Adirondack Watershed Institute Stewardship Program Summary of Programs and Research 2015

Photo courtesy of Jake Sporn

Paul Smith's College
THE COLLEGE OF THE ADIRONDACKS

Adirondack Watershed Institute
Report # AWI 2016-05

Adirondack Watershed Institute Stewardship Program

Adirondack Watershed Institute of Paul Smith's College

Season 16 in Review!

73 stewards covered **50** boat launches and **11** decontamination stations

Between Memorial Day and Columbus Day, lake stewards completed...

43,806 WATERCRAFT INSPECTIONS!

...and took 34 shameless selfies throughout the Adirondacks.

staff educated **96,140** people at steward sites

and presented at **70** outreach events and **9** Water Shield Workshops

1,125 aquatic invasive species fragments were removed from watercraft in 2015!

AIS

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Steward Mitch Jones at North Branch Boquet Brook.

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The 2015 Adirondack Watershed Institute Stewardship Program was funded by:

Great Lakes Restoration

Paul Smith's College
The College of the Adirondacks

Lake Champlain Basin Program

Natural Heritage Trust
Supporting Parks, Conservation, Recreation and Historic Preservation

The Shore Owners' Association of Lake Placid
Preserving Placid's ecology, history and scenic beauty

Saratoga Lake Protection & Improvement District

Adirondack White Lake Association

Great Sacandaga Lake Advisory Council

Rainbow Lake Association

G.S.L.A. Member Great Sacandaga Lake Assoc.

The S.A.V.E. Lake George Partnership
Working Together to Stop Invasives

Upper Saranac Foundation
It still is, and always will be, about water quality

St. Regis Foundation

Partners:

New York State of Opportunity Department of Environmental Conservation

State of New York LG Lake George Park Commission

Adirondack Park Invasive Plant Program APIPP Since 1998

Adirondack Lakes Alliance

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Table 1. Abbreviations List.

Abbreviation	Complete Text
AIS	Aquatic Invasive Species
APIPP	Adirondack Park Invasive Plant Program
AWI	Paul Smith's College Adirondack Watershed Institute
AWISP	Adirondack Watershed Institute Stewardship Program
ECOS	Environmentally Clean Operating System
EPA GLRI	United States Environmental Protection Agency Great Lakes Restoration Initiative
ESSLA	East Shore Schroon Lake Association
EWM	Eurasian watermilfoil
FSRMFT	Friends of St. Regis Mountain Fire Tower
LCBP	Lake Champlain Basin Program
LGPC	Lake George Parks Commission
NHT	Natural Heritage Trust
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 inVasive from Entering Lake George Partnership
SLPID	Saratoga Lake Protecion and Improvement District
Steward	Adirondack Watershed Institute Steward
USLA & USLF	Upper Saranac Lake Association & Upper Saranac Lake Foundation
VIC	Paul Smith's College Visitor Interpretive Center

Abstract

This report summarizes the data and program highlights for the 2015 field season of the Paul Smith's College (PSC) Adirondack Watershed Institute Stewardship Program (AWISP) in Paul Smiths, New York. In 2015, New York State contracted with PSC to launch the Adirondack AIS Spread Prevention Pilot Program, a NYS Environmental Protection Fund (EPF) initiative through which the AWISP provided stewards at several previously unserved waterways, and supervised the establishment of 11 decontamination stations across the park. 73 stewards were stationed at 61 boat launches and decontamination stations across the Adirondack region and beyond, implementing a landscape-scale, coordinated aquatic invasive species (AIS) spread prevention program. Stewards greeted and educated 96,140 visitors about AIS issues and spread prevention techniques while inspecting 43,806 watercraft of multiple types. Stewards discovered and removed 1,125 instances of confirmed AIS, approximately 3% of all watercraft inspected. A comparative analysis of data from all 61 steward locations revealed variation in traffic encountered, visitor receptivity to inspection, AIS transport rate, percentage of visitors taking AIS spread prevention measures, and type of watercraft launched. Visitors reported using their watercraft within the previous two weeks on over 350 different water bodies across the United States and Canada. This report also includes summaries of steward projects and research initiatives including public education and outreach, community improvement and research projects, summit stewardship, surveying and management of invasive species, banded loon monitoring, and a comprehensive biological stream assessment as part of an ongoing AWI research project. The program was funded in 2015 by a United States Environmental Protection Agency/ Great Lakes Restoration Initiative (EPA GLRI) grant, New York State's Natural Heritage Trust (NHT), the Upper Saranac Lake Foundation (USLF), the St. Regis Foundation, the Lake Placid Shore Owners' Association (LPSOA), the Saratoga Lake Protection and Improvement District (SLPID), the Rainbow Lake Association (RLA), the Adirondack White Lake Association, Great Sacandaga Lake Advisory Council, Great Sacandaga Lake Association, Lake Champlain Basin Program (LCBP), S.A.V.E. (Stop Aquatic inVasives from Entering) Lake George Partnership, and PSC.

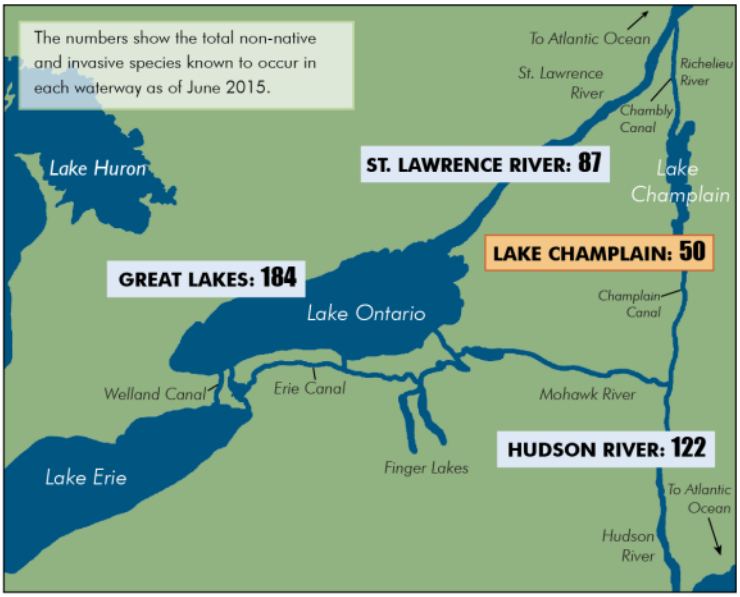
Introduction

Eric Holmlund, PhD
Director, Adirondack Watershed Institute Stewardship Program

The AWISP and the AWI

The AWISP is the education, outreach and spread prevention arm of PSC's comprehensive environmental science, education, and management institute. The Adirondack Watershed Institute (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, 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. The Stewardship Program initiated services in 2000 on one northern Adirondack lake chain, the St. Regis Lakes, and has since expanded its coverage to over 60 locations dispersed across the entire Adirondack region.

The AWISP embodies the tripartite mission of the AWI—(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 mounting challenge of the spread of aquatic invasive species. The AWISP 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. In a region as large and jurisdictionally complex as the Adirondacks, the AWISP 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.



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. AIS presence in New York and surroundings

The Adirondack Region and the Threat of Aquatic Invasive Species

The Adirondack Region is home to globally significant wetlands, thousands of lakes and ponds, and over 30,000 miles of rivers and streams. With an abundance of high quality water resources, 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 (Kelting, 2006). While productive from a socioeconomic perspective, many of these activities can, and have, spread AIS over the past two decades to over 90 Adirondack lakes A 2010 Notre Dame University paper confirmed and quantified the role of recreational watercraft and trailers in spreading AIS overland between waterbodies (Rothlisberger, Chadderton, McNulty, & Lodge, 2010). Previous research has shown that zebra mussels are dispersed when they are attached to aquatic vegetation entrained on boat propellers and trailers (Johnson, Ricciardi, & Carlton, 2001). New AIS continue to make inroads in NYS each season, including an increasingly serious infestation of Asian clam (*Corbicula fluminea*) in Lake George, expanding to a total of 14 sites in 2014, new detections of spiny waterflea (*Bythotrephes longimanus*) in Adirondack lakes, along with the continued management of *Hydrilla verticillata* in Cayuga Lake and the Lower Croton River. While the Adirondack Park has 94 waterways infested with eight 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 (Smith, Quirion, & Johnstone, 2013). AIS spread prevention programs are an integral component of an effective invasive species management regimen. Stewardship/ watercraft inspection programs can 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.

Program Elements and Scope

The 2015 field season of the AWISP was the highest-volume, largest-scope, and most administratively complex effort in the organization's history. A record 77 AWISP employees, supported by a budget in excess of $1 million, delivered an integrated AIS spread prevention program at over 50 separate locations in all regions of the 6,000,000-acre Adirondack Park. The AWISP administered a composite budget derived from over a dozen sources, including a large, one-year contract from New York State, a large Great Lakes Restoration Initiative award from the US EPA, awards from the Lake Champlain Basin Program, and contracts with several lake associations, foundations and municipal entities. The AWISP coordinated the local and regional imperatives of each funding source and stakeholder group into an integrated, regionally coherent program. In addition, the AWISP 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 District and a number of Adirondack lake associations including the East Shore Schroon Lake Association.

The AWISP's 2015 field season was distinguished by its central role in the design and implementation of a comprehensive New York State pilot initiative to deploy and staff decontamination equipment at 11 new stations sited strategically around the Park. The AWISP 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 Department of Fisheries, and Regions 5 and 6 staff to plan, troubleshoot, and monitor the greatly expanded AIS spread prevention program. Through this unprecedented New York State effort, AWISP watercraft inspectors were able to use high-pressure hot water decontamination equipment on high-risk boats for the first time. Watercraft inspectors at the dozens of inspection locations at boat launches across the Park could, for the first time, refer high-risk watercraft to nearby decontamination facilities, thereby providing the greatest degree of AIS spread prevention in the Park's history.

Overview of the 2015 report

This report contains chapters and components summarizing the full range of program activities and functions. The Program Description and Methods 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 2015 field season, including analysis of the AIS spread vectors 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 2015 program: the Great Lakes Restoration Initiative and the Adirondack AIS Spread Prevention Pilot Program, funded by New York State. The report continues with short descriptions of each program location, followed by summaries and results from approximately 20 distinct environmental stewardship projects conducted by seasonal staff to augment and extend their primary function as watercraft inspectors. The longest section of the annual report is comprised of 32 three-page 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 snapshots of program outcomes for those interested in particular water bodies and locations. The report concludes with appendices profiling our seasonal staff and listing the education and outreach events attended by our outreach staff.

Steward decontaminating two personal watercraft.

Overview of Steward Locations

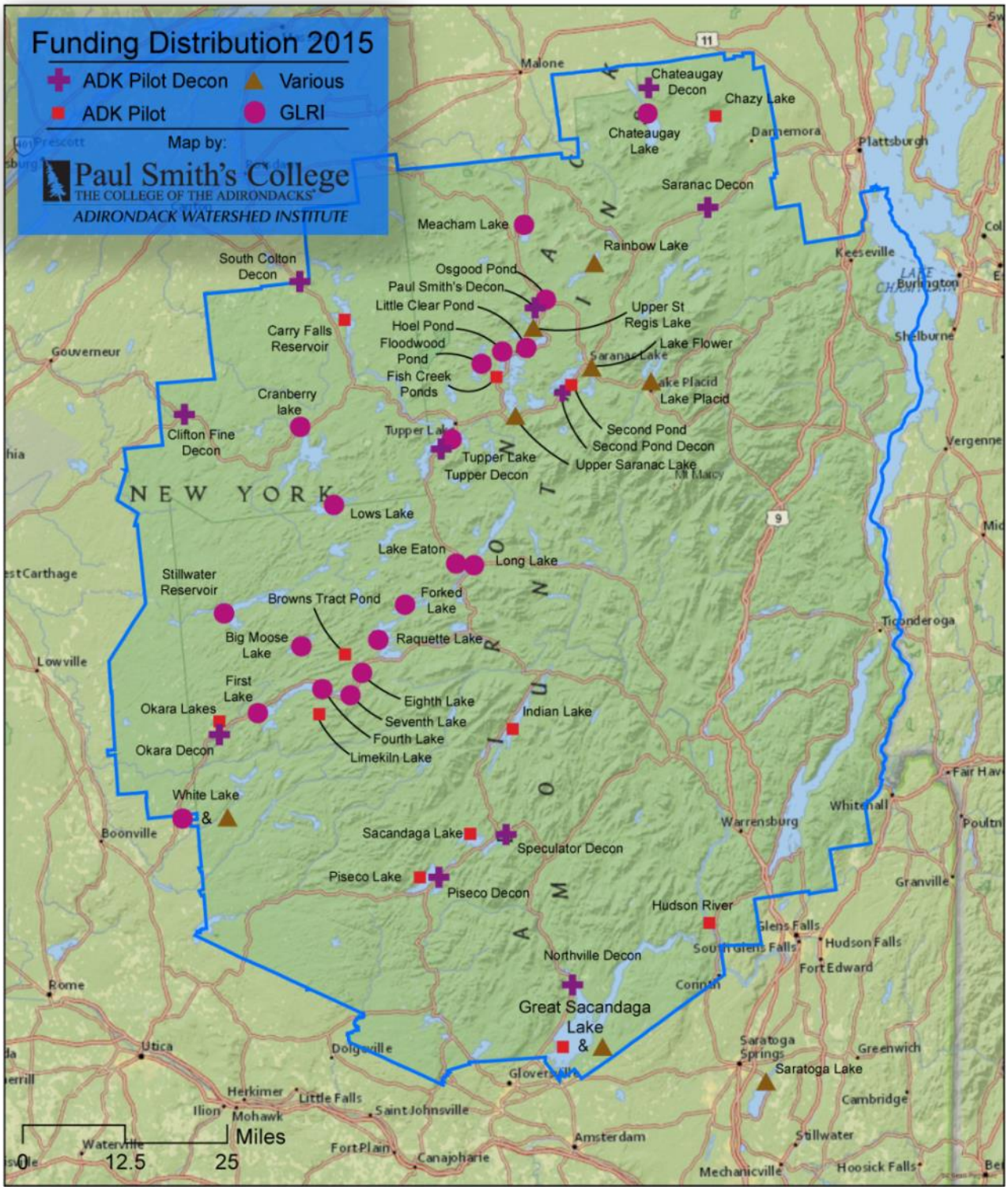


Figure 2. Overview map of AWISP steward locations. "ADK Pilot" and "ADK Pilot Decon" indicate inspection only and decontamination stations funded by NYS Adirondack AIS Spread Prevention Pilot Program.

Program Description and Methods

Kathleen Wiley
Assistant Director, Adirondack Watershed Institute Stewardship Program

Program Background

The AWISP 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 AWISP mission involves providing on-site stewardship of terrestrial and aquatic natural resources, primarily through public education, field monitoring, and service work. The AWISP 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 AWISP began posting stewards at Upper St. Regis Lake and on St. Regis Mountain, the program has gradually expanded through the central and western Adirondacks. For 16 years, the program has built relationships with lake associations, state foresters, forest rangers, New York State Department of Environmental Conservation (NYSDEC) operations, fisheries, and environmental conservation departments as AIS prevention has emerged as a top priority among the scientific, property owner, and tourism communities of the region. In 2015, the AWISP received funding through the New York State Environmental Protection Fund via the Natural Heritage Trust to post stewards and infrastructure at 11 decontamination stations. Through continued funding by a Great Lakes Restoration Initiative (via US EPA) grant, the AWISP provided a fifth year of watercraft inspection in the west-central Adirondack region. The other sources of funding for the AWISP are contracts with lake associations, foundations, a tax district, and smaller grants. The AWISP provided part and full-time coverage at 61 locations in 2015.

Steward Training

The stewards participated in a weeklong 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 ninth year, the AWISP hosted a state-wide steward training with the LCBP, our own stewards, stewards from the NYS Department of Parks, Recreation, and Historic Preservation, and stewards sponsored by individual lake associations across NYS. Participants traveled to PSC's Joan Weill Student Center to experience this multiple-element training. Staffers from the Adirondack Park Invasive Plant Program (APIPP), AWI, and the LCBP 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 NYSDEC, the Adirondack Park Agency (APA), and SUNY Oneonta. Some AWISP staff members attended training by the Lake George Park Commission (LGPC) on operation of the decontamination equipment. The stewards were given the opportunity to attend a Standard First Aid and CPR/AED course. Many stewards attended a course taught at PSC by the Athletic and Recreation Department, but a few stewards took classes closer to their homes. The

stewards also participated in sexual harassment awareness training. Staff training throughout the season on different topics is important to encourage ongoing education and positive morale.

Participants of the 2015 Statewide Watershed Steward Training Program at PSC.

Watercraft Inspector Methods

Beginning on Memorial Day weekend, for the 12 weeks from May 23rd to August 16th, and then Friday – Sunday through October 12th as staff was available. Stewards inspected watercraft and educated visitors at more than 60 locations including 40 different waterbodies. Stewards worked from 7:00 AM to 4:00 PM with one hour off for breaks and lunch. Shift timing was modified in some instances to fit local traffic conditions. This was the first season that the AWISP provided additional coverage at some locations through Columbus Day Weekend. Some boat launches were covered seven days per week while others were staffed part of the week. Boat ramps were selected by AIS spread prevention risk assessment in conjunction with NYSDEC, APIPP and LCBP. Stewards were instructed to gather visible data on each visitor party, including group size, type of watercraft, state of 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). Stewards shaped their approach according to the characteristics of the particular boat launch, their assessment of visitor background and receptivity, and environmental considerations.

Steward coverage at individual boat launches depended upon resource availability and visitor usage rates. Stewards were present seven days per week at Chateaugay Lake, Lake Placid NYSDEC Boat Launch, Long Lake, Raquette Lake Village, Saratoga Lake, Upper St. Regis Lake, and the Clifton-Fine Decontamination Station. At a small number of sites, such as Hollywood Hills on First Lake and the Pine Cone Boat Launch on Cranberry Lake, a Steward was present on only a few instances for educational purposes. 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.

Table 2. Total number of days covered and typical weekly coverage level at each location

Location	Days Covered in 2015	Steward Coverage
Big Moose Lake	3	-
Brown's Tract Pond	1	-
Cadyville Decontamination Station 7/3/15 (station opening date)	43	4 days/week
Carry Falls Reservoir	6	-
Chateaugay Lake	112	7 days/week
Chateaugay Decon 6/22	45	3-5 days/week
Chazy Lake	72	3 days/week
Clifton Fine Decon 5/23	90	7 days/week
Cranberry Lake-NYSDEC Launch	80	5-7 days/week
Cranberry Lake-Pine Cone Launch Wanakena	3	-
Eighth Lake	2	-
First Lake (Hollywood Hills)	2	-
Fish Creek Ponds	46	2-3 days/week
Floodwood Pond	14	-
Forked Lake	5	-
Fourth Lake	106	5-7 days/week
Great Sacandaga Lake-Broadalbin	79	4-7 days/week
Great Sacandaga Lake-Day	27	2-3 days/week
Great Sacandaga Lake-Northhampton	64	2-5 days/week
Great Sacandaga Lake-Northville	53	4-6 days/week
Great Sacandaga Lake-Northville Decon 7/11	52	4-5 days/week
Higley Flow	8	-
Hoel Pond	18	-
Hudson River (Luzerne)	22	-
Indian Lake	62	4 days/week
Lake Colby	1	-
Lake Eaton	17	1-2 days/week
Lake Flower	87	5 days/week
Lake Placid-NYSDEC Launch	115	7 days/week
Lake Placid-Village Launch	75	7 days/week
Limekiln Lake	4	-
Little Clear Pond	19	-
Long Lake	99	7 days/week

Lows Lake	11	1-2 days/week
Meacham Lake	37	-
Okara Lake Decon 6/25	48	4-5 days/week
Osgood Pond	59	3-4 days/week
Oxbow Lake	1	-
Paul Smiths Decon 7/3	57	5 days/week
Piseco Lake-Comfort Launch	19	-
Piseco Lake-Poplar Launch	72	4-5 days/week
Piseco Lake-Sand Launch	1	-
Piseco Lake Decon 6/20	31	3-4 days/week
Rainbow Lake (Buck Pond)	76	3 days/week
Raquette Lake-Village Launch	116	7 days/week
Raquette Lake-Burke's Marina	17	1-2 days/week
Raquette Lake-Golden Beach	1	-
Sacandaga Lake	62	3 days/week
Saratoga Lake-NYSDEC Launch	98	7 days/week
Saratoga Lake-South Shore Launch	12	7 days/week
Second Pond	107	6-7 days/week
Second Pond Decon 7/3	66	7 days/week
Seventh Lake	34	1-3 days/week
South Colton Decon 7/28	23	5 days/week
Speculator Decon 7/17	24	4 days/week
Stillwater Reservoir	66	4-5 days/week
Tupper Lake	95	5-7 days/week
Tupper Lake Decon 7/15	33	5-7 days/week
Upper Saranac Lake	85	4 days/week
Upper St. Regis Lake	117	7 days/week
White Lake	49	3 days/week

Each steward set up a workstation depending on the site layout and amenities at each location that 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 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

Steward promoting Invasive Species Awareness Week.

creating posters and other special exhibits. The stewards wore a PSC cap, khaki button-up shirt or dark green polo displaying the AWISP logo, and an AWISP nametag. Depending on the weather, they also wore a dark green sweatshirt with the AWISP logo and "clean/drain/dry" message.

Pressure washing units were stored and locked in appropriate sized portable storage containers, (MHC units required a 10 foot long container, ECOS units required 20 foot containers) which also housed signs, personal protective equipment, cones and other gear such as lower unit flushers, buckets, and tarps. Personal protective equipment provided to the stewards 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 Department of Transportation (NYSDOT) 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.

ECOS unit in operation with storage container and wash water mat.

Stewards provided boaters and visitors with interpretive information 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 proprietary survey software and uploaded wirelessly to a server for weekly download and analysis by one steward in charge of data processing.

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.

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 the Clean, Drain, 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, which 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.

Outboards and lower units found with standing water in them underwent a flushing process, which consisted of low pressure hot water being supplied to the lower unit with 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 AWISP included a full-time Director, Assistant Director, Program Manager and Program Assistant in 2015. The 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. APIPP was instrumental in the preseason site work. The Program Administrator approved all employee timesheets twice monthly and submitted check request forms, reimbursement forms, and purchase

Stewards from the Northwest Region.

order request forms to the financial office at PSC.

The stewards were divided into six regions of approximately 10 stewards apiece. The regions coincided with the northwest, northeast, southwest, southeast, central, and Paul Smith's regions of the park. A staff meeting was held on Mondays at the AWI building at PSC, which was attended by the six Regional Supervisors, either in person or via phone or video chat. Weekly staff meetings were held on Tuesday, Wednesday, or Thursday mornings 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 poor roads. 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 then they were transported to PSC for a second review and further identification from the 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.

AWISP administrators oriented stewards to each boat launch workstation during staff training, often with the assistance of lake association members. During the summer, stewards participated in boat tours provided by lake association members or using the AWISP boat. The Regional Supervisors conducted unannounced site visits during the week to observe and support each steward individually. One Steward based in each of the six regions functioned as a Weekend Supervisor for their respective areas. Weekend Supervisors conducted site visits to support and monitor each Steward as well as participated in outreach activities.

The AWISP doubled in size with the addition of the ADK AIS Pilot Program in 2015, which, combined with the late spring initiation of the contract, presented challenges. Eleven 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 AWISP entered its fifth season of GLRI funding. The Director focused on grant administration and agency communication and coordination, and the Assistant Director oversaw the six 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.

Regional Supervisors with AWISP Director, Dr. Eric Holmlund.

Steward Special Projects

In general, 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 broadcast the AWISP message, to coordinate with partner organizations, and to provide the stewards a respite from boat launch duty while gaining hands-on skills that benefited the mission of the AWI and area lake associations. Stewards monitored

loons on Big Moose Lake, Stillwater Reservoir, Upper St. Regis Lake and Spitfire Lake for the Biodiversity Research Institute, worked with APIPP to survey garlic mustard, and managed purple loosestrife through hand pulling on the St. Regis Lakes. Stewards also collected water samples for a senior research project through PSC, updated the kiosks at the NYSDEC boat launches at Cranberry and Long Lakes, and assisted PSC professors with research projects on Lyme Disease and climate change. Stewards also constructed AIS disposal stations for NYSDEC boat launches on Great Sacandaga Lake with materials provided by the NYSDEC. Stewards worked on the AWI social media project by posting to a blog, Facebook page, Twitter feed, Instagram, and writing newsletter articles. Stewards attended and presented at area special events and lake association meetings.

Networking, Meetings and Outreach Activities

The Director attended regular meetings of APIPP, the Adirondack AIS Committee, NYSDEC collaborators, and the LCBP and made several conference and meeting presentations. In May, the AWISP Director presented at the NYS Federation of Lake Associations' annual conference in Hamilton, New York, and at the International Association of Great Lakes Research national conference in Burlington, Vermont. In June, he presented at the Black River Watershed Conference, and in November conducted two webinars through the New York Sea Grant/ Cornell Extension webinar series. The Director also made several progress presentations to NYSDEC and the LGPC.

The AWI attended Adirondack Day in the NYS Legislative Office Building in Albany in April. The AWISP Program Manager conducted a Volunteer Lake Steward Training at the Pottersville Fire Department for 40 members of the East Shore Schroon Lake Association (ESSLA), Schroon Lake Association, Brant Lake Association, Paradox Lake Association and from Garnet Lake. This training allowed AWI to provide consistent information to other areas of the Park. PSC hosted the inaugural Adirondack Lakes Alliance Symposium in July. The AWISP partnered with the APIPP, RLFP, 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.

The AWISP also coordinated data collection from steward programs run by various Adirondack lake associations. AWISP provided iPads to the ESSLA, Schroon Lake Association, Brant Lake Association, Paradox Lake Association, and Loon Lake Association for the duration of the season. Lake associations were encouraged to purchase any additional iPads they needed with the AWISP providing the data collection software. Each association had unique survey and login credentials. This allowed the AWISP to collect lake association's data directly for use in park-wide AIS spread vector analysis.

In the future, the AWISP will expand this service to more lake associations. Managing several lake associations' survey training, data collection practices, and devices requires a dedicated staff member. Lake association steward employees are often volunteers or non-college age and need different training and support compared with the typical AWI employee.

Recommendations and Conclusion

The hiring, training and administration of 60 to 80 seasonal employees requires increased off-season staff capacity. For 2016, AWISP will expand and formalize preseason supervisor training and documentation.

Additional off-season staff will also allow the AWISP to expand outreach and education programming to various user groups in Adirondack communities. The AWISP should also expand staff appearances and participation at relevant meetings and events across the Adirondack PRISM during the off-season. During the field season, weekly meetings of regional employees need increased standardization and coordination to facilitate information exchange across the program region and through all levels of the organization.

The AWISP completed its sixteenth 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 AWISP continues to be involved in outreach beyond boat launch inspections to present the message to all boaters.

Acknowledgements

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We gratefully rely on the collaboration of our close working group of Brendan Quirion, Erin Vennie-Vollrath, and Zack Simek of APIPP, Kristen Rohne of LGA, Dave Wick and Joe Thouin of LGPC, Meg Modley of LCBP, and Jane Smith and Ed Griesmer of the ALA. We would also like to thank the NYS DEC Invasive Species Coordination Unit: Leslie Surprenant, Dave Adams, and Catherine McGlynn. Also, NYS DEC Natural Resources Assistant Commissioner, Kathy Moser, and Region 5 and 6 Regional Directors Robert Stegemann and Judy Drabicki, were all supportive. Bill Farber, Hamilton County Board of Supervisors, Fred Monroe, Adirondack Park Local Government Review Board, Eric Siy, Fund for Lake George, and Sherman Craig, Cranberry Lake resident and Adirondack Park Agency Commissioner were invaluable as well. In addition, we wish to thank the following supervisors for the Rick Wilt, Town of Arietta, 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 2015.

Adirondack Association of Towns and Villages
Adirondack Canoe Classic
Adirondack Lakes Alliance
Adirondack North Country Association
Adirondack Park Agency
Big Moose Lake Property Owners' Association
Black Lake Association
Blue Mountain Lake Association
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
Dunn's Marina
East Shore Schroon Lake Association
Fulton Chain of Lakes Association
Hamilton County Soil and Water Conservation District
Holywood Hills Association
Hudson River-Black River Regulating District
Indian Lake Association
Jerry Delaney - Saranac Town Board
Keene Central School
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
Osgood Pond Association
Paradox Lake Association
Piseco Common School District
Piseco Lake Association
PSC VIC
Raquette Lake Preservation Foundation
Raquette Lake Supply
Raquette Lake Union Free School District
Regional Inlet Invasive Species Plant Program
Saranac Country Store
Saratoga Lake Association
Saratoga Rowing Association
Schroon Lake Association
Sixth and Seventh Lakes Association
South Shore Marina
St Regis Foundation
St. Regis Property Owners Association
Stop Aquatic inVasives from Entering Lake George Partnership
SUNY Oneonta
SUNY Plattsburgh
The Fund for Lake George
Town of Arietta Highway Department
Twitchell Lake Fish and Game Club
Upper Saranac Lake Association
White Lake Shores Association

Summary of Results

Eric Holmlund, Director, with Jeffrey Sann, Program Manager,
Adirondack Watershed Institute Stewardship Program

As awareness of AIS reaches a concerned public, the AWISP continues to lead the way in education and spread prevention within the Adirondacks. 2015 saw another increase in program size with the initiation of the ADK AIS Pilot Program funded through the vision of Governor Cuomo, the NHT and NYSDEC.

The 2015 field season was particularly significant because federal and state agencies collaborated with private lake associations and municipalities to provide the most encompassing and integrated AIS spread prevention program in the history of the Adirondack Park. The AWISP, which initiated service in 2000 with 8 employees covering 1 boat launch, grew to service 40 lakes plus other locations in 2015 (Figure 3).

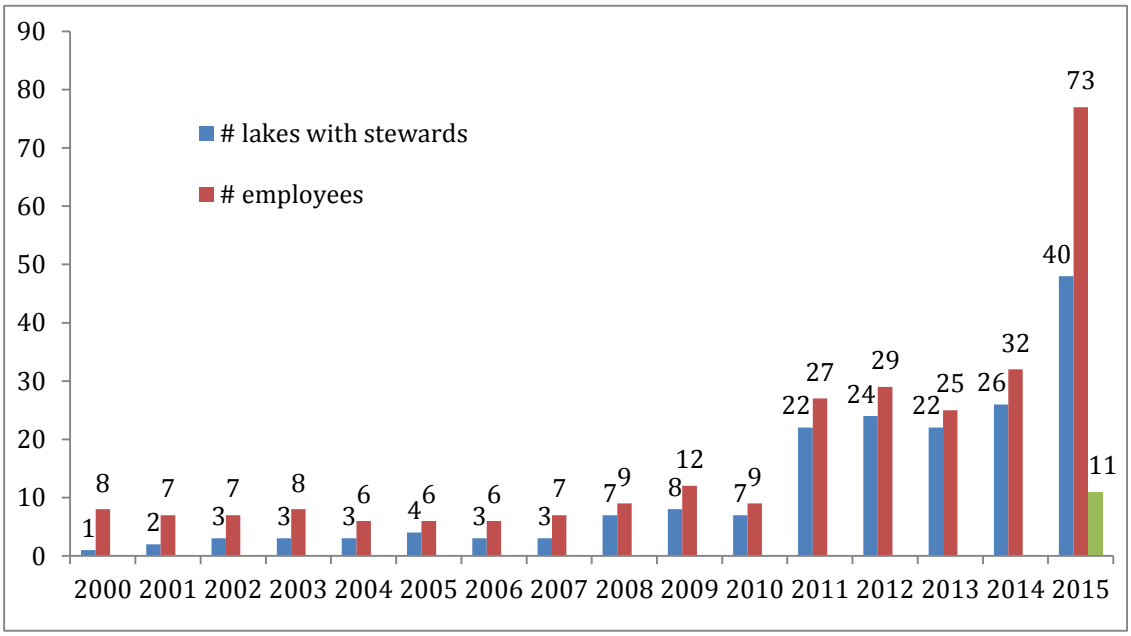

Figure 3. Number of lakes with steward coverage, number of stewards, and number of decontamination stations, 2000-2015.

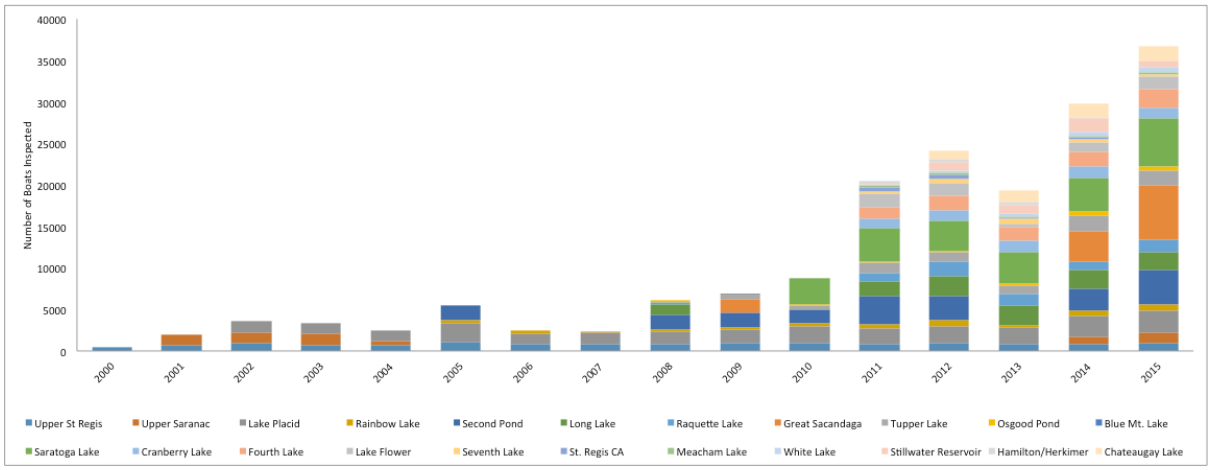

Figure 4. Number of watercraft inspected by stewards 2000-2015.

Comprehensive Findings

The 2015 field season ran from Memorial Day weekend through Labor Day weekend (May 23 – Sept. 7, 2015) with extended coverage at many locations, as staff was available. Many decontamination stations and steward locations were kept open until Columbus Day weekend (Oct. 12, 2015) in attempt to service boaters in the fall shoulder season. 73 stewards performed 43,806 inspections and contacted 96,140 people with the program's message about AIS spread prevention, taking preventative steps with their boat and the ecological losses caused by the establishment of AIS (Table 3). The number of boats inspected at each individual water body varied substantially and ranged from Eighth Lake with 1 boat inspected to Great Sacandaga Lake where coverage at 4 launches combined totaled 7,297 inspections. The range in visitors at each site varied with factors such as popularity, days of steward coverage and ease of accessibility.

The user group and vessels found on an individual lake is often reflective of the morphology, location and physical characteristics of each respective lake and its access points. Stewards at lakes with hard surface boat ramps are much more likely to encounter a greater number of motorboats whereas car top launch sites are dominated by paddle-powered craft such as canoes, kayaks and SUPs. Motorboats represented the majority of boats inspected this summer at 66%, Kayaks (14%), Canoes (11%) and personal watercraft (6%) represented a smaller but substantial percentage of use. Sailboats, rowboats, barges, SUP's and docks rounded out the remainder with percentages at 1% or less (Table 4). The lake with the greatest number of motorboats was Great Sacandaga Lake with 6,271 or 81% of its use, which edged out Saratoga Lake with 5,422, or 92% of its total use. Second Pond remains the top location for non-motorized craft (canoes, kayaks, SUP's, rowboats) with a total of 2,721 or 61% of boats encountered falling into these categories.

Table 3. Comprehensive data summary, 2015. Total # of visitors and # of organisms removed from watercraft entering and leaving AWISP boat launch sites.

Waterbody	total # people	organisms found			total organisms	# boats dirty	# of inspections	% of inspected boats dirty
		entering	leaving	roadside				
Big Moose Lake	21	2	0	0	2	2	13	15%
Brown's Tract Pond	33	10	0	0	10	7	12	58%
Cadyville Decon 7/3	35	0	0	8	8	7	23	30%
Carry Falls Reservoir	34	0	0	0	0	0	17	0%
Chateaugay Lake (total)	4435	110	231	0	341	217	1883	12%
Chateaugay Lake Decon 6/22	2432	45	122	0	167	104	1002	10%
Chazy Lake	899	32	12	0	44	36	446	8%
Clifton Fine Decon 5/23	702	0	0	25	25	17	364	5%
Cranberry Lake	2955	30	90	0	120	83	1233	7%
Eighth Lake	2	0	0	0	0	0	1	0%
First Lake	32	0	0	0	0	0	12	0%
Fish Creek Ponds	1163	26	80	0	106	79	555	14%
Floodwood Pond	279	2	9	0	11	8	173	5%
Forked Lake	92	14	59	0	73	28	50	56%
Fourth Lake	5328	106	74	0	180	175	2275	8%
Great Sacandaga Lake	17869	82	82	0	164	144	7297	2%
Higley Flow Reservoir	150	8	9	0	17	14	74	19%
Hoel Pond	167	8	1	0	9	6	97	6%
Hudson River	404	1	0	0	1	1	170	1%
Indian Lake	2608	23	4	0	27	25	1331	2%
Lake Colby	10	1	0	0	1	1	4	25%
Lake Eaton	97	11	8	0	19	12	53	23%
Lake Flower	3907	113	226	0	339	234	1576	15%
Lake Placid	5217	129	46	0	175	141	2665	5%
Limekiln Lake	35	0	0	0	0	0	20	0%
Little Clear Pond	311	12	7	0	19	16	199	8%
Long Lake	4495	826	640	0	1466	1065	2109	50%
Lows Lake	214	32	113	0	145	75	138	54%
Meacham Lake	393	2	1	0	3	3	203	1%
Northville Decon 7/11	2647	2	1	0	3	3	927	0.3%
Okara Lakes Decon 6/25	413	0	0	14	14	10	208	5%
Osgood Pond	745	14	37	0	51	46	498	9%
Oxbow Lake	49	0	0	0	0	0	27	0%
Paul Smith's Decon 7/3	93	0	0	11	11	6	59	10%
Piseco Lake	1362	1	0	0	1	1	549	0.2%
Piseco Lake Decon 6/20	146	0	0	0	0	0	90	0%
Rainbow Lake (Buck Pond)	1258	217	192	0	409	308	740	42%
Raquette Lake	3035	83	297	0	380	276	1619	17%
Sacandaga Lake	2943	24	16	0	40	36	1112	3%
Saratoga Lake	13402	649	1310	0	1959	1092	5811	19%
Second Pond (total)	8180	141	172	0	313	246	4193	6%
Second Pond Decon 7/3	5662	63	105	0	168	142	2798	5%
Seventh Lake	548	15	13	0	28	27	288	9%
South Colton Decon 7/27	113	0	0	0	0	0	43	0%
Speculator Decon 7/17	298	0	0	18	18	15	178	8%
Stillwater Reservoir	2005	9	1	0	10	10	845	1%
Tupper Lake	3742	203	512	0	715	468	1719	27%
Tupper Lake Decon 7/15	79	0	0	17	17	13	55	24%
Upper Saranac Lake	2924	59	47	0	106	84	1215	7%
Upper St. Regis Lake	1727	27	51	0	78	56	968	6%
White Lake	1191	9	1	0	10	6	596	1%
Totals	**96140**	**3031**	**4341**	**93**	**7465**	**5096**	**43806**	**11.6%**

Table 4. Comprehensive data summary, boat types, 2015. Quantity of watercraft type observed at each boat launch site. M = motorboat; PWC = personal watercraft; S = sailboat; C = canoe; K = kayak; B = construction barge; R = rowboat; SUP= stand-up paddle board.

