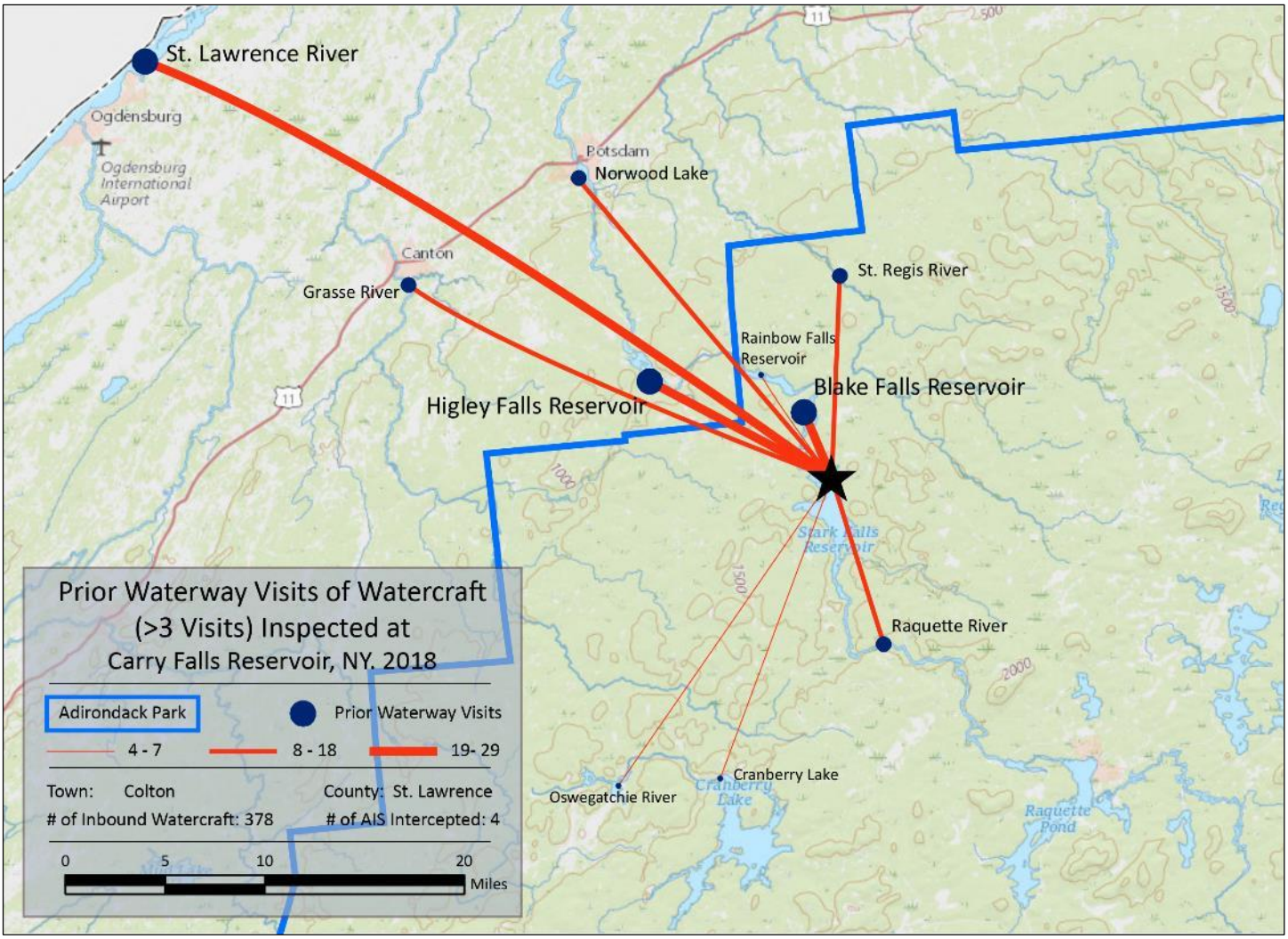


Organisms Removed	Organism Type									total # AIS	% of inspected boats w/AIS
	Non-invasive	BN*	CLP*	EF*	EWM*	VLM*	SWF*	WC*	ZM*		
Blake Falls Reservoir	1	0	0	0	0	0	0	0	0	0	0%
percentage of total orgs	100%	0%	0%	0%	0%	0%	0%	0%	0%		
Carry Falls Reservoir (North)	63	0	2	0	1	0	0	0	1	4	0.7%
percentage of total orgs	94%	0%	3%	0%	1%	0%	0%	0%	1%		
Carry Falls Reservoir (South)	1	0	0	0	0	0	0	0	0	0	0%
percentage of total orgs	100%	0%	0%	0%	0%	0%	0%	0%	0%		
Forked Lake	33	0	0	0	0	5	0	0	0	5	0.4%
percentage of total orgs	87%	0%	0%	0%	0%	13%	0%	0%	0%		
Higley Flow (Higley Falls Reservoir)	8	0	0	0	0	1	0	0	0	1	0.2%
percentage of total orgs	89%	0%	0%	0%	0%	11%	0%	0%	0%		
Meacham Lake	47	0	1	0	1	0	0	1	0	3	0.8%
percentage of total orgs	94%	0%	2%	0%	2%	0%	0%	2%	0%		
Rainbow Falls Reservoir	2	0	0	0	0	0	0	0	0	0	0%
percentage of total orgs	100%	0%	0%	0%	0%	0%	0%	0%	0%		
totals	**155**	**0**	**3**	**0**	**2**	**6**	**0**	**1**	**1**	**13**	**0.5%**
percentage of total orgs	**92%**	**0%**	**2%**	**0%**	**1%**	**4%**	**0%**	**1%**	**1%**		

Non-invasive = native aquatic or terrestrial material; BN = brittle naiad; CLP = curly-leaf pondweed; EF = European frogbit; EWM = Eurasian watermilfoil; VLM = variable-leaf milfoil; SWF = spiny waterflea; WC= water chestnut; ZM = zebra mussel; */AIS = aquatic invasive species.

Aquatic Invasive Species Intercepted by Stewards	# found on boats launching	Previous Waterway	# found on boats retrieving	Previous Waterway
curly-leaf pondweed	3	Carry Falls Reservoir: St. Lawrence River (2) Meacham Lake: St. Lawrence River (1)	0	N/A
Eurasian watermilfoil	2	Carry Falls Reservoir: St. Lawrence River (1) Meacham Lake: Meacham Lake (1)	0	N/A
variable-leaf milfoil	1	Higley Falls Reservoir: Carry Falls Reservoir (1)	5	Forked Lake (5)
water chestnut	0	N/A	1	Meacham Lake (previously in St. Lawrence River)
zebra mussel	1	Carry Falls Reservoir: Blake Falls Reservoir (previously in St. Lawrence River)	0	N/A
Totals	**7**		**6**	

Location	First Day	Last Day	Total Days
Blake Falls Reservoir	4 Aug	21 Aug	3
Carry Falls Reservoir (North)	26 May	3 Sept	41
Carry Falls Reservoir (South)	27 May	27 May	1
Forked Lake	26 May	2 Sept	64
Higley Flow (Higley Falls Reservoir)	26 May	26 July	42
Meacham Lake	26 May	15 Sept	51
Rainbow Falls Reservoir	10 Aug	28 Aug	4



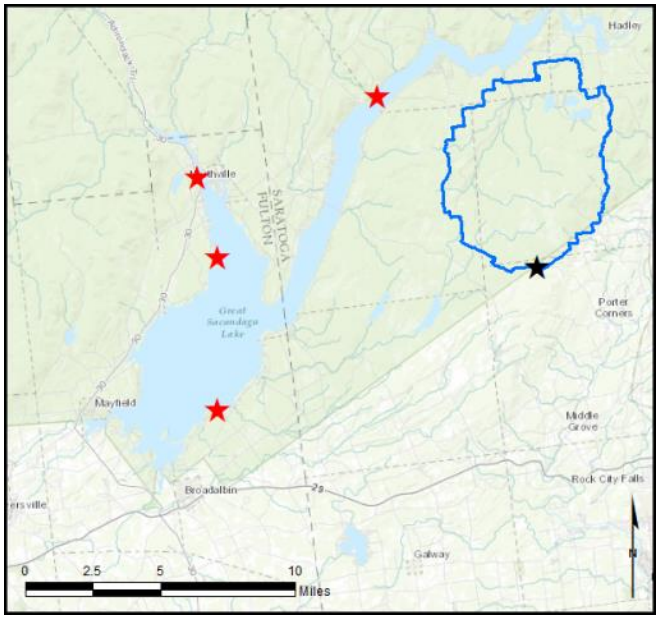
Carry Falls Boat Launch

Great Sacandaga Lake

AIS intercepted: 62
Boats inspected: 13,967
Dates of Operation: May 26 – October 20
Number of visitors: 28,683
Boats failing inspection: 2.9%

Total Number of Days Covered: Broadalbin 99, Day 67, Northampton 69, Northville 103
Weekly Coverage: 5 days
Visitors showing spread prevention awareness: 91%
Number of previously visited waterways: 86

AIS Present in Waterbody: Eurasian watermilfoil, spiny waterflea, brittle naiad
Stewardship History: 2009, 2014 - present
Partnership: Great Sacandaga Advisory Council, Great Sacandaga Lake Association



Watercraft	Boat Type										total # boats observed	total # boats inspected
	Barge	Canoe	Dock	Kayak	Motor	PWC	Row	Sail	SUP	Wind		
Broadalbin	0	34	0	193	4501	790	2	57	0	3	5580	5556
percentage of total boats	0%	1%	0%	3%	81%	14%	0%	1%	0%	0%	100%	100%
Day (Edinburg)	2	9	11	95	1467	301	5	8	0	0	1898	1877
percentage of total boats	0%	0%	1%	5%	77%	16%	0%	0%	0%	0%	100%	99%
Northampton	0	5	1	121	1720	742	4	24	6	0	2623	2491
percentage of total boats	0%	0%	0%	5%	66%	28%	0%	1%	0%	0%	100%	95%
Northville	10	29	13	259	3023	785	6	7	1	2	4135	4043
percentage of total boats	0%	1%	0%	6%	73%	19%	0%	0%	0%	0%	100%	98%
totals	**12**	**77**	**25**	**668**	**10711**	**2618**	**17**	**96**	**7**	**5**	**14236**	**13967**
percentage of total boats	**0%**	**1%**	**0%**	**5%**	**75%**	**18%**	**0%**	**1%**	**0%**	**0%**	**100%**	**98%**

Boats observed at launch, including those not inspected. PWC=personal watercraft, SUP=stand-up paddleboard, Wind=windsurfer.

	total # visitors	organisms found			total organisms	# boats dirty	# boats w/AIS	# of inspections	% of inspected boats dirty	% of inspected boats w/AIS
		entering	leaving	roadside						
Broadalbin	12600	51	57	--	108	102	19	5556	1.8%	0.3%
Day (Edinburg)	3634	9	14	--	23	23	6	1877	1.2%	0.3%
Northampton	3536	90	55	--	145	144	9	2491	5.8%	0.4%
Northville	8913	65	83	--	148	136	23	4043	3.4%	0.6%
totals	**28683**	**215**	**209**	**--**	**424**	**405**	**57**	**13967**	**2.9%**	**0.4%**

Boats dirty = watercraft with any organic material, invasive, non-invasive or unknown.

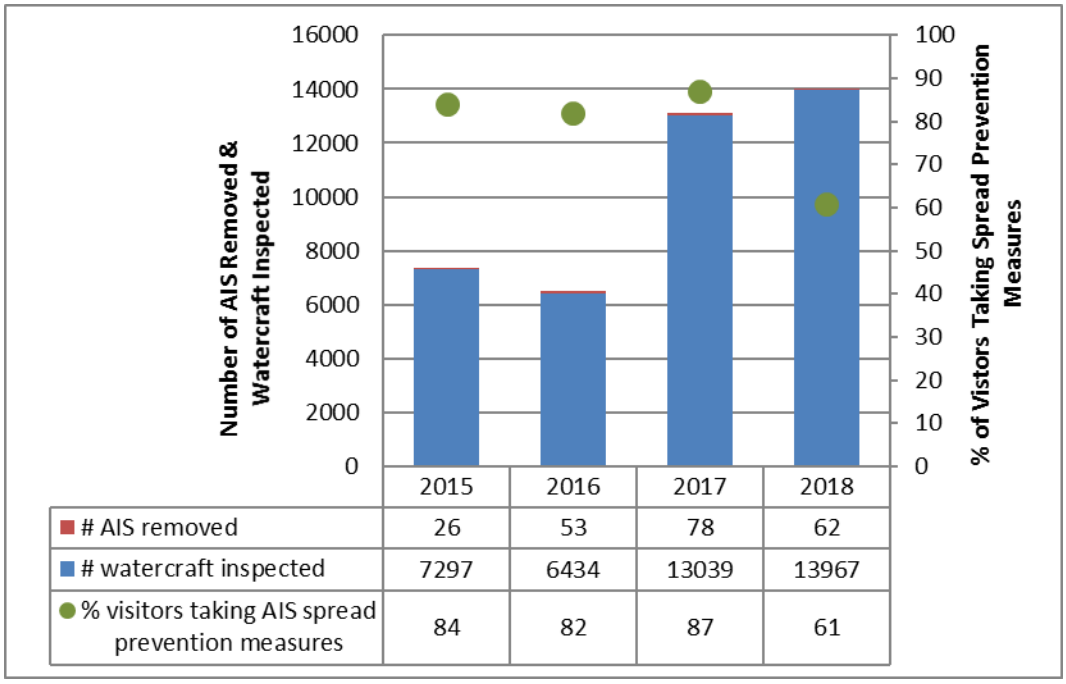
Visitor Responses	AIS spread prevention awareness											# groups asked
	yes	Inspect	Wash	Drain	Bait	LW	Dry	Decon	same lake	first/frozen	didn't ask	
Broadalbin	5270	853	310	699	203	172	722	126	3750	392	64	5423
percentage of total groups asked	97%	16%	6%	13%	4%	3%	13%	2%	69%	7%	NA	
Day (Edinburg)	1451	381	191	285	5	14	236	35	540	375	355	1497
percentage of total groups asked	97%	25%	13%	19%	0%	1%	16%	2%	36%	25%	NA	
Northampton	1759	138	81	145	5	11	139	16	1273	248	116	2313
percentage of total groups asked	76%	6%	4%	6%	0%	0%	6%	1%	55%	11%	NA	
Northville	3093	19	186	121	0	9	104	10	2381	469	552	3434
percentage of total groups asked	90%	1%	5%	4%	0%	0%	3%	0%	69%	14%	NA	
totals	**11573**	**1391**	**768**	**1250**	**213**	**206**	**1201**	**187**	**7944**	**1484**	**1087**	**12667**
percentage of total groups asked	**91%**	**11%**	**6%**	**10%**	**2%**	**2%**	**9%**	**1%**	**63%**	**12%**	**NA**	

Yes = showed AIS spread prevention awareness; Drain = drained bilge; Bait = emptied bait bucket/disposed of bait; LW = drained livewell; Dry = dried boat; Decon = visited decon station; Same Lake = boat only goes in this lake; First/Frozen = first launch of the season or frozen boat.

Organisms Removed	Organism Type									total # AIS	% of inspected boats w/AIS
	Non-invasive	BN*	CLP*	EF*	EWM*	VLM*	SWF*	WC*	ZM*		
Broadalbin	86	0	3	0	12	0	1	4	2	22	0.3%
percentage of total orgs	80%	0%	3%	0%	11%	0%	1%	4%	2%		
Day (Edinburg)	17	0	0	0	2	0	1	0	3	6	0.3%
percentage of total orgs	74%	0%	0%	0%	9%	0%	4%	0%	13%		
Northampton	136	1	0	0	3	0	2	3	0	9	0.4%
percentage of total orgs	94%	1%	0%	0%	2%	0%	1%	2%	0%		
Northville	123	1	1	0	13	0	2	4	4	25	0.6%
percentage of total orgs	83%	1%	1%	0%	9%	0%	1%	3%	3%		
totals	**362**	**2**	**4**	**0**	**30**	**0**	**6**	**11**	**9**	**62**	**0.4%**
percentage of total orgs	**85%**	**0%**	**1%**	**0%**	**7%**	**0%**	**1%**	**3%**	**2%**		

Non-invasive = native aquatic or terrestrial material; BN = brittle naiad; CLP = curly-leaf pondweed; EF = European frogbit; EWM = Eurasian watermilfoil; VLM = variable-leaf milfoil; SWF = spiny waterflea; WC= water chestnut; ZM = zebra mussel; */AIS = aquatic invasive species.

Aquatic Invasive Species Intercepted by Stewards	# found on boats launching	Previous Waterway	# found on boats retrieving	Previous Waterway
brittle naiad	0	N/A	2	Great Sacandaga Lake
curly-leaf pondweed	4	*None* (1), Oswego River (1), Otsego Lake (1), Saratoga Lake (1)	0	N/A
Eurasian watermilfoil	24	*None* (4), Saratoga Lake (4), Lake Ontario (3), Great Sacandaga Lake (2), Canada Lake (1), Delta Lake (1), Duane Lake (1), Hudson River (1), Lake George (1), Lake Mahopac (1), Lake Zoar (1), Mohawk River (1), Round Lake (1), St. Lawrence River (1), unspecified lake in New York (1)	6	Great Sacandaga Lake
spiny waterflea	2	Great Sacandaga Lake (2)	4	Great Sacandaga Lake
water chestnut	10	Great Sacandaga Lake - previously in Hudson, Mohawk and Saratoga (4), *None* (3), Hudson River (2), Mohawk River (1)	1	Great Sacandaga Lake - previously in Ontario River
zebra mussel	8	*None* (4), Saratoga Lake (4)	1	Great Sacandaga Lake - previously in Hudson River
Totals	**48**		**14**	

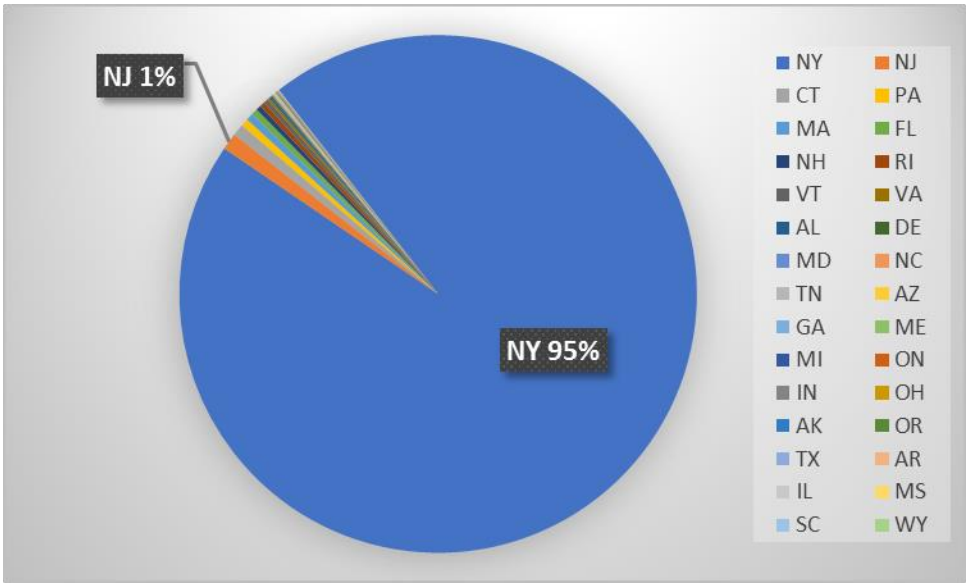


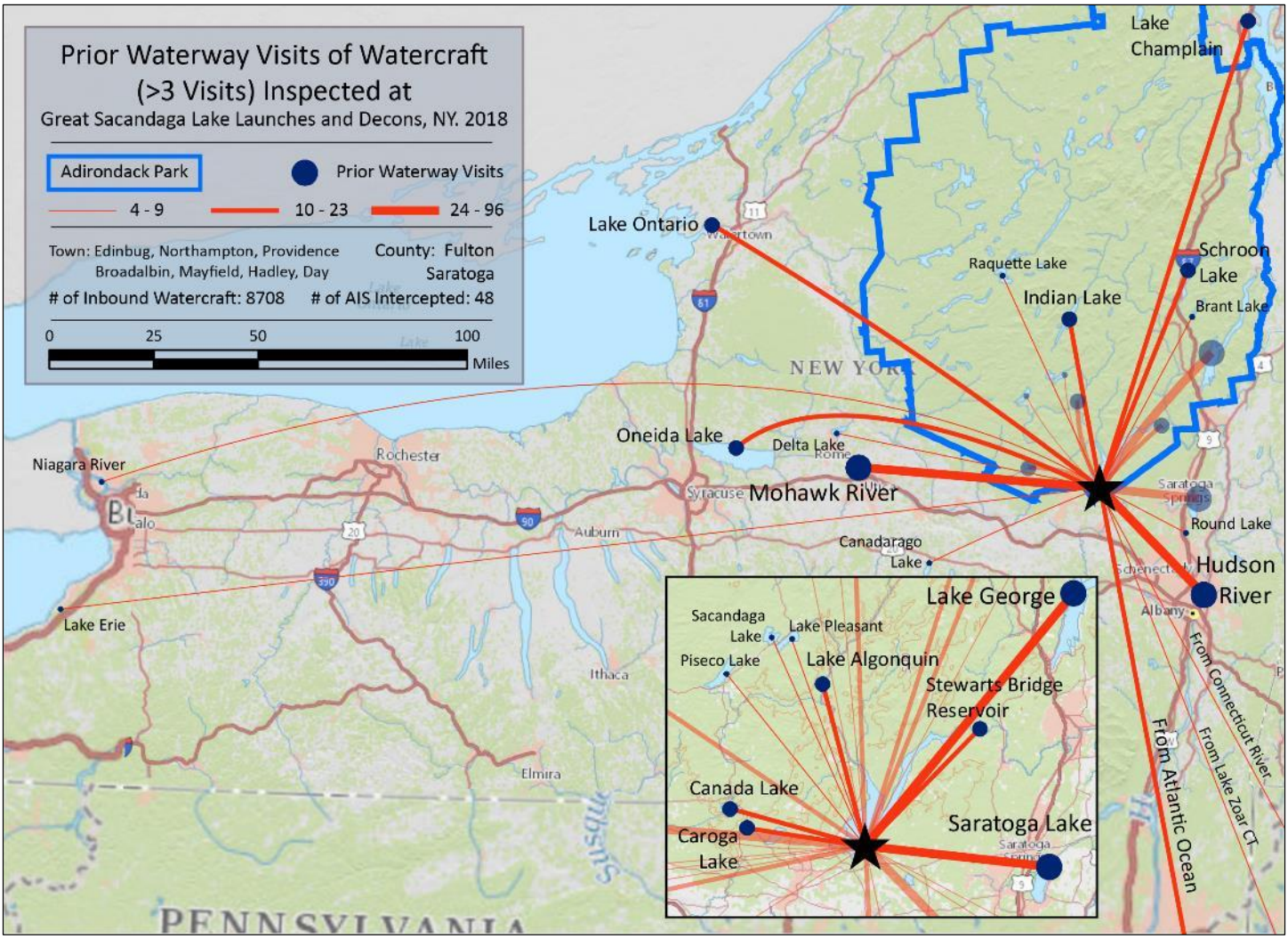
Previous Waterways for Launching Boats	# visits
SAME LAKE - PREVIOUS VISIT	5836
NONE	2156
NOT ASKED	145
Saratoga Lake	96
Hudson River	83
Lake George	83
Mohawk River	58
UNKNOWN (boater doesn't know)	38
Stewarts Bridge Reservoir	23
Schroon Lake	20
unspecified lake in New York	20
Lake Algonquin	18
Caroga Lake	14
Oneida Lake	14
Lake Champlain	13
Long Island Sound	13
Indian Lake	12
Lake Ontario	11
Canada Lake	10
Piseco Lake	9
RENTAL	9
Atlantic Ocean	8
Canadarago Lake	8
Connecticut River, CT	8
Sacandaga Lake	8
Brant Lake	7
Lake Zoar, Fairfield, CT	7
Niagara River	6
Round Lake, Saratoga County, NY	6
Lake Erie	5
Raquette Lake	5
Delta Lake	4

Previous Waterways for Launching Boats	# visits
Lake Pleasant	4
Ballston Lake	3
Candlewood Lake, Brookfield, CT	3
Fourth Lake	3
unspecified lake in the Adirondacks	3
Upper Saranac Lake	3
Black Lake	2
Blue Marsh Lake, Berks, PA	2
Cayuga Lake	2
Cazenovia Lake	2
Conesus Lake	2
Cranberry Lake	2
Fish Creek Ponds	2
Greenwood Lake, West Milford, NJ	2
Lake Lillinonah, Brookfield, CT	2
Lake Placid	2
Lake Winnipesaukee, Alton, NH	2
Lewey Lake	2
Long Lake	2
Loon Lake (Warren County)	2
Old Forge Pond, Old Forge, NY	2
Otisco Lake	2
Otsego Lake	2
Oxbow Lake	2
Tupper Lake	2
unspecified lake in Connecticut	2
Allagash Lake, ME	1
Bantam Lake, Morris, CT	1
Brantingham Lake, Greig, NY	1
Canandaigua Lake	1
Canistear Reservoir, Stockholm, NJ	1
Chateaugay Lake	1

Previous Waterways for Launching Boats	# visits
Cheat Lake, Eastern, WV	1
Chebacco Lake, Essex, MA	1
Chesapeake Bay, MD	1
Cranberry Lake, Byram Township, NJ	1
Delaware River, NJ	1
Duane Lake, Duanesburg, NY	1
Eighth Lake	1
Erie Canal	1
Highland Lake, Winchester, CT	1
Kayuta Lake	1
Lake Dunmore, Salisbury, VT	1
Lake Flower	1
Lake Garfield, Monterey, MA	1
Lake Hopatcong, Jefferson, NJ	1
Lake Mahopac, Mahopac,	1
Lake Musconetcong, Stanhope, NJ	1
Little Sebago Lake, Windham, ME	1
Lower Saranac Lake	1
Massabesic Lake, Auburn, NH	1
Oswego River	1
Pontoosuc Lake, Pittsfield, MA	1
Raquette River	1
Seneca Lake	1
Seventh Lake	1
Spy Lake, Arietta, NY	1
St. Lawrence River	1
Susquehanna River, NY	1
Swartswood Lake, NJ	1
Thames River, Groton, CT	1
unspecified lake in New Jersey	1
West Canada Lake	1
TOTAL BOATS	**8849**

State of Motorized Boat Registration
(n=10,724)





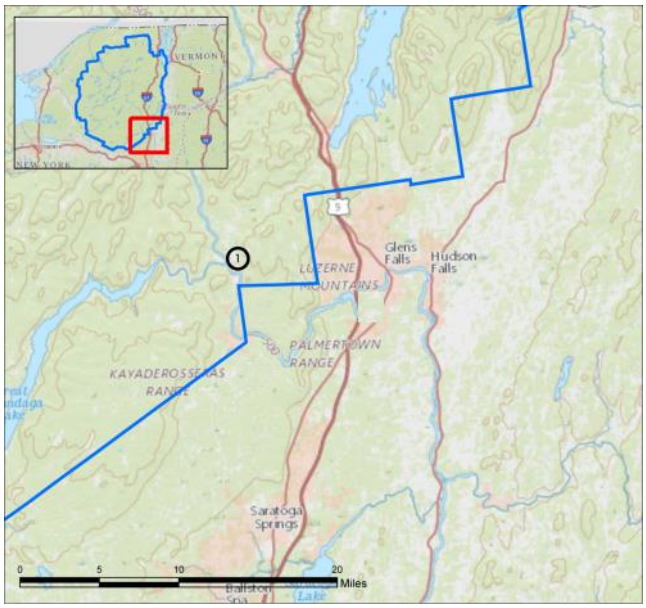
Broadalbin Boat Launch

Hudson River - Luzerne

AIS intercepted: 3
Boats inspected: 1,177
Dates of Operation: May 26 – October 8
Number of visitors: 2,331
Boats failing inspection: 0.3%

Total Number of Days Covered: 72
Weekly Coverage: 5 days
Visitors showing spread prevention awareness: 55%
Number of previously visited waterways: 15

AIS Present in Waterbody: Eurasian watermilfoil, variable-leaf milfoil, curly-leaf pondweed, water chestnut, zebra mussel, others
Stewardship History: 2017 – present



Watercraft	Boat Type										total # boats observed	total # boats inspected
	Barge	Canoe	Dock	Kayak	Motor	PWC	Row	Sail	SUP	Wind		
# of boats observed	1	4	0	76	941	175	0	0	3	0	1200	1177
percentage of total boats	0%	0%	0%	6%	78%	15%	0%	0%	0%	0%	100%	98%

Boats observed at launch, including those not inspected. PWC=personal watercraft, SUP=stand-up paddleboard, Wind=windsurfer.

total # visitors	organisms found			total organisms	# boats dirty	# boats w/AIS	# of inspections	% of inspected boats dirty	% of inspected boats w/AIS
	entering	leaving	roadside						
2331	3	1	--	4	4	3	1177	0.3%	0.3%

Boats dirty = watercraft with any organic material, invasive, non-invasive or unknown.

Visitor Responses	AIS spread prevention awareness											# groups asked
	yes	Inspect	Wash	Drain	Bait	LW	Dry	Decon	same lake	first/frozen	didn't ask	
# of groups	594	78	51	96	1	3	59	17	200	198	67	1080
percentage of total groups asked	55%	7%	5%	9%	0%	0%	5%	2%	19%	18%	NA	

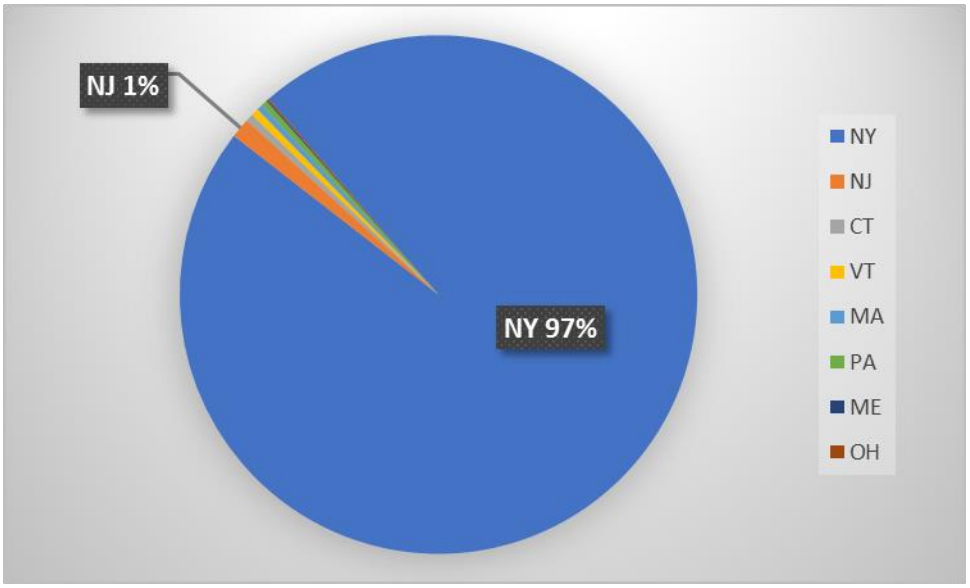
Yes = showed AIS spread prevention awareness; Drain = drained bilge; Bait = emptied bait bucket/disposed of bait; LW = drained livewell; Dry = dried boat; Decon = visited decon station; Same Lake = boat only goes in this lake; First/Frozen = first launch of the season or frozen boat.

Organisms Removed	Organism Type									total # AIS	% of inspected boats w/AIS
	Non-invasive	BN*	CLP*	EF*	EWM*	VLM*	SWF*	WC*	ZM*		
# of organisms	1	0	0	0	2	0	0	0	1	3	0.3%
percentage of total orgs	25%	0%	0%	0%	50%	0%	0%	0%	25%		

Non-invasive = native aquatic or terrestrial material; BN = brittle naiad; CLP = curly-leaf pondweed; EF = European frogbit; EWM = Eurasian watermilfoil; VLM = variable-leaf milfoil; SWF = spiny waterflea; WC= water chestnut; ZM = zebra mussel; */AIS = aquatic invasive species.

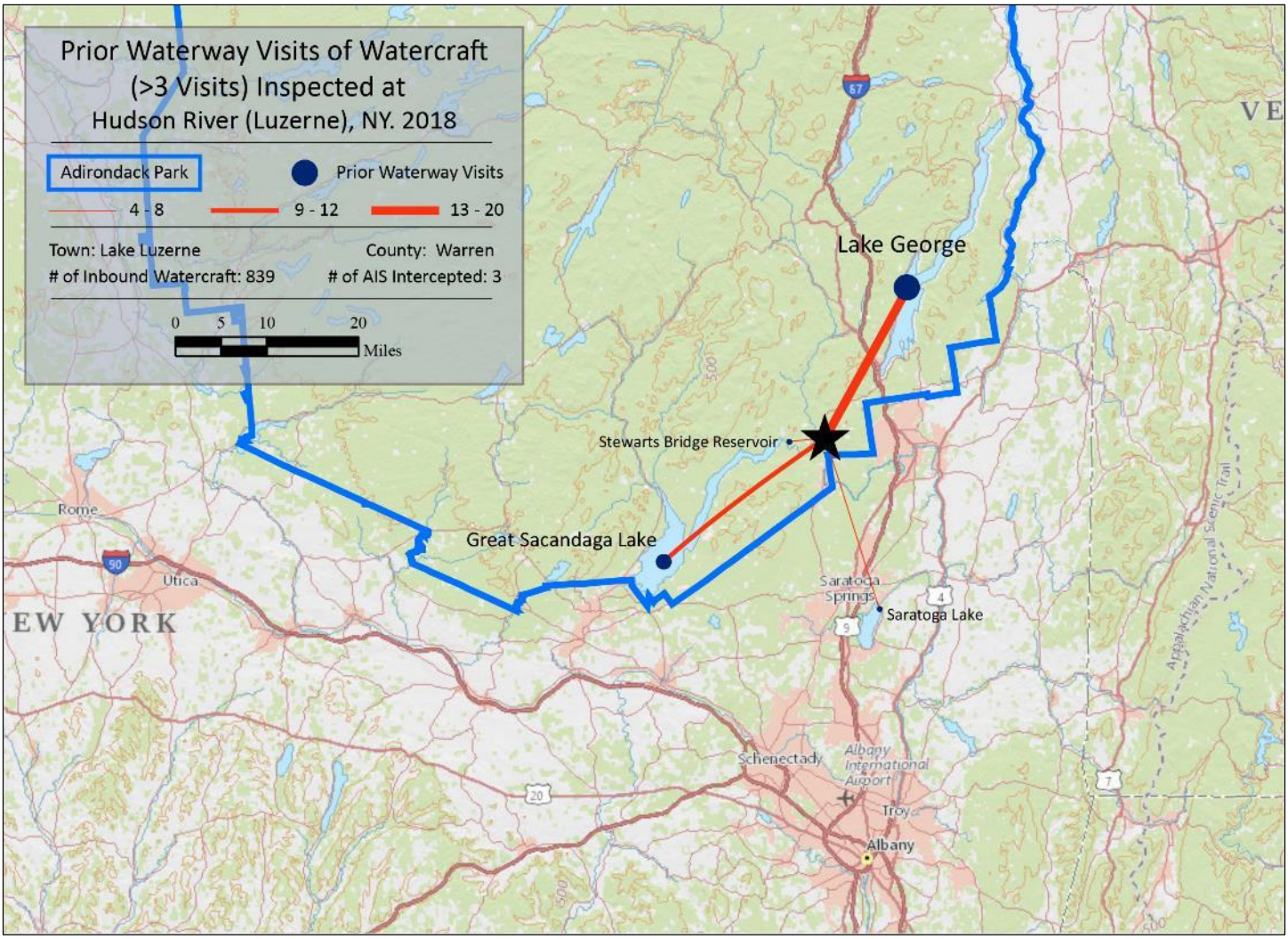
Aquatic Invasive Species Intercepted by Stewards	# found on boats launching	Previous Waterway	# found on boats retrieving	Previous Waterway
Eurasian watermilfoil	2	Hudson River (1), Saratoga Lake (1)	0	N/A
zebra mussel	1	*None* (1)	0	N/A
Totals	**3**		**0**	

State of Motorized Boat Registration
(n=1,058)



Previous Waterways for Launching Boats	# visits
SAME LAKE - PREVIOUS VISIT	459
NONE	232
NOT ASKED	91
Lake George	20
UNKNOWN (boater doesn't know)	13
Great Sacandaga Lake	12
Stewarts Bridge Reservoir	8
Saratoga Lake	7
Mohawk River	2
unspecified lake in New York	2

Previous Waterways for Launching Boats	# visits
Atlantic Ocean	1
Blue Mountain Lake	1
Brant Lake	1
Lake Flower	1
Middle Saranac Lake	1
Paradox Lake	1
Raquette Lake	1
Schroon Lake	1
Upper Saranac Lake	1
Waterbury Reservoir, Waterbury, VT	1
TOTAL BOATS	**856**



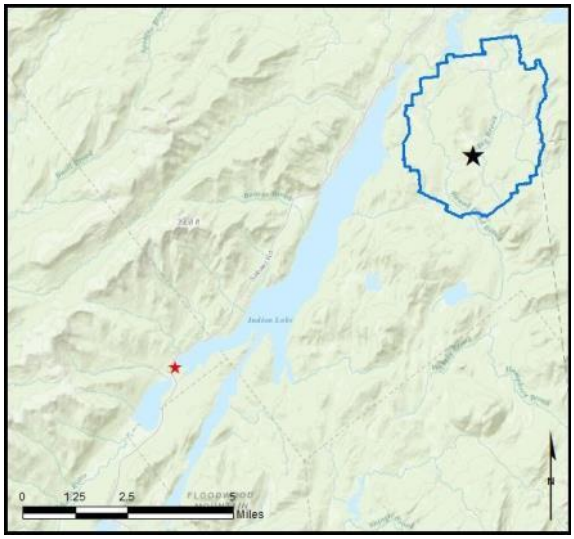
Luzerne Launch

Indian Lake

AIS intercepted: 2
Boats inspected: 2,898
Dates of Operation: May 26 – October 8
Number of visitors: 5,751
Boats failing inspection: 3.8%

Total Number of Days Covered: 98
Weekly Coverage: 5-7 days
Visitors showing spread prevention awareness: 83%
Number of previously visited waterways: 82

AIS Present in Waterbody: spiny waterflea
Stewardship History: 2015 - present
Partnership: Indian Lake Association



Watercraft	Boat Type										total # boats observed	total # boats inspected
	Barge	Canoe	Dock	Kayak	Motor	PWC	Row	Sail	SUP	Wind		
# of boats observed	0	585	0	848	1319	110	11	16	19	0	2908	2898
percentage of total boats	0%	20%	0%	29%	45%	4%	0%	1%	1%	0%	100%	100%

Boats observed at launch, including those not inspected. PWC=personal watercraft, SUP=stand-up paddleboard, Wind=windsurfer.

total # visitors	organisms found			total organisms	# boats dirty	# boats w/AIS	# of inspections	% of inspected boats dirty	% of inspected boats w/AIS
	entering	leaving	roadside						
5751	61	49	--	110	110	2	2898	3.8%	0.1%

Boats dirty = watercraft with any organic material, invasive, non-invasive or unknown.

Visitor Responses	AIS spread prevention awareness											# groups asked
	yes	Inspect	Wash	Drain	Bait	LW	Dry	Decon	same lake	first/frozen	didn't ask	
# of groups	1837	1299	237	1122	10	118	483	35	226	202	9	2223
percentage of total groups asked	83%	58%	11%	50%	0%	5%	22%	2%	10%	9%	NA	

Yes = showed AIS spread prevention awareness; Drain = drained bilge; Bait = emptied bait bucket/disposed of bait; LW = drained livewell; Dry = dried boat; Decon = visited decon station; Same Lake = boat only goes in this lake; First/Frozen = first launch of the season or frozen boat.

Organisms Removed	Organism Type									total # AIS	% of inspected boats w/AIS
	Non-invasive	BN*	CLP*	EF*	EWM*	VLM*	SWF*	WC*	ZM*		
# of organisms	108	0	0	0	0	0	0	1	1	2	0.1%
percentage of total orgs	98%	0%	0%	0%	0%	0%	0%	1%	1%		

Non-invasive = native aquatic or terrestrial material; BN = brittle naiad; CLP = curly-leaf pondweed; EF = European frogbit; EWM = Eurasian watermilfoil; VLM = variable-leaf milfoil; SWF = spiny waterflea; WC= water chestnut; ZM = zebra mussel; */AIS = aquatic invasive species.

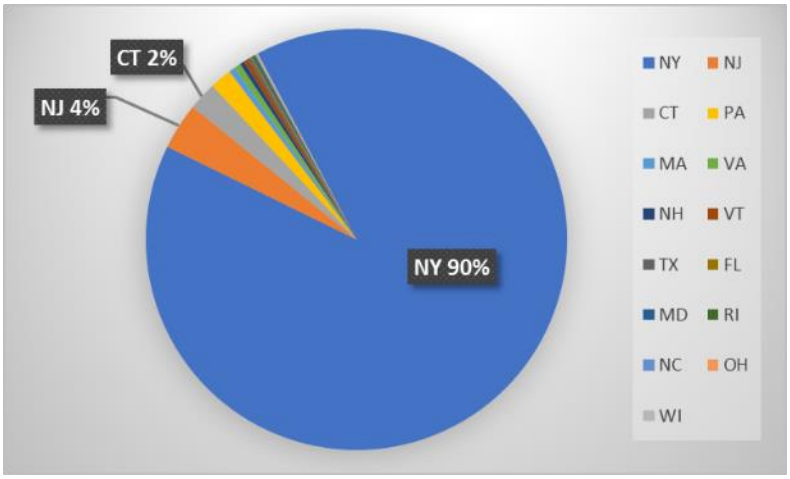
Aquatic Invasive Species Intercepted by Stewards	# found on boats launching	Previous Waterway	# found on boats retrieving	Previous Waterway
water chestnut	1	*Unknown* (1)	0	N/A
zebra mussel	1	Otsego Lake (1)	0	N/A

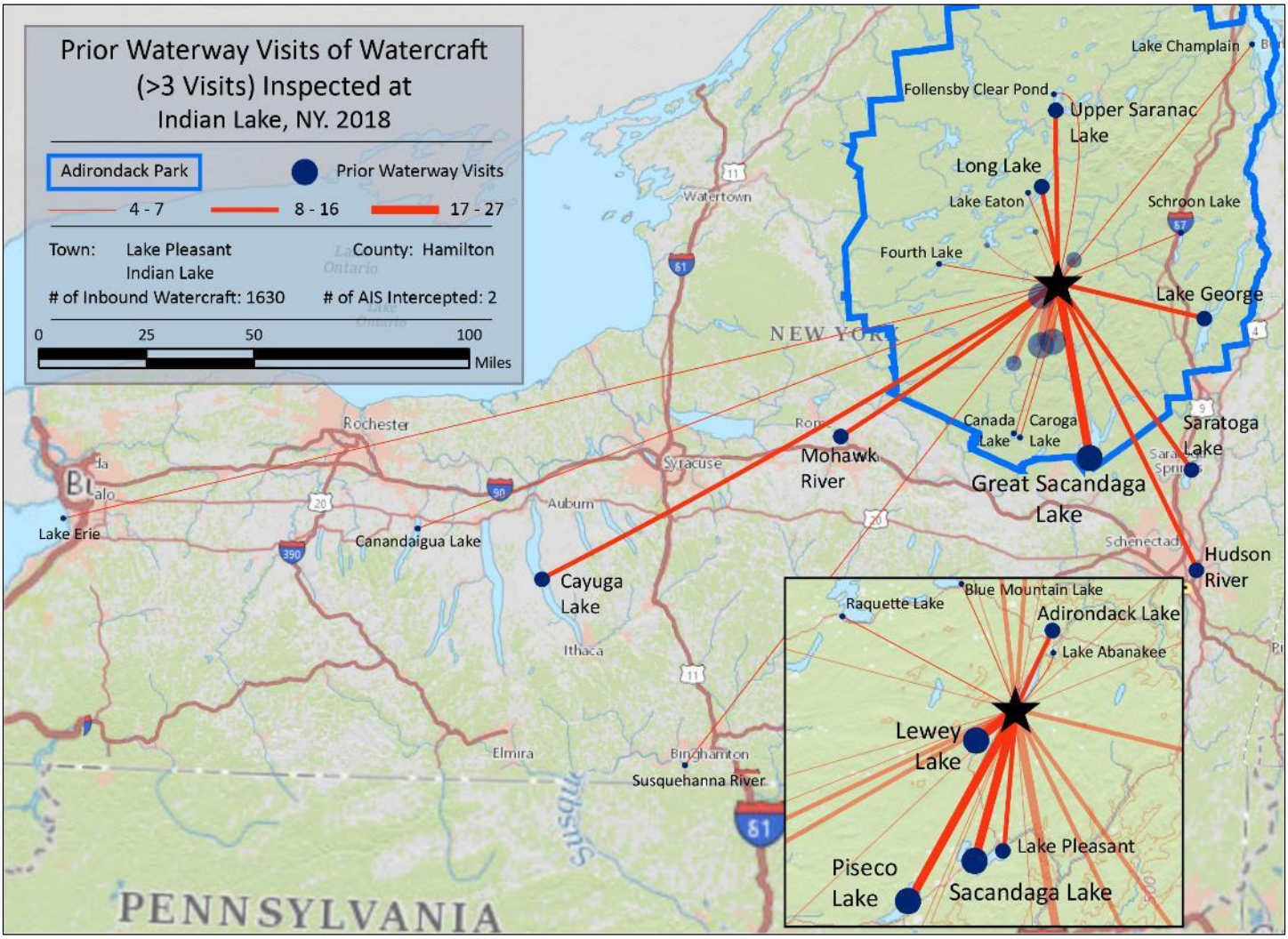
Previous Waterways for Launching Boats	# visits
NONE	721
SAME LAKE - PREVIOUS VISIT	358
RENTAL	151
Sacandaga Lake	27
unspecified lake in New York	23
Great Sacandaga Lake	22
Lewey Lake	20
Piseco Lake	18
UNKNOWN (boater doesn't know)	17
Mohawk River	16
Lake Adirondack	15
Lake Pleasant	13
Hudson River	12
Saratoga Lake	10
Cayuga Lake	9
Long Lake	9
Upper Saranac Lake	9
Lake George	8
Lake Eaton	7
NOT ASKED	7
Raquette Lake	7
Blue Mountain Lake	6
Canandaigua Lake	6
Lake Abanakee, Indian Lake, NY	6
Schroon Lake	6
Erie Canal	5
Follensby Clear Pond	5
Lake Champlain	5
Susquehanna River, NY	5
Canada Lake	4
Caroga Lake	4
Fourth Lake	4

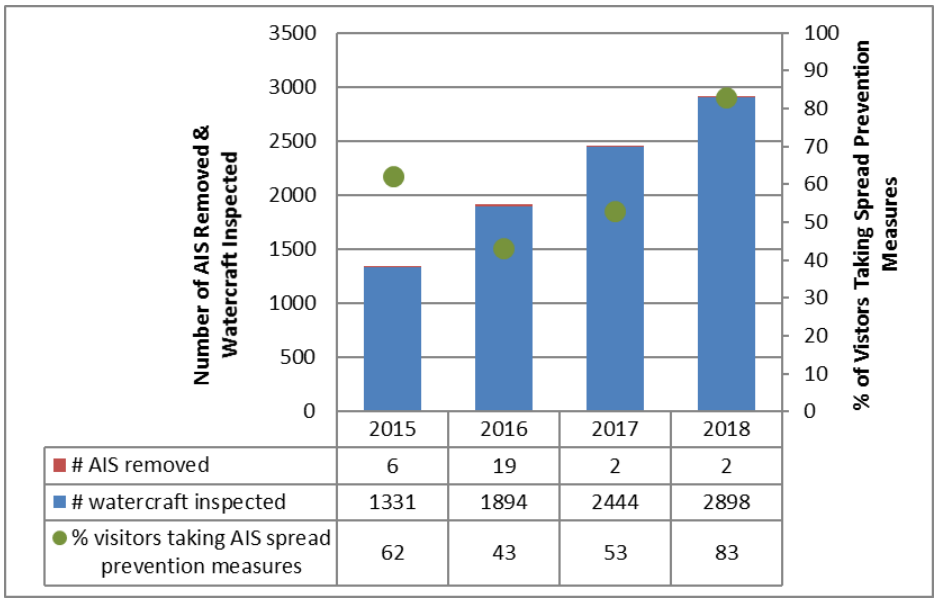
Previous Waterways for Launching Boats	# visits
unspecified lake in the Adirondacks	4
Big Moose Lake	3
Canadarago Lake	3
Fish Creek Ponds	3
Lake Durant, Indian Lake, NY	3
Round Lake, Saratoga County, NY	3
Tupper Lake	3
unspecified lake in New Jersey	3
Atlantic Ocean	2
Chateaugay Lake	2
Cranberry Lake	2
Delta Lake	2
Goodyear Lake, Milford, NY	2
Hemlock Lake	2
Henderson Lake, Newcomb, NY	2
Jamesville Reservoir , Lafayette, NY	2
Lake Algonquin	2
Little Clear Pond	2
Lows Lake	2
Mason Lake, Lake Pleasant, NY	2
Moreau Lake, Moreau, NY	2
Otsego Lake	2
Paradox Lake	2
Rockwood Lake, Fulton County, NY	2
Seventh Lake	2
Skaneateles Lake	2
St. Lawrence River	2
Stoner Lakes, Caroga, NY	2
unspecified lake in Vermont	2
Ballston Lake	1
Bear Lake, Fine, NY	1
Blue Marsh Lake, Berks, PA	1

Previous Waterways for Launching Boats	# visits
Brant Lake	1
Chesapeake Bay, MD	1
Conesus Lake	1
Connecticut River, CT	1
Cossayuna Lake, Argyle, NY	1
Cranberry Lake, Byram Township, NJ	1
Finger Lakes (unspecified)	1
Forked Lake	1
Hinckley Reservoir	1
Lake Cochituate, Framingham, MA	1
Lake Erie	1
Lake Francis, Indian Lake, NY	1
Lake Harris	1
Lake Moraine	1
Lake Ontario	1
Manasquan Reservoir, Howell, NJ	1
Meacham Lake	1
Mountain View Lake	1
North Lake, Ohio, NY	1
Oneida Lake	1
Oneida River	1
Oxbow Lake	1
Salmon River Reservoir, Redfield, NY	1
Silver Lake, Perry, NY	1
Swinging Bridge Reservoir, Bethel, NY	1
Third Lake	1
Thirteenth Lake, Johnsburg, NY	1
unspecified lake in Lewis County	1
unspecified lake in New Hampshire	1
unspecified lake in Pennsylvania	1
unspecified lake near Syracuse	1
TOTAL BOATS	**1636**

State of Motorized Boat Registration
(n=1,425)







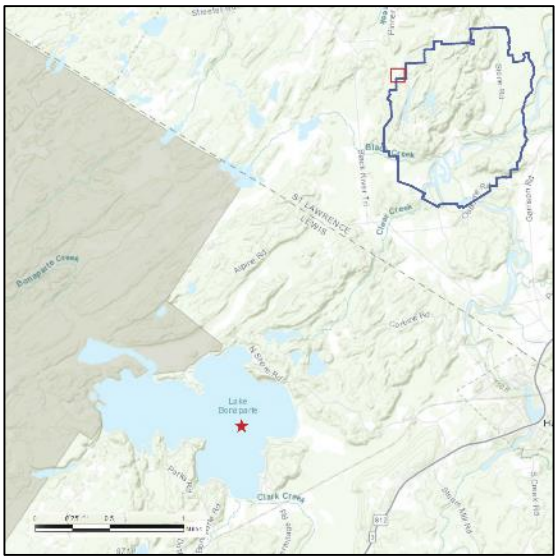
	2015	2016	2017	2018
# AIS removed	6	19	2	2
# watercraft inspected	1331	1894	2444	2898
% visitors taking AIS spread prevention measures	62	43	53	83

Lake Bonaparte

AIS intercepted: 12
Boats inspected: 844
Dates of Operation: May 26 – July 9
Number of visitors: 1,868
Boats failing inspection: 1.5%

Total Number of Days Covered: 32
Weekly Coverage: 5 days
Visitors showing spread prevention awareness: 68%
Number of previously visited waterways: 14

AIS Present in Waterbody: Eurasian watermilfoil
Stewardship History: First year



Watercraft	Boat Type										total # boats observed	total # boats inspected
	Barge	Canoe	Dock	Kayak	Motor	PWC	Row	Sail	SUP	Wind		
# of boats observed	1	14	0	212	535	83	1	0	0	0	846	844
percentage of total boats	0%	2%	0%	25%	63%	10%	0%	0%	0%	0%	100%	100%

Boats observed at launch, including those not inspected. PWC=personal watercraft, SUP=stand-up paddleboard, Wind=windsurfer.

total # visitors	organisms found			total organisms	# boats dirty	# boats w/AIS	# of inspections	% of inspected boats dirty	% of inspected boats w/AIS
	entering	leaving	roadside						
1868	0	13	--	13	13	12	844	1.5%	1.4%

Boats dirty = watercraft with any organic material, invasive, non-invasive or unknown.