Waterbody	Boat Type									total # boats
	M	PWC	S	C	K	B	R	SUP	Docks	
Big Moose Lake	12	1	0	0	0	0	0	0	0	13
Brown's Tract Pond	0	0	0	6	6	0	0	0	0	12
Cadyville Decon 7/3	18	0	0	2	3	0	0	0	0	23
Carry Falls Reservoir	17	0	0	0	0	0	0	0	0	17
Chateaugay Lake (total)	1678	129	4	9	86	1	5	1	0	1913
Chateaugay Lake Decon 6/22	886	67	2	6	44	0	5	0	0	1010
Chazy Lake	334	59	2	7	42	0	1	0	1	446
Clifton Fine Decon 5/23	257	6	2	50	53	0	2	1	0	371
Cranberry Lake	1142	40	3	53	61	1	4	0	0	1304
Eighth Lake	1	0	0	0	0	0	0	0	0	1
First Lake	6	6	0	0	1	0	0	0	0	13
Fish Creek Ponds	311	52	1	65	135	0	0	0	0	564
Floodwood Pond	2	0	0	110	62	0	0	1	0	175
Forked Lake	6	0	0	24	20	0	0	0	0	50
Fourth Lake	1798	364	26	33	120	0	8	3	0	2352
Great Sacandaga Lake	6271	1108	59	45	225	4	18	1	15	7746
Higley Flow Reservoir	22	2	0	4	47	0	1	0	0	76
Hoel Pond	0	0	0	71	27	0	0	0	0	98
Hudson River	133	27	0	1	19	0	0	2	0	182
Indian Lake	624	34	10	285	359	0	35	5	0	1352
Lake Colby	3	0	0	1	0	0	0	0	0	4
Lake Eaton	29	3	0	5	17	0	1	0	0	55
Lake Flower	1122	81	2	274	137	0	3	4	1	1624
Lake Placid	1508	1	20	238	879	1	14	142	0	2803
Limekiln Lake	4	0	0	3	13	0	0	0	0	20
Little Clear Pond	0	0	0	131	68	0	0	0	0	199
Long Lake	1298	97	14	417	318	1	5	0	5	2155
Lows Lake	0	2	0	87	49	0	0	0	0	138
Meacham Lake	118	15	0	9	61	0	2	1	0	206
Northville Decon 7/11	932	134	4	9	59	0	3	0	4	1145
Okara Lakes Decon 6/25	192	9	3	1	2	0	1	0	0	208
Osgood Pond	67	0	0	182	256	0	4	0	0	509
Oxbow Lake	27	0	0	0	0	0	0	0	0	27
Paul Smith's Decon 7/3	11	0	0	28	20	0	0	0	0	59
Piseco Lake	432	46	9	13	62	0	3	1	2	568
Piseco Lake Decon 6/20	55	7	3	17	7	0	1	0	0	90
Rainbow Lake (Buck Pond)	216	4	0	138	374	0	4	10	1	747
Raquette Lake	821	56	7	388	405	0	0	9	2	1688
Sacandaga Lake	945	142	2	14	81	0	5	1	1	1191
Saratoga Lake	5422	262	24	24	150	0	15	8	0	5905
Second Pond (total)	1630	71	8	1299	1381	1	8	33	1	4432
Second Pond Decon 7/3	1152	57	8	846	917	1	3	25	0	3009
Seventh Lake	125	18	3	26	120	0	1	2	0	295
South Colton Decon 7/27	38	0	0	3	2	0	2	0	0	45
Speculator Decon 7/17	108	11	3	20	34	0	3	0	0	179
Stillwater Reservoir	672	18	6	58	77	0	18	0	0	849
Tupper Lake	1152	64	57	220	245	6	3	11	1	1759
Tupper Lake Decon 7/15	22	2	0	19	11	0	1	0	0	55
Upper Saranac Lake	1019	65	11	110	80	0	5	5	0	1295
Upper St. Regis Lake	285	1	5	398	310	6	3	4	0	1012
White Lake	239	143	6	33	152	3	8	21	1	606
Grand Total	**30192**	**2946**	**290**	**4921**	**6577**	**24**	**184**	**266**	**31**	**45431**
% of all watercraft	66%	6%	1%	11%	14%	0.1%	0%	1%	0%	100%

Table 5. Summary of organisms removed from watercraft, 2015; BW = bladderwort; CLP = curly-leaf pondweed; ELO= elodea; EWM = Eurasian watermilfoil; GRS = grass; NM = native milfoil; UM= unidentified milfoil; VLM = variable leaf milfoil; NON = non-aquatic debris; NP = native pondweed, SWF = spiny waterflea; WC = water chestnut; WL = water lily; ZM = zebra mussel; AIS = aquatic invasive species.

Waterbody	organism type																total AIS	% of inspected boats with AIS
	BW	CLP*	ELO	GRS	EWM*	NM	UM	VLM*	MUD	NON	NP	SWF*	WC*	WL	ZM*	other		
Big Moose Lake	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0%
Brown's Tract Pond	0	0	0	3	0	0	0	0	0	7	0	0	0	0	0	0	0	0%
Cadyville Decon 7/3	0	0	0	2	1	0	1	0	1	3	0	0	0	0	0	0	1	4%
Carry Falls Reservoir	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
Chateaugay Lake (total)	1	4	37	93	81	7	5	0	17	60	16	1	0	8	3	8	89	5%
Chateaugay Lake Decon 6/22	0	2	22	34	52	3	3	0	8	19	13	1	0	1	3	6	58	6%
Chazy Lake	0	0	2	8	2	0	2	0	3	22	0	1	0	0	1	3	4	1%
Clifton Fine Decon 5/23	0	0	2	5	3	0	2	0	0	3	3	0	0	0	2	5	5	1%
Cranberry Lake	6	1	2	30	4	5	3	7	0	37	6	0	0	11	1	7	13	1%
Eighth Lake	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
First Lake	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
Fish Creek Ponds	8	0	0	32	1	0	0	11	5	28	11	0	0	1	2	7	14	3%
Floodwood Pond	0	0	0	0	0	0	0	0	3	7	0	0	0	0	0	1	0	0%
Forked Lake	0	0	0	10	0	0	0	0	19	28	15	0	0	1	0	0	0	0%
Fourth Lake	0	0	1	7	2	0	1	1	0	139	0	0	0	0	0	29	3	0.1%
Great Sacandaga Lake	0	7	3	56	9	4	4	1	1	26	18	4	3	0	2	26	26	0.4%
Higley Flow Reservoir	0	0	0	0	0	0	0	0	0	8	9	0	0	0	0	0	0	0%
Hoel Pond	0	0	0	0	0	0	0	0	4	5	0	0	0	0	0	0	0	0%
Hudson River	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0%
Indian Lake	0	0	1	2	2	0	2	0	3	8	3	0	3	0	1	2	6	0.5%
Lake Colby	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
Lake Eaton	0	0	0	0	0	0	0	0	10	9	0	0	0	0	0	0	0	0%
Lake Flower	17	3	4	92	45	7	12	28	14	48	34	0	0	18	0	17	76	5%
Lake Placid	3	0	4	51	3	0	0	1	21	83	2	0	0	1	0	6	4	0.2%
Limekiln Lake	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
Little Clear Pond	0	0	0	2	0	0	0	0	3	14	0	0	0	0	0	0	0	0%
Long Lake	14	0	1	199	2	0	2	3	184	970	50	0	2	31	0	8	7	0.3%
Lows Lake	5	0	0	45	0	0	2	0	10	66	0	0	0	16	0	1	0	0%
Meacham Lake	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0%
Northville Decon 7/11	0	0	0	1	0	0	1	0	0	0	1	0	0	0	0	0	0	0%
Okara Lakes Decon 6/25	2	0	0	4	3	0	0	0	0	3	0	0	0	0	1	1	4	2%
Osgood Pond	6	0	1	8	0	0	0	0	5	18	5	0	0	8	0	0	0	0%
Oxbow Lake	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
Paul Smith's Decon 7/3	0	0	0	0	1	1	0	0	0	5	4	0	0	0	0	0	1	2%
Piseco Lake	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0%
Piseco Lake Decon 6/20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
Rainbow Lake (Buck Pond)	14	0	3	20	2	0	1	0	78	232	18	0	0	3	0	38	2	0.3%
Raquette Lake	27	0	0	105	0	23	0	11	49	104	2	0	0	36	1	22	12	1%
Sacandaga Lake	0	2	0	9	3	0	1	0	2	9	0	0	0	0	0	14	5	0.4%
Saratoga Lake	2	189	172	664	356	60	0	0	10	36	233	0	28	5	186	18	759	13%
Second Pond (total)	3	0	11	60	72	0	2	2	33	84	21	0	0	4	0	21	74	2%
Second Pond Decon 7/3	2	0	6	31	55	0	1	2	12	29	16	0	0	1	0	13	57	2%
Seventh Lake	0	0	0	6	0	1	0	0	2	18	0	0	0	0	0	1	0	0%
South Colton Decon 7/27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
Speculator Decon 7/17	0	1	0	1	3	0	0	0	0	8	2	0	0	0	1	2	5	3%
Stillwater Reservoir	0	0	0	0	1	0	0	0	0	7	0	0	1	0	0	1	2	0.2%
Tupper Lake	9	0	3	290	2	1	1	4	103	225	21	0	0	40	0	16	6	0.3%
Tupper Lake Decon 7/15	0	0	0	3	0	0	0	0	2	11	1	0	0	0	0	0	0	0%
Upper Saranac Lake	3	0	1	20	5	0	0	1	13	43	11	0	0	2	0	7	6	0.5%
Upper St. Regis Lake	4	1	0	7	0	0	0	0	18	41	3	0	0	1	0	3	1	0.1%
White Lake	0	0	0	1	0	0	0	0	3	3	0	0	0	0	0	3	0	0%
Totals	**124**	**208**	**248**	**1837**	**603**	**109**	**41**	**70**	**617**	**2422**	**488**	**6**	**37**	**186**	**201**	**268**	**1125**	**3%**
organism presence as % of inspections	0.3%	0.5%	0.6%	4%	1%	0.2%	0.1%	0.2%	1%	6%	1%	0.01%	0.1%	0.4%	0.5%	0.6%	3%	

Stewards detected and removed organisms at different frequencies depending on location (Table 3). While the average frequency for visible organism transport was 11.6%, the visible organism transport range was, at its lowest, 0% at multiple locations and peaked at locations such as Brown's Tract Pond (58%), Forked Lake (56%) and Lows Lake (54%). Other locations with noticeably higher than average organism transport rates were; Long Lake (50%), Rainbow Lake (42%), Cadyville decontamination site (30%) and Tupper Lake (27%). However, it is important to note that these high transport rates are often caused by the transport of native vegetation. This variation was caused by boat ramp proximity to weed beds, traffic volume, wind and wave action, employee persistence, or the layout and physical characteristics of the different boat ramps. Overall, more boats were found to be transporting visible organisms as they departed waterways than upon launching, with 4,341 organisms detected on vessels retrieving and 3,031 on vessels launching (Table 3).

In 2015, stewards detected 7,465 organisms on 5,096 vessels as the result of 43,806 inspections (Table 3). Of the organisms observed, 1,125 were confirmed AIS including: EWM (603), curly leaf pondweed (208), zebra mussels (201), variable leaf milfoil (70), water chestnut (37), and spiny waterflea (6) (Table 5). Questionable samples were bagged, labeled and delivered to AWISP Regional Supervisors for confirmation. All possible AIS samples were transported to the AWI Environmental Research Laboratory at PSC for further scrutiny and confirmation of positive identification by an AWI Research Associate.

Saratoga Lake had the greatest number of AIS detected of the steward-only locations with 759 or 13% of boats inspected transporting visible AIS (Table 5). Among decontamination sites, the Chateaugay boat launch had the highest AIS transport detection rate of 6%.

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

Type of Watercraft	# boats transporting any organism	% of 5,096 boats transporting any organism	Total # boats inspected	% of all boats transporting any organism	% of groups taking AIS spread prevention steps
Barge - construction	5	0.1%	22	0.01%	42%
Canoe	701	13.8%	4,787	1.6%	55%
Dock	4	0.1%	27	0.01%	45%
Kayak	834	16.4%	6,383	1.9%	56%
Motorboat	3,325	65.2%	29,056	7.6%	64%
Personal Watercraft	183	3.6%	2,822	0.4%	66%
Rowboat	16	0.3%	182	0.04%	57%
Sailboat	15	0.3%	284	0.03%	64%
Stand-up paddleboard	13	0.3%	243	0.03%	43%
Totals	**5,096**		**43,806**	**11.6%**	**63%**

Each different 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 5,096 vessels transporting any organism, 3,325 or 65% were motorboats. Kayaks transported 834 organisms or 16.4% and canoes were responsible for 701 transport instances or 13.8% of the total transport figure. To put these figures into perspective, 7.6% of all motorboats inspected were transporting visible organisms, 1.9% of kayaks and 1.3% of canoes were found to be transporting a visible organism of any kind.

Table 7. AIS transport rates by type of watercraft.

Type of Watercraft	CLP	EWM	VLM	SWF	WC	ZM	Total # boats w/ AIS	Total # boats inspected	% of boats transporting AIS
Barge - construction	0	0	0	0	0	0	0	22	0%
Canoe	1	4	6	0	0	0	11	4,787	0.2%
Dock	0	0	0	0	0	0	0	27	0%
Kayak	0	8	6	0	0	0	14	6,383	0.2%
Motorboat	203	550	54	6	36	187	1,036	29,056	4%
Personal Watercraft	4	37	2	0	1	11	55	2,822	2%
Rowboat	0	1	2	0	0	0	3	182	1.6%
Sailboat	0	2	0	0	0	3	5	284	1.8%
Stand-up paddleboard	0	1	0	0	0	0	1	243	0.4%
Grand Total	**208**	**603**	**70**	**6**	**37**	**201**	**1,125**	**43,806**	**3%**

During the 2015 stewarding season AIS were observed on all types of watercraft except for barges and docks. Of the 29,056 motorboats inspected, 1,036 or about 4% of them were transporting AIS. Personal watercraft had the next highest percentage of AIS transport at 2% with 55 of 2,822 observed to be transporting AIS. 2015 data suggests that *motorboats are 40 times more likely to be transporting AIS than canoes, kayaks or other not motorized vessels*, which is an increase from last year (Table 7).

When asked by stewards, an average of 70% of boaters reported taking AIS spread prevention measures with their vessel (Table 8). In order for the response to counted as affirmative, the visitor had to express that the *reason* they took a spread prevention measure was in order to prevent the spread of AIS. In other words, washing one's boat for cosmetic reasons will also prevent the spread of AIS, but for the purposes of this study, would not count as a consciously adopted spread prevention measure. 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, 44% reported that they had washed their vessel, 39% reported having inspected it for visible AIS, 25% drained the bilge and 24% let their boat dry prior to launching it. Other spread prevention measures such as draining live-wells and disposing of unused bait properly were reported less frequently (Table 8). It is important to note that the percentage of boaters who responded, "Yes" to the spread prevention measures question varied greatly from lake to lake. Some locations with comparatively few days of coverage yielded results ranging from 100% to 20% of visitor groups taking spread prevention measures. Several locations with comparatively large sample size reported visitor AIS spread prevention behavior well above our 2015 averages: Sacandaga Lake (94%), Great Sacandaga Lake (85%), Fourth Lake (83%), Raquette Lake (75%) and Osgood Pond (72%).

Previously Visited Waterways

Stewards stationed at the launches and decontamination sites asked boaters to name the last waterway visited with 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. Cumulatively, about 44% of boaters reported that their vessel had been in the lake that they are 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 29% of the responses (Table 9).

Boat preparing to launch after inspection - clear of AIS from a previous waterbody.

Combining responses of "same lake" with "none" indicates that 73% of visitors to the lakes in the AWISP 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). The third most common response to this question was an "unknown lake."

Table 8. AIS spread prevention information, 2015. Yes = took one or more spread prevention measures; I = inspected boat; WB = washed boat; DB = drained bilge; BB = emptied bait bucket; LW = drained livewell; Dis = disposed of unused bait; Dry = dried boat.

Waterbody	# groups taking AIS spread prevention measures										# groups asked
	yes	yes %	I	WB	DB	BB	LW	Dis	Dry	didn't ask	
Big Moose Lake	9	100%	3	5	3	1	1	0	5	4	9
Brown's Tract Pond	2	67%	1	1	0	0	0	0	1	3	3
Cadyville Decon 7/3	16	76%	10	11	5	1	0	0	2	0	21
Carry Falls Reservoir	4	40%	3	4	0	0	1	0	2	7	10
Chateaugay Lake (total)	1163	65%	916	1062	445	25	318	14	612	85	1784
Chateaugay Lake Decon 6/22	581	61%	452	531	252	6	199	4	346	41	946
Chazy Lake	259	63%	197	218	27	4	15	2	29	10	412
Clifton Fine Decon 5/23	172	59%	122	86	38	2	9	0	49	24	294
Cranberry Lake	612	53%	421	368	245	10	56	3	148	66	1164
Eighth Lake	1	100%	0	1	0	0	0	0	1	0	1
First Lake	7	58%	3	5	0	0	0	0	0	1	12
Fish Creek Ponds	309	68%	151	196	68	3	10	2	86	26	455
Floodwood Pond	63	63%	44	59	0	0	0	0	26	1	100
Forked Lake	9	28%	4	7	0	0	0	0	3	2	32
Fourth Lake	1724	83%	1325	1488	156	2	7	9	1242	112	2087
Great Sacandaga Lake	5316	84%	3594	2500	3466	89	175	48	1722	1118	6337
Higley Flow Reservoir	9	20%	9	7	2	0	0	0	5	1	45
Hoel Pond	23	43%	18	17	0	0	0	0	2	2	54
Hudson River	116	83%	25	104	9	1	1	1	42	24	139
Indian Lake	611	62%	222	414	328	234	240	191	377	15	978
Lake Colby	1	33%	0	0	0	0	0	0	1	1	3
Lake Eaton	20	48%	3	16	3	0	0	0	3	1	42
Lake Flower	782	65%	386	543	213	12	19	5	109	90	1209
Lake Placid	1336	66%	604	933	410	10	17	3	433	217	2016
Limekiln Lake	3	23%	3	1	0	0	0	0	0	0	13
Little Clear Pond	48	52%	27	40	0	0	0	0	11	5	93
Long Lake	807	48%	297	646	107	2	9	4	178	78	1681
Lows Lake	25	36%	12	20	1	0	0	1	8	0	69
Meacham Lake	105	65%	62	82	37	2	23	1	67	9	162
Northville Decon 7/11	722	80%	591	489	564	4	50	8	588	178	901
Okara Lakes Decon 6/25	77	39%	26	56	8	0	3	0	22	10	197
Osgood Pond	226	72%	152	139	9	0	1	0	79	15	314
Oxbow Lake	26	96%	14	25	20	8	19	2	25	0	27
Paul Smith's Decon 7/3	22	58%	16	16	3	0	0	0	2	2	38
Piseco Lake	425	82%	291	243	217	85	99	60	305	14	518
Piseco Lake Decon 6/20	69	96%	50	28	35	17	15	12	49	1	72
Rainbow Lake (Buck Pond)	362	72%	165	218	21	6	10	3	63	22	504
Raquette Lake	614	75%	361	308	216	31	20	34	373	402	820
Sacandaga Lake	1074	94%	903	191	428	26	23	19	456	10	1139
Saratoga Lake	3186	69%	1162	2381	694	43	155	16	538	1148	4625
Second Pond (total)	1887	66%	965	978	720	6	16	6	569	223	2874
Second Pond Decon 7/3	1297	66%	673	628	589	3	9	2	389	151	1975
Seventh Lake	104	54%	23	61	10	0	0	0	34	33	194
South Colton Decon 7/27	14	32%	9	12	6	0	1	0	10	0	44
Speculator Decon 7/17	96	66%	18	67	53	21	22	10	73	2	145
Stillwater Reservoir	377	49%	178	243	82	25	26	21	67	7	765
Tupper Lake	788	58%	229	641	120	8	23	4	100	68	1368
Tupper Lake Decon 7/15	20	61%	7	13	0	0	0	0	1	3	33
Upper Saranac Lake	838	74%	347	588	305	7	13	4	159	64	1137
Upper St. Regis Lake	529	77%	242	383	99	4	13	0	137	20	691
White Lake	230	51%	139	192	67	14	5	14	108	54	455
Totals	**24516**	**70%**	**13759**	**15617**	**8676**	**699**	**1365**	**489**	**8334**	**4000**	**35185**
% of groups taking measures	70%		39%	44%	25%	2%	4%	1%	24%	11%	

Table 9. Top 25 Previously Visited Waterbodies, 2015 (N = 38,637 user groups).

Previously Visited Waterway	total visits 2015	% of total visits	2015 rank	2014 rank	2013 rank
Same Lake - Previous Visit	16899	43.738%	1	1	1
None	11121	28.783%	2	2	2
Unknown Lake	1972	5.104%	3	22	41
Saranac Lake Chain	1003	2.596%	4	4	4
Rental	962	2.490%	5	3	3
Sacandaga Lake	461	1.193%	6	20	11
Lake Champlain	372	0.963%	7	5	6
Fulton Chain of Lakes	324	0.839%	8	6	5
Hudson River	302	0.782%	9	7	7
Lake George	300	0.776%	10	9	9
Lake Placid	220	0.569%	11	10	19
Saratoga Lake	215	0.556%	12	12	42
St. Lawrence River	195	0.505%	13	16	10
Lake Ontario	186	0.481%	14	11	12
Mohawk River	167	0.432%	15	13	14
Oneida Lake	163	0.422%	16	17	13
Tupper Lake	162	0.419%	17	14	16
Cranberry Lake	145	0.375%	18	31	35
Great Sacandaga Lake	143	0.370%	19	24	22
Raquette Lake	141	0.365%	20	19	8
Raquette River	136	0.352%	21	21	29
Schroon Lake	109	0.282%	22	27	18
Canandaigua Lake	104	0.269%	23	25	27
Delta Lake	100	0.259%	24	30	21
Long Lake	99	0.256%	25	18	15

Decontamination Station Results

For the first time, the Adirondack AIS Prevention Pilot Program (New York State) provided funding for the construction, equipment, and staffing of 11 high pressure, hot water decontamination stations. Based on an analysis of AIS spread vectors, program administrators and agency officials at NYSDEC designated three site classifications designed to provide a regionally-deployed network of watercraft decontamination capacity. Three decontamination stations, Chateaugay Lake, Northville, and Second Pond, were located at existing, high traffic NYSDEC public boat launches (designated B in the table below) on Chateaugay Lake, Great Sacandaga Reservoir, and Second Pond (Saranac River) respectively. Four locations, Cadyville, Okara Lakes, South Colton, and Clifton-Fine, were located at so-called gateway locations (G), along highways on the park periphery. These sites were intended to intercept trailered watercraft arriving and leaving the Adirondack Park. Four locations were designated at interior road-side (I) locations, including Paul Smith's College (Route 30), Piseco Lake (Route 8), Speculator (Route 30) and Tupper Lake (Route 30). Due to limitations in staff and contractor

availability, logistic constraints, and workload, the decontamination stations came on-line at various dates ranging from 5/23/15 (Clifton Fine) to 7/27/15 (South Colton). See Table 5 for initial dates of service.

Together, the decontamination station stewards performed 5,747 inspections, resulting in 317 inspections detecting organisms and the removal of 131 confirmed aquatic invasive species. 5.5% of watercraft were found to be "dirty" or carrying some visible material, and 2.3% were found to be carrying a fragment of AIS. Stewards performed 175 voluntary decontaminations of dirty watercraft. The stations experienced great variability in traffic levels and compliance.

Table 10. AWI Decontamination Station overview 2015.

AWI Inspection Location (5/22/15-10/12/15)	Total inspections	Decons performed	Inspections finding orgs	# AIS removed	% Boats Dirty	% Boats w/ AIS
B Chateaugay Lake Decon	1002	41	104	58	10.4%	5.8%
B Northville Decon	927	7	3	0	0.3%	0.0%
B Second Pond Decon	2798	13	142	57	5.1%	2.0%
G Cadyville Decon	23	5	7	1	30.4%	4.3%
G Clifton Fine Decon	364	33	17	5	4.7%	1.4%
G Okara Lakes Decon	208	30	10	4	4.8%	1.9%
G South Colton Decon	43	1	0	0	0.0%	0.0%
I Paul Smith's Decon	59	10	6	1	10.2%	1.7%
I Piseco Lake Decon	90	13	0	0	0.0%	0.0%
I Speculator Decon	178	15	15	5	8.4%	2.8%
I Tupper Lake Decon	55	7	13	0	23.6%	0.0%
Overall figures	5747	175	317	131	5.5%	2.3%

Second Pond, overall, was the busiest site, with almost 3,000 inspections credited. It is important to note, however, that the stewards at the onsite boat launch at Second Pond inspected the vast majority of watercraft and referred visitors failing to comply with the AIS transport law to the decontamination station, which was approximately 50 yards up the road. Comparatively few boat operators complied with the directive, resulting in only 13 decontaminations performed on watercraft despite 142 inspections detecting organisms. This was similar to the situation at the Chateaugay boat launch. In order to maximize compliance, we recommend that traffic patterns be revised to direct visitors, where logistically possible, to the decontamination check station *first* rather than *after* an encounter with an inspector at the boat ramp.

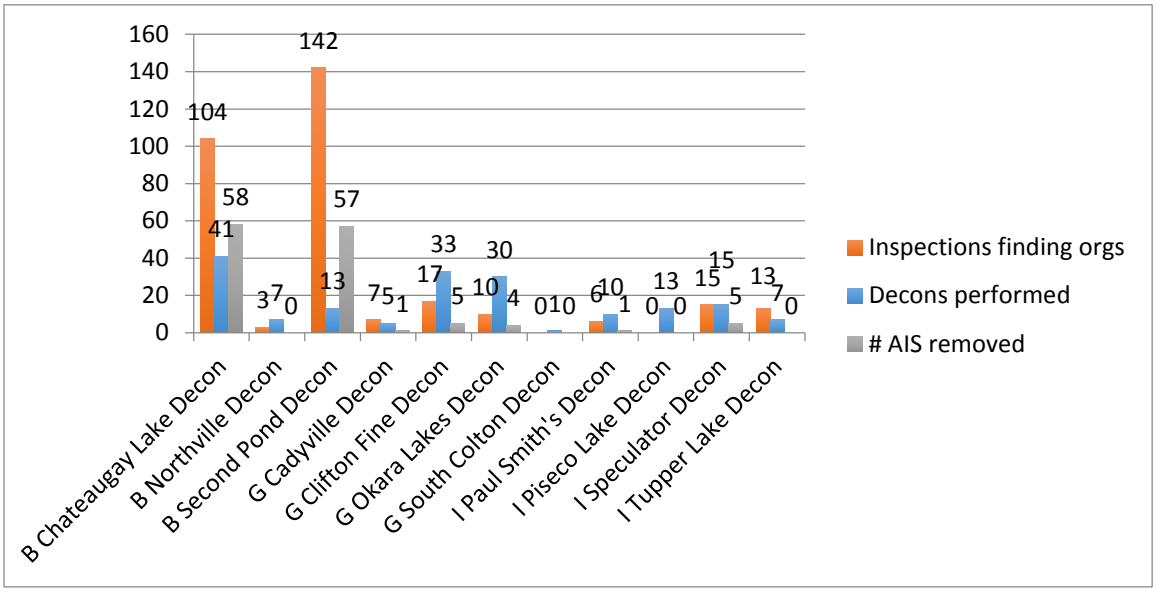

Figure 5. Inspections, decontaminations and AIS removed at AWISP decon stations, 2015.

Figure 6. Decontamination station with high pressure, hot water unit and run-off percolation pad.

Decontamination station stewards noted Eurasian watermilfoil (M. Spicatum) as the most frequently removed aquatic invasive species, with comparatively high counts of the organism removed from watercraft using two boat launches servicing lakes with known infestations of the plant. More than twice the numbers of AIS were removed from watercraft departing inspection stations located at boat launches compared with those launching, which supports the idea that boats leaving infested waterways present greater comparative risk for transporting AIS.

Table 11. AIS removed from AWI decontamination stations, 2015. CLP = curly-leaf pondweed; EWM = Eurasian watermilfoil; VLM = variable-leaf milfoil; SWF = spiny waterflea; WC = water chestnut; ZM = zebra mussel; AIS = aquatic invasive species.

AWI Inspection Location	CLP	EWM	VLM	SWF	WC	ZM	total AIS removed	launching	retrieving	roadside
B Chateaugay Lake Decon	2	52	0	1	0	3	58	16	42	0
B Northville Decon	0	0	0	0	0	0	0	0	0	0
B Second Pond Decon	0	55	2	0	0	0	57	15	42	0
G Cadyville Decon	0	1	0	0	0	0	1	0	0	1
G Clifton Fine Decon	0	3	0	0	0	2	5	0	0	5
G Okara Lakes Decon	0	3	0	0	0	1	4	0	0	4
G South Colton Decon	0	0	0	0	0	0	0	0	0	0
I Paul Smith's Decon	0	1	0	0	0	0	1	0	0	1
I Piseco Lake Decon	0	0	0	0	0	0	0	0	0	0
I Speculator Decon	1	3	0	0	0	1	5	0	0	5
I Tupper Lake Decon	0	0	0	0	0	0	0	0	0	0
Overall figures	3	118	2	1	0	7	131	31	84	16

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. We surmise that roadside stations would tally more inspections and decontaminations with improved amenities, more welcoming signage, and a system which provides the public with immediate benefit for receiving a boat inspection prior to arriving at boat launches, which tend to become congested and slow-moving. Finding ways to create expedited “fast lanes” at popular boat launches for tagged watercraft which have already passed an inspection should be a way to drive up traffic at roadside decontamination stations and provide increased performance for the system as a whole.

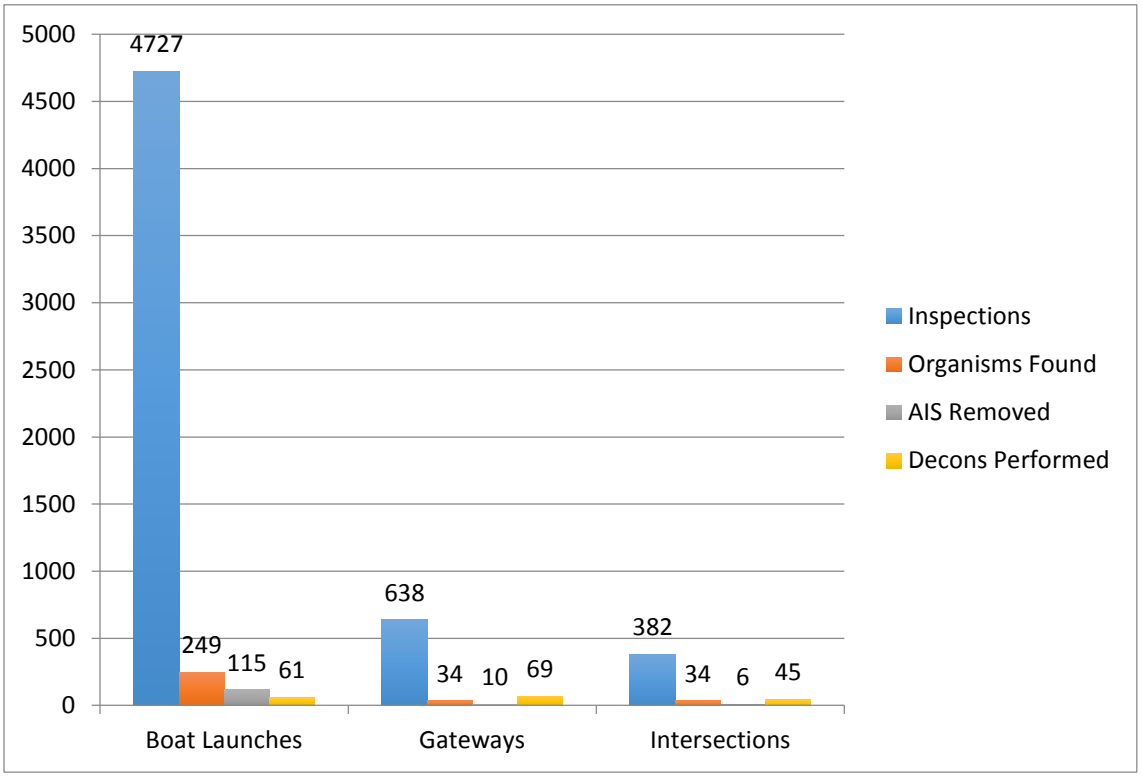

Figure 7. AWI decontamination station results by category, 2015.

Watershed Steward Network Analysis

The AWISP examined various dimensions of boat ramp activity and findings to better understand how the boat launches might function as a landscape-level 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 most frequently occurring two or three outbound trip connections 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 that operators of recreational watercraft create between the waterways (Figure 8). 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.

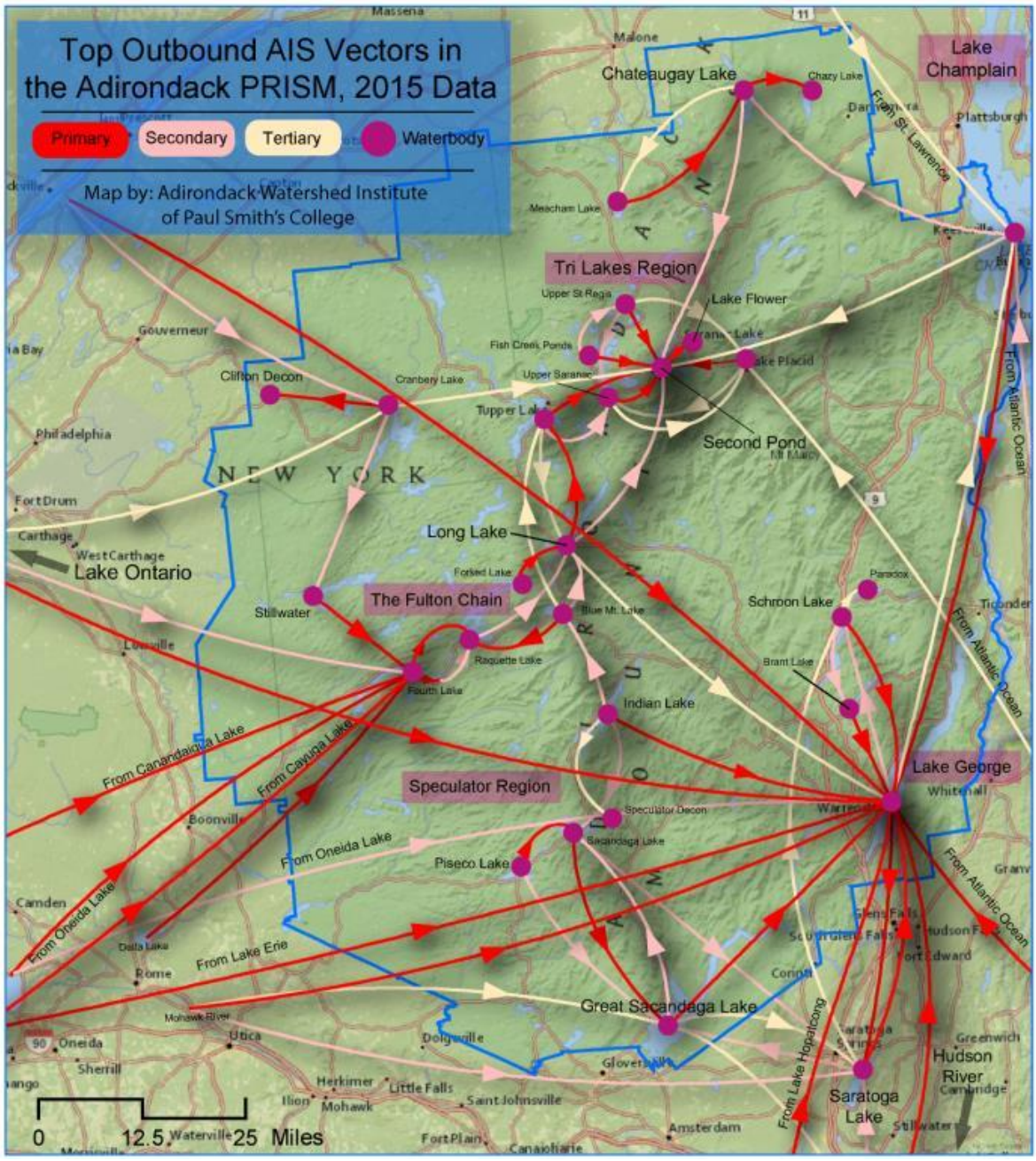

Figure 8. Top 3 Outbound AIS Vectors in the Adirondack PRISM, 2015, including data from the Brant Lake Association, ESSLA, LCBP, LGPC, Paradox Lake Association and Schroon Lake Association.

Using responses to our standard question of visitors, "What is the last waterway within the past two weeks that you have visited with this watercraft?" we identified the top three outbound destinations from each waterway in the larger Adirondack network. The map reveals sub networks of waterbodies connected by comparatively frequent connected use. Note the **Northway network** (Great Sacandaga- Saratoga- Lake George- Schroon- Lake Champlain), the **Tri Lakes network** (Chateaugay- Meacham- Lake Placid- the Saranacs- Tupper), the **Fulton Chain network** (Stillwater- Fulton Chain- Raquette- Blue Mountain- Long), and the

Speculator network (Piseco- Sacandaga- Indian). Note also the "linkage lakes" which bridge the sub networks (Chateaugay, Tupper-Long, Indian-Blue, Sacandaga- Great Sacandaga).

This information is useful when one considers hypothetical AIS spread scenarios. For example, the tertiary outbound vector, 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 vector) is Lake George. Lake George's primary outbound vector is Saratoga Lake. Saratoga Lake's primary outbound vector is Lake George, forming a circle. If an AIS is transported via a tertiary vector from Lake George to Lake Champlain, it might travel via a secondary vector to Chateaugay Lake and hence to the Saranac Lake region. It is important to note that, represented by small numbers of visits; almost EVERY lake in the Adirondack region is connected to almost EVERY OTHER lake. What our top outbound AIS vector map shows is the pattern of vectors for the highest numbers of outbound visits. This provides essential intelligence when managers are making decisions about the deployment of AIS spread prevention assets across the entire region. We cannot focus on water bodies in isolation: optimization of regional spread prevention requires analysis of AIS spread vectors functioning as systemic outgrowth of repeated and predictable visitor behavior. Note that this functional network has emerged as a pattern in our analysis of data for each of the past three years.

Program managers and public resource managers need to make resource allocation decisions based on well-informed risk management for minimizing the spread of AIS. At the landscape level, resource managers cannot allocate limited resources according only to 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 users of each of the region's waterways.

Discussion and Recommendations

As the AWISP provides services to more communities and locations, the data the program gathers becomes more complete and robust. With the acquisition of data from locations not represented in years past, the AWISP was able to update and improve spread vector 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 AWISP 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 the Adirondack Park Forest Preserve to recreate, fish, and paddle.

In retrospect, the ADK AIS Pilot Program presented an enormous opportunity and responsibility for the AWISP. The format of this program was intended to help resource managers in the Adirondacks learn how to most effectively utilize resources to achieve our AIS spread prevention goals. We are already beginning to see management decisions being made based on the data gathered by the ADK AIS Pilot Program which put the health of our freshwater resources and ecosystems first. The NYSDEC office of Invasive Species Coordination and APIPPP provide our program with guidance based on AIS prevention data and priorities articulated by various state agencies. We anticipate NYSDEC's continued focus on decontamination of watercraft exiting

waterways with small-bodied AIS present to be expanded throughout NYS in 2016. Based on 2015 program data and public receptivity to the program, we expect decontamination opportunities like this one will be well received and prove valuable.

Lakes with and without current AIS infestations will need to have continued steward coverage to detect, remove, and refer boaters based on AIS they may encounter on watercraft. Some decontamination sites will need to be strategically and centrally located to receive these referrals. 2015 marked the first year that stewards could refer boaters with AIS on their vessel to a free, local and effective means of decontamination, which is a service we have long identified as essential for regional protection. Promotion of the recently passed NYS AIS transport regulation will help the boating public understand the role that the watercraft inspection and decontamination sites play by providing the public with the opportunity to take environmentally responsible and logistically convenient measures to stop AIS. However, enforcement of the regulation may be necessary to encourage all members of the public to modify their behavior.

Conclusion

The AWISP dramatically increased its capacity in the summer of 2015 with the doubling of the size of our staff and the roll-out of a logistically complex new element of our programming: watercraft decontamination. We could only succeed with the valuable and cheerful support of colleagues at the LGPC, the NYSDEC Department of Fisheries and Operations, the NYSDOT, support from municipalities and lake associations, and the cooperation and creativity of our close partners at APIPP, LCBP, and the Adirondack Lakes Alliance. Our program was honored to be part of such rewarding and important work alongside partners sharing passion about the health and integrity of our ecosystems. We look forward to refining our programs to best provide landscape level resource management in the Adirondack Park and surrounding areas. As we expand our program into regions where the stewardship message is new, we continue to see the need for stewardship of lands and waters. Some of the lowest observed compliance by boaters taking spread prevention measures was located in regions where the AWISP is growing (Table 8). At water ways where AWISP has been well established for over a decade, new users continue to visit and discover the world-class lakes, ponds, rivers and streams that are situated here. Stewards continue to provide the message of responsibility and respect that our resources deserve coupled with an interpretive message and courtesy watercraft inspection. Passing along the value and behaviors of watershed stewardship to new users is our community's ongoing challenge.

Program Discussion and Conclusion

Jeffrey Sann, Program Manager, with Eric Holmlund, Director,
Adirondack Watershed Institute Stewardship Program

Great Lakes Restoration Initiative: Lake Ontario Headwaters Watercraft Inspection Program

Introduction

Eastern Lake Ontario watersheds provide valuable ecosystem services and habitat for wildlife species, fisheries and coastal communities, and represent some of the most significant natural resources of New York State. Thanks to the GLRI and funding allocated through the Environmental Protection Agency and the U.S. Fish and Wildlife Service, the AWISP has been able to provide watercraft inspection and AIS spread prevention in the headwaters of Lake Ontario since 2011. The 2015 effort included coverage in the Black River, Oswegatchie River and Raquette River watersheds.

Regional Supervisor Emma Antolos leads an aquatic plant identification program at Big Moose Lake, NY.

The GLRI represents a commitment made in 2010 by President Barack Obama, to invest in restoring the irreplaceable freshwater resources of the Great Lakes. 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. By intercepting AIS at the headwaters, we interrupt threats that could potentially move downstream to infest high priority resources such as riparian areas and coastal wetlands.

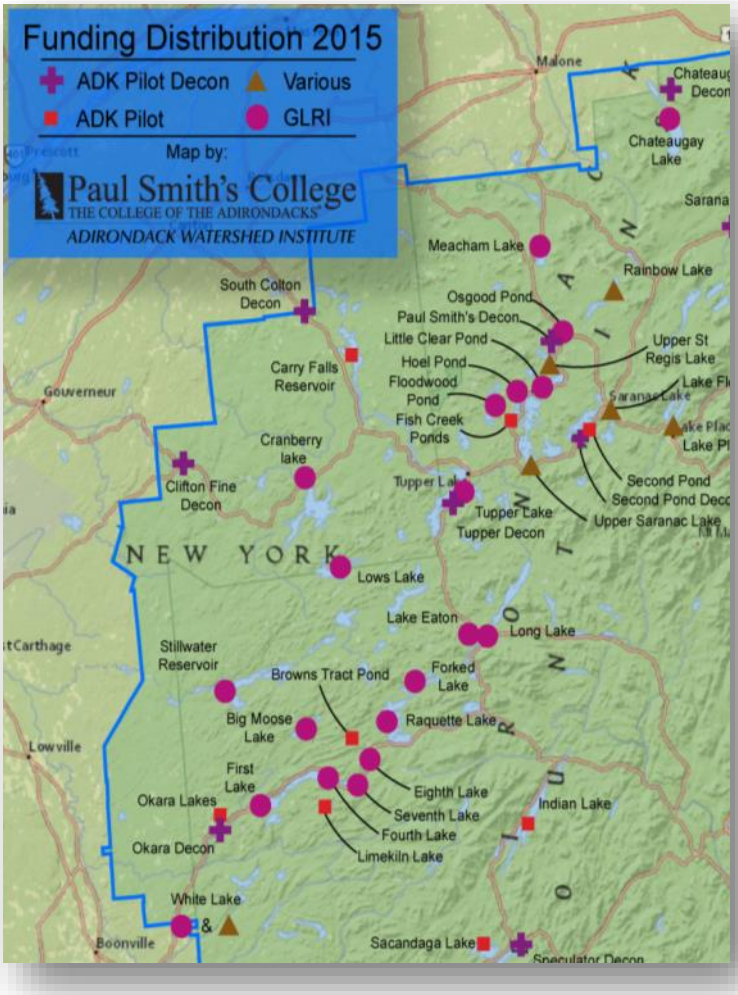

Figure 9. GLRI funded watercraft inspection locations noted by purple circle.

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 AWISP 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 Appendix B of this document.

2015 GLRI Review

During the summer of 2015, the AWISP expanded coverage in Great Lakes watersheds through new steward locations and boat decontamination stations. The message of the AWISP reached new user groups and communities, in an effort 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. Some stewards were also involved in actively managing invasive species populations once weekly as part of regional initiatives to mitigate the impacts of these infestations.

Decontamination stations were implemented with the assistance of a New York State-funded initiative referred to as the Adirondack AIS Pilot Program, with several stations located within GLRI-supported watersheds. These sites provided high-pressure hot water decontamination service to boaters who failed to meet the clean, drained, dry standard and also to those who requested the service as a courtesy. Regional projects like this demonstrate the AWISP'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, 2015. Quantity of watercraft type observed at each boat launch site. M = motorboat; PWC = personal watercraft; S = sailboat; C = canoe; K = kayak; B = construction barge; R = rowboat; SUP= stand-up paddle.

GLRI Waterbody	Boat Type									total # boats
	M	PWC	S	C	K	B	R	SUP	Docks	
Big Moose Lake	12	1	0	0	0	0	0	0	0	13
Brown's Tract Pond	0	0	0	6	6	0	0	0	0	12
Chateaugay Lake	1678	129	4	9	86	1	5	1	0	1913
Chazy Lake	334	59	2	7	42	0	1	0	1	446
Cranberry Lake	1142	40	3	53	61	1	4	0	0	1304
Eighth Lake	1	0	0	0	0	0	0	0	0	1
First Lake	6	6	0	0	1	0	0	0	0	13
Floodwood Pond	2	0	0	110	62	0	0	1	0	175
Forked Lake	6	0	0	24	20	0	0	0	0	50
Fourth Lake	1798	364	26	33	120	0	8	3	0	2352
Hoel Pond	0	0	0	71	27	0	0	0	0	98
Limekiln Lake	4	0	0	3	13	0	0	0	0	20
Little Clear Pond	0	0	0	131	68	0	0	0	0	199
Long Lake	1298	97	14	417	318	1	5	0	5	2155
Lows Lake	0	2	0	87	49	0	0	0	0	138
Meacham Lake	118	15	0	9	61	0	2	1	0	206
Osgood Pond	67	0	0	182	256	0	4	0	0	509
Raquette Lake	821	56	7	388	405	0	0	9	2	1688
Seventh Lake	125	18	3	26	120	0	1	2	0	295
Stillwater Reservoir	672	18	6	58	77	0	18	0	0	849
Tupper Lake	1152	64	57	220	245	6	3	11	1	1759
Grand Total	**9236**	**869**	**122**	**1834**	**2037**	**9**	**51**	**28**	**9**	**14195**
% of all watercraft	65%	6%	1%	13%	14%	0%	0%	0%	0%	100%

Throughout the summer of 2015, 14,195 watercraft were observed and inspected at 21 locations funded with GLRI support (Table 12). Stewards shared the AIS prevention message with 29,766 boaters at different launches in GLRI watersheds. 3,607 organisms were detected as a result of 13,833 inspections. The percentage of dirty boats stewards encountered at GLRI sites was 18.4% (Table 13). The AWISP 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." Watercraft were more likely to be found with organisms upon leaving waterways. Stewards found organisms on a high percentage of watercraft at Long Lake, Forked Lake, and Lows Lake. Stewards found comparatively fewer organisms on watercraft at Chateaugay Lake, Cranberry Lake, Meacham Lake, Raquette Lake, Tupper Lake and Stillwater Reservoir. Site characteristics (weed beds close to the boat launch) contributed to this discrepancy.

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

GLRI Waterbody	total # people	organisms found			total organisms found	# boats dirty	# of inspections	% of inspected boats dirty
		entering	leaving	roadside				
Big Moose Lake	21	2	0	0	2	2	13	15.4%
Brown's Tract Pond	33	10	0	0	10	7	12	58.3%
Chateaugay Lake	4435	110	231	0	341	217	1883	11.5%
Chazy Lake	899	32	12	0	44	36	446	8.1%
Cranberry Lake	2955	30	90	0	120	83	1233	6.7%
Eighth Lake	2	0	0	0	0	0	1	0%
First Lake	32	0	0	0	0	0	12	0%
Floodwood Pond	279	2	9	0	11	8	173	4.6%
Forked Lake	92	14	59	0	73	28	50	56.0%
Fourth Lake	5328	106	74	0	180	175	2275	7.7%
Hoel Pond	167	8	1	0	9	6	97	6.2%
Limekiln Lake	35	0	0	0	0	0	20	0%
Little Clear Pond	311	12	7	0	19	16	199	8.0%
Long Lake	4495	826	640	0	1466	1065	2109	50.5%
Lows Lake	214	32	113	0	145	75	138	54.3%
Meacham Lake	393	2	1	0	3	3	203	1.5%
Osgood Pond	745	14	37	0	51	46	498	9.2%
Raquette Lake	3035	83	297	0	380	276	1619	17.0%
Seventh Lake	548	15	13	0	28	27	288	9.4%
Stillwater Reservoir	2005	9	1	0	10	10	845	1.2%
Tupper Lake	3742	203	512	0	715	468	1719	27.2%
Totals	**29766**	**1510**	**2097**	**0**	**3607**	**2548**	**13833**	**18.4%**

Stewards found and removed a variety of organisms from watercraft at the GLRI funded locations. Chateaugay Lake, with its dense beds of EWM (Myriophyllum spicatum), produced the most confirmed fragments of AIS (89), distantly followed by Cranberry Lake (13) and Raquette Lake (12), which both have established beds of variable leaf milfoil (Myriophyllum heterophyllum) (Table 14).

Stewards asked each visitor group whether they had taken AIS spread prevention measures prior to arrival (Table 15). A majority (63%) of groups responded affirmatively. There was comparatively large variability in visitor adoption of spread prevention behavior between sites, which suggests segmentation of user groups by location. Washing boats prior to launching was the most frequently reported spread prevention measure, followed by inspection and drying the watercraft. Please refer to the Summary of Results earlier in this report and the Location Summaries at the report's end for further presentation and discussion of GLRI data.

Table 14. Organisms removed from watercraft, GLRI 2015; BW = bladderwort; CLP = curly-leaf pondweed; ELO= elodea; GRS = grass; EWM = Eurasian watermilfoil; NM = native milfoil; UM= unidentified milfoil; VLM = variable leaf milfoil; Mud = mud; NON = non-aquatic matter; NP = native pondweed; SWF = spiny waterflea WC = water chestnut; WL = water lily; ZM = zebra mussel.

Waterbody	organism type																total AIS	% of inspected
	BW	CLP*	ELO	GRS	EWM*	NM	UM	VLM*	MUD	NON	NP	SWF*	WC*	WL	ZM*	other		
Big Moose Lake	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0%
Brown's Tract Pond	0	0	0	3	0	0	0	0	0	7	0	0	0	0	0	0	0	0%
Chateaugay Lake	1	4	37	93	81	7	5	0	17	60	16	1	0	8	3	8	89	4.7%
Chazy Lake	0	0	2	8	2	0	2	0	3	22	0	1	0	0	1	3	4	0.9%
Cranberry Lake	6	1	2	30	4	5	3	7	0	37	6	0	0	11	1	7	13	1.1%
Eighth Lake	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
First Lake	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
Floodwood Pond	0	0	0	0	0	0	0	0	3	7	0	0	0	0	0	1	0	0.0%
Forked Lake	0	0	0	10	0	0	0	0	19	28	15	0	0	1	0	0	0	0%
Fourth Lake	0	0	1	7	2	0	1	1	0	139	0	0	0	0	0	29	3	0.1%
Hoel Pond	0	0	0	0	0	0	0	0	4	5	0	0	0	0	0	0	0	0%
Limekiln Lake	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
Little Clear Pond	0	0	0	2	0	0	0	0	3	14	0	0	0	0	0	0	0	0%
Long Lake	14	0	1	199	2	0	2	3	184	970	50	0	2	31	0	8	7	0.3%
Lows Lake	5	0	0	45	0	0	2	0	10	66	0	0	0	16	0	1	0	0%
Meacham Lake	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0%
Osgood Pond	6	0	1	8	0	0	0	0	5	18	5	0	0	8	0	0	0	0%
Raquette Lake	27	0	0	105	0	23	0	11	49	104	2	0	0	36	1	22	12	0.7%
Seventh Lake	0	0	0	6	0	1	0	0	2	18	0	0	0	0	0	1	0	0%
Stillwater Reservoir	0	0	0	0	1	0	0	0	0	7	0	0	1	0	0	1	2	0.2%
Tupper Lake	9	0	3	290	2	1	1	4	103	225	21	0	0	40	0	16	6	0.3%
Totals	**68**	**5**	**47**	**807**	**94**	**37**	**16**	**26**	**403**	**1729**	**115**	**2**	**3**	**151**	**6**	**98**	**136**	1.0%

Enthusiastic stewards at Long Lake.

Table 15. AIS spread prevention behavior, GLRI 2015. Yes = took one or more spread prevention measures; I = inspected boat; WB = washed boat; DB = drained bilge; BB = emptied bait bucket; LW = drained livewell; Dis = disposed of unused bait; Dry = dried boat.

Waterbody	# groups taking AIS spread prevention measures										# groups asked
	yes	yes %	I	WB	DB	BB	LW	Dis	Dry	didn't ask	
Big Moose Lake	9	100%	3	5	3	1	1	0	5	4	9
Brown's Tract Pond	2	67%	1	1	0	0	0	0	1	3	3
Chateaugay Lake	1163	65%	916	1062	445	25	318	14	612	85	1784
Chazy Lake	259	63%	197	218	27	4	15	2	29	10	412
Cranberry Lake	612	53%	421	368	245	10	56	3	148	66	1164
Eighth Lake	1	100%	0	1	0	0	0	0	1	0	1
First Lake	7	58%	3	5	0	0	0	0	0	1	12
Floodwood Pond	63	63%	44	59	0	0	0	0	26	1	100
Forked Lake	9	28%	4	7	0	0	0	0	3	2	32
Fourth Lake	1724	83%	1325	1488	156	2	7	9	1242	112	2087
Hoel Pond	23	43%	18	17	0	0	0	0	2	2	54
Limekiln Lake	3	23%	3	1	0	0	0	0	0	0	13
Little Clear Pond	48	52%	27	40	0	0	0	0	11	5	93
Long Lake	807	48%	297	646	107	2	9	4	178	78	1681
Lows Lake	25	36%	12	20	1	0	0	1	8	0	69
Meacham Lake	105	65%	62	82	37	2	23	1	67	9	162
Osgood Pond	226	72%	152	139	9	0	1	0	79	15	314
Raquette Lake	614	75%	361	308	216	31	20	34	373	402	820
Seventh Lake	104	54%	23	61	10	0	0	0	34	33	194
Stillwater Reservoir	377	49%	178	243	82	25	26	21	67	7	765
Tupper Lake	788	58%	229	641	120	8	23	4	100	68	1368
Totals	**6969**	**63%**	**4276**	**5412**	**1458**	**110**	**499**	**93**	**2986**	**903**	**11137**
% of groups taking measures	63%		38%	49%	13%	1%	4%	1%	27%	8%	

Looking Forward

The AWISP continues to grow and implement programs with the benefit of several sources of funding. As a result, management, logistics and data collection were at an all-time high in the 2015 field season, in terms of volume and complexity. As we look to the future we anticipate reaching the users at all of our program locations at a more consistent and frequent basis. We have learned that frequent communication, from the program director down through the stewards, is crucial and standardized weekly staff meetings enhance staff effectiveness and morale. For 2016, we will increase the presence of regional supervisors at weekly steward meetings and the standardization of each meeting's agenda across the entire program to enhance coordination, consistency, and effectiveness.

Fulton Chain stewards.

The number of staff needed for the summer of 2015 doubled when the AWISP learned it was selected by NYS to provide the ADK AIS Pilot Program. This strained the capacity of the AWISP to hire and train a full contingent of staff in the short time available before the start of the field season. For 2016, we plan on providing more teambuilding opportunities for stewards in remote Adirondack locations in order for them to interact and build stronger relationships with one another and with community members. As AIS awareness grows in the communities served by the AWISP GLRI award, we have seen an increase in demand for the services our program offers. Many smaller lake associations are noting the presence of AWISP stewards at the highly visited NYSDEC boat launches, and desire our presence at their home lakes. We hope to answer this demand by continuing and adding to our coverage locations to promote AIS spread prevention awareness.

As AWISP approaches the 5-year mark of working in GLRI-served locations, we have witnessed increasing community acceptance and support each year. Previous relationships with lake associations, outfitters, marinas and other local businesses have become stronger and new relationships continue to blossom. AWISP is pleased to offer services in these regions that preserve the native ecosystems and waterways that help these communities and economies to flourish.

AWISP enjoyed another successful summer in the Great Lakes and St. Lawrence River watersheds, and is currently working with an expanding number of partners to make future summers of AIS awareness and prevention a certainty at new launches in GLRI regions. As our message of awareness and prevention continues to be presented to new and growing user groups, we seek to enhance community and public stewardship of our lakes and waterways. Stewards will continue to work diligently in hopes of instilling a passion for respecting our world-class freshwater resources.

2015 Adirondack AIS Spread Prevention Pilot Program

Watercraft decontamination station in use.

Introduction

In the late spring of 2015, the AWISP received a contract from New York State to manage and staff new watercraft inspection and boat decontamination stations throughout the Adirondack Park. This opportunity was the result of an impressive regional effort, in which several partners mobilized and launched the Adirondack Park-wide Invasive Species Spread Prevention Pilot Program. Funding for this program was provided as a result of an initiative of Governor Andrew M. Cuomo to use the New York State Environmental Protection Fund, via the Natural Heritage Trust, to initiate a new AIS prevention program covering the entire Adirondack Park. Directed by the NYSDEC, the program demonstrates the commitment of New York State to support regional, coordinated protection in the fight against AIS. Under the coordination of the Adirondack Park Invasive Plant Program's (APIPP) role as director of the Adirondack Partnership for Regional Invasive Species Management (Adk PRISM), the AWISP initiated boat decontamination and inspection stations in strategic locations designed to interrupt the spread of AIS on a regional scale.

In December of 2014, the AWI convened a meeting of agency officials, scientists, lake associations, and municipalities to determine how all stakeholders battling AIS in the Adirondacks could collaborate to increase the effectiveness of regional AIS spread prevention. The meeting incorporated the science-based recommendations of the white paper, *Boat inspection and decontamination for aquatic invasive species prevention: Recommendations for the Adirondack region.* (Johnstone, Smith, Holmund, Modley, Debolt, Rhone 2014.) The document examines existing infestations in the park and, analyzing years of stewardship program data, identifies spread vectors based on boater usage and travel patterns. Drawing information from the white paper, meeting attendees discussed AIS risk management options, reaching a consensus that strategically situated high-pressure hot water decontamination stations with additional watercraft inspector stations could provide an essential level of protection for all Adirondack waterways. Based upon the experience of the Lake George Park Commission, which had completed the first year of its mandatory boat decontamination pilot program, meeting attendees designed a framework for a similar, voluntary watercraft decontamination program throughout the rest of the Adirondack Park.

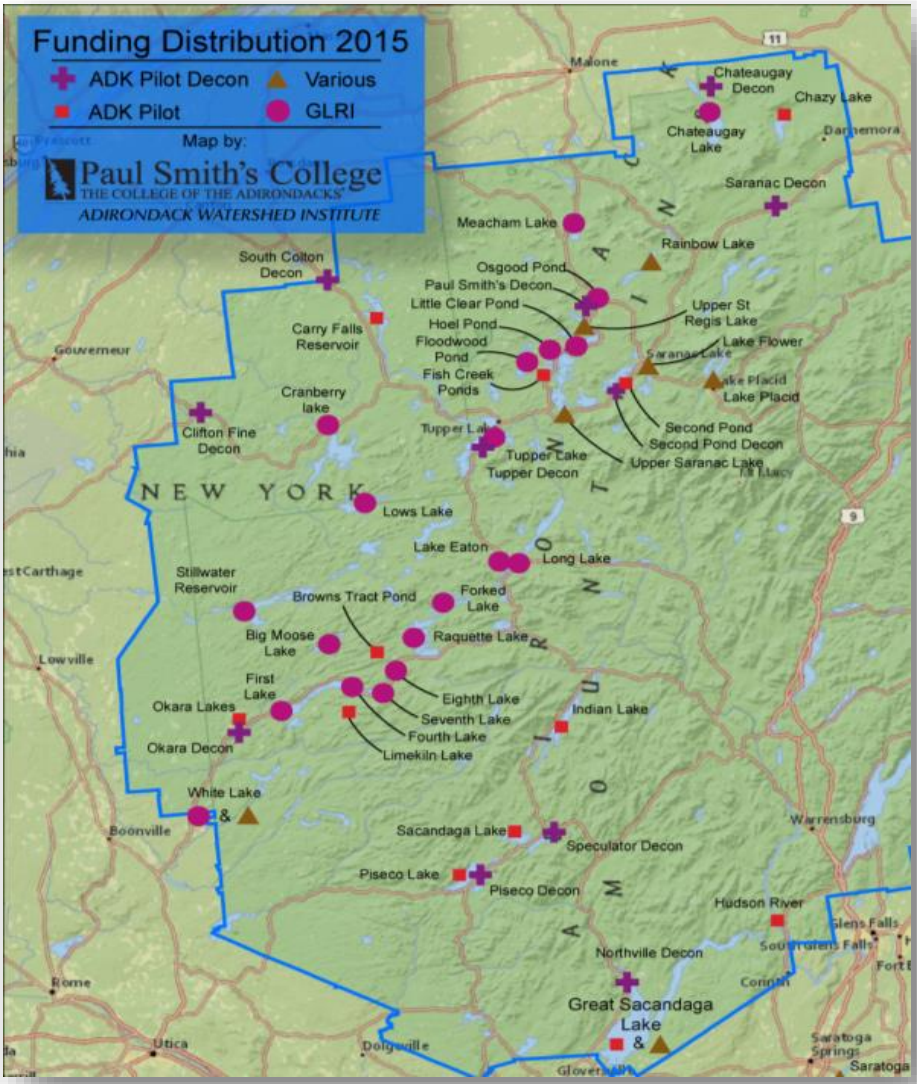

Figure 10. ADK AIS Pilot Program locations indicated by the + sign and the red squares. Note complementary coverage provided by other funding sources.

Expanded Stewardship

The summer of 2015 marked the initiation of the most comprehensive regional AIS spread prevention program in Adirondack history. The AWISP focused on expanding its coverage and stewardship message to regions of the Adirondack PRISM previously unserved by watercraft inspectors. Educating new user groups is always a challenging and exciting process. Stewards in newly-served regions interacted with visitors who might

never have encountered AIS spread prevention stewards. These encounters might have been the first time they had heard the AIS awareness and spread prevention message.

Some locations funded by the NYSDEC and ADK AIS Pilot Program had seen sporadic and minimal coverage in the past. The expanded funding in 2015 provided the support needed to strengthen and enhance the AWISP's presence in these areas. It is important to note that a number of lakes in the ADK AIS Pilot Program were previously served through steward programming funded by local sources.

Landa MHC high pressure hot water unit in action.

In the summer of 2015, the AWISP hired and managed approximately 75 seasonal staff to fulfill its commitments to several AIS prevention programs including this ADK AIS Pilot Program. AWISP 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. More 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.

Mobile roadside signage associated with decontamination stations.

Watercraft Decontamination

To execute the decontamination component, NYSDEC provided 10 Landa MHC pressure washers and 1 Landa Environmentally Clean Operating System (ECOS) unit to be used by stewards. The ECOS unit is designed to be a self-contained trailer-mounted pressure washer that collects and filters spent wash water, and re-circulates it into a supply tank. Two additional ECOS units were purchased using alternative funding sources by partners at the Loon Lake Association and ESSLA (Horicon); these units were staffed and managed by the respective lake associations. Stewards for these locations were trained by AWISP staff and collected data in cooperation with AWISP protocol in attempt to keep data and messages comparable.

Site identification began for the ADK AIS Pilot Program in early 2015 with APIPP taking the lead role in coordinating with state agencies, municipalities, and private land and business owners. When choosing a 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 protect as many lakes as possible. Because the program was a pilot, a decision was made to initiate three types of decontamination sites and compare use numbers to help identify which type of site would provide the best conservation value for future years. The three types of sites were: High priority boat launches, high traffic intersections /roadsides, and Adirondack Park gateway corridors. Gateway corridor sites are characterized as a location on or around the park boundary in attempt to service trailered watercraft on their way into the park. The permitting process that followed site identification was conducted by AWISP personnel with the cooperation of personnel in NYSDEC and NYSDOT.

Figure 11. Okara Lakes Decontamination Site Map.

Because many of the sites had neither electricity nor a pressurized water supply for the pressure washers, the AWISP and NYSDEC had to develop a design to tank-feed the MHC units at remote locations. Procedures to periodically fill the supply tanks also had to be formulated and tested. Some involved partnerships with local fire departments or municipalities, other times water was pumped from adjacent water bodies into the tank using gasoline powered water transfer pumps. Site preparation or excavation was unique to the situation presented at each site. In many cases, partners such as NYSDEC and NYSDOT provided labor and materials to complete the work. Still some sites required a private contractor hired by the AWISP to perform the necessary improvements. Stations were opened as they were completed which resulted in a variety of opening dates. Decontamination technicians were trained on the specifics of each decontamination station after completion and prior to opening.

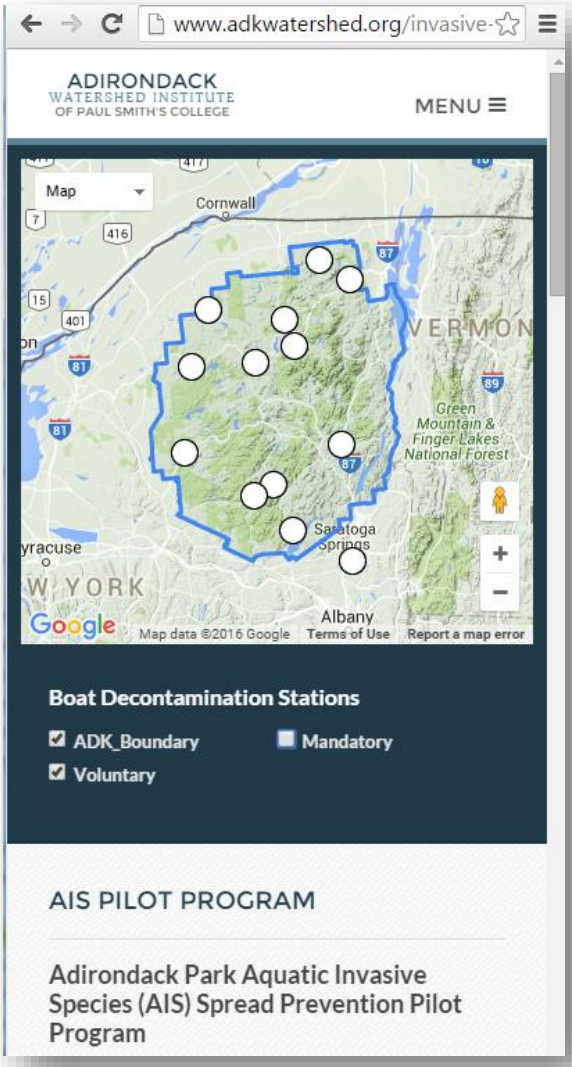

Figure 12. Voluntary decontamination stations as depicted on www.adkcleanboats.org

A focus on educating waterway users about the location and purpose of the decontamination stations quickly became critical. Stewards would strongly advise boaters on decontamination station location, purpose and effectiveness. Partners involved developed rack cards showcasing locations of new decontamination stations as well as radio ads. The AWISP, with collaboration from APIPP and the LCBP, created and launched a website, adkcleanboats.org, to provide information such as location and hours of operation of stations. The fabrication and delivery of permanent roadside signs was delayed by the state's focus on a high profile prison break, and in their place, portable orange "Boat Inspection Ahead" signs were used. Supplemental "Stop Invasive Species, Free Boat Wash!" signs were purchased and displayed on the decontamination equipment storage containers at stations where they would be visible from the road.

Elevated water supply tank and cribbing- Okara Decontamination Station.

Discussion

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 actual 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 investment made in this program, by all partners involved, was a demonstration to many about how serious the threat of AIS is and how committed to prevention NYS has grown.

Table 16. Decontamination Station opening and closing dates, Days of coverage by site, coverage varied due to staff availability.

Decon Station	Date Completed	Date Closed	Days of Coverage
Chateaugay	6/22/15	10/12/15	45
Northville (GSL)	7/11/15	10/12/15	52
Paul Smiths	7/3/15	10/12/15	57
Piseco	6/20/15	10/12/15	31
Saranac	7/3/15	10/12/15	43
Second Pond	7/3/15	10/12/15	66
South Colton	7/27/15	10/12/15	23
Speculator	7/3/15	10/12/15	24
Okara	6/25/15	10/12/15	48
Tupper Lake	7/15/15	10/12/15	33
Clifton Fine	5/23/15	10/12/15	90

A tagging system provided by the S.A.V.E. Lake George Partnership allowed the ADK AIS Pilot Program to mirror the Lake George Park Commission's use of tags. Location-specific orange tags were given to boaters when they were planning on returning to that same water body on their next visit. This would allow a steward to see that their boat had not been in any other water way and thus presented no risk of transporting new AIS

to the specified location. If a boat arrived with an orange tag from *another* lake, the steward would be able to identify the potential threat of AIS transport from the previous lake and perform a targeted inspection. Stewards installed green tags when boats arrived at decontamination stations and either passed the clean, drain, dry standard or failed and were decontaminated. Stewards at boat launches removed these green tags and boaters proceeded with expedited interaction with the launch steward.

Boaters were fond of any tool that they felt would speed up their inspection and launch process. Many took advantage of the orange tags when they were planning on launching again at the same lake at another time. The green tags were also well-received by those individuals who had stopped at roadside or gateway decontamination stations and would be heading to a launch where a steward would recognize the tag and its implications.

Boat decontamination tags furnished by the S.A.V.E. Lake George Partnership.

Some boaters were opposed to tagging their boats for a number of reasons; some because they would be launching at lakes without stewards there to remove them or they would be launching before or after the hours typical of steward coverage. The size of the Adirondack Park and number of lakes, ponds and rivers make it difficult for staff to be at every location to remove tags when boat operators need the service. Also, many boaters launch their watercraft at times when stewards are not on duty. While the tags can be easily removed with a pair of snips or even scissors, some boaters felt that they were inconvenient. Others were opposed to the idea of numbers on the tags which might allow their movements to be tracked and recorded.

Because this system was adopted from the Lake George program, which has a mandatory inspection policy and different coverage and staffing practices, there were limitations on how fully it could be implemented in the AWISP, with its voluntary compliance protocol. An advantage of the tag system is that it helped stewards at the launch identify vessels that presented substantially reduced risk of transporting new AIS either because the previously visited water body was that very lake or because they had been inspected at another inspection site and either passed or were decontaminated. The AWISP will continue the tag program in the 2016 season. We are optimistic that with repetition, users will come to expect and appreciate the tag system.

Table 17 lists the lakes covered by the AWI that were involved in the tagging system along with their identifying seal codes. Other lakes in the Adirondack region utilizing this tagging system include, Brant Lake, Horicon at Schroon Lake, Loon Lake, Paradox Lake, and Lake George.

Table 17. Lakes utilizing the tagging system and their associated seal codes.

2015 Orange Seal Codes	AWISP Boat Launch
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-Northville
ADK-FLOWER	Lake Flower
ADK-PLACID	Lake Placid
ADK-LONG	Long Lake
ADK-OSGOOD	Osgood Pond
ADK-RAINBOW	Rainbow Lake
ADK-RAQUETTE	Raquette Lake
" "	Raquette Lake - Golden Beach
" "	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-STILLWAT	Stillwater Reservoir
ADK-TUPPER	Tupper Lake
ADK-UP SARAN	Upper Saranac Lake
ADK-UP ST RE	Upper St. Regis

Recommendations

The AWISP holds an annual comprehensive training at PSC for its stewards and for many 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.

In addition to steward training, vessel decontamination technicians attended a custom training session with the LGPC. In 2016, the AWISP work with LGPC to improve and extend this training opportunity, especially for staff who might be starting in the middle of the season. Throughout the field season, conducting hands-on training on a variety of topics will greatly benefit decontamination station technicians. Every technician should operate the equipment and perform at least one part of decontamination at training sessions. This opportunity will help to alleviate any apprehension or lack of confidence technicians could otherwise have before they decontaminate a boat owned by a member of the public.

The ADK AIS Pilot Program was planned, funded and executed over only a few months, which is an impressive example of what can be achieved when partners unite to reach a common goal. However, because of the short time period provided to plan and execute this program, some of the stations could not be brought online until later in the summer. Progress was affected by many factors beyond the control of AWISP such as contractor availability, weather, staff housing and availability of staff in certain regions. Looking forward, the stations need to be ready to serve boaters on the opening weekend (Memorial Day). This will provide a better representation of the use for the entire season and will allow for continuity in the relationship between stewards and decontamination stations throughout the season. Also, proper signage installed on roadsides prior to opening as well as “Enter” and “Exit” signs when sites are open would be useful to streamline the process.

We anticipate adjustments to the locations of decontamination stations as well as new and emerging strategies to best provide our region with an effective resource for decontaminating watercraft that fail to meet the clean, drained and dry standard. The AWISP intends to work with its core partners to integrate the latest techniques, protocols and equipment, and the experience gained in the 2015 field season, to create an even more effective Adirondack AIS prevention program in 2016.

Conclusion

The threat of AIS remains immediate and is ever-changing. This program represents a commitment made by NYSDEC and The Governor's office, which demonstrates their understanding of the AIS threat and New York State's willingness to take action. Stewardship of our natural ecosystems, fisheries and recreation areas continues to be of great importance to shape user attitudes and to teach future generations about responsible use of these resources.

The lessons learned in the execution of this program were of tremendous value. They will provide structure and information for many steward and decontamination programs throughout NYS. The AWISP was honored to have the opportunity to pilot this program and to work so closely with partners across the board. It is truly inspiring what can be achieved when partners work with a common goal and desire to make a program like this happen. We look forward to the future of this program and how it will continue to involve Adirondack communities acting on their passionate connection to their resources.

Reference:

Johnstone, M., H. Smith, E. Holmlund, M. Modley, E. DeBolt, K. Rohne. 2014. Boat inspection and decontamination for aquatic invasive species prevention: recommendations for the Adirondack region.

Ribbon cutting at Second Pond decon site exemplifying partnerships. Representation by APIPP, AWI, APA, DEC, ALA, ADK Council, and the Local Government Review Board.

Location Descriptions

***Note: For fully detailed results from each waterway, below please view the Boat Launch Use Data Summaries beginning on page 98.**

Cadyville Decontamination Station

The Cadyville station used private property at the Saranac Country Store in the Town of Saranac. This site was chosen to service those heading south along NYS Route 3 from the Plattsburgh and Lake Champlain regions. The site opened on July 3, 2015 and inspected 23 boats over 43 days of coverage. Of the 23 boats inspected, 1 AIS was detected and 5 decontaminations were performed. Concerns about the visibility of the station in this location arose by AWISP staff due to how busy and congested with traffic the vicinity around the store can be. Although the road is heavily used, the comparatively low number of watercraft inspected might indicate that the site was not as visible to passing motorists as it should be.

Carry Falls Reservoir

A NHT-funded steward was located at the Parmeter Campsite Boat Launch, a Brookfield Renewable Energy Group Recreation Site, for several days this summer. The reservoir, a 3,170 acre water body with access points along NYS Route 56, between South Colton and Sevey's Corners, is a popular spot for fisherman. In 2015, AWI was able to cover this launch for 6 days during June. A steward also covered the boat launch at the Carry Falls Dam Site on Carry Falls Road. As the decontamination stations became operational during the summer, stewards were required at those locations.

Chateaugay Lake

2015 marked the fourth year that the program stationed a steward at the NYSDEC Boat Launch at Chateaugay Lake. Stewards were present at Chateaugay Lake 7 days per week during the 2015 field season. The boat launch is located on Route 374, on the Chateaugay Narrows, between the Upper and Lower Chateaugay Lakes. This season stewards educated 4,435 people, inspected 1,883 watercraft, and found 11.5% of boats had some organism, removing 89 AIS.

Chateaugay Lake Decontamination Station

This site was located conveniently for boaters at the NYSDEC Upper Chateaugay Lake Boat Launch facility in the Town of Merrill, NY. Because of its proximity to the lake, this site required landscape improvements to ensure wash water would infiltrate instead of running off into the lake. This site was opened on June 22, 2015 and featured 45 days of coverage. 58 AIS were removed as the result of 1,002 inspections. Stewards performed 41 decontaminations. This station is located on a lake with EWM present, which accounted for 52 of the 58 AIS detected.

Chazy Lake

2015 is the second year of steward coverage at the Chazy Lake NYSDEC Boat Launch. Chazy Lake is a 1,600 acre water body located 5 miles west of the village of Dannemora with public access off Route 374. This launch had steward coverage 4-5 days a week for the entire season. Coverage continued into the fall, with a steward at the launch 3 days a week, until October 9th. In total, the Chazy Lake Boat Launch was covered more than 70 days in 2015.

Clifton-Fine Decontamination Station

This site, located one minute outside of Star Lake on NYS route 3, was the first AWISP decontamination station to become functional, opening on Memorial Day weekend, and was staffed seven days per week until August 26th. This station was created through the hard work and partnership of the Cranberry Lake association, the Department of State, NYSDEC region 6, municipal and state departments of transportation, and PSC. The station, which featured an attractive outbuilding and sign, is intended to be developed into a visitor center. Stewards inspected 364 boats with 33 requiring decontamination. 5 total AIS were removed which consisted of 3 EWM and 2 zebra mussels.

Cranberry Lake

Cranberry Lake is a 7,000 acre water body located in southern Clinton County. In 2015, stewards provided an average of 6 days of coverage throughout the summer and sporadic coverage up until Columbus Day, totaling 76 days by the end of the season. One AWI steward covered the unofficial "Pine Cone Launch" in Wanakena three Saturdays during the summer. Cranberry Lake stewards were able to educate 2,955 visitors, inspect 1,233 boats, and found 6.7% of boats had some organism with 13 AIS being removed.

Fish Creek Pond Campground

The Fish Creek Pond Boat Launch is located within Fish Creek Pond Campground. The boat launch was covered 4 days a week through the Upper Saranac Lake Foundation/LCBP. The stewards educated 1,163 people, inspected 555 boats, and found that 68% of people have taken steps to prevent the spread of AIS. Of the boats inspected, 14% were found to have one or more organisms and 2.5% of the organisms found were AIS.

Forked Lake Campground

Located in the Town of Long Lake, Forked Lake received steward coverage for the fifth consecutive year. Funded through an EPA GLRI grant, Forked Lake was covered 4 times throughout the summer. A total of 50 boats were inspected with 56% carrying some type of organism but no AIS were found.

Fourth Lake

The Fulton Chain of Lakes is located in the Central Adirondacks. The chain consists of eight lakes, originating at a dam in Old Forge and extending through navigable waters into Fifth Lake, and then by

portage to the dam at Sixth Lake through Seventh Lake, with a final portage to Eighth Lake. The Fourth Lake Boat Launch is located off NYS Route 28 in Inlet, NY. Fourth Lake NYSDEC Boat Launch is one of the busiest AWISP launches in the west-central region. It is the only public access point for motorboats to the lower Fulton Chain. Funding was provided by an EPA GLRI grant. The Fourth Lake launch was typically covered 5-7 days a week during the summer and every weekend until Columbus Day. The launch was covered for a total of 106 days and stewards educated a total number of 5,328 visitors. Stewards inspected a total of 2,275 water craft with 7.7% of boats found to have one or more organism and 3 AIS.

Great Sacandaga Lake

The Great Sacandaga Lake is a 29-mile-long reservoir that was created by damming the Sacandaga River in 1930. The lake extends into parts of Fulton, Saratoga and southern Hamilton counties with the northern portion falling within the Adirondack Park boundary. The AWISP resumed coverage in 2015 with stewards stationed at four different locations with varying levels of coverage. The Broadalbin NYSDEC Boat Launch was staffed 4-7 days per week. The Town of Day NYSDEC Boat Launch was covered 2-3 days a week. The Northville NYSDEC Boat Launch had steward coverage 4-6 days a week, while Northampton State Campground was covered 2-5 days a week, depending on staff availability. Funding was split between the Great Sacandaga Lake Advisory Council, Great Sacandaga Lake Association, PSC, and the ADK AIS Pilot Program. The lake is known to contain invasive EWM, spiny waterflea, and brittle naiad. Stewards inspected a combined 7,297 boats and educated 17,869 visitors. Of the boats inspected, only 2% had some type of organism and 26 AIS were detected.