Visitor Responses	AIS spread prevention awareness											# groups asked
	yes	Inspect	Wash	Drain	Bait	LW	Dry	Decon	same lake	first/frozen	didn't ask	
# of groups	497	70	70	65	35	21	16	0	262	128	2	736
percentage of total groups asked	68%	10%	10%	9%	5%	3%	2%	0%	36%	17%	NA	

Yes = showed AIS spread prevention awareness; Drain = drained bilge; Bait = emptied bait bucket/disposed of bait; LW = drained livewell; Dry = dried boat; Decon = visited decon station; Same Lake = boat only goes in this lake; First/Frozen = first launch of the season or frozen boat.

Organisms Removed	Organism Type									total # AIS	% of inspected boats w/AIS
	Non-invasive	BN*	CLP*	EF*	EWM*	VLM*	SWF*	WC*	ZM*		
# of organisms	1	0	0	0	10	2	0	0	0	12	1.4%
percentage of total orgs	8%	0%	0%	0%	77%	15%	0%	0%	0%		

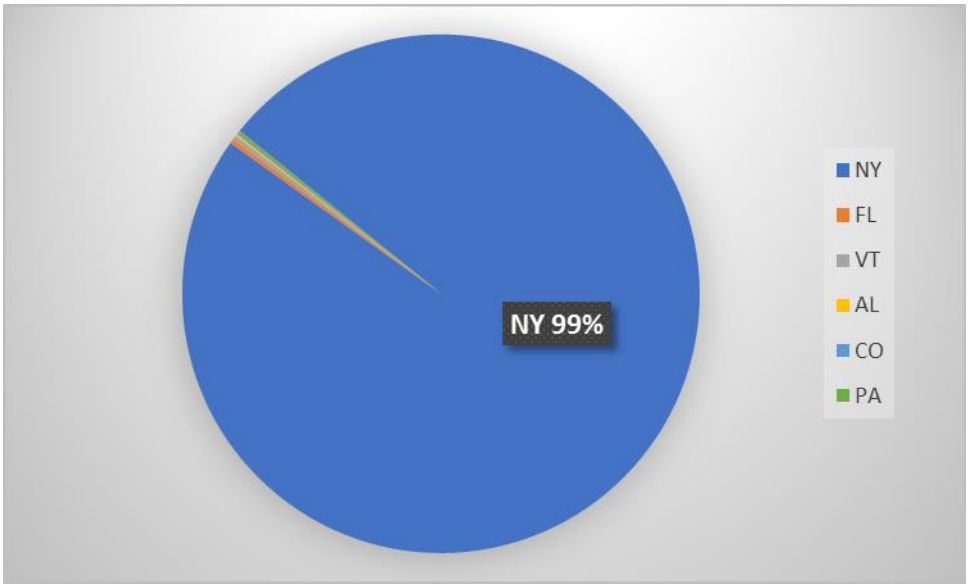
Non-invasive = native aquatic or terrestrial material; BN = brittle naiad; CLP = curly-leaf pondweed; EF = European frogbit; EWM = Eurasian watermilfoil; VLM = variable-leaf milfoil; SWF = spiny waterflea; WC= water chestnut; ZM = zebra mussel; */AIS = aquatic invasive species.

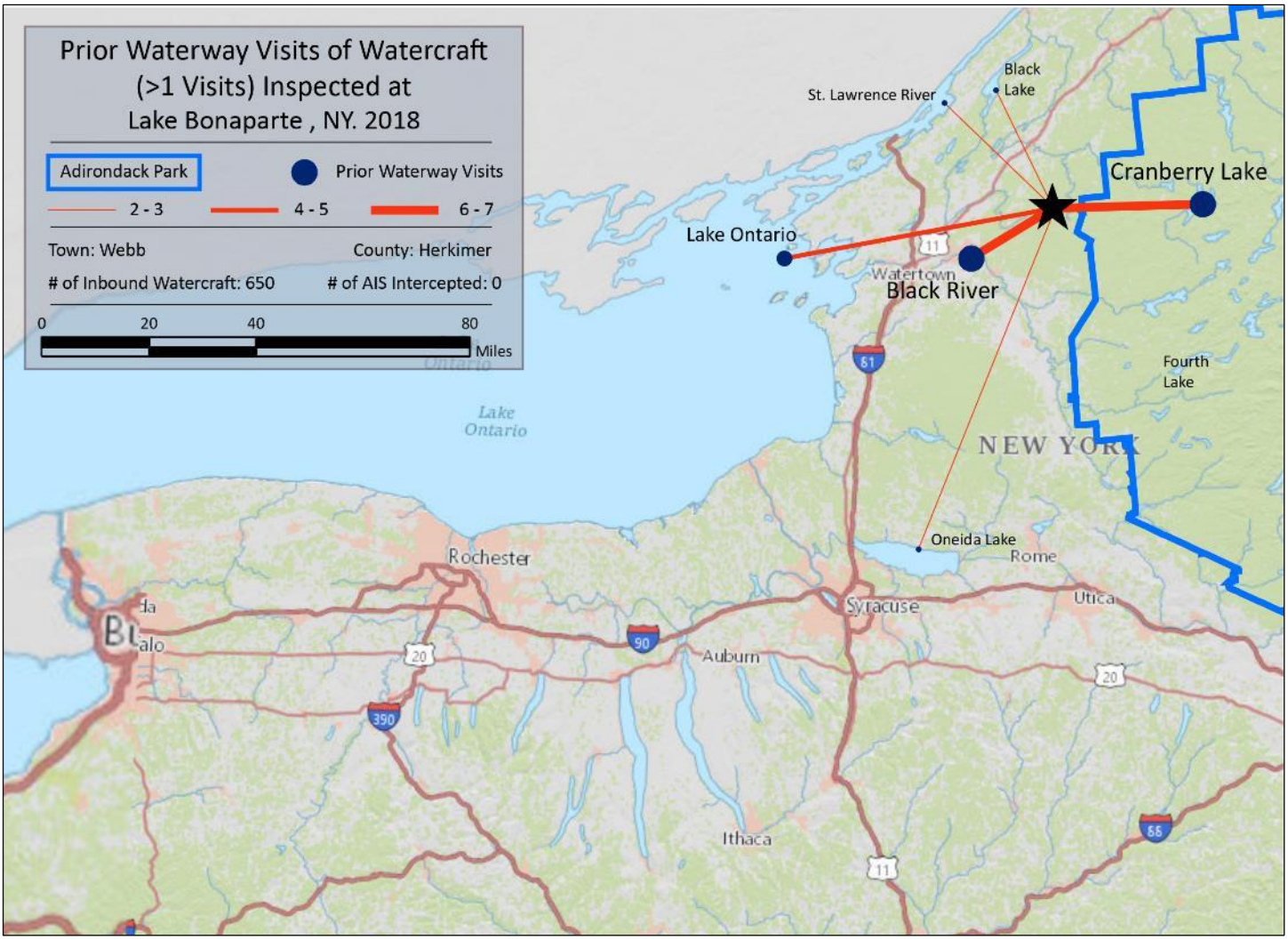
Aquatic Invasive Species Intercepted by Stewards	# found on boats launching	Previous Waterway	# found on boats retrieving	Previous Waterway
Eurasian watermilfoil	0	N/A	10	Lake Bonaparte
variable-leaf milfoil	0	N/A	2	Lake Bonaparte
Totals	**0**		**12**	

Previous Waterways for Launching Boats	# visits
SAME LAKE - PREVIOUS VISIT	386
NONE	214
Black River	7
unspecified lake in New York	7
Cranberry Lake	6
Lake Ontario	5
RENTAL	5
UNKNOWN (boater doesn't know)	5
Black Lake	3
St. Lawrence River	3

Previous Waterways for Launching Boats	# visits
Oneida Lake	2
Forked Lake	1
Fourth Lake	1
Harriman Reservoir, Wilmington, VT	1
Hemlock Lake	1
Indian Lake	1
Lake Quinsigamond, Shrewsbury, MA	1
Lake Scranton, Scranton, PA	1
NOT ASKED	1
Red Lake, Theresa, NY	1
TOTAL BOATS	**652**

State of Motorized Boat Registration
(n=734)



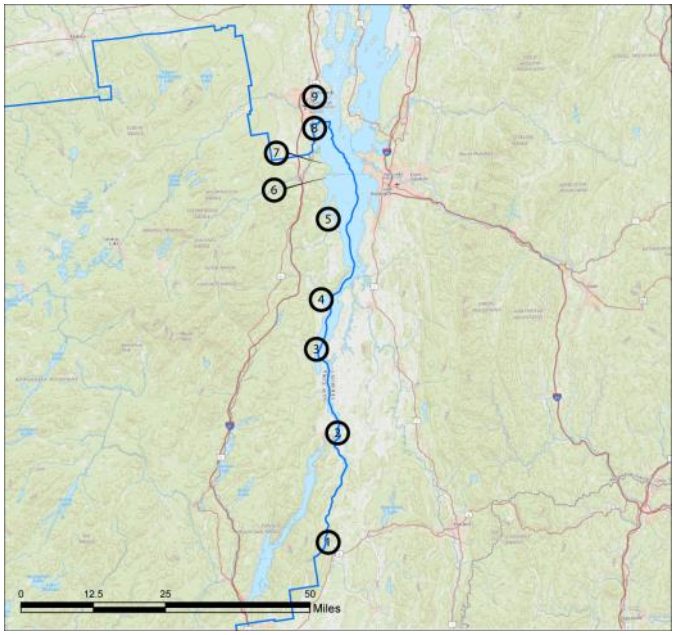


Lake Bonaparte

Lake Champlain

AIS intercepted: 3,390
Boats inspected: 16,445
Dates of Operation: May 26 – November 2
Number of visitors: 33,324
Boats failing inspection: 23.6%

Visitors showing spread prevention awareness: 83%
Number of previously visited waterways: 122
AIS Present in Waterbody: Eurasian watermilfoil, variable-leaf milfoil, curly-leaf pondweed, water chestnut, zebra mussel, European frogbit, spiny waterflea, brittle naiad, yellow floating heart
Stewardship History: 2016 - present
Partnership: Lake Champlain Basin Program
Notes: The Lake Champlain Basin Program provided steward coverage at the Peru launch in addition to AWI stewards.



1-South Bay; 2-Ticonderoga; 3-Port Henry; 4-Westport; 5-Willsboro; 6-Port Douglas; 7-Port Kent; 8-Peru; 9-Plattsburgh

Watercraft	Boat Type										total # boats observed	total # boats inspected
	Barge	Canoe	Dock	Kayak	Motor	PWC	Row	Sail	SUP	Wind		
Crown Point	0	7	0	120	115	22	2	6	0	0	272	256
percentage of total boats	0%	3%	0%	44%	42%	8%	1%	2%	0%	0%	100%	94%
Peru	0	30	0	137	1609	175	4	10	1	0	1966	1898
percentage of total boats	0%	2%	0%	7%	82%	9%	0%	1%	0%	0%	100%	97%
Plattsburgh	0	0	2	74	1729	178	3	121	3	5	2115	1987
percentage of total boats	0%	0%	0%	3%	82%	8%	0%	6%	0%	0%	100%	94%
Port Douglas	0	16	0	28	1581	119	0	5	6	0	1755	1739
percentage of total boats	0%	1%	0%	2%	90%	7%	0%	0%	0%	0%	100%	99%
Port Henry	0	0	0	22	2102	84	1	2	0	0	2211	2035
percentage of total boats	0%	0%	0%	1%	95%	4%	0%	0%	0%	0%	100%	92%
South Bay	0	24	0	119	1847	19	17	1	0	0	2027	2016
percentage of total boats	0%	1%	0%	6%	91%	1%	1%	0%	0%	0%	100%	99%
Ticonderoga	0	22	0	90	3479	26	2	2	0	0	3621	3588
percentage of total boats	0%	1%	0%	2%	96%	1%	0%	0%	0%	0%	100%	99%
Westport	0	28	8	118	1578	55	5	40	2	0	1834	1750
percentage of total boats	0%	2%	0%	6%	86%	3%	0%	2%	0%	0%	100%	95%
Willsboro	0	23	3	48	982	114	0	6	9	0	1185	1176
percentage of total boats	0%	2%	0%	4%	83%	10%	0%	1%	1%	0%	100%	99%
totals	**0**	**150**	**13**	**756**	**15022**	**792**	**34**	**193**	**21**	**5**	**16986**	**16445**
percentage of total boats	**0%**	**1%**	**0%**	**4%**	**88%**	**5%**	**0%**	**1%**	**0%**	**0%**	**100%**	**97%**

Boats observed at launch, including those not inspected. PWC=personal watercraft, SUP=stand-up paddleboard, Wind=windsurfer.

	total # visitors	organisms found			total organisms	# boats dirty	# boats w/AIS	# of inspections	% of inspected boats dirty	% of inspected boats w/AIS
		entering	leaving	roadside						
Crown Point	453	63	144	--	207	134	57	256	52.3%	22.3%
Peru	4070	70	222	--	292	198	50	1898	10.4%	2.6%
Plattsburgh	3728	25	205	--	230	191	140	1987	9.6%	7.0%
Port Douglas	3794	19	204	--	223	161	68	1739	9.3%	3.9%
Port Henry	4815	28	648	--	676	390	256	2035	19.2%	12.6%
South Bay	4008	54	720	--	774	434	326	2016	21.5%	16.2%
Ticonderoga	6203	78	3360	--	3438	1531	1086	3588	42.7%	30.3%
Westport	3792	100	1371	--	1471	771	494	1750	44.1%	28.2%
Willsboro	2461	16	91	--	107	74	42	1176	6.3%	3.6%
totals	**33324**	**453**	**6965**	**--**	**7418**	**3884**	**2519**	**16445**	**23.6%**	**15.3%**

Boats dirty = watercraft with any organic material, invasive, non-invasive or unknown.

Visitor Responses	AIS spread prevention awareness											# groups asked
	yes	Inspect	Wash	Drain	Bait	LW	Dry	Decon	same lake	first/frozen	didn't ask	
Crown Point	166	44	49	53	0	12	99	0	34	31	17	185
percentage of total groups asked	90%	24%	26%	29%	0%	6%	54%	0%	18%	17%	NA	
Peru	1673	942	512	667	1	58	118	38	432	164	66	1830
percentage of total groups asked	91%	51%	28%	36%	0%	3%	6%	2%	24%	9%	NA	
Plattsburgh	1136	301	286	406	19	221	164	19	457	99	660	1420
percentage of total groups asked	80%	21%	20%	29%	1%	16%	12%	1%	32%	7%	NA	
Port Douglas	1492	358	301	469	18	91	188	19	718	141	74	1659
percentage of total groups asked	90%	22%	18%	28%	1%	5%	11%	1%	43%	8%	NA	
Port Henry	1982	129	66	575	18	367	155	11	1100	124	115	2054
percentage of total groups asked	96%	6%	3%	28%	1%	18%	8%	1%	54%	6%	NA	
South Bay	644	307	134	81	6	53	86	15	111	160	14	1967
percentage of total groups asked	33%	16%	7%	4%	0%	3%	4%	1%	6%	8%	NA	
Ticonderoga	2895	2225	87	1517	30	291	361	33	117	39	439	3125
percentage of total groups asked	93%	71%	3%	49%	1%	9%	12%	1%	4%	1%	NA	
Westport	1558	405	560	273	2	83	181	49	590	146	117	1662
percentage of total groups asked	94%	24%	34%	16%	0%	5%	11%	3%	35%	9%	NA	
Willsboro	983	207	143	228	2	47	110	58	459	161	28	1114
percentage of total groups asked	88%	19%	13%	20%	0%	4%	10%	5%	41%	14%	NA	
totals	**12529**	**4918**	**2138**	**4269**	**96**	**1223**	**1462**	**242**	**4018**	**1065**	**1530**	**15016**
percentage of total groups asked	**83%**	**33%**	**14%**	**28%**	**1%**	**8%**	**10%**	**2%**	**27%**	**7%**	**NA**	

Yes = showed AIS spread prevention awareness; Drain = drained bilge; Bait = emptied bait bucket/disposed of bait; LW = drained livewell; Dry = dried boat; Decon = visited decon station; Same Lake = boat only goes in this lake; First/Frozen = first launch of the season or frozen boat.

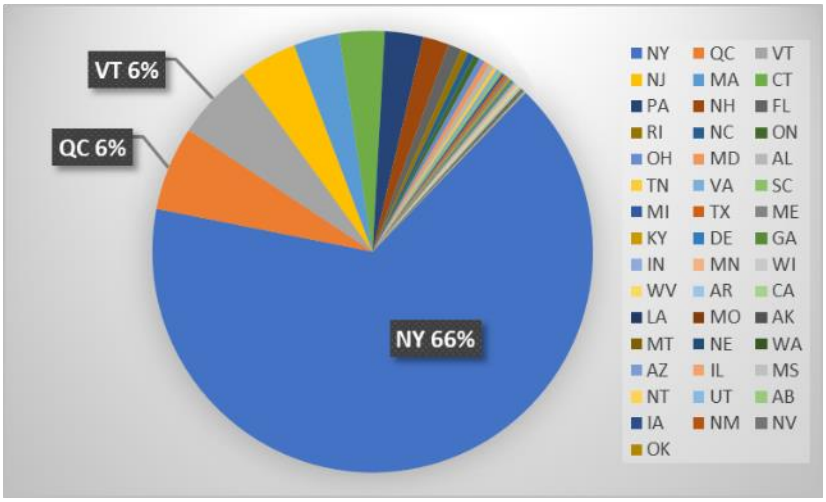
Organisms Removed	Organism Type									total # AIS	% of inspected boats w/AIS
	Non-invasive	BN*	CLP*	EF*	EWM*	VLM*	SWF*	WC*	ZM*		
Crown Point	123	0	23	0	48	3	0	0	10	84	22.3%
percentage of total orgs	59%	0%	11%	0%	23%	1%	0%	0%	5%		
Peru	238	0	2	0	35	8	0	0	9	54	2.6%
percentage of total orgs	82%	0%	1%	0%	12%	3%	0%	0%	3%		
Plattsburgh	79	0	13	0	135	0	0	0	3	151	7.0%
percentage of total orgs	34%	0%	6%	0%	59%	0%	0%	0%	1%		
Port Douglas	145	0	15	0	54	5	0	0	4	78	3.9%
percentage of total orgs	65%	0%	7%	0%	24%	2%	0%	0%	2%		
Port Henry	337	2	102	0	160	44	0	1	30	339	12.6%
percentage of total orgs	50%	0%	15%	0%	24%	7%	0%	0%	4%		
South Bay	297	0	69	0	158	9	0	216	25	477	16.2%
percentage of total orgs	38%	0%	9%	0%	20%	1%	0%	28%	3%		
Ticonderoga	1869	11	408	0	653	69	0	10	418	1569	30.3%
percentage of total orgs	54%	0%	12%	0%	19%	2%	0%	0%	12%		
Westport	879	8	309	0	194	16	14	2	49	592	28.2%
percentage of total orgs	60%	1%	21%	0%	13%	1%	1%	0%	3%		
Willsboro	61	0	7	0	32	1	0	0	6	46	3.6%
percentage of total orgs	57%	0%	7%	0%	30%	1%	0%	0%	6%		
totals	**4028**	**21**	**948**	**0**	**1469**	**155**	**14**	**229**	**554**	**3390**	**15.3%**
percentage of total orgs	**54%**	**0%**	**13%**	**0%**	**20%**	**2%**	**0%**	**3%**	**7%**		

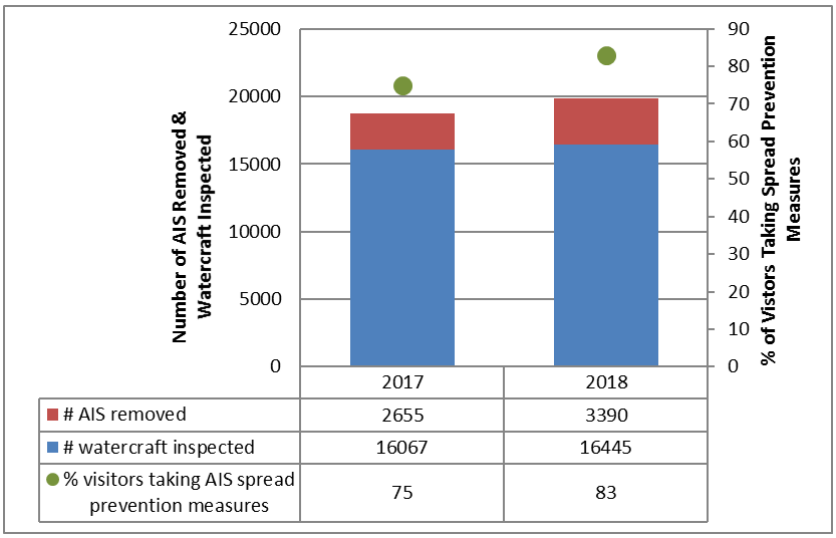
Non-invasive = native aquatic or terrestrial material; BN = brittle naiad; CLP = curly-leaf pondweed; EF = European frogbit; EWM = Eurasian watermilfoil; VLM = variable-leaf milfoil; SWF = spiny waterflea; WC= water chestnut; ZM = zebra mussel; */AIS = aquatic invasive species.

Location	First Day	Last Day	Total Days
Crown Point	26 May	2 Sept	68
Peru	26 May	29 Sept	73
Plattsburgh	26 May	3 Sept	68
Port Douglas	26 May	17 Aug	60
Port Henry	26 May	21 Oct	114
South Bay	26 May	8 Oct	98
Ticonderoga	26 May	2 Nov	115
Westport	26 May	29 Oct	102
Willsboro	26 May	2 Sept	63

Aquatic Invasive Species Intercepted by Stewards	# found on boats launching	Previous Waterway	# found on boats retrieving	Previous Waterway
brittle naiad	0	N/A	21	Lake Champlain
curly-leaf pondweed	43	Lake Champlain (41), *None* (1), *Unknown* (1)	905	Lake Champlain
Eurasian watermilfoil	99	Lake Champlain (81), *None* (5), *Rental* (4), Lake Bomoseen (2), *Unknown* (2), Black Lake (1), Candlewood Lake (1), Cranberry Lake NJ (1), Mohawk River (1), St. Lawrence River (1)	1370	Lake Champlain
variable-leaf milfoil	4	Lake Champlain (3), *None* (1)	151	Lake Champlain
spiny waterflea	0	N/A	14	Lake Champlain
water chestnut	10	Lake Champlain (8), Hudson River (1), *None* (1)	219	Lake Champlain
zebra mussel	26	Lake Champlain (16), *None* (8), Lake Bomoseen (1), Oneida Lake (1)	528	Lake Champlain
Totals	**182**		**3208**	

State of Motorized Boat Registration (n=15,246)

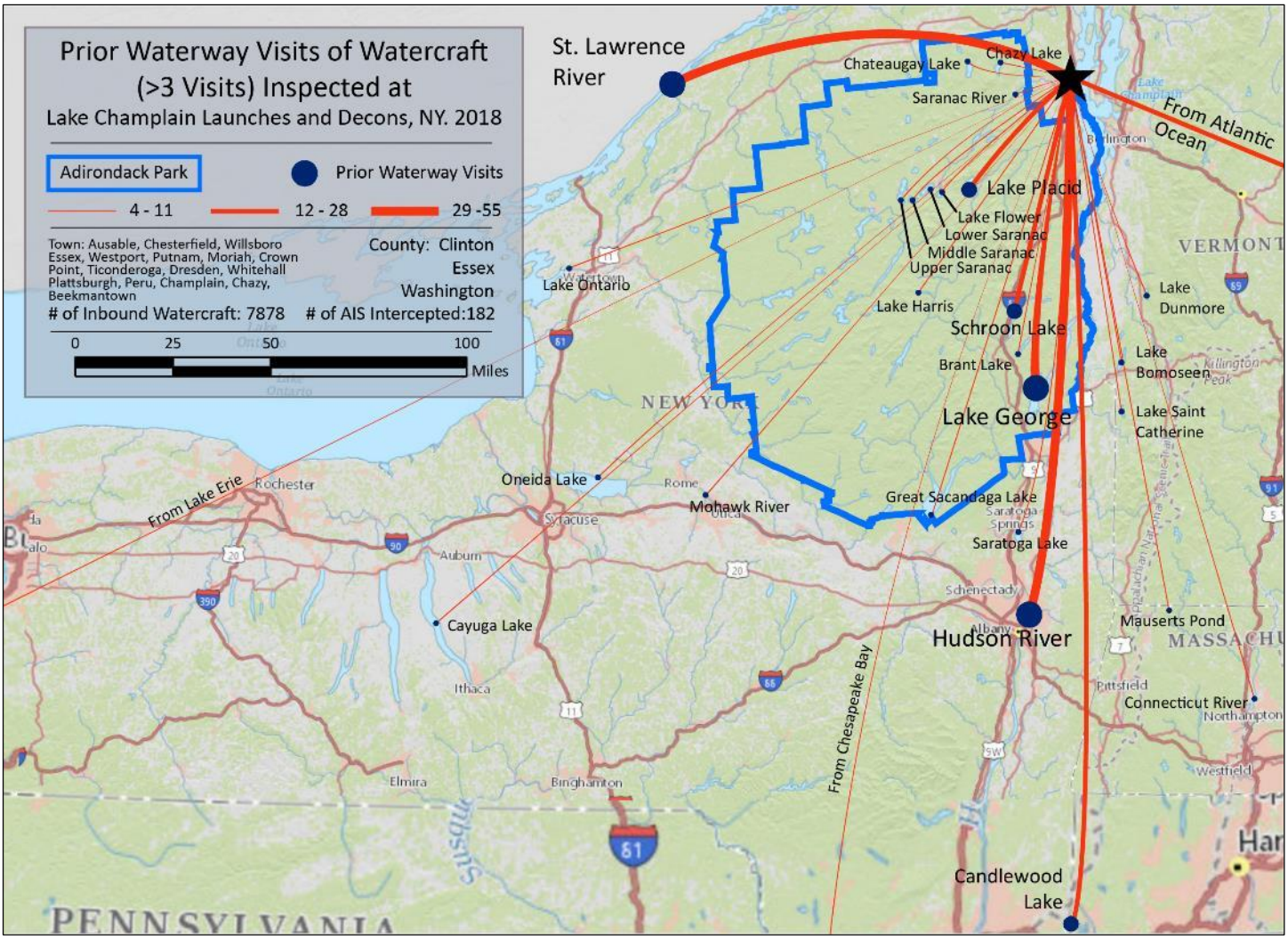




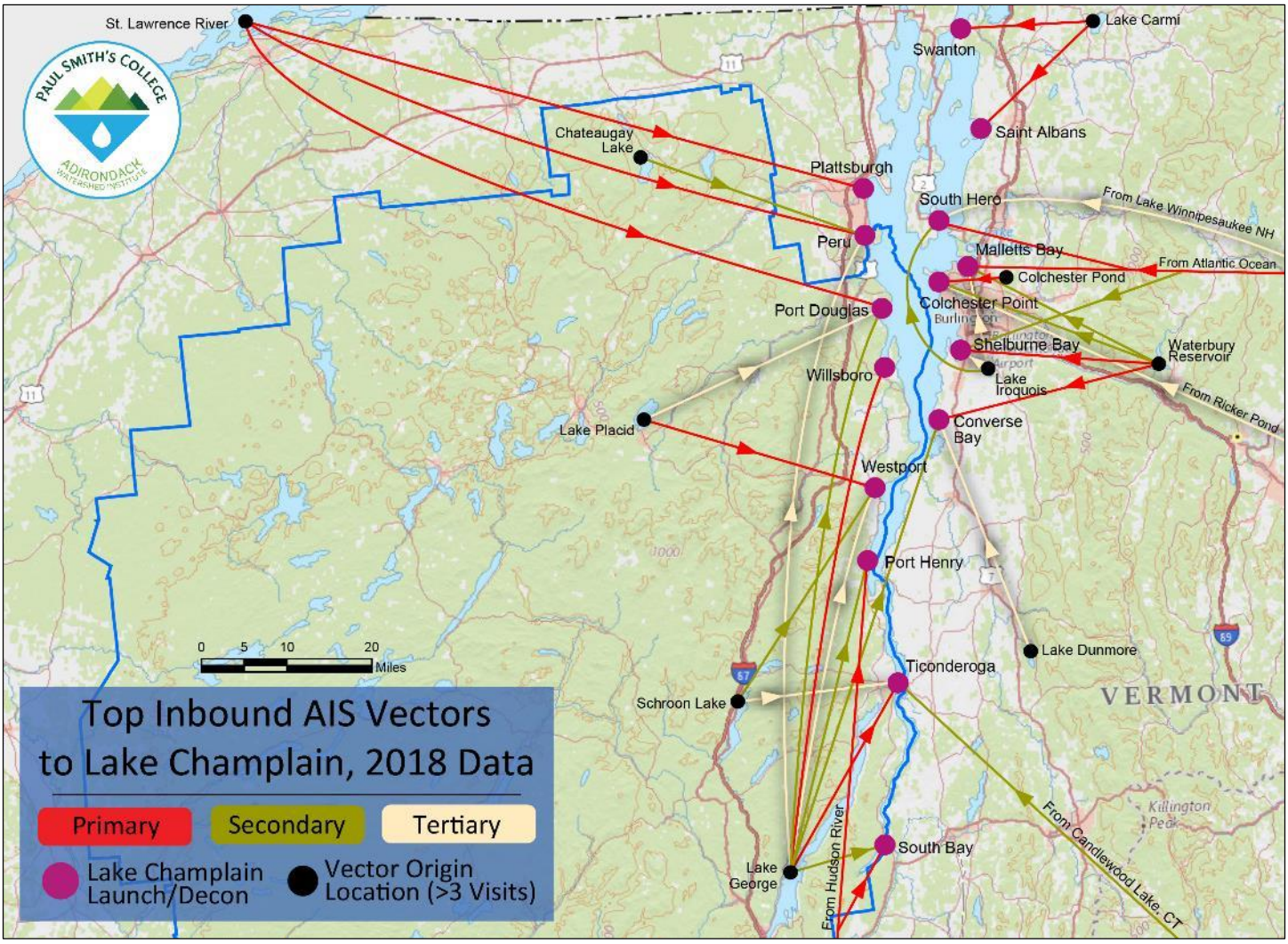
Previous Waterways for Launching Boats	# visits
SAME LAKE - PREVIOUS VISIT	5631
NONE	1747
NOT ASKED	245
UNKNOWN (boater doesn't know)	71
Lake George	55
St. Lawrence River	35
Hudson River	33
unspecified lake in New York	31
Schroon Lake	28
Lake Placid	17
Atlantic Ocean	12
Candlewood Lake, Brookfield, CT	12
Chateaugay Lake	11
Mohawk River	11
Middle Saranac Lake	9
Saratoga Lake	9
Brant Lake	7
Great Sacandaga Lake	7
RENTAL	7
Lake Bomoseen, Castleton, VT	6
Lake Ontario	6
Oneida Lake	6
Chazy Lake	5
Chesapeake Bay, MD	5
Connecticut River, CT	5
Lake Harris	5
Upper Saranac Lake	5
Cayuga Lake	4
Lake Dunmore, Salisbury, VT	4
Lake Erie	4
Lake Flower	4
Lake Saint Catherine, Poultney, VT	4
Lower Saranac Lake	4
Mauserts Pond, Clarksburg, MA	4
Saranac River	4
Buck Pond (Rainbow Lake/Lake Kushaqua)	3
Lake Winnipesaukee, Alton, NH	3
Paradox Lake	3
Skaneateles Lake	3
unspecified lake in Connecticut	3
unspecified lake in New Hampshire	3
Black Lake	2
Blue Mountain Lake	2
Cazenovia Lake	2
Connecticut River, MA	2
Cranberry Lake, Byram Township, NJ	2
Delaware River, NJ	2

Previous Waterways for Launching Boats	# visits
Eagle Lake, Ticonderoga, NY	2
Erie Canal	2
Hemlock Lake	2
Highland Lake, Winchester, CT	2
Housatonic River, MA	2
Lake Norman, Westport, NC	2
Lake Willoughby, Westmore, VT	2
Long Lake	2
Ossipee Lake , Freedom, NH	2
Otisco Lake	2
Pachaug Pond, Griswold, CT	2
Potomac River, VA	2
Round Lake, Saratoga County, NY	2
Squam Lake, Holderness, NH	2
Taylor Pond, Black Brook, NY	2
unspecified lake in Pennsylvania	2
unspecified lake in Quebec	2
unspecified lake in the Adirondacks	2
Aspinook Pond, Jewett City, CT	1
Ballston Lake	1
Bantam Lake, Morris, CT	1
Blue Marsh Lake, Berks, PA	1
Bowdish Reservoir, Glocester, RI	1
China Lake, China, ME	1
Clinton Reservoir, West Milford, NJ	1
Congamond Lakes, Southwick, MA	1
Copake Lake, Copake Lake, NY	1
Cossayuna Lake, Argyle, NY	1
Cranberry Lake	1
Crescent Lake, Sharon, CT	1
Cross Lake, Onondaga County, NY	1
Delta Lake	1
Fern Lake, Black Brook, NY	1
First Lake	1
Fish Creek Ponds	1
Fox Lake, Fox Lake Hills, IL	1
Glenwood Lake, Ridgeway, NY	1
Goose Pond, Tyringham, MA	1
Higley Falls Reservoir	1
Hopkinton Lake, Hopkinton, NH	1
Indian Lake	1
Lake Allatoona, Acworth, GA	1
Lake Arthur , Butler, PA	1
Lake Colby	1
Lake Mistassini, Baie-James, QC	1
Lake Morey, Fairlee, VT	1
Lake Nockamixon, Bucks County, PA	1

Previous Waterways for Launching Boats	# visits
Lake Owassa, Frankford, NJ	1
Lake Pearl, Wrentham, MA	1
Lake Simcoe, Georgina, ON	1
Lake Sunapee, Sunapee, NH	1
Lake Tahoe, NV	1
Lake Waramaug, New Preston, CT	1
Lake Winola, Overfield Township, PA	1
Lincoln Pond, Elizabethtown, NY	1
Little Sebago Lake, Windham, ME	1
Long Island Sound	1
Long Pond, Santa Clara, NY	1
Lower St. Regis Lake	1
Meacham Lake	1
Mirror Lake	1
Moore Reservoir , Littleton, NH	1
Mudge Pond, Sharon , CT	1
North East River, North East, MD	1
Oak Ridge Reservoir, Oak Ridge, NJ	1
Onota Lake, Pittsfield, MA	1
Otsego Lake	1
Ottawa River, QC	1
Pickwick Lake, Florence, AL	1
Piseco Lake	1
Pontoosuc Lake, Pittsfield, MA	1
Raritan River, NJ	1
Raystown Lake, Juniata Township, PA	1
Reservoir Baskatong, QC	1
Richmond Pond, Richmond, MA	1
Saguenay River, QC	1
Salmon River	1
Somerset Reservoir, Stratton, VT	1
Susquehanna River, MD	1
Swinging Bridge Reservoir, Bethel, NY	1
Twin Lakes, Salisbury, CT	1
Tyler Lake, Goshen, CT	1
unspecified lake in Cape Cod, MA	1
unspecified lake in Illinois	1
unspecified lake in Louisiana	1
unspecified lake in Massachusetts	1
unspecified lake in New Jersey	1
unspecified lake in South Carolina	1
unspecified lake in Warren County	1
unspecified river in Pittsburgh	1
Upper St. Regis Lake	1
Watts Bar Lake, Loudon, TN	1
Waushakum Pond, Framingham, MA	1
White Lake, Forestport, NY	1
TOTAL BOATS	**8195**



South Bay Launch



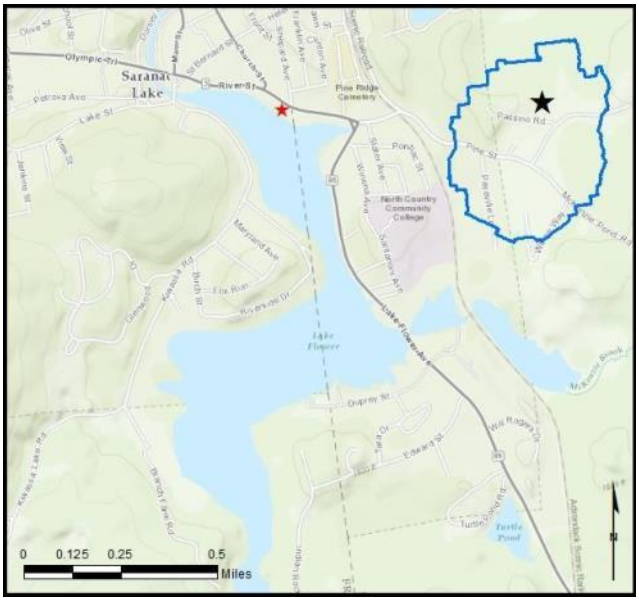
Westport Launch

Lake Flower

AIS intercepted: 54
Boats inspected: 1,173
Dates of Operation: May 26 – November 2
Number of visitors: 2,259
Boats failing inspection: 12.6%

Total Number of Days Covered: 103
Weekly Coverage: 5 days
Visitors showing spread prevention awareness: 54%
Number of previously visited waterways: 45

AIS Present in Waterbody: Eurasian watermilfoil, variable-leaf milfoil, curly-leaf pondweed
Stewardship History: 2011 - present



Watercraft	Boat Type										total # boats observed	total # boats inspected
	Barge	Canoe	Dock	Kayak	Motor	PWC	Row	Sail	SUP	Wind		
# of boats observed	1	79	0	161	862	94	1	4	9	1	1212	1173
percentage of total boats	0%	7%	0%	13%	71%	8%	0%	0%	1%	0%	100%	97%

Boats observed at launch, including those not inspected. PWC=personal watercraft, SUP=stand-up paddleboard, Wind=windsurfer.

total # visitors	organisms found			total organisms	# boats dirty	# boats w/AIS	# of inspections	% of inspected boats dirty	% of inspected boats w/AIS
	entering	leaving	roadside						
2259	49	157	--	206	148	47	1173	12.6%	4.0%

Boats dirty = watercraft with any organic material, invasive, non-invasive or unknown.

Visitor Responses	AIS spread prevention awareness											# groups asked
	yes	Inspect	Wash	Drain	Bait	LW	Dry	Decon	same lake	first/frozen	didn't ask	
# of groups	475	51	102	75	2	5	48	3	160	131	212	886
percentage of total groups asked	54%	6%	12%	8%	0%	1%	5%	0%	18%	15%	NA	

Yes = showed AIS spread prevention awareness; Drain = drained bilge; Bait = emptied bait bucket/disposed of bait; LW = drained livewell; Dry = dried boat; Decon = visited decon station; Same Lake = boat only goes in this lake; First/Frozen = first launch of the season or frozen boat.

Organisms Removed	Organism Type									total # AIS	% of inspected boats w/AIS
	Non-invasive	BN*	CLP*	EF*	EWM*	VLM*	SWF*	WC*	ZM*		
# of organisms	152	0	0	0	28	26	0	0	0	54	4.0%
percentage of total orgs	74%	0%	0%	0%	14%	13%	0%	0%	0%		

Non-invasive = native aquatic or terrestrial material; BN = brittle naiad; CLP = curly-leaf pondweed; EF = European frogbit; EWM = Eurasian watermilfoil; VLM = variable-leaf milfoil; SWF = spiny waterflea; WC= water chestnut; ZM = zebra mussel; */AIS = aquatic invasive species.