Northville Decontamination Station

Located at the NYSDEC Northville Boat Launch on Great Sacandaga Lake, this site provided quick and convenient access to a decontamination station for boaters on a water body with small-bodied organisms. The site opened on July 11, 2015 and provided decontamination services for 52 days. 927 inspections were performed and 3 organisms were detected, none of which were AIS. The tagging system was very popular at this site as many users intended on launching again within the next day or two. Repeat visitors were common because of the great recreation opportunities at this water body but limited mooring for many users.

Hudson River

A steward worked at the Hudson River Boat Launch just south of the Village of Lake Luzerne for 22 days in June. This steward location was new to AWI and was funded through the NHT. Due to staffing constraints AWI was unable to staff this location during the rest of summer.

Indian Lake Islands Campground

Located in south-central Hamilton County, Indian Lake is the home to one NYSDEC campground boat launch. With all of the campsites being accessible by water only, the campground sees a steady flow of

visiting watercraft. Indian Lake is the largest lake in the Adirondack Park that is AIS-free. Through the ADK AIS Pilot Program, AWI was able to offer coverage at Indian Lake approximately 4 days per week. Stewards performed 1,331 watercraft inspections and educated 2,608 people about AIS spread prevention. There were 6 instances of AIS found on watercraft upon arrival at the boat launch, including zebra mussels, EWM, and water chestnuts.

Lake Eaton Campground

Lake Eaton is a 558 acre water body located just north of the Village of Long Lake. The boat launch is situated within the Lake Eaton State Campground and provides lake access to paddle craft and small motorboats. The EPA GLRI grant provided funding for steward coverage 1 day per week. In the beginning of the summer (May and June), it was often covered 2-3 days per week. Lake Eaton is not known to contain any AIS and is therefore a priority site for invasive species prevention efforts. It was covered a total of 18.5 days during the summer. A total of 53 boats were inspected and 97 people were educated.

Lake Flower

A steward was present at Lake Flower 5 days per week throughout the summer, including most weekends. This is the fifth summer that the lake has received steward coverage. The Lake Flower Boat Launch is located within the Village of Saranac Lake on Route 86. The steward coverage was sponsored by the AWI through a LCBP grant. Lake Flower is known to contain EWM, variable-leaf milfoil, and curly leaf pondweed. On June 8 and September 17, AWI hosted a Water Shield Workshops on Lake Flower for Keene Central School. In 2015, Lake Flower stewards educated 3,907 total visitors and inspected 1,576 boats. Stewards found that 14.8% of inspected boats had one or more organism and 76 AIS were removed.

Lake Placid

The Lake Placid Shore's Owners' Association funded seven day per week coverage at the NYSDEC Launch and 2 days during the weekend at the Village Boat Launch. On July 7, 2015, the Association provided funding for increasing coverage at the Village Launch to 7 day per week. The Association has sponsored stewards at Lake Placid each year since 2002. Two Water Shield Workshops were hosted at the NYSDEC Launch for the Northern New York BOCES/Apple Educational Conference and the 11th grade class at Lake Placid High School. In 2015, Lake Placid stewards educated 5,217 visitors, inspected 2,665 boats, found 5.3% of inspected boats were carrying some type of organism and removed 4 AIS.

Long Lake

Stewards have been positioned at the NYSDEC boat launch near Long Lake village since 2008, initially as a combined effort between the Town of Long Lake, the Long Lake Association, and a state grant designated by NYS Senator Betty Little. In 2015 the steward position was funded by an EPA GLRI Grant

as in previous years. Stewards educated 4,495 people, inspected 2,109 boats, found 50.5% of inspected boats were carrying some type of organism and removed 7 AIS.

Lows Lake

2015 was the first year of steward coverage at Lows Lake- Hitchens Pond access. This lake is a popular canoeing and camping spot with car top boat access only. Between May and July a steward was stationed at the launch 1-2 days per week, totaling 10.5 of coverage during the summer. Stewards were able to inspect 138 watercraft and educate 214 people. 54% of boats inspected had one or more organism but no AIS were detected.

Meacham Lake Campground

Meacham Lake Boat Launch is located within Meacham Lake Campground and situated adjacent to State Route 30 approximately 12.6 miles northwest of PSC. Two day per week steward coverage was funded by the USEPA GLRI grant. The steward educated 393 boaters, inspected 203 boats, and found that 65% of boaters have taken prevention measures to stop the spread of AIS. No AIS were detected at Meacham Lake Boat Launch.

Okara Lakes Decontamination Station

The Okara Lakes decontamination station was located along NYS Route 28, just south of Old Forge in the town of Thendara. The location was specifically chosen as a gateway site to intercept boats that may be coming from outside the Park from Central New York. The station was opened on June 25, 2015 and was covered 5 days per week, Thursday through Sunday until the end of August. After Labor Day, it remained open one day per week on Friday or Saturday. In total, the station was open 48 days throughout the season. The staff inspected 208 watercraft and a total of 30 decontaminations were performed. On multiple occasions, Eurasian water milfoil and zebra mussels were detected during the inspection process.

Osgood Pond

The Osgood Pond Boat Launch is located on Lone Pine Road in Paul Smiths, 1.8 miles from PSC. The USEPA GLRI award funded three day per week coverage; commencing on July 30, the Osgood Pond Association funded an extra day of coverage. Stewards educated 745 boaters, inspected 498 boats, and found that 72% of boaters had taken prevention measures to stop the spread of AIS. No AIS were detected while stewards covered Osgood Pond.

Paul Smith's College Decontamination Station

This site was located in the parking lot of Saunders Sport Complex at PSC, along Keese Mills Road. This site was classified as a high traffic intersection location because it sits adjacent to the intersection of NYS 86 and NYS 30 in the town of Paul Smiths. This unit was opened on July 3, 2015 and provided coverage for 54 days. Technicians at this site inspected 59 boats, 10.2% of the boats inspected were

considered dirty and 1.7% of boats inspected were transporting AIS. A total of 10 boats were decontaminated.

Piseco Lake

Through the Adk AIS Pilot Program, AWI was able to provide stewardship on Piseco Lake for the first time in 2015. With 3 NYSDEC campgrounds and launches surrounding the lake, Piseco Lake is a popular vacation destination in southern Hamilton County. Stewards were stationed at the 3 different locations (Poplar Point, Little Sands, and Point Comfort) with varying degrees of coverage. Overall stewards were able to provide 77 days of coverage and educated 1,362 people. 549 boats were inspected with only 0.2% carrying some type of organism, none being AIS.

Piseco Decontamination Station

The Piseco boat inspection and decontamination station, funded by the Adk AIS Pilot Program was located on Route 8 at the Piseco Common School. Because of its close proximity to 3 state boat launches, the site offered a convenient place for the public to have their boat inspected and decontaminated before or after use of several lakes. This location was also chosen because of its location on Route 8, which is considered a gateway route into the park. The station was open approximately 3-4 days per week from June through August for a total of 24 days of operation. After Labor Day, due to the loss of staff, the station was open for 1 Saturday in September. A total of 90 boats were inspected and 13 decontaminations were performed. No AIS were detected at this site.

Rainbow Lake/Buck Pond Campground

The Rainbow Lake Boat Launch is located within the Buck Pond State Campground off of Gabriels-Onchiota Road, also providing access to Lake Kushaqua. Stewards were funded by the Rainbow Lake Association and coverage was provided 4 days per week. Rainbow Lake stewards educated a total of 1,258 visitors and inspected 740 boats. Of the boats inspected, 41.6% had one or more organism and 2 AIS were removed.

Raquette Lake

Raquette Lake is the largest natural lake in the Adirondacks and the source of the Raquette River. The Raquette Lake Village Boat Launch, located in the Town of Long Lake in the Central Adirondacks, has been covered by the AWISP since 2008. Burke's Marina, located north of the village, has been covered by the AWISP for the last few seasons. Due to funding by an EPA GLRI grant, the Raquette Lake Village launch was covered seven days a week and Burke's Marina was covered on Fridays and Saturdays, depending on staff availability. After Labor Day, the Village launch was staffed every weekend until Columbus Day. Golden Beach Campground and Brown's Tract were both only covered once in the summer due to low boat traffic. The Raquette Lake Preservation Foundation (RLPF) provided support and encouragement throughout the season. In total, the Raquette Lake launches were covered 130+ days (Village: 110, Burke's: 18, Brown's Tract: 1, Golden Beach: 1) throughout the 2015 season.

Stewards educated 3,035 people, inspected 1,619 boats, found that 17% of boats were carry some type of organism and 12 AIS were detected.

Sacandaga Lake

Sacandaga Lake is accessible through the NYSDEC campground Moffitt Beach, which makes it one of the busiest launches in the central region. Through the ADK AIS Pilot Program, AWISP was able to offer coverage of Sacandaga Lake for the first time in 2015. This coverage was a welcome addition for the Lake Pleasant Sacandaga Association, which has been providing stewardship at this location since 2009. A steward was placed at this location 3 day per week. Stewards inspected 1,112 watercraft and educated 2,943 people. Among all of the watercraft inspected, 36 boats were dirty; with 5 AIS intercepted. Sacandaga Lake is known to have spiny water flea so watercraft inspections upon leaving the lake are just as important as inspections performed prior to entering.

Saratoga Lake

Beginning in 2010, the SLPID has sponsored stewards at the NYSDEC Boat Launch on the north end of Saratoga Lake. In 2015, there were three stewards who provided 7 day per week coverage. SLPID provides a volunteer liaison that provides weekly contact, support and mentorship for the stewards. Saratoga Lake is the only lake in the program that is not located within the Adirondack Park. The boat launch is located on Fish Creek Rd., just off of Route 9P. The boat launch on Saratoga Lake continues to receive the highest boat traffic of any lake in the AWISP network. Saratoga Lake contains four known AIS including EWM, curly-leaf pondweed, water chestnut, and zebra mussels. Selective herbicides are currently being used to target curly-leaf pondweed and EWM. In addition, two mechanical harvesters are being used to control the invasive plant population around the lake. Saratoga Lake stewards educated 13,402 visitors, inspected 5,811 boats and detected 759 AIS.

Second Pond

The Second Pond NYSDEC Boat Launch is situated adjacent to State Route 3 approximately 3½ miles southwest of the Village of Saranac Lake. The newly renovated and expanded boat launch is an impressive facility and sees a high volume of use. The facility is a primary access location for Lower Saranac Lake and the Saranac Lake Islands Campground. Second Pond is known to contain variable-leaf milfoil and EWM, while the hydrologically connected Saranac Lake Chain is known to contain EWM and curly-leaf pondweed. A LCBP grant secured by the Lower Saranac Lake Association provided funding for five days of coverage in 2015. Stewards interacted with 8,180 people, inspected 4,193 watercraft and removed 74 organisms.

Second Pond Decontamination Station

Located at the Second Pond NYSDEC Boat Launch, stewards at this site inspected more watercraft than at any other decontamination station. NYSDEC Region 5 donated materials and time for improvements made at this site. The decontamination station opened on July 3, 2015, providing 66 days of coverage

during which 168 organisms were removed, including 57 AIS. 13 boats were decontaminated though 5.1% of boats encountered were classified as dirty. Since this site is located where AIS present, many of the AIS detected were found upon retrieval. Stewards removed these AIS prior to departure to prevent the spread to other water bodies.

Seventh Lake

Located adjacent to NY Route 28 in Hamilton County, three miles east of Inlet, Seventh Lake State Boat Launch has received coverage by the AWISP since 2011. Through funding from an EPA GLRI grant, this lake was covered on average 2-3 days a week throughout the summer and on the weekends after Labor Day. Seventh Lake contains EWM and variable-leaf milfoil and is being monitored and controlled by the Sixth and Seventh Lake Association. In 2015, Seventh Lake was covered 30+ days. Stewards educated 548 visitors, inspected a total of 288 watercraft and found 9.4% had one or more organism, none being AIS.

South Colton Decontamination Station

The South Colton decontamination station is located on NYS Route 56 south of the village of South Colton. The site was classified as a gateway location and used a convenient pull-off on the side of NYS 56. Many boaters using this travel corridor are coming from the St. Lawrence River and surrounding lakes that are known to have multiple AIS infestations. This station was the last decontamination station to open due to remoteness, contractor availability, and difficulties in choosing a site. This site was staffed 5 days a week starting in late July and running through Labor Day. A total of 43 boats were inspected, 1 of which failed and was decontaminated.

Speculator Decontamination Station

The Speculator decontamination station was conveniently located on the southbound pull-off of NYS Route 8 south of the Village of Speculator. This site was equipped with a LANDA ECOS unit, which required no site improvements. Depending on staff availability there were varying degrees of coverage. From July 17th through Labor Day the unit was staffed Thursday through Sunday. Located in close proximity to many boat launches, this site inspected 178 boats and decontaminated 8.4% of those. 2.8% of boats inspected were transporting AIS. Because of strong community involvement and diligence from local marinas and stewards, our program was able to prevent introductions of zebra mussels, Eurasian watermilfoul, and curly leaf pondweed. AWISP anticipates continued coverage for the 2016 season and hopes to have the unit open 7 days a week.

Stillwater Reservoir

Located 18 miles from Eagle Bay, Stillwater Reservoir is a 6,700 acre reservoir in the western Adirondacks. In 2015, Stillwater Reservoir was covered on average 4 to 5 days per week, totaling 64 days of coverage throughout the season. Funding for this site was provided through an EPA GLRI grant. Stewards educated 2,005 visitors and inspected 845 boats. 1% of boats inspected had one or more organism and 2 AIS were removed.

Tupper Lake

The Tupper Lake NYSDEC Boat Launch has received continuous coverage by AWI since 2008. Funding was provided through an EPA GLRI grant, which allowed stewards to cover the launch up to 7 days a week throughout the season, totaling 86.5 days throughout the summer. Tupper Lake is known to host variable-leaf milfoil. Efforts from the AWISP and the boating community have helped keep additional AIS from becoming established in the lake. In 2015, stewards educated 3,742 people, inspected 1,719 boats, found 27.2% of boats were carrying organisms and 6 AIS were removed.

Tupper Lake Decontamination Station

This roadside watercraft decontamination station was located south of the Town of Tupper Lake, on NYS Rt. 30. This station opened in mid-July and was staffed 5-7 days a week. It was covered a total of 28 days this summer. Stewards and technicians at this site inspected 55 boats and detected 17 organisms. None of the detected organisms were identified as AIS.

Upper Saranac Lake

The Upper Saranac Lake NYSDEC Boat Launch is located a ½ mile from Route 30 by the Saranac Lake Inn. Coverage at the Upper Saranac Boat Launch was funded by the Upper Saranac Lake Foundation/ LCBP grant that allowed coverage 4 days a week, usually Thursday-Monday. Stewards interacted with 2,924 visitors, performed 1,215 boat inspections, and removed 6 AIS from boats. On July 8 and August 12, the AWI hosted a Water Shield Workshop for the children of the USLA and USLF members.

Upper St. Regis Lake

Since 2000, the St. Regis Foundation has sponsored 7 day per week coverage at the Upper St. Regis Lake Boat Launch. There is a boat wash station on the property, which the stewards urge all boaters to use prior to launching and upon retrieval. Upper St. Regis stewards educated 1,727 visitors, inspected 968 boats, and found that 77% took prevention measures before coming to the launch. 6% of the boats inspected has one or more organism on them and 1 was an AIS, curly leaf pondweed.

St. Regis Canoe Area: Floodwood, Hoel and Little Clear Ponds

The St. Regis Canoe Area has had coverage by the WSP on Hoel and Little Clear Ponds since 2011 and Floodwood Pond since 2012. Little Clear Pond is located off of NYS Route 30 on the Fish Hatchery Road, which also gives one access to the NYSDEC Fish Hatchery site. Hoel Pond and Floodwood Pond are also located off of NYS Route 30 near the St. Regis Canoe Outfitters and the Saranac Inn's Golf Course on Floodwood Road. The St. Regis Canoe Area had coverage funded by GLRI through a U.S. Fish and Wildlife Service Grant, which allowed for coverage of 1 site per week for 1 day. It is important to continue coverage of the St. Regis Canoe Area since it is still free of any AIS.

White Lake

White Lake is one of the first bodies of water encountered when entering the Adirondack Park from the west via NYS Route 28. This is the fourth year that White Lake has been covered by the AWISP. The Adirondack White Lake Association and an EPA GLRI grant sponsored weekend steward coverage (Friday – Sunday) for this location. There is no public access to this lake, so the AWISP is very appreciative of the local lake associations that permit access to their launch site. Overall, White Lake was covered 46+ days throughout the season. Stewards at this location educated 1,191 total visitors and inspected 596 total boats.


Photo courtesy of Lauren Henderson

Special Project Reports

Analysis of Common Water Sampling Techniques Used to Assess Lake Trophic State

Watershed Steward Hunter Favreau collected and analyzed water samples under the supervision of Corey Laxson for his special project over the summer. He then used this data to complete his capstone project, "Analysis of Common Water Sampling Techniques Used to Assess Lake Trophic State". This project was done to fulfill requirements for a Bachelor of Science Degree in Environmental Science at PSC. The paper abstract is attached; please contact AWI for the full paper if interested.

Abstract

Volunteer lake management programs (VLMPs) across the country employ different surface water sampling techniques to establish long-term trends in nutrient availability and trophic state. The three most common techniques are a surface grab (SG), 2m integrated tube sampler (IT), and a discrete sampler, such as a Van Dorn or Kemmerer bottle deployed to a depth of 1.5m (DD). These various sampling techniques vary not only in depth, but also in cost and ease of use. The objectives of this study was to 1) determine if there is a statistical difference in chlorophyll-a (chl-a) and total phosphorus (TP) concentration obtained between the three different sampling techniques, 2) determine if the treatment effect (sampling device) varies over time, 3) determine which method has the least amount of variability, and 4) determine if sampling technique ultimately influences trophic state classification. The study was conducted on Upper St. Regis Lake in Paul Smiths, New York. 10 samples were collected from the lake using the three different techniques during the months of June – August, 2015. A significant difference was found in chlorophyll-a concentration between sampling techniques during June and July, and during the month of July for TP. The three sampling techniques yielded similar variability for chlorophyll-a but significantly different variability for TP. Ultimately, the trophic status rating for Upper St. Regis was not effected by sampling technique. This study suggests that VLMP should utilize a SG or IT rather than a costly DD sampler.

Watershed Steward Hunter Favreau presenting his finding at Paul Smith's College capstone presentation day.

Community Service and Research

Cranberry Lake Boat Launch Map

The NYSDEC Cranberry Lake Boat Launch is an extremely popular launch for a variety of recreational activities, including fishing, hiking, and camping. It is located in close proximity to the Town of Cranberry Lake and the Cranberry Lake Campground. Therefore, it is important to provide a comprehensive map of the lake and surrounding areas displayed at the boat launch. The old map was in dire need of updating. AWI Steward Nate Morey created an updated version of the map. He used ArcGIS in order to overlay multiple layers of data, including water bodies, topography, APA land classifications, trail systems, and local attractions. The new map is color-coded, neatly organized, and more easily readable. Since such a large part of fighting the spread of invasive species involves the education of the public, this was a very important project. When people are more familiar with the landscapes surrounding them, they will be more eager to protect them. The map can be found in Figure 13.

Clifton-Fine Decontamination Station Landscaping Project

This summer Jeff Goolden was asked to help with landscaping for the Clifton-Fine Decontamination Station. This site is located at the intersection of Route 3 and Route 50, near the hamlet of Star Lake. Using his experience and passion for landscaping, along with materials from the nearby wooded area, Jeff proceeded to improve on the recently excavated earth. He used large, round stones to create a border around the sign explaining the future plans for the site (the building of an information station and a more permanent AWI decontamination/boat inspection station). In addition, he replanted ferns that he found growing at the edge of the wooded lot and used an artistic log as a centerpiece for the project.

Fern Park Trail Maintenance

Over the course of three weeks, Izaac Cooper performed trail maintenance at Fern Park in Inlet, New York, with special attention being paid to terrestrial invasive species. Fern Park is a popular recreation area in town year round, offering playing fields and hiking trails in the summer and cross country skiing and snowmobiling trails in the winter. Routine maintenance is required to keep the trails safe and usable for outdoor recreation opportunities. Maintenance of the trails involved clipping and clearing overhanging branches out of paths for easier, safer usage and a more aesthetically pleasing experience. This undertaking was carried out with the help of the Inlet Parks Department, who supplied equipment and information. Further maintenance will be required as the foliage becomes overgrown once more. No terrestrial invasive species were discovered throughout the process.

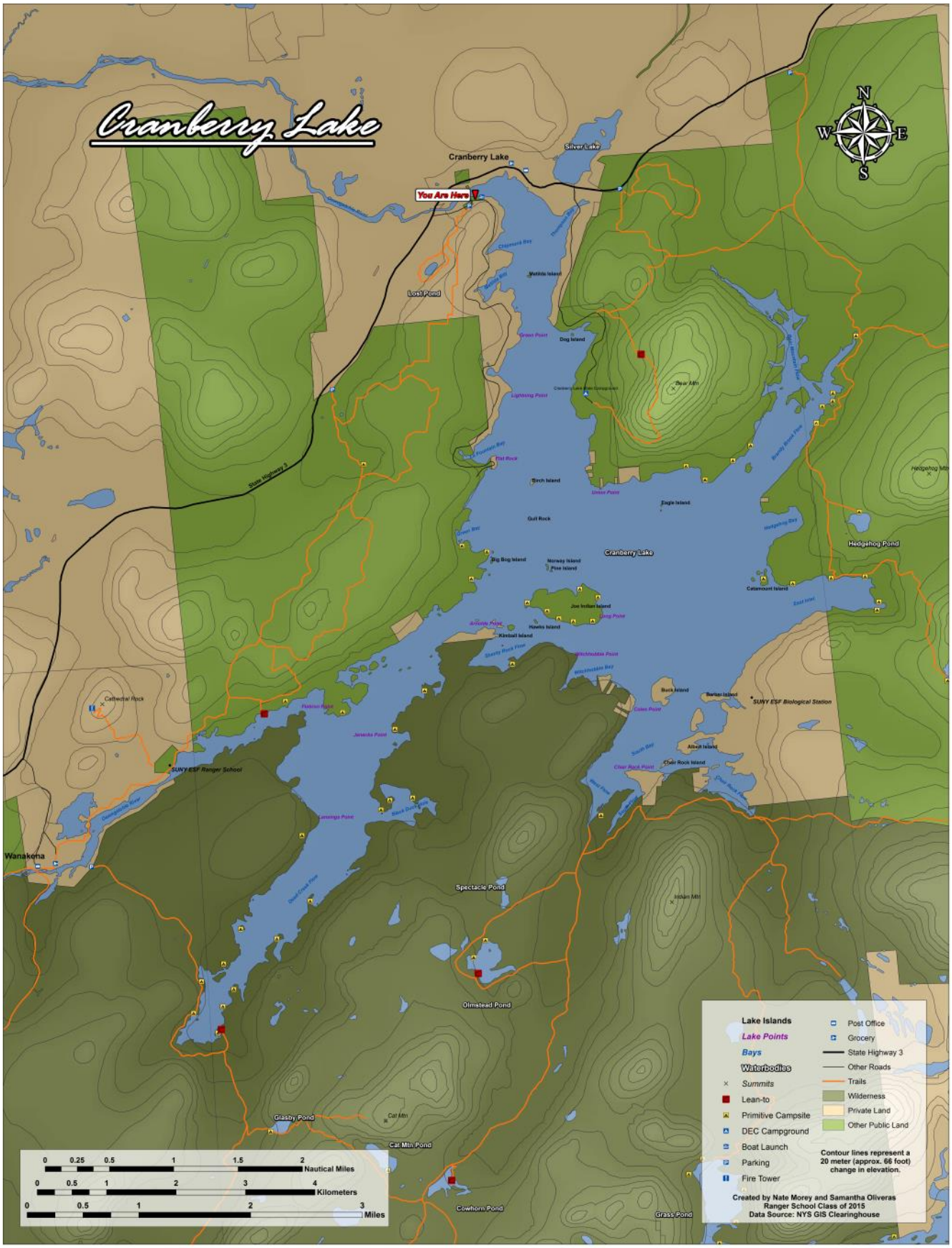

Figure 13. Cranberry Lake Boat Launch Map created by steward Nate Morey.

Lyme Disease Ecology in the North Country

Stewards Jennifer Ryan and Jessica Setter worked with Dr. Lee Ann Sporn to collect ticks for the St. Lawrence County Department of Health. Ticks collected were tested for diseases such as Lyme Disease. Presence/absence data indicates the upslope progress of Lyme Disease into the Adirondack Park as a result of warming temperatures associated with climate change.

In order to collect the ticks, a one square meter strip of corduroy was tied to a wooden pole by a piece of rope and dragged through knee high grass. The strip was dragged for 1000 meters at a time, inspecting the strip for ticks every twenty steps. There were anywhere from 4-8 tick drags completed at each location. The required attire for gathering this research was long pants, a long sleeved shirt, thick socks and closed toed shoes, with a white body suit to top it all off. The clothing is mandatory in order to protect stewards from getting bit by ticks, as they were not allowed to wear any bug repellant while collecting this data. Other types of equipment used during this study were: tweezers (to collect the ticks off of the corduroy) and vials filled with ethanol (to preserve the ticks).

Steward Jennifer Ryan sporting tick-sampling attire.

Sites sampled throughout the season include: Higley Flow State Park near South Colton, Leishman Point in Waddington, and a field located off a highway in Childwold. Three other locations in Franklin, Clinton, and St. Lawrence County were sampled.

At the conclusion of sampling 3 ticks were found, all in Higley Flow State Park. Though it did not appear to be a good year for collecting ticks, it did turn out to be a good summer for dogs and their owners, who probably were not looking to get bit while hiking and walking through the Adirondack trails.

Revitalizing an Informational Kiosk at Long Lake

While stationed at the Long Lake Boat Launch, Steward Ben Trowbridge took the initiative to revitalize an interpretive kiosk. The first part of his project consisted of making structural repairs and improving the overall appearance of the kiosk. Ben moved on to add relevant and up-to-date content, featuring the new DEC regulations on AIS. To make the display as informative as possible, a new "Aquatic Invaders" poster was updated to include variable leaf milfoil, which is an AIS found in Long Lake. The revitalized kiosk now provides valuable AIS spread prevention information that is readily available to the public.

Steward Ben Trowbridge shows off the final outcome after revitalizing the Long Lake kiosk.

Footbridges built by stewards at Wanakena.

Ranger School Environmental Stewardship Projects

The State University of New York College of Environmental Science and Forestry's (SUNY ESF) Ranger School holds a long history of education in forestry. It is located in the town of Wanakena, just across the Oswegatchie River from the Five Ponds Wilderness. The school manages 2,800 acres in this remote setting, where it holds a tradition of excellence in educating and disciplining minds.

Numerous research studies are in progress at the Ranger School. One in particular is led by Professor Shawn Cleveland. It involves laying out transect lines on which to place live traps for the capture and monitoring of the local snowshoe hare (*Lepus americanus*) population. Karl Hunter and Nate Morey helped by measuring out these transect lines, baiting and checking the traps, and handling the hares when necessary.

Another project was the ongoing maintenance of the hiking trails on the property. With such an extensive trail system on such a large property, this task took up a significant portion of time. Routine trimming and treading were offset by the placement of much-needed water bars, the repair of stairs, and the building of footbridges.

White Pine planted for establishment of a Christmas tree plantation.

Stewards Karl Hunter and Nate Morey also spent time working on new projects for the improvement of the school. One ongoing project is the creation of a Christmas tree plantation on the property. The stewards aided in planting a small grid of trees to test the endeavor. This planting included equal parts white pine, red pine and white spruce.

As graduates of the Ranger School themselves, Morey and Hunter were well-versed in these tasks and found the work quite rewarding. With this weekly opportunity to assist the school, the stewards gained a welcome alternative to their more typical duties at the Cranberry Lake Boat Launch and at the local Clifton-Fine Decontamination Station. This change of scenery allowed Morey and Hunter to contribute to the school's offerings to the public and helped them stay fresh and accommodating in greeting and educating the public at their respective AWI sites.

Tamarack, Black Spruce and Climate Change

Over the summer steward Chloe Mattilio worked with Professor Celia Evans, PhD, on a continuation of a STEM Scholarship research project in the Heron Marsh Bog at the VIC. The ongoing study has focused on issues associated with difficult establishment and growth of Black Spruce and Tamarack trees in this peat land because of harsh conditions such as the high water table, acidity, and low nutrient availability. These conditions have led to the belief that competition between Black Spruce and Tamarack are not a determining factor of growth. Instead, it has been proposed that each of these species has its own microsite niche within the bog. To examine this hypothesis, piezometers were used to test the abiotic belowground variables such as water temperature, depth to the water table and pH. The multivariate relationships between these characteristics and the abundance of both Black Spruce and Tamarack were then examined.

During the continued research this summer by Chloe and Dr. Evans, 3 new transects were established, doubling the sample size. Chloe and Dr. Evans were also able to collect crucial proportional canopy coverage data, which is only available during peak canopy season.

Currently, those involved in the study are working on a paper for publication summarizing the research and results and preparing for the Northeastern Natural History Conference where findings from the past year will be shared. The rate of nutrient re-translocation of Tamarack at the end of the growing season is also being examined.

Those involved in the study believe this is especially relevant research because Black Spruce and Tamarack are both boreal species growing at the most southern extent of their ranges where potential impacts of climate change will likely be severe. With the Adirondacks predicted to experience warmer temperature, shorter winters, more precipitation and higher rate of evapotranspiration, research on these common wetland trees may provide insight into potential futures for these species in the Adirondacks.

Education and Outreach

With the expansion of the AWISP, education and outreach continue to be a crucial aspect of our program. Stewards are our first line of defense against the spread of AIS, and have the difficult task of educating boaters on the importance of AIS spread prevention. The initiation of the new NYS funded ADK AIS Pilot Program required energetic and constant education and outreach. With 11 new boat decontamination stations and 12 locations with first time steward coverage, stewards worked hard to introduce the AWISP and environmental conservation ethic to user groups in new areas. Outreach efforts go a long way to build collaborative relationships between local communities, lake associations, and our Stewardship Program.

Through a combination of community, educational, and professional events the AWISP was able to broadcast our message to many user groups. In 2015, the AWISP tabled and presented at 70 events such as farmer's markets, fishing tournaments, and special community events (A full listing of our outreach in 2015 can be found in the Appendix B). Ultimately, the goal of AWISP outreach is to engage Adirondack communities in ways that facilitate the stewardship of our Adirondack natural resources.

Regional Supervisors attending an outreach event.

Community Events and Meetings

Regional Supervisor, Teresa Troy, uses the watershed model to educate children at an outreach event.

Of the outreach events, some of the most successful were those with a strong focus on Adirondack natural resource and water recreation. Stewards attended these events at various locations throughout the Adirondack Park during the 2015 season. Stewards also attended multiple meetings held by lake associations and organizations. Attending these meetings allowed stewards to give these groups updates on the work they did throughout the season.

Adirondack Kids Day: On October 3rd, regional supervisor Emma Antolos attended the Adirondack Kids Day. Adirondack Kids Day is an annual event in Inlet, NY celebrating the 'Adirondack Kids' children's books with different events for families. Emma set up the watershed model at the launching site for the fishing derby. The event was a success and the children participating enjoyed interacting with the model. Overall, approximately 30 children participated in the hands on activity.

Adirondack Waterfest: This summer stewards participated in the 20th annual Adirondack Waterfest, an annual event that celebrates Adirondack lakes and rivers. The AWI attended this event to education the public on AIS spread prevention. AWI staff members were able to utilize a Hamilton County Soil and Water boat to demonstrate where AIS are most commonly found and demonstrate how to properly inspect a boat. The event was helpful for increasing awareness and distributing information about the ADK AIS Pilot Program and boat decontamination stations. Overall stewards connected and educated approximately 75 people.

Teen Aquatic Stewardship Program: Stewards participated in a program organized by the Ausable River Association and the Adirondack Mountain Club called *Discovering the Ausable: An Aquatic Stewardship Program.* This was a free five-day, four-night adventure in camping and aquatic stewardship for teens age 14-17. On July 9th, stewards did a workshop with the teens, educating them on our stewardship program and teaching them about AIS.

St. Regis Paddle Outing: The St. Regis Paddle Outing is an event hosted by the Adirondack Mountain Club and takes place at Paul Smiths College. Paddlers from various areas lodge on campus and spend the day paddling the St. Regis Canoe Area. On July 27th, steward Jon Nielsen gave a presentation to the attendees about the AWISP and the ADK AIS Pilot Program.

Farmers' Markets

Stewards attended farmers' markets in Lake Placid, Long Lake, Malone, Old Forge, Potsdam and Tupper Lake throughout the 2015 season. Stewards set up an informational display containing live samples of aquatic plants and literature pertinent to the AWISP and AIS. The stewards occasionally utilized the watershed model as an interactive tool to provide more educational opportunities. In total, stewards attended over 20 farmers' markets and interacted with close to 250 people.

Stewards attend local farmers' markets to get the word out to the general public about AIS spread prevention.

Fishing Tournaments

This summer the AWISP inspected boats and had informational tables set up at six different fishing events. Events ranged from bass tournaments to kids fishing derbies, allowing stewards to reach a broad audience. By educating and reaching out to this user group, the AWI is optimistic that fishermen will promote and utilize boat decontamination stations and practice inspection techniques that insure no AIS are being inadvertently transported.

Media Mentions

With the introduction of the ADK AIS Pilot Program and boat washing sites in the Adirondack Park this year, newspaper and radio media were a key way for the public to gather information about the AWISP. Articles generally provided background information related to the AWISP and information about decontamination stations. Director of the program, Eric Holmlund, was also interviewed about the new decontamination stations and featured on North Country Public Radio.

http://www.northcountrypublicradio.org/news/story/28977/20150717/adirondack-boat-washing-stations-fight-spread-of-invasive-species

Social Media

In the age of technology and social media, perhaps one of the most valuable ways to promote our mission is through the use of these various platforms. The AWI, including the AWISP, the Adirondack Aquatic Rapid Response Team, the Aquatic Plant Management Team, and the Limnology and Water Quality Program, maintains a Facebook page, Twitter account, Instagram feed, blog, and a newsletter. The goal of our social media pages is to engage followers by posting human interest pieces such as staff profiles, information about AWI events, and links to relevant articles.

The blog featured longer narratives written by staff highlighting various AIS issues, outreach events, and other relevant topics. The newsletter, which has over 300 subscribers, featured up to date happenings within our program that allowed subscribers to see what we accomplished throughout the year.

Overall, the AWISP has built an online network that includes 370 “likes” on Facebook, 534 twitter followers, 176 followers on Instagram, and 315 subscribers to our newsletter.

Water Shield Workshops

The Water Shield Workshop is an environmental education program designed to engage participants in the stewardship of our aquatic resources. This is the third year that the AWI has offered this free service to the Adirondack community. The curriculum focuses on four major themes including lake ecology, watershed processes, natural history of aquatic plants, and AIS spread prevention. The program can be easily adjusted to accommodate all ages and groups including school groups, teacher workshops, and lake association groups.

Nine Water Shield Workshops were conducted in the 2015 season, six more than in the previous year. The AWI collaborated with the Keene and Lake Placid Central Schools, USLA & USLF, ESSLA, the Saratoga Rowing Association, and for a BOCES Administrator Conference. Keene and Lake Placid Schools brought third grade, sixth grade, and high school classes to Lake Flower and Lake Placid for the workshop. The USLA & USLF and ESSLA invited their members' children to participate in the workshops. The AWI also collaborated with two Apple Education Development Executives at the Northern NY BOCES Administrators Conference held in Lake Placid. They were particularly interested in demonstrating the significance of STEM education to the conference attendees. Our furthest Workshop was on Saratoga Lake with children in 7th-12th grade involved in the Saratoga Rowing Association.

Workshops included both land and water based activities. The water portion of the workshop took place aboard our 21' Carolina Skiff. Participants were able to sample for spiny waterflea, measure dissolved oxygen, use a Secchi disk to determine water clarity, and collect aquatic vegetation for identification. While on land, participants rotated through three different stations where they had hands on time with the watershed model. They learned how to identify aquatic plants and learned how to prevent the spread of invasive species. Through our hands on approach to education, it is the goal of AWI to provide the foundation necessary to foster a sense of stewardship in all ages.

Water Shield Workshop on Upper Saranac Lake- Photo credit: Upper Saranac Lake Foundation.

Teresa Troy demonstrating the watershed model at the Saratoga Rowing Association Water Shield Workshop.

Invasive Species Monitoring and Management

Efficiency Audit of the AWI Aquatic Plant Management Team on Chateaugay Lake

Members of the Aquatic Plant Management Team removing AIS from Chateaugay Lake.

Jeff Barnes worked with the AWI Aquatic Plant Management Team from June through mid-September on Chateaugay Lake documenting the average task time for the team's work. The Aquatic Plant Management Team is made up of 5 members, who are each equipped with a full scuba wet suit, fins, gloves, and masks. They use an air line model hookah system that has 4 air tubes for breathing underwater. The Team utilizes a motorboat, kayak, and collection bags for the harvested EWM. To make the process as efficient as possible team work is an important component of the work day. While some members are diving, there is always a person located topside in the kayak to grab filled bags from the divers, collect any floating fragments of EWM, and most importantly, protect the divers from boat traffic.

On a typical day, the team arrives at the boat launch at 8:00 am, where they take 15 minutes to prepare the boat and drive to their harvesting destination. EWM harvesting starts between 8:15 and 8:30am and lasts until 11:00am. At this time, 15 to 20 minutes is needed to bring the filled bags of EWM to the dock. Once at the dock, it takes another 15 to 20 minutes to weigh the bags and load them onto the trailer. A lunch break then takes place between 12:00pm to 1:30pm, and an additional half hour is needed to get re-situated into scuba gear and return to the harvesting site. The team then harvests more EWM from 2:00pm to 3:30pm, bringing the full bags back to the docks, where the bags are weighed and put on the trailer. On a normal day the team would have the boat cleaned up and be done for the day at approximately 4:00pm.

In the beginning of the season the team used bags that could hold up to 30 pounds of EWM. The average weight they were collecting ranged from 15 to 30 pounds and it took between 10 to 15 minutes to fill each bag. On average they collected around 150 to 300 pounds per day. At the end of June, the team started using larger collection bags that could hold up to 60 pounds of EWM. The amount of time it took to fill each bag increased from 10 to 20 minutes to 15 to 30 minutes. The bags could weigh between 30 to 55 pounds, depending on the density of the EWM in the area.

The team's ability to collect EWM has many variables including the depth of water, if benthic mats were recently removed, visibility, density of EWM and other present vegetation, boat traffic, equipment difficulties, and water temperature. On average the team removed approximately 250 pounds of EWM a day. Overall, 15 tons of EWM were harvested in a 70-acre area.

Although there are many variables that effect the team's ability to harvest EWM, it is clear that hand harvesting is an efficient means of managing this invasive species. Other methods of AIS removal include herbicide application and benthic mat placement.

Members of the Aquatic Plant Management Team after a days work of removing AIS from Chateaugay Lake.

Garlic Mustard Hand Harvesting

Garlic mustard (*Alliaria petiolata) is an invasive herbaceous plant native to Europe and Asia that has rapidly spread across the United States. It displaces native species by outcompeting them for light, nutrients and water. It is typically found* in dry forests, floodplains, edge habitats and disturbed lands.[1] It is known to impact the chemical composition of soils which suppresses native tree growth. Chemicals in the plant are also toxic to native butterflies. Garlic mustard is currently within the Adirondack Park and requires active monitoring and management.

Jake Kuryla pulling garlic mustard along Moose River Road.

Once garlic mustard is established in an area, it is extremely difficult to control and managing the plant requires a long-term effort. A singular plant can produce up to 3,000 seeds and can replace most native herbaceous plants within ten years.[2] There are multiple control methods in which plant populations can be managed. For smaller infestations, hand pulling is effective but only if the entire root system is removed. Once the plants are removed, they should be placed in bags and set in the sun. It is crucial to clean clothes, footwear and tools after pulling garlic mustard to avoid transporting seeds.[3] Garlic mustard can also be removed through proper chemical application or prescribed burning.