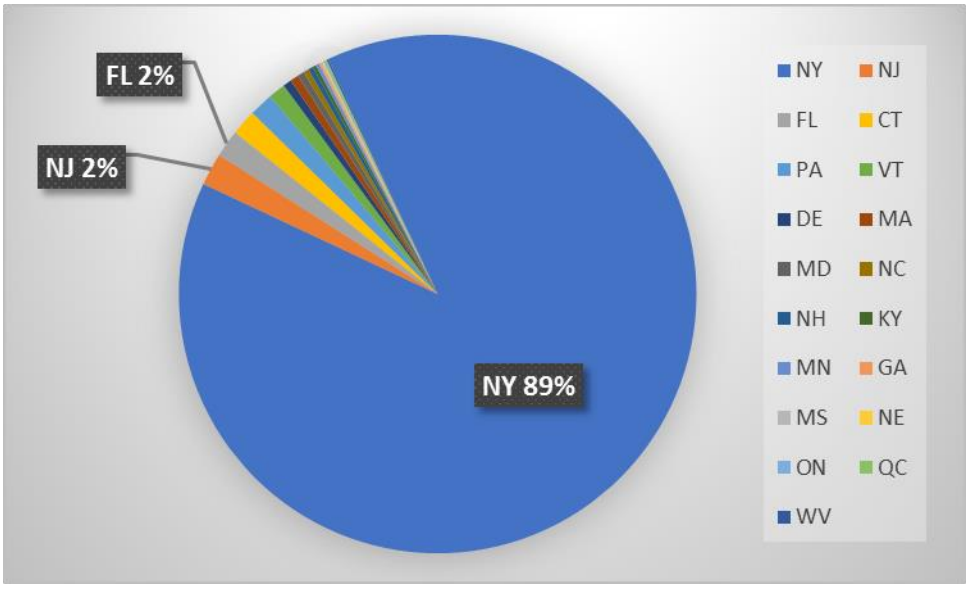
Aquatic Invasive Species Intercepted by Stewards	# found on boats launching	Previous Waterway	# found on boats retrieving	Previous Waterway
Eurasian watermilfoil	7	Lake Flower (3), Delta Lake (1), *None* (1), *Not Asked* (1), Saranac Lake Chain (1)	21	Lake Flower
variable-leaf milfoil	4	Lake Flower (2), *None* (1), *Not Asked* (1)	22	Lake Flower
Totals	**11**		**43**	

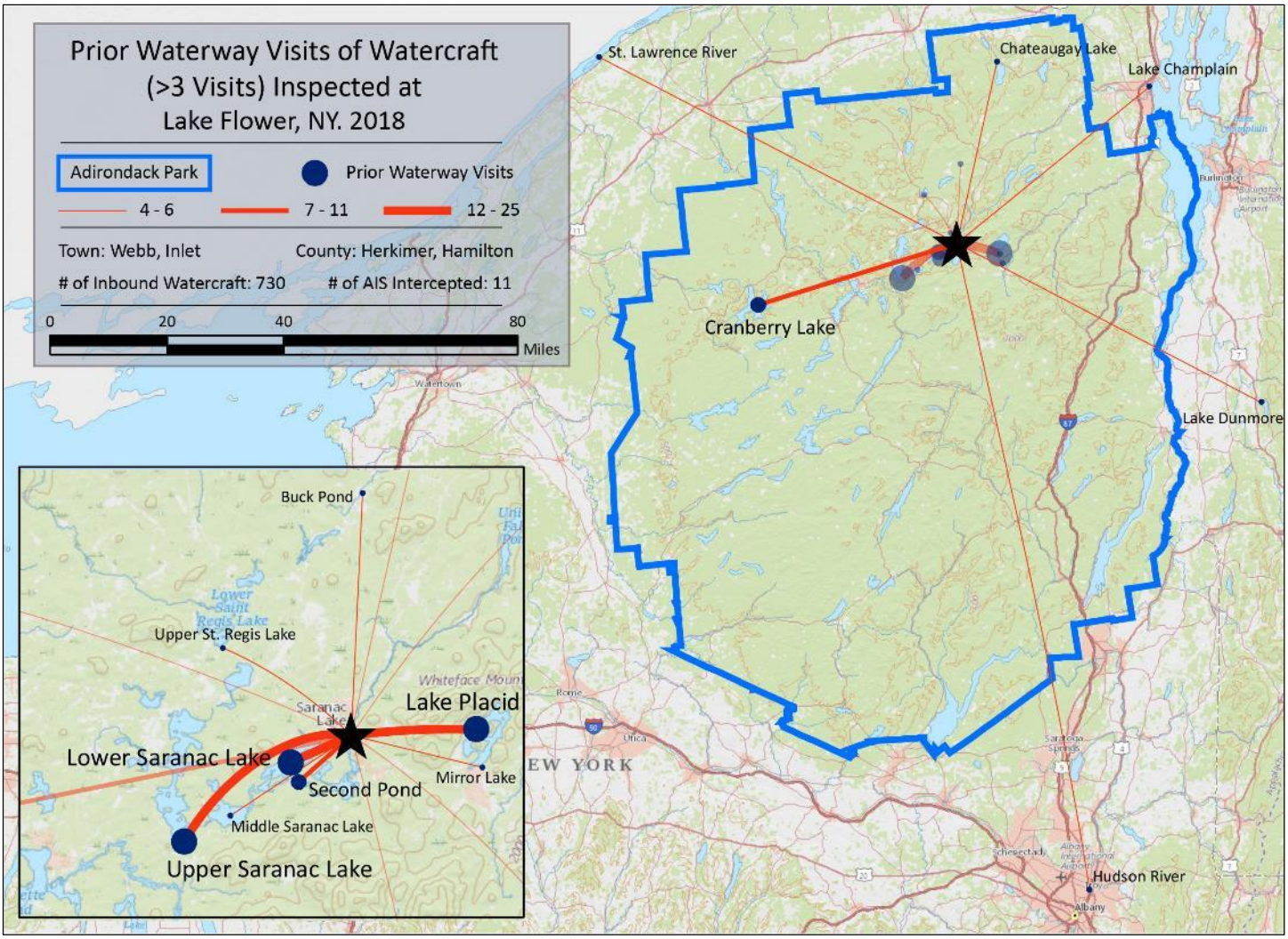
Previous Waterways for Launching Boats	# visits
NONE	265
SAME LAKE - PREVIOUS VISIT	248
NOT ASKED	46
Upper Saranac Lake	25
Lake Placid	21
Lower Saranac Lake	16
RENTAL	16
Second Pond	11
UNKNOWN (boater doesn't know)	9
Cranberry Lake	7
Lake Champlain	6
Mirror Lake	6
St. Lawrence River	6
Chateaugay Lake	5
Hudson River	5
Lake Dunmore, Salisbury, VT	5
Middle Saranac Lake	5
unspecified lake in New York	5

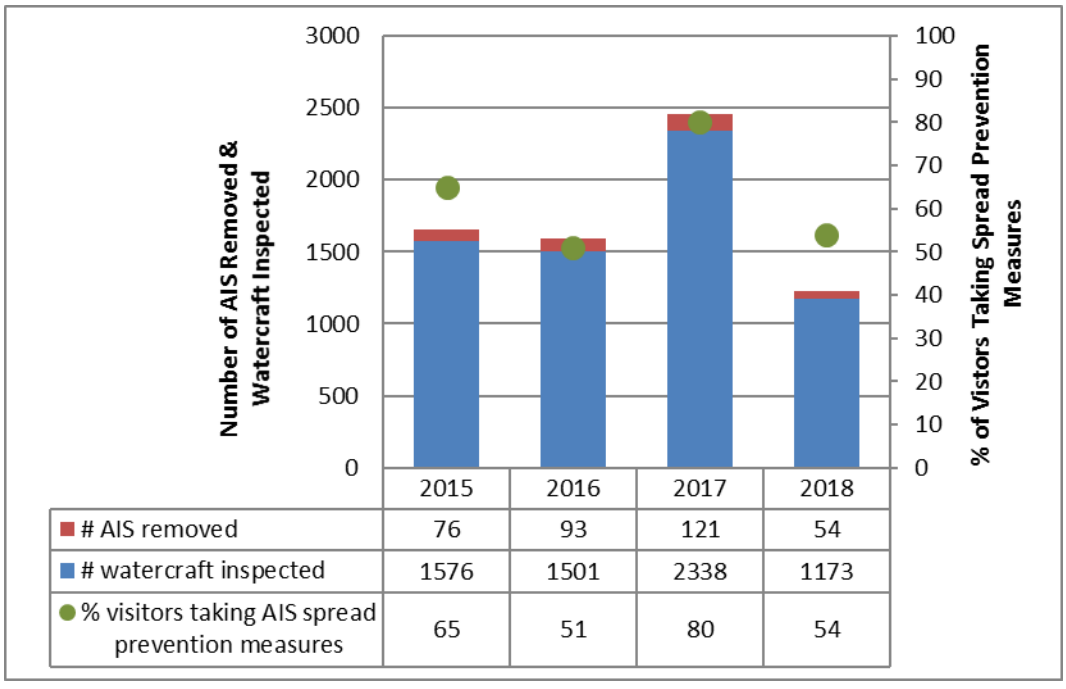
Previous Waterways for Launching Boats	# visits
Buck Pond (Rainbow/Kushaqua)	4
Upper St. Regis Lake	4
Lake Colby	3
Schroon Lake	3
Caspian Lake, Greensboro, VT	2
Chazy Lake	2
Finger Lakes (unspecified)	2
Fourth Lake	2
Lake Erie	2
Long Pond, Santa Clara, NY	2
Lower St. Regis Lake	2
Polliwog Pond, Santa Clara, NY	2
Saratoga Lake	2
Tupper Lake	2
Atlantic Ocean	1
Bear Lake, Fine, NY	1
Blue Mountain Lake	1
Canandaigua Lake	1

Previous Waterways for Launching Boats	# visits
Caroga Lake	1
Charles River, Boston, MA	1
Delta Lake	1
First Lake	1
Fish Creek Ponds	1
Follensby Clear Pond	1
Glendale Lake, Chest Township, PA	1
Gulf of Mexico , FL	1
Lake Ontario	1
Long Lake	1
Meacham Lake	1
Niagara River	1
Raquette River	1
St. Regis River	1
unspecified lake in Quebec	1
unspecified lake in Vermont	1
West Canada Lake	1
TOTAL BOATS	**762**

State of Motorized Boat Registration
(n=939)







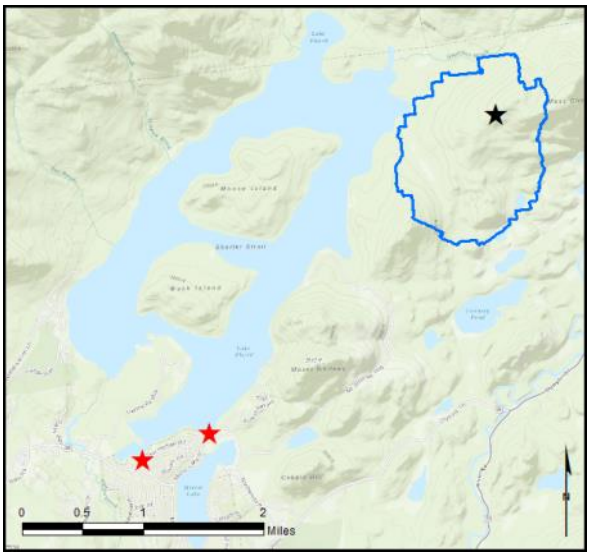
	2015	2016	2017	2018
# AIS removed	76	93	121	54
# watercraft inspected	1576	1501	2338	1173
% visitors taking AIS spread prevention measures	65	51	80	54

Lake Placid

AIS intercepted: 8
Boats inspected: 4,365
Dates of Operation: May 26 – November 2
Number of visitors: 7,810
Boats failing inspection: 18.6%

Total Number of Days Covered: DEC Launch 150
Village Launch 91
Weekly Coverage: 7 days
Visitors showing spread prevention awareness: 70%
Number of previously visited waterways: 75

AIS Present in Waterbody: variable-leaf milfoil
Stewardship History: 2002 - present
Partnership: Lake Placid Shore Owners Association



Watercraft	Boat Type										total # boats observed	total # boats inspected
	Barge	Canoe	Dock	Kayak	Motor	PWC	Row	Sail	SUP	Wind		
State Launch	7	231	7	1353	1863	5	17	20	178	1	3682	3547
percentage of total boats	0%	6%	0%	37%	51%	0%	0%	1%	5%	0%	100%	96%
Village Launch	1	77	3	327	325	0	24	1	71	0	829	818
percentage of total boats	0%	9%	0%	39%	39%	0%	3%	0%	9%	0%	100%	99%
totals	**8**	**308**	**10**	**1680**	**2188**	**5**	**41**	**21**	**249**	**1**	**4511**	**4365**
percentage of total boats	**0%**	**7%**	**0%**	**37%**	**49%**	**0%**	**1%**	**0%**	**6%**	**0%**	**100%**	**97%**

Boats observed at launch, including those not inspected. PWC=personal watercraft, SUP=stand-up paddleboard, Wind=windsurfer.

	total # visitors	organisms found			total organisms	# boats dirty	# boats w/AIS	# of inspections	% of inspected boats dirty	% of inspected boats w/AIS
		entering	leaving	roadside						
State Launch	6473	394	314	--	708	699	5	3547	19.7%	0.1%
Village Launch	1337	65	51	--	116	113	1	818	13.8%	0.1%
totals	**7810**	**459**	**365**	**--**	**824**	**812**	**6**	**4365**	**18.6%**	**0.1%**

Boats dirty = watercraft with any organic material, invasive, non-invasive or unknown.

Visitor Responses	AIS spread prevention awareness											# groups asked
	yes	Inspect	Wash	Drain	Bait	LW	Dry	Decon	same lake	first/frozen	didn't ask	
State Launch	1620	306	611	95	17	20	158	66	542	164	563	2351
percentage of total groups asked	69%	13%	26%	4%	1%	1%	7%	3%	23%	7%	NA	
Village Launch	413	21	152	20	5	9	30	5	203	36	72	550
percentage of total groups asked	75%	4%	28%	4%	1%	2%	5%	1%	37%	7%	NA	
totals	**2033**	**327**	**763**	**115**	**22**	**29**	**188**	**71**	**745**	**200**	**635**	**2901**
percentage of total groups asked	**70%**	**11%**	**26%**	**4%**	**1%**	**1%**	**6%**	**2%**	**26%**	**7%**	**NA**	

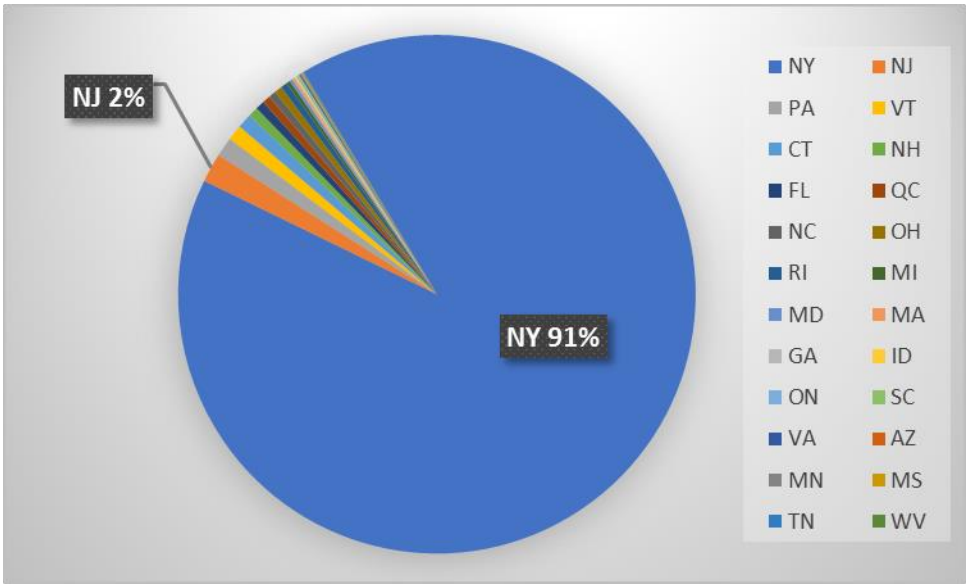
Yes = showed AIS spread prevention awareness; Drain = drained bilge; Bait = emptied bait bucket/disposed of bait; LW = drained livewell; Dry = dried boat; Decon = visited decon station; Same Lake = boat only goes in this lake; First/Frozen = first launch of the season or frozen boat.

Organisms Removed	Organism Type									total # AIS	% of inspected boats w/AIS
	Non-invasive	BN*	CLP*	EF*	EWM*	VLM*	SWF*	WC*	ZM*		
State Launch	703	0	0	0	0	2	0	1	2	5	0.1%
percentage of total orgs	99%	0%	0%	0%	0%	0%	0%	0%	0%		
Village Launch	113	0	1	0	1	0	0	0	1	3	0.1%
percentage of total orgs	97%	0%	1%	0%	1%	0%	0%	0%	1%		
totals	**816**	**0**	**1**	**0**	**1**	**2**	**0**	**1**	**3**	**8**	**0.1%**
percentage of total orgs	**99%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**		

Non-invasive = native aquatic or terrestrial material; BN = brittle naiad; CLP = curly-leaf pondweed; EF = European frogbit; EWM = Eurasian watermilfoil; VLM = variable-leaf milfoil; SWF = spiny waterflea; WC= water chestnut; ZM = zebra mussel; */AIS = aquatic invasive species.

Aquatic Invasive Species Intercepted by Stewards	# found on boats launching	Previous Waterway	# found on boats retrieving	Previous Waterway
curly-leaf pondweed	1	Black Lake (1)	0	N/A
Eurasian watermilfoil	1	Black Lake (1)	0	N/A
variable-leaf milfoil	2	Lake Placid (1), Saranac Lake Chain (1)	0	N/A
water chestnut	0	N/A	1	Lake Placid (previously Seneca River)
zebra mussel	3	Black Lake (1), *None* (1), *Not Asked* (1)	0	N/A
Totals	**7**		**1**	

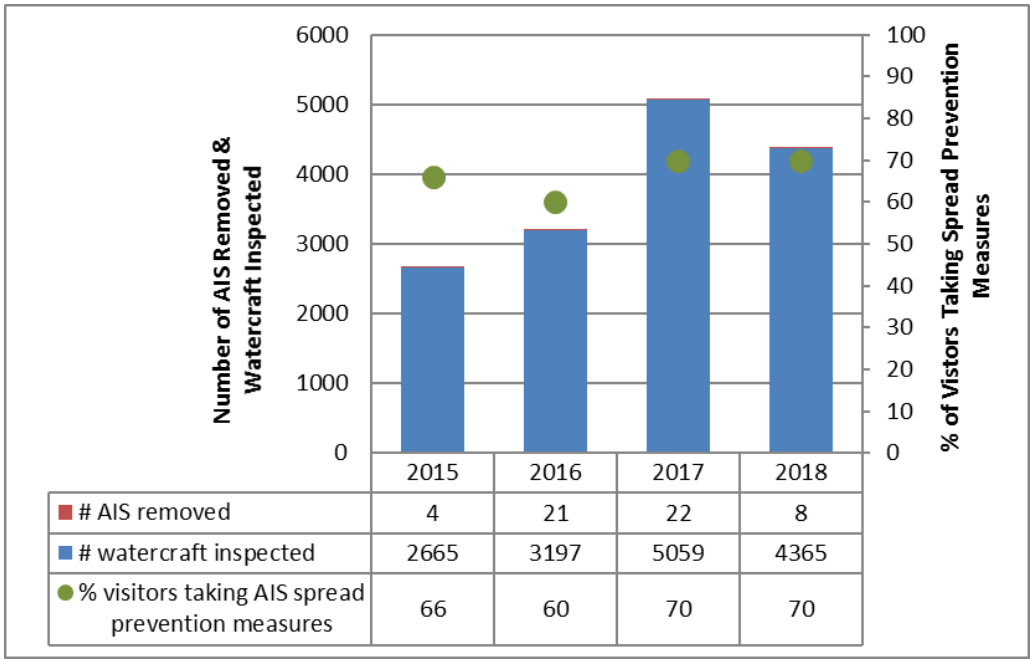
State of Motorized Boat Registration
(n=2,157)

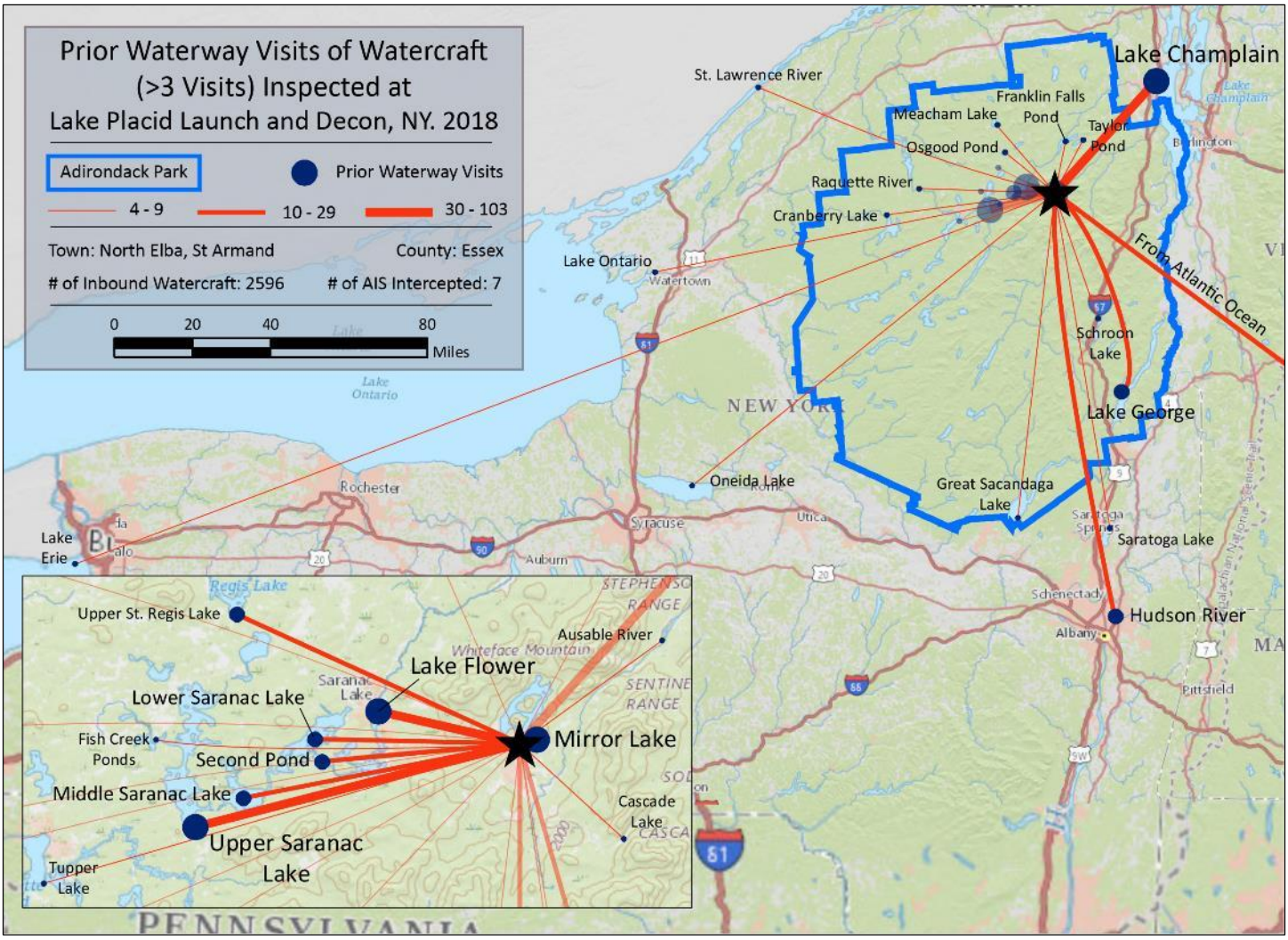


Previous Waterways for Launching Boats	# visits
SAME LAKE - PREVIOUS VISIT	862
NONE	702
RENTAL	423
NOT ASKED	129
Mirror Lake	103
UNKNOWN (boater doesn't know)	44
unspecified lake in New York	41
Upper Saranac Lake	32
Lake Champlain	30
Lake Flower	30
Lower Saranac Lake	29
Hudson River	14
Lake George	12
Middle Saranac Lake	12
Atlantic Ocean	11
Second Pond	10
Upper St. Regis Lake	10
Fish Creek Ponds	9
Schroon Lake	9
Ausable River	8
Lake Ontario	8
St. Lawrence River	8
Cranberry Lake	7
Lake Erie	7
Osgood Pond	7
Great Sacandaga Lake	6
Meacham Lake	5
Cascade Lake, Keene, NY	4
Franklin Falls Pond	4
Long Island Sound	4

Previous Waterways for Launching Boats	# visits
Oneida Lake	4
Raquette River	4
Saratoga Lake	4
Taylor Pond, Black Brook, NY	4
Tupper Lake	4
Caroga Lake	3
Jones Pond, Brighton, NY	3
Lake Eaton	3
Lake Pleasant	3
Black Lake	2
Blue Mountain Lake	2
Buck Pond (Rainbow/Kushaqua)	2
Canandaigua Lake	2
Candlewood Lake, Brookfield, CT	2
Chazy Lake	2
Connery Pond, North Elba, NY	2
Delaware River, NJ	2
Delta Lake	2
Finger Lakes (unspecified)	2
Floodwood Pond	2
Fourth Lake	2
Lake Iroquois, Williston, VT	2
Lake Sunapee, Sunapee, NH	2
Long Lake	2
Onota Lake, Pittsfield, MA	2
Piseco Lake	2
Skaneateles Lake	2
Squam Lake, Holderness, NH	2
St. Regis River	2
Swift River, MA	2

Previous Waterways for Launching Boats	# visits
Third Lake	2
unspecified lake in New Jersey	2
unspecified river in Quebec	2
Cayuga Lake	1
Connecticut River, CT	1
Fern Lake, Leicester, VT	1
Forked Lake	1
Fulton Chain of Lakes (unspecified)	1
Harriman Reservoir, Wilmington, VT	1
Hoel Pond	1
Lake Lansing, MI	1
Little Clear Pond	1
Loon Lake (Warren County)	1
Lower St. Regis Lake	1
Ottawa River, QC	1
Owasco Lake	1
Paradox Lake	1
Raquette Lake	1
Rondout Creek, High Falls, NY	1
Round Lake, Saratoga County, NY	1
Saranac River	1
Stillwater Reservoir	1
unspecified lake in Connecticut	1
unspecified lake in Essex County	1
unspecified lake in Hamilton County	1
unspecified lake in Maine	1
unspecified lake in Maryland	1
unspecified lake in Ontario	1
unspecified private lake	1
Upper Little York Lake, Cortland, NY	1
TOTAL BOATS	**2687**





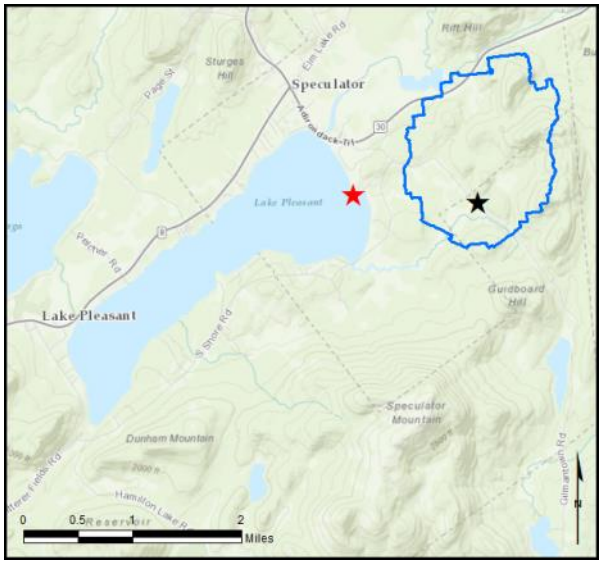
Lake Placid State Boat Launch

Lake Pleasant

AIS intercepted: 0
Boats inspected: 908
Dates of Operation: May 28 – August 25
Number of visitors: 1,089
Boats failing inspection: 6.7%

Total Number of Days Covered: 72
Weekly Coverage: 5 days
Visitors showing spread prevention awareness: 74%
Number of previously visited waterways: 22

AIS Present in Waterbody: spiny waterflea
Stewardship History: 2016 - present
Partnership: Town of Lake Pleasant,
Lake Pleasant Sacandaga Association



Watercraft	Boat Type										total # boats observed	total # boats inspected
	Barge	Canoe	Dock	Kayak	Motor	PWC	Row	Sail	SUP	Wind		
# of boats observed	0	107	0	745	21	17	5	2	15	0	912	908
percentage of total boats	0%	12%	0%	82%	2%	2%	1%	0%	2%	0%	100%	100%

Boats observed at launch, including those not inspected. PWC=personal watercraft, SUP=stand-up paddleboard, Wind=windsurfer.

total # visitors	organisms found			total organisms	# boats dirty	# boats w/AIS	# of inspections	% of inspected boats dirty	% of inspected boats w/AIS
	entering	leaving	roadside						
1089	58	3	--	61	61	0	908	6.7%	0%

Boats dirty = watercraft with any organic material, invasive, non-invasive or unknown.

Visitor Responses	AIS spread prevention awareness											# groups asked
	yes	Inspect	Wash	Drain	Bait	LW	Dry	Decon	same lake	first/frozen	didn't ask	
# of groups	335	69	54	7	1	0	98	6	54	96	4	454
percentage of total groups asked	74%	15%	12%	2%	0%	0%	22%	1%	12%	21%	NA	

Yes = showed AIS spread prevention awareness; Drain = drained bilge; Bait = emptied bait bucket/disposed of bait; LW = drained livewell; Dry = dried boat; Decon = visited decon station; Same Lake = boat only goes in this lake; First/Frozen = first launch of the season or frozen boat.

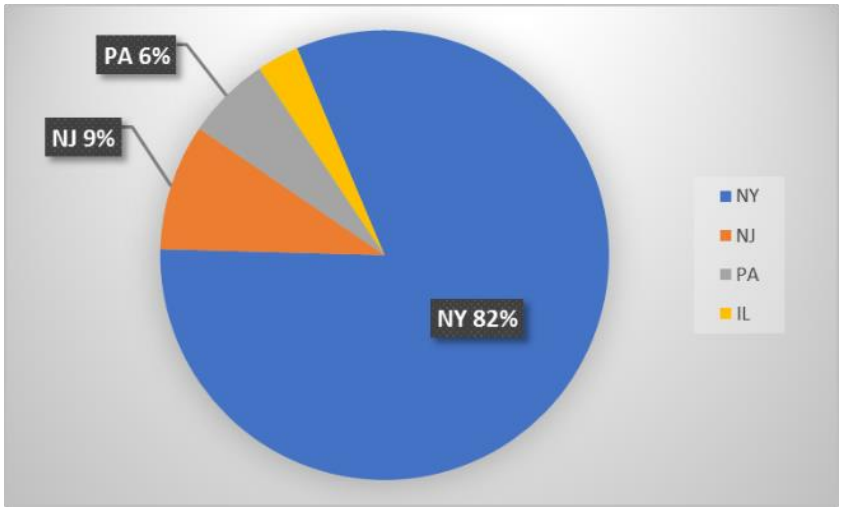
Organisms Removed	Organism Type									total # AIS	% of inspected boats w/AIS
	Non-invasive	BN*	CLP*	EF*	EWM*	VLM*	SWF*	WC*	ZM*		
# of organisms	61	0	0	0	0	0	0	0	0	0	0%
percentage of total orgs	100%	0%	0%	0%	0%	0%	0%	0%	0%		

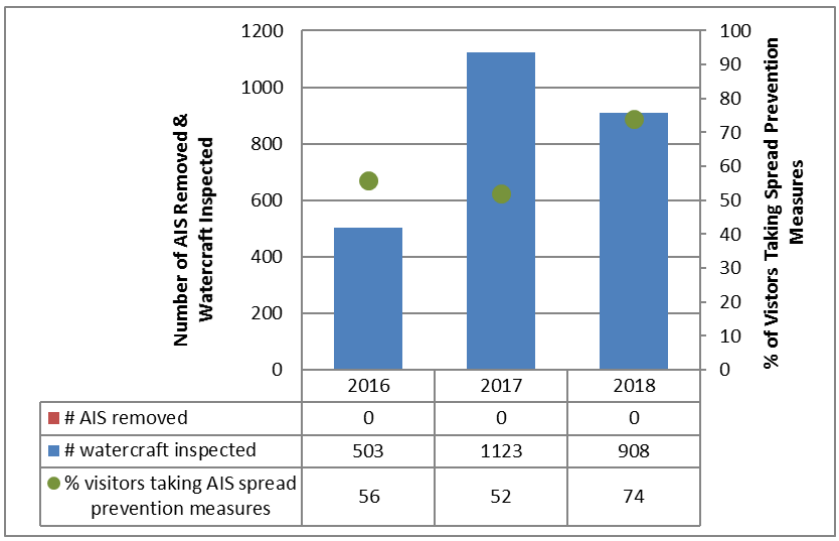
Non-invasive = native aquatic or terrestrial material; BN = brittle naiad; CLP = curly-leaf pondweed; EF = European frogbit; EWM = Eurasian watermilfoil; VLM = variable-leaf milfoil; SWF = spiny waterflea; WC= water chestnut; ZM = zebra mussel; */AIS = aquatic invasive species.

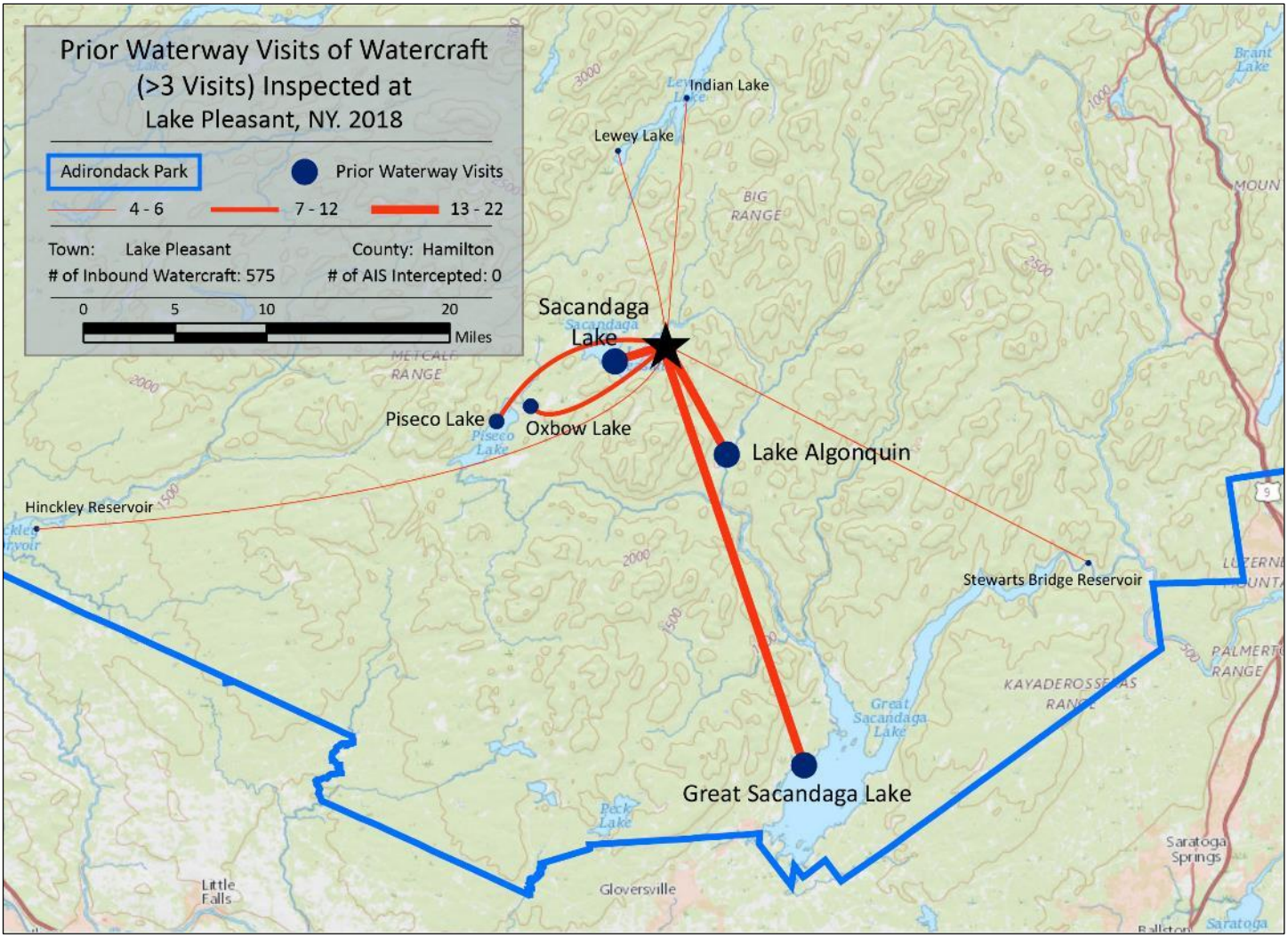
Previous Waterways for Launching Boats	# visits
NONE	286
SAME LAKE - PREVIOUS VISIT	145
Lake Algonquin	22
Sacandaga Lake	19
Great Sacandaga Lake	17
Oxbow Lake	12
unspecified lake in New York	9
Piseco Lake	8
UNKNOWN (boater doesn't know)	7
Indian Lake	6
Lewey Lake	5
Hinckley Reservoir	4
NOT ASKED	4
RENTAL	4
Stewarts Bridge Reservoir	4

Previous Waterways for Launching Boats	# visits
unspecified lake in the Adirondacks	4
Hudson River	3
Ballston Lake	2
Big Moose Lake	2
Canada Lake	2
Cossayuna Lake, Argyle, NY	2
Forestport Reservoir, Forestport, NY	2
Lake Bonaparte	2
Mohawk River	2
Saratoga Lake	2
Brant Lake	1
Lincoln Pond, Elizabethtown, NY	1
Round Lake, Saratoga County, NY	1
Stillwater Reservoir	1
TOTAL BOATS	**579**

State of Motorized Boat Registration
(n=33)







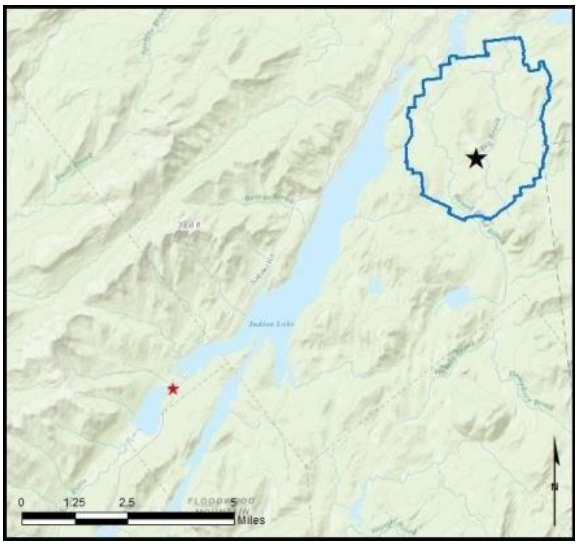
Lake Pleasant Boat Launch

Lewey Lake

AIS intercepted: 0
Boats inspected: 205
Dates of Operation: June 2 – August 11
Number of visitors: 285
Boats failing inspection: 4.9%

Total Number of Days Covered: 30
Weekly Coverage: 2-3 days
Visitors showing spread prevention awareness: 47%
Number of previously visited waterways: 10

AIS Present in Waterbody: None
Stewardship History: First year



Watercraft	Boat Type										total # boats observed	total # boats inspected
	Barge	Canoe	Dock	Kayak	Motor	PWC	Row	Sail	SUP	Wind		
# of boats observed	0	34	0	146	21	1	2	0	1	0	205	205
percentage of total boats	0%	17%	0%	71%	10%	0%	1%	0%	0%	0%	100%	100%

Boats observed at launch, including those not inspected. PWC=personal watercraft, SUP=stand-up paddleboard, Wind=windsurfer.

total # visitors	organisms found			total organisms	# boats dirty	# boats w/AIS	# of inspections	% of inspected boats dirty	% of inspected boats w/AIS
	entering	leaving	roadside						
285	4	6	--	10	10	0	205	4.9%	0%

Boats dirty = watercraft with any organic material, invasive, non-invasive or unknown.

Visitor Responses	AIS spread prevention awareness											# groups asked
	yes	Inspect	Wash	Drain	Bait	LW	Dry	Decon	same lake	first/frozen	didn't ask	
Lewey Lake	59	8	13	6	2	0	15	0	9	18	0	126
percentage of total groups asked	47%	6%	10%	5%	2%	0%	12%	0%	7%	14%	NA	

Yes = showed AIS spread prevention awareness; Drain = drained bilge; Bait = emptied bait bucket/disposed of bait; LW = drained livewell; Dry = dried boat; Decon = visited decon station; Same Lake = boat only goes in this lake; First/Frozen = first launch of the season or frozen boat.

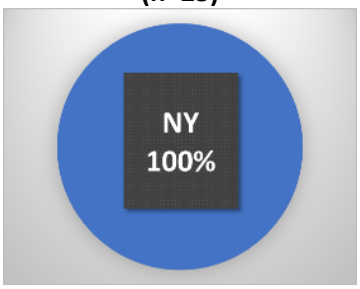
Organisms Removed	Organism Type									total # AIS	% of inspected boats w/AIS
	Non-invasive	BN*	CLP*	EF*	EWM*	VLM*	SWF*	WC*	ZM*		
Lewey Lake	10	0	0	0	0	0	0	0	0	0	0%
percentage of total orgs	100%	0%	0%	0%	0%	0%	0%	0%	0%		

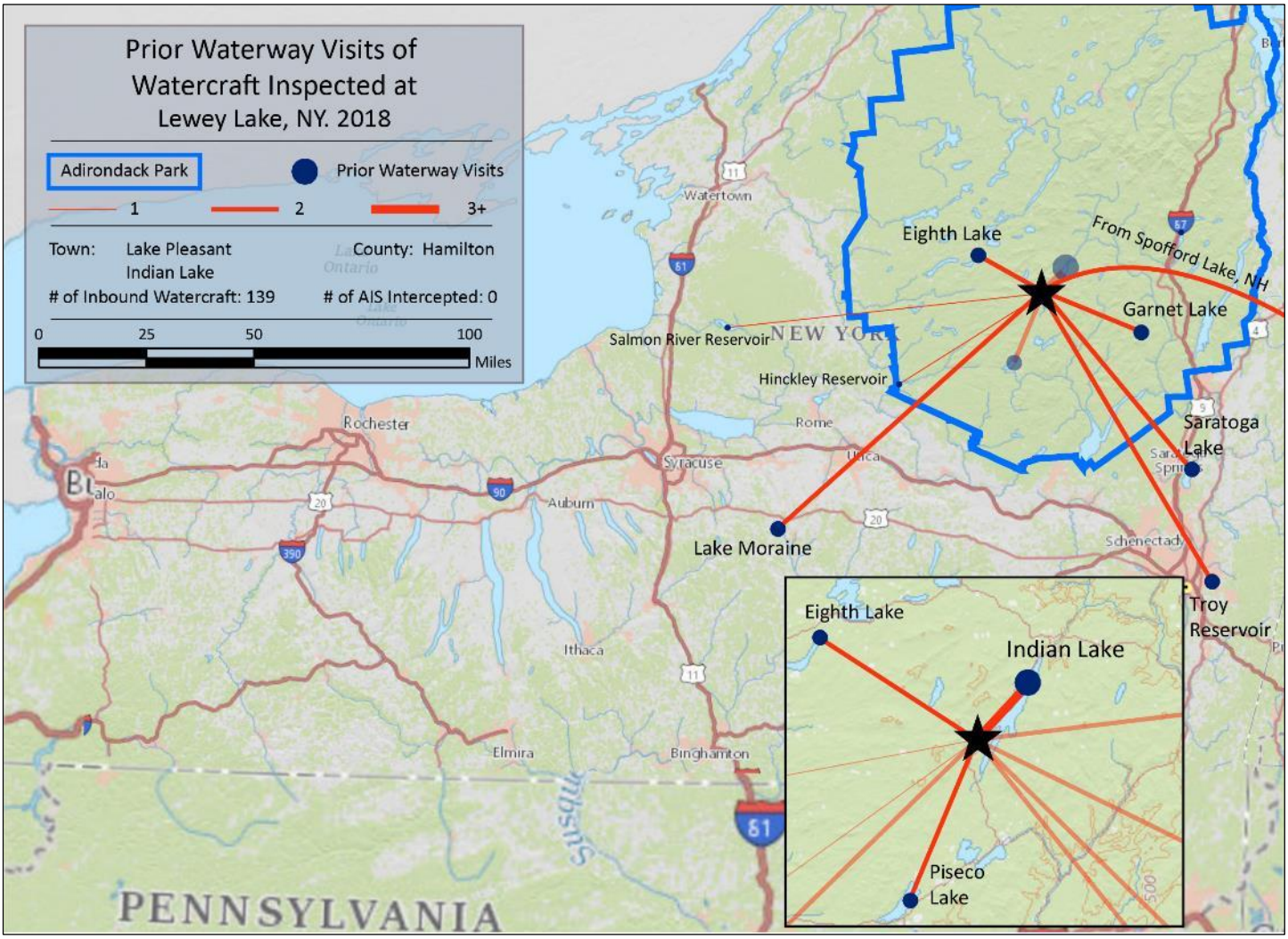
Non-invasive = native aquatic or terrestrial material; BN = brittle naiad; CLP = curly-leaf pondweed; EF = European frogbit; EWM = Eurasian watermilfoil; VLM = variable-leaf milfoil; SWF = spiny waterflea; WC= water chestnut; ZM = zebra mussel; */AIS = aquatic invasive species.

Previous Waterways for Launching Boats	# visits
NONE	72
SAME LAKE - PREVIOUS VISIT	30
Indian Lake	12
unspecified lake in New York	6
Eighth Lake	2
Garnet Lake, Thurman, NY	2
Lake Moraine	2
Piseco Lake	2

Previous Waterways for Launching Boats	# visits
Saratoga Lake	2
Spofford Lake, Chesterfield, NH	2
Troy Reservoir, Brunswick, NY	2
UNKNOWN (boater doesn't know)	2
Hinckley Reservoir	1
RENTAL	1
Salmon River Reservoir, Redfield, NY	1
TOTAL BOATS	**139**

State of Motorized Boat Registration
(n=23)



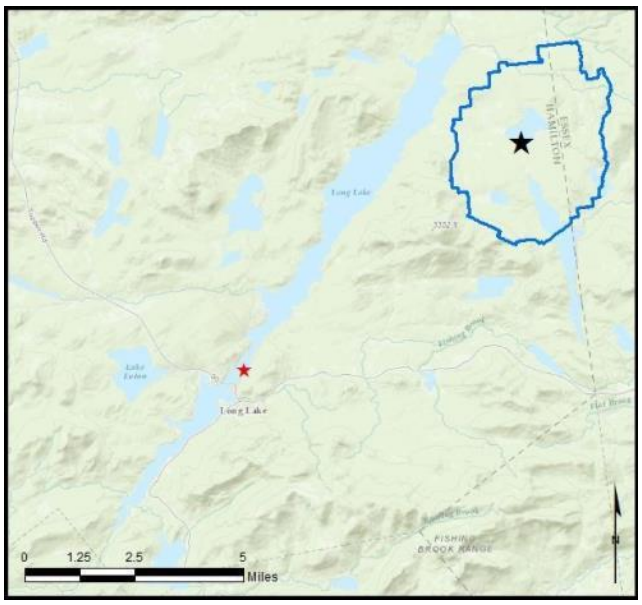


Long Lake

AIS intercepted: 17
Boats inspected: 2,249
Dates of Operation: May 26 – September 2
Number of visitors: 4,650
Boats failing inspection: 3.6%

Total Number of Days Covered: State Launch 148
Decon Station 24
Weekly Coverage: 7 days (State)
Visitors showing spread prevention awareness: 82%
Number of previously visited waterways: 80

AIS Present in Waterbody: variable-leaf milfoil
Stewardship History: 2008, 2011 - present
Partnership: Long Lake Association



Watercraft	Boat Type										total # boats observed	total # boats inspected
	Barge	Canoe	Dock	Kayak	Motor	PWC	Row	Sail	SUP	Wind		
State Launch	3	416	2	271	1341	182	3	14	3	0	2235	2222
percentage of total boats	0%	19%	0%	12%	60%	8%	0%	1%	0%	0%	100%	99%
Decon Station	0	5	0	1	15	6	0	0	0	0	27	27
percentage of total boats	0%	19%	0%	4%	56%	22%	0%	0%	0%	0%	100%	100%
totals	**3**	**421**	**2**	**272**	**1356**	**188**	**3**	**14**	**3**	**0**	**2262**	**2249**
percentage of total boats	**0%**	**19%**	**0%**	**12%**	**60%**	**8%**	**0%**	**1%**	**0%**	**0%**	**100%**	**99%**

Boats observed at launch, including those not inspected. PWC=personal watercraft, SUP=stand-up paddleboard, Wind=windsurfer.

	total # visitors	organisms found			total organisms	# boats dirty	# boats w/AIS	# of inspections	% of inspected boats dirty	% of inspected boats w/AIS
		entering	leaving	roadside						
State Launch	4607	31	53	--	84	76	12	2222	3.4%	0.5%
Decon Station	43	--	--	6	6	5	4	27	18.5%	14.8%
totals	**4650**	**31**	**53**	**6**	**90**	**81**	**16**	**2249**	**3.6%**	**0.7%**

Boats dirty = watercraft with any organic material, invasive, non-invasive or unknown.

Visitor Responses	AIS spread prevention awareness											# groups asked
	yes	Inspect	Wash	Drain	Bait	LW	Dry	Decon	same lake	first/frozen	didn't ask	
State Launch	1506	225	440	466	3	23	231	13	331	314	35	1823
percentage of total groups asked	83%	12%	24%	26%	0%	1%	13%	1%	18%	17%	NA	
Decon Station	5	0	1	0	0	0	0	2	0	2	0	25
percentage of total groups asked	20%	0%	4%	0%	0%	0%	0%	8%	0%	8%	NA	
totals	**1511**	**225**	**441**	**466**	**3**	**23**	**231**	**15**	**331**	**316**	**35**	**1848**
percentage of total groups asked	**82%**	**12%**	**24%**	**25%**	**0%**	**1%**	**13%**	**1%**	**18%**	**17%**	**NA**	

Yes = showed AIS spread prevention awareness; Drain = drained bilge; Bait = emptied bait bucket/disposed of bait; LW = drained livewell; Dry = dried boat; Decon = visited decon station; Same Lake = boat only goes in this lake; First/Frozen = first launch of the season or frozen boat.

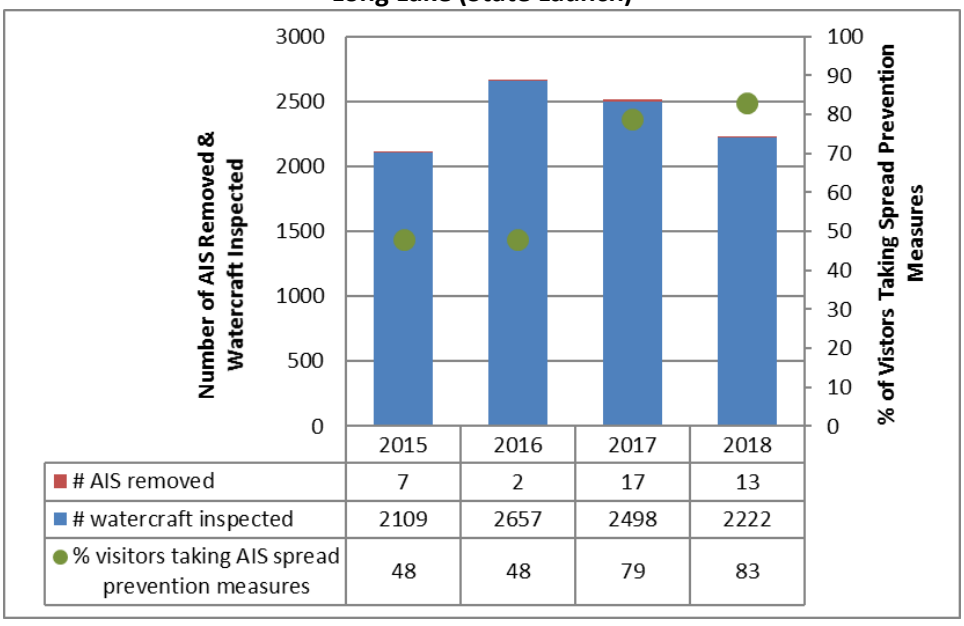
Organisms Removed	Organism Type									total # AIS	% of inspected boats w/AIS
	Non-invasive	BN*	CLP*	EF*	EWM*	VLM*	SWF*	WC*	ZM*		
State Launch	71	0	0	0	3	6	0	1	3	13	0.5%
percentage of total orgs	85%	0%	0%	0%	4%	7%	0%	1%	4%		
Decon Station	2	0	0	0	0	3	0	0	1	4	14.8%
percentage of total orgs	33%	0%	0%	0%	0%	50%	0%	0%	17%		
totals	**73**	**0**	**0**	**0**	**3**	**9**	**0**	**1**	**4**	**17**	**0.7%**
percentage of total orgs	**81%**	**0%**	**0%**	**0%**	**3%**	**10%**	**0%**	**1%**	**4%**		

Non-invasive = native aquatic or terrestrial material; BN = brittle naiad; CLP = curly-leaf pondweed; EF = European frogbit; EWM = Eurasian watermilfoil; VLM = variable-leaf milfoil; SWF = spiny waterflea; WC= water chestnut; ZM = zebra mussel; */AIS = aquatic invasive species.