On June 11th, 2015, Zachary Simek, the Terrestrial Invasive Species Project Coordinator from APIPP, came to the regional meeting in Inlet and gave a brief presentation about terrestrial invasive plants. After the presentation, Simek took Jake Juryla, Anna Knapp, Izaac Cooper and Emma Antolos out in the field and visited locations of garlic mustard infestations. They hand pulled garlic mustard for a few hours along Moose River Road in McKeever and filled multiple garbage bags. On his special project days, Jake Kuryla returned to Moose River Road and hand pulled two 55-gallon garbage bags worth of garlic mustard. Overall, it is crucial to continually monitor and manage this location and other sites throughout the park to protect the biological integrity of the Adirondacks.

Sources:

[1] National Park Service. “Garlic Mustard (Alliaria Petiolata).” U.S. Department of the Interior, 11 Nov. 2010. Web. 13 Nov. 2015. <http://www.nps.gov/plants/alien/pubs/midatlantic/alpe.htm>.

[2] Forest Invasive Plants Resource Center. “Garlic Mustard.” Web. 13 Nov. 2015. <http://na.fs.fed.us/spfo/invasiveplants/factsheets/pdf/garlic-mustard.pdf>.

[3] King County. "Garlic Mustard Identification, Impacts and Control Methods.” Web. 3 Feb. 2015. Web. 13 Nov. 2015.

Purple Loosestrife (Lythrum salicaria) Management in the St. Regis Chain of Lakes
By Nathaniel Wells

Introduction

Purple loosestrife (*Lythrum salicaria*) is a perennial plant that can grow up to 2.5 m tall. It can have as many as 50 stems protruding from a single taproot. The plant has a square stem, entire lanceolate leaves arranged in whorls, and conspicuous purple flowers during the summer and autumn (USDA, 2000). Fully mature plants, on average, produce more than 2.5 million seeds per year (Malecki, et al. 1990). *L. salicaria* is commonly found in wetlands or near water's edge, although it has the ability to establish in a wide range of habitats.

The plant was introduced to North America in the 1800's. Until the 1930's, it was only sparsely distributed. Due to the high rate of human disturbances brought about by agriculture, canal development, and irrigation systems, the abundance and distribution of *L. salicaria* populations increased dramatically (USDA, 2000). *L. salicaria* has been documented in all of the U.S. continental states, except for Florida, as well as much of Canada. (Blossey, et al., 2001).

L. salicaria proves to be an adept invader due to its large seed production and the ability of these seeds to remain viable after years of submersion. These qualities allow it to quickly seed and establish monocultures in areas that have been recently disturbed. In its native range, there are 14 insect species found to be specific host species to *L. salicaria* (Malecki, et al., 1990). In North America, the lack of natural predators and diseases to control *L. salicaria* populations have led to many detrimental effects.

The colonization of L. salicaria has been linked to declines in species richness in plant communities. It has also been shown to affect bird populations and change wetland functions (such as water chemistry and rates of decomposition) (Blossey, et al., 2001; Thompson, et al., 1987). Studies have shown that a 25% decrease in wetland plant biomass correlates with increased *L. salicaria* biomass in that habitat (Farnsworth & Ellis, 2001).

Many techniques have been used in attempts to manage *L. salicaria* populations, including herbicides, hand harvesting, and biological controls. Herbicides pose the threat of killing non-target plant species. However, applying chemicals directly to the top of a L. salicaria plant has shown to be effective with little impact on surrounding non-target species. Hand harvesting is a traditional and highly effective way of managing small populations, but can prove to be unrealistic when dealing with larger infestations (Butterfield et al., 1996).

L. salicaria is in flower until late September or early October and the plants begin to develop seeds as they prepare to lose their flowers. This makes it imperative when hand harvesting to complete the harvest within the window of opportunity when the mature plants retain their flowers (for easy identification), but before they have gone to seed (USDA, 2000). Biological controls (such as the introduction of host-specific beetles or sheep) have been initiated in certain areas to aid management efforts (Kleppel & LaBarge, 2011; Schooler, et al. 2003).

Methods

Visual surveys were conducted along the shorelines of Lower St. Regis Lake, Upper St. Regis Lake, and Spitfire Lake. Surveys were conducted from Paul Smiths College's boat the *Water Shield* on August 4th and August 18th. A final survey of Lower St Regis Lake and the outlet leading to the dam before the St. Regis River was conducted from an AWI canoe on August 25th. While surveying, sites from which *L. salicaria* had previously been harvested were of particular interest. However, the entire perimeter of the lakes was observed for new infestations when traveling between known sites.

When a new location was identified as being an infested site, the location was marked on a map, and included a general description of the site (to minimize confusion for subsequent years of management). The plants were then harvested by hand, an effective method of management in small and/or isolated patches (Malecki, et al. 1993). Shovels and pick axes were brought along for removing deeply rooted individuals, which are likely the result of an incomplete removal from previous years (Thompson, et al., 1987). Harvested plants were then placed in black garbage bags and left to dry out in the sun to ensure they were no longer viable before being disposed of.

Results

After management was complete, a total of 592 plants were harvested from the St. Regis chain of lakes. The total number of plants harvested decreased by 47% from the amount harvested in 2014. This year's harvest was the fifth lowest since the project began in 2001. Three new sites were identified, all of which were on Lower St. Regis Lake. Thirteen previously infested sites were found clear of infestation. Three of these sites were recently harvested in 2014, and the other ten have been clear of infestation for two or more years (Table 18).

Lower St. Regis

The previous two years of management have reported no incidences of *L. salicaria* on Lower St. Regis Lake. This year, twelve plants were harvested from three separate sites, none of which seem to be from previously harvested sites. Four plants were harvested from Site 31, located directly to the left of the PSC canoe launch. Two plants were harvested from Site 32, in between Blum house and the private residence to its right. Site 33 was discovered on the east bay of the lake where 6 plants were harvested (Figure 15). Possibly, Site 33 could be what was historically Sites 18 and 19. We are classifying this new site as Site 33 since previous reports were unclear on the site description. Also, the past two years do not include them on the map. Even more confusing, in 2011, Sites 18 and 19 were described as being located just east of the forestry cabin, but were displayed on the map as being west of the cabin. All of the locations in the slough leading to Spitfire Lake appear free of infestation.

Spitfire Lake

Spitfire remained the most infested of the three lakes we surveyed. A total of 364 plants were harvested from Spitfire Lake alone, which comprised 61% all the plants harvested. Although Spitfire Lake has the highest number of sites, Sites 9, 11, and 20 showed no infestations after being harvested in 2014. Sites 24

and 25 have not been documented for the past two years and are not represented on the map. No undocumented sites were found on Spitfire Lake.

Upper St. Regis Lake

Historically, there have only been three sites documented on Upper St. Regis Lake. Sites 1 and 2 remained successfully managed. Site 3 required a substantial amount of harvesting (Table 18) and had spread much farther inland (10 -15 m from the shore) than any other sites. At Site 3, 203 plants were harvested (34% of the total number of plants harvested).

The *Water Shield*, used for purple loosestrife surveying and removal, on Upper St. Regis Lake.

Table 18. Summary of managed sites and # of plants harvested per year. In 2013, Site 26 was previously Sites 12, 13, and 23 consolidated. They have since been separated. Site 27 was previously Sites 2 and 4 consolidated, but have also since been separated.

Site	2001	2002	2003	2010	2011	2012	2013	2014	2015
1	0	14	0	0	0	0	0	0	0
2	0	0	0	0	0	0	N/A	0	0
3	450	1400	330	222	197	103	154	106	203
4	5	63	5	0	10	21	N/A	69	26
5	0	74	23	2	4	2	0	4	11
6	0	0	0	0	15	19	22	38	10
7	250	915	117	39	76	24	11	27	19
8	110	49	3	6	4	6	2	278	52
9	0	437	143	72	30	67	152	223	0
10	0	123	5	4	7	8	0	57	13
11	0	0	0	3	8	0	7	8	0
12	18	11	13	1	4	1	0	46	24
13	25	260	35	89	17	20	0	121	132
14	0	0	0	0	9	0	0	0	0
15	30	8	16	25	11	21	0	0	0
16	0	0	0	3	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0
18	0	0	0	0	16	0	0	0	0
19	0	0	0	0	1	0	0	0	0
20	0	0	0	0	0	1	0	67	0
21	0	0	0	0	0	1	0	0	0
22	0	0	0	305	20	91	68	174	76
23	0	0	0	2	2	0	0	0	1
24	0	0	0	0	0	45	0	-	-
25							43	-	-
26							30	N/A	N/A
27							19	N/A	N/A
28	0	0	0	0	0	0	0	17	0
29	0	0	0	0	0	0	0	5	3
30	0	0	0	0	0	0	0	26	10
31	0	0	0	0	0	0	0	0	4
32	0	0	0	0	0	0	0	0	2
33	0	0	0	0	0	0	0	0	6
Total	888	3354	690	773	431	430	508	1266	592

Discussion

Site 3 required an extensive amount of harvesting compared to other sites and had spread inland to the point that many plants were not reachable from the shore (Table 18). It is crucial that in the future, harvesting efforts be extended past the shoreline. Although many of the plants may not be accessible from the shore line, the riparian zone at this location is very large and extends 10 m to 15 m from the shoreline and is dense with hydrophytic plants. This is habitat is very conducive to *L. salicaria* growth and many of the plants that were harvested from this site had not yet flowered and were nearly indistinguishable from the other species of plants at a distance.

Studies suggest that in larger infestations, it may be more feasible to manage populations than to try and eradicate them which may be achievable by using host specific insects that have minimal impact on the surrounding vegetation (Schooler, et al., 2003). A thorough search should be conducted of the entire area to prevent it from spreading to the rest of the otherwise unaffected Upper St. Regis Lake.

Lower St. Regis Lake experienced the only three new infestations to be identified this year (Figure 15). Two of the sites (31 and 32) are accessible directly from campus and can be easily monitored for removal if some should appear. Site 33 seemed like an isolated event with 6 only plants harvested, but one *L. salicaria* can produce over 2.5 million seeds. These seeds also retain up to 80% viability after being submerged in water for two years (Malecki et al., 1990). Some seeds may have arrived with the same that started these three new sites on Lower St. Regis Lake, but have yet to germinate.

Spitfire Lake remained the most prominently affected area in the St. Regis chain of lakes. Studies have shown that an invasion of *L. salicaria* may impose a potential threat to the biodiversity of the flora and fauna along the water's edge (Thompson, et al., 1987). Research has also suggested that the presence of *L. salicaria* may not necessarily have an impact on the diversity of vegetation in certain stands, but it was directly negatively correlated with the biomass of other wetland vegetation species (Farnsworth & Ellis, 2001) Although it had the most infestations, Spitfire Lake also harbored the only sites that were successfully managed from last year to this year. All previous sites in the slough connecting Spitfire Lake and Lower St. Regis Lake remained infestation free.

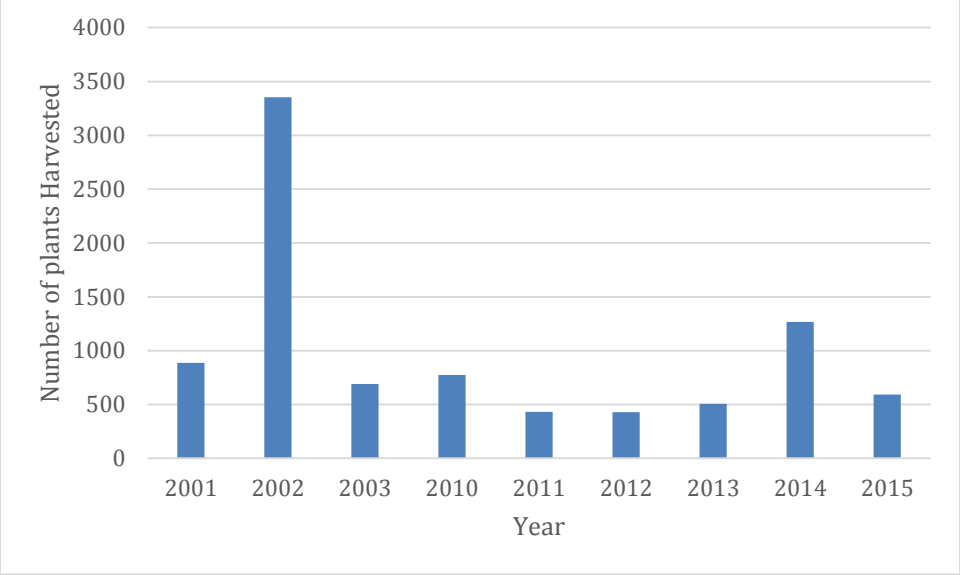

Figure 14. Total plants harvested each year on the St. Regis Chain of Lakes.

Figure 15. Map of Lower St. Regis Lake. Magenta squares represent sites which L. salicaria was managed. All sites indicated on this map were managed for the first time this year. There are previous sites that have been successfully managed on Lower St. Regis Lake that are not represented.

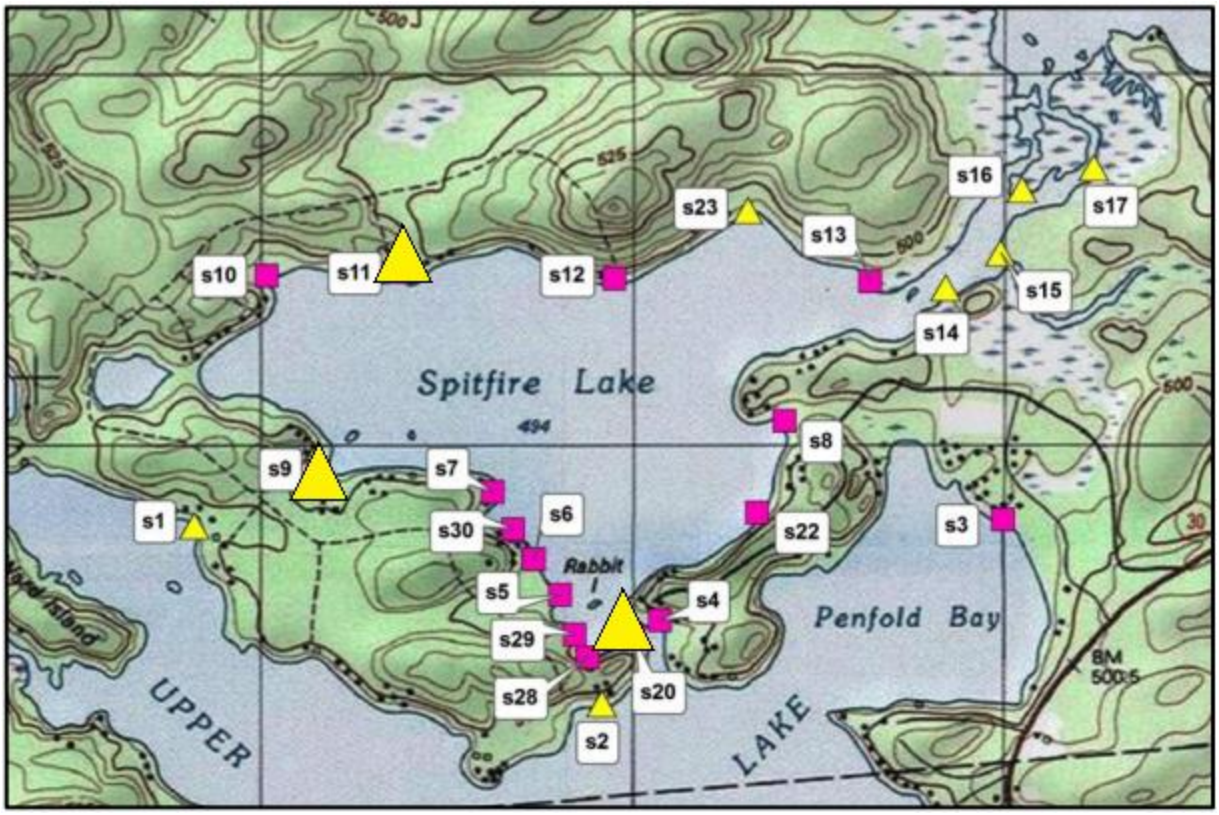

Figure 16. Map of Spitfire and Upper St. Regis Lake. Magenta squares indicate sites which L. salicaria was managed. Large yellow triangles represent sites which were harvested in 2014 and no L. salicaria was observed. Small yellow triangles represent sites of previous years which have since been eradicated.

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Stewards during water chestnut pull on Saratoga Lake

Water Chestnut Pulls on Saratoga Lake

On three Wednesday mornings in June 4 stewards went out on Saratoga Lake using the SLPID row boat and a canoe and pulled water chestnuts from the mouth of the Kaydeross Creek. The goal was to remove as many of the invasive plants as possible before August when they would drop seed. The area where water chestnut removal occurred is a shallow, plant dense area which restricts waterfront residents from launching boats of any sort from their docks. Stewards would identify water chestnut plants by the floating leaves and would remove the entire plant by reaching as far as possible down to the roots, wrapping the plant stem around their wrist in order to get a firm grip, and pull slowly. Although not always efficient for removing the entire root and seed of the plant, most of the AIS were successfully removed with roots and seeds. Plants were brought into the boats and left in plastic laundry baskets to drain then transferred to large plastic contractor bags which were left at the Saratoga Lake State Boat Launch where staff members from the Saratoga Spa State Park collected the bags and disposed of the plant matter in the Parks compost facility. On average, four 55-gallon contractor bags were filled with plant matter each week and disposed of.

Invasive Species Disposal Stations

Phil Dumais and Tim Baker collaborated with the NYS DEC to install invasive species disposal stations at the NYS boat launches at Northampton Campground, Northville, and Broadalbin on Great Sacandaga Lake. The NYS DEC Office in Northville provided the materials and AWI provided the labor. These disposal stations should be provided at all NYS DEC boat launches on bodies of water containing AIS. These stations are meant to make boaters aware of the need to inspect their boat and provide a location to dispose of any found AIS.

Stewards Phil Dumais and Tim Baker delivering Invasive Species Disposal Boxes they constructed throughout the season.

Loon Monitoring Report

By Jesse Fischer, Jon Nielsen, Joe Ritz, and Erin Stoddard

Adult Loon (*Gavia immer*) with Chicks. Photo by Nina Schoch.

Introduction

The Biodiversity Research Institute is a non-profit organization based out of Portland, Maine. The Institute's mission is to assess emerging threats to wildlife and ecosystems through collaborative research to advance environmental awareness and inform decision makers. BRI maintains a research center in the Adirondack Park that focuses on the impacts of human activity on the Common Loon (Gavia immer). The primary focus of the research is to assess the impacts of mercury bioaccumulation on the health of adult and juvenile birds. Loons are highly susceptible to mercury poisoning because they consume smaller creatures that are already affected by mercury inputs from air and water pollution.

Methods

The AWISP has been contributing to loon research in the Adirondacks for 14 years. On May 28th, Dr. Nina Schoch of the Adirondack Center for Loon Conservation trained volunteers. Through classroom and field instructions, stewards learned where to locate loons, the meaning of various calls, and how to document the observation of banded and unbanded birds on data forms. Stewards were assigned lakes and were responsible for monitoring and recording data throughout the summer. Joe Ritz and Erin Stoddard monitored Big Moose Lake in the Central Adirondacks and Jessie Fischer and Jon Nielsen monitored the Tri Lake Region. Monitoring began June and ended in August. Each site was visited once a week.

Kayaks and canoes were used to navigate the lakes. Monitoring began between 6:00AM-7:00AM. These times were chosen in order to maximize loon activity and take advantage of the calm waters and low

boat traffic. Observations on the lake ranged from 5-6 hours per days, depending on the lake size and weather conditions. Loons were observed with high-powered 10x42 binoculars. This was to ensure minimal disturbance to nesting loons and chicks, which can be detrimental to loon activity. Observation data was recorded field notebook, which included date, time, weather, Beaufort scale, water conditions, and number of loons observed. If loons were observed, information regarding territorial pairs, nesting pairs, nest type, number of eggs and number of fledges was taken. When monitoring, stewards looked for unique bands on the legs of adult loons. Bands differ by coloring and arrangement and help BRI staff identify the bird and can provide information such as the distance an individual has traveled since the initial banding. All field data is recorded and entered into BRI data sheets, which are sent on a weekly basis to Dr. Nina Schoch for compilation.

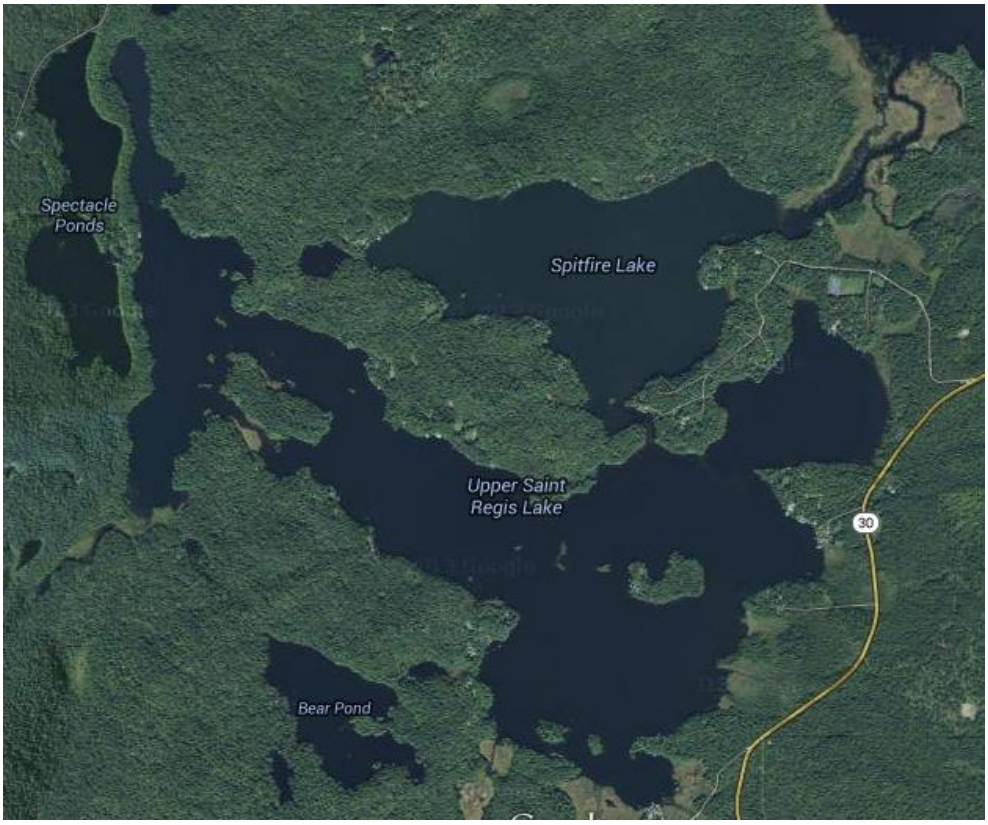


Figure 17. Aerial image of the St. Regis Lakes, containing loon territories.

Results: Tri-Lakes Region

Upper St. Regis Lake:

Upper St. Regis Lake is a 742-acre lake located about 3 miles south of PSC on NYS Route 30 in the hamlet of Upper St. Regis. It is the southernmost lake of the St. Regis Lakes and is connected via a channel to Spitfire Lake, followed by a channel into Lower St. Regis. The chain of lakes is famous for the presence of several historic great camps belonging to some of the wealthiest figures of early America. Upper St. Regis Lake is divided into six distinct loon territories, most being shared territories. The territories for this lake are divided into three distinct loon territories: PSC, St. Regis river outlet and St. Regis-Spitfire Channel entrance. The St. Regis-Spitfire Channel entrance has never been monitored in

the past. Jessie Fischer and Jon Nielsen divided up the territories and took turns monitoring each location.

Paul Smith's College territory:

No nesting pair was observed in this area.

St. Regis-Spitfire Channel:

An unknown loon was observed with unknown mate in this area. This unknown pair mated and nested with one egg roughly 5/28/2015 but failed by 6/30/2015 for unknown reasons. This nest was monitored with a trail camera but it did not provide insight as to why the nest failed.

St. Regis River: A banded loon (LL=orange/red, RL= yellow/silver) was observed in this area to an unbanded mate. It was concluded that the unbanded mate was male due to the banded loon being female. The nest was never discovered but two chicks were observed later in the season with the mated pair.

Discussion

The nest in the St. Regis- Spitfire channel territory failed for an unknown reason. High boat traffic may be the cause of the nest failure. During monitoring sessions, boat traffic was observed at least once a day on average. The use of an electric motor on a canoe was extremely beneficial for monitoring this large area. It allowed stewards to continually monitor the loons in various weather conditions and cover more ground.

Results: West-Central Region

Big Moose Lake:

Big Moose Lake is the headwater of the Moose River in the west central Adirondacks. It is located in the town of Webb, five miles north of Fourth Lake. The lake covers an area of 1,265 acres and has two major islands. The lake consists of five loon territories that were observed during the 2015 field season. The territories observed on Big Moose Lake include North Bay, South Bay, East Bay, Main Lake and the Inlet in the Eastern portion of the lake.

North Bay Territory:

North Bay offers areas with little to no boat traffic and provides numerous possibilities for nesting sites. The territory includes one large island and some bog sections suitable for nesting. This summer, loons were observed in six of seven visits, with one nest found which yielded two chicks. The chicks were observed throughout the summer with no mortalities. A game camera was placed in the vicinity of this nest. The pictures clearly showed that one of the parent loons was unbanded, with the other parent having a blue band on its right leg.

Main Lake Territory:

The Main Lake is a large territory that experiences significant motorboat traffic and high winds. Loons were observed on seven of eight visits. A loon with band number 0938-788-10 was observed on an island in this territory with two eggs. There were two territorial pairs in this territory, one of which was a nesting pair. This nesting pair produced two chicks. Only one of these chicks survived. In addition, a presumably unpaired loon was often observed.

Inlet Territory:

The Inlet offers ideal loon territory, with adequate wind protection, high bog composition, and inaccessibility to most motorboats due to shallow water and hidden rocks. All shorelines were carefully observed but no loons or nesting efforts by loons were observed.

East Bay:

The East Bay territory is comprised mostly of private homes. Loons were not observed at all during the summer in this territory. This may be because of high boat traffic in the area.

South Bay:

A nesting adult pair of loons was observed in South Bay. The pair had been using the artificial nest platform. One parent loon was always observed to be sitting over the eggs on the platform, while the other was seen not far away. It was reported by residents of the lake that this pair had been there for at least 10 years and had never had a successful nest. Once again, the nest failed and the eggs were collected and given to BRI staff. Towards the end of the summer, the pair continued to be active in South Bay. Both of the loons were unbanded.

Discussion

Throughout the 2015 field season, Joe Ritz observed three territorial pairs, two of which were nesting pairs and one lone loon throughout the three monitoring locations. From these nesting pairs, there were three successful fledglings and one chick that died, likely due to aggression by other loons. Erin Stoddard observed one pair in South Bay and also observed the pair with two chicks in the Main Lake. Unfortunately, bands could not be observed. One pair was confirmed to not have bands but the other pair could not be confirmed.

Figure 18. Aerial image of Big Moose Lake.

Conclusion

With increasing public awareness of the issues surrounding the common loons' survival, their future in the Adirondacks is looking more promising every year. The AWISP's role in the monitoring of common loons is vital to research efforts being conducted by BRI. Determining the impact of human activities on the common loon will help guide future regulations and management practices to ensure the livelihood of the species. Loon monitoring efforts are also beneficial to the AWISP because they provide an opportunity for stewards to survey the waters for AIS and any other potential ecological threats. The 2015 loon monitors enjoyed their dual role in ensuring the well-being of the common loon and helping protect Adirondack lakes. It is of utmost importance that we remain diligent in monitoring and protecting the common loon so we can ensure the call of the loon will be heard and enjoyed by generations to come.

Summit Stewarding

Summit stewarding is an important way to educate hikers about history, the environment and the importance of conservation. Three stewards, Lauren Henderson, Janelle Hoh and Jake Kuryla, used their special project day to steward on the summits of St. Regis Mountain and Bald Mountain. Throughout the summer, stewards interacted with hundreds of visitors and helped spread the word about conservation and preservation in the Adirondacks.

St. Regis Mountain

St. Regis Mountain is located in the town of Santa Clara in the northern Adirondacks. The trail is a gradual 3.3-mile ascent to the 2,874-foot summit and offers outstanding views of the St. Regis Canoe Area and the High Peaks to the south. The summit is home to a fire tower, which was built in 1918 and housed an observer. The observer lived in a cabin on the mountain and kept a watchful eye on the land, surveying for any forest fires during fire season. Due to the effectiveness of aerial and ground surveillance, the tower closed in 1990 and sat, deteriorating, on the summit. Fortunately, the Friends of St. Regis Mountain Fire Tower (FSRMFT) have been working tirelessly to restore the tower to its former glory. Restoration began in September of 2015 and will continue into 2016.

St. Regis Summit, photo by Janelle Hoh.

Lauren Henderson and Janelle Hoh stewarded on St. Regis and typically climbed the mountain on Wednesdays, depending on weather and scheduling. While at the summit, Lauren and Janelle saw on average 20-30 hikers. August 19th was busiest day at the summit with the two stewards interacting with 40-45 hikers.

A large part of Lauren and Janelle's summit stewarding experience consisted of talking about the fire tower. A subject so rich in history brought no shortage of conversations. Topics ranged from the history (and future) of the Fire Tower itself to the role of Fire Tower Observers in the past to identifying all the lakes, ponds and mountains that can be seen from the summit. The stewards met some hikers from Michigan and Minnesota and the group discussed zebra mussels

and other invasive species, both terrestrial and aquatic. Lauren and Janelle found that even though they were outside of their normal workstations, people generally were inclined to talk about invasive species.

Lauren and Janelle worked with the FSRMFT and the AWISP to create educational materials for future stewards. FSRMFT created summit cards for Lauren and Janelle to hand out on the top. Summit cards were signed and dated by the stewards, allowing hikers to keep an official record of their ascent. The summit cards were popular with younger hikers, who were thrilled to be able to return off the mountain with a card acknowledging their climb. In addition to the summit cards, Lauren created a brochure with information on the history of the mountain and fire tower. Janelle created an activity booklet that kids can complete to become "Junior Observers of St. Regis Mountain."

Janelle was able to help FSRMFT in other ways. In the beginning on the season, on National Trails Day on June 6th, Janelle assisted FSRMFT, the Department of Environmental Conservation (DEC), the Student Conservation Association (SCA) and other volunteers with building footbridges over a wet, boggy area of the trail. Wood and contraction tools were carried to the location and many hands made light work of the construction. As noted earlier, restoration of the Fire Tower began in September 2015. Janelle and fellow steward Jon Nielsen were able to join the efforts and partner with FSRMFT and the SCA to build new stairs, railings, and floors on the Fire Tower. Jon and Janelle also carried supplies down the mountain on the last day of construction.

Table 19. Number of visitors reached while summit stewarding on St. Regis Mountain.

Date	# of Visitors Reached
June 10th, 2015	25
June 17th, 2015	20
June 24th, 2015	22
July 8th, 2015	26
July 29th, 2015	45
August 19th, 2015	31
September 2nd, 2015	10
	TOTAL: 179

Bald Mountain

Bald Mountain, located northeast of Old Forge, is one of the most visited mountains in NYS. Throughout the summer, Jake Kuryla used his special project day to summit Bald Mountain and educate visitors about the history of the mountain. The trail, located off State Route 28 on Rondaxe Road, is a one-mile hike to the top and climbs approximately 2,300 ft. The summit offers stunning views of the Fulton Chain of Lakes.

The fire tower located at the summit was originally built in 1912 and was used to observe fires until 1990. Those manning the tower would stay in a cabin atop the mountain and live there throughout the year. Early observers raised families while working on the mountain. The fire tower was closed in 1991 after being deemed unsafe to the public. In 2001, the local volunteer group Friends of Bald Mountain began a restoration project on the tower in 2001. In 2005, the tower was reopened to the public and remains one of the most visited, attracting about 10,000-15,000 hikers annually.

The summit steward began his ascent at 7 am every Monday or Thursday and talked to visitors at the summit until 3:30 pm. While at the summit, Kuryla would record how many hikers he saw, talk to them about the history of the mountain and the fire tower and would answer questions. He also spoke to the visitors about the importance of the "leave no trace" policy. The number of hikers generally increased as the summer went on with a high count of 401 hikers atop the mountain on 8/6/15 and a low count of 3 hikers on 6/15/15. The low visitation days were mainly attributed to frequent rain in the early weeks of summer. Kuryla was able to speak with a total of 817 visitors.

Overall, summit stewarding is a great way to educate the public about local history and the environment. Stewards were able to interact with hundreds of hikers throughout the summer. Through education, visitors get a better understanding of their environment and the importance of prrfor generations to come.

Table 20. Number of visitors reached while summit stewarding on Bald Mountain.

Date	# of Visitors Reached
June 15th, 2015	3
July 27th, 2015	161
August 6th, 2015	401
August 17th, 2015	252
	TOTAL: 817

Spatial and Temporal Conductivity in Adirondack Streams

By Sue O'Reilly

Stewards recorded water conductivity and sampled macroinvertebrate populations in small mountain streams as a component of Dr. Dan Kelting's research into the effects of road salt runoff in the Adirondack watershed. New York State is the leading user of road salt in the United States, and this research is vital to finding solutions for road salt runoff and ground water pollution.

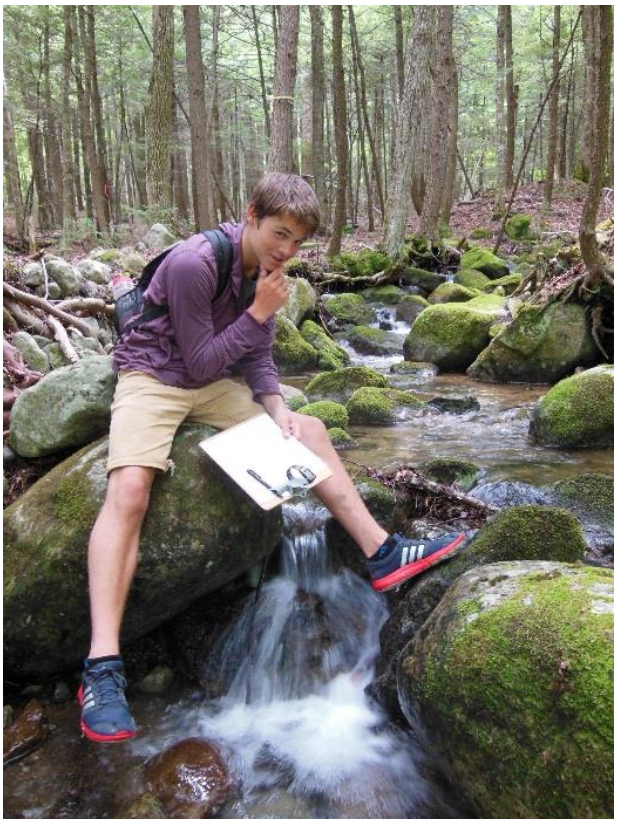
Methods

Study site

The study was conducted in 18 upland streams in the northern Adirondack Park in upstate New York, USA. The focal region was a montane area with dominant terrestrial vegetation including coniferous, mixed, and deciduous forest, which encompasses the headwaters of three regionally-important rivers: the Boquet, Ausable, and Saranac. Streams were selected based on the following criteria: (1) occupying separate watersheds; (2) the presence of largely undisturbed upstream terrestrial habitat; (3) encompassing a gradient of road-salt concentrations. After an initial series of measurements on all streams in the set, three streams were chosen for repeated measurements during the last three weeks of the study.

Data collection

Water temperature and specific conductivity as a surrogate for NaCl concentration were collected using the YSI 556 handheld multiparameter instrument. As this was an evolving study, distances were first determined in 40-meter increments by tape and later by 40-meter pace increments marked by GPS waypoints. Measurements for streams crossing roadways began as far downstream as practical and continued 400 meters upstream of the roadway wherever possible. Since the measurements required free-flowing water for accuracy, the upstream distance was not always possible due to stream interruptions caused by beaver dams. Measurements for control streams that did not cross roadways began at the permanent AWI stream gauge locations and continued upstream for 400 meters.



Steward Cougar Smith at South Branch Brook.

Location Use Data Summaries

Cadyville Decontamination Station

Opening date: 3 July 2015

Boats inspected: 23
AIS intercepted: 1
Number of visitors: 35
Visitors taking spread prevention measures: 76%
Inspected boats with organisms: 30.4%
Number of previously visited waterways: 6

Waterbody	Boat Type									total # boats
	M	PWC	S	C	K	B	R	SUP	Docks	
Cadyville DECON SITE	18	0	0	2	3	0	0	0	0	23
percentage of total boats	78%	0%	0%	9%	13%	0%	0%	0%	0%	100%

Boats observed at site. M = motorboat; PWC = personal watercraft; S = sailboat; C = canoe; K = kayak; B = construction barge; R = rowboat; SUP= stand-up paddleboard; Docks = boat docks launched for seasonal installation/maintenance

Waterbody	total # people	organisms found	# boats dirty	# of inspections	% of inspected boats dirty
Cadyville DECON SITE	35	8	7	23	30.4%

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

Waterbody	# groups taking AIS spread prevention measures									# groups asked
	yes	I	WB	DB	BB	LW	Dis	Dry	didn't ask	
Cadyville DECON SITE	16	10	11	5	1	0	0	2	0	21
percentage of total # groups asked	76%	48%	52%	24%	5%	0%	0%	10%	NA	

Yes = took one or more AIS spread prevention measures; I = inspected boat; WB = washed boat; DB = drained bilge; BB = emptied bait bucket; LW = drained livewell; Dis = disposed of unused bait; Dry = dried boat.

Waterbody	Organism Type																total AIS	% of inspected boats with AIS
	BW	CLP*	ELO	GRS	EWM*	NM	UM	VLM*	MUD	NON	NP	SWF*	WC*	WL	ZM*	other		
Cadyville DECON SITE	0	0	0	2	1	0	1	0	1	3	0	0	0	0	0	0	1	4.3%
percentage of organisms removed	0%	0%	0%	25%	13%	0%	13%	0%	13%	38%	0%	0%	0%	0%	0%	0%		

BW = bladderwort; CLP = curly-leaf pondweed; ELO = elodea; GRS = grass; EWM = Eurasian watermilfoil; NM = native milfoil; UM = unknown milfoil; VLM = variable leaf milfoil; MUD = mud; NON = non-aquatic debris; NP = native pondweed; SWF = spiny waterflea; WC= water chestnut; WL= water lily; ZM = Zebra mussel; */AIS = aquatic invasive species.

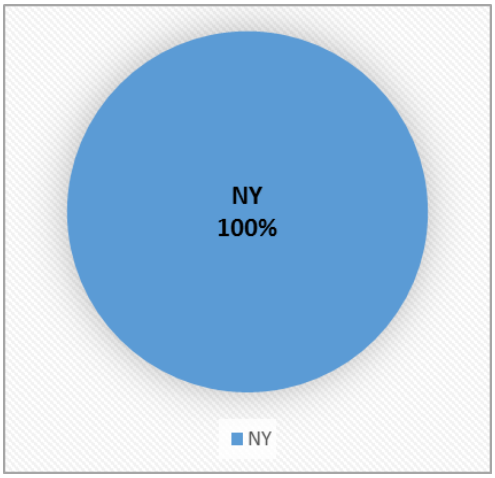
Cadyville DECON SITE: Aquatic Invasive Species Intercepted by Stewards, 2015	# found at roadside site	Previous Waterway
Eurasian water milfoil	1	Chateaugay Lake (1)

Adirondack Watershed Institute Stewardship Program
Dr. Eric Holmlund, Director. P.O. Box 265, Paul Smiths NY, 12970
Telephone: (518) 327-6341. Email: eholmlund@paulsmiths.edu
www.adkwatershed.org

Paul Smith's College
THE COLLEGE OF THE ADIRONDACKS

Cadyville DECON SITE: Previous Waterways visited, 2015	# visits
Lake Champlain	5
None	5
Chateaugay Lake	3
Chazy Lake	2
Saranac River	2
Unknown	2
Fish Creek Ponds	1
Upper St Regis Lake	1
Total	**21**

State of Boat Registration



Steward decontaminates a boat after inspection.