Aquatic Invasive Species Intercepted by Stewards	# found on boats launching	Previous Waterway	# found on boats retrieving	Previous Waterway
Eurasian watermilfoil	3	Mohawk River (1), St. Lawrence River (1), Upper Little York Lake (1)	0	N/A
variable-leaf milfoil	1	Lake Durant (1)	5	Long Lake
water chestnut	1	Lake Champlain (1)	0	N/A
zebra mussel	3	Lake Champlain (1), Mohawk River (1), Raquette River (1)	0	N/A
Totals	**8**		**5**	

Aquatic Invasive Species Intercepted by Stewards	# found at roadside	Previous Waterway
variable-leaf milfoil	3	Long Lake (2), *Not Asked* (1)
zebra mussel	1	Mohawk River (1)
Totals	**4**	

Long Lake (State Launch)

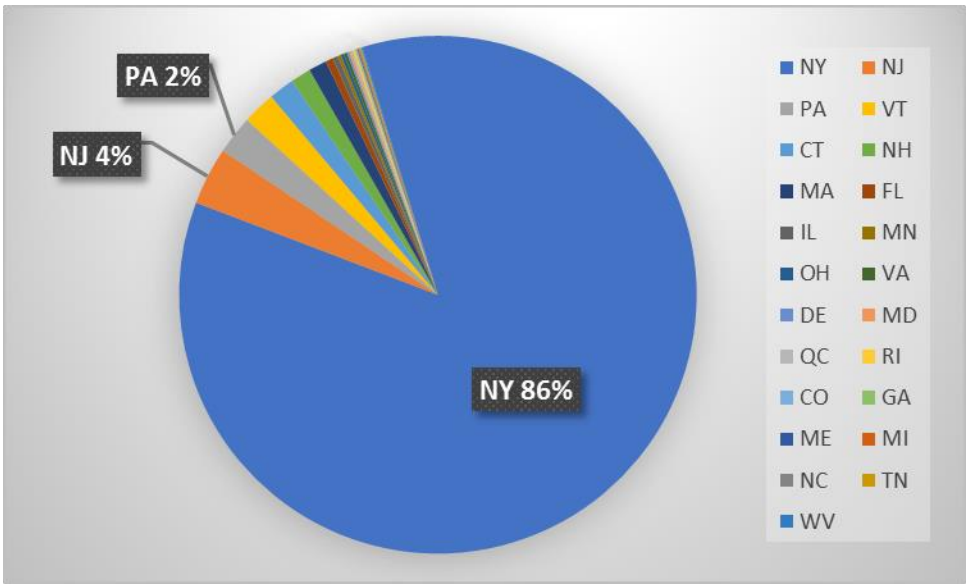


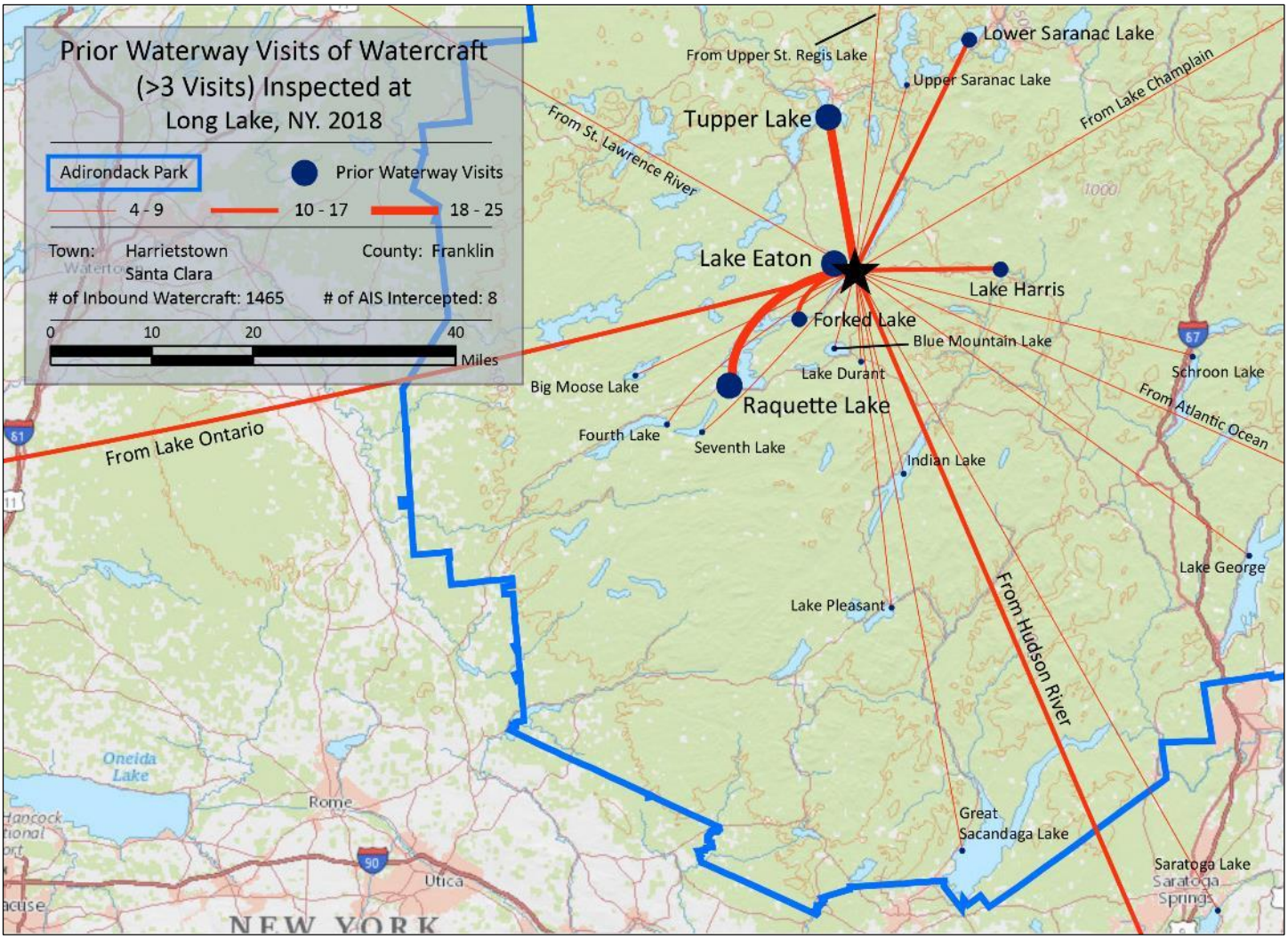
Previous Waterways for Launching Boats	# visits
NONE	649
SAME LAKE - PREVIOUS VISIT	309
RENTAL	127
UNKNOWN (boater doesn't know)	47
Tupper Lake	27
Lake Eaton	26
Raquette Lake	20
Forked Lake	14
Lake Harris	14
Hudson River	11
NOT ASKED	11
unspecified lake in New York	11
Lake Ontario	10
Lower Saranac Lake	10
Fourth Lake	9
Schroon Lake	9
Great Sacandaga Lake	8
Saratoga Lake	8
Upper Saranac Lake	8
Lake George	7
St. Lawrence River	7
Indian Lake	6
Lake Champlain	6
Lake Pleasant	6
Big Moose Lake	5
Blue Mountain Lake	5
Seventh Lake	5
Upper St. Regis Lake	5
Lake Durant, Indian Lake, NY	4
Connecticut River, CT	3

Previous Waterways for Launching Boats	# visits
Long Island Sound	3
Lower St. Regis Lake	3
Middle Saranac Lake	3
Mohawk River	3
Piseco Lake	3
Raquette River	3
Atlantic Ocean	2
Carry Falls Reservoir	2
Chautauqua Lake	2
Cranberry Lake	2
Eighth Lake	2
Erie Canal	2
Fish Creek Ponds	2
Greenwood Lake, West Milford, NJ	2
Lake Adirondack	2
Lake Erie	2
Lake Winnipesaukee, Alton, NH	2
Little Tupper Lake	2
Oneida Lake	2
Paradox Lake	2
Round Lake, Saratoga County, NY	2
Wolcott Pond, Wolcott, VT	2
Black Pond, Brighton, NY	1
Blue Marsh Lake, Berks, PA	1
Brant Lake	1
Canadarago Lake	1
Canandaigua Lake	1
Cayuga Lake	1
Chateaugay Lake	1
Delaware River, DE	1

Previous Waterways for Launching Boats	# visits
Delta Lake	1
First Lake	1
Higley Falls Reservoir	1
Hitchins Pond, Webb, NY	1
Honeoye Lake	1
Kayuta Lake	1
Keuka Lake	1
Lake Algonquin	1
Lake Colby	1
Lake Harris, Newcomb, NY	1
Lake Willoughby, Westmore, VT	1
Lake Wylie, Steele Creek, NC	1
Loon Lake (Franklin County)	1
Moose Pond, Bridgton, ME	1
Newfound Lake, Bristol, NH	1
Niagara River	1
Otsego Lake	1
Silver Lake, Perry, NY	1
Skaneateles Lake	1
Stiles Reservoir, Spencer, MA	1
Stillwater Reservoir	1
Susquehanna River, NY	1
Susquehanna River, PA	1
unspecified lake in Massachusetts	1
unspecified lake in New Jersey	1
unspecified lake in Pennsylvania	1
Upper Little York Lake, Cortland, NY	1
Waterbury Reservoir, Waterbury, VT	1
Wesserunsett Lake, Madison , ME	1
TOTAL BOATS	**1474**

State of Motorized Boat Registration
(n=1,498)





Long Lake Boat Launch

Osgood Pond

AIS intercepted: 0
Boats inspected: 600
Dates of Operation: May 26 – September 2
Number of visitors: 801
Boats failing inspection: 4.8%

Total Number of Days Covered: 48
Weekly Coverage: 3-4 days
Visitors showing spread prevention awareness: 83%
Number of previously visited waterways: 43

AIS Present in Waterbody: none
Stewardship History: 2008 - present
Partnership: Osgood Pond Association

Watercraft	Boat Type										total # boats observed	total # boats inspected
	Barge	Canoe	Dock	Kayak	Motor	PWC	Row	Sail	SUP	Wind		
# of boats observed	0	190	0	341	55	0	4	0	10	0	600	600
percentage of total boats	0%	32%	0%	57%	9%	0%	1%	0%	2%	0%	100%	100%

Boats observed at launch, including those not inspected. PWC=personal watercraft, SUP=stand-up paddleboard, Wind=windsurfer.

total # visitors	organisms found			total organisms	# boats dirty	# boats w/AIS	# of inspections	% of inspected boats dirty	% of inspected boats w/AIS
	entering	leaving	roadside						
801	9	20	--	29	29	0	600	4.8%	0%

Boats dirty = watercraft with any organic material, invasive, non-invasive or unknown.

Visitor Responses	AIS spread prevention awareness											# groups asked
	yes	Inspect	Wash	Drain	Bait	LW	Dry	Decon	same lake	first/frozen	didn't ask	
# of groups	163	29	64	4	0	0	39	1	3	46	127	196
percentage of total groups asked	83%	15%	33%	2%	0%	0%	20%	1%	2%	23%	NA	

Yes = showed AIS spread prevention awareness; Drain = drained bilge; Bait = emptied bait bucket/disposed of bait; LW = drained livewell; Dry = dried boat; Decon = visited decon station; Same Lake = boat only goes in this lake; First/Frozen = first launch of the season or frozen boat.

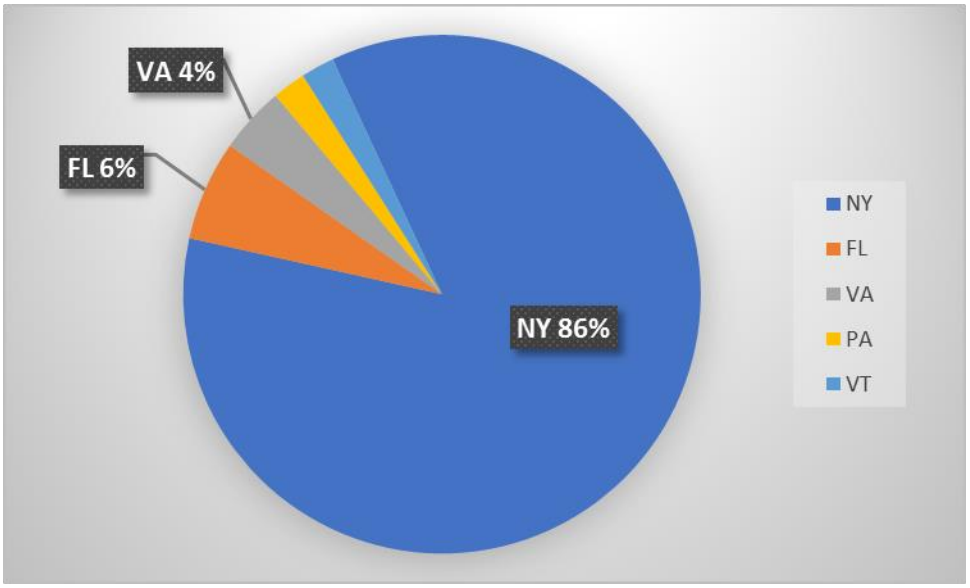
Organisms Removed	Organism Type									total # AIS	% of inspected boats w/AIS
	Non-invasive	BN*	CLP*	EF*	EWM*	VLM*	SWF*	WC*	ZM*		
# of organisms	29	0	0	0	0	0	0	0	0	0	0%
percentage of total orgs	100%	0%	0%	0%	0%	0%	0%	0%	0%		

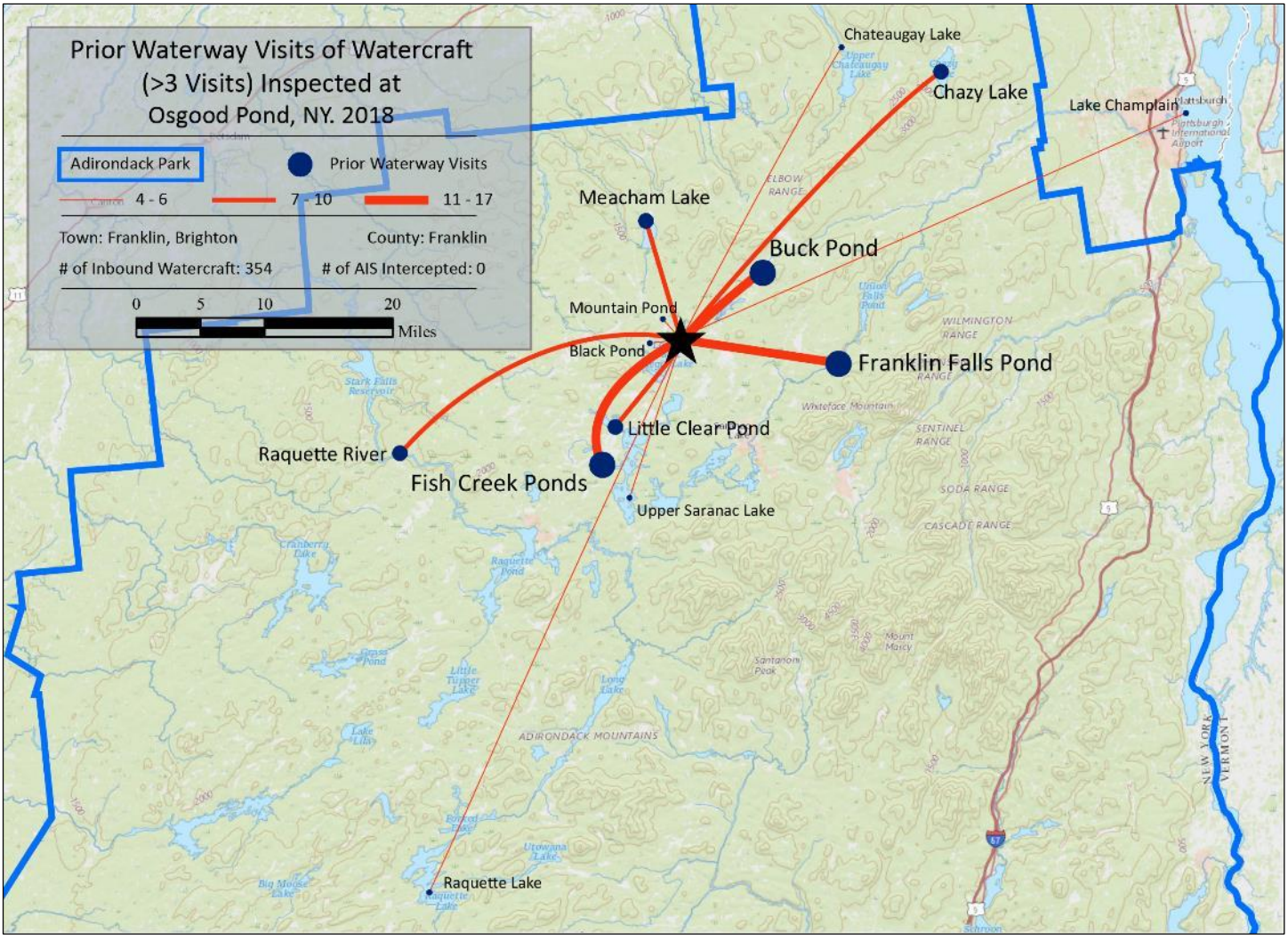
Non-invasive = native aquatic or terrestrial material; BN = brittle naiad; CLP = curly-leaf pondweed; EF = European frogbit; EWM = Eurasian watermilfoil; VLM = variable-leaf milfoil; SWF = spiny waterflea; WC= water chestnut; ZM = zebra mussel; */AIS = aquatic invasive species.

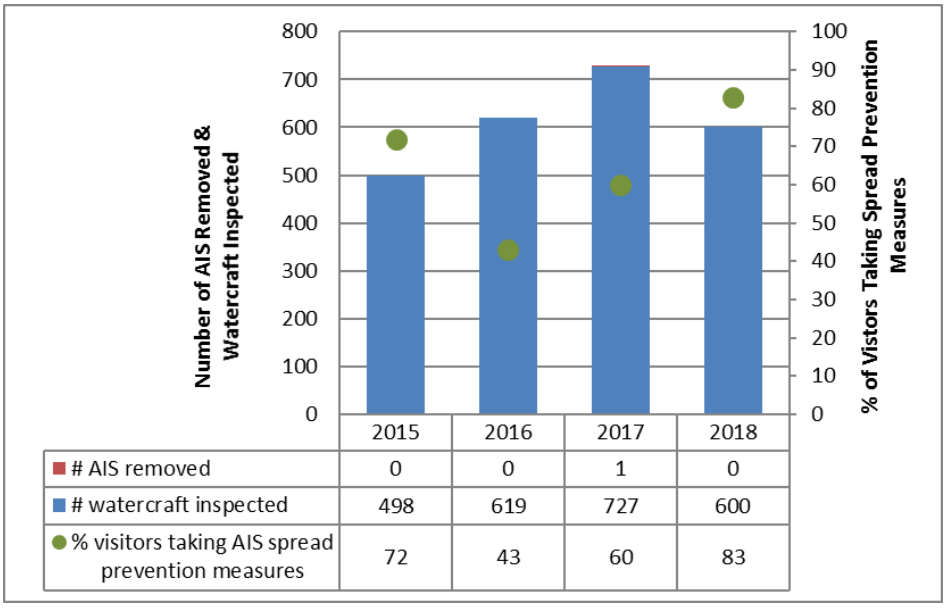
Previous Waterways for Launching Boats	# visits
NONE	146
SAME LAKE - PREVIOUS VISIT	43
Fish Creek Ponds	17
Buck Pond (Rainbow/Kushaqua)	11
Franklin Falls Pond	11
Meacham Lake	10
Chazy Lake	9
Little Clear Pond	8
Raquette River	7
Chateaugay Lake	6
Lake Champlain	6
Upper Saranac Lake	6
UNKNOWN (boater doesn't know)	5
Black Pond, Brighton, NY	4
Mountain Pond , Brighton, NY	4
Raquette Lake	4
Follensby Clear Pond	3
Green Pond, Santa Clara, NY	3
Jones Pond, Brighton, NY	3
Loon Lake (Franklin County)	3
Square Pond, Franklin, NY	3
St. Regis River	3
Cayuga Lake	2
Church Pond, Brighton, NY	2

Previous Waterways for Launching Boats	# visits
Deer River Flow, Duane, NY	2
Fern Lake, Black Brook, NY	2
Lake Colby	2
Lake Harris	2
Lower Saranac Lake	2
Lower St. Regis Lake	2
Moose Pond, Long Lake, NY	2
Round Lake, Saratoga County, NY	2
Saranac River	2
Second Pond	2
Upper St. Regis Lake	2
Ausable River	1
Big Moose Lake	1
Cranberry Lake	1
Lake Clear	1
Lake Placid	1
Long Lake	1
Mountain View Lake	1
NOT ASKED	1
Piseco Lake	1
Sacandaga River, NY	1
Taylor Pond, Black Brook, NY	1
Tupper Lake	1
unspecified lake in New York	1
TOTAL BOATS	**354**

State of Motorized Boat Registration
(n=48)

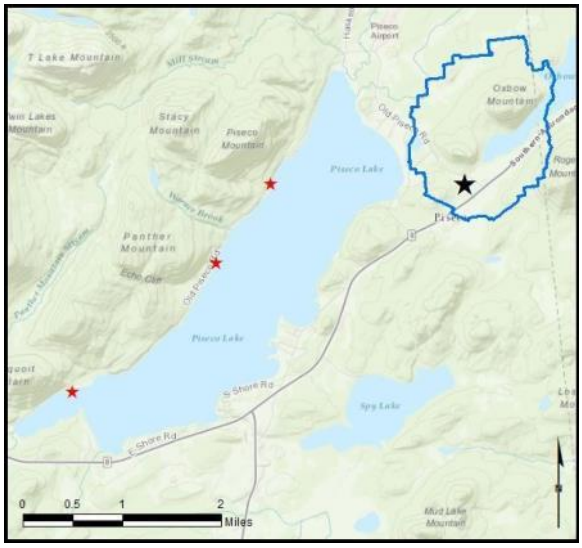



Prior Waterway Visits of Watercraft (>3 Visits) Inspected at Osgood Pond, NY. 2018
Adirondack Park
Prior Waterway Visits
4 - 6
7 - 10
11 - 17
Town: Franklin, Brighton
County: Franklin
# of Inbound Watercraft: 354
# of AIS Intercepted: 0
0 5 10 20
Miles
Chateaugay Lake
Chazy Lake
Lake Champlain
Meacham Lake
Buck Pond
Mountain Pond
Black Pond
Franklin Falls Pond
Little Clear Pond
Raquette River
Fish Creek Ponds
Upper Saranac Lake
Raquette Lake
ADIRONDACK MOUNTAINS


Number of AIS Removed & Watercraft Inspected
% of Visitors Taking Spread Prevention Measures
800
700
600
500
400
300
200
100
0
100
90
80
70
60
50
40
30
20
10
0
2015 2016 2017 2018
AIS removed 0 0 1 0
watercraft inspected 498 619 727 600
% visitors taking AIS spread prevention measures 72 43 60 83

Piseco Lake

AIS intercepted: 8
Boats inspected: 1,529
Dates of Operation: May 26 – September 3
Number of visitors: 3,237
Boats failing inspection: 4.6%



Total Number of Days Covered: Little Sand 63, Point Comfort 83, Poplar Point 97
Weekly Coverage: Little Sand 5 days, Point Comfort 5-7 days, Poplar Point 5-7 days
Visitors showing spread prevention awareness: 76%
Number of previously visited waterways: 45

AIS Present in Waterbody: spiny waterflea
Stewardship History: 2015 - present
Partnership: Piseco Lake Association, Town of Arietta
Notes: Piseco Lake has 3 NYS DEC Campgrounds, all which provide a point of access for boaters to enter the lake. The AWI was contracted to provide comprehensive stewardship coverage to all 3 boat launches.

Watercraft	Boat Type										total # boats observed	total # boats inspected
	Barge	Canoe	Dock	Kayak	Motor	PWC	Row	Sail	SUP	Wind		
Little Sand Launch	0	8	0	20	121	8	1	4	0	0	162	162
percentage of total boats	0%	5%	0%	12%	75%	5%	1%	2%	0%	0%	100%	100%
Point Comfort Launch	0	6	0	111	311	25	5	10	2	2	472	471
percentage of total boats	0%	1%	0%	24%	66%	5%	1%	2%	0%	0%	100%	100%
Poplar Point Launch	0	3	0	130	652	86	3	24	1	3	902	896
percentage of total boats	0%	0%	0%	14%	72%	10%	0%	3%	0%	0%	100%	99%
totals	**0**	**17**	**0**	**261**	**1084**	**119**	**9**	**38**	**3**	**5**	**1536**	**1529**
percentage of total boats	**0%**	**1%**	**0%**	**17%**	**71%**	**8%**	**1%**	**2%**	**0%**	**0%**	**100%**	**99.5%**

Boats observed at launch, including those not inspected. PWC=personal watercraft, SUP=stand-up paddleboard, Wind=windsurfer.

	total # visitors	organisms found			total organisms	# boats dirty	# boats w/AIS	# of inspections	% of inspected boats dirty	% of inspected boats w/AIS
		entering	leaving	roadside						
Little Sand Launch	351	8	5	--	13	11	1	162	6.8%	0.6%
Point Comfort Launch	1017	2	2	--	4	4	0	471	0.8%	0%
Poplar Point Launch	1869	21	34	--	55	55	6	896	6.1%	0.7%
totals	**3237**	**31**	**41**	**--**	**72**	**70**	**7**	**1529**	**4.6%**	**0.5%**

Boats dirty = watercraft with any organic material, invasive, non-invasive or unknown.

Visitor Responses	AIS spread prevention awareness											# groups asked
	yes	Inspect	Wash	Drain	Bait	LW	Dry	Decon	same lake	first/frozen	didn't ask	
Little Sand Launch	105	35	31	9	12	6	13	8	23	18	5	147
percentage of total groups asked	71%	24%	21%	6%	8%	4%	9%	5%	16%	12%	NA	
Point Comfort Launch	323	74	47	26	8	1	42	4	116	74	1	414
percentage of total groups asked	78%	18%	11%	6%	2%	0%	10%	1%	28%	18%	NA	
Poplar Point Launch	631	188	97	72	14	17	75	17	209	145	5	825
percentage of total groups asked	76%	23%	12%	9%	2%	2%	9%	2%	25%	18%	NA	
totals	**1059**	**297**	**175**	**107**	**34**	**24**	**130**	**29**	**348**	**237**	**11**	**1386**
percentage of total groups asked	**76%**	**21%**	**13%**	**8%**	**2%**	**2%**	**9%**	**2%**	**25%**	**17%**	**NA**	

Yes = showed AIS spread prevention awareness; Drain = drained bilge; Bait = emptied bait bucket/disposed of bait; LW = drained livewell; Dry = dried boat; Decon = visited decon station; Same Lake = boat only goes in this lake; First/Frozen = first launch of the season or frozen boat.

Organisms Removed	Organism Type									total # AIS	% of inspected boats w/AIS
	Non-invasive	BN*	CLP*	EF*	EWM*	VLM*	SWF*	WC*	ZM*		
Little Sand Launch	11	0	0	0	1	1	0	0	0	2	0.6%
percentage of total orgs	85%	0%	0%	0%	8%	8%	0%	0%	0%		
Point Comfort Launch	4	0	0	0	0	0	0	0	0	0	0%
percentage of total orgs	100%	0%	0%	0%	0%	0%	0%	0%	0%		
Poplar Point Launch	49	0	1	0	3	0	2	0	0	6	0.7%
percentage of total orgs	89%	0%	2%	0%	5%	0%	4%	0%	0%		
totals	**64**	**0**	**1**	**0**	**4**	**1**	**2**	**0**	**0**	**8**	**0.5%**
percentage of total orgs	**89%**	**0%**	**1%**	**0%**	**6%**	**1%**	**3%**	**0%**	**0%**		

Non-invasive = native aquatic or terrestrial material; BN = brittle naiad; CLP = curly-leaf pondweed; EF = European frogbit; EWM = Eurasian watermilfoil; VLM = variable-leaf milfoil; SWF = spiny waterflea; WC= water chestnut; ZM = zebra mussel; */AIS = aquatic invasive species.

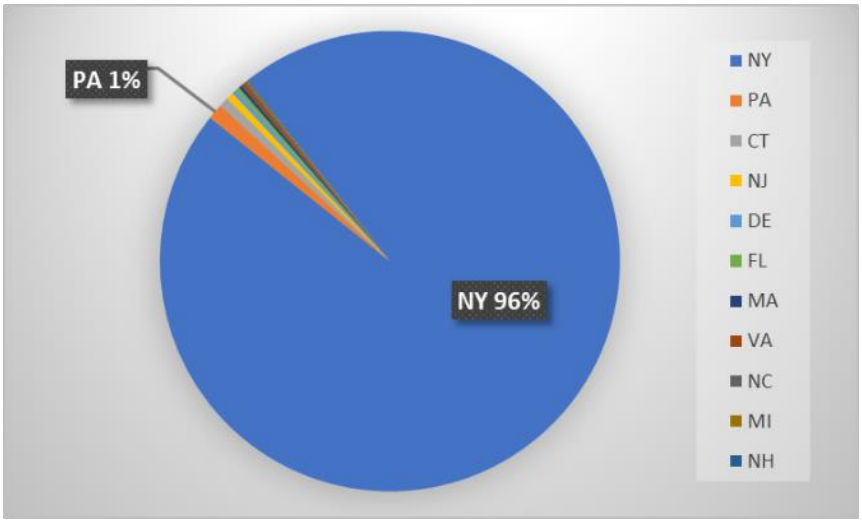
Aquatic Invasive Species Intercepted by Stewards	# found on boats launching	Previous Waterway	# found on boats retrieving	Previous Waterway
curly-leaf pondweed	1	Delta Lake (1)	0	N/A
Eurasian watermilfoil	4	Delta Lake (1), Lake Ontario (1), Oneida Lake (1), Round Lake (1)	0	N/A
variable-leaf milfoil	1	Round Lake (1)	0	N/A
spiny waterflea	0	N/A	2	Piseco Lake
Totals	**6**		**2**	

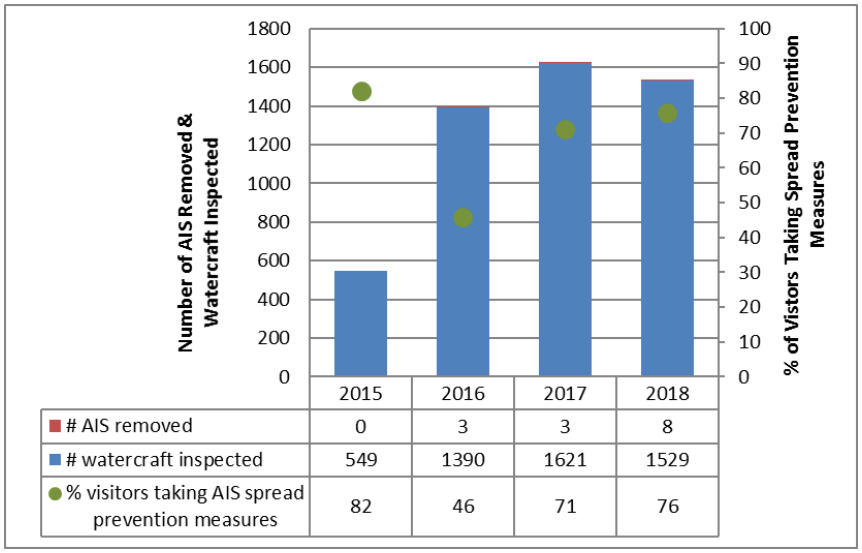
Previous Waterways for Launching Boats	# visits
NONE	514
SAME LAKE - PREVIOUS VISIT	325
Lake Pleasant	23
Sacandaga Lake	22
Oxbow Lake	19
UNKNOWN (boater doesn't know)	12
unspecified lake in New York	12
Great Sacandaga Lake	10
Hinckley Reservoir	10
Canadarago Lake	8
Oneida Lake	8
Canada Lake	7
Delta Lake	6
Indian Lake	5
Caroga Lake	4
NOT ASKED	4
Erie Canal	3
Lake Algonquin	3

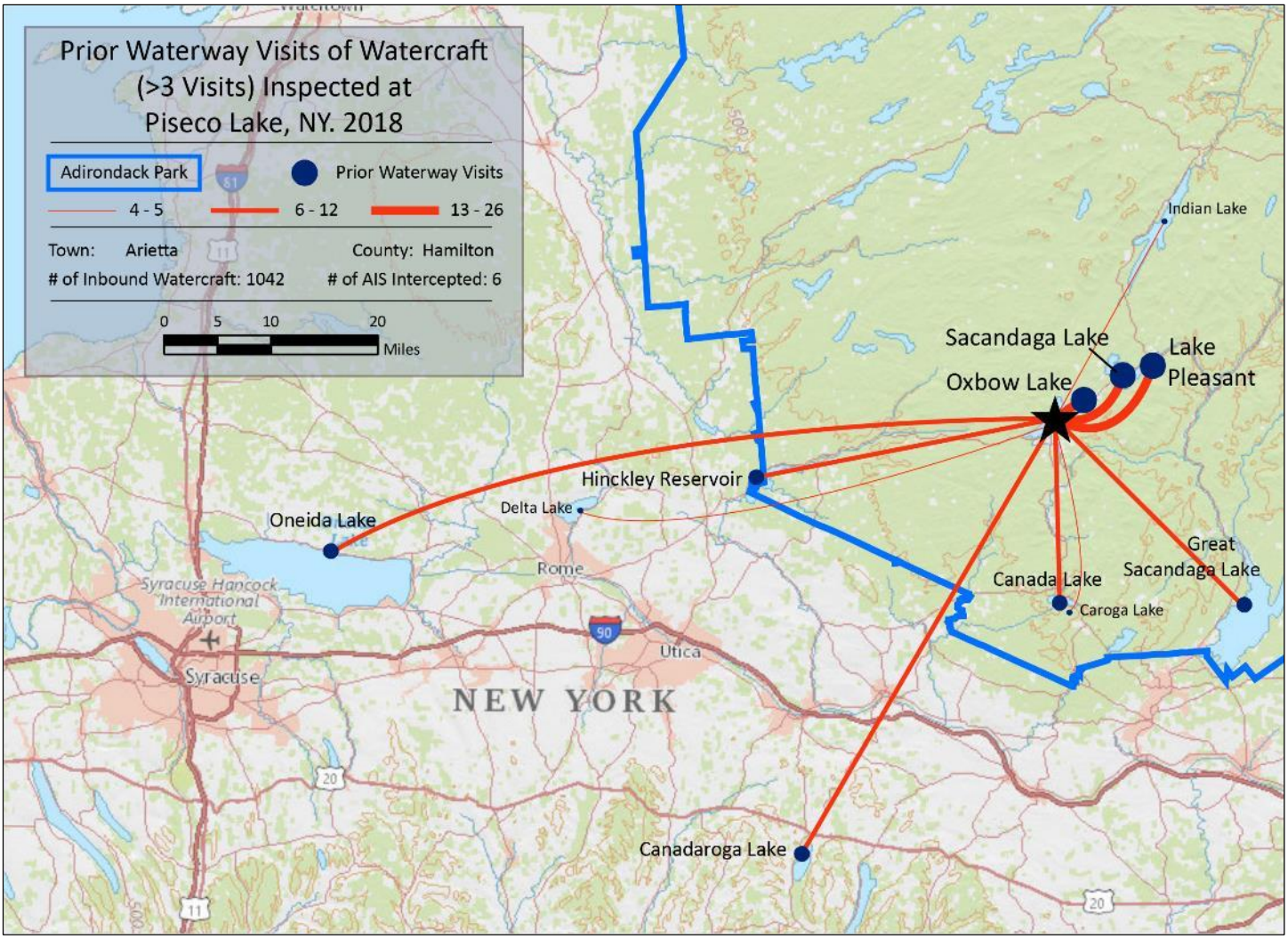
Previous Waterways for Launching Boats	# visits
Lake George	3
Lake Ontario	3
Long Lake	3
RENTAL	3
Eighth Lake	2
Kayuta Lake	2
Lake Champlain	2
Mohawk River	2
Oneida River	2
Raquette Lake	2
Round Lake, Saratoga County, NY	2
Seneca Lake	2
Atlantic Ocean	1
Blue Mountain Lake	1
Canandaigua Lake	1
Cayuga Lake	1
Fulton Chain of Lakes (unspecified)	1
Great Lakes (unspecified)	1

Previous Waterways for Launching Boats	# visits
Greenwood Lake, West Milford, NJ	1
Lake Bonaparte	1
Lake Heritage , Lake Heritage, PA	1
Lamoka Lake, Tyrone, NY	1
Long Pond, Santa Clara, NY	1
Niagara River	1
North Lake, Ohio, NY	1
Saratoga Lake	1
Schroon Lake	1
Sebec Lake, Willimantic, ME	1
Silver Lake, Perry, NY	1
St. Lawrence River	1
Stillwater Reservoir	1
Susquehanna River, NY	1
unspecified lake in Pennsylvania	1
unspecified lake in the Adirondacks	1
unspecified lake in Vermont	1
Upper Saranac Lake	1
TOTAL BOATS	**1047**

State of Motorized Boat Registration
(n=1,180)







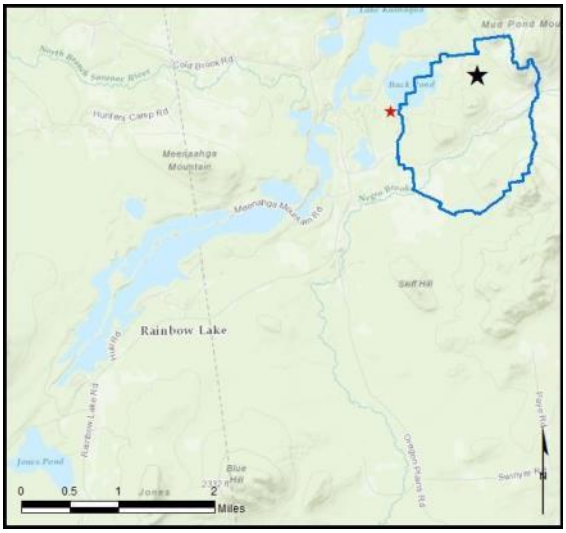
Little Sand Point Boat Launch

Rainbow Lake - Buck Pond

AIS intercepted: 0
Boats inspected: 1,105
Dates of Operation: May 26 – August 31
Number of visitors: 1,794
Boats failing inspection: 0.8%

Total Number of Days Covered: 65
Weekly Coverage: 5 days
Visitors showing spread prevention awareness: 95%
Number of previously visited waterways: 48

AIS Present in Waterbody: none
Stewardship History: 2005 - present
Partnership: Rainbow Lake Association



Watercraft	Boat Type										total # boats observed	total # boats inspected
	Barge	Canoe	Dock	Kayak	Motor	PWC	Row	Sail	SUP	Wind		
# of boats observed	0	244	0	489	319	9	19	9	14	6	1109	1105
percentage of total boats	0%	22%	0%	44%	29%	1%	2%	1%	1%	1%	100%	100%

Boats observed at launch, including those not inspected. PWC=personal watercraft, SUP=stand-up paddleboard, Wind=windsurfer.

total # visitors	organisms found			total organisms	# boats dirty	# boats w/AIS	# of inspections	% of inspected boats dirty	% of inspected boats w/AIS
	entering	leaving	roadside						
1794	4	5	--	9	9	0	1105	0.8%	0%

Boats dirty = watercraft with any organic material, invasive, non-invasive or unknown.

Visitor Responses	AIS spread prevention awareness											# groups asked
	yes	Inspect	Wash	Drain	Bait	LW	Dry	Decon	same lake	first/frozen	didn't ask	
# of groups	728	315	36	69	4	20	267	6	153	69	13	766
percentage of total groups asked	95%	41%	5%	9%	1%	3%	35%	1%	20%	9%	NA	

Yes = showed AIS spread prevention awareness; Drain = drained bilge; Bait = emptied bait bucket/disposed of bait; LW = drained livewell; Dry = dried boat; Decon = visited decon station; Same Lake = boat only goes in this lake; First/Frozen = first launch of the season or frozen boat.

Organisms Removed	Organism Type									total # AIS	% of inspected boats w/AIS
	Non-invasive	BN*	CLP*	EF*	EWM*	VLM*	SWF*	WC*	ZM*		
# of organisms	9	0	0	0	0	0	0	0	0	0	0%
percentage of total orgs	100%	0%	0%	0%	0%	0%	0%	0%	0%		

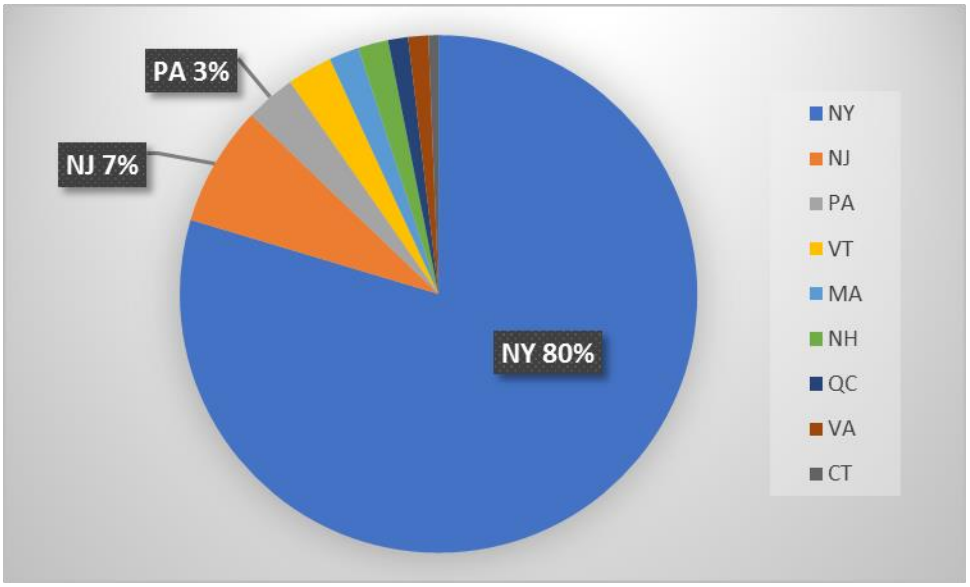
Non-invasive = native aquatic or terrestrial material; BN = brittle naiad; CLP = curly-leaf pondweed; EF = European frogbit; EWM = Eurasian watermilfoil; VLM = variable-leaf milfoil; SWF = spiny waterflea; WC= water chestnut; ZM = zebra mussel; */AIS = aquatic invasive species.

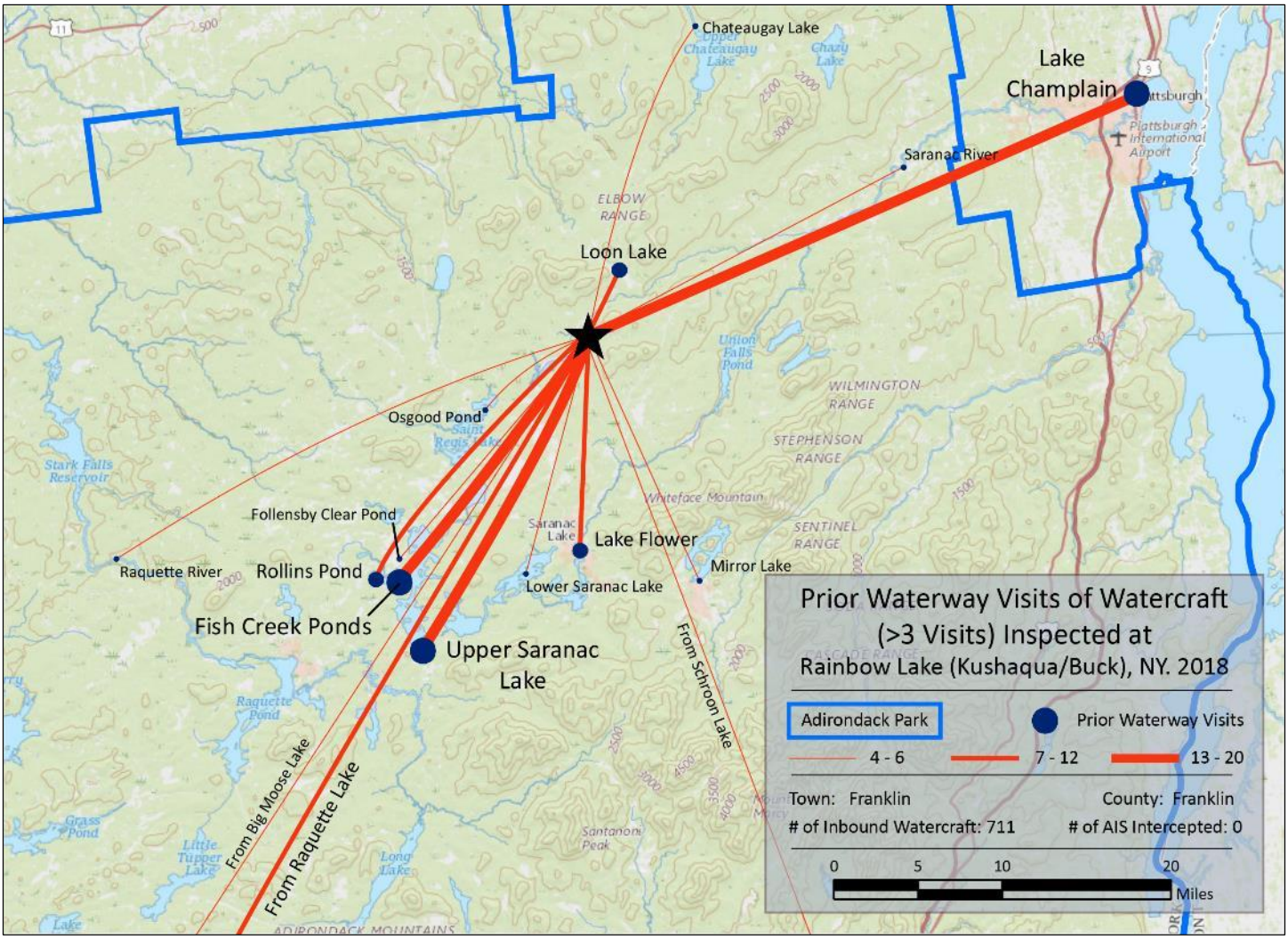
Previous Waterways for Launching Boats	# visits
SAME LAKE - PREVIOUS VISIT	328
NONE	174
Lake Champlain	20
Fish Creek Ponds	18
Upper Saranac Lake	15
RENTAL	13
Rollins Pond	12
Lake Flower	7
Loon Lake (Franklin County)	7
Raquette Lake	7
Big Moose Lake	6
unspecified lake in New York	6
Chateaugay Lake	5
Lower Saranac Lake	5
Osgood Pond	5
Raquette River	5
Saranac River	5
Schroon Lake	5
Follensby Clear Pond	4
Mirror Lake	4

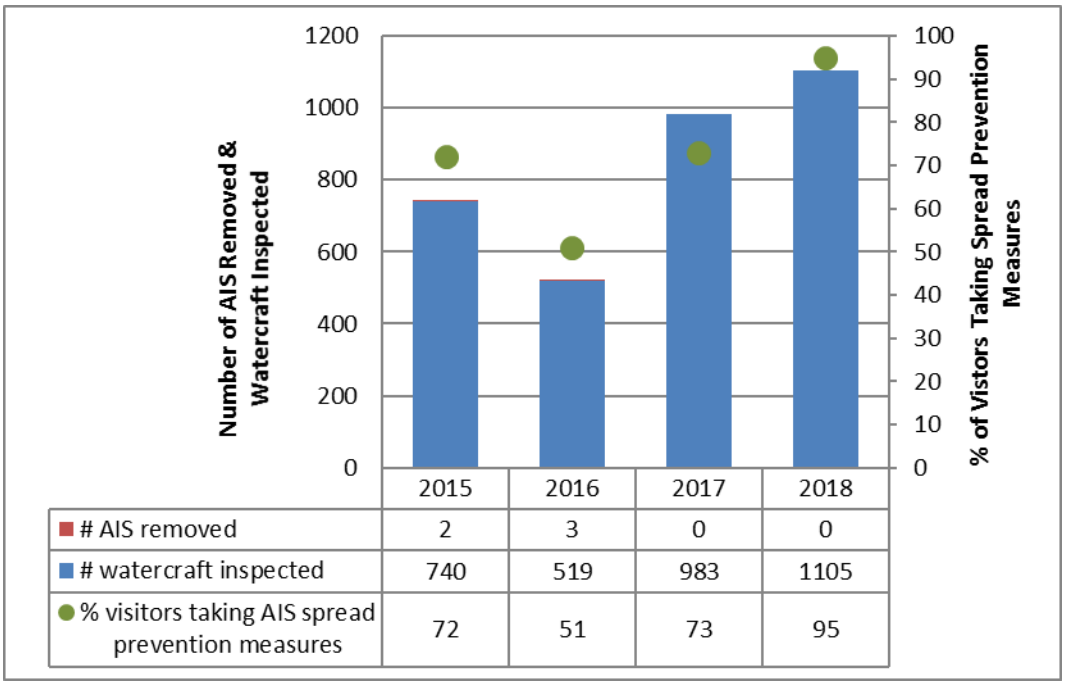
Previous Waterways for Launching Boats	# visits
UNKNOWN (boater doesn't know)	4
Lake Colby	3
Loon Lake (Warren County)	3
Middle Saranac Lake	3
Allegheny River, PA	2
Atlantic Ocean	2
Fern Lake, Black Brook, NY	2
Franklin Falls Pond	2
Lake George	2
Lake Placid	2
Lewey Lake	2
Little Clear Pond	2
Moose Pond, St. Armand, NY	2
NOT ASKED	2
Otis Reservoir, Otis, MA	2
South Meadow Pond, Clinton, MA	2
St. Regis River	2
Taylor Pond, Black Brook, NY	2
unspecified lake in Florida	2

Previous Waterways for Launching Boats	# visits
unspecified lake in New Hampshire	2
Ausable River	1
Black Lake	1
Carry Falls Reservoir	1
Connecticut River, CT	1
Hudson River	1
Indian Lake	1
Jones Pond, Brighton, NY	1
Kiwassa Lake	1
Lake Erie	1
Long Lake	1
Lower St. Regis Lake	1
Mountain View Lake	1
Shenandoah River, VA	1
St. Lawrence River	1
Tupper Lake	1
unspecified lake in Pennsylvania	1
unspecified lake in Vermont	1
Upper St. Regis Lake	1
TOTAL BOATS	**714**

State of Motorized Boat Registration
(n=319)




Chateaugay Lake
Lake Champlain
Saranac River
Loon Lake
Osgood Pond
Follensby Clear Pond
Raquette River
Rollins Pond
Fish Creek Ponds
Upper Saranac Lake
Lake Flower
Saranac Lake
Lower Saranac Lake
Mirror Lake
From Schroon Lake
From Big Moose Lake
From Raquette Lake
ELBOW RANGE
WILMINGTON RANGE
STEPHENSON RANGE
SENTINEL RANGE
Whiteface Mountain
Santanoni Peak
Prior Waterway Visits of Watercraft (>3 Visits) Inspected at Rainbow Lake (Kushaqua/Buck), NY. 2018
Adirondack Park
Prior Waterway Visits
4 - 6
7 - 12
13 - 20
Town: Franklin
County: Franklin
# of Inbound Watercraft: 711
# of AIS Intercepted: 0
0 5 10 20
Miles

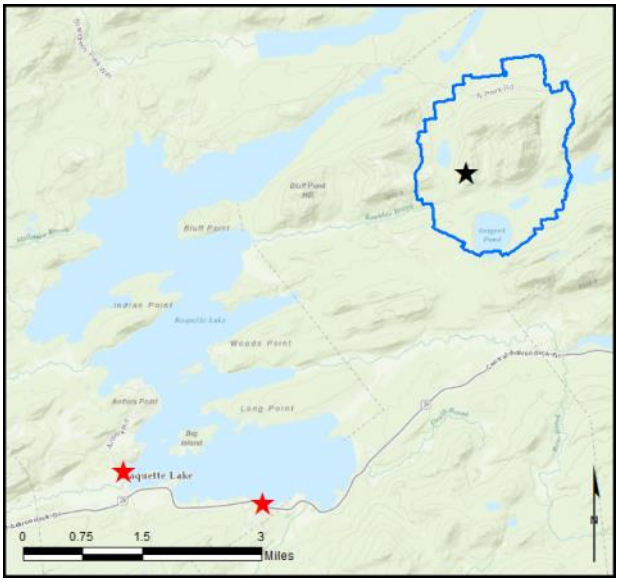

Number of AIS Removed & Watercraft Inspected
% of Vistors Taking Spread Prevention Measures
1200
1000
800
600
400
200
0
100
90
80
70
60
50
40
30
20
10
0
2015
2016
2017
2018
AIS removed 2 3 0 0
watercraft inspected 740 519 983 1105
% visitors taking AIS spread prevention measures 72 51 73 95

Raquette Lake

AIS intercepted: 17
Boats inspected: 1,622
Dates of Operation: May 26 – September 3
Number of visitors: 2,969
Boats failing inspection: 4.4%

Total Number of Days Covered: Burke's Marina 24, Village Launch 99
Weekly Coverage: Burke's 2-3 days, Village 7 days
Visitors showing spread prevention awareness: 80%
Number of previously visited waterways: 82

AIS Present in Waterbody: variable-leaf milfoil
Stewardship History: 2008, 2011 - present
Partnership: Raquette Lake Preservation Foundation, Raquette Lake Supply Co.



Watercraft	Boat Type										total # boats observed	total # boats inspected
	Barge	Canoe	Dock	Kayak	Motor	PWC	Row	Sail	SUP	Wind		
Burke's Marina	0	1	0	2	245	44	0	1	0	0	293	289
percentage of total boats	0%	0%	0%	1%	84%	15%	0%	0%	0%	0%	100%	99%
Village Launch	0	189	0	280	779	82	1	6	4	0	1341	1333
percentage of total boats	0%	14%	0%	21%	58%	6%	0%	0%	0%	0%	100%	99%
totals	**0**	**190**	**0**	**282**	**1024**	**126**	**1**	**7**	**4**	**0**	**1634**	**1622**
percentage of total boats	**0%**	**12%**	**0%**	**17%**	**63%**	**8%**	**0%**	**0%**	**0%**	**0%**	**100%**	**99%**

Boats observed at launch, including those not inspected. PWC=personal watercraft, SUP=stand-up paddleboard, Wind=windsurfer.

	total # visitors	organisms found			total organisms	# boats dirty	# boats w/AIS	# of inspections	% of inspected boats dirty	% of inspected boats w/AIS
		entering	leaving	roadside						
Burke's Marina	532	4	4	--	8	7	1	289	2.4%	0.3%
Village Launch	2437	32	60	--	92	65	13	1333	4.9%	1.0%
totals	**2969**	**36**	**64**	**--**	**100**	**72**	**14**	**1622**	**4.4%**	**0.9%**

Boats dirty = watercraft with any organic material, invasive, non-invasive or unknown.

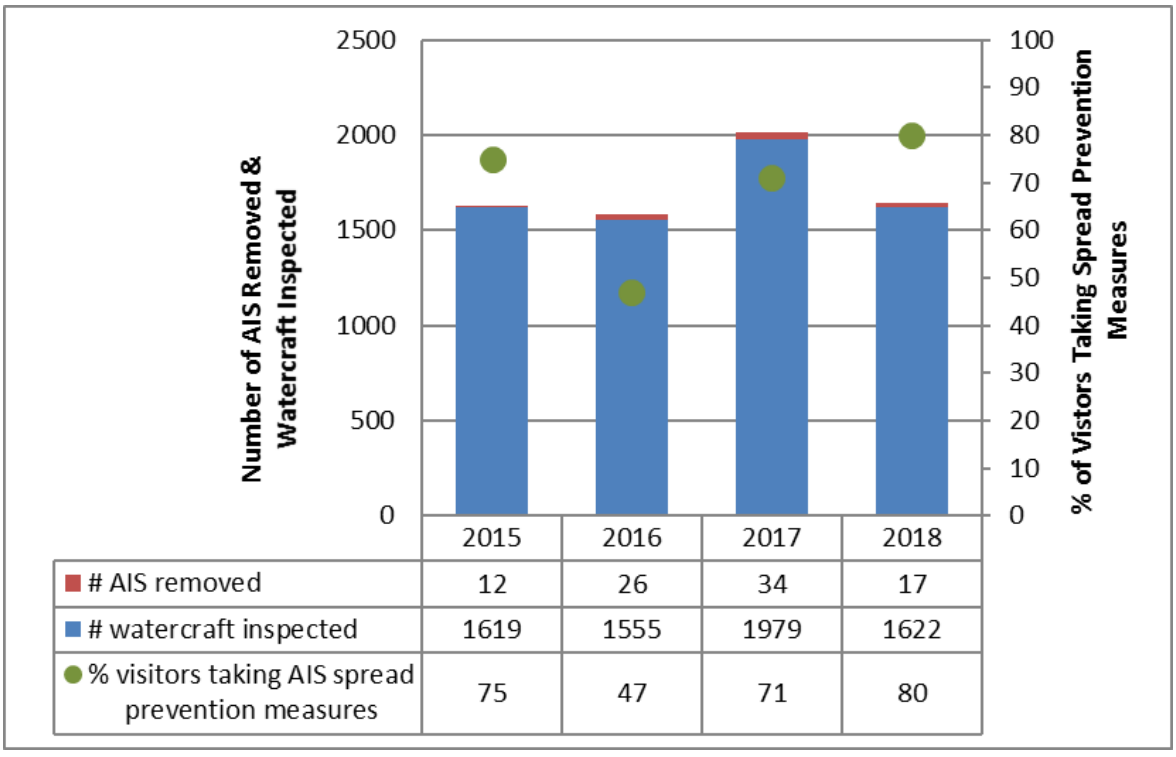
Visitor Responses	AIS spread prevention awareness											# groups asked
	yes	Inspect	Wash	Drain	Bait	LW	Dry	Decon	same lake	first/frozen	didn't ask	
Burke's Marina	246	16	93	23	0	1	14	4	67	57	1	291
percentage of total groups asked	85%	5%	32%	8%	0%	0%	5%	1%	23%	20%	NA	
Village Launch	841	229	344	263	0	9	146	21	139	163	4	1061
percentage of total groups asked	79%	22%	32%	25%	0%	1%	14%	2%	13%	15%	NA	
totals	**1087**	**245**	**437**	**286**	**0**	**10**	**160**	**25**	**206**	**220**	**5**	**1352**
percentage of total groups asked	**80%**	**18%**	**32%**	**21%**	**0%**	**1%**	**12%**	**2%**	**15%**	**16%**	**NA**	

Yes = showed AIS spread prevention awareness; Drain = drained bilge; Bait = emptied bait bucket/disposed of bait; LW = drained livewell; Dry = dried boat; Decon = visited decon station; Same Lake = boat only goes in this lake; First/Frozen = first launch of the season or frozen boat.

Organisms Removed	Organism Type									total # AIS	% of inspected boats w/AIS
	Non-invasive	BN*	CLP*	EF*	EWM*	VLM*	SWF*	WC*	ZM*		
Burke's Marina	6	0	1	0	1	0	0	0	0	2	0.3%
percentage of total orgs	75%	0%	13%	0%	13%	0%	0%	0%	0%		
Village Launch	77	0	4	0	5	5	0	1	0	15	1.0%
percentage of total orgs	84%	0%	4%	0%	5%	5%	0%	1%	0%		
totals	**83**	**0**	**5**	**0**	**6**	**5**	**0**	**1**	**0**	**17**	**0.9%**
percentage of total orgs	**83%**	**0%**	**5%**	**0%**	**6%**	**5%**	**0%**	**1%**	**0%**		

Non-invasive = native aquatic or terrestrial material; BN = brittle naiad; CLP = curly-leaf pondweed; EF = European frogbit; EWM = Eurasian watermilfoil; VLM = variable-leaf milfoil; SWF = spiny waterflea; WC= water chestnut; ZM = zebra mussel; */AIS = aquatic invasive species.

Aquatic Invasive Species Intercepted by Stewards	# found on boats launching	Previous Waterway	# found on boats retrieving	Previous Waterway
curly-leaf pondweed	4	Hudson River (1), *None* (1), Salmon River Reservoir (1), Saratoga Lake (1)	1	Raquette Lake
Eurasian watermilfoil	6	*None* (3), Fulton Chain (1), Salmon River Reservoir (1), Saranac Lake Chain (1)	0	N/A
variable-leaf milfoil	0	N/A	5	Raquette Lake
water chestnut	1	Hudson River (1)	0	N/A
Totals	**11**		**6**	

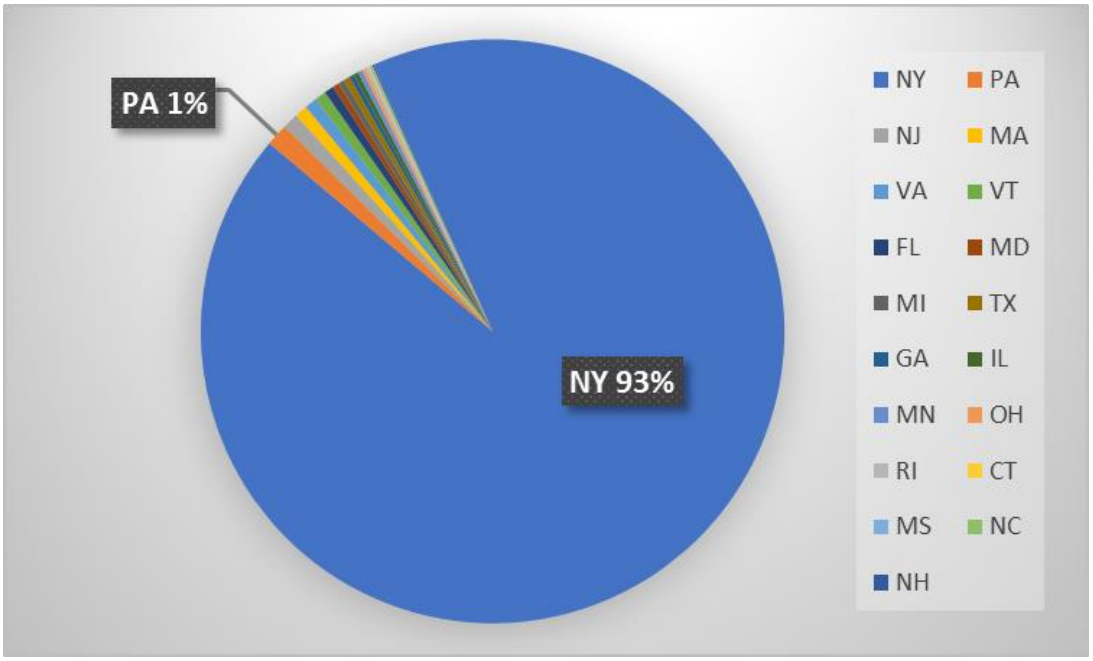


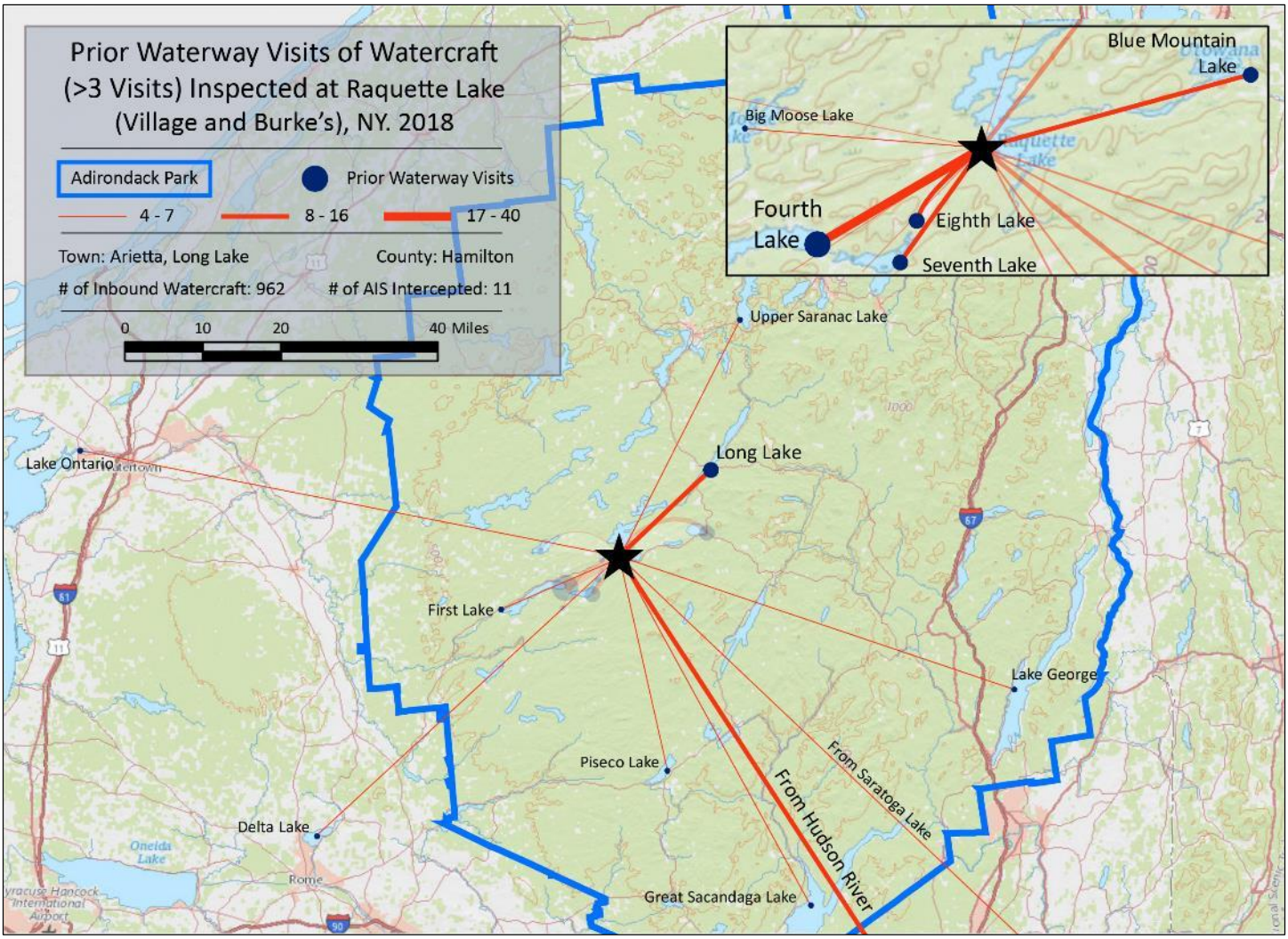
Previous Waterways for Launching Boats	# visits
NONE	482
SAME LAKE - PREVIOUS VISIT	186
Fourth Lake	40
Fulton Chain of Lakes (unspecified)	27
Seventh Lake	16
Long Lake	12
Blue Mountain Lake	10
Eighth Lake	9
UNKNOWN (boater doesn't know)	9
Hudson River	8
Big Moose Lake	7
First Lake	7
Great Sacandaga Lake	7
unspecified lake in New York	7
Delta Lake	6
Lake George	6
Piseco Lake	6
unspecified river near Rochester	6
Lake Ontario	4
Saratoga Lake	4
Upper Saranac Lake	4
Black River	3
Brantingham Lake, Greig, NY	3
Cayuga Lake	3
Hinckley Reservoir	3
Indian Lake	3
Limekiln Lake	3
Lower Saranac Lake	3
Oneida Lake	3
Tupper Lake	3

Previous Waterways for Launching Boats	# visits
Big Moose River, NY	2
Browns Tract Pond	2
Canadarago Lake	2
Canandaigua Lake	2
Candlewood Lake, Brookfield, CT	2
Erie Canal	2
Forked Lake	2
Garnet Lake, Thurman, NY	2
Honeoye Lake	2
Kayuta Lake	2
Lake Harris	2
Lake Michigan, MI	2
Lake Pleasant	2
Mohawk River	2
Old Forge Pond, Old Forge, NY	2
Salmon River Reservoir, Redfield, NY	2
Sandy Creek, Jefferson County, NY	2
Seneca River	2
Skaneateles Lake	2
Spruce Run Reservoir, NJ	2
Stillwater Reservoir	2
Atlantic Ocean	1
Barge Canal, Rome, NY	1
Black Lake	1
Cannonsville Reservoir, NY	1
Caroga Lake	1
Chateaugay Lake	1
Connecticut River, CT	1
East Sidney Lake, Franklin, NY	1
Eaton Brook Reservoir, Eaton, NY	1

Previous Waterways for Launching Boats	# visits
Fish Creek Ponds	1
Lake Bonaparte	1
Lake Durant, Indian Lake, NY	1
Lake Eaton	1
Lake Moraine	1
Lake Placid	1
Lake Rondaxe, Webb, NY	1
Lake Saint Catherine, Poultney, VT	1
Lake Wallenpaupack, PA	1
Lake Winnipesaukee, Alton, NH	1
Lamoka Lake, Tyrone, NY	1
Lebanon Reservoir, Lebanon, NY	1
Middle Saranac Lake	1
Mountain View Lake	1
North Lake, Ohio, NY	1
NOT ASKED	1
Otisco Lake	1
Otsego Lake	1
Otter Lake, Forestport, NY	1
RENTAL	1
Schroon Lake	1
Sixth Lake, Inlet, NY	1
Snyder's Lake, North Greenbush, NY	1
South Lake, Ohio, NY	1
St. Lawrence River	1
Stark Falls Reservoir	1
Stockbridge Bowl, Stockbridge, MA	1
unspecified lake in Saranac Chain	1
White Lake, Forestport, NY	1
Woods Lake, Benson, NY	1
TOTAL BOATS	**971**

State of Motorized Boat Registration (n=1,140)





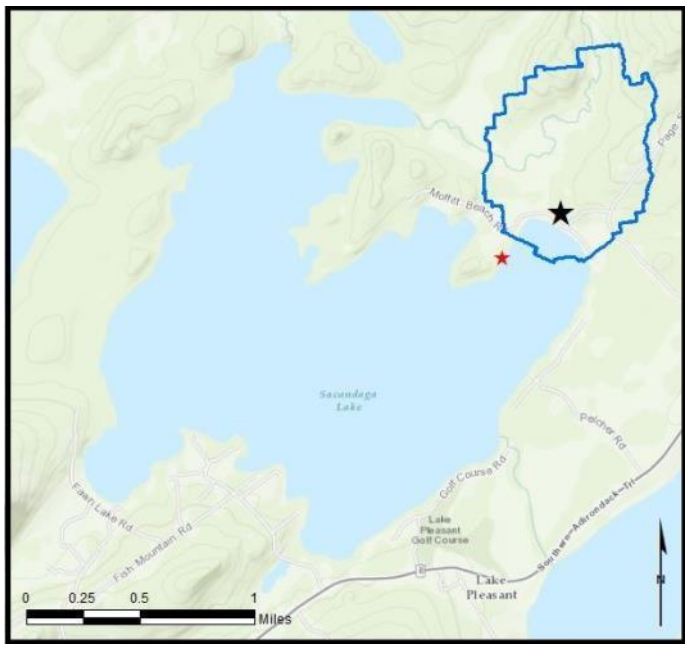
Raquette Lake – Burke's Marina

Sacandaga Lake (Moffitt Beach)

AIS intercepted: 7
Boats inspected: 1,395
Dates of Operation: May 25 – October 8
Number of visitors: 3,154
Boats failing inspection: 9.9%

Total Number of Days Covered: 124
Weekly Coverage: 7 days
Visitors showing spread prevention awareness: 95%
Number of previously visited waterways: 35

AIS Present in Waterbody: spiny waterflea
Stewardship History: 2015 - present
Partnership: Lake Pleasant Sacandaga Association, Town of Lake Pleasant



Watercraft	Boat Type										total # boats observed	total # boats inspected
	Barge	Canoe	Dock	Kayak	Motor	PWC	Row	Sail	SUP	Wind		
# of boats observed	0	16	0	144	1068	161	7	8	2	0	1406	1395
percentage of total boats	0%	1%	0%	10%	76%	11%	0%	1%	0%	0%	100%	99%

Boats observed at launch, including those not inspected. PWC=personal watercraft, SUP=stand-up paddleboard, Wind=windsurfer.

total # visitors	organisms found			total organisms	# boats dirty	# boats w/AIS	# of inspections	% of inspected boats dirty	% of inspected boats w/AIS
	entering	leaving	roadside						
3154	92	53	--	145	138	6	1395	9.9%	0.4%

Boats dirty = watercraft with any organic material, invasive, non-invasive or unknown.

Visitor Responses	AIS spread prevention awareness											# groups asked
	yes	Inspect	Wash	Drain	Bait	LW	Dry	Decon	same lake	first/frozen	didn't ask	
# of groups	887	192	138	104	4	21	138	36	223	225	87	1239
percentage of total groups asked	72%	15%	11%	8%	0%	2%	11%	3%	18%	18%	NA	

Yes = showed AIS spread prevention awareness; Drain = drained bilge; Bait = emptied bait bucket/disposed of bait; LW = drained livewell; Dry = dried boat; Decon = visited decon station; Same Lake = boat only goes in this lake; First/Frozen = first launch of the season or frozen boat.

Organisms Removed	Organism Type									total # AIS	% of inspected boats w/AIS
	Non-invasive	BN*	CLP*	EF*	EWM*	VLM*	SWF*	WC*	ZM*		
# of organisms	138	0	0	0	2	0	1	0	4	7	0.4%
percentage of total orgs	95%	0%	0%	0%	1%	0%	1%	0%	3%		

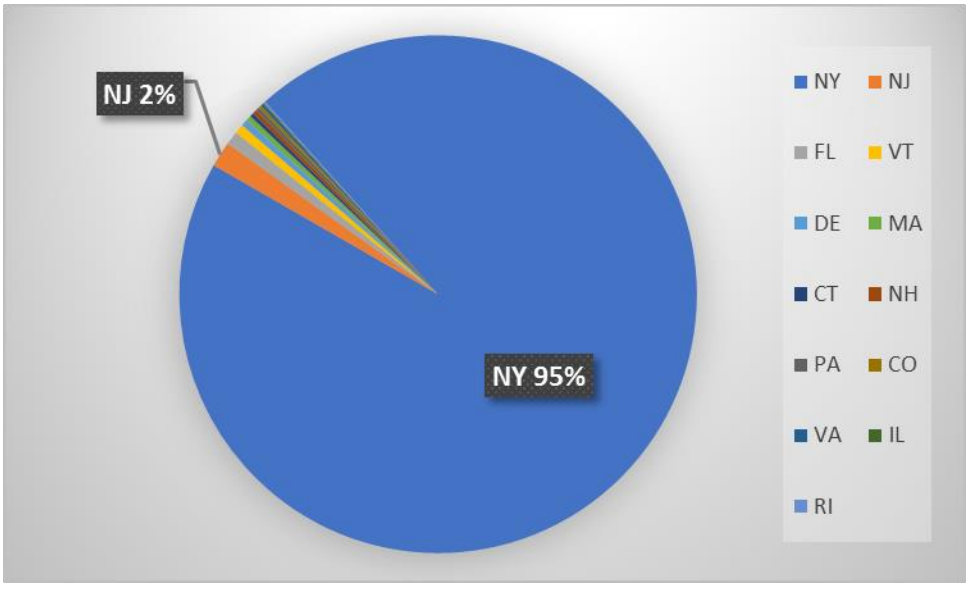
Non-invasive = native aquatic or terrestrial material; BN = brittle naiad; CLP = curly-leaf pondweed; EF = European frogbit; EWM = Eurasian watermilfoil; VLM = variable-leaf milfoil; SWF = spiny waterflea; WC= water chestnut; ZM = zebra mussel; */AIS = aquatic invasive species.

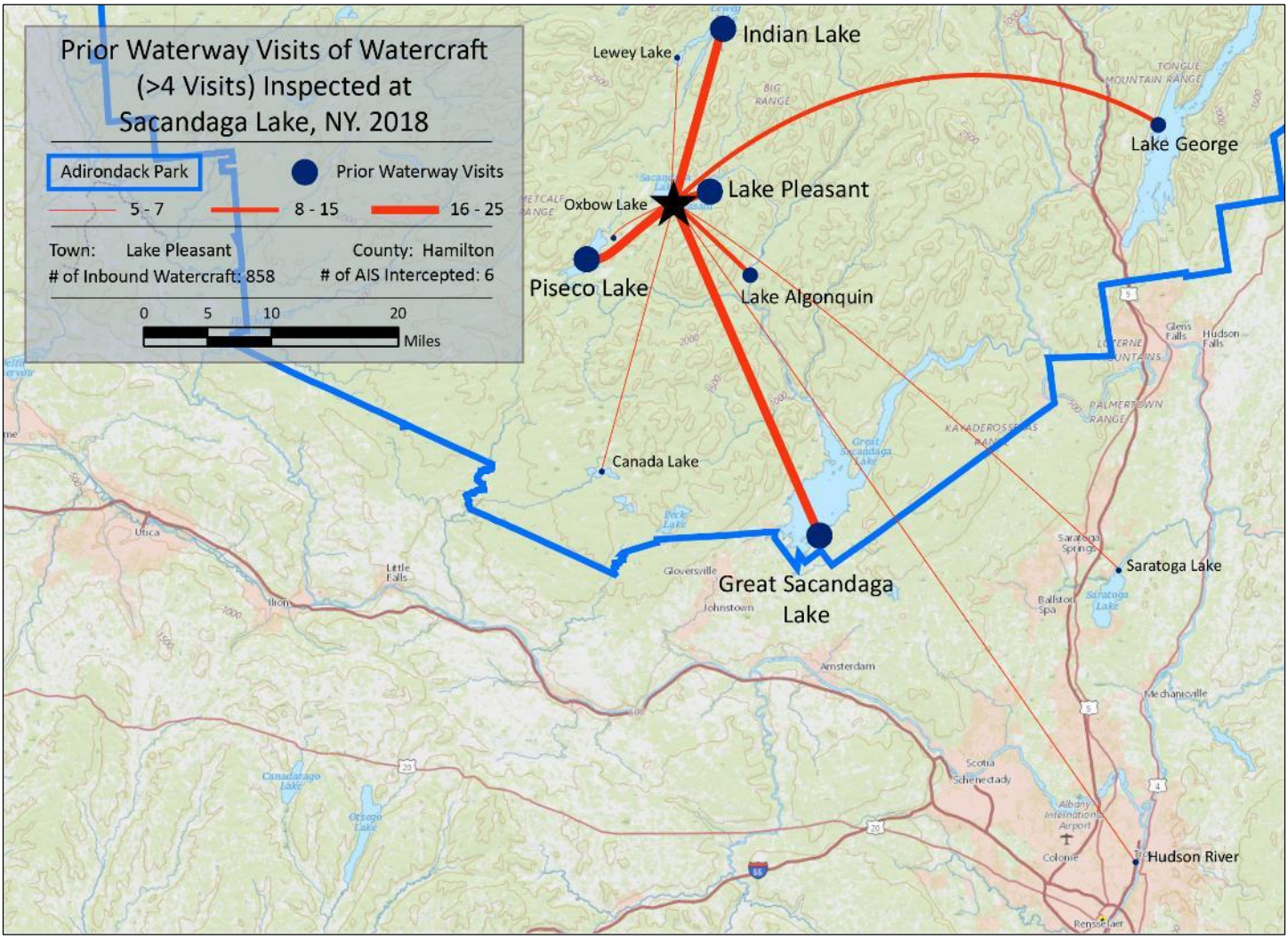
Aquatic Invasive Species Intercepted by Stewards	# found on boats launching	Previous Waterway	# found on boats retrieving	Previous Waterway
Eurasian watermilfoil	2	*None* (1), Saratoga Lake (1)	0	N/A
spiny waterflea	0	N/A	1	Sacandaga Lake
zebra mussel	4	*None (1),* Saratoga Lake (1), St. Lawrence River, *Unknown* (1)	0	N/A
Totals	**6**		**1**	

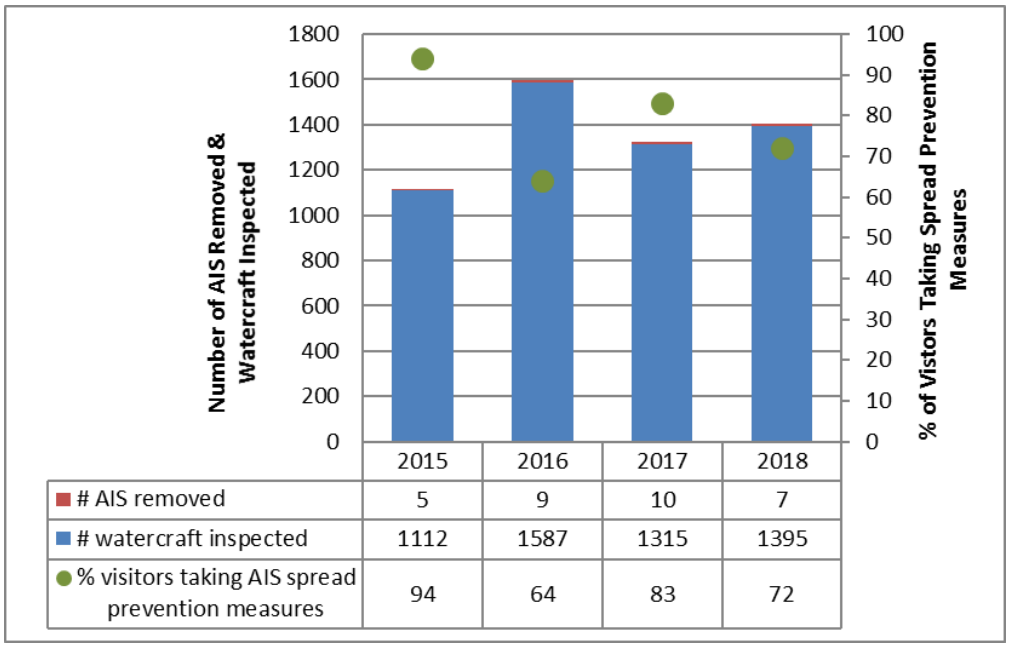
Previous Waterways for Launching Boats	# visits
NONE	430
SAME LAKE - PREVIOUS VISIT	213
Lake Pleasant	25
NOT ASKED	24
Indian Lake	22
Piseco Lake	22
Great Sacandaga Lake	21
unspecified lake in New York	10
Lake Algonquin	8
Lake George	8
Hudson River	7
Saratoga Lake	7
Lewey Lake	6
UNKNOWN (boater doesn't know)	6
Canada Lake	5
Oxbow Lake	5
RENTAL	5
Raquette Lake	4
Canadarago Lake	3
Fall Lake, Arietta, NY	3
Fourth Lake	3

Previous Waterways for Launching Boats	# visits
Hinckley Reservoir	3
Jessup River , NY	2
Lake Champlain	2
Long Lake	2
Mohawk River	2
Schroon Lake	2
St. Lawrence River	2
Atlantic Ocean	1
Buck Pond (Rainbow/Kushaqua)	1
Cayuga Lake	1
Crystal Lake, Middletown, CT	1
Delta Lake	1
Fulton Chain of Lakes (unspecified)	1
Lake Erie	1
Lake Michigan, WI	1
Lower Saranac Lake	1
Oneida Lake	1
Paradox Lake	1
Skaneateles Lake	1
Stillwater Reservoir	1
unspecified river in New York	1
TOTAL BOATS	**866**

State of Motorized Boat Registration
(n=1,193)







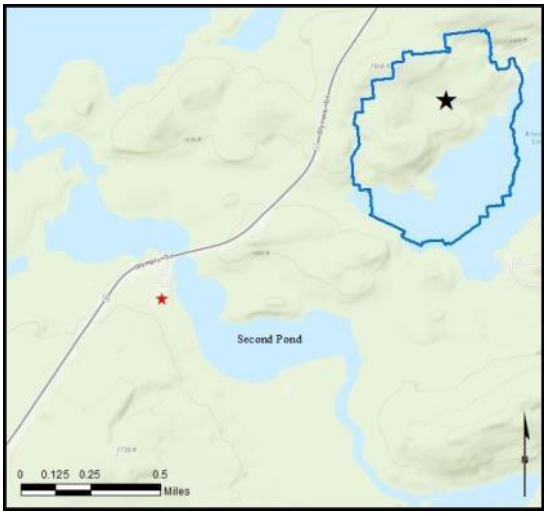
	2015	2016	2017	2018
# AIS removed	5	9	10	7
# watercraft inspected	1112	1587	1315	1395
% visitors taking AIS spread prevention measures	94	64	83	72

Second Pond

AIS intercepted: 44
Boats inspected: 4,015
Dates of Operation: May 26 – October 29
Number of visitors: 7,655
Boats failing inspection: 8.0%

Total Number of Days Covered: 116
Weekly Coverage: 5 days
Visitors showing spread prevention awareness: 65%
Number of previously visited waterways: 119

AIS Present in Waterbody: Eurasian watermilfoil, variable-leaf milfoil
Stewardship History: 2005, 2008-2012, 2014-Present



Watercraft	Boat Type										total # boats observed	total # boats inspected
	Barge	Canoe	Dock	Kayak	Motor	PWC	Row	Sail	SUP	Wind		
# of boats observed	1	826	0	978	2140	78	9	0	37	12	4081	4015
percentage of total boats	0%	20%	0%	24%	52%	2%	0%	0%	1%	0%	100%	98%

Boats observed at launch, including those not inspected. PWC=personal watercraft, SUP=stand-up paddleboard, Wind=windsurfer.

total # visitors	organisms found			total organisms	# boats dirty	# boats w/AIS	# of inspections	% of inspected boats dirty	% of inspected boats w/AIS
	entering	leaving	roadside						
7655	89	252	--	341	320	42	4015	8.0%	1.0%

Boats dirty = watercraft with any organic material, invasive, non-invasive or unknown.

Visitor Responses	AIS spread prevention awareness											# groups asked
	yes	Inspect	Wash	Drain	Bait	LW	Dry	Decon	same lake	first/frozen	didn't ask	
# of groups	1538	626	449	432	3	35	414	21	95	238	811	2366
percentage of total groups asked	65%	26%	19%	18%	0%	1%	17%	1%	4%	10%	NA	

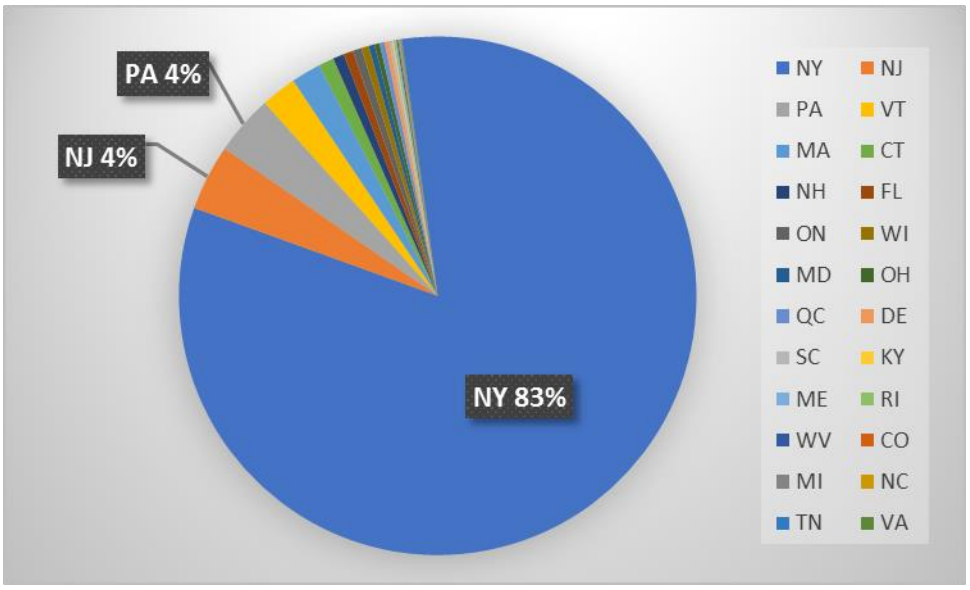
Yes = showed AIS spread prevention awareness; Drain = drained bilge; Bait = emptied bait bucket/disposed of bait; LW = drained livewell; Dry = dried boat; Decon = visited decon station; Same Lake = boat only goes in this lake; First/Frozen = first launch of the season or frozen boat.

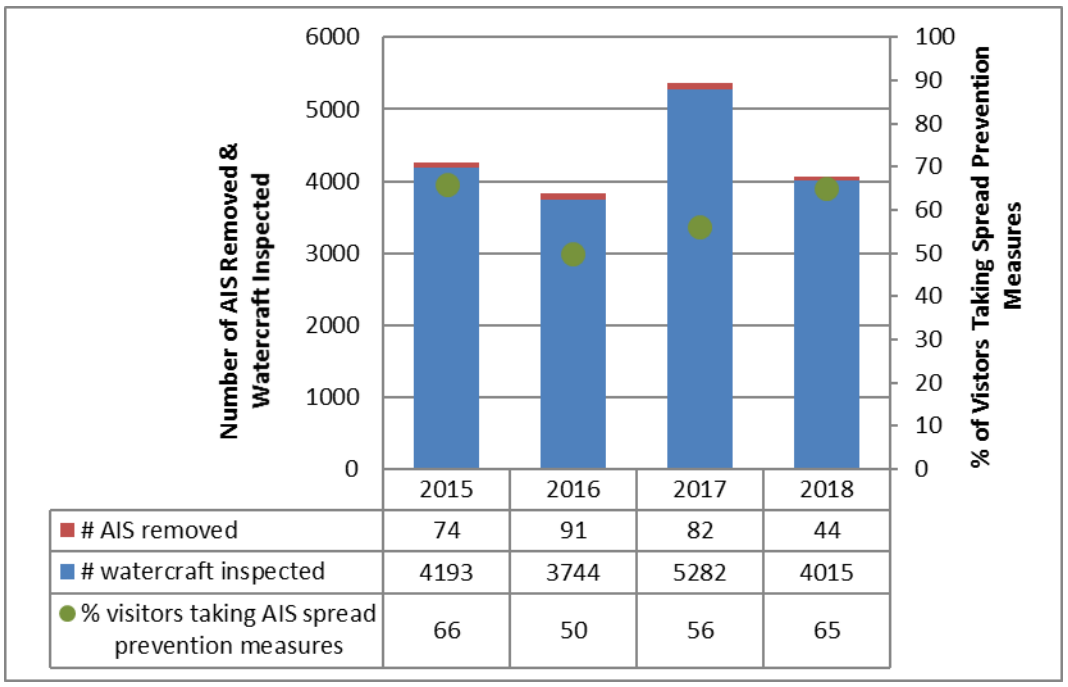
Organisms Removed	Organism Type									total # AIS	% of inspected boats w/AIS
	Non-invasive	BN*	CLP*	EF*	EWM*	VLM*	SWF*	WC*	ZM*		
# of organisms	297	0	5	0	27	12	0	0	0	44	1.0%
percentage of total orgs	87%	0%	1%	0%	8%	4%	0%	0%	0%		

Non-invasive = native aquatic or terrestrial material; BN = brittle naiad; CLP = curly-leaf pondweed; EF = European frogbit; EWM = Eurasian watermilfoil; VLM = variable-leaf milfoil; SWF = spiny waterflea; WC= water chestnut; ZM = zebra mussel; */AIS = aquatic invasive species.

Aquatic Invasive Species Intercepted by Stewards	# found on boats launching	Previous Waterway	# found on boats retrieving	Previous Waterway
curly-leaf pondweed	2	Second Pond (2)	3	Second Pond
Eurasian watermilfoil	8	*None* (3), Second Pond (3), *Not Asked* (2)	19	Second Pond
variable-leaf milfoil	3	Second Pond (2), Lake Champlain (1)	9	Second Pond
Totals	**13**		**31**	

State of Motorized Boat Registration
(n=2,166)

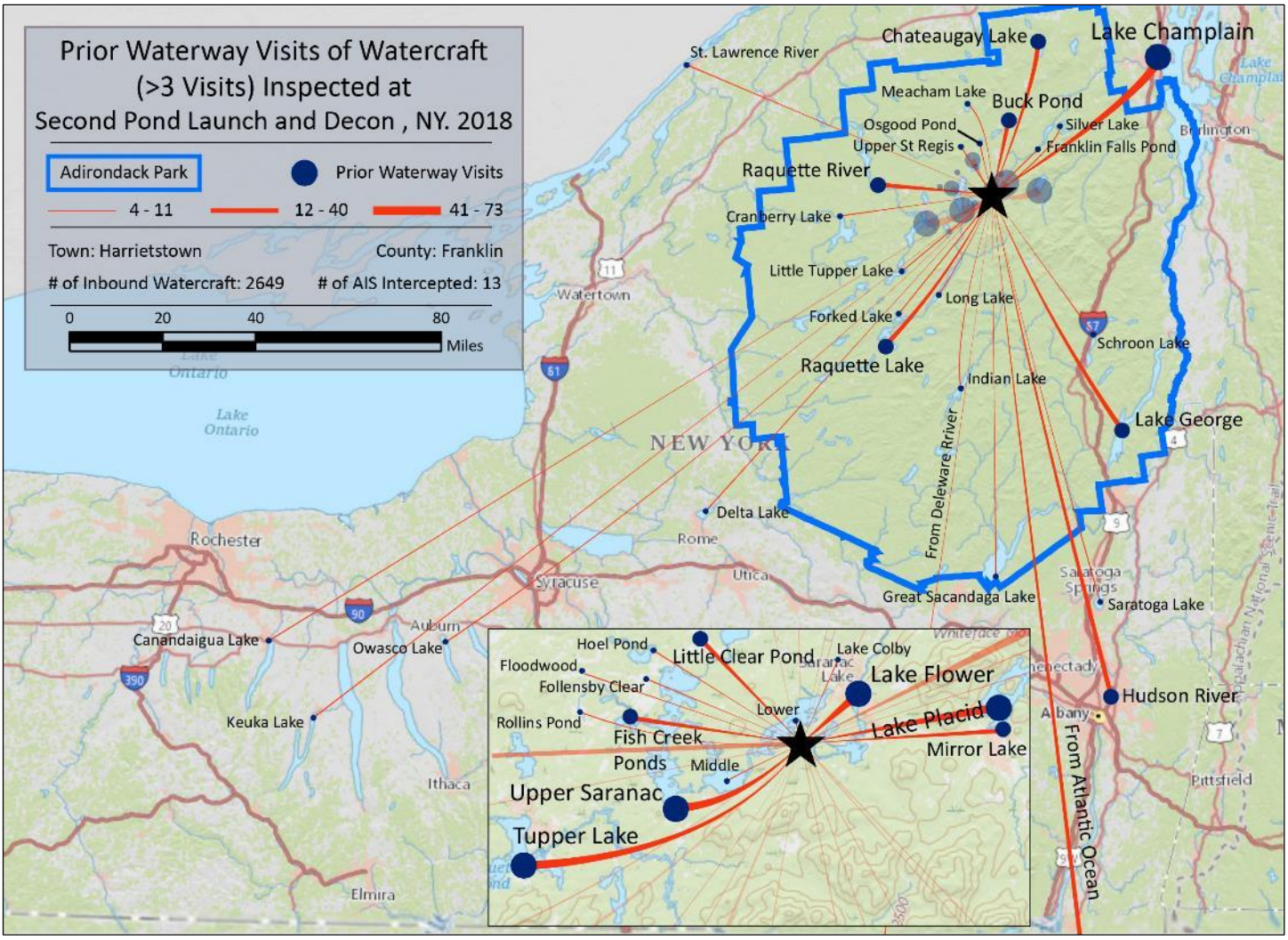




Previous Waterways for Launching Boats	# visits
NONE	807
SAME LAKE - PREVIOUS VISIT	620
RENTAL	274
NOT ASKED	178
Upper Saranac Lake	73
Lake Placid	59
unspecified lake in New York	58
Lake Flower	54
Lake Champlain	41
Tupper Lake	41
Fish Creek Ponds	23
UNKNOWN (boater doesn't know)	23
Hudson River	20
Raquette Lake	19
Buck Pond (Rainbow/Kushaqua)	17
Mirror Lake	14
Little Clear Pond	13
Atlantic Ocean	12
Chateaugay Lake	12
Lake George	12
Raquette River	12
Delaware River, PA	11
Rollins Pond	11
St. Lawrence River	11
Saratoga Lake	10
Upper St. Regis Lake	10
Follensby Clear Pond	9
Great Sacandaga Lake	9
Schroon Lake	9
Cranberry Lake	7
Forked Lake	7
Indian Lake	7
Lake Colby	7
Finger Lakes (unspecified)	6
Floodwood Pond	6
Franklin Falls Pond	6
Long Island Sound	6
Long Lake	6
Meacham Lake	6
Middle Saranac Lake	6
unspecified lake in Pennsylvania	6
Canandaigua Lake	5
Owasco Lake	5
unspecified lake in the Adirondacks	5
Delta Lake	4

Previous Waterways for Launching Boats	# visits
Hoel Pond	4
Keuka Lake	4
Little Tupper Lake	4
Lower Saranac Lake	4
Osgood Pond	4
Silver Lake, Black Brook, NY	4
Barnum Pond, Brighton, NY	3
Kiwassa Lake	3
Lake Erie	3
unspecified lake in Connecticut	3
Waterbury Reservoir, Waterbury, VT	3
Big Moose Lake	2
Blue Mountain Lake	2
Carry Falls Reservoir	2
Delaware River, DE	2
Erie Canal	2
Fern Lake, Black Brook, NY	2
Grasse River	2
Henderson Lake, Newcomb, NY	2
Highland Lakes, Goshen, MA	2
Hopewell Lake, Union Township, PA	2
Kayuta Lake	2
Lake Bonaparte	2
Lake Clear	2
Lake Durant, Indian Lake, NY	2
Lake Eaton	2
Lake of Bays, Huntsville, ON	2
Lake Ontario	2
Lake Pleasant	2
Niagara River	2
Oneida Lake	2
Onota Lake, Pittsfield, MA	2
Paradox Lake	2
Raystown Lake, Juniata Township, PA	2
Salmon River	2
Seneca River	2
Skaneateles Lake	2
Stillwater Reservoir	2
Susquehanna River, PA	2
unspecified lake in New Jersey	2
unspecified lake in Ohio	2
unspecified lake in Ontario	2
unspecified river in New Jersey	2
Arnold Lake, Hartwick, NY	1

Previous Waterways for Launching Boats	# visits
Ausable River	1
Black Lake	1
Black Pond, Brighton, NY	1
Brant Lake	1
Canadarago Lake	1
Cayuga Lake	1
Chazy River, NY	1
Chesapeake Bay, VA	1
Cheshire Reservoir, Cheshire, MA	1
Connecticut River, MA	1
Cross Lake, Onondaga County, NY	1
Delaware River	1
Delaware River, Bucks County, PA	1
Delaware River, Philadelphia, PA	1
Delaware River, Pike County, PA	1
Fourth Lake	1
Fulton Chain of Lakes (unspecified)	1
Hiawatha Lake, Scott Township, PA	1
Jones Pond, Brighton, NY	1
Lake Abanakee, Indian Lake, NY	1
Lake Ashmere, Hinsdale, MA	1
Lake Harris	1
Lake Nockamixon, Bucks County, PA	1
Lake Wallenpaupack, PA	1
Lake Winnisquam, Laconia, NH	1
Lamprey River, NH	1
Lincoln Pond, Elizabethtown, NY	1
Long Pond, Santa Clara, NY	1
Lower Range Pond, Poland, ME	1
Lower St. Regis Lake	1
Mohawk River	1
Newfound Lake, Bristol, NH	1
Oswego River	1
Otisco Lake	1
Piseco Lake	1
Putnam Pond, Ticonderoga, NY	1
Red Lake, Theresa, NY	1
Seneca Lake	1
Seventh Lake	1
Spofford Lake, Chesterfield, NH	1
St. Regis River	1
Union Falls Pond, Black Brook, NY	1
unspecified pond in New Hampshire	1
Whaley Lake, Pawling, NY	1
TOTAL BOATS	**2705**



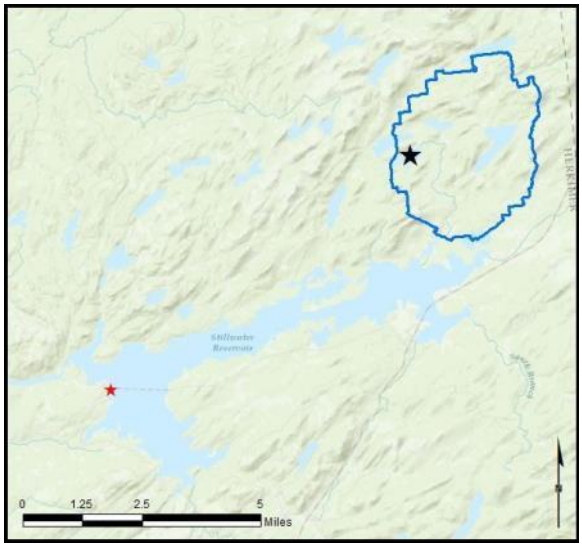
Second Pond Boat Launch

Stillwater Reservoir

AIS intercepted: 3
Boats inspected: 1,338
Dates of Operation: May 26 – August 24
Number of visitors: 2,832
Boats failing inspection: 0.1%

Total Number of Days Covered: 73
Weekly Coverage: 5-7 days
Visitors showing spread prevention awareness: 51%
Number of previously visited waterways: 36

AIS Present in Waterbody: variable-leaf milfoil
Stewardship History: 2011 - present



Watercraft	Boat Type										total # boats observed	total # boats inspected
	Barge	Canoe	Dock	Kayak	Motor	PWC	Row	Sail	SUP	Wind		
# of boats observed	0	134	0	203	979	20	1	1	1	0	1339	1338
percentage of total boats	0%	10%	0%	15%	73%	1%	0%	0%	0%	0%	100%	100%

Boats observed at launch, including those not inspected. PWC=personal watercraft, SUP=stand-up paddleboard, Wind=windsurfer.

total # visitors	organisms found			total organisms	# boats dirty	# boats w/AIS	# of inspections	% of inspected boats dirty	% of inspected boats w/AIS
	entering	leaving	roadside						
2832	3	0	--	3	2	2	1338	0.1%	0.1%

Boats dirty = watercraft with any organic material, invasive, non-invasive or unknown.