Chateaugay Lake

Decontamination station opening date: 22 June 2015

Boats inspected: 1,883
AIS intercepted: 89
Number of visitors: 4,435

Visitors taking spread prevention measures: 65%
Inspected boats with organisms: 11.5%
Number of previously visited waterways: 48

Waterbody	Boat Type									total # boats
	M	PWC	S	C	K	B	R	SUP	Docks	
Chateaugay Lake (launch & decon)	1678	129	4	9	86	1	5	1	0	1913
percentage of total boats	88%	7%	0%	0%	4%	0%	0%	0%	0%	100%
Chateaugay Lake (decon only)	886	67	2	6	44	0	5	0	0	1010
percentage of total boats	88%	7%	0%	1%	4%	0%	0%	0%	0%	100%

Boats observed at launch. M = motorboat; PWC = personal watercraft; S = sailboat; C = canoe; K = kayak; B = construction barge; R = rowboat; SUP= stand-up paddleboard; Docks = boat docks launched for seasonal installation/maintenance

Waterbody	total # people	organisms found		# boats dirty	# of inspections	% of inspected boats dirty
		entering	leaving			
Chateaugay Lake (launch & decon)	4435	110	231	217	1883	11.5%
Chateaugay Lake (decon only)	2432	45	122	104	1002	10.4%

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

Waterbody	# groups taking AIS spread prevention measures									# groups asked
	yes	I	WB	DB	BB	LW	Dis	Dry	didn't ask	
Chateaugay Lake (launch & decon)	1163	916	1062	445	25	318	14	612	85	1784
percentage of total # groups asked	65%	51%	60%	25%	1%	18%	1%	34%	NA	
Chateaugay Lake (decon only)	581	452	531	252	6	199	4	346	41	946
percentage of total # groups asked	61%	48%	56%	27%	1%	21%	0%	37%	NA	

Yes = took one or more AIS spread prevention measures; I = inspected boat; WB = washed boat; DB = drained bilge; BB = emptied bait bucket; LW = drained livewell; Dis = disposed of unused bait; Dry = dried boat.

Waterbody	Organism Type																total AIS	% of inspected boats with AIS
	BW	CLP*	ELO	GRS	EWM*	NM	UM	VLM*	MUD	NON	NP	SWF*	WC*	WL	ZM*	other		
Chateaugay Lake (launch & decon)	1	4	37	93	81	7	5	0	17	60	16	1	0	8	3	8	89	4.7%
percentage of organisms removed	0%	1%	11%	27%	24%	2%	1%	0%	5%	18%	5%	0%	0%	2%	1%	2%		
Chateaugay Lake (decon only)	0	2	22	34	52	3	3	0	8	23	13	1	0	1	3	6	58	5.8%
percentage of organisms removed	0%	1%	13%	20%	30%	2%	2%	0%	5%	13%	8%	1%	0%	1%	2%	4%		

BW = bladderwort; CLP = curly-leaf pondweed; ELO = elodea; GRS = grass; EWM = Eurasian watermilfoil; NM = native milfoil; UM = unknown milfoil; VLM = variable leaf milfoil; MUD = mud; NON = non-aquatic debris; NP = native pondweed; SWF = spiny waterflea; WC= water chestnut; WL= water lily; ZM = Zebra mussel; */AIS = aquatic invasive species.

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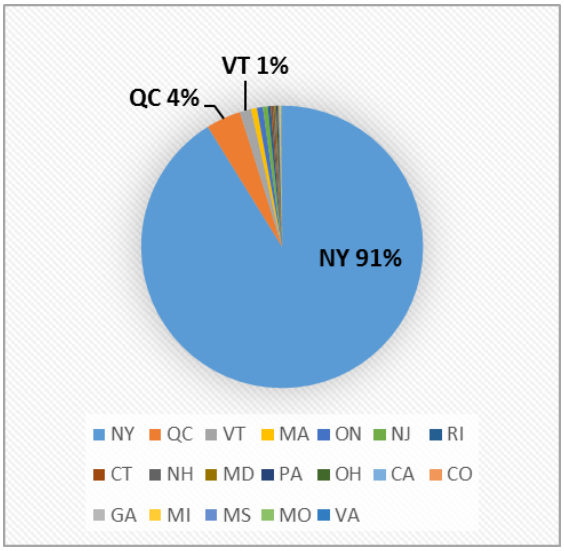
Chateaugay Lake: Aquatic Invasive Species Intercepted by Stewards, 2015	# found on boats launching	Previous Waterway	# found on boats retrieving	Top 5 Previous Waterway
Curly-leaf pondweed	1	*None* (1)	3	Chateaugay Lake (3)
Eurasian water milfoil	18	Chateaugay Lake (13), *Unknown* (3), *None* (1), St. Lawrence River (1),	63	Chateaugay Lake (44), Lake Champlain (4), Lake Kushaqua (1), *None* (2), St. Lawrence River (1), *Unknown* (10), Upper Saranac Lake (1)
Spiny waterflea	1	Lake Champlain (1)	0	N/A
Zebra mussel	3	Lake Champlain (3)	0	N/A
Totals	**23**		**66**	

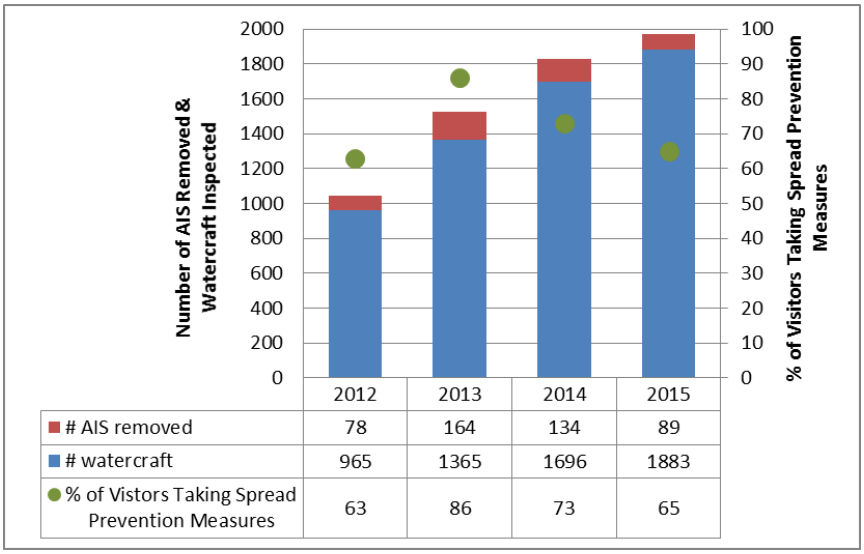
Previous Waterways visited, 2015	# visits
Chateaugay Lake	1254
None	357
Lake Champlain	81
Unknown	41
Chazy Lake	26
St. Lawrence River	17
Meacham Lake	15
Lower Saranac Lake	7
Upper Saranac Lake	5
Saranac Lake Chain	4
Saranac River	4
Saratoga Lake	4
Lake George	3
Lower St Regis Lake	3
Buck Pond	2
Canandaigua Lake	2
Fish Creek Ponds	2
Franklin Falls Flow	2

Previous Waterways visited, 2015	# visits
Lake Colby	2
Mountain View Lake	2
Upper St Regis Lake	2
Lake Kushaqua	2
Silver Lake, Wyoming County NY	2
Waterbury Reservoir, Waterbury VT	2
Carry Falls Reservoir	1
Cayuga Lake	1
Conesus Lake	1
Cranberry Lake	1
Forked Lake	1
Hudson River	1
Indian Lake	1
Lake Flower	1
Lake Ontario	1
Lake Placid	1
Long Lake	1
Mohawk River	1

Previous Waterways visited, 2015	# visits
Osgood Pond	1
Raquette Lake	1
Raquette River	1
Rental	1
Rollins Pond	1
Schroon Lake	1
Second Pond	1
Taylor Pond	1
Tupper Lake	1
Niagara River	1
Grasse River, St. Lawrence County NY	1
Owasco Lake	1
Lake Titus	1
Ottawa River	1
Salmon River	1
Stark Falls Reservoir, Colton NY	1
Total	**1869**

State of Boat Registration





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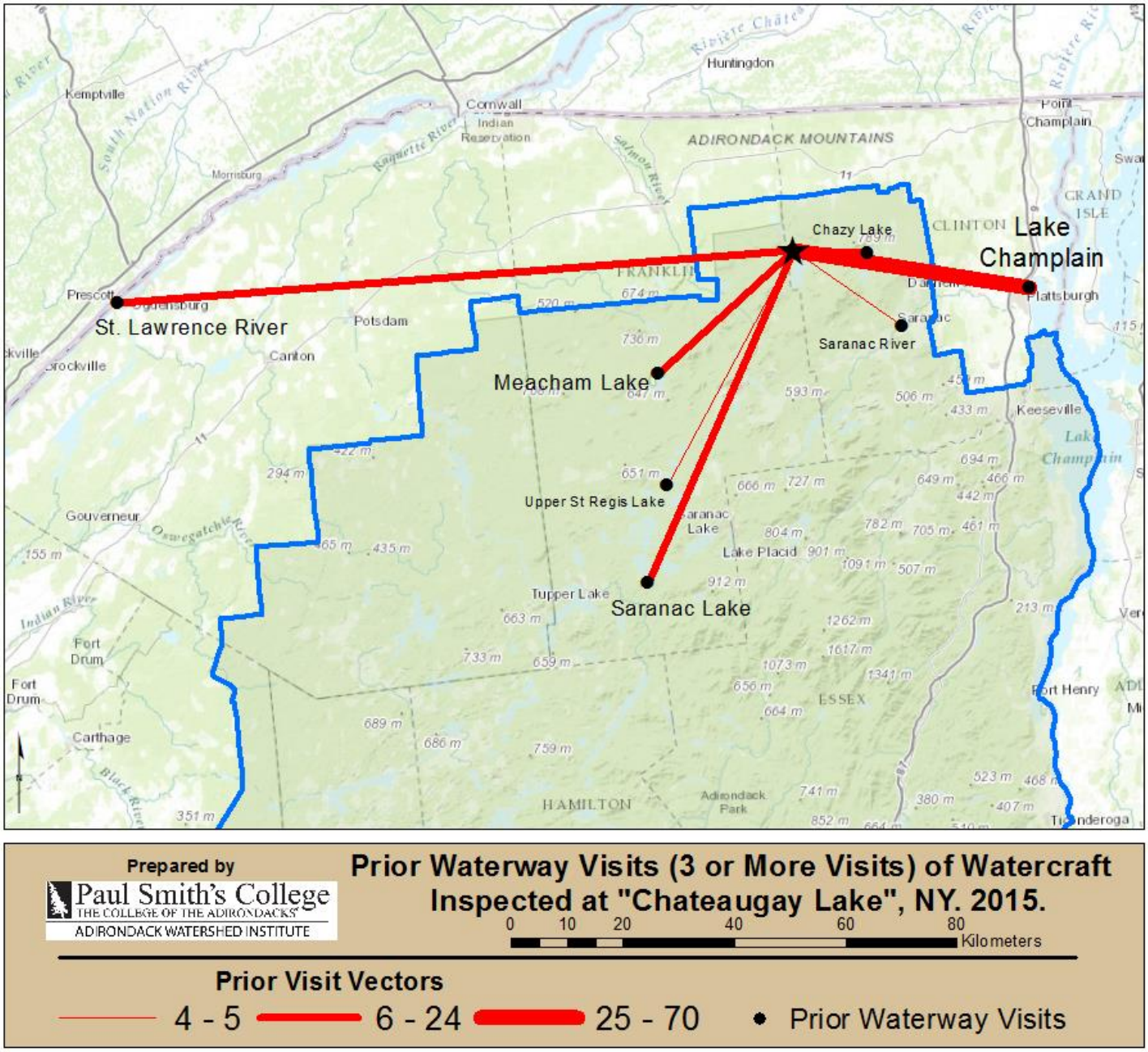

Waterways visited in previous 2 weeks by incoming vessels to Chateaugay Lake. Vectors weighted to denote quantity of visits to previous waterbodies.

Clifton Fine Decontamination Station

Opening date: 23 May 2015

Boats inspected: 364
AIS intercepted: 5
Number of visitors: 702

Visitors taking spread prevention measures: 59%
Inspected boats with organisms: 4.7%
Number of previously visited waterways: 40

Waterbody	Boat Type									total # boats
	M	PWC	S	C	K	B	R	SUP	Docks	
Clifton Fine DECON SITE	257	6	2	50	53	0	2	1	0	371
percentage of total boats	69%	2%	1%	13%	14%	0%	1%	0%	0%	100%

Boats observed at site. M = motorboat; PWC = personal watercraft; S = sailboat; C = canoe; K = kayak; B = construction barge; R = rowboat; SUP= stand-up paddleboard; Docks = boat docks launched for seasonal installation/maintenance

Waterbody	total # people	organisms found	# boats dirty	# of inspections	% of inspected boats dirty
Clifton Fine DECON SITE	702	25	17	364	4.7%

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

Waterbody	# groups taking AIS spread prevention measures									# groups asked
	yes	I	WB	DB	BB	LW	Dis	Dry	didn't ask	
Clifton Fine DECON SITE	172	122	86	38	2	9	0	49	24	294
percentage of total # groups asked	59%	41%	29%	13%	1%	3%	0%	17%	NA	

Yes = took one or more AIS spread prevention measures; I = inspected boat; WB = washed boat; DB = drained bilge; BB = emptied bait bucket; LW = drained livewell; Dis = disposed of unused bait; Dry = dried boat.

Waterbody	Organism Type																total AIS	% of inspected boats with AIS
	BW	CLP*	ELO	GRS	EWM*	NM	UM	VLM*	MUD	NON	NP	SWF*	WC*	WL	ZM*	other		
Clifton Fine DECON SITE	0	0	2	5	3	0	2	0	0	3	3	0	0	0	2	5	5	1.4%
percentage of organisms removed	0%	0%	8%	20%	12%	0%	8%	0%	0%	12%	12%	0%	0%	0%	8%	20%		

BW = bladderwort; CLP = curly-leaf pondweed; ELO = elodea; GRS = grass; EWM = Eurasian watermilfoil; NM = native milfoil; UM = unknown milfoil; VLM = variable leaf milfoil; MUD = mud; NON = non-aquatic debris; NP = native pondweed; SWF = spiny waterflea; WC= water chestnut; WL= water lily; ZM = Zebra mussel; */AIS = aquatic invasive species.

Clifton Fine DECON SITE: Aquatic Invasive Species Intercepted, 2015	# found at roadside site	Previous Waterway
Eurasian water milfoil	3	*Unknown* (2), St. Lawrence River (1)
Zebra mussel	2	St. Lawrence River (2)
Totals	**5**	

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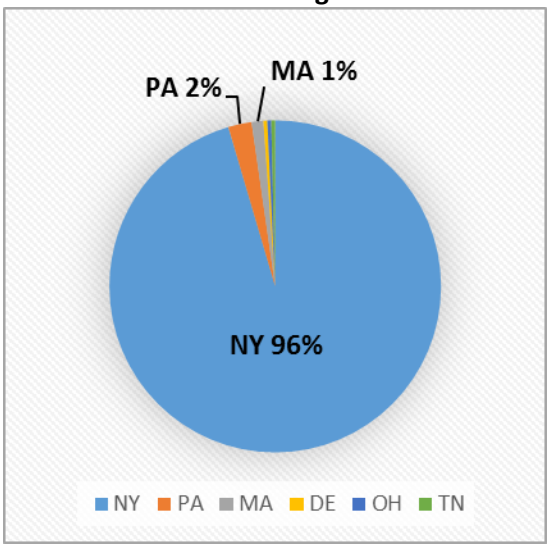
Previous Waterways visited, 2015	# visits
None	97
Cranberry Lake	85
Unknown	37
Lake Ontario	12
Oswegatchie River	10
Fish Creek Ponds	9
St. Lawrence River	8
Oneida Lake	6
Raquette River	5
Carry Falls Reservoir	4
Upper Saranac Lake	4
Lake Erie	3
Tupper Lake	3
Lake Bonaparte	3
Canandaigua Lake	2
Keuka Lake	2
Meacham Lake	2
Middle Saranac Lake	2
Atlantic Ocean	1
Cayuga Lake	1
Chateaugay Lake	1

Previous Waterways visited, 2015	# visits
Conesus Lake	1
Delta Lake	1
Erie Canal	1
Indian Lake	1
Lake Placid	1
Little Tupper Lake	1
Long Lake	1
Lower Saranac Lake	1
Rollins Pond	1
Saranac Lake Chain	1
Saranac River	1
Saratoga Lake	1
Skaneateles Lake	1
Stillwater Reservoir	1
Black River	1
Long Pond (St Regis Canoe Area)	1
Horseshoe Lake	1
Niagara River	1
Little River	1
Star Lake	1
Strawberry Lake, McLean County ND	1
Total	**318**

State of Boat Registration



Cranberry Lake

Boats inspected: 1,233
AIS intercepted: 13
Number of visitors: 2,955

Visitors taking spread prevention measures: 53%
Inspected boats with organisms: 6.7%
Number of previously visited waterways: 56

Waterbody	Boat Type									total # boats
	M	PWC	S	C	K	B	R	SUP	Docks	
Cranberry Lake	1142	40	3	53	61	1	4	0	0	1304
percentage of total boats	88%	3%	0%	4%	5%	0%	0%	0%	0%	100%

Boats observed at launch. M = motorboat; PWC = personal watercraft; S = sailboat; C = canoe; K = kayak; B = construction barge; R = rowboat; SUP= stand-up paddleboard; Docks = boat docks launched for seasonal installation/maintenance

Waterbody	total # people	organisms found		# boats dirty	# of inspections	% of inspected boats dirty
		entering	leaving			
Cranberry Lake	2955	30	90	83	1233	6.7%

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

Waterbody	# groups taking AIS spread prevention measures									# groups asked
	yes	I	WB	DB	BB	LW	Dis	Dry	didn't ask	
Cranberry Lake	612	421	368	245	10	56	3	148	66	1164
percentage of total # groups asked	53%	36%	32%	21%	1%	5%	0%	13%	NA	

Yes = took one or more AIS spread prevention measures; I = inspected boat; WB = washed boat; DB = drained bilge; BB = emptied bait bucket; LW = drained livewell; Dis = disposed of unused bait; Dry = dried boat.

Waterbody	Organism Type																total AIS	% of inspected boats with AIS
	BW	CLP*	ELO	GRS	EWM*	NM	UM	VLM*	MUD	NON	NP	SWF*	WC*	WL	ZM*	other		
Cranberry Lake	6	1	2	30	4	5	3	7	0	37	6	0	0	11	1	7	13	1.1%
percentage of organisms removed	5%	1%	2%	25%	3%	4%	3%	6%	0%	31%	5%	0%	0%	9%	1%	6%		

BW = bladderwort; CLP = curly-leaf pondweed; ELO = elodea; GRS = grass; EWM = Eurasian watermilfoil; NM = native milfoil; UM = unknown milfoil; VLM = variable leaf milfoil; MUD = mud; NON = non-aquatic debris; NP = native pondweed; SWF = spiny waterflea; WC= water chestnut; WL= water lily; ZM = Zebra mussel; */AIS = aquatic invasive species.

Cranberry Lake: Aquatic Invasive Species Intercepted by Stewards, 2015	# found on boats launching	Previous Waterway	# found on boats retrieving	Previous Waterway
Curly leaf pondweed	1	Lake Erie (1)	0	N/A
Eurasian water milfoil	4	Lake Erie (1), Lake Ontario (1), St. Lawrence River (1), *Unknown* (1)	0	N/A
Variable leaf milfoil	1	Cranberry Lake (1)	6	Cranberry Lake (6)
Zebra mussel	1	St. Lawrence River (1)	0	N/A
Totals	**7**		**6**	

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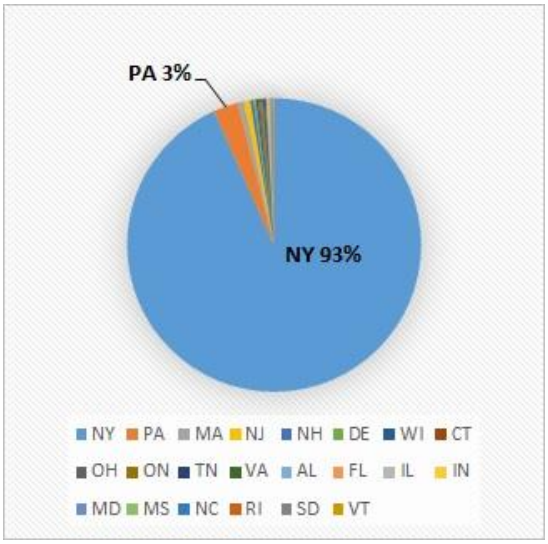
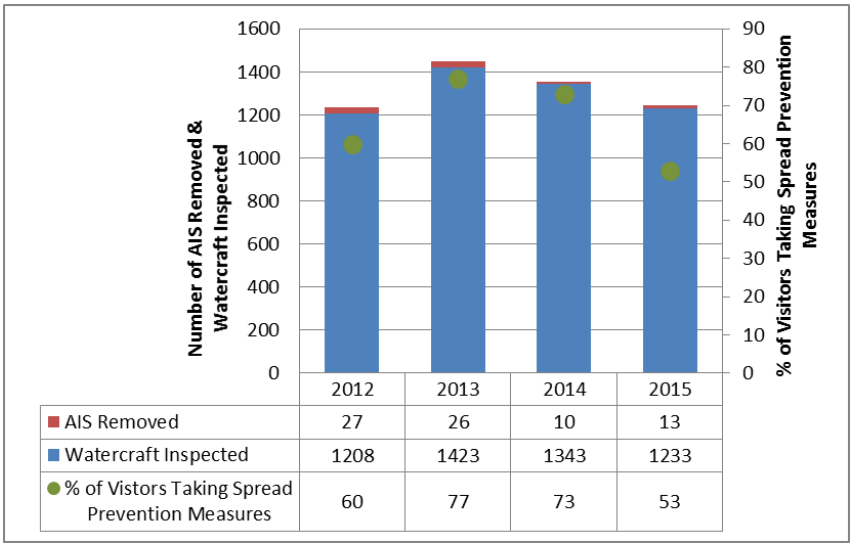
Previous Waterways visited, 2015	# visits
Cranberry Lake	643
None	266
Unknown	77
Did not ask	40
St. Lawrence River	39
Lake Ontario	29
Raquette River	9
Carry Falls Reservoir	7
Oneida Lake	7
Oswegatchie River	7
Tupper Lake	6
Upper Saranac Lake	6
Lake Bonaparte	6
Conesus Lake	5
Canandaigua Lake	4
Hinckley Flow Reservoir	4
Lake Champlain	4
Black River	4
Cayuga Lake	3
Lake Placid	3
Rental	3

Previous Waterways visited, 2015	# visits
Stillwater Reservoir	3
Black Lake	3
Chateaugay Lake	2
Fourth Lake	2
Keuka Lake	2
Lake Erie	2
Lake Flower	2
Long Lake	2
Lower Saranac Lake	2
Lows Lake	2
Raquette Lake	2
Saranac Lake Chain	2
Seneca Lake	2
Skaneateles Lake	2
North-South Lake, Hunter NY	2
Grasse River, St. Lawrence County NY	2
Atlantic Ocean	1
Big Moose Lake	1
Forked Lake	1
Great Sacandaga Lake	1

Previous Waterways visited, 2015	# visits
Hudson River	1
Kayuta Lake	1
Lake George	1
Middle Saranac Lake	1
Mirror Lake	1
Mohawk River	1
Rollins Pond	1
Sacandaga Lake	1
Seventh Lake	1
Upper St Regis Lake	1
Lake Durant	1
Payne Lake, Antwerp NY	1
Susquehanna River	1
Moose River	1
White River, VT	1
Shohola Lake, Pike County PA	1
somewhere in New Hampshire	1
Blake Falls Reservoir, St. Lawrence Cou	1
somewhere in Maryland	1
Ingrams Pond, Millsboro DE	1
Total	**1230**

State of Boat Registration





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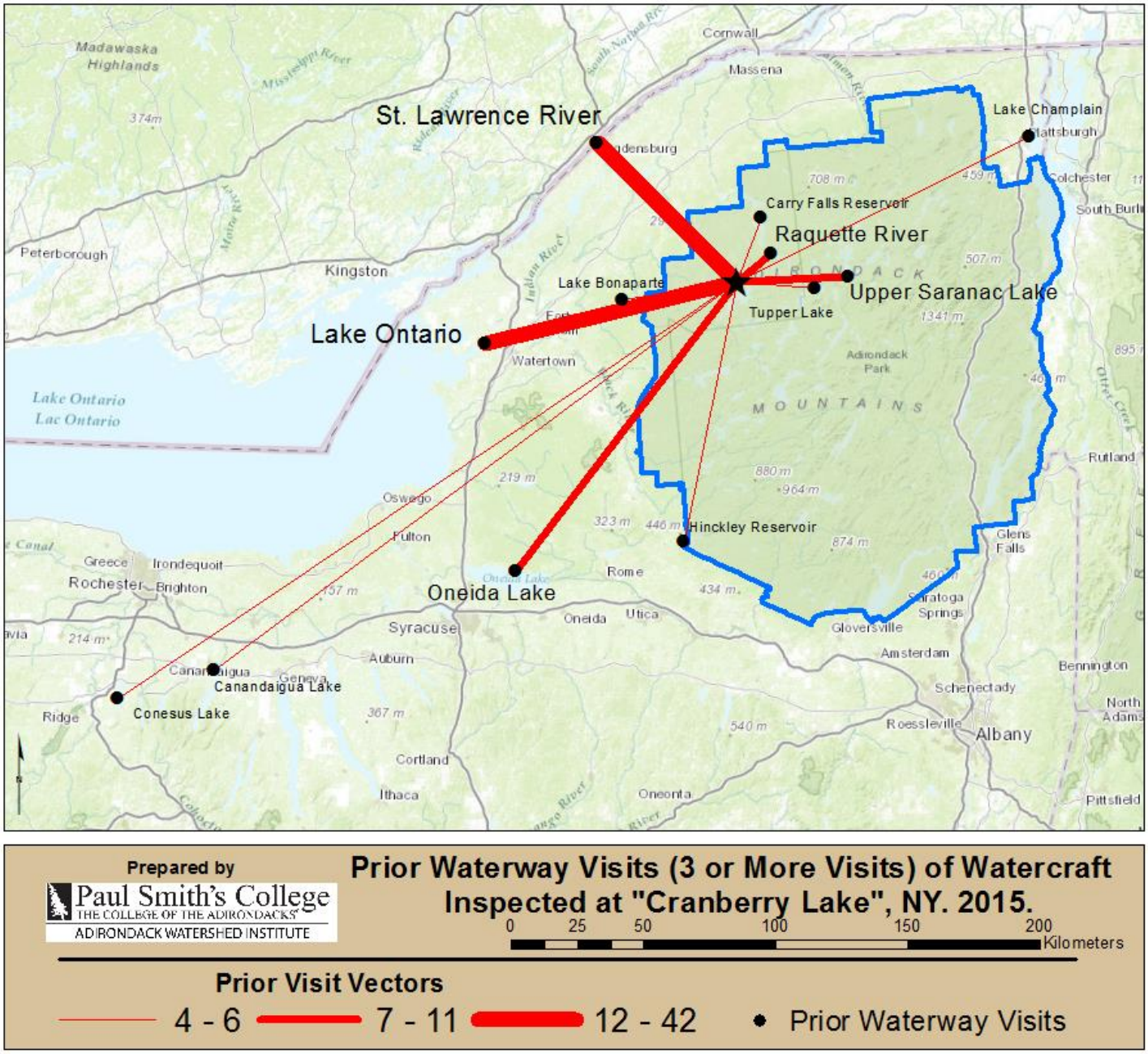

Waterways visited in previous 2 weeks by incoming vessels to Cranberry Lake. Vectors weighted to denote quantity of visits to previous waterbodies.

Eighth Lake, First Lake, Fourth Lake, Limekiln Lake, Seventh Lake, Stillwater Reservoir and White Lake

Boats inspected: 4,037
Visitors taking spread prevention measures: 69%
AIS intercepted: 5
Inspected boats with organisms: 5.4%
Number of visitors: 9,141
Numbers of previously visited waterways: 212

Waterbody	Boat Type									total # boats
	M	PWC	S	C	K	B	R	SUP	Docks	
Eighth Lake	1	0	0	0	0	0	0	0	0	1
percentage of total boats	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%
First Lake	6	6	0	0	1	0	0	0	0	13
percentage of total boats	46%	46%	0%	0%	8%	0%	0%	0%	0%	100%
Fourth Lake	1798	364	26	33	120	0	8	3	0	2352
percentage of total boats	76%	15%	1%	1%	5%	0%	0%	0%	0%	100%
Limekiln Lake	4	0	0	3	13	0	0	0	0	20
percentage of total boats	20%	0%	0%	15%	65%	0%	0%	0%	0%	100%
Seventh Lake	125	18	3	26	120	0	1	2	0	295
percentage of total boats	42%	6%	1%	9%	41%	0%	0%	1%	0%	100%
Stillwater Reservoir	672	18	6	58	77	0	18	0	0	849
percentage of total boats	79%	2%	1%	7%	9%	0%	2%	0%	0%	100%
White Lake	239	143	6	33	152	3	8	21	1	606
percentage of total boats	39%	24%	1%	5%	25%	0%	1%	3%	0%	100%
totals	1047	185	15	120	363	3	27	23	1	4136
percentage of total boats	25%	4%	0%	3%	9%	0%	1%	1%	0%	100%

Boats observed at launch. M = motorboat; PWC = personal watercraft; S = sailboat; C = canoe; K = kayak; B = construction barge; R = rowboat; SUP= stand-up paddleboard; Docks = boat docks launched for seasonal installation/maintenance

Waterbody	total # people	organisms found		# boats dirty	# of inspections	% of inspected boats dirty
		entering	leaving			
Eighth Lake	2	0	0	0	1	0%
First Lake	32	0	0	0	12	0%
Fourth Lake	5328	106	74	175	2275	7.7%
Limekiln Lake	35	0	0	0	20	0%
Seventh Lake	548	15	13	27	288	9.4%
Stillwater Reservoir	2005	9	1	10	845	1.2%
White Lake	1191	9	1	6	596	1.0%
totals	9141	139	89	218	4037	5.4%

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

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Waterbody	# groups taking AIS spread prevention measures									# groups asked
	yes	I	WB	DB	BB	LW	Dis	Dry	didn't ask	
Eighth Lake	1	0	1	0	0	0	0	1	0	1
percentage of total # groups asked	100%	0%	100%	0%	0%	0%	0%	100%	NA	
First Lake	7	3	5	0	0	0	0	0	1	12
percentage of total # groups asked	58%	25%	42%	0%	0%	0%	0%	0%	NA	
Fourth Lake	1724	1325	1488	156	2	7	9	1242	112	2087
percentage of total # groups asked	83%	63%	71%	7%	0%	0%	0%	60%	NA	
Limekiln Lake	3	3	1	0	0	0	0	0	0	13
percentage of total # groups asked	23%	23%	8%	0%	0%	0%	0%	0%	NA	
Seventh Lake	104	23	61	10	0	0	0	34	33	194
percentage of total # groups asked	54%	12%	31%	5%	0%	0%	0%	18%	NA	
Stillwater Reservoir	377	178	243	82	25	26	21	67	7	765
percentage of total # groups asked	49%	23%	32%	11%	3%	3%	3%	9%	NA	
White Lake	230	139	192	67	14	5	14	108	54	455
percentage of total # groups asked	51%	31%	42%	15%	3%	1%	3%	24%	NA	
totals	2446	1671	1991	315	41	38	44	1452	207	3527
percentage of total # groups asked	69%	47%	56%	9%	1%	1%	1%	41%	NA	

Yes = took one or more AIS spread prevention measures; I = inspected boat; WB = washed boat; DB = drained bilge; BB = emptied bait bucket; LW = drained livewell; Dis = disposed of unused bait; Dry = dried boat.

Waterbody	Organism Type																total AIS	% of inspected boats with AIS
	BW	CLP*	ELO	GRS	EWM*	NM	UM	VLM*	MUD	NON	NP	SWF*	WC*	WL	ZM*	other		
Eighth Lake	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
percentage of organisms removed	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
First Lake	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
percentage of organisms removed	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Fourth Lake	0	0	1	7	2	0	1	1	0	139	0	0	0	0	0	29	3	0.1%
percentage of organisms removed	0%	0%	1%	4%	1%	0%	1%	1%	0%	77%	0%	0%	0%	0%	0%	16%		
Limekiln Lake	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
percentage of organisms removed	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Seventh Lake	0	0	0	6	0	1	0	0	2	18	0	0	0	0	0	1	0	0%
percentage of organisms removed	0%	0%	0%	21%	0%	4%	0%	0%	7%	64%	0%	0%	0%	0%	0%	4%		
Stillwater Reservoir	0	0	0	0	1	0	0	0	0	7	0	0	1	0	0	1	2	0.2%
percentage of organisms removed	0%	0%	0%	0%	10%	0%	0%	0%	0%	70%	0%	0%	10%	0%	0%	10%		
White Lake	0	0	0	1	0	0	0	0	3	3	0	0	0	0	0	3	0	0%
percentage of organisms removed	0%	0%	0%	10%	0%	0%	0%	0%	30%	30%	0%	0%	0%	0%	0%	30%		
totals	0	0	1	14	3	1	1	1	5	167	0	0	1	0	0	34	5	0.1%
percentage of organisms removed	0%	0%	0%	6%	1%	0%	0%	0%	2%	73%	0%	0%	0%	0%	0%	15%		

BW = bladderwort; CLP = curly-leaf pondweed; ELO = elodea; GRS = grass; EWM = Eurasian watermilfoil; NM = native milfoil; UM = unknown milfoil; VLM = variable leaf milfoil; MUD = mud; NON = non-aquatic debris; NP = native pondweed; SWF = spiny waterflea; WC= water chestnut; WL= water lily; ZM = Zebra mussel; */AIS = aquatic invasive species.

Black River Watershed: Aquatic Invasive Species Intercepted by Stewards, 2015	# found on boats launching	Previous Waterway	# found on boats retrieving	Previous Waterway
Eurasian water milfoil	3	Fourth Lake: *None* (1), Oneida Lake (1) Stillwater: Oneida Lake (1)	0	N/A
Variable leaf milfoil	0	N/A	1	Fourth Lake: Fourth Lake (1)
Water chestnut	1	Stillwater: Seneca Lake (1)	0	N/A
Totals	**4**		**1**	

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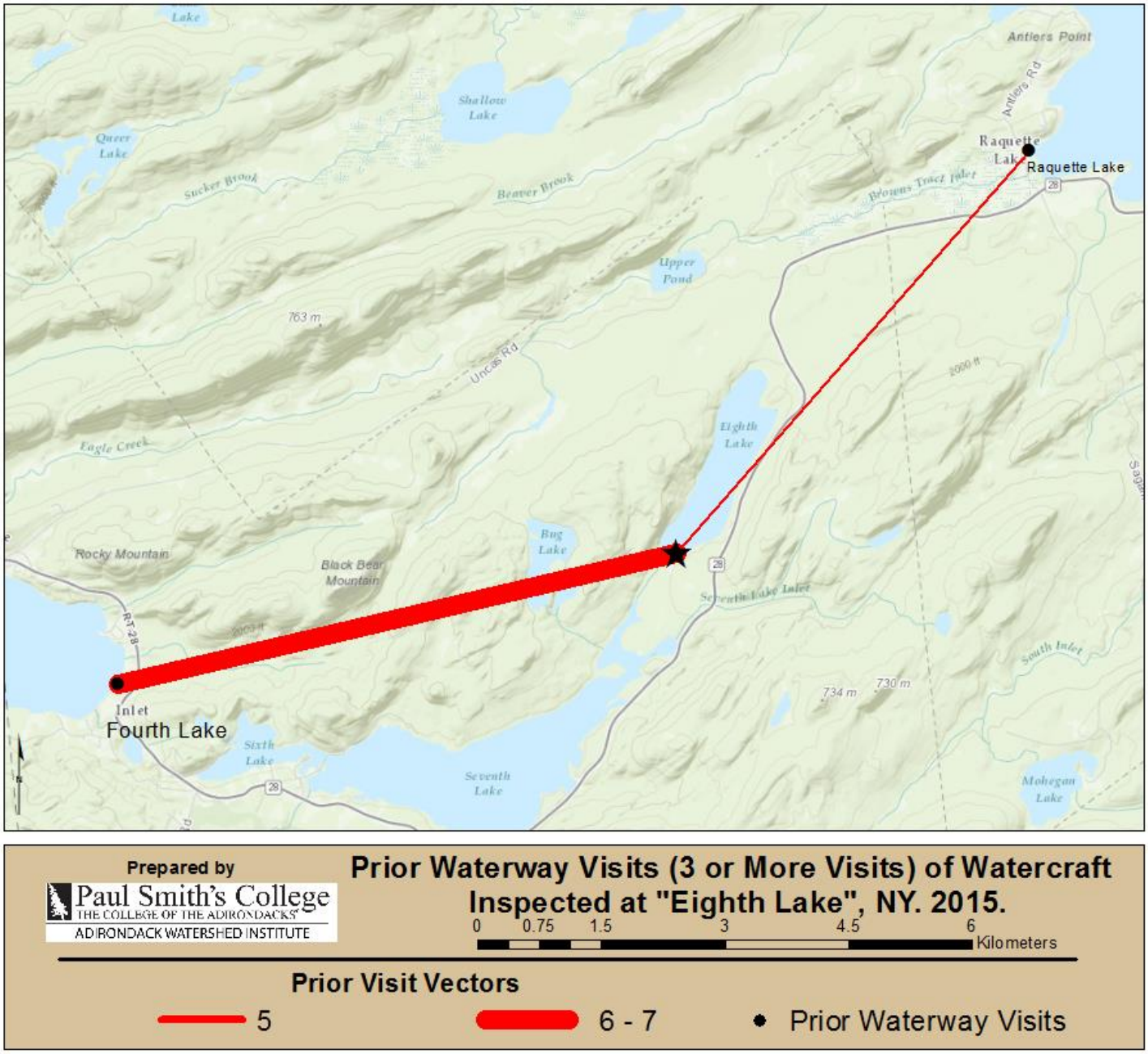
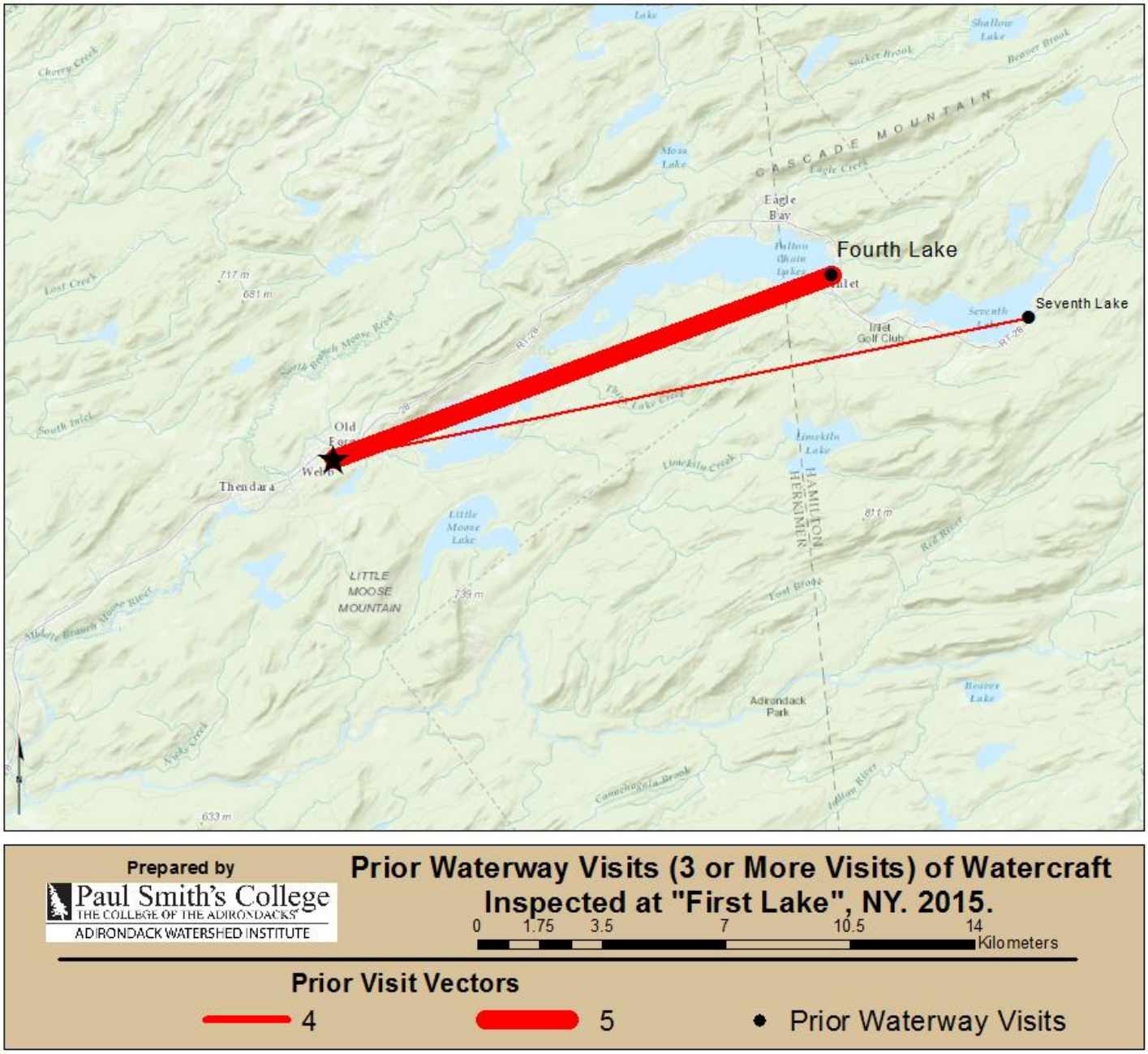
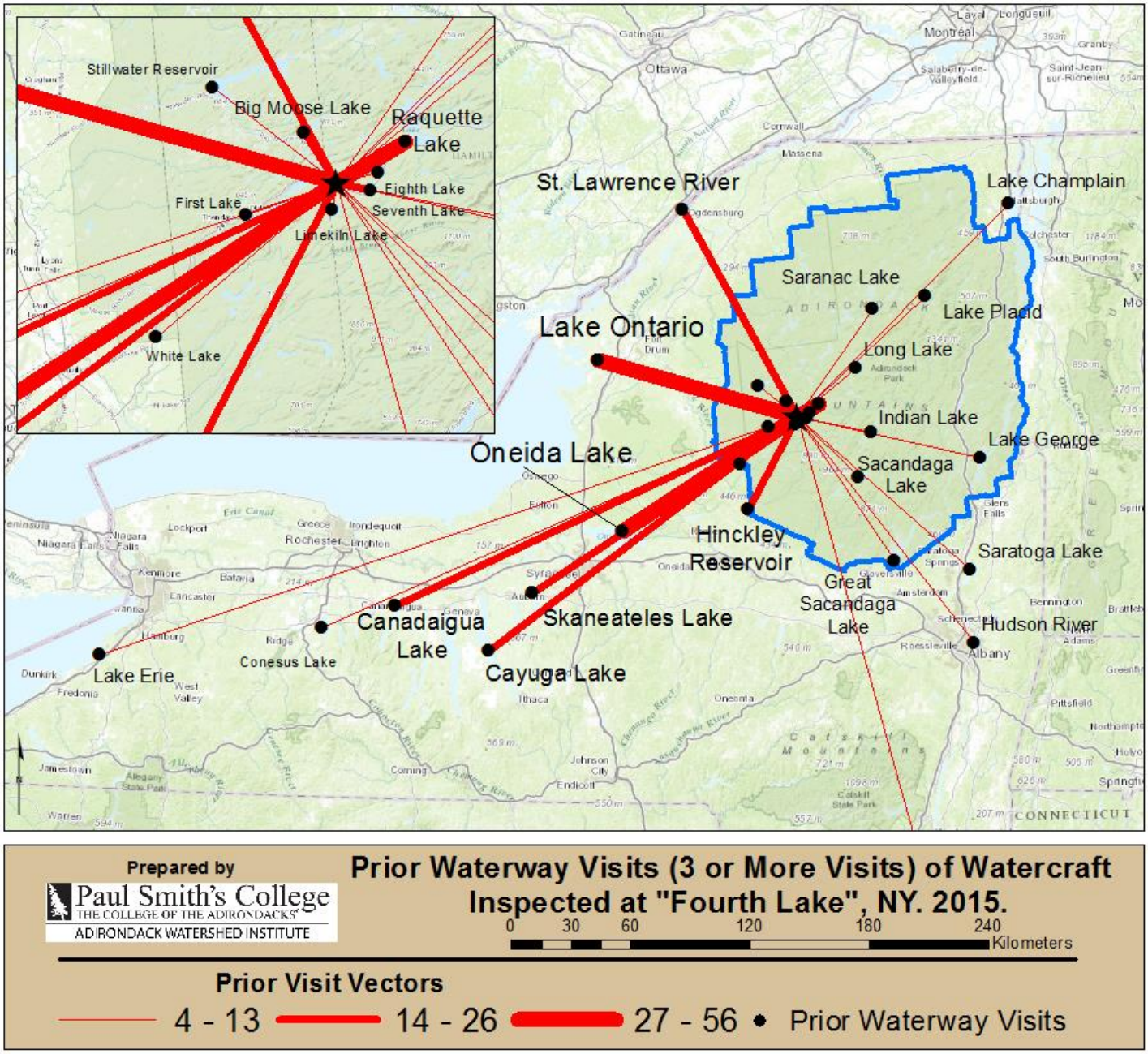


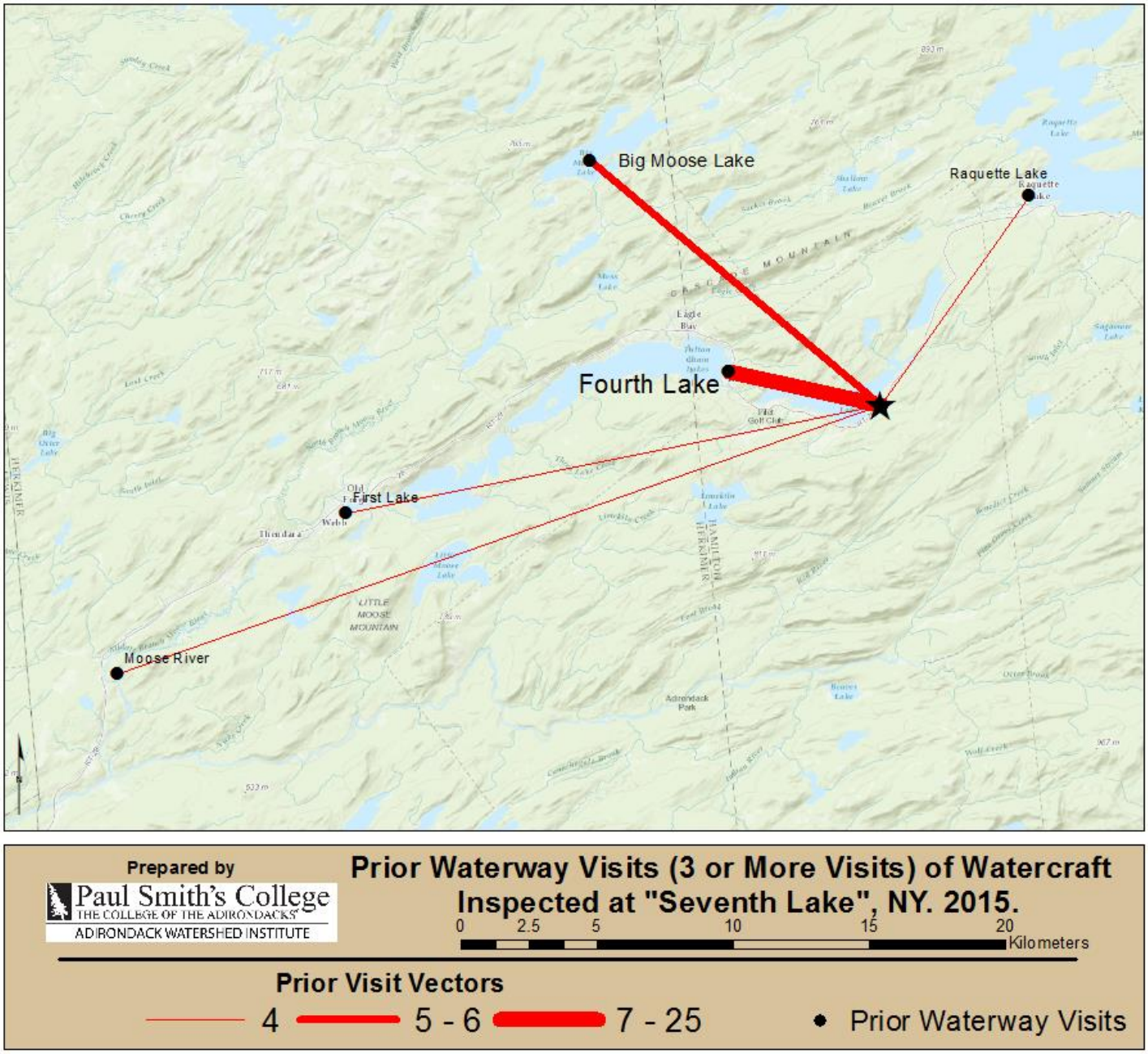
Waterways visited in previous 2 weeks by incoming vessels to Seventh Lake. Vectors weighted to denote quantity of visits to previous waterbodies.



Waterways visited in previous 2 weeks by incoming vessels to Seventh Lake. Vectors weighted to denote quantity of visits to previous waterbodies.



Waterways visited in previous 2 weeks by incoming vessels to Seventh Lake. Vectors weighted to denote quantity of visits to previous waterbodies.



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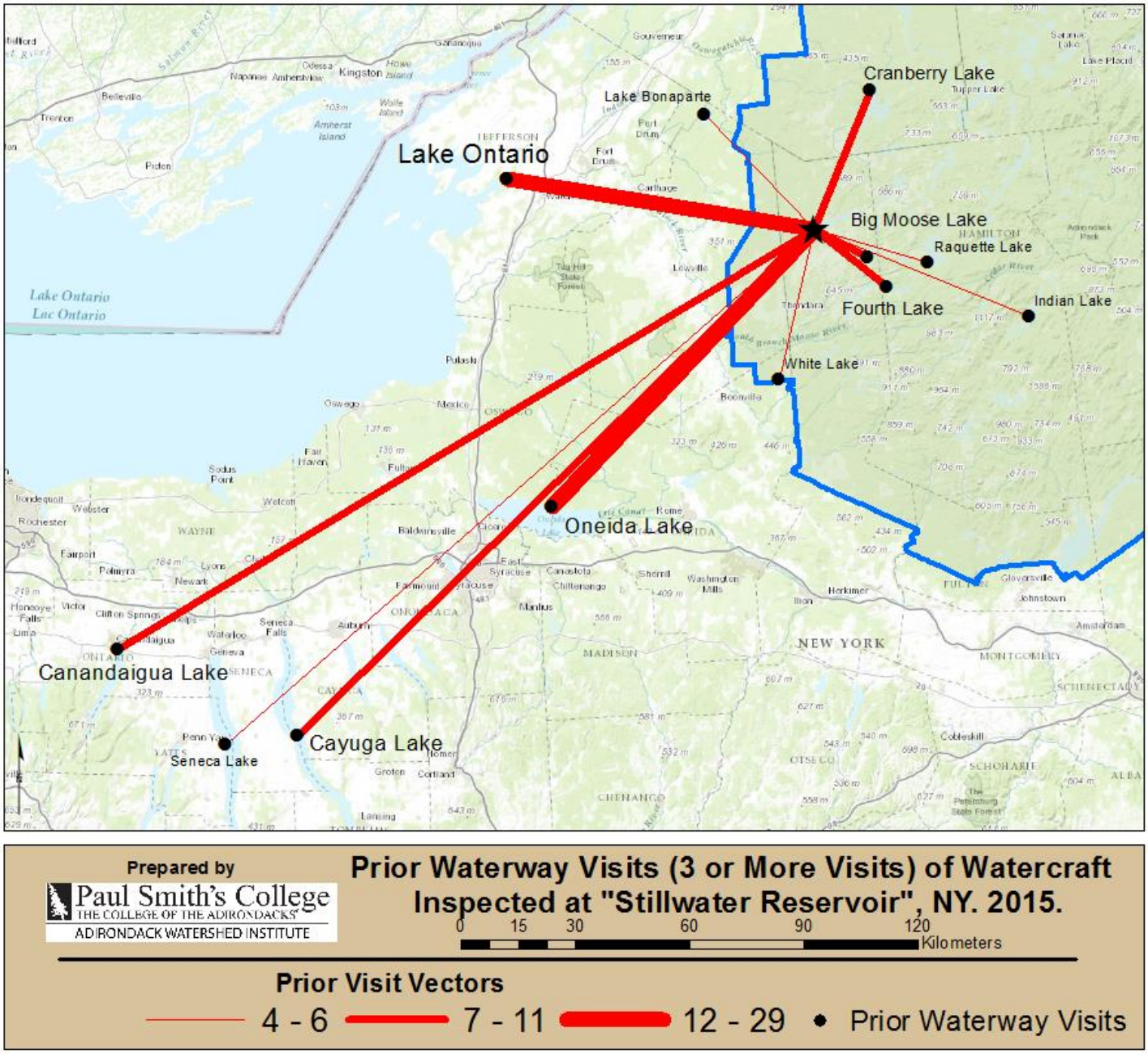

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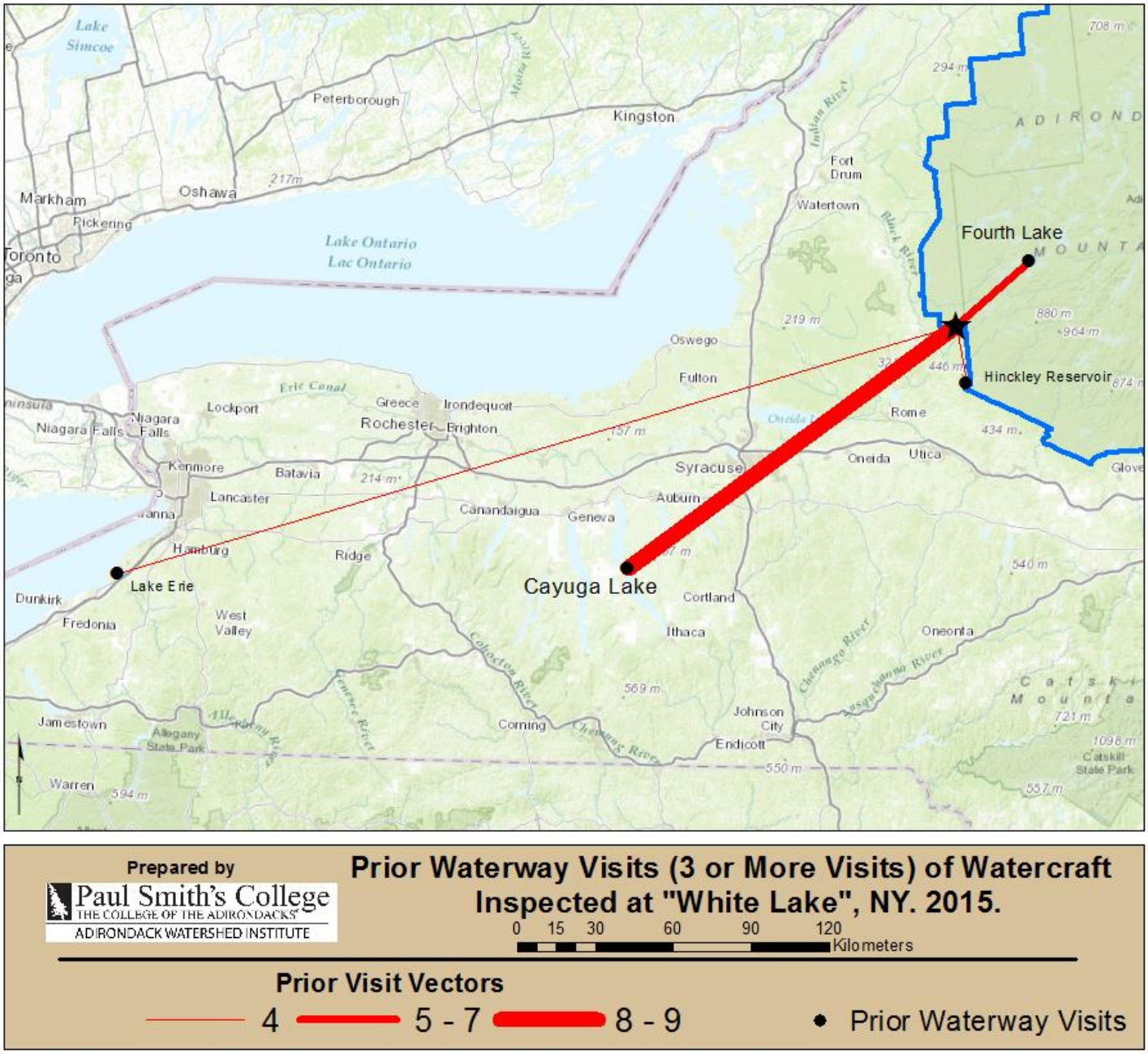
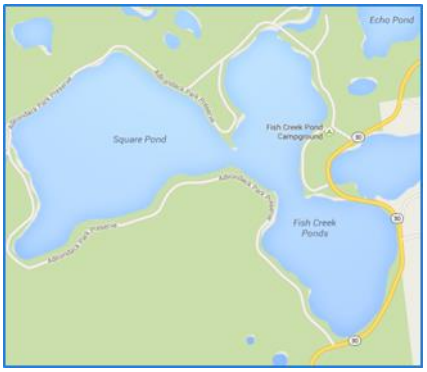


Waterways visited in previous 2 weeks by incoming vessels to Seventh Lake. Vectors weighted to denote quantity of visits to previous waterbodies.

Fish Creek Ponds

Boats inspected: 555
AIS intercepted: 14
Number of visitors: 1,163
Visitors taking spread prevention measures: 68%
Inspected boats with organisms: 14.2%
Number of previously visited waterways: 57



Waterbody	Boat Type									total # boats
	M	PWC	S	C	K	B	R	SUP	Docks	
Fish Creek Ponds	311	52	1	65	135	0	0	0	0	564
percentage of total boats	55%	9%	0%	12%	24%	0%	0%	0%	0%	100%

Boats observed at launch. M = motorboat; PWC = personal watercraft; S = sailboat; C = canoe; K = kayak; B = construction barge; R = rowboat; SUP= stand-up paddleboard; Docks = boat docks launched for seasonal installation/maintenance

Waterbody	total # people	organisms found		# boats dirty	# of inspections	% of inspected boats dirty
		entering	leaving			
Fish Creek Ponds	1163	26	80	79	555	14.2%

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

Waterbody	# groups taking AIS spread prevention measures									# groups asked
	yes	I	WB	DB	BB	LW	Dis	Dry	didn't ask	
Fish Creek Ponds	309	151	196	68	3	10	2	86	26	455
percentage of total # groups asked	68%	33%	43%	15%	1%	2%	0%	19%	NA	

Yes = took one or more AIS spread prevention measures; I = inspected boat; WB = washed boat; DB = drained bilge; BB = emptied bait bucket; LW = drained livewell; Dis = disposed of unused bait; Dry = dried boat.

Waterbody	Organism Type																total AIS	% of inspected boats with AIS
	BW	CLP*	ELO	GRS	EWM*	NM	UM	VLM*	MUD	NON	NP	SWF*	WC*	WL	ZM*	other		
Fish Creek Ponds	8	0	0	32	1	0	0	11	5	28	11	0	0	1	2	7	14	2.5%
percentage of organisms removed	8%	0%	0%	30%	1%	0%	0%	10%	5%	26%	10%	0%	0%	1%	2%	7%		

BW = bladderwort; CLP = curly-leaf pondweed; ELO = elodea; GRS = grass; EWM = Eurasian watermilfoil; NM = native milfoil; UM = unknown milfoil; VLM = variable leaf milfoil; MUD = mud; NON = non-aquatic debris; NP = native pondweed; SWF = spiny waterflea; WC= water chestnut; WL= water lily; ZM = Zebra mussel; */AIS = aquatic invasive species.

Fish Creek Ponds: Aquatic Invasive Species Intercepted by Stewards, 2015	# found on boats launching	Previous Waterway	# found on boats retrieving	Previous Waterway
Eurasian water milfoil	2	*None* (1), Saratoga Lake (1)	1	Lake Champlain (1)
Variable leaf milfoil	0	N/A	11	*Did not ask* (3), None (2), Unknown (2), Conesus Lake (1), Fish Creek Ponds (1), Piseco Lake (1), Seneca Lake (1)
Zebra mussel	0	N/A	0	N/A
Totals	**2**		**12**	

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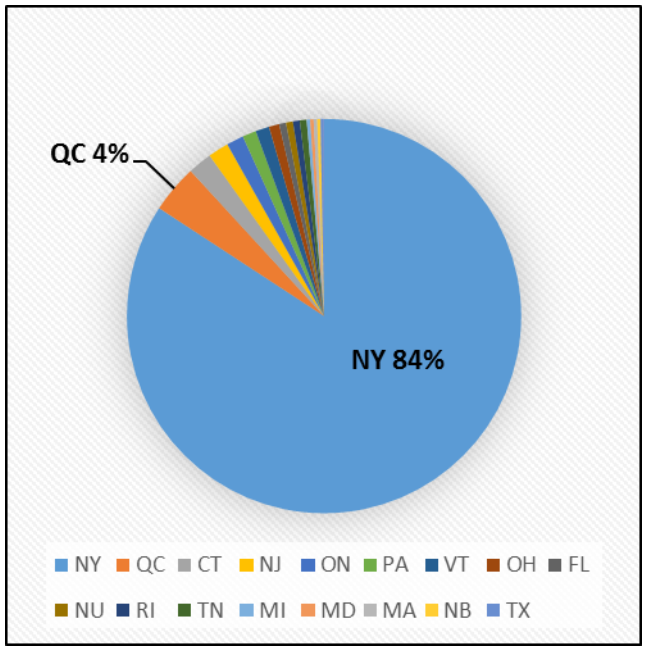
Previous Waterways visited, 2015	# visits
None	224
Fish Creek Ponds	91
Unknown	36
Rollins Pond	11
Lake Champlain	8
Lake Flower	7
Upper Saranac Lake	6
St. Lawrence River	5
Canandaigua Lake	4
Conesus Lake	4
Lake Ontario	4
Raquette River	4
Saratoga Lake	4
Cranberry Lake	3
Did not ask	3
Lower Saranac Lake	3
Oneida Lake	3
Rental	3
Chateaugay Lake	2
Erie Canal	2
Lake Erie	2

Previous Waterways visited, 2015	# visits
Lake George	2
Little Clear Pond	2
Meacham Lake	2
Osgood Pond	2
Raquette Lake	2
Sacandaga Lake	2
Seneca Lake	2
Tupper Lake	2
Black Pond	2
Ballston Lake, Ballston NY	2
Loon Lake, Steuben County NY	2
Atlantic Ocean	1
Big Moose Lake	1
Connecticut River	1
Delta Lake	1
Follensby Clear Pond	1
Fourth Lake	1
Fulton Chain of Lakes	1
Great Sacandaga Lake	1
Hudson River	1
Kayuta Lake	1

Previous Waterways visited, 2015	# visits
Keuka Lake	1
Lake Colby	1
Lake Pleasant	1
Piseco Lake	1
Round Lake	1
Saranac Lake Chain	1
Skaneateles Lake	1
St. Regis River	1
Floodwood Pond	1
Long Pond (St Regis Canoe Area)	1
Black Lake	1
somewhere in Ontario	1
Niagara River	1
Middle Pond	1
Lake Iroquois, Williston VT	1
Welland River, ON	1
Wellend Pond, ON	1
Waterbury Reservoir, Waterbury VT	1
Garnet Lake, Warren County NY	1
Lake Alice, Orleans County NY	1
Total	**481**

State of Boat Registration



Boaters at Fish Creek Pond Launch.

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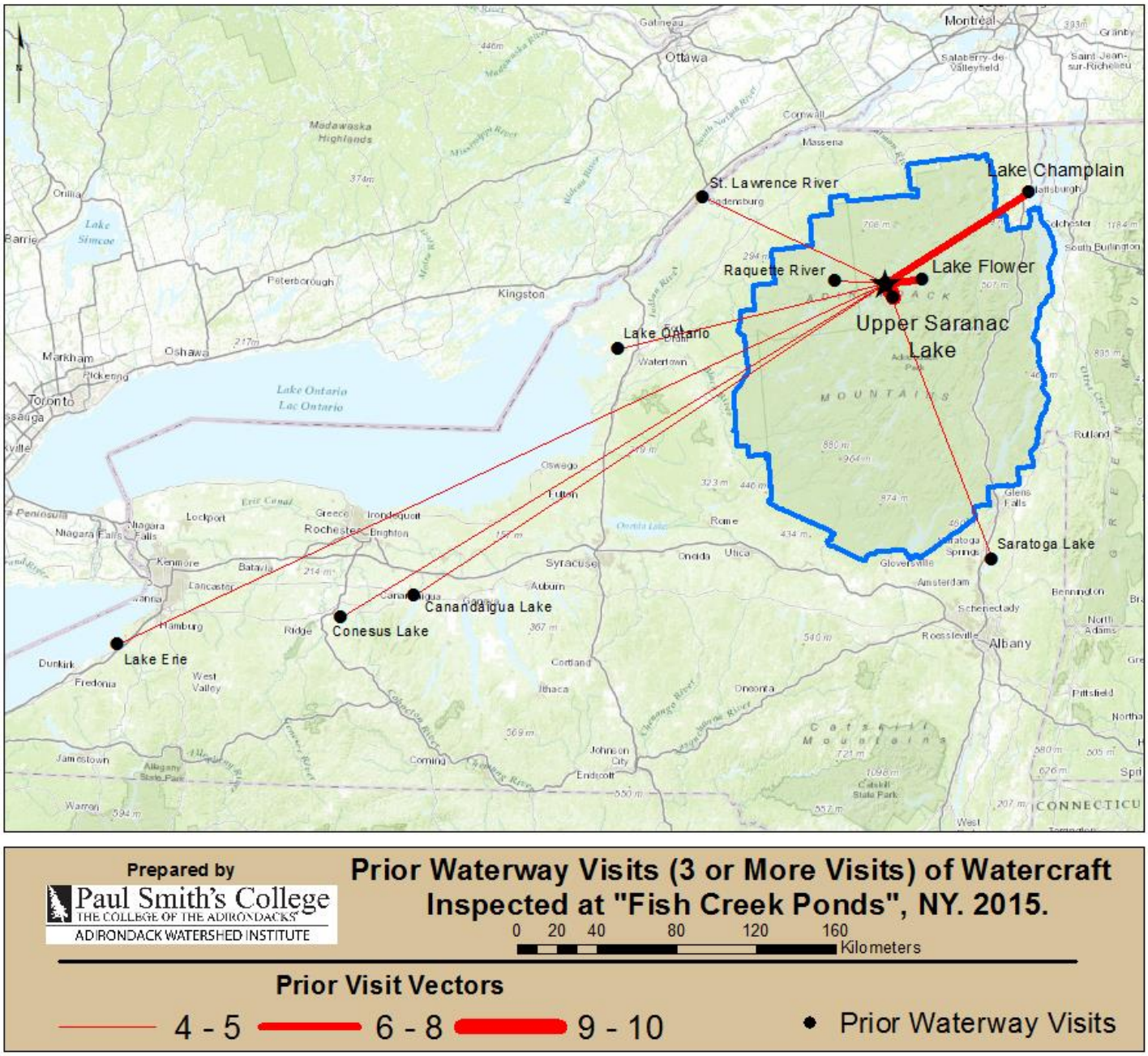
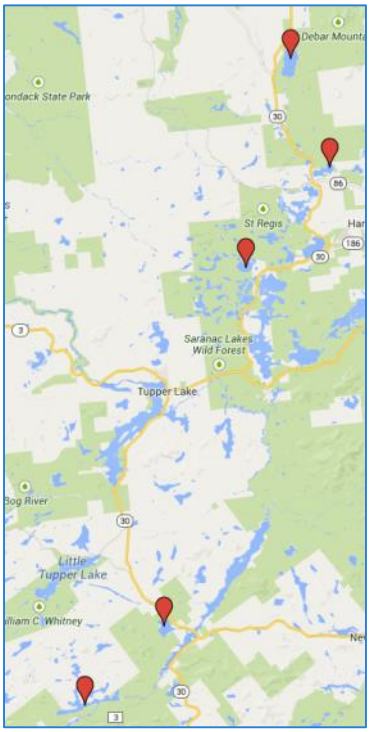


Waterways visited in previous 2 weeks by incoming vessels to Fish Creek Pond. Vectors weighted to denote quantity of visits to previous waterbodies.

Forked Lake, Lake Eaton, Meacham Lake and Osgood Pond

Boats inspected: 804
AIS intercepted: 0
Number of visitors: 1,327

Visitors taking spread prevention measures: 65%
Inspected boats with organisms: 11.1%
Number of previously visited waterways: 70



Waterbody	Boat Type									total # boats
	M	PWC	S	C	K	B	R	SUP	Docks	
Forked Lake	6	0	0	24	20	0	0	0	0	50
percentage of total boats	12%	0%	0%	48%	40%	0%	0%	0%	0%	100%
Lake Eaton	29	3	0	5	17	0	1	0	0	55
percentage of total boats	53%	5%	0%	9%	31%	0%	2%	0%	0%	100%
Meacham Lake	118	15	0	9	61	0	2	1	0	206
percentage of total boats	57%	7%	0%	4%	30%	0%	1%	0%	0%	100%
Osgood Pond	67	0	0	182	256	0	4	0	0	509
percentage of total boats	13%	0%	0%	36%	50%	0%	1%	0%	0%	100%
totals	220	18	0	220	354	0	7	1	0	820
percentage of total boats	27%	2%	0%	27%	43%	0%	1%	0%	0%	100%

Boats observed at launch. M = motorboat; PWC = personal watercraft; S = sailboat; C = canoe; K = kayak; B = construction barge;
R = rowboat; SUP= stand-up paddleboard; Docks = boat docks launched for seasonal installation/maintenance

Waterbody	total # people	organisms found		# boats dirty	# of inspections	% of inspected boats dirty
		entering	leaving			
Forked Lake	92	14	59	28	50	56.0%
Lake Eaton	97	11	8	12	53	22.6%
Meacham Lake	393	2	1	3	203	1.5%
Osgood Pond	745	14	37	46	498	9.2%
totals	1327	41	105	89	804	11.1%

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

Waterbody	# groups taking AIS spread prevention measures									# groups asked
	yes	I	WB	DB	BB	LW	Dis	Dry	didn't ask	
Forked Lake	9	4	7	0	0	0	0	3	2	32
percentage of total # groups asked	28%	13%	22%	0%	0%	0%	0%	9%	NA	
Lake Eaton	20	3	16	3	0	0	0	3	1	42
percentage of total # groups asked	48%	7%	38%	7%	0%	0%	0%	7%	NA	
Meacham Lake	105	62	82	37	2	23	1	67	9	162
percentage of total # groups asked	65%	38%	51%	23%	1%	14%	1%	41%	NA	
Osgood Pond	226	152	139	9	0	1	0	79	15	314
percentage of total # groups asked	72%	48%	44%	3%	0%	0%	0%	25%	NA	
totals	360	221	244	49	2	24	1	152	27	550
percentage of total # groups asked	65%	40%	44%	9%	0%	4%	0%	28%	NA	

Yes = took one or more AIS spread prevention measures; I = inspected boat; WB = washed boat; DB = drained bilge; BB = emptied bait bucket; LW = drained livewell; Dis = disposed of unused bait; Dry = dried boat.

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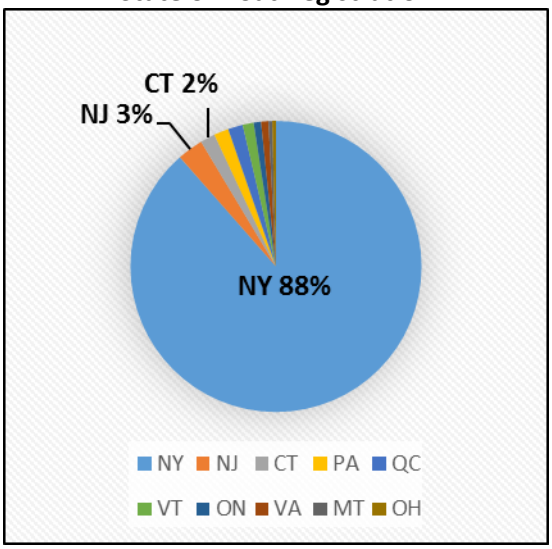
Waterbody	Organism Type																total AIS	% of inspected boats with AIS
	BW	CLP*	ELO	GRS	EWM*	NM	UM	VLM*	MUD	NON	NP	SWF*	WC*	WL	ZM*	other		
Forked Lake	0	0	0	10	0	0	0	0	19	28	15	0	0	1	0	0	0	0%
percentage of organisms removed	0%	0%	0%	14%	0%	0%	0%	0%	26%	38%	21%	0%	0%	1%	0%	0%		
Lake Eaton	0	0	0	0	0	0	0	0	10	9	0	0	0	0	0	0	0	0%
percentage of organisms removed	0%	0%	0%	0%	0%	0%	0%	0%	53%	47%	0%	0%	0%	0%	0%	0%		
Meacham Lake	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0%
percentage of organisms removed	0%	0%	0%	33%	0%	0%	0%	0%	33%	33%	0%	0%	0%	0%	0%	0%		
Osgood Pond	6	0	1	8	0	0	0	0	5	18	5	0	0	8	0	0	0	0%
percentage of organisms removed	12%	0%	2%	16%	0%	0%	0%	0%	10%	35%	10%	0%	0%	16%	0%	0%		
totals	6	0	1	19	0	0	0	0	35	56	20	0	0	9	0	0	0	0%
percentage of organisms removed	4%	0%	1%	13%	0%	0%	0%	0%	24%	38%	14%	0%	0%	6%	0%	0%		

BW = bladderwort; CLP = curly-leaf pondweed; ELO = elodea; GRS = grass; EWM = Eurasian watermilfoil; NM = native milfoil; UM = unknown milfoil; VLM = variable leaf milfoil; MUD = mud; NON = non-aquatic debris; NP = native pondweed; SWF = spiny waterflea; WC= water chestnut; WL= water lily; ZM = Zebra mussel; */AIS = aquatic invasive species.

State of Boat Registration



Previous Waterways visited, 2015	# visits
None	195
Meacham Lake	78
Unknown	72
Osgood Pond	48
Lake Eaton	15
Chateaugay Lake	11
Jones Pond	10
Lower St Regis Lake	8
Rental	8
Upper St Regis Lake	8
Lake Flower	7
Lower Saranac Lake	7
Fish Creek Ponds	5
Lake Placid	5
Rainbow Lake	5
Second Pond	5
Buck Pond	4

Previous Waterways visited, 2015	# visits
Lake Champlain	4
Middle Saranac Lake	4
Black Pond	3
Chazy Lake	3
Follensby Clear Pond	3
Hudson River	3
Raquette River	3
Round Lake	3
Saranac Lake Chain	3
St. Lawrence River	3
Ausable River	2
Barnum Pond	2
Blue Mountain Lake	2
Branch Pond, Sunderland VT	2
Deer River Flow	2
Did not ask	2
Eighth Lake	2

Previous Waterways visited, 2015	# visits
Floodwood Pond	2
Fulton Chain of Lakes	2
Lake Clear	2
Little Clear Pond	2
Little Green Pond	2
Taylor Pond	2
Tupper Lake	2
Atlantic Ocean	1
Cayuga Lake	1
Chubb River	1
Clear Lake, Lake County CA	1
Delaware River	1
Forked Lake	1
Franklin Falls Flow	1
Grafton Lakes, Rensselaer County NY	1
Grasse River, St. Lawrence County NY	1
Horseshoe Lake	1

Previous Waterways visited, 2015	# visits
Indian Lake	1
Keuka Lake	1
Lake Erie	1
Lake Ontario	1
Little Tupper Lake	1
Long Lake	1
Moose Pond	1
Mountain View Lake	1
Oswegatchie River	1
Paradox Lake	1
Round Lake, Saratoga County NY	1
Salmon River	1
Skaneateles Lake	1
Slush Pond	1
Stillwater Reservoir	1
Upper Saranac Lake	1
Total	577

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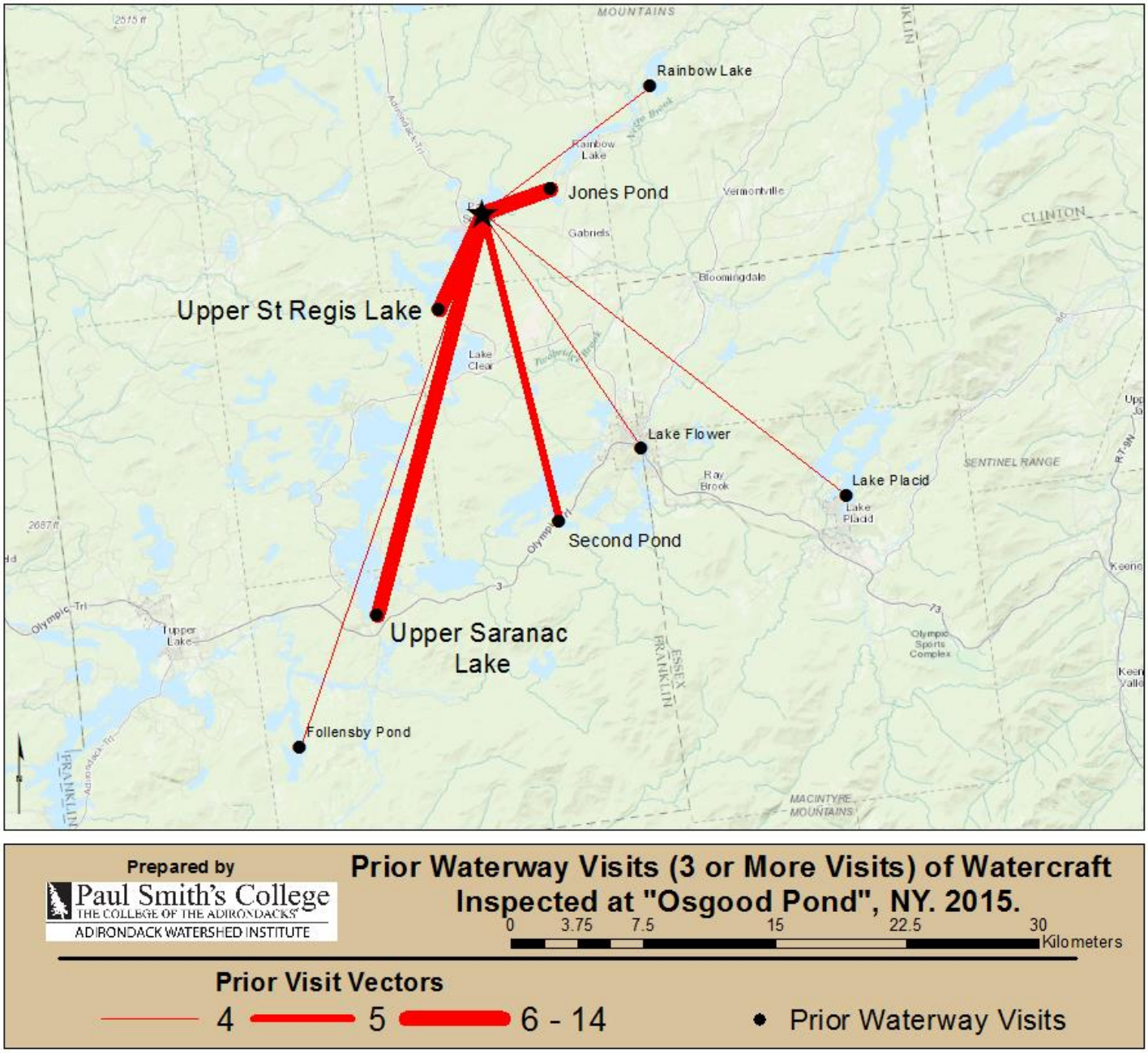
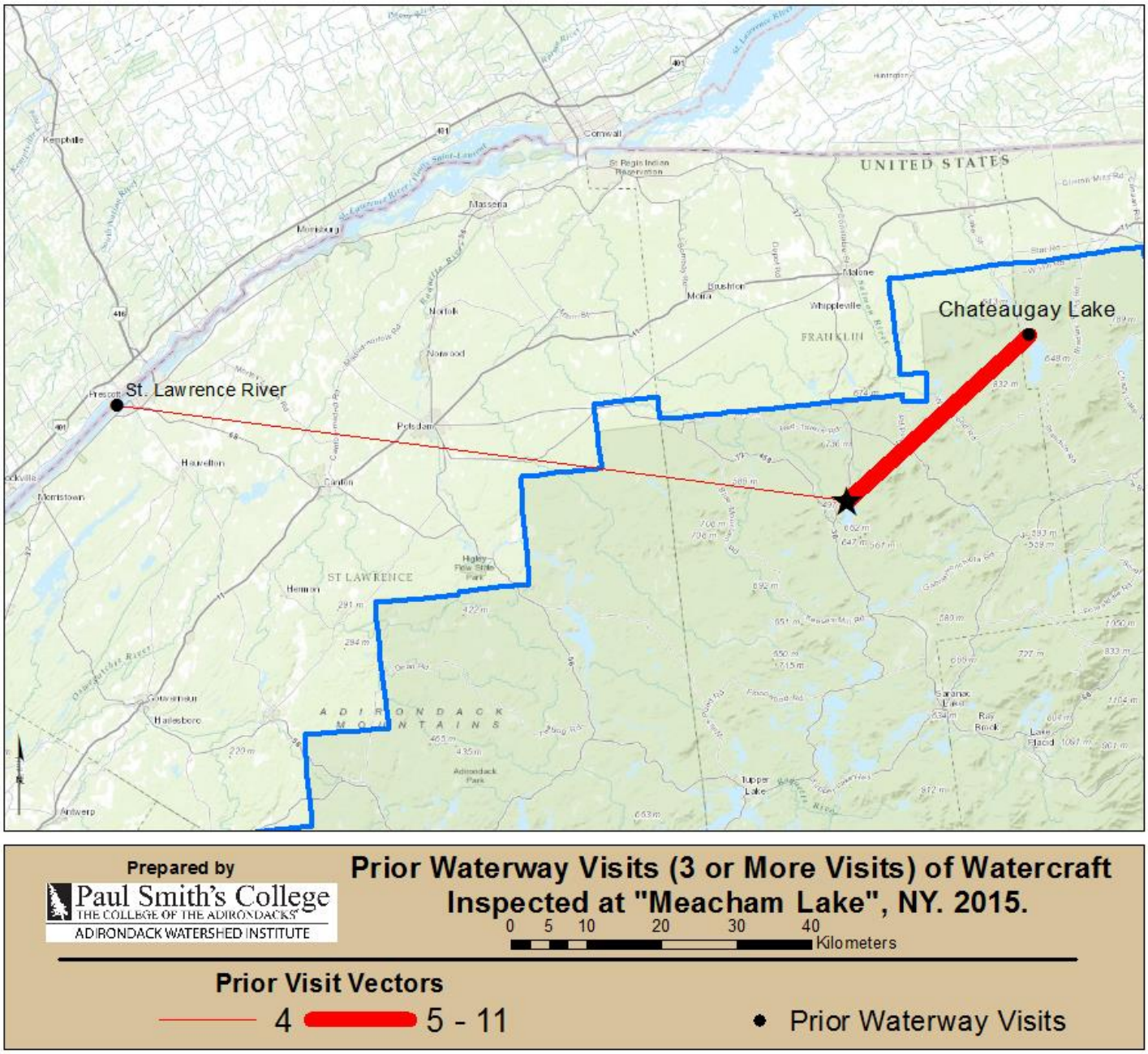


Waterways visited in previous 2 weeks by incoming vessels to Osgood Pond. Vectors weighted to denote quantity of visits to previous waterbodies.