Visitor Responses	AIS spread prevention awareness											# groups asked
	yes	Inspect	Wash	Drain	Bait	LW	Dry	Decon	same lake	first/frozen	didn't ask	
# of groups	592	31	145	214	4	15	147	1	173	79	1	1165
percentage of total groups asked	51%	3%	12%	18%	0%	1%	13%	0%	15%	7%	NA	

Yes = showed AIS spread prevention awareness; Drain = drained bilge; Bait = emptied bait bucket/disposed of bait; LW = drained livewell; Dry = dried boat; Decon = visited decon station; Same Lake = boat only goes in this lake; First/Frozen = first launch of the season or frozen boat.

Organisms Removed	Organism Type									total # AIS	% of inspected boats w/AIS
	Non-invasive	BN*	CLP*	EF*	EWM*	VLM*	SWF*	WC*	ZM*		
# of organisms	0	0	0	0	2	1	0	0	0	3	0.1%
percentage of total orgs	0%	0%	0%	0%	67%	33%	0%	0%	0%		

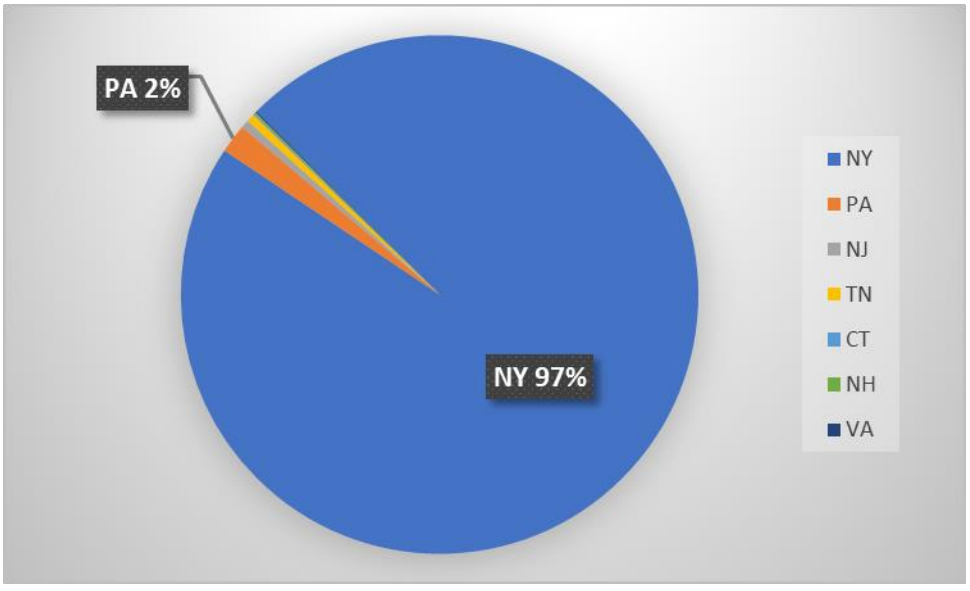
Non-invasive = native aquatic or terrestrial material; BN = brittle naiad; CLP = curly-leaf pondweed; EF = European frogbit; EWM = Eurasian watermilfoil; VLM = variable-leaf milfoil; SWF = spiny waterflea; WC= water chestnut; ZM = zebra mussel; */AIS = aquatic invasive species.

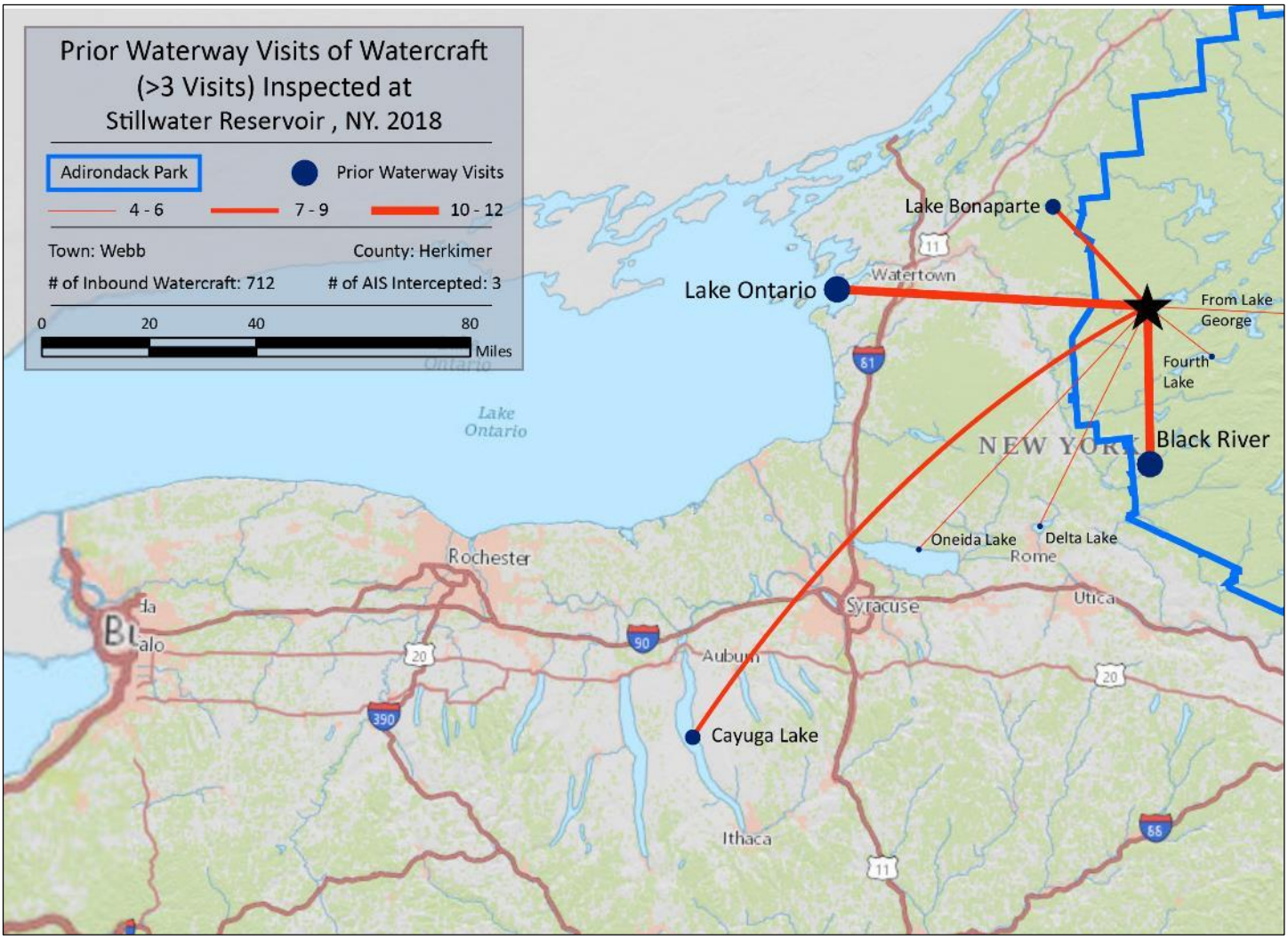
Aquatic Invasive Species Intercepted by Stewards	# found on boats launching	Previous Waterway	# found on boats retrieving	Previous Waterway
Eurasian watermilfoil	2	Lake Ontario (1), *None* (1)	0	N/A
variable-leaf milfoil	1	Lake Ontario (1)	0	N/A
Totals	**3**		**0**	

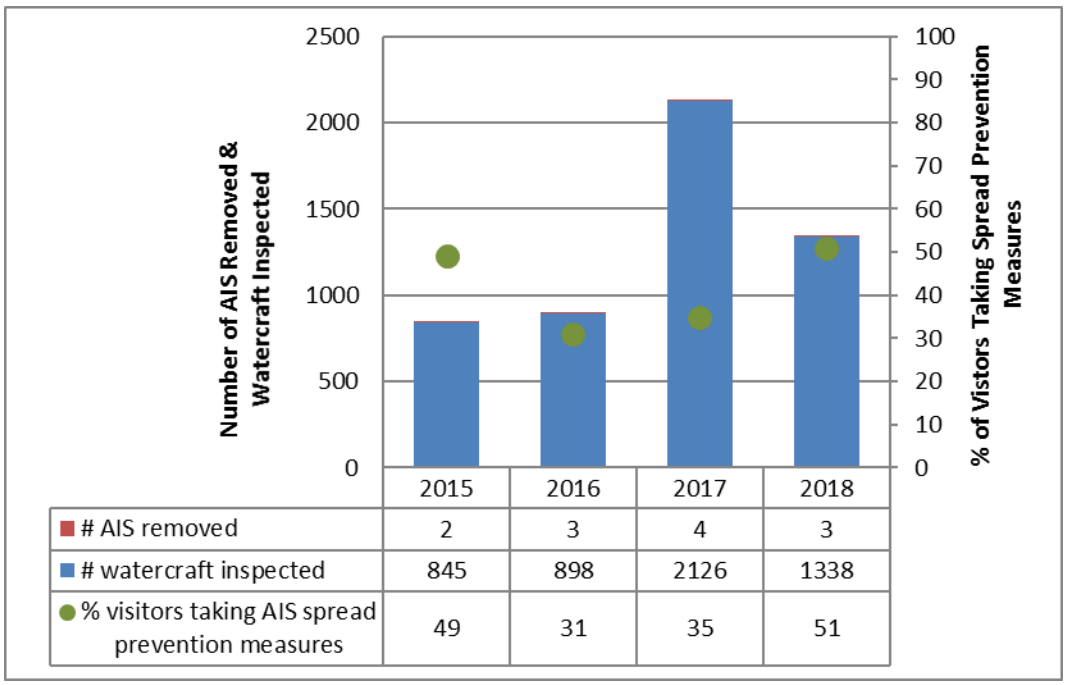
Previous Waterways for Launching Boats	# visits
NONE	329
SAME LAKE - PREVIOUS VISIT	265
unspecified lake in New York	22
Black River	12
Lake Ontario	10
Lake Bonaparte	8
Cayuga Lake	7
Oneida Lake	5
Delta Lake	4
Fourth Lake	4
Lake George	4
St. Lawrence River	3
Atlantic Ocean	2
Fern Lake, Black Brook, NY	2
First Lake	2
Grasse River	2
Great Sacandaga Lake	2
Old Forge Pond, Old Forge, NY	2
Otisco Lake	2
RENTAL	2
UNKNOWN (boater doesn't know)	2
Bear Lake, Fine, NY	1

Previous Waterways for Launching Boats	# visits
Black Lake	1
Blue Mountain Lake	1
Canadarago Lake	1
Cranberry Lake	1
Erie Canal	1
Forest Lake, Forest Lake Township, PA	1
Fulton Chain of Lakes (unspecified)	1
Genesee River	1
Hyde Lake, Theresa, NY	1
Kayuta Lake	1
Lower Saranac Lake	1
NOT ASKED	1
Oneida River	1
Oswegatchie River	1
Piseco Lake	1
Raquette Lake	1
Salmon River	1
Salmon River Reservoir, Redfield, NY	1
Seneca Lake	1
unspecified lake near Syracuse	1
White Lake, Forestport, NY	1
TOTAL BOATS	**713**

State of Motorized Boat Registration
(n=993)




Prior Waterway Visits of Watercraft
(>3 Visits) Inspected at
Stillwater Reservoir , NY. 2018
Adirondack Park
Prior Waterway Visits
4 - 6
7 - 9
10 - 12
Town: Webb
County: Herkimer
# of Inbound Watercraft: 712
# of AIS Intercepted: 3
0
20
40
80
Miles
Lake Bonaparte
Watertown
Lake Ontario
From Lake George
Fourth Lake
Black River
NEW YORK
Lake Ontario
Oneida Lake
Delta Lake
Rome
Rochester
Syracuse
Utica
Auburn
Cayuga Lake
Ithaca

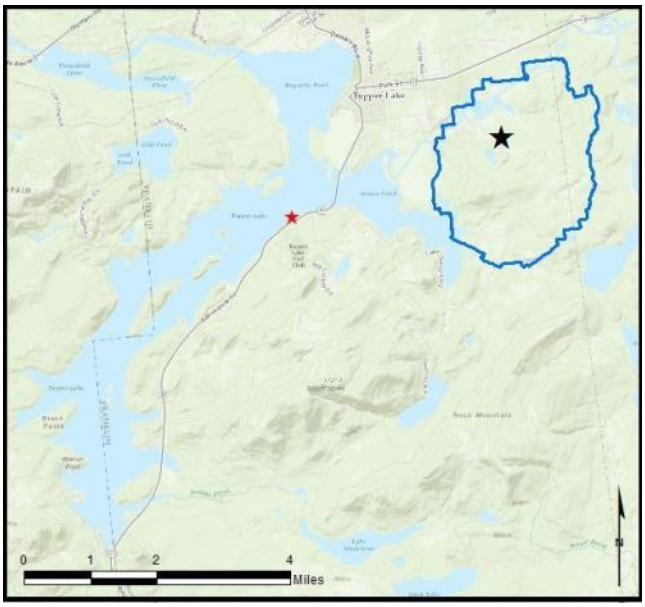

Number of AIS Removed & Watercraft Inspected
% of Vistors Taking Spread Prevention Measures
2500
2000
1500
1000
500
0
100
90
80
70
60
50
40
30
20
10
0
2015
2016
2017
2018
AIS removed
2
3
4
3
watercraft inspected
845
898
2126
1338
% visitors taking AIS spread prevention measures
49
31
35
51

Tupper Lake

AIS intercepted: 20
Boats inspected: 2,775
Dates of Operation: May 26 – Oct 27
Number of visitors: 5,952
Boats failing inspection: 40.1%

Total Number of Days Covered: 89
Weekly Coverage: 5 days
Visitors showing spread prevention awareness: 92%
Number of previously visited waterways: 75

AIS Present in Waterbody: variable-leaf milfoil
Stewardship History: 2009 - present



Watercraft	Boat Type										total # boats observed	total # boats inspected
	Barge	Canoe	Dock	Kayak	Motor	PWC	Row	Sail	SUP	Wind		
# of boats observed	0	307	3	334	1978	143	1	38	6	1	2811	2775
percentage of total boats	0%	11%	0%	12%	70%	5%	0%	1%	0%	0%	100%	99%

Boats observed at launch, including those not inspected. PWC=personal watercraft, SUP=stand-up paddleboard, Wind=windsurfer.

total # visitors	organisms found			total organisms	# boats dirty	# boats w/AIS	# of inspections	% of inspected boats dirty	% of inspected boats w/AIS
	entering	leaving	roadside						
5952	276	1010	--	1286	1112	20	2775	40.1%	0.7%

Boats dirty = watercraft with any organic material, invasive, non-invasive or unknown.

Visitor Responses	AIS spread prevention awareness											# groups asked
	yes	Inspect	Wash	Drain	Bait	LW	Dry	Decon	same lake	first/frozen	didn't ask	
# of groups	2148	503	1051	541	6	56	90	18	450	214	119	2323
percentage of total groups asked	92%	22%	45%	23%	0%	2%	4%	1%	19%	9%	NA	

Yes = showed AIS spread prevention awareness; Drain = drained bilge; Bait = emptied bait bucket/disposed of bait; LW = drained livewell; Dry = dried boat; Decon = visited decon station; Same Lake = boat only goes in this lake; First/Frozen = first launch of the season or frozen boat.

Organisms Removed	Organism Type									total # AIS	% of inspected boats w/AIS
	Non-invasive	BN*	CLP*	EF*	EWM*	VLM*	SWF*	WC*	ZM*		
# of organisms	1266	0	0	0	4	10	0	3	3	20	0.7%
percentage of total orgs	98%	0%	0%	0%	0%	1%	0%	0%	0%		

Non-invasive = native aquatic or terrestrial material; BN = brittle naiad; CLP = curly-leaf pondweed; EF = European frogbit; EWM = Eurasian watermilfoil; VLM = variable-leaf milfoil; SWF = spiny waterflea; WC= water chestnut; ZM = zebra mussel; */AIS = aquatic invasive species.

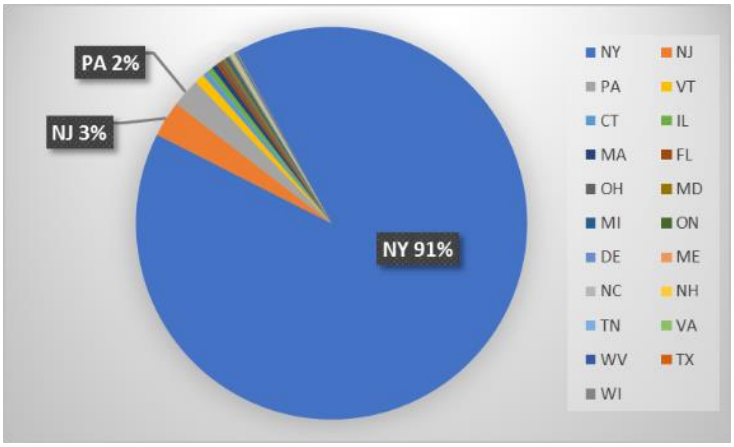
Aquatic Invasive Species Intercepted by Stewards	# found on boats launching	Previous Waterway	# found on boats retrieving	Previous Waterway
Eurasian watermilfoil	4	Greenwood Lake (1), Kasoag Lake (1), *None* (1), Oneida Lake (1)	0	N/A
variable-leaf milfoil	1	Saranac Lake Chain (1)	9	Tupper Lake
water chestnut	2	Lake Champlain (1), Saranac Lake Chain (1)	1	Tupper Lake (previously in Lake Flower and unknown lake in New Hampshire)
zebra mussel	3	Mohawk River (1), Oneida Lake (1), St. Lawrence River (1)	0	N/A
Totals	**10**		**10**	

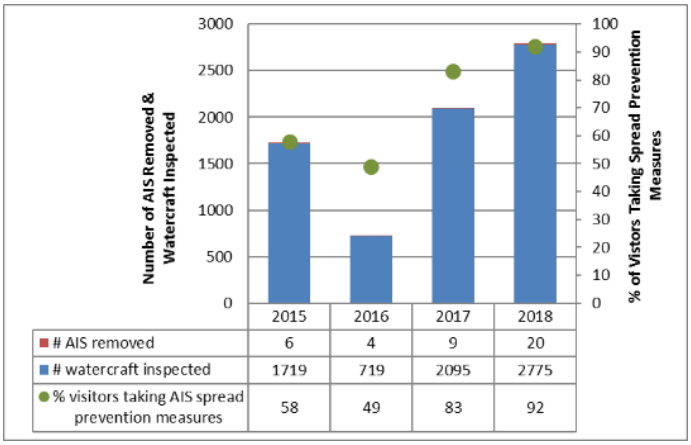
Previous Waterways for Launching Boats	# visits
SAME LAKE - PREVIOUS VISIT	590
NONE	498
Upper Saranac Lake	38
NOT ASKED	31
UNKNOWN (boater doesn't know)	22
Bog River, NY	16
Lake Champlain	16
Long Lake	16
RENTAL	16
Lower Saranac Lake	15
Cranberry Lake	11
unspecified lake in New York	11
Allagash Lake, ME	10
Great Sacandaga Lake	10
Raquette River	10
St. Lawrence River	9
Oneida Lake	7
Lake Flower	6
Lake Ontario	6
Raquette Lake	6
Atlantic Ocean	5
Lake Erie	5
Lake George	5
Middle Saranac Lake	5
Fish Creek Ponds	4
Forked Lake	4
Saratoga Lake	4

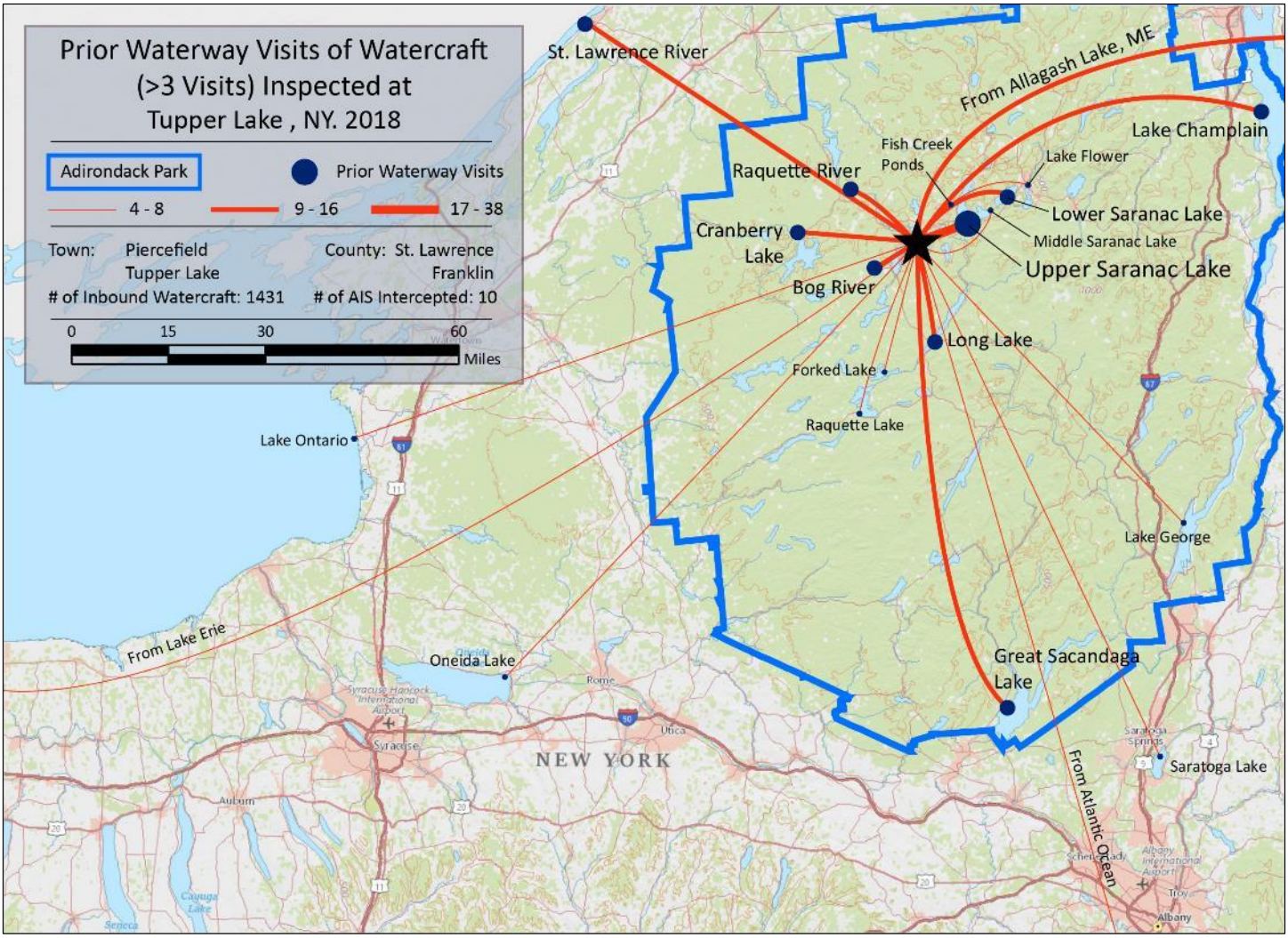
Previous Waterways for Launching Boats	# visits
Big Moose Lake	3
Blue Mountain Lake	3
Brant Lake	3
Carry Falls Reservoir	3
Lake Placid	3
Paradox Lake	3
Schroon Lake	3
Seneca Lake	3
Cayuga Lake	2
Chateaugay Lake	2
Delaware River, PA	2
Delta Lake	2
Glenwood Lake, Ridgeway, NY	2
Hinckley Reservoir	2
Lake Eaton	2
Long Island Sound	2
Loon Lake (Franklin County)	2
Meacham Lake	2
Mirror Lake	2
Mohawk River	2
Rainbow Falls Reservoir	2
Rollins Pond	2
Susquehanna River, PA	2
Canada Lake	1
Canadarago Lake	1
Candlewood Lake, Brookfield, CT	1
Chautauqua Lake	1

Previous Waterways for Launching Boats	# visits
Chesapeake Bay, MD	1
Cold Stream Pond, Enfield, ME	1
Deer Creek Lake, Pickaway County, OH	1
Fulton Chain of Lakes (unspecified)	1
Genesee River	1
Greenwood Lake, West Milford, NJ	1
Higley Falls Reservoir	1
Horseshoe Lake, Piercefield, NY	1
Indian Lake	1
Kasoag Lake, Williamstown, NY	1
Lake Clear	1
Lake Colby	1
Lake Harris	1
Lake Pleasant	1
Little Clear Pond	1
Little Tupper Lake	1
Mountain View Lake	1
Niagara River	1
Onota Lake, Pittsfield, MA	1
Osgood Pond	1
Oxbow Lake	1
Piseco Lake	1
Potomac River, MD	1
Rice Lake, Brighton, NY	1
Second Pond	1
Upper Rideau Lake, Rideau Lakes, ON	1
Upper St. Regis Lake	1
TOTAL BOATS	**1461**

State of Motorized Boat Registration (n=2,117)





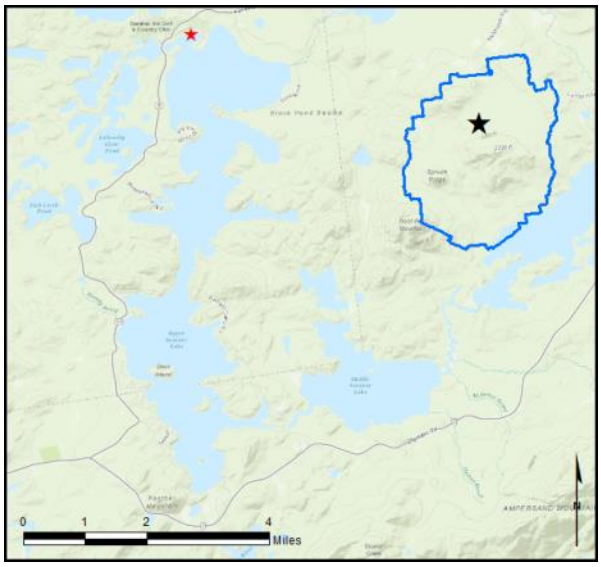


Upper Saranac Lake

AIS intercepted: 18
Boats inspected: 1,862
Dates of Operation: May 26 – October 21
Number of visitors: 3,283
Boats failing inspection: 5.0%

Total Number of Days Covered: 131
Weekly Coverage: 7 days
Visitors showing spread prevention awareness: 87%
Number of previously visited waterways: 63

AIS Present in Waterbody: Eurasian watermilfoil, variable-leaf milfoil
Stewardship History: 2001 - 2004, 2014 - present
Partnership: Upper Saranac Lake Association, Upper Saranac Foundation



Watercraft	Boat Type										total # boats observed	total # boats inspected
	Barge	Canoe	Dock	Kayak	Motor	PWC	Row	Sail	SUP	Wind		
# of boats observed	0	150	0	163	1434	94	1	28	5	2	1877	1862
percentage of total boats	0%	8%	0%	9%	76%	5%	0%	1%	0%	0%	100%	99%

Boats observed at launch, including those not inspected. PWC=personal watercraft, SUP=stand-up paddleboard, Wind=windsurfer.

total # visitors	organisms found			total organisms	# boats dirty	# boats w/AIS	# of inspections	% of inspected boats dirty	% of inspected boats w/AIS
	entering	leaving	roadside						
3283	62	66	--	128	94	15	1862	5.0%	0.8%

Boats dirty = watercraft with any organic material, invasive, non-invasive or unknown.

Visitor Responses	AIS spread prevention awareness											# groups asked
	yes	Inspect	Wash	Drain	Bait	LW	Dry	Decon	same lake	first/frozen	didn't ask	
# of groups	1488	968	182	543	3	37	432	317	128	227	37	1705
percentage of total groups asked	87%	57%	11%	32%	0%	2%	25%	19%	8%	13%	NA	

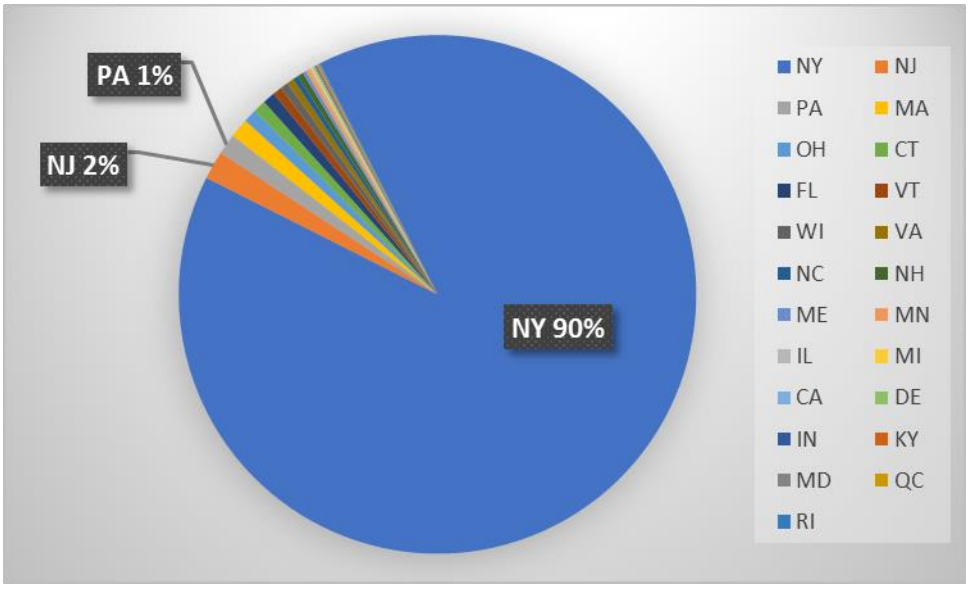
Yes = showed AIS spread prevention awareness; Drain = drained bilge; Bait = emptied bait bucket/disposed of bait; LW = drained livewell; Dry = dried boat; Decon = visited decon station; Same Lake = boat only goes in this lake; First/Frozen = first launch of the season or frozen boat.

Organisms Removed	Organism Type									total # AIS	% of inspected boats w/AIS
	Non-invasive	BN*	CLP*	EF*	EWM*	VLM*	SWF*	WC*	ZM*		
# of organisms	110	0	3	0	6	4	0	1	4	18	0.8%
percentage of total orgs	86%	0%	2%	0%	5%	3%	0%	1%	3%		

Non-invasive = native aquatic or terrestrial material; BN = brittle naiad; CLP = curly-leaf pondweed; EF = European frogbit; EWM = Eurasian watermilfoil; VLM = variable-leaf milfoil; SWF = spiny waterflea; WC= water chestnut; ZM = zebra mussel; */AIS = aquatic invasive species.

Aquatic Invasive Species Intercepted by Stewards	# found on boats launching	Previous Waterway	# found on boats retrieving	Previous Waterway
curly-leaf pondweed	3	Lake Champlain (1), Lake Erie (1), *None* (1)	0	N/A
Eurasian watermilfoil	5	Chateaugay Lake (1), Lake Champlain (1), Lake Erie (1), Lake Ontario, (1), *Unknown* (1)	1	Upper Saranac Lake
variable-leaf milfoil	4	Saranac Lake Chain (2), *Unknown* (1), Upper Saranac Lake (1)	0	N/A
water chestnut	1	Hudson River (1)	0	N/A
zebra mussel	4	Chateaugay Lake (1), Hudson River (1), Lake Erie (1), *None* (1)	0	N/A
Totals	**17**		**1**	

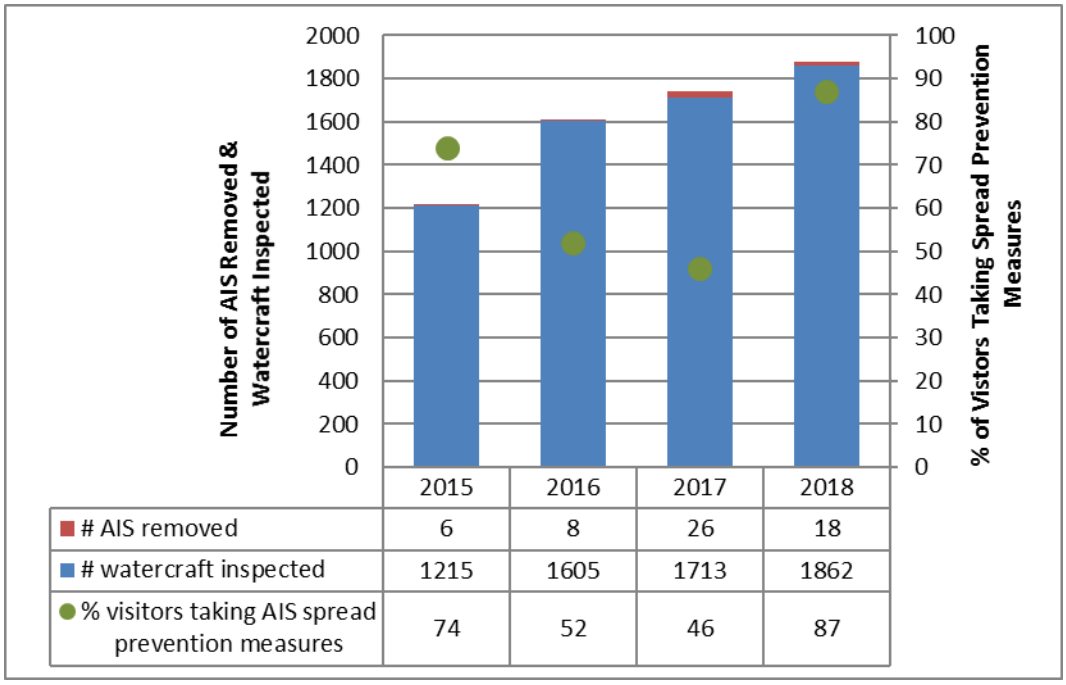
State of Motorized Boat Registration
(n=1,410)

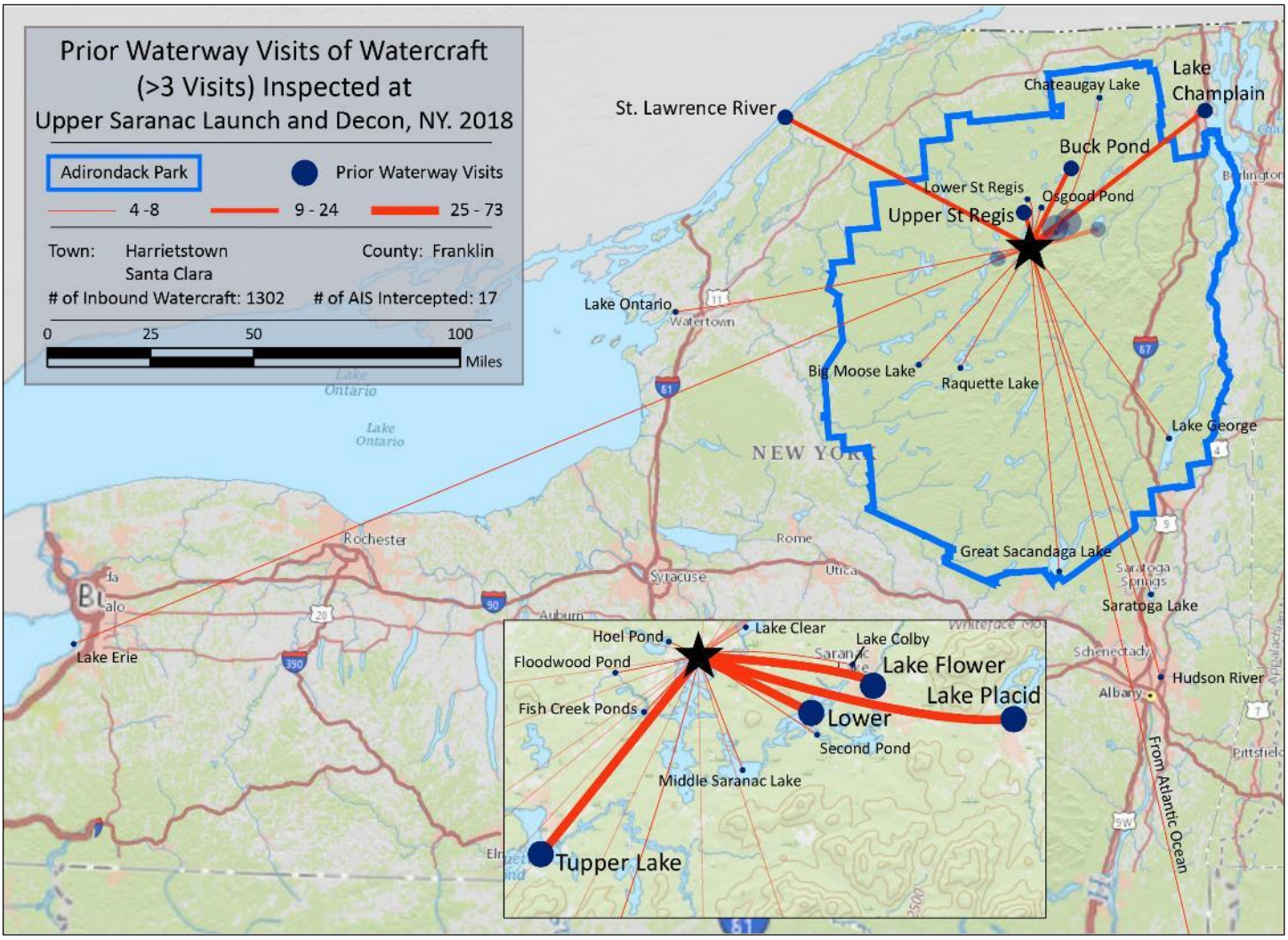


Previous Waterways for Launching Boats	# visits
SAME LAKE - PREVIOUS VISIT	420
NONE	398
Lower Saranac Lake	73
Lake Flower	41
UNKNOWN (boater doesn't know)	41
Tupper Lake	35
Lake Placid	34
Lake Champlain	24
unspecified lake in New York	18
NOT ASKED	17
Upper St. Regis Lake	16
St. Lawrence River	12
Buck Pond (Rainbow/Kushaqua)	11
RENTAL	9
Chateaugay Lake	8
Fish Creek Ponds	8
Middle Saranac Lake	8
Lake George	6
Lake Ontario	6
Big Moose Lake	5
Lake Clear	5
Saratoga Lake	5
Second Pond	5
Atlantic Ocean	4
Floodwood Pond	4
Hoel Pond	4

Previous Waterways for Launching Boats	# visits
Hudson River	4
Lake Colby	4
Lake Erie	4
Lower St. Regis Lake	4
Osgood Pond	4
Cranberry Lake	3
Follensby Clear Pond	3
Great Sacandaga Lake	3
Mirror Lake	3
Raquette River	3
Canandaigua Lake	2
Chautauqua Lake	2
Franklin Falls Pond	2
Fulton Chain of Lakes (unspecified)	2
Lake Alice, Chazy, NY	2
Meacham Lake	2
Polliwog Pond, Santa Clara, NY	2
Rollins Pond	2
Schroon Lake	2
Skaneateles Lake	2
Taylor Pond, Black Brook, NY	2
Cayuga Lake	1
Chazy Lake	1
Chesapeake Bay, VA	1
Connecticut River, CT	1
Delta Lake	1

Previous Waterways for Launching Boats	# visits
Fern Lake, Black Brook, NY	1
Finger Lakes (unspecified)	1
Goodyear Lake, Milford, NY	1
Indian Lake	1
Lake Bomoseen, Castleton, VT	1
Lake Bonaparte	1
Mountain View Lake	1
Oneida Lake	1
Piercefield Flow, Piercefield, NY	1
Raquette Lake	1
Robinson Pond, Hudson, NH	1
Saranac River	1
Seneca River	1
Silver Lake, Black Brook, NY	1
Susquehanna River, PA	1
Sylvia Lake, Gouverneur, NY	1
unspecified lake in Massachusetts	1
unspecified lake in Michigan	1
unspecified lake in New Jersey	1
unspecified lake in Ohio	1
unspecified lake in Pennsylvania	1
unspecified lake in the Adirondacks	1
unspecified lake in Vermont	1
unspecified lake near Rome	1
unspecified lake near Syracuse	1
White Lake, Forestport, NY	1
TOTAL BOATS	**1305**





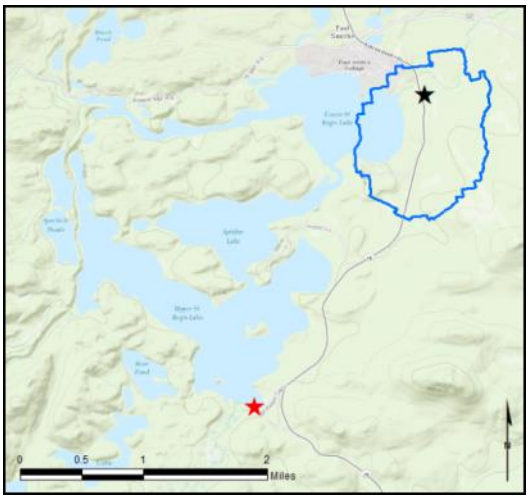
Upper Saranac Lake Decontamination Station

Upper St. Regis Lake

AIS intercepted: 0
Boats inspected: 803
Dates of Operation: May 26 – October 6
Number of visitors: 1,303
Boats failing inspection: 8.8%

Total Number of Days Covered: 97
Weekly Coverage: 7 days
Visitors showing spread prevention awareness: 66%
Number of previously visited waterways: 37

AIS Present in Waterbody: none
Stewardship History: 2000 - present
Partnership: St. Regis Foundation



Watercraft	Boat Type										total # boats observed	total # boats inspected
	Barge	Canoe	Dock	Kayak	Motor	PWC	Row	Sail	SUP	Wind		
# of boats observed	1	335	1	198	299	0	0	5	7	0	846	803
percentage of total boats	0%	40%	0%	23%	35%	0%	0%	1%	1%	0%	100%	95%

Boats observed at launch, including those not inspected. PWC=personal watercraft, SUP=stand-up paddleboard, Wind=windsurfer.

total # visitors	organisms found			total organisms	# boats dirty	# boats w/AIS	# of inspections	% of inspected boats dirty	% of inspected boats w/AIS
	entering	leaving	roadside						
1303	49	24	--	73	71	0	803	8.8%	0%

Boats dirty = watercraft with any organic material, invasive, non-invasive or unknown.

Visitor Responses	AIS spread prevention awareness											# groups asked
	yes	Inspect	Wash	Drain	Bait	LW	Dry	Decon	same lake	first/frozen	didn't ask	
# of groups	362	67	90	100	5	5	91	3	42	74	47	545
percentage of total groups asked	66%	12%	17%	18%	1%	1%	17%	1%	8%	14%	NA	

Yes = showed AIS spread prevention awareness; Drain = drained bilge; Bait = emptied bait bucket/disposed of bait; LW = drained livewell; Dry = dried boat; Decon = visited decon station; Same Lake = boat only goes in this lake; First/Frozen = first launch of the season or frozen boat.

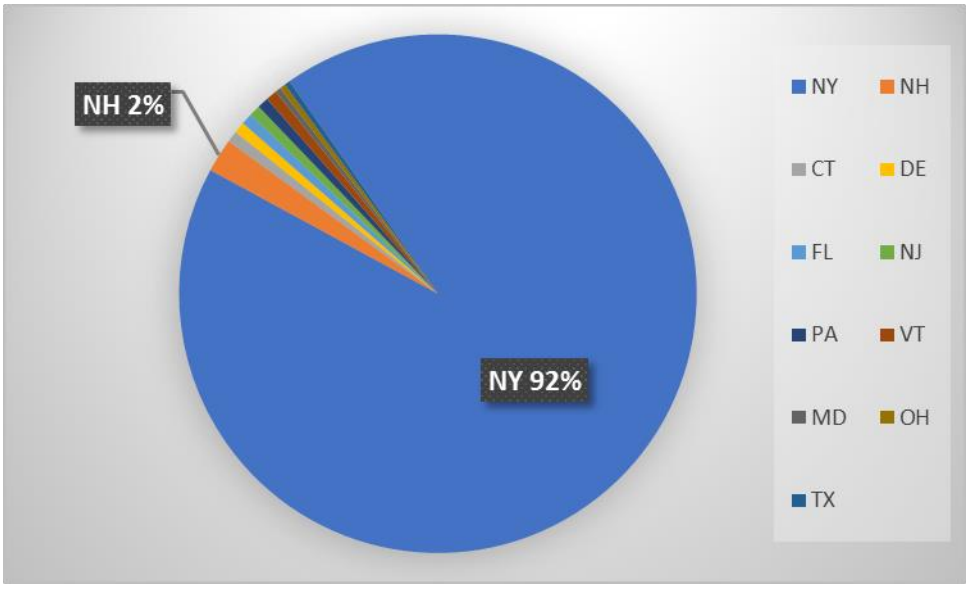
Organisms Removed	Organism Type									total # AIS	% of inspected boats w/AIS
	Non-invasive	BN*	CLP*	EF*	EWM*	VLM*	SWF*	WC*	ZM*		
# of organisms	73	0	0	0	0	0	0	0	0	0	0%
percentage of total orgs	100%	0%	0%	0%	0%	0%	0%	0%	0%		

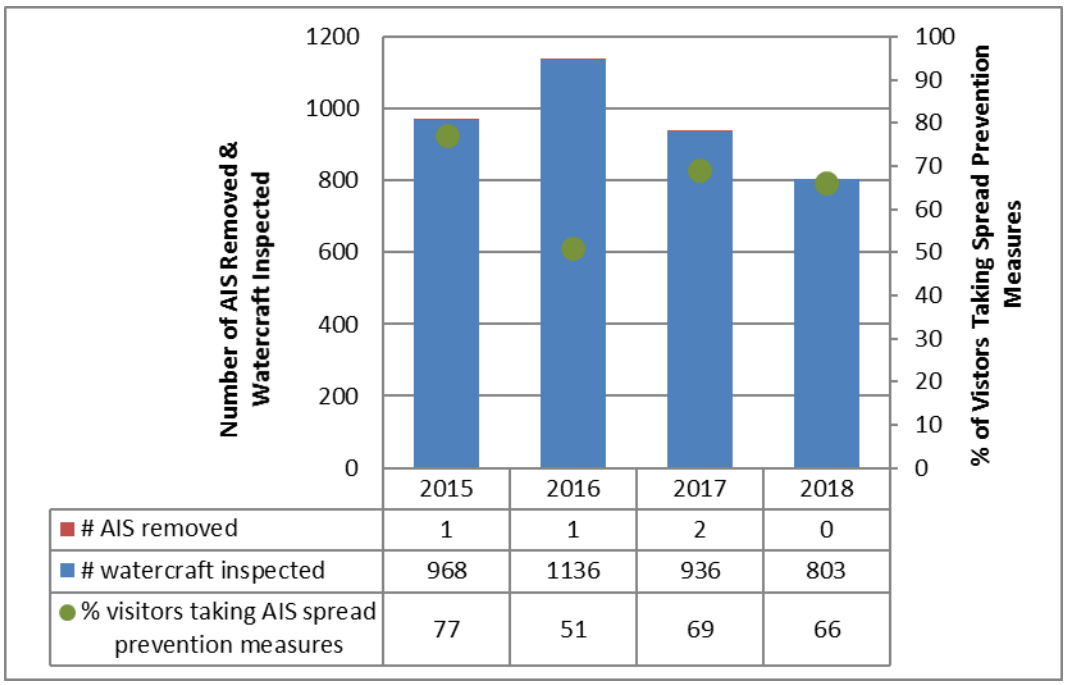
Non-invasive = native aquatic or terrestrial material; BN = brittle naiad; CLP = curly-leaf pondweed; EF = European frogbit; EWM = Eurasian watermilfoil; VLM = variable-leaf milfoil; SWF = spiny waterflea; WC= water chestnut; ZM = zebra mussel; */AIS = aquatic invasive species.

Previous Waterways for Launching Boats	# visits
NONE	210
SAME LAKE - PREVIOUS VISIT	84
unspecified lake in New York	35
UNKNOWN (boater doesn't know)	34
Lower Saranac Lake	25
RENTAL	25
Lake Placid	16
Little Clear Pond	16
Upper Saranac Lake	13
Jones Pond, Brighton, NY	12
Osgood Pond	12
Buck Pond (Rainbow/Kushaqua)	7
Fish Creek Ponds	7
Lake Flower	7
Rollins Pond	7
Raquette River	6
Lake Champlain	5
Lake Clear	5
St. Lawrence River	5
Franklin Falls Pond, Franklin County, NY	4
Hoel Pond	3
Middle Saranac Lake	3

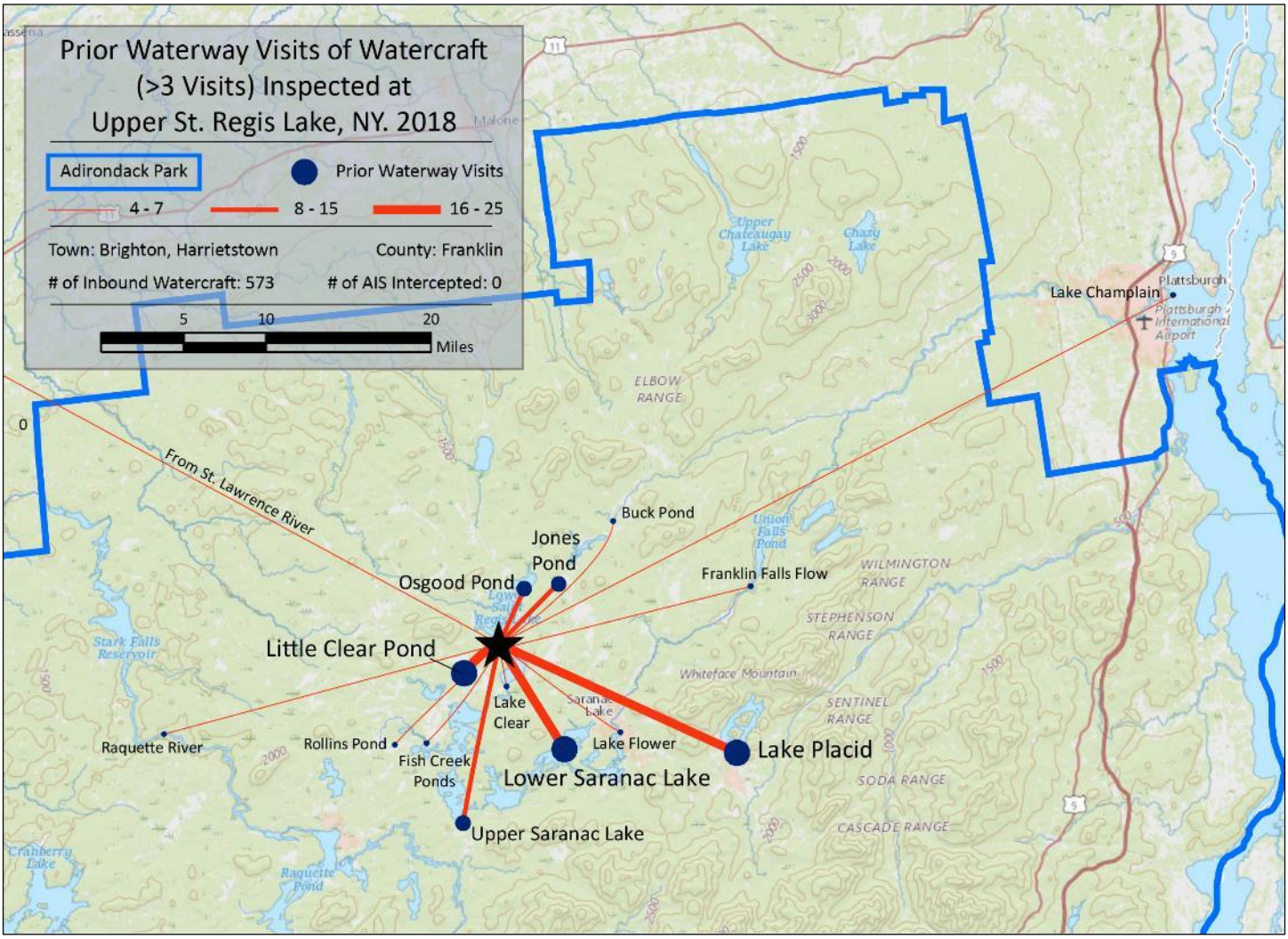
Previous Waterways for Launching Boats	# visits
Mirror Lake	3
NOT ASKED	3
Polliwog Pond, Santa Clara, NY	3
Bog River, NY	2
Follensby Clear Pond	2
Great Sacandaga Lake	2
Hudson River	2
Indian Lake	2
Long Lake	2
Long Pond, Santa Clara, NY	2
Loon Lake (Franklin County)	2
Meacham Lake	2
Salmon River	2
Tupper Lake	2
Connecticut River, CT	1
Floodwood Pond	1
Forked Lake	1
Lake Colby	1
Lake Titus, Malone, NY	1
Union Falls Pond, Black Brook, NY	1
Waterbury Reservoir, Waterbury, VT	1
TOTAL BOATS	**579**

State of Motorized Boat Registration
(n=285)



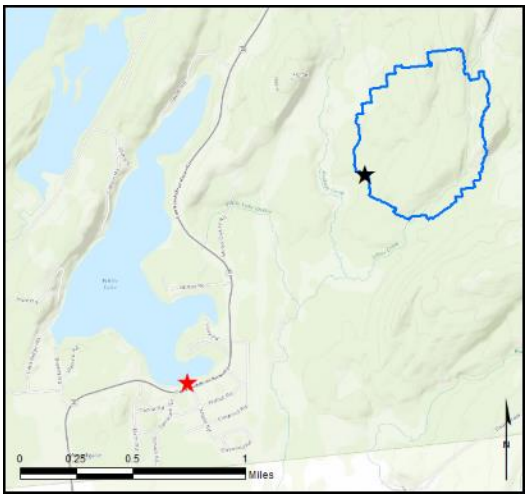


	2015	2016	2017	2018
# AIS removed	1	1	2	0
# watercraft inspected	968	1136	936	803
% visitors taking AIS spread prevention measures	77	51	69	66



White Lake

AIS intercepted: 0
Boats inspected: 332
Dates of Operation: May 26 – September 2
Number of visitors: 508
Boats failing inspection: 0%



Total Number of Days Covered: 30
Weekly Coverage: 2 days
Visitors showing spread prevention awareness: 98%
Number of previously visited waterways: 12

AIS Present in Waterbody: none
Stewardship History: 2012-2016, 2018
Partnership: Adirondack White Lake Association

Watercraft	Boat Type										total # boats observed	total # boats inspected
	Barge	Canoe	Dock	Kayak	Motor	PWC	Row	Sail	SUP	Wind		
# of boats observed	0	5	2	83	136	86	0	0	20	0	332	332
percentage of total boats	0%	2%	1%	25%	41%	26%	0%	0%	6%	0%	100%	100%

Boats observed at launch, including those not inspected. PWC=personal watercraft, SUP=stand-up paddleboard, Wind=windsurfer.

total # visitors	organisms found			total organisms	# boats dirty	# boats w/AIS	# of inspections	% of inspected boats dirty	% of inspected boats w/AIS
	entering	leaving	roadside						
508	0	0	--	0	0	0	332	0%	0%

Boats dirty = watercraft with any organic material, invasive, non-invasive or unknown.

Visitor Responses	AIS spread prevention awareness											# groups asked
	yes	Inspect	Wash	Drain	Bait	LW	Dry	Decon	same lake	first/frozen	didn't ask	
# of groups	290	33	14	35	0	0	13	1	155	75	0	295
percentage of total groups asked	98%	11%	5%	12%	0%	0%	4%	0%	53%	25%	NA	

Yes = showed AIS spread prevention awareness; Drain = drained bilge; Bait = emptied bait bucket/disposed of bait; LW = drained livewell; Dry = dried boat; Decon = visited decon station; Same Lake = boat only goes in this lake; First/Frozen = first launch of the season or frozen boat.

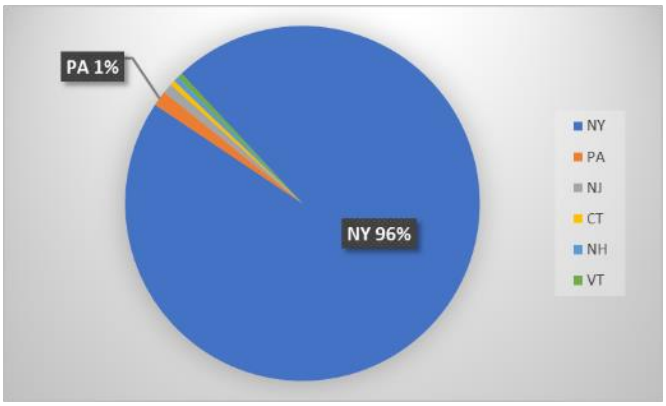
Organisms Removed	Organism Type									total # AIS	% of inspected boats w/AIS
	Non-invasive	BN*	CLP*	EF*	EWM*	VLM*	SWF*	WC*	ZM*		
# of organisms	0	0	0	0	0	0	0	0	0	0	0%
percentage of total orgs	0%	0%	0%	0%	0%	0%	0%	0%	0%		

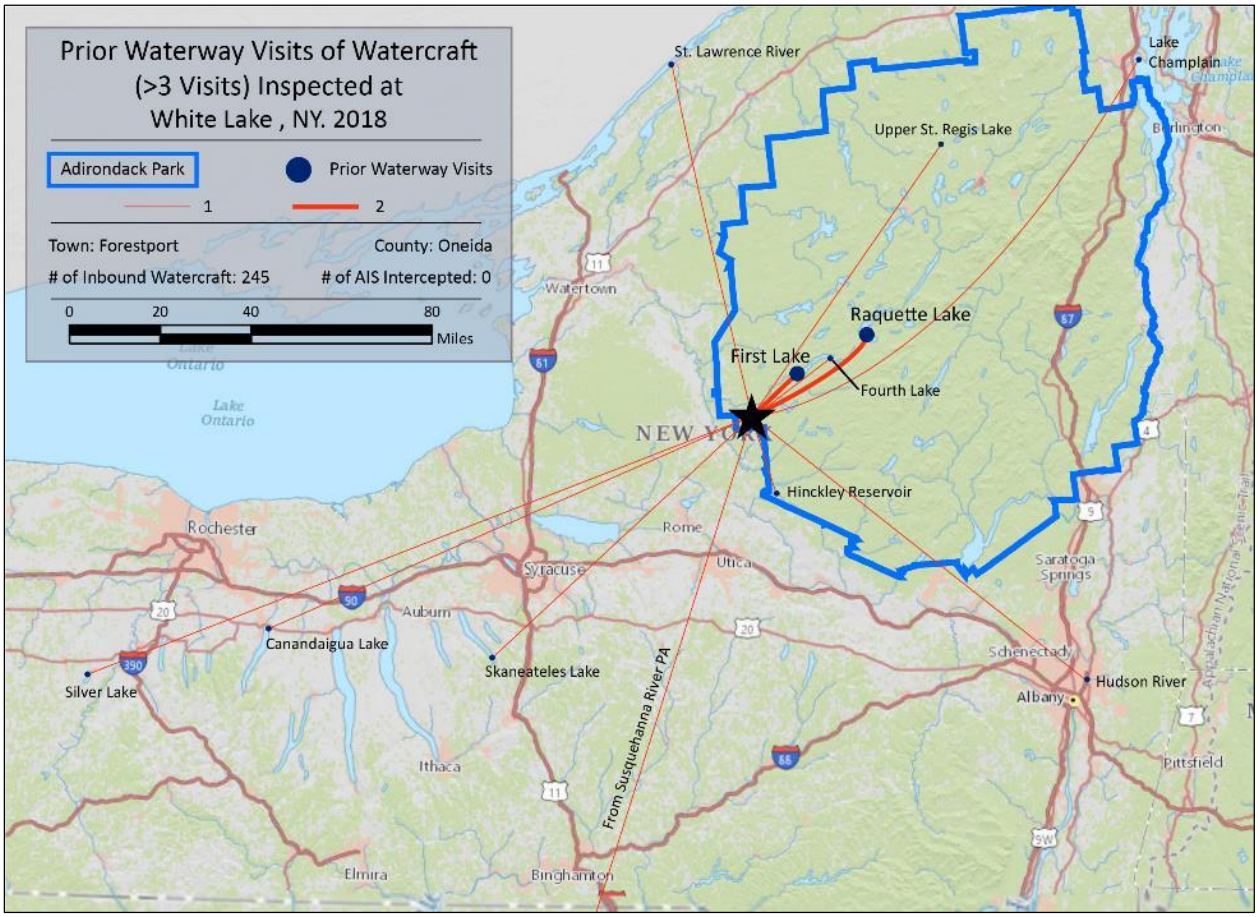
Non-invasive = native aquatic or terrestrial material; BN = brittle naiad; CLP = curly-leaf pondweed; EF = European frogbit; EWM = Eurasian watermilfoil; VLM = variable-leaf milfoil; SWF = spiny waterflea; WC= water chestnut; ZM = zebra mussel; */AIS = aquatic invasive species.

Previous Waterways for Launching Boats	# visits
SAME LAKE - PREVIOUS VISIT	131
NONE	92
unspecified lake in New York	6
First Lake	2
Raquette Lake	2
Canandaigua Lake	1
Fourth Lake	1
Fulton Chain of Lakes (unspecified)	1
Hinckley Reservoir	1

Previous Waterways for Launching Boats	# visits
Hudson River	1
Lake Champlain	1
Silver Lake, Perry, NY	1
Skaneateles Lake	1
St. Lawrence River	1
Susquehanna River, PA	1
UNKNOWN (boater doesn't know)	1
Upper St. Regis Lake	1
TOTAL BOATS	**245**

State of Motorized Boat Registration (n=218)





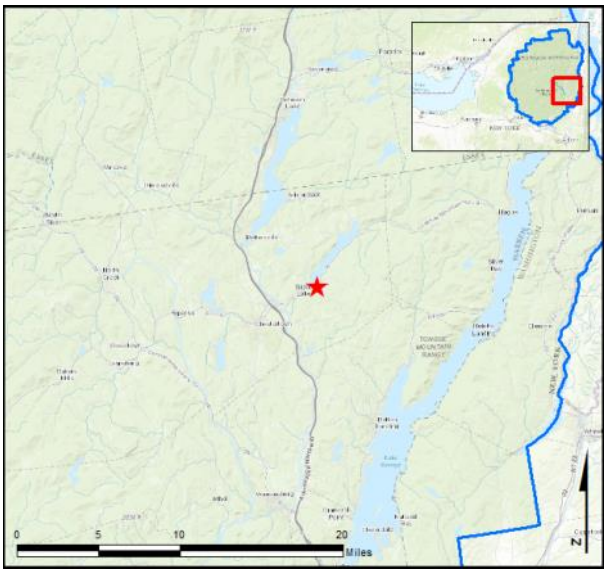
AWI Data Analysis Support Services Reports

Boat Inspection Programs Operated By
Municipalities and Lake Association Partners

Schroon Region – Brant Lake

AIS intercepted: 7
Boats inspected: 2,523
Number of visitors: 4,542
Boats failing inspection: 1.5%
Visitors showing spread prevention awareness: 86%
Number of previously visited waterways: 25

AIS Present in Waterbody: curly-leaf pondweed, Eurasian watermilfoil
Partnerships: Brant Lake Association and Town of Horicon
Notes: AWI provided support through steward training, supervisory service, a loaner iPad, and WISPA data management throughout the season.



Watercraft	Boat Type										total # boats observed	total # boats inspected
	Barge	Canoe	Dock	Kayak	Motor	PWC	Row	Sail	SUP	Wind		
# of boats observed	18	51	0	197	2079	158	35	10	0	0	2548	2523
percentage of total boats	1%	2%	0%	8%	82%	6%	1%	0%	0%	0%	100%	99%

Boats observed at launch, including those not inspected. PWC=personal watercraft, SUP=stand-up paddleboard, Wind=windsurfer.

total # visitors	organisms found			total organisms	# boats dirty	# boats w/AIS	# of inspections	% of inspected boats dirty	% of inspected boats w/AIS
	entering	leaving	roadside						
4542	2	46	--	48	37	7	2523	1.5%	0.3%

Boats dirty = watercraft with any organic material, invasive, non-invasive or unknown.

Visitor Responses	AIS spread prevention awareness											# groups asked
	yes	Inspect	Wash	Drain	Bait	LW	Dry	Decon	same lake	first/frozen	didn't ask	
# of groups	2061	843	150	121	12	26	357	19	673	364	49	2386
percentage of total groups asked	86%	35%	6%	5%	1%	1%	15%	1%	28%	15%	NA	

Yes = showed AIS spread prevention awareness; Drain = drained bilge; Bait = emptied bait bucket/disposed of bait; LW = drained livewell; Dry = dried boat; Decon = visited decon station; Same Lake = boat only goes in this lake; First/Frozen = first launch of the season or frozen boat.

Organisms Removed	Organism Type									total # AIS	% of inspected boats w/AIS
	Non-invasive	BN*	CLP*	EF*	EWM*	VLM*	SWF*	WC*	ZM*		
# of organisms	41	0	2	0	5	0	0	0	0	7	0.3%
percentage of total orgs	85%	0%	4%	0%	10%	0%	0%	0%	0%		

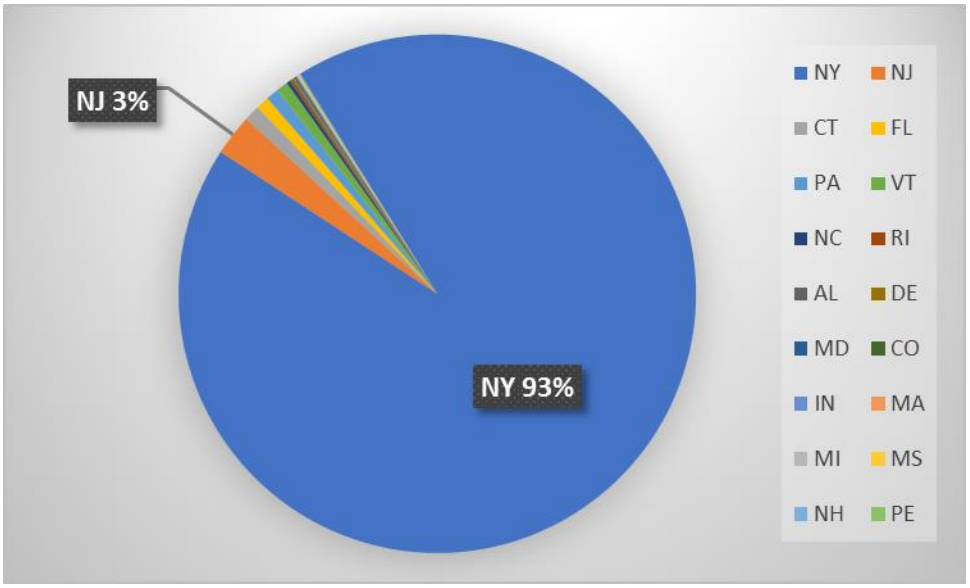
Non-invasive = native aquatic or terrestrial material; BN = brittle naiad; CLP = curly-leaf pondweed; EF = European frogbit; EWM = Eurasian watermilfoil; VLM = variable-leaf milfoil; SWF = spiny waterflea; WC= water chestnut; ZM = zebra mussel; */AIS = aquatic invasive species.

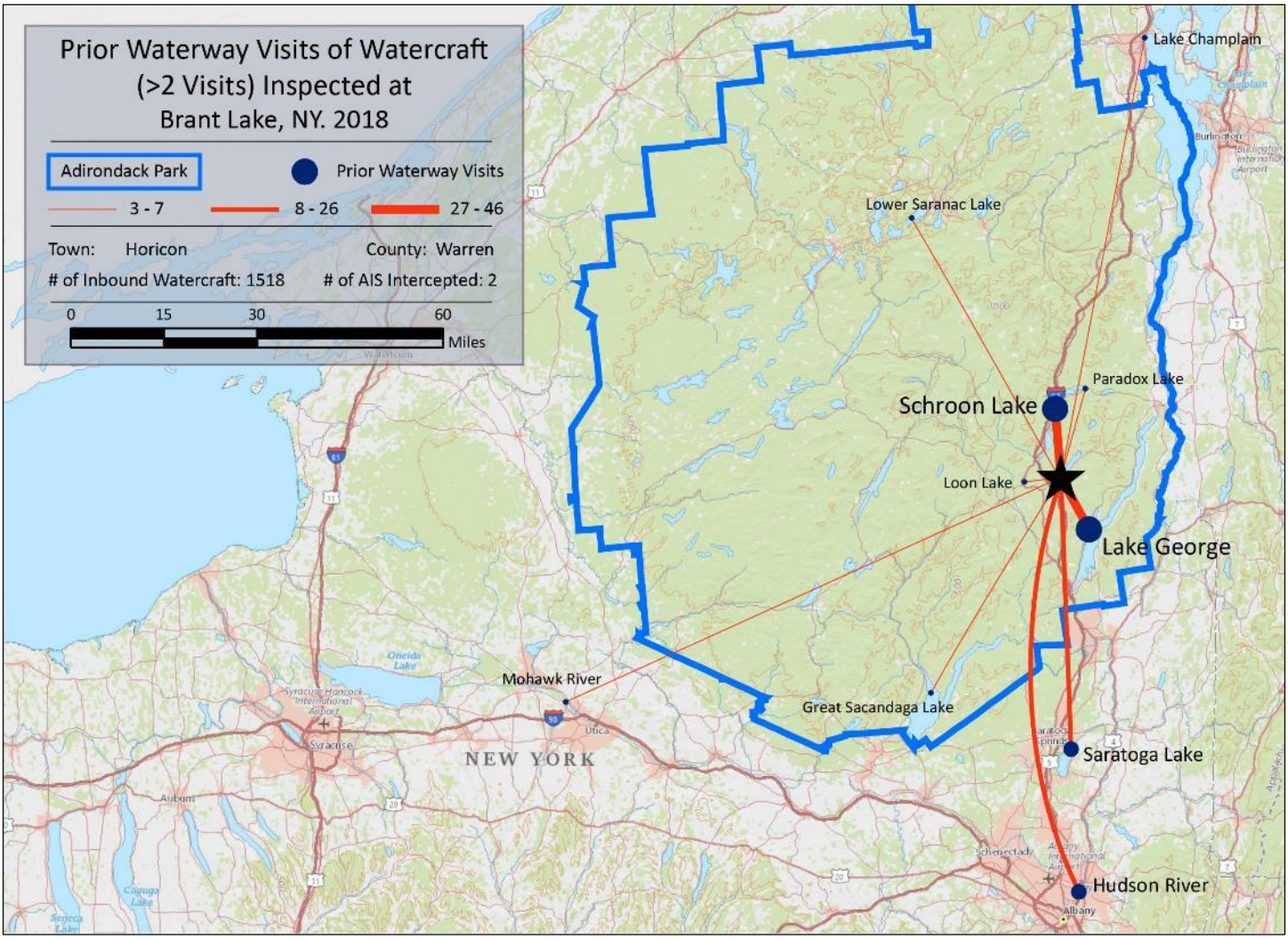
Aquatic Invasive Species Intercepted by Stewards	# found on boats launching	Previous Waterway	# found on boats retrieving	Previous Waterway
curly-leaf pondweed	2	Great Sacandaga Lake (1), *None* (1)	0	N/A
Eurasian watermilfoil	0	N/A	5	Brant Lake
Totals	**2**		**5**	

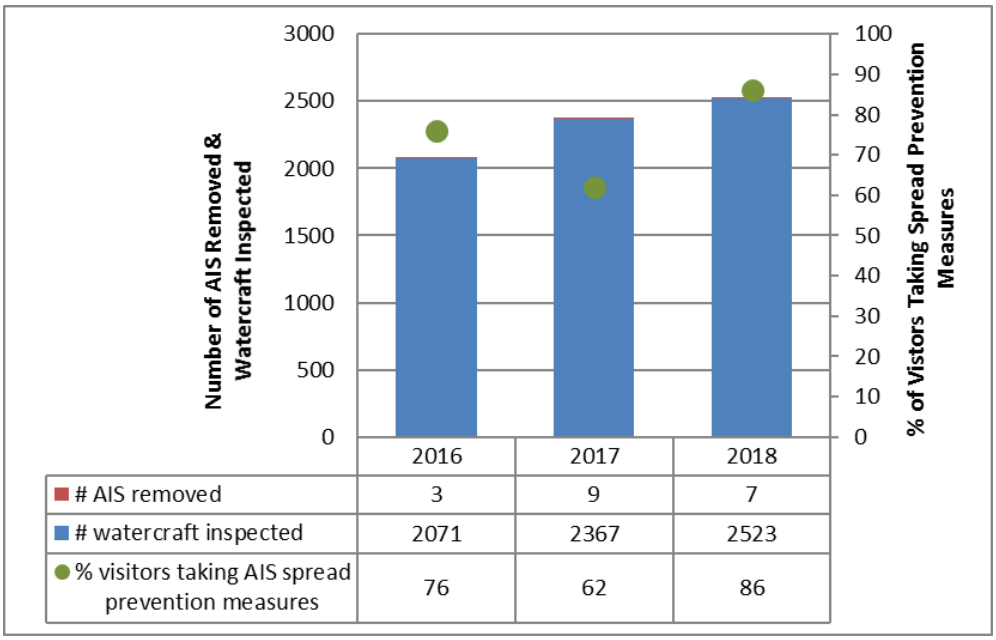
Previous Waterways for Launching Boats	# visits
SAME LAKE - PREVIOUS VISIT	662
NONE	653
Schroon Lake	46
Lake George	27
NOT ASKED	25
RENTAL	25
UNKNOWN (boater doesn't know)	21
Saratoga Lake	11
Hudson River	10
unspecified lake in New York	9
Paradox Lake	7
Loon Lake (Warren County)	6
Great Sacandaga Lake	3
Lake Champlain	3
Lower Saranac Lake	3
Mohawk River	3
unspecified lake in Vermont	3
Long Lake	2

Previous Waterways for Launching Boats	# visits
Candlewood Lake, Brookfield, CT	1
Caroga Lake	1
Fish Creek Ponds	1
Garnet Lake, Thurman, NY	1
Indian Lake	1
Lake Bomoseen, Castleton, VT	1
Lake Durant, Indian Lake, NY	1
Lake Harris	1
Lake Ontario	1
Lake Placid	1
Lime Lake, Lime Lake, NY	1
Middle Saranac Lake	1
Schroon River, NY	1
Tupper Lake	1
unspecified lake in New Jersey	1
unspecified lake in North Carolina	1
unspecified lake in the Adirondacks	1
TOTAL BOATS	**1536**

State of Motorized Boat Registration
(n=2,104)







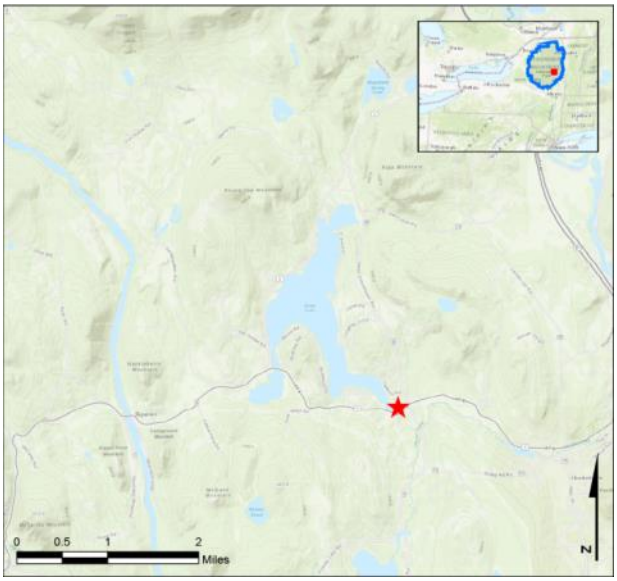
	2016	2017	2018
# AIS removed	3	9	7
# watercraft inspected	2071	2367	2523
% visitors taking AIS spread prevention measures	76	62	86

AWI Data Analysis Support Services Reports

Schroon Region – Loon Lake

AIS intercepted: 7
Boats inspected: 895
Number of visitors: 1,242
Boats failing inspection: 0.7%
Visitors showing spread prevention awareness: 99%
Number of previously visited waterways: 43

AIS Present in Waterbody: Eurasian watermilfoil
Partnerships: Loon Lake Association and Town of Horicon
Notes: AWI provided support through steward training, supervisory service, a loaner iPad, and WISPA data management throughout the season.



Watercraft	Boat Type										total # boats observed	total # boats inspected
	Barge	Canoe	Dock	Kayak	Motor	PWC	Row	Sail	SUP	Wind		
# of boats observed	14	45	0	233	479	98	15	2	1	8	895	895
percentage of total boats	2%	5%	0%	26%	54%	11%	2%	0%	0%	1%	100%	100%

Boats observed at launch, including those not inspected. PWC=personal watercraft, SUP=stand-up paddleboard, Wind=windsurfer.

total # visitors	organisms found			total organisms	# boats dirty	# boats w/AIS	# of inspections	% of inspected boats dirty	% of inspected boats w/AIS
	entering	leaving	roadside						
1242	4	3	--	7	6	6	895	0.7%	0.7%

Boats dirty = watercraft with any organic material, invasive, non-invasive or unknown.

Visitor Responses	AIS spread prevention awareness											# groups asked
	yes	Inspect	Wash	Drain	Bait	LW	Dry	Decon	same lake	first/frozen	didn't ask	
# of groups	722	442	2	130	1	114	4	148	179	96	49	726
percentage of total groups asked	99%	61%	0%	18%	0%	16%	1%	20%	25%	13%	NA	

Yes = showed AIS spread prevention awareness; Drain = drained bilge; Bait = emptied bait bucket/disposed of bait; LW = drained livewell; Dry = dried boat; Decon = visited decon station; Same Lake = boat only goes in this lake; First/Frozen = first launch of the season or frozen boat.

Organisms Removed	Organism Type									total # AIS	% of inspected boats w/AIS
	Non-invasive	BN*	CLP*	EF*	EWM*	VLM*	SWF*	WC*	ZM*		
# of organisms	0	0	0	0	5	0	0	1	1	7	0.7%
percentage of total orgs	0%	0%	0%	0%	71%	0%	0%	14%	14%		

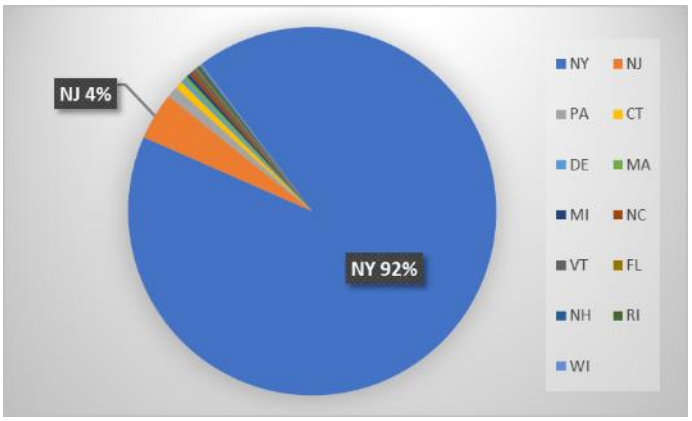
Non-invasive = native aquatic or terrestrial material; BN = brittle naiad; CLP = curly-leaf pondweed; EF = European frogbit; EWM = Eurasian watermilfoil; VLM = variable-leaf milfoil; SWF = spiny waterflea; WC= water chestnut; ZM = zebra mussel; */AIS = aquatic invasive species.

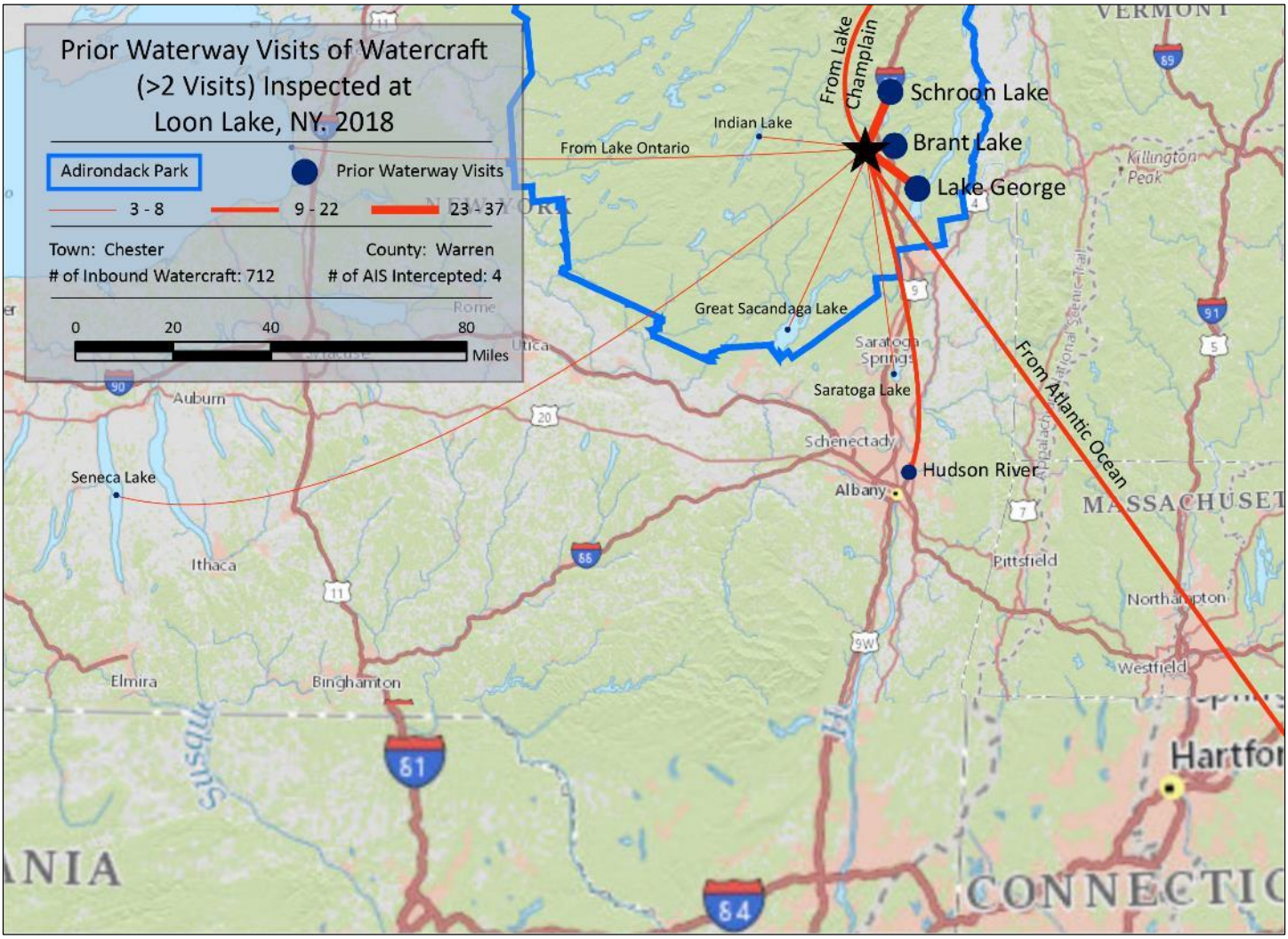
Aquatic Invasive Species Intercepted by Stewards	# found on boats launching	Previous Waterway	# found on boats retrieving	Previous Waterway
Eurasian watermilfoil	2	Lake Champlain (1), unspecified lake in Connecticut (1)	3	Loon Lake
water chestnut	1	Schroon Lake (1)	0	N/A
zebra mussel	1	Lake Champlain (1)		
Totals	**4**		**3**	

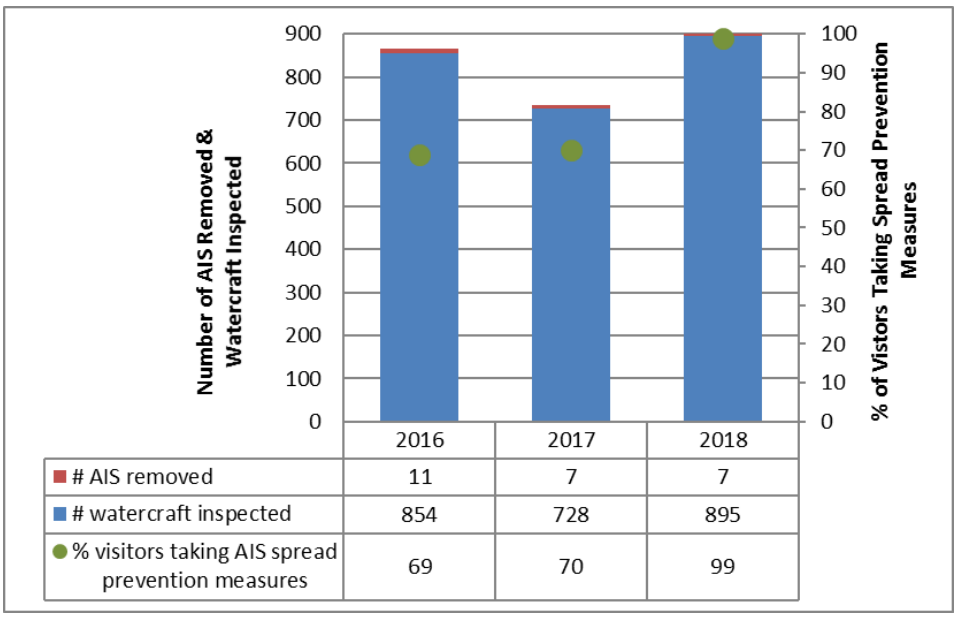
Previous Waterways for Launching Boats	# visits
SAME LAKE - PREVIOUS VISIT	243
NONE	172
unspecified lake in New York	57
UNKNOWN (boater doesn't know)	56
Brant Lake	37
Schroon Lake	28
Lake George	23
Hudson River	11
Lake Champlain	9
Atlantic Ocean	5
Lake Ontario	5
Long Island Sound	5
Great Sacandaga Lake	3
Indian Lake	3
Saratoga Lake	3
Seneca Lake	3
Ballston Lake	2
Blue Mountain Lake	2
Canada Lake	2
Chateaugay Lake	2
First Lake	2
Lake Algonquin	2
Lake Erie	2
Lake Placid	2
Little Tupper Lake	2
Lower Saranac Lake	2
Paradox Lake	2

Previous Waterways for Launching Boats	# visits
Stockbridge Bowl, Stockbridge, MA	2
Androscoggin Lake, Wayne, ME	1
Arrowhead Lake, Denville, NJ	1
Black River	1
Delaware River, NJ	1
Delta Lake	1
Fish Creek Ponds	1
Greenwood Lake, West Milford, NJ	1
Gulf of Mexico, TX	1
Henderson Lake, Newcomb, NY	1
Lake Adirondack	1
Lake Dunmore, Salisbury, VT	1
Lake Michigan, MI	1
Lake Pleasant	1
Long Lake	1
Mansfield Hollow Lake, Mansfield, CT	1
Michigan River, MI	1
Oneida Lake	1
RENTAL	1
Round Lake, Saratoga County, NY	1
Tupper Lake	1
unspecified lake in Connecticut	1
unspecified lake in Essex County	1
unspecified lake in Florida	1
unspecified lake in New Mexico	1
unspecified lake in Vermont	1
TOTAL BOATS	**712**

State of Motorized Boat Registration
(n=602)

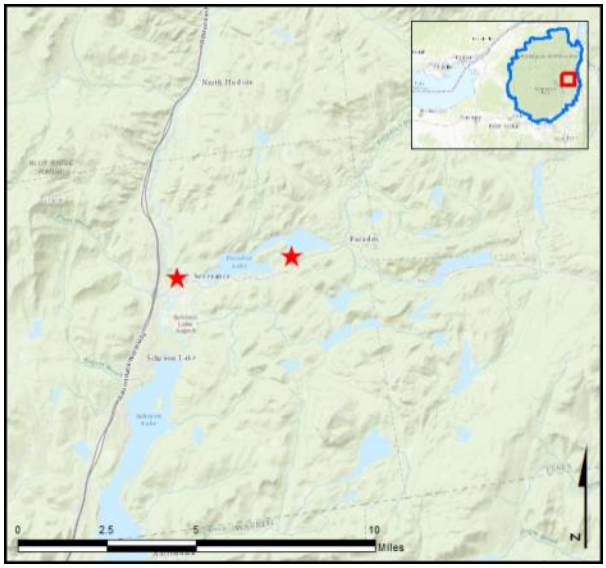



Prior Waterway Visits of Watercraft
(>2 Visits) Inspected at
Loon Lake, NY. 2018
Adirondack Park
Prior Waterway Visits
3 - 8
9 - 22
23 - 37
Town: Chester
County: Warren
# of Inbound Watercraft: 712
# of AIS Intercepted: 4
0
20
40
80
Miles
From Lake Champlain
Schroon Lake
Indian Lake
From Lake Ontario
Brant Lake
Lake George
Great Sacandaga Lake
Saratoga Springs
Saratoga Lake
From Atlantic Ocean
Hudson River
Albany
Schenectady
Auburn
Seneca Lake
Ithaca
Elmira
Binghamton
Pittsfield
Northampton
Westfield
VERMONT
MASSACHUSET
CONNECTIC


Number of AIS Removed & Watercraft Inspected
% of Vistors Taking Spread Prevention Measures
900
800
700
600
500
400
300
200
100
0
100
90
80
70
60
50
40
30
20
10
0
2016
2017
2018
AIS removed 11 7 7
watercraft inspected 854 728 895
% visitors taking AIS spread prevention measures 69 70 99

AWI Data Analysis Support Services Reports

Schroon Region – Paradox Lake & Northern Schroon/Paradox Decon Station



AIS intercepted: 2
Boats inspected: 1,571
Number of visitors: 2,539
Boats failing inspection: 0.2%
Visitors showing spread prevention awareness: 97%
Number of previously visited waterways: 20

AIS Present in Waterbody: curly-leaf pondweed, Eurasian watermilfoil, variable-leaf milfoil
Partnerships: Paradox Lake Association, NYSDEC Paradox Lake Campground
Notes: AWI provided support through steward training, supervisory service, a loaner iPad, and WISPA data management throughout the season.

Watercraft	Boat Type										total # boats observed	total # boats inspected
	Barge	Canoe	Dock	Kayak	Motor	PWC	Row	Sail	SUP	Wind		
Paradox Lake	2	61	3	484	802	54	16	0	2	1	1425	1425
percentage of total boats	0%	4%	0%	34%	56%	4%	1%	0%	0%	0%	100%	100%
N Schroon/Paradox Decon	0	4	0	1	117	18	5	1	0	0	146	146
percentage of total boats	0%	3%	0%	1%	80%	12%	3%	1%	0%	0%	100%	100%
totals	**2**	**65**	**3**	**485**	**919**	**72**	**21**	**1**	**2**	**1**	**1571**	**1571**
percentage of total boats	**0%**	**4%**	**0%**	**31%**	**58%**	**5%**	**1%**	**0%**	**0%**	**0%**	**100%**	**100%**

Boats observed at launch, including those not inspected. PWC=personal watercraft, SUP=stand-up paddleboard, Wind=windsurfer.

	total # visitors	organisms found			total organisms	# boats dirty	# boats w/AIS	# of inspections	% of inspected boats dirty	% of inspected boats w/AIS
		entering	leaving	roadside						
Paradox Lake	2329	0	2	--	2	2	1	1425	0.1%	0.1%
N Schroon/Paradox Decon	210	--	--	1	1	1	1	146	0.7%	0.7%
totals	**2539**	**0**	**2**	**1**	**3**	**3**	**2**	**1571**	**0.2%**	**0.1%**

Boats dirty = watercraft with any organic material, invasive, non-invasive or unknown.

Visitor Responses	AIS spread prevention awareness											# groups asked
	yes	Inspect	Wash	Drain	Bait	LW	Dry	Decon	same lake	first/frozen	didn't ask	
Paradox Lake	1123	810	56	193	7	8	90	10	110	171	10	1139
percentage of total groups asked	99%	71%	5%	17%	1%	1%	8%	1%	10%	15%	NA	
N Schroon/Paradox Decon	122	10	5	9	0	1	4	102	2	9	3	139
percentage of total groups asked	88%	7%	4%	6%	0%	1%	3%	73%	1%	6%	NA	
totals	**1245**	**820**	**61**	**202**	**7**	**9**	**94**	**112**	**112**	**180**	**13**	**1278**
percentage of total groups asked	**97%**	**64%**	**5%**	**16%**	**1%**	**1%**	**7%**	**9%**	**9%**	**14%**	**NA**	

Yes = showed AIS spread prevention awareness; Drain = drained bilge; Bait = emptied bait bucket/disposed of bait; LW = drained livewell; Dry = dried boat; Decon = visited decon station; Same Lake = boat only goes in this lake; First/Frozen = first launch of the season or frozen boat.

Organisms Removed	Organism Type									total # AIS	% of inspected boats w/AIS
	Non-invasive	BN*	CLP*	EF*	EWM*	VLM*	SWF*	WC*	ZM*		
Paradox Lake	1	0	0	0	1	0	0	0	0	1	0.1%
percentage of total orgs	50%	0%	0%	0%	50%	0%	0%	0%	0%		
N Schroon/Paradox Decon	0	0	0	0	0	0	0	0	1	1	0.7%
percentage of total orgs	0%	0%	0%	0%	0%	0%	0%	0%	100%		
totals	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**2**	**0.1%**
percentage of total orgs	**33%**	**0%**	**0%**	**0%**	**33%**	**0%**	**0%**	**0%**	**33%**		

Non-invasive = native aquatic or terrestrial material; BN = brittle naiad; CLP = curly-leaf pondweed; EF = European frogbit; EWM = Eurasian watermilfoil; VLM = variable-leaf milfoil; SWF = spiny waterflea; WC= water chestnut; ZM = zebra mussel; */AIS = aquatic invasive species.

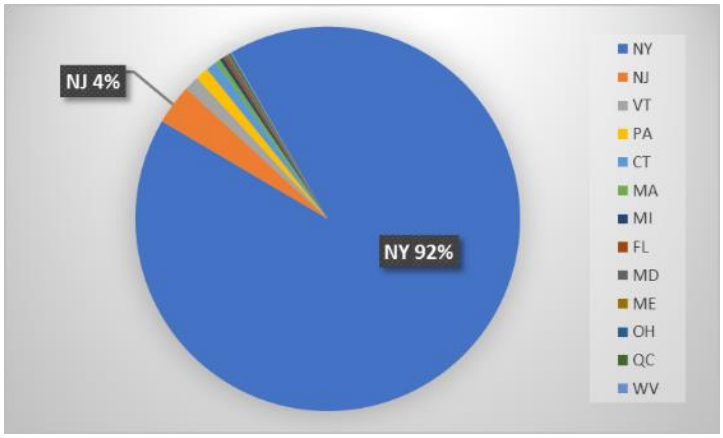
Aquatic Invasive Species Intercepted by Stewards	# found on boats launching	Previous Waterway	# found on boats retrieving	Previous Waterway
Eurasian watermilfoil	0	N/A	1	Paradox Lake
Totals	**0**		**1**	

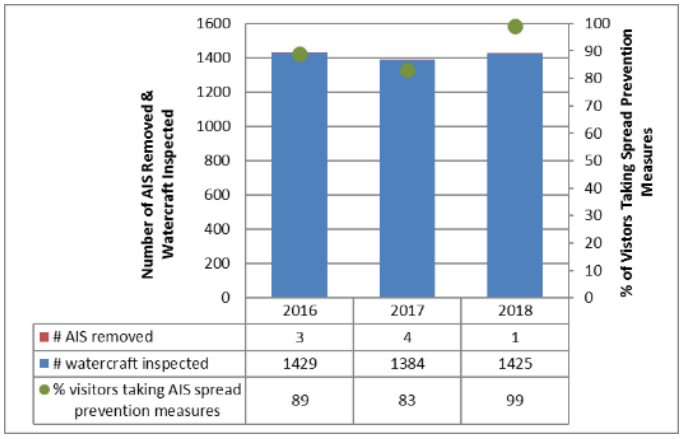
Aquatic Invasive Species Intercepted by Stewards	# found at roadside	Previous Waterway
zebra mussel	1	*None* (1)
Totals	**1**	

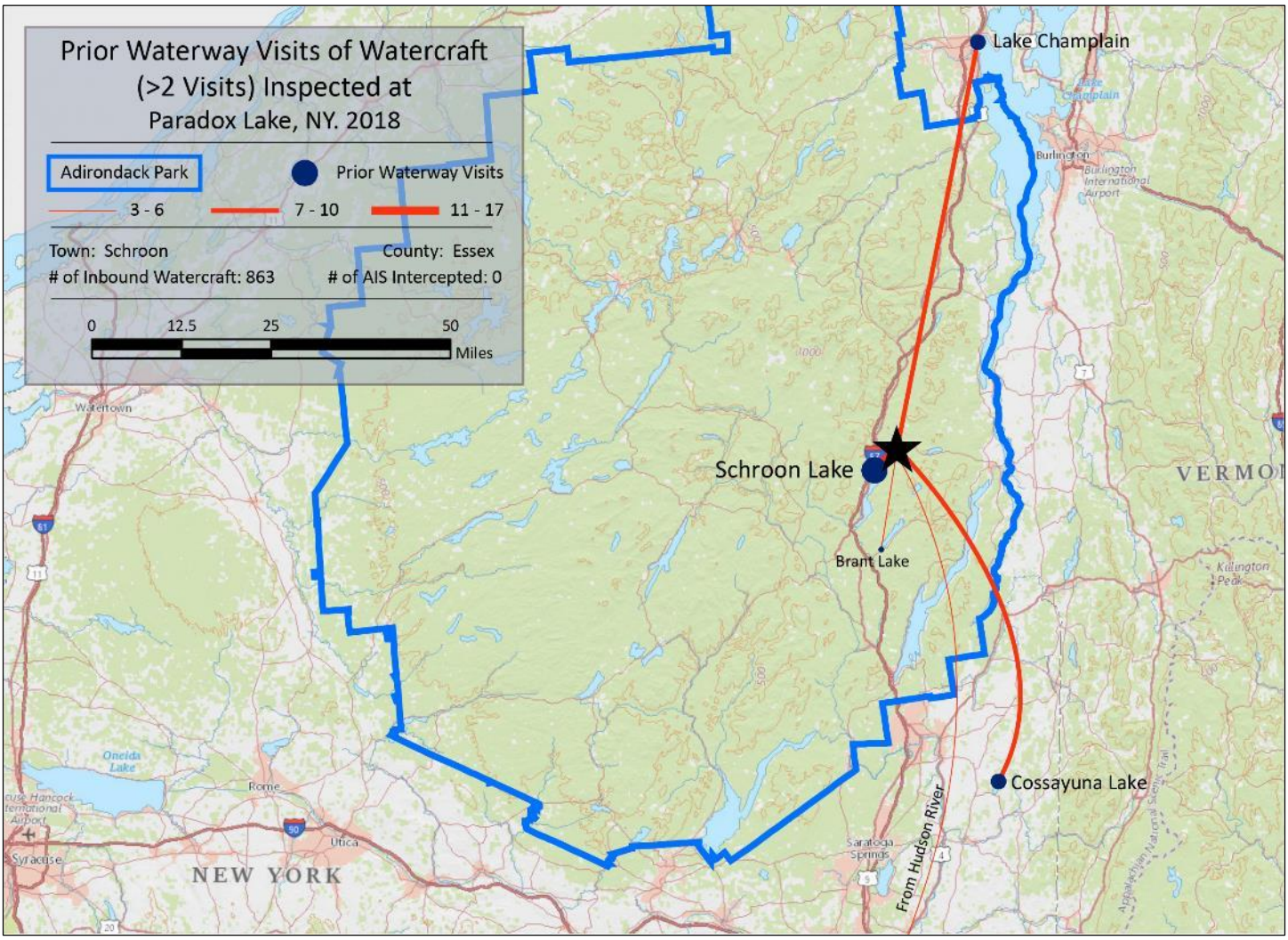
Previous Waterways for Launching Boats	# visits
NONE	514
SAME LAKE - PREVIOUS VISIT	260
Schroon Lake	17
NOT ASKED	13
Lake Champlain	10
UNKNOWN (boater doesn't know)	8
Cossayuna Lake, Argyle, NY	7
unspecified lake in the Adirondacks	7
Hudson River	5
Brant Lake	3
Blue Mountain Lake	2
Lake Algonquin	2
unspecified lake in New York	2

Previous Waterways for Launching Boats	# visits
Ballston Lake	1
Canada Lake	1
Eagle Lake, Ticonderoga, NY	1
Finger Lakes (unspecified)	1
Indian Lake	1
Lake George	1
Lake Harris	1
Lake Michigan, MI	1
Lens Lake, Stony Creek, NY	1
Putnam Pond, Ticonderoga, NY	1
Round Lake, Saratoga County, NY	1
Saratoga Lake	1
Tupper Lake	1
TOTAL BOATS	**863**

State of Motorized Boat Registration (n=977)





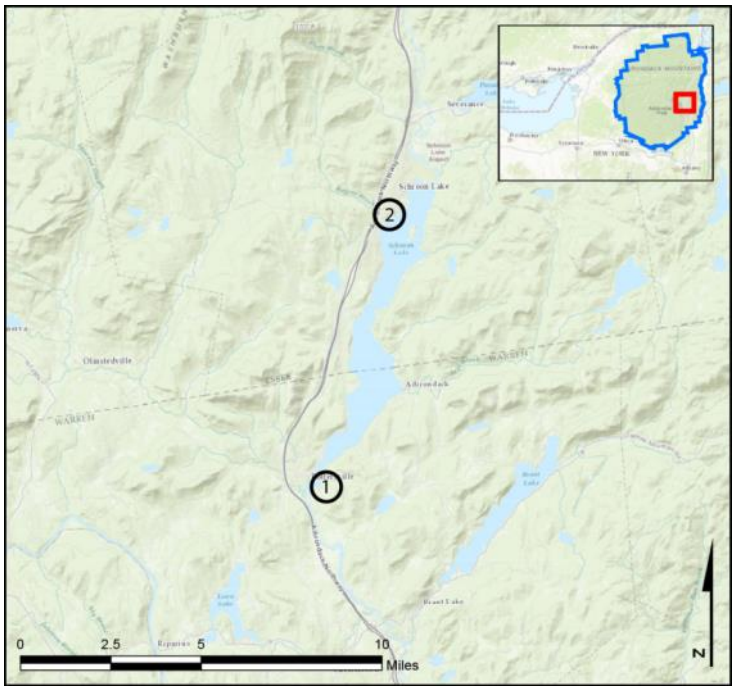


AWI Data Analysis Support Services Reports

Schroon Region – Schroon Lake

AIS intercepted: 8
Boats inspected: 4,581
Number of visitors: 8,723
Boats failing inspection: 0.4%
Visitors showing spread prevention awareness: 90%
Number of previously visited waterways: 47

AIS Present in Waterbody: curly-leaf pondweed, Eurasian watermilfoil
Partnerships: East Shore Schroon Lake Association, Schroon Lake Association, Town of Horicon
Notes: AWI provided support through steward training, supervisory service, a loaner iPad, and WISPA data management throughout the season.



1-Horicon Launch/Decon; 2-Town of Schroon Launch

Watercraft	Boat Type										total # boats observed	total # boats inspected
	Barge	Canoe	Dock	Kayak	Motor	PWC	Row	Sail	SUP	Wind		
Horicon Decon	0	2	0	4	193	20	0	0	0	0	219	219
percentage of total boats	0%	1%	0%	2%	88%	9%	0%	0%	0%	0%	100%	100%
Horicon Launch	8	7	0	54	1964	154	2	5	2	0	2196	2194
percentage of total boats	0%	0%	0%	2%	89%	7%	0%	0%	0%	0%	100%	100%
Town of Schroon Launch	18	17	1	138	1623	324	12	31	5	0	2169	2168
percentage of total boats	1%	1%	0%	6%	75%	15%	1%	1%	0%	0%	100%	100%
totals	**26**	**26**	**1**	**196**	**3780**	**498**	**14**	**36**	**7**	**0**	**4584**	**4581**
percentage of total boats	**1%**	**1%**	**0%**	**4%**	**82%**	**11%**	**0%**	**1%**	**0%**	**0%**	**100%**	**99.9%**

Boats observed at launch, including those not inspected. PWC=personal watercraft, SUP=stand-up paddleboard, Wind=windsurfer.

	total # visitors	organisms found			total organisms	# boats dirty	# boats w/AIS	# of inspections	% of inspected boats dirty	% of inspected boats w/AIS
		entering	leaving	roadside						
Horicon Decon	391	1	0	--	1	1	1	219	0.5%	0.5%
Horicon Launch	4183	12	4	--	16	12	5	2194	0.5%	0.2%
Town of Schroon Launch	4149	4	2	--	6	6	1	2168	0.3%	0.0%
totals	8723	17	6	--	23	19	7	4581	0.4%	0.2%

Boats dirty = watercraft with any organic material, invasive, non-invasive or unknown.

Visitor Responses	AIS spread prevention awareness											# groups asked
	yes	Inspect	Wash	Drain	Bait	LW	Dry	Decon	same lake	first/frozen	didn't ask	
Horicon Decon	78	33	20	27	3	7	33	30	5	3	50	164
percentage of total groups asked	48%	20%	12%	16%	2%	4%	20%	18%	3%	2%	NA	
Horicon Launch	1926	289	92	165	4	8	182	45	1105	360	71	2068
percentage of total groups asked	93%	14%	4%	8%	0%	0%	9%	2%	53%	17%	NA	
Town of Schroon Launch	1842	586	105	68	6	62	81	44	874	316	76	2019
percentage of total groups asked	91%	29%	5%	3%	0%	3%	4%	2%	43%	16%	NA	
totals	**3846**	**908**	**217**	**260**	**13**	**77**	**296**	**119**	**1984**	**679**	**197**	**4251**
percentage of total groups asked	**90%**	**21%**	**5%**	**6%**	**0%**	**2%**	**7%**	**3%**	**47%**	**16%**	**NA**	

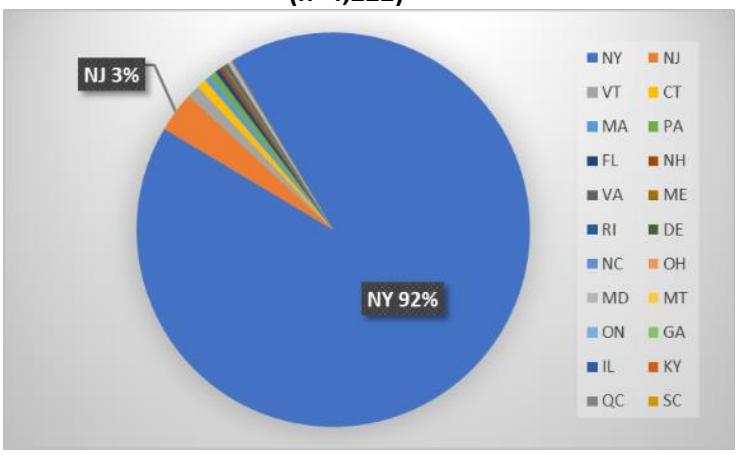
Yes = showed AIS spread prevention awareness; Drain = drained bilge; Bait = emptied bait bucket/disposed of bait; LW = drained livewell; Dry = dried boat; Decon = visited decon station; Same Lake = boat only goes in this lake; First/Frozen = first launch of the season or frozen boat.

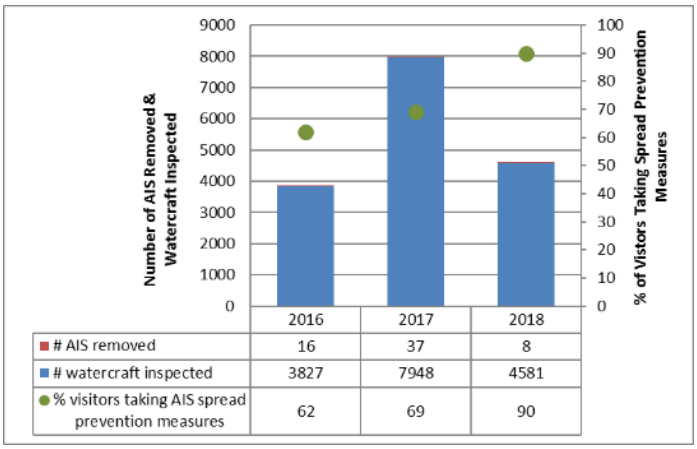
Organisms Removed	Organism Type									total # AIS	% of inspected boats w/AIS
	Non-invasive	BN*	CLP*	EF*	EWM*	VLM*	SWF*	WC*	ZM*		
Horicon Decon	0	0	0	0	0	0	0	0	1	1	0.5%
percentage of total orgs	0%	0%	0%	0%	0%	0%	0%	0%	100%		
Horicon Launch	10	0	1	0	2	0	0	2	1	6	0.2%
percentage of total orgs	63%	0%	6%	0%	13%	0%	0%	13%	6%		
Town of Schroon Launch	5	0	0	0	0	0	0	0	1	1	0%
percentage of total orgs	83%	0%	0%	0%	0%	0%	0%	0%	17%		
totals	**15**	**0**	**1**	**0**	**2**	**0**	**0**	**2**	**3**	**8**	**0.2%**
percentage of total orgs	**65%**	**0%**	**4%**	**0%**	**9%**	**0%**	**0%**	**9%**	**13%**		

Non-invasive = native aquatic or terrestrial material; BN = brittle naiad; CLP = curly-leaf pondweed; EF = European frogbit; EWM = Eurasian watermilfoil; VLM = variable-leaf milfoil; SWF = spiny waterflea; WC= water chestnut; ZM = zebra mussel; */AIS = aquatic invasive species.

Aquatic Invasive Species Intercepted by Stewards	# found on boats launching	Previous Waterway	# found on boats retrieving	Previous Waterway
curly-leaf pondweed	1	Great Sacandaga Lake	0	N/A
Eurasian watermilfoil	2	Mohawk River (1), Round Lake (1)	0	N/A
water chestnut	1	*None* (1)	1	Schroon Lake (previously in Saratoga Lake)
zebra mussel	2	*None* (1), Saratoga Lake	1	Schroon Lake (previously in Saratoga Lake)
Totals	**6**		**2**	

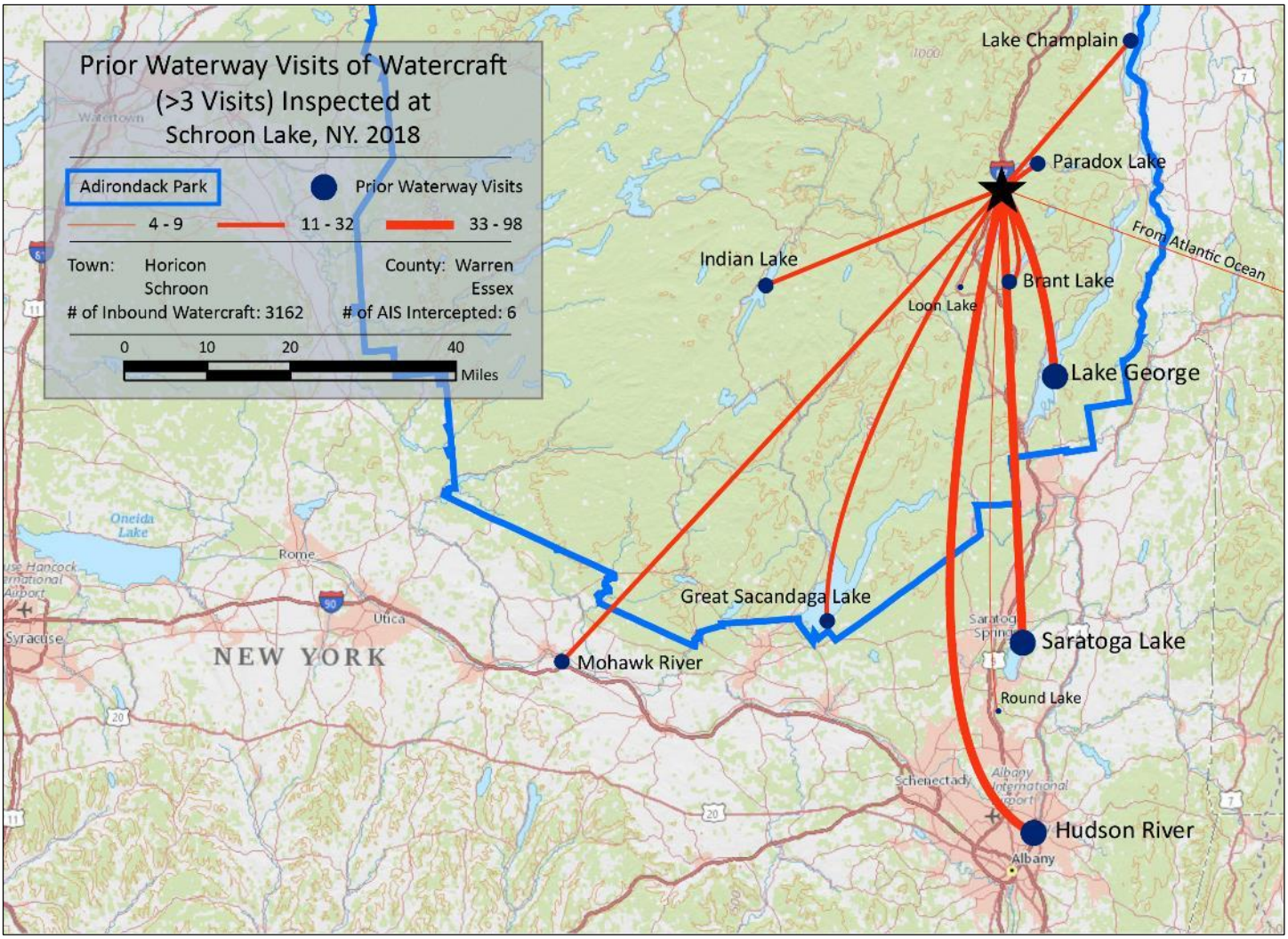
State of Motorized Boat Registration (n=4,222)





Previous Waterways for Launching Boats	# visits
SAME LAKE - PREVIOUS VISIT	1671
NONE	1083
Lake George	98
Hudson River	34
Saratoga Lake	33
NOT ASKED	29
Lake Champlain	26
Great Sacandaga Lake	23
Brant Lake	21
UNKNOWN (boater doesn't know)	18
Paradox Lake	15
Mohawk River	11
Indian Lake	10
RENTAL	10
unspecified lake in New York	9
Loon Lake (Warren County)	8
Round Lake, Saratoga County, NY	5
Long Island Sound	4
Lake Placid	3
Lower Saranac Lake	3
Oneida Lake	3
Upper Saranac Lake	3
Atlantic Ocean	2
Ausable River	2
Cayuga Lake	2
Chateaugay Lake	2
Follensby Clear Pond	2
Glenwood Lake, Ridgeway, NY	2

Previous Waterways for Launching Boats	# visits
Lake Bomoseen, Castleton, VT	2
Lake Erie	2
Raquette Lake	2
Blue Mountain Lake	1
Buck Pond (Rainbow/Kushaqua)	1
Burden Lake, Rensselaer, NY	1
Chesapeake Bay, MD	1
Finger Lakes (unspecified)	1
Greenwood Lake, West Milford, NJ	1
Harriman Reservoir, Wilmington, VT	1
Lake Harris	1
Lake Monomonac, Winchendon, MA	1
Lake Ontario	1
Lake Pleasant	1
Long Lake	1
Meacham Lake	1
Middle Saranac Lake	1
Mirror Lake	1
Mousam Lake, Shapleigh, ME	1
Schroon River, NY	1
Shrewsbury River, NJ	1
Stewarts Bridge Reservoir	1
Susquehanna River, PA	1
Tupper Lake	1
unspecified lake in New Jersey	1
unspecified lake in Ontario	1
unspecified lake in Pennsylvania	1
Wolf Pond, Tupper Lake, NY	1
TOTAL BOATS	**3163**



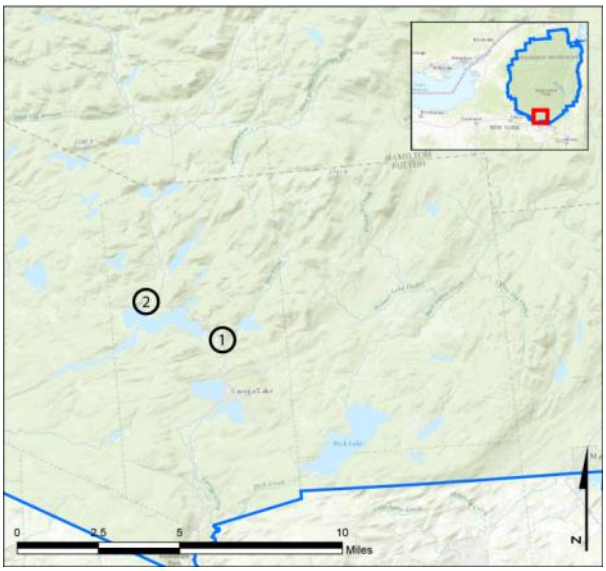
Schroon Lake Water Shield Workshop with Environmental Educator Jaime Parslow.

AWI Data Analysis Support Services Reports

Canada Lake & Caroga Decontamination Station

AIS intercepted: 12
Boats inspected: 2,206
Number of visitors: 4,015
Boats failing inspection: 1.0%
Visitors showing spread prevention awareness: 91%
Number of previously visited waterways: 33

AIS Present in Waterbody: Eurasian watermilfoil
Partnerships: Canada Lakes Conservation and E/W Caroga Lake Association
Notes: AWI provided support through steward training, a loaner iPad, and WISPA data management throughout the season.



1–Caroga Decon; 2–Canada Lake

Watercraft	Boat Type										total # boats observed	total # boats inspected
	Barge	Canoe	Dock	Kayak	Motor	PWC	Row	Sail	SUP	Wind		
Canada Lake	0	102	0	812	653	58	11	5	8	0	1649	1643
percentage of total boats	0%	6%	0%	49%	40%	4%	1%	0%	0%	0%	100%	100%
Caroga DECON STATION	0	27	0	64	124	9	1	1	0	0	226	226
percentage of total boats	0%	12%	0%	28%	55%	4%	0%	0%	0%	0%	100%	100%
East Caroga Lake (Marina)	0	1	0	2	299	31	1	3	0	0	337	337
percentage of total boats	0%	0%	0%	1%	89%	9%	0%	1%	0%	0%	100%	100%
totals	**0**	**130**	**0**	**878**	**1076**	**98**	**13**	**9**	**8**	**0**	**2212**	**2206**
percentage of total boats	**0%**	**6%**	**0%**	**40%**	**49%**	**4%**	**1%**	**0%**	**0%**	**0%**	**100%**	**99.7%**

Boats observed at launch, including those not inspected. PWC=personal watercraft, SUP=stand-up paddleboard, Wind=windsurfer.

	total # visitors	organisms found			total organisms	# boats dirty	# boats w/AIS	# of inspections	% of inspected boats dirty	% of inspected boats w/AIS
		entering	leaving	roadside						
Canada Lake	2841	11	0	--	11	10	2	1643	0.6%	0.1%
Caroga DECON STATION	396	--	--	4	4	4	4	226	1.8%	1.8%
East Caroga Lake (Marina)	778	0	8	--	8	8	6	337	2.4%	1.8%
totals	**4015**	**11**	**8**	**4**	**23**	**22**	**12**	**2206**	**1.0%**	**0.5%**

Boats dirty = watercraft with any organic material, invasive, non-invasive or unknown.

Visitor Responses	AIS spread prevention awareness											# groups asked
	yes	Inspect	Wash	Drain	Bait	LW	Dry	Decon	same lake	first/frozen	didn't ask	
Canada Lake	999	231	304	50	7	4	136	13	208	309	75	1072
percentage of total groups asked	93%	22%	28%	5%	1%	0%	13%	1%	19%	29%	NA	
Caroga DECON STATION	168	72	60	4	1	1	8	61	20	41	1	182
percentage of total groups asked	92%	40%	33%	2%	1%	1%	4%	34%	11%	23%	NA	
East Caroga Lake (Marina)	207	93	10	21	1	0	2	1	90	15	71	257
percentage of total groups asked	81%	36%	4%	8%	0%	0%	1%	0%	35%	6%	NA	
totals	**1374**	**396**	**374**	**75**	**9**	**5**	**146**	**75**	**318**	**365**	**147**	**1511**
percentage of total groups asked	**91%**	**26%**	**25%**	**5%**	**1%**	**0%**	**10%**	**5%**	**21%**	**24%**	**NA**	

Yes = showed AIS spread prevention awareness; Drain = drained bilge; Bait = emptied bait bucket/disposed of bait; LW = drained livewell; Dry = dried boat; Decon = visited decon station; Same Lake = boat only goes in this lake; First/Frozen = first launch of the season or frozen boat.

Organisms Removed	Organism Type									total # AIS	% of inspected boats w/AIS
	Non-invasive	BN*	CLP*	EF*	EWM*	VLM*	SWF*	WC*	ZM*		
Canada Lake	9	0	0	0	1	0	0	0	1	2	0.1%
percentage of total orgs	82%	0%	0%	0%	9%	0%	0%	0%	9%		
Caroga DECON STATION	0	0	0	0	3	0	0	0	1	4	1.8%
percentage of total orgs	0%	0%	0%	0%	75%	0%	0%	0%	25%		
East Caroga Lake (Marina)	2	0	0	0	6	0	0	0	0	6	1.8%
percentage of total orgs	25%	0%	0%	0%	75%	0%	0%	0%	0%		
totals	**11**	**0**	**0**	**0**	**10**	**0**	**0**	**0**	**2**	**12**	**0.5%**
percentage of total orgs	**48%**	**0%**	**0%**	**0%**	**43%**	**0%**	**0%**	**0%**	**9%**		

Non-invasive = native aquatic or terrestrial material; BN = brittle naiad; CLP = curly-leaf pondweed; EF = European frogbit; EWM = Eurasian watermilfoil; VLM = variable-leaf milfoil; SWF = spiny waterflea; WC= water chestnut; ZM = zebra mussel; */AIS = aquatic invasive species.

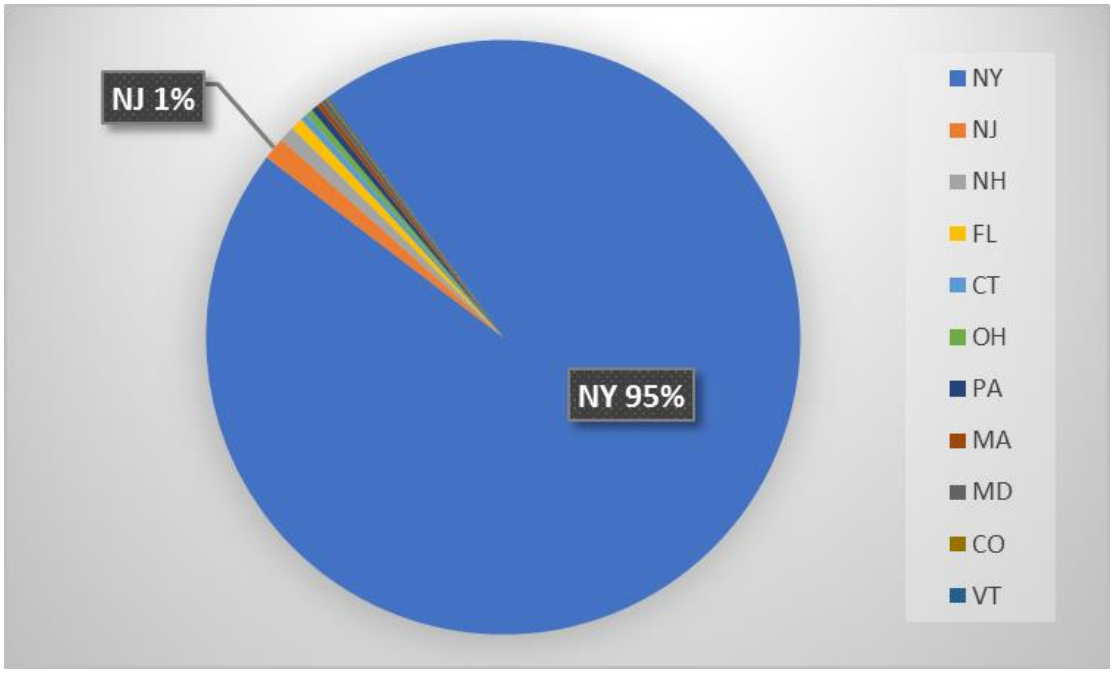
Aquatic Invasive Species Intercepted by Stewards	# found on boats launching	Previous Waterway	# found on boats retrieving	Previous Waterway
Eurasian watermilfoil	1	Canada Lake: Caroga Lake (1)	6	East Caroga Lake (6)
zebra mussel	1	Canada Lake: Mohawk River (1)	0	N/A
Totals	**2**		**6**	

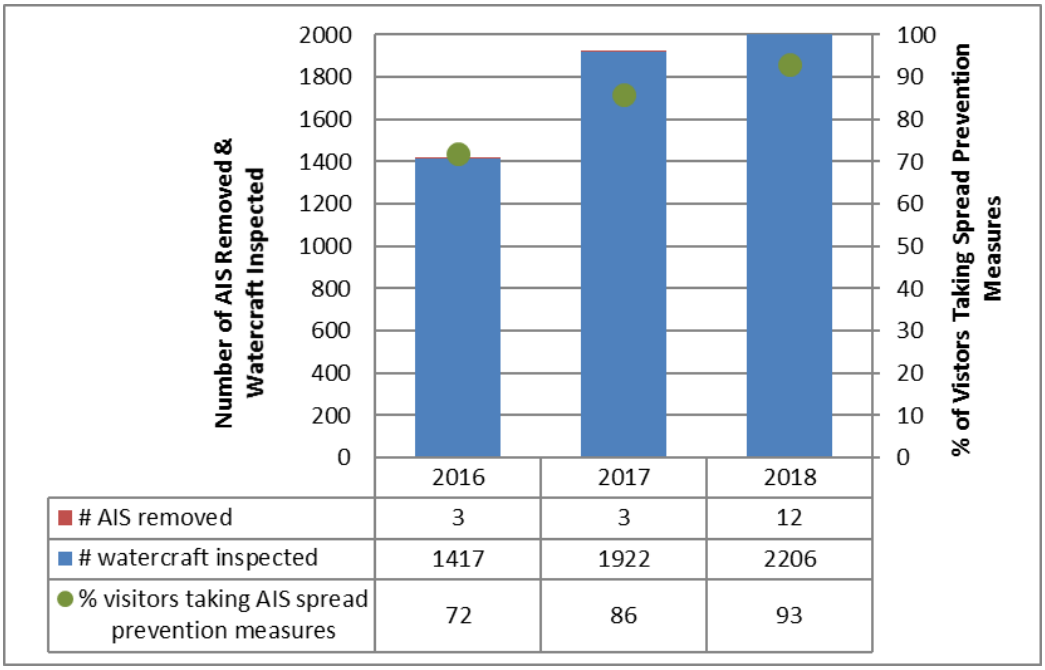
Aquatic Invasive Species Intercepted by Stewards	# found at roadside	Previous Waterway
Eurasian watermilfoil	3	Caroga Lake (2), *None* (1)
zebra mussel	1	Mohawk River (1)
Totals	**4**	

Previous Waterways for Launching Boats	# visits
NONE	746
SAME LAKE - PREVIOUS VISIT	315
Great Sacandaga Lake	83
unspecified lake in New York	80
Caroga Lake	55
NOT ASKED	23
Mohawk River	18
Piseco Lake	15
UNKNOWN (boater doesn't know)	12
Lake George	9
Indian Lake	8
unspecified lake in British Columbia	8
RENTAL	7
Otsego Lake	6
Saratoga Lake	6
Canadarago Lake	4
Oxbow Lake	4
Seventh Lake	4
Tupper Lake	4
Canandaigua Lake	3
Hudson River	3

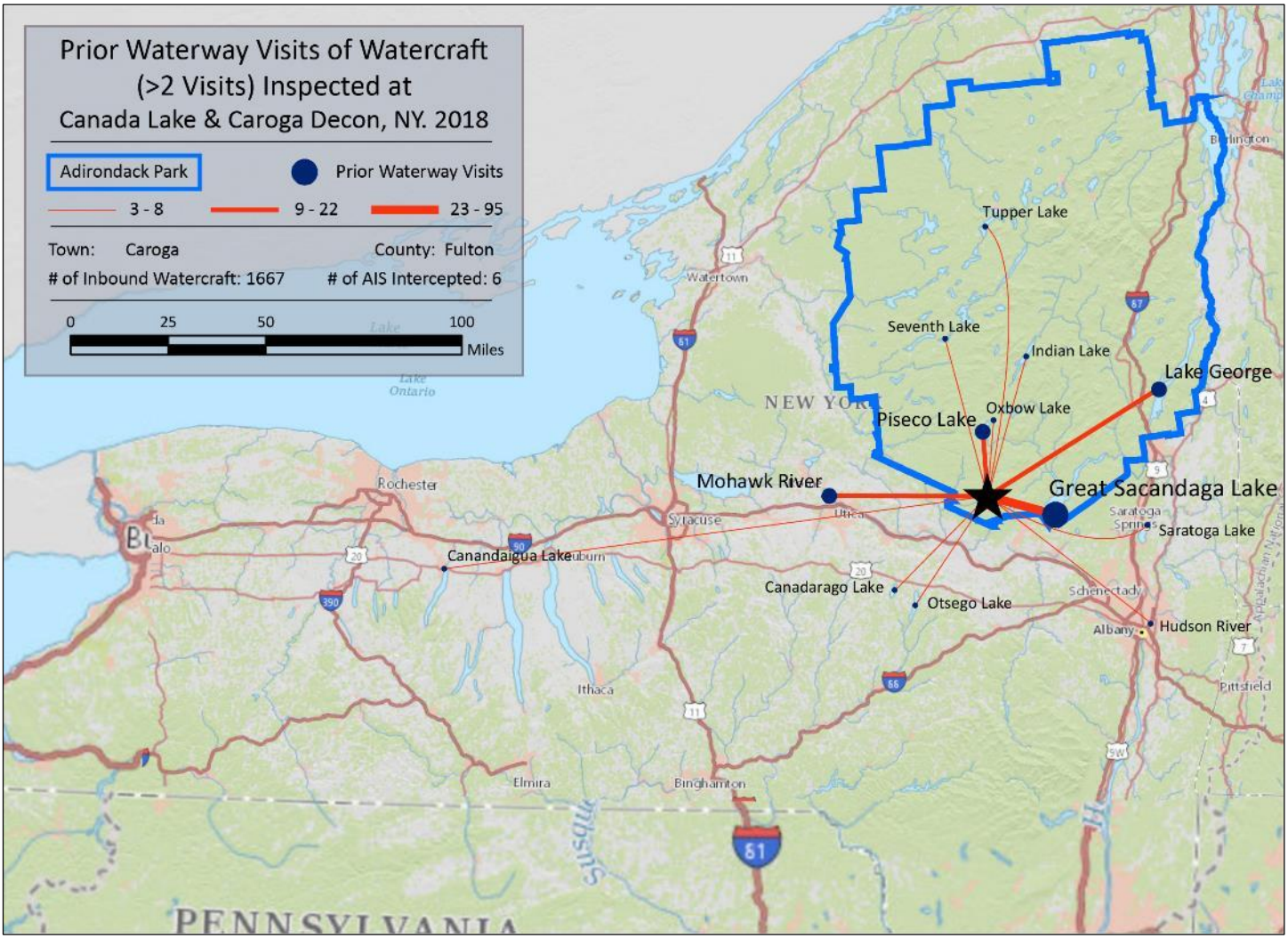
Previous Waterways for Launching Boats	# visits
Atlantic Ocean	2
Ballston Lake	2
Rockwood Lake, Fulton County, NY	2
Saranac River	2
Third Lake	2
Upper Goose Pond, Berkshire, MA	2
Upper St. Regis Lake	2
Ausable River	1
Cayuga Lake	1
Cranberry Lake	1
Erie Canal	1
Lake Algonquin	1
Lake Colby	1
Lake Durant, Indian Lake, NY	1
Passaic River, NJ	1
Raquette River	1
Round Lake, Saratoga County, NY	1
Schroon Lake	1
Trout Lake, Arietta, NY	1
unspecified lake in New Jersey	1
unspecified lake in the Adirondacks	1
TOTAL BOATS	**1441**

State of Motorized Boat Registration
(n=1,053)





	2016	2017	2018
# AIS removed	3	3	12
# watercraft inspected	1417	1922	2206
% visitors taking AIS spread prevention measures	72	86	93



Appendices

Appendix A: Seasonal Staff Profiles

Regional Supervisors	AWI Region	Education
Aveson, Sydney	Tri-Lakes	SUNY Plattsburgh
Egenhofer, Jerry	St. Lawrence	Columbia College
Fountain, Mason	Cranberry	Paul Smith's College
Garlock, Shane	South Champlain	Paul Smith's College
Kennedy, Kevin	Piseco	Excelsior College
Parker, Justice	Schroon	SUNY Cortland
Repp, Jennifer	Fulton Chain	SUNY Stony Brook
Sammons, Jeff	Sacandaga	SUNY Potsdam
Simpson, Matthew	Paul Smiths	Paul Smith's College
Young, Casey	North Champlain	Paul Smith's College

Assistant Supervisors	AWI Region	Education
Clymer, Jordan	Tri-Lakes	Paul Smith's College
Gauthier, Zachary	Piseco	Paul Smith's College
Johnson, Erik	Paul Smiths	U of North Dakota Schl of Law
Maxwell, Jake	Fulton Chain	Paul Smith's College
Nagell, Austin	Sacandaga	Siena College
Vara, Connor	South Champlain	Paul Smith's College
Wakefield, Emberstar	Cranberry	SUNY Potsdam

Stewards & Decon Techs	AWI Region	Education
Abrams, Isabel	Piseco	SUNY Canton
Allen, Karen	Cranberry	West Maryland College
Alton, Dennis	North Champlain	SUNY Oswego
Baldes, Hanna	Sacandaga	SUNY Cobleskill
Bertsche, Mackenzie	Schroon	Crown Point High School
Beyer, Lydia	Fulton Chain	Lowville Academy
Bobbette, Henry	Piseco	Johnstown High School
Bordeaux, Joshua	North Champlain	SUNY ESF
Bradley, Abigail	Fulton Chain	Paul Smith's College
Brault, Nathan	North Champlain	Onondaga Community College
Burnham, Katharine	Paul Smiths	Paul Smith's College
Carman, Tyler	Sacandaga	University of Buffalo
Cassidy , Lisa	Paul Smiths	SUNY Albany
Chamberlain, Alexis	St. Lawrence	Paul Smith's College
Christ, Alexander	Piseco	N/A
Comeau, Adrien	Fulton Chain	Newcomb CS
Comeau, Jules	Fulton Chain	SUNY Buffalo
Coolidge, Benjamin	North Champlain	Paul Smith's College
Crews, Samuel	St. Lawrence	Paul Smith's College
Davies, Liam	Fulton Chain	Paul Smith's College
Davis, Quinn	Fulton Chain	Paul Smith's College
Davis, Nicholas	Cranberry	SUNY ESF
Delosh, Austin	Cranberry	Paul Smith's College
Dudenhoeffer, Sean	South Champlain	Paul Smith's College
Fairchild , Garrett	Fulton Chain	Paul Smith's College
Farah, Jonathan	Tri-Lakes	NCCC
Fargnoli, Brandon	Piseco	New Hartford HS

Farquhar, Bruce	South Champlain	N/A
Felter, Greg	Sacandaga	Paul Smith's College
Firkins, Thomas	Cranberry	Paul Smith's College
Fisk, Tyler	North Champlain	Paul Smith's College
Foutch, Darcy	Piseco	Chatham Central School
Fraser, Rory	South Champlain	Paul Smith's College
Frechette, Daniel	Paul Smiths	Northeastern University
Gabri, Jade	Cranberry	Laurentian University
Gauthier, Rachael	Piseco	Poland Central School
Gocke, John Lance	Fulton Chain	The King's College
Gocke, James	Fulton Chain	Newcomb CS
Gocke, Peter	Fulton Chain	Newcomb CS
Godecki, Mark	Piseco	Jagiellonian University
Greminger, Rachael	North Champlain	SUNY Plattsburgh
Grube, Quincie	North Champlain	Paul Smith's College
Guimara, Kristel	Tri-Lakes	Paul Smith's College
Hackett, Jordan	Fulton Chain	Paul Smith's College
Haigler , Nicholas	Sacandaga	Paul Smith's College
Hanson, Paul	South Champlain	Paul Smith's College
Haralson, Caroline	Tri-Lakes	Colorado School of Healing Arts
Harvey, Lydia	North Champlain	Paul Smith's College
Heroux, Jessica	Tri-Lakes	Paul Smith's College
Hillery, Sean	Fulton Chain	St. Bonaventure University
Hinman , James	Fulton Chain	SUNY Buffalo
Joaquin, Jonathan	Cranberry	Paul Smith's College
Johnson, Brandon	North Champlain	Paul Smith's College
Jordan, Molly	Paul Smiths	Austin Peay State University
Kesler, Herbert	Tri-Lakes	Auburn University
Koebbeman, Ridge	Sacandaga	Paul Smith's College
Koster, Chase	Cranberry	SUNY Potsdam
LaLumiere, Sarah	Tri-Lakes	Paul Smith's College
Landry, Julie	South Champlain	North Country Community College
Liguori, Bronson	Paul Smiths	Paul Smith's College
McGreevy, Tim	South Champlain	N/A
McGuire, Ian	Tri-Lakes	Paul Smith's College
McInerney, Benjamin	Piseco	Paul Smith's College
Merritt, Matthew	Paul Smiths	Paul Smith's College
Michienzi, Grace	Piseco	University at Buffalo
Miller, Edward	South Champlain	Paul Smith's College
Monacchio, Haley	Sacandaga	Northville HS
Monroe, Richard	St. Lawrence	Paul Smith's College
Morris, Monique	Fulton Chain	SUNY Canton
Murray, Payton	Paul Smiths	Paul Smith's College
Myer, Annalisa	Fulton Chain	Stony Brook University
Naadzenga, Aperr	Sacandaga	Antioch University
Nilsen, David	Piseco	N/A
O'Connor, Robert Trey	Brantingham Lake	Herkimer Community College
Palen, Tom	South Champlain	Keene HS
Palmer , Jack	St. Lawrence	SUNY Canton/NCCC
Parslow, Carl	Piseco	Herkimer Community College
Plumstead, Cole	Schroon	N/A
Ramsay, Ann	Tri-Lakes	Paul Smith's College
Reynolds, James	Piseco	MVCC

Rider, Abigail	Tri-Lakes	Cairne University
Sammons, Elizabeth	Sacandaga	SUNY ESF
Shore, Ana	Fulton Chain	SUNY Stony Brook
Spordone, Jordan	Paul Smiths	Paul Smith's College
Steeper, Christopher	Piseco	Whitesboro Central School
Stouffer, Isaac	Tri-Lakes	Paul Smith's College
Sweeney, James	Sacandaga	Paul Smith's College
Szabo, Thomas	South Champlain	Paul Smith's College
Thompson, Malik	Sacandaga	Paul Smith's College
Thompson, Stephen	Schroon	Ticonderoga HS
Tobin, William	Tri-Lakes	Paul Smith's College
Vail, Michael	Piseco	SUNY Potsdam
Vivlamore, Sarah	North Champlain	Paul Smith's College
Wells, Maranda	South Champlain	SUNY Plattsburgh
Wrazen, Benjamin	North Champlain	Paul Smith's College
Zajac, Jillian	Fulton Chain	SUNY Plattsburgh

Appendix B: Education and Outreach Events

Outreach Events

Date	Outreach Event	People reached
January 27-29	New York State Sportsman's Expo- Syracuse NY	415
February 21	SUNY Plattsburgh	
April 16	ADK Day, Legislative Building – Albany, NY	50
April 22	Earth Day Celebration – Harrietstown Town Hall	52
June 2	Feeder Canal Race – Queensbury, NY	30
June 10	Raquette River Clean Up	
June 16	Indian Lake Quadrathlon	20
June 23	Take-a-Rake Workshop	
July 9	APIPP/ Tannery Pond	
July 10	Invasive Species Information Booth – The Utica Zoo	50
July 12	Invasive Species Information Booth – PSC VIC	25
July 12	Invasive Species Information Booth – Speculator Farmers Market	50
July 14	Invaders Day! – The Wild Center	
July 14	Antique Boat Show – Old Forge, NY	75
July 21	Poker Paddle, Table and Inspections – Indian Lake, NY	75
August 1	St. Regis Neighbor Day	
September 6	Brant Lake AIS talk	
September 6	AWI table at 90-Miler registration	
September 7-9	90-Miler Support	

Education, Workshops, and Trainings

Date	Education, Workshops, and Trainings
March 8	Science Slam @ Keene Central School
April 30	DEC Campground Caretaker Training
May 9	Classroom Workshop @ Petrova Middle School (Watershed Model, Incredible Journey)
May 11	Classroom Workshop @ Caroline Street Elementary School (Watershed Model, Incredible Journey)
May 20	Stewardship Training @ Schroon Lake
May 24	Water Shield Workshop with Tupper Lake and St. Regis Falls High School
June 7	Summer Field Day - The Incredible Journey @ Camp Sacanadaga
June 8	Limnology Workshop on St. Regis Lake with PSC Admissions tour
June 25	AIS ID and Boat Inspection training @ Dunns Marina
June 26	Water Shield Workshop – Saratoga Lake
July 11	Water Shield Workshop – Schroon Lake (ESSLA)
July 13	Rainbow Lake Volunteer Training
July 16	Teen Aquatic Stewardship Paddle – Lake Flower, NY
July 25	"You can't eat me! I'm a Spiny Waterflea" – The Utica Zoo
July 26	Invasive Species interactive presentation – Camp Colby
July 28	Rainbow Lake Training
July 31	State Fire Boat Decontamination Training – Rocky Mt. Decon
August 1	Watershed Model – Camp Colby, at PSC VIC
August 7	Water Shield Workshop – Saratoga Lake, Stillwater Youth Recreation
August 15	Water Shield Workshop – Schroon Lake (ESSLA)
September 14	Water Shield Workshop – Lake Placid AP Environmental Science
September 20	Conservation Field Days – Hamilton County Soil and Water
September 26	"Take a Child Outside" Day – The Adirondack Experience
October 5	Water Shield Workshop – Saranac Lake AP Environmental Science

October 15	Water Shield Workshop – Plattsburgh AP Environmental Science
December 17	Classroom Workshop @ Plattsburgh High School (Watershed Model)

Career Fairs

Date	Career Fairs
March 22	Herkimer County Community College
March 28	SUNY ESF
March 28	SUNY Plattsburgh
March 29	Paul Smiths College
October 18	Paul Smiths College

Meetings and Conferences

Date	Meetings and Conferences
April 2	APIPP Partners Meeting
April 6	WISPA Meeting
April 24	APIPP Partners Meeting
May 8	North East Great Lakes Workgroup Meeting
June 8	ALA Presidents Meeting
June 8	Indian River Lakes Conservancy Water Quality Conference
June 10	NYS Bass Tournament Meeting
June 12	Black River Watershed Conference
June 29	Chazy Lake Association Meeting
July 14	Black Lake Association Meeting
July 20	Advisory Committee Meeting
July 26	Piseco Lake Association Meeting
August 4	Raquette Lake Preservation Foundation
August 4	6th and 7th Lake Improvement Association meeting
August 5	Çhazy Lake Association Meeting
August 8-9	Lake Ontario Ecology Workshop
August 8	ALA Annual meeting
August 11	FCLA Annual meeting
August 12	Osgood Pond meeting
August 18	Piseco Lake Association meeting
August 19	Lake Pleasant/ Sacandaga Association meeting
August 25	Chazy Lake Environmental Committee meeting
September 25	DEC Invasive species curriculum/ iMAP Invasives training
October 17	ALA meeting
November 1	GSLAC meeting
November 2	APIPP Partners meeting
November 13-15	Cornell In- Service training
November 29	Great Lakes Action Agenda
December 7	Advisory Committee Meeting

Appendix C: Bibliography

Comeau, S., Rainville, S., Baldwin, W., & Austin, E. (2001). Susceptibility of quagga mussels (Dreissna rostiformis bugensis) to hot-water sprays as a means of watercraft decontamination. *Biofouling, 27*(3), 267-274.

Drury, K., & Rothlisberger, J. (2008). Offense and defense in landscape-level invasion control. *Oikos, 117*, 182-190.

GLRI. (2018, February 10). *Great Lakes Restoration Initiative Report to Congress and the President, Fiscal Year 2017.* Retrieved February 2019, from www.glri.us/documents

Johnson, L. E., Ricciardi, A., & Carlton, J. T. (2001). Overland Dispersal of Aquatic Invasive Species: A Risk Assessment of Transient Recreational Boating. *Ecological Applications, 11*(6), 1789-1799.

Johnson, L., & Padilla, D. (1996). Geographic spread of exotic species: Ecological lessons and opportunities from the invasion of the Zebra Mussel, Dreissena polymorpha. *Biological Conservation, 78*, 23-33.

Johnson, L., Ricciardi, A., & Carlton, J. (2001). Overland dispersal of aquatic invasive species: a risk assessment of transient recreational boating. *Ecological Applications, 11*, 1789-1799.

Johnstone, M., Smith, H., Holmlund, E., Modley, M., DeBolt, E., & Rohne, K. (2014). *Boat inspection and decontamination for aquatic invasive species prevention: Recommendations for the Adirondack Region.* Keene Valley, NY: Adirondack Park Invasive Plant Program.

Leung, B., Bossenbroek, J., & Lodge, D. (2001). Boats, pathways, and aquatic biological invasions: Estimating dispersal potential with gravity models. *Ecological Applications, 11*, 1778-1788.

Morse, J. (2009). Assessing the effects of application time and temperature on the efficacy of hot-water sprays to mitigate fouling by Dreissena polymorpha (zebra mussels Pallas). *Biofouling, 27*(3), 267-274.

NYSDEC Bureau of Fisheries. (2015). *New York State Aquatic Invasive Species Management Plan.* New York State Department of Environmental Conservation, Division of Fish Wildlife and Marine Resources. Albany: New York State.

PlaceMaking. (2018). *Leisure travel study: Essex, Franklin and Hamilton County Region.* Lake Placid: Regional Office of Sustainable Tourism.

Quirion, B., Vennie-Vollrath, E., & Simek, Z. (2017). *Adirondack Park Invasive Plant Program 2017 Annual Report.* Keene Valley, NY: Adirondack Chapter of the Nature Conservancy.

Ricciardi, A. (2006). Patterns of invasion in the Laurentian Greate Lakes in relation to changes in vector activity. *Diversity and Distributions*(12), 425-433.

Rothlisberger, J., Chadderton, W., McNulty, J., & Lodge, D. (2010). Aquatic invasive species transport via trailered boats: What is being moved, who is moving it, and what can be done. *Fisheries, 35*(3), 121-132.

Seekamp, E., McCreary, A., Mayer, J., Zack, S., Charlebois, P., & Pasternak, L. (2016). Exploring the efficacy of an aquatic invasive species prevention capaign among water recreationists. *Biological Invasions*(18), 1745-1758.