Waterways visited in previous 2 weeks by incoming vessels to Meacham Lake. Vectors weighted to denote quantity of visits to previous waterbodies.

Fourth Lake

Boats inspected: 2,275
AIS intercepted: 3
Number of visitors: 5,328

Visitors taking spread prevention measures: 83%
Inspected boats with organisms: 7.7%
Number of previously visited waterways: 80

Waterbody	Boat Type									total # boats
	M	PWC	S	C	K	B	R	SUP	Docks	
Fourth Lake	1798	364	26	33	120	0	8	3	0	2352
percentage of total boats	76%	15%	1%	1%	5%	0%	0%	0%	0%	100%

Boats observed at launch. M = motorboat; PWC = personal watercraft; S = sailboat; C = canoe; K = kayak; B = construction barge; R = rowboat; SUP= stand-up paddleboard; Docks = boat docks launched for seasonal installation/maintenance

Waterbody	total # people	organisms found		# boats dirty	# of inspections	% of inspected boats dirty
		entering	leaving			
Fourth Lake	5328	106	74	175	2275	7.7%

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

Waterbody	# groups taking AIS spread prevention measures									# groups asked
	yes	I	WB	DB	BB	LW	Dis	Dry	didn't ask	
Fourth Lake	1724	1325	1488	156	2	7	9	1242	112	2087
percentage of total # groups asked	83%	63%	71%	7%	0%	0%	0%	60%	NA	

Yes = took one or more AIS spread prevention measures; I = inspected boat; WB = washed boat; DB = drained bilge; BB = emptied bait bucket; LW = drained livewell; Dis = disposed of unused bait; Dry = dried boat.

Waterbody	Organism Type																total AIS	% of inspected boats with AIS
	BW	CLP*	ELO	GRS	EWM*	NM	UM	VLM*	MUD	NON	NP	SWF*	WC*	WL	ZM*	other		
Fourth Lake	0	0	1	7	2	0	1	1	0	139	0	0	0	0	0	29	3	0.1%
percentage of organisms removed	0%	0%	1%	4%	1%	0%	1%	1%	0%	77%	0%	0%	0%	0%	0%	16%		

BW = bladderwort; CLP = curly-leaf pondweed; ELO = elodea; GRS = grass; EWM = Eurasian watermilfoil; NM = native milfoil; UM = unknown milfoil; VLM = variable leaf milfoil; MUD = mud; NON = non-aquatic debris; NP = native pondweed; SWF = spiny waterflea; WC= water chestnut; WL= water lily; ZM = Zebra mussel; */AIS = aquatic invasive species.

Fourth Lake: Aquatic Invasive Species Intercepted by Stewards, 2015	# found on boats launching	Previous Waterway	# found on boats retrieving	Previous Waterway
Eurasian water milfoil	2	*None* (1), Oneida Lake (1)	0	N/A
Variable leaf milfoil	0	N/A	1	Fourth Lake (1)
Totals	**2**		**1**	

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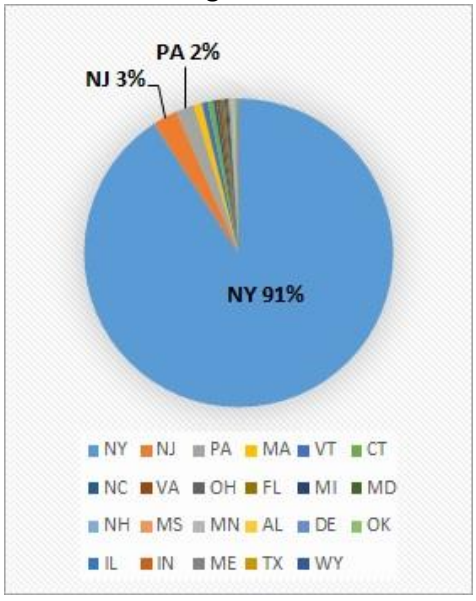
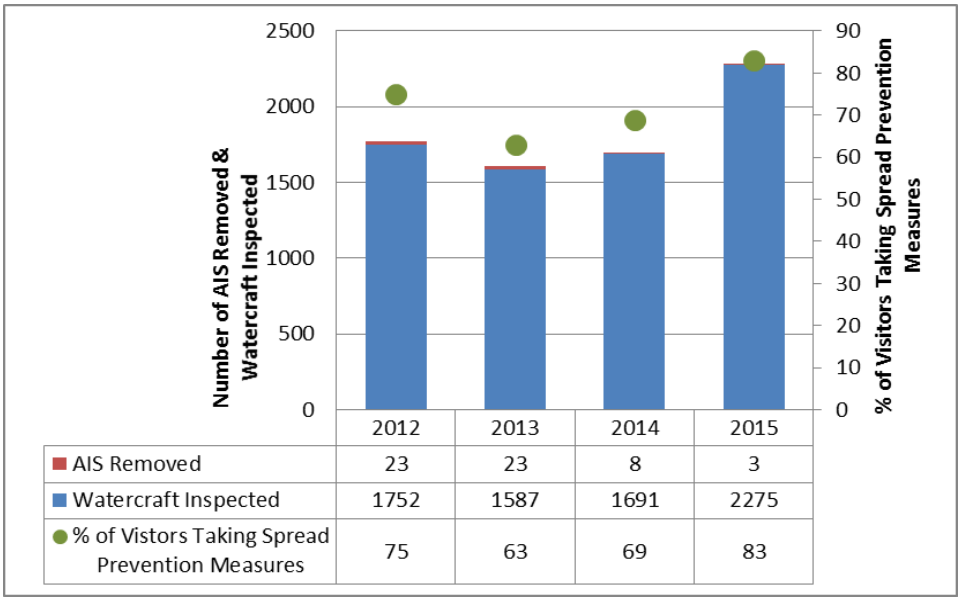
Previous Waterways visited, 2015	# visits
None	884
Fourth Lake	510
Did not ask	145
Unknown	84
Oneida Lake	56
Delta Lake	55
Raquette Lake	42
Fulton Chain of Lakes	38
Lake Ontario	37
Seventh Lake	27
Big Moose Lake	26
Hinckley Flow Reservoir	24
Cayuga Lake	22
Canandaigua Lake	21
Skaneateles Lake	17
St. Lawrence River	17
Stillwater Reservoir	13
Limekiln Lake	12
Eighth Lake	7
Lake Erie	7
Lake George	7
Sacandaga Lake	7
Saratoga Lake	7
Lake Placid	6
Conesus Lake	5
Erie Canal	5
First Lake	5
Hudson River	5
Indian Lake	5

Previous Waterways visited, 2015	# visits
Lake Champlain	5
Great Sacandaga Lake	4
Long Lake	4
Saranac Lake Chain	4
White Lake	4
Chateaugay Lake	3
Kayuta Lake	3
Mohawk River	3
Raquette River	3
Schroon Lake	3
Seneca Lake	3
Canadarago Lake	3
Atlantic Ocean	2
Connecticut River	2
Fish Creek Ponds	2
Lake Pleasant	2
Piseco Lake	2
Rental	2
Upper Saranac Lake	2
Black River	2
Otter Lake	2
Niagara River	2
Old Forge Pond	2
Twitchell Lake	2
Lebanon Reservoir, Hamilton NY	2
Sharbot Lake, ON	2
Hamilton Reservoir, Holland MA	2
Crystal Pond, Eastford CT	2
Pondson Lakes	2

Previous Waterways visited, 2015	# visits
Blue Mountain Lake	1
Lake Eaton	1
Lake Flower	1
Middle Saranac Lake	1
Tupper Lake	1
Lake Bonaparte	1
Moss Lake, Herkimer County NY	1
Nicks Lake, Old Forge NY	1
Otsego Lake	1
Lake Owasco	1
Oneida River	1
Salmon River Reservoir	1
somewhere in Texas	1
Otisco Lake	1
Lake Ashmere, Peru MA	1
Moose River	1
Lake Moraine	1
Guilford Lake, Chenango County NY	1
Cazenovia Lake	1
Rider Lake	1
Lake Branencamp	1
Brantingham Lake, Lewis County NY	1
Whitney Point Lake, Broome County NY	1
Delavan Lake, WI	1
Eaton Brook Reservoir, Madison County	1
Honeoye Lake	1
somewhere in Pennsylvania	1
Total	**2199**

State of Boat Registration





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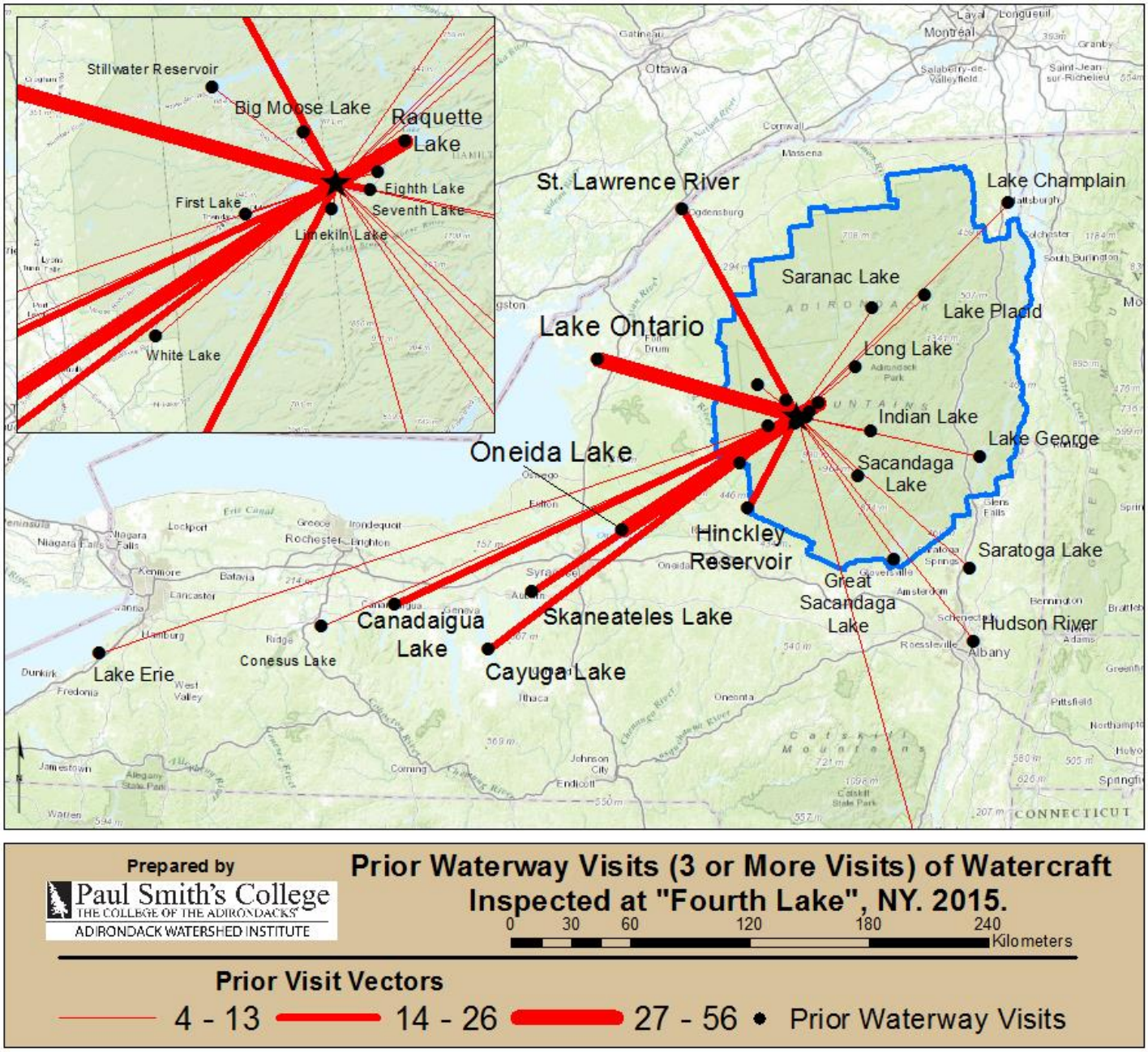

Waterways visited in previous 2 weeks by incoming vessels to Fourth Lake. Vectors weighted to denote quantity of visits to previous waterbodies.

Great Sacandaga Lake

Northville decontamination station opening date: 11 July 2015

Boats inspected: 7,297
AIS intercepted: 26
Number of visitors: 17,869

Visitors taking spread prevention measures: 84%
Inspected boats with organisms: 2.0%
Number of previously visited waterways: 73

Waterbody	Boat Type									total # boats
	M	PWC	S	C	K	B	R	SUP	Docks	
Great Sacandaga Lake	6271	1108	59	45	225	4	18	1	15	7746
percentage of total boats	81%	14%	1%	1%	3%	0%	0%	0%	0%	100%
Northville (decon only)	932	134	4	9	59	0	3	0	4	1145
percentage of total boats	81%	12%	0%	1%	5%	0%	0%	0%	0%	100%

Boats observed at launch. M = motorboat; PWC = personal watercraft; S = sailboat; C = canoe; K = kayak; B = construction barge; R = rowboat; SUP= stand-up paddleboard; Docks = boat docks launched for seasonal installation/maintenance

Waterbody	total # people	organisms found		# boats dirty	# of inspections	% of inspected boats dirty
		entering	leaving			
Great Sacandaga Lake	17869	82	82	144	7297	2.0%
Northville (decon only)	2647	2	1	3	927	0.3%

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

Waterbody	# groups taking AIS spread prevention measures									# groups asked
	yes	I	WB	DB	BB	LW	Dis	Dry	didn't ask	
Great Sacandaga Lake	5316	3594	2500	3466	89	175	48	1722	1118	6337
percentage of total # groups asked	84%	57%	39%	55%	1%	3%	1%	27%	NA	
Northville (decon only)	722	591	489	564	4	50	8	588	178	901
percentage of total # groups asked	80%	66%	54%	63%	0%	6%	1%	65%	NA	

Yes = took one or more AIS spread prevention measures; I = inspected boat; WB = washed boat; DB = drained bilge; BB = emptied bait bucket; LW = drained livewell; Dis = disposed of unused bait; Dry = dried boat.

Waterbody	Organism Type																total AIS	% of inspected boats with AIS
	BW	CLP*	ELO	GRS	EWM*	NM	UM	VLM*	MUD	NON	NP	SWF*	WC*	WL	ZM*	other		
Great Sacandaga Lake	0	7	3	56	9	4	4	1	1	26	18	4	3	0	2	26	26	0.4%
percentage of organisms removed	0%	4%	2%	34%	5%	2%	2%	1%	1%	16%	11%	2%	2%	0%	1%	16%		
Northville (decon only)	0	0	0	1	0	0	1	0	0	0	1	0	0	0	0	0	0	0%
percentage of organisms removed	0%	0%	0%	33%	0%	0%	33%	0%	0%	0%	33%	0%	0%	0%	0%	0%		

BW = bladderwort; CLP = curly-leaf pondweed; ELO = elodea; GRS = grass; EWM = Eurasian watermilfoil; NM = native milfoil; UM = unknown milfoil; VLM = variable leaf milfoil; MUD = mud; NON = non-aquatic debris; NP = native pondweed; SWF = spiny waterflea; WC= water chestnut; WL= water lily; ZM = Zebra mussel; */AIS = aquatic invasive species.

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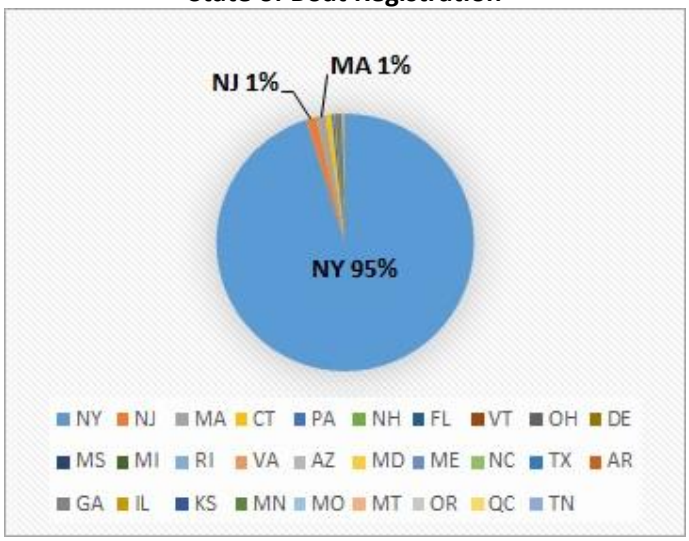
State of Boat Registration

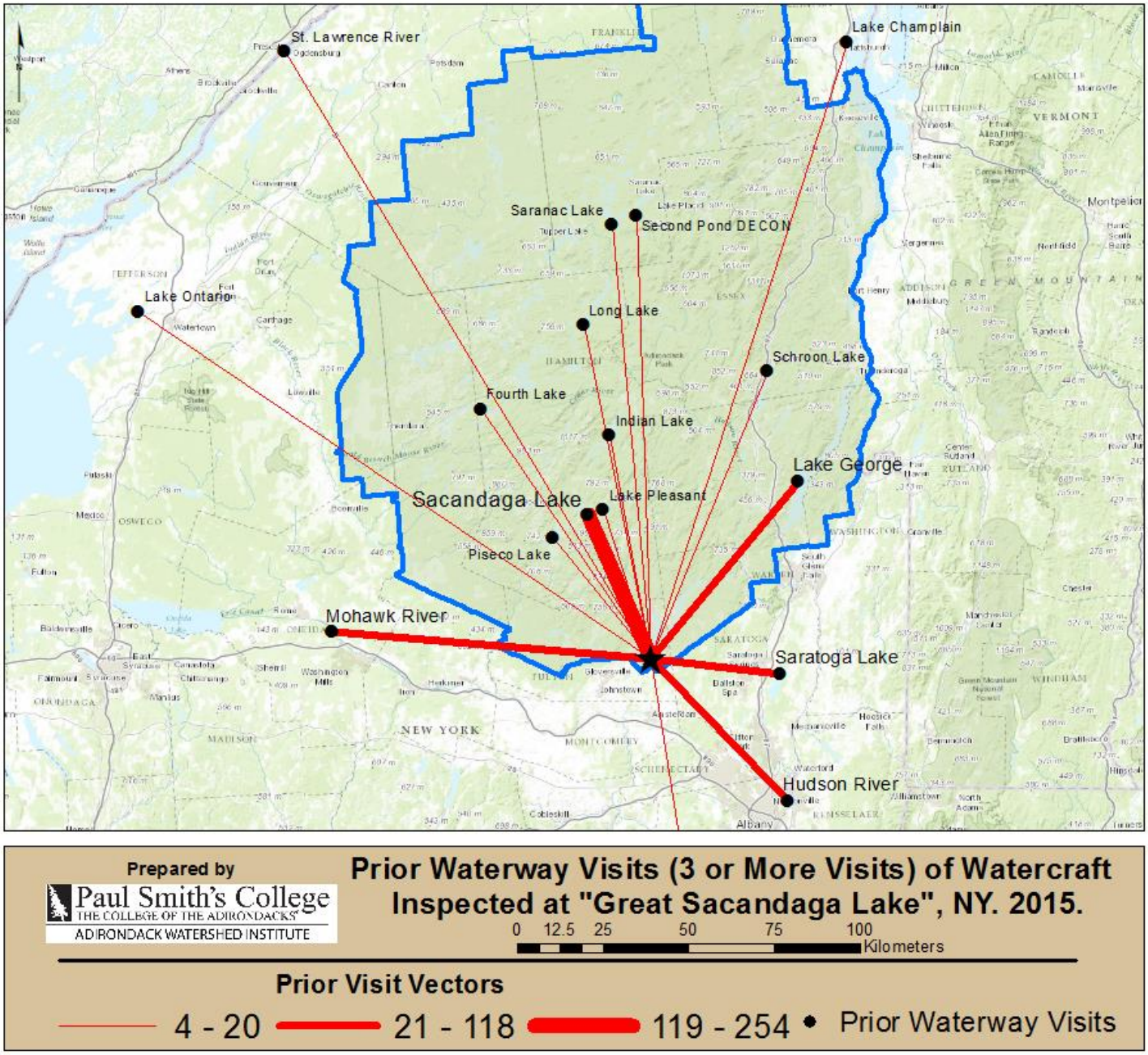


Great Sacandaga Lake: Aquatic Invasive Species Intercepted by Stewards, 2015	# found on boats launching	Previous Waterway	# found on boats retrieving	Previous Waterway
Curly leaf pondweed	7	Saratoga Lake (3), Sacandaga Lake (2), Great Sacandaga Lake (1), *None* (1),	0	N/A
Eurasian water milfoil	8	Great Sacandaga Lake (2), Hudson River (1), *None* (1), Saranac Lake Chain (1), Saratoga Lake (1), *Unknown* (1), Whitehall Reservoir, Hopkinton MA (1)	1	Great Sacandaga Lake (1)
Variable leaf milfoil	1	Thompson's Lake, Albany NY (1)	0	N/A
Spiny waterflea	1	Sacandaga Lake (1)	3	Sacandaga Lake (2), Great Sacandaga Lake (1)
Water chestnut	2	Saratoga Lake (1), *Unknown* (1)	1	Saratoga Lake (1)
Zebra mussel	2	Great Sacanadaga Lake (1), *None* (1)	0	N/A
Totals	**21**		**5**	N/A

Previous Waterways visited, 2015	# visits
Great Sacandaga Lake	4674
None	1718
Sacandaga Lake	255
Unknown	187
Saratoga Lake	123
Hudson River	92
Did not ask	80
Lake George	58
Mohawk River	54
Fulton Chain of Lakes	21
Schroon Lake	19
St. Lawrence River	13
Atlantic Ocean	12
Piseco Lake	12
Indian Lake	10
Lake Champlain	10
Lake Pleasant	10
Caroga Lake	6
Canandaigua Lake	5
Connecticut River	5
Fish Creek Ponds	5
Lake Ontario	5
Canada Lake	5
Long Lake	3
Oneida Lake	3
Thompson's Lake, Albany NY	3
Stewarts Bridge Reservoir	3

Previous Waterways visited, 2015	# visits
Canadarago Lake	3
Fourth Lake	2
Hinckley Flow Reservoir	2
Raquette Lake	2
Rental	2
Round Lake	2
Saranac Lake Chain	2
West Canada Lake	2
somewhere in Connecticut	2
Lake Algonquin	2
Otsego Lake	2
Old Forge Pond	2
Blue Mountain Lake	1
Cayuga Lake	1
Conesus Lake	1
Cranberry Lake	1
Delta Lake	1
Eighth Lake	1
Keuka Lake	1
Lake Erie	1
Lake Flower	1
Lewey Lake	1
Lower Saranac Lake	1
Rainbow Lake	1
Saranac River	1
Seneca Lake	1

Previous Waterways visited, 2015	# visits
Skaneateles Lake	1
Stillwater Reservoir	1
Taylor Pond	1
Tupper Lake	1
White Lake	1
Black Pond	1
Paradox Lake	1
Otter Lake	1
Snyder's Lake, Rensselaer County NY	1
Lake Harris, Newcomb NY	1
Lake Adirondack, Indian Lake NY	1
Raystown Lake, Huntingdon County PA	1
Mayfield Lake	1
Long Pond, Plymouth MA	1
Coventry Lake, Coventry CT	1
Lake Arthur, Bulter County PA	1
Daggett Pond, Warren County NY	1
Newfound Lake, Grafton County NH	1
Whitehall Reservoir, Hopkinton MA	1
Webster Lake, Webster MA	1
Schoharie Creek	1
somewhere in western Massachusetts	1
Lily Lake, Fulton County NY	1
Pontoosuc Lake, Lanesborough MA	1
private lake in Orange County NY	1
Total	**7455**



Waterways visited in previous 2 weeks by incoming vessels to Great Sacandaga Lake. Vectors weighted to denote quantity of visits to previous waterbodies.

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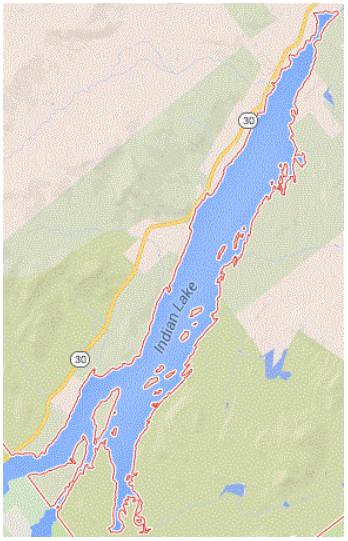
Indian Lake

Boats inspected: 1,331
AIS intercepted: 6
Number of visitors: 2,608

Visitors taking spread prevention measures: 62%
Inspected boats with organisms: 1.9%
Number of previously visited waterways: 74



Waterbody	Boat Type									total # boats
	M	PWC	S	C	K	B	R	SUP	Docks	
Indian Lake	624	34	10	285	359	0	35	5	0	1352
percentage of total boats	46%	3%	1%	21%	27%	0%	3%	0%	0%	100%

Boats observed at launch. M = motorboat; PWC = personal watercraft; S = sailboat; C = canoe; K = kayak; B = construction barge; R = rowboat; SUP= stand-up paddleboard; Docks = boat docks launched for seasonal installation/maintenance

Waterbody	total # people	organisms found		# boats dirty	# of inspections	% of inspected boats dirty
		entering	leaving			
Indian Lake	2608	23	4	25	1331	1.9%

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

Waterbody	# groups taking AIS spread prevention measures									# groups asked
	yes	I	WB	DB	BB	LW	Dis	Dry	didn't ask	
Indian Lake	611	222	414	328	234	240	191	377	15	978
percentage of total # groups asked	62%	23%	42%	34%	24%	25%	20%	39%	NA	

Yes = took one or more AIS spread prevention measures; I = inspected boat; WB = washed boat; DB = drained bilge; BB = emptied bait bucket; LW = drained livewell; Dis = disposed of unused bait; Dry = dried boat.

Waterbody	Organism Type																total AIS	% of inspected boats with AIS
	BW	CLP*	ELO	GRS	EWM*	NM	UM	VLM*	MUD	NON	NP	SWF*	WC*	WL	ZM*	other		
Indian Lake	0	0	1	2	2	0	2	0	3	8	3	0	3	0	1	2	6	0%
percentage of organisms removed	0%	0%	4%	7%	7%	0%	7%	0%	11%	30%	11%	0%	11%	0%	4%	7%		

BW = bladderwort; CLP = curly-leaf pondweed; ELO = elodea; GRS = grass; EWM = Eurasian watermilfoil; NM = native milfoil; UM = unknown milfoil; VLM = variable leaf milfoil; MUD = mud; NON = non-aquatic debris; NP = native pondweed; SWF = spiny waterflea; WC= water chestnut; WL= water lily; ZM = Zebra mussel; */AIS = aquatic invasive species.

Indian Lake: Aquatic Invasive Species Intercepted by Stewards, 2015	# found on boats launching	Previous Waterway	# found on boats retrieving	Previous Waterway
Eurasian water milfoil	2	St. Lawrence River (2), Lake Champlain (1)	0	N/A
Water chestnut	3	None (2), Hudson River (1)	0	N/A
Zebra mussel	1	Saratoga Lake (1)	0	N/A
Totals	**6**		**0**	

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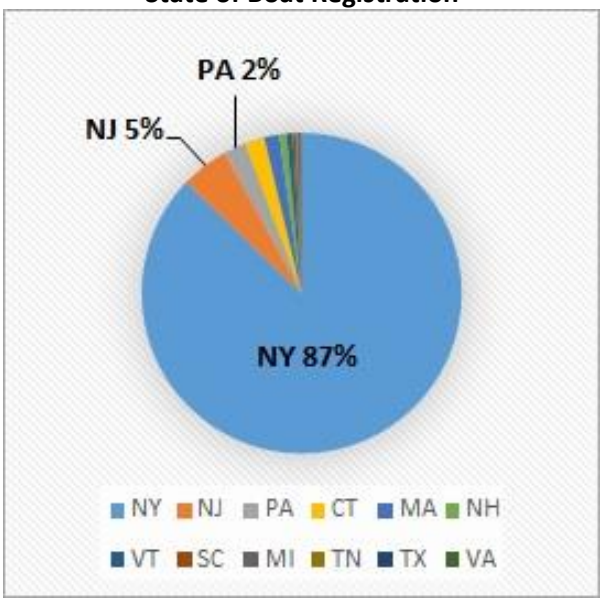
Previous Waterways visited, 2015	# visits
None	390
Same Lake - Previous Visit	248
Rental	60
Unknown	47
Sacandaga Lake	21
Lewey Lake	20
Great Sacandaga Lake	15
Hudson River	15
Saratoga Lake	13
Lake George	10
Mohawk River	9
Raquette Lake	8
Long Lake	7
Piseco Lake	7
Fourth Lake	6
Lake Champlain	6
Oneida Lake	6
Lake Ontario	5
Canadarago Lake	5
Cedar River Flow	5
Cayuga Lake	4
Atlantic Ocean	3
Saranac Lake Chain	3
Stillwater Reservoir	3
Tupper Lake	3
Canada Lake	3
Lake Durant	3

Previous Waterways visited, 2015	# visits
Caroga Lake	3
Mason Lake, Hamilton County NY	3
Big Moose Lake	2
Blue Mountain Lake	2
Canandaigua Lake	2
Chateaugay Lake	2
Fulton Chain of Lakes	2
Round Lake	2
Schroon Lake	2
Seventh Lake	2
Skaneateles Lake	2
Otsego Lake	2
Brant Lake	2
Owasco Lake	2
Greenwood Lake, Orange County NY	2
Brown's Tract Pond	1
Conesus Lake	1
Connecticut River	1
Cranberry Lake	1
Delta Lake	1
Erie Canal	1
Lake Pleasant	1
Limekiln Lake	1
Second Pond	1
St. Lawrence River	1
Upper Saranac Lake	1
Paradox Lake	1

Previous Waterways visited, 2015	# visits
Lake Algonquin	1
Stewarts Bridge Reservoir	1
Oxbow Lake	1
Lake Adirondack, Indian Lake NY	1
Schroon River	1
13th Lake, North Creek NY	1
Moose River	1
Potomac River	1
Cross Lake, Cayuga/Onondaga Counties NY	1
Candlewood Lake, Cranberry CT	1
Severance River, MD	1
Waterbury Reservoir, Waterbury VT	1
Eaton Brook Reservoir, Madison County NY	1
Rushford Lake, Allegany County NY	1
Garnet Lake, Warren County NY	1
Cossayuna Lake	1
North Hartland Lake, VT	1
Salmon River	1
Haunted Lake, Francestown NH	1
Otselic River, Whitney Point NY	1
Lens Lake, Warren County NY	1
Cowanesque Lake, Lawrenceville PA	1
Richmond Pond, Richmond MA	1
Kunjamuk River	1
Total	**993**

State of Boat Registration



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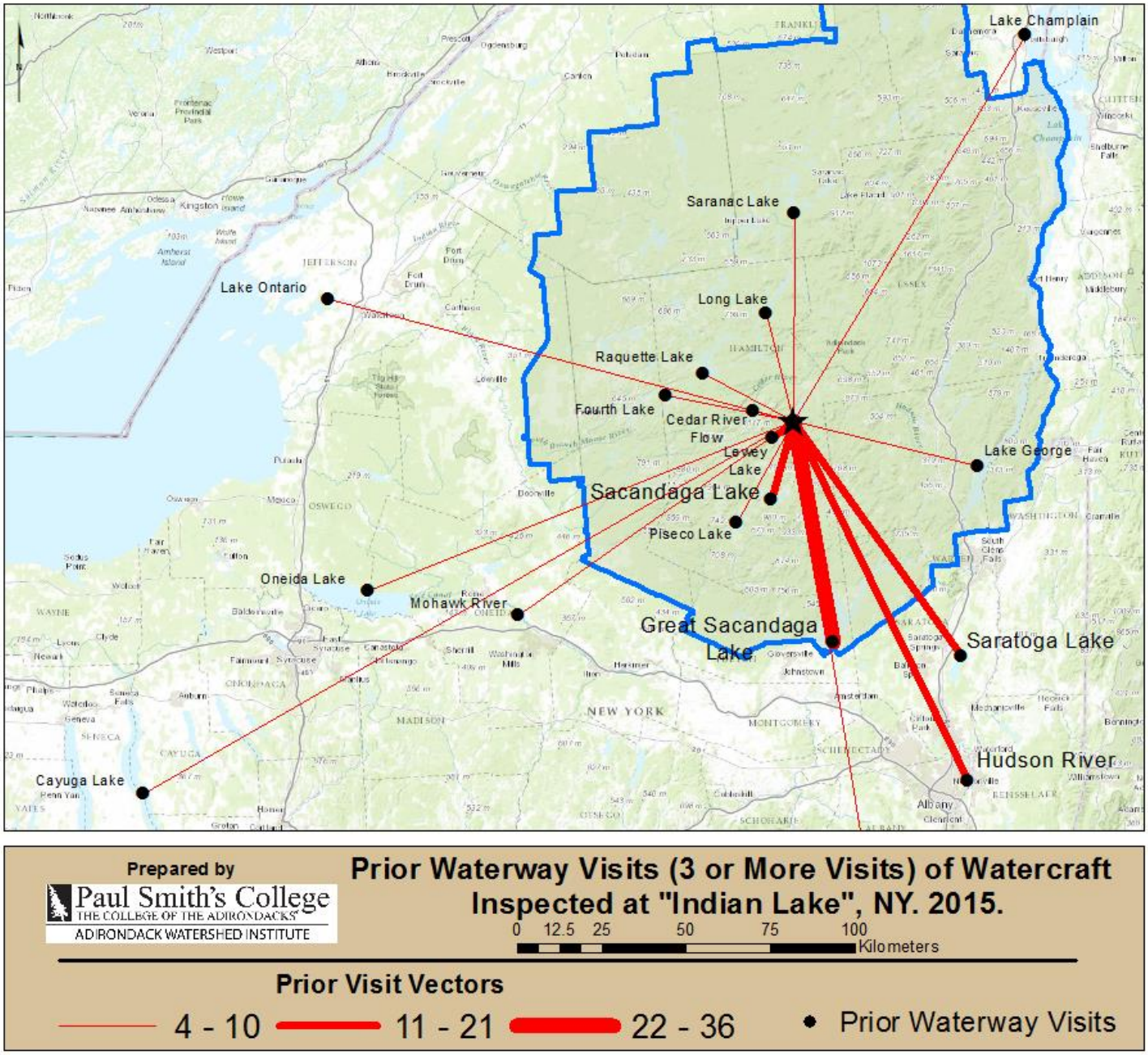

Waterways visited in previous 2 weeks by incoming vessels to Indian Lake. Vectors weighted to denote quantity of visits to previous waterbodies.

Lake Flower

Boats inspected: 1,576
AIS intercepted: 76
Number of visitors: 3,907

Visitors taking spread prevention measures: 65%
Inspected boats with organisms: 14.8%
Number of previously visited waterways: 56

Waterbody	Boat Type									total # boats
	M	PWC	S	C	K	B	R	SUP	Docks	
Lake Flower	1122	81	2	274	137	0	3	4	1	1624
percentage of total boats	69%	5%	0%	17%	8%	0%	0%	0%	0%	100%

Boats observed at launch. M = motorboat; PWC = personal watercraft; S = sailboat; C = canoe; K = kayak; B = construction barge; R = rowboat; SUP= stand-up paddleboard; Docks = boat docks launched for seasonal installation/maintenance

Waterbody	total # people	organisms found		# boats dirty	# of inspections	% of inspected boats dirty
		entering	leaving			
Lake Flower	3907	113	226	234	1576	14.8%

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

Waterbody	# groups taking AIS spread prevention measures									# groups asked
	yes	I	WB	DB	BB	LW	Dis	Dry	didn't ask	
Lake Flower	782	386	543	213	12	19	5	109	90	1209
percentage of total # groups asked	65%	32%	45%	18%	1%	2%	0%	9%	NA	

Yes = took one or more AIS spread prevention measures; I = inspected boat; WB = washed boat; DB = drained bilge; BB = emptied bait bucket; LW = drained livewell; Dis = disposed of unused bait; Dry = dried boat.

Waterbody	Organism Type																total AIS	% of inspected boats with AIS
	BW	CLP*	ELO	GRS	EWM*	NM	UM	VLM*	MUD	NON	NP	SWF*	WC*	WL	ZM*	other		
Lake Flower	17	3	4	92	45	7	12	28	14	48	34	0	0	18	0	17	76	4.8%
percentage of organisms removed	5%	1%	1%	27%	13%	2%	4%	8%	4%	14%	10%	0%	0%	5%	0%	5%		

BW = bladderwort; CLP = curly-leaf pondweed; ELO = elodea; GRS = grass; EWM = Eurasian watermilfoil; NM = native milfoil; UM = unknown milfoil; VLM = variable leaf milfoil; MUD = mud; NON = non-aquatic debris; NP = native pondweed; SWF = spiny waterflea; WC= water chestnut; WL= water lily; ZM = Zebra mussel; */AIS = aquatic invasive species.

Lake Flower: Aquatic Invasive Species Intercepted by Stewards, 2015	# found on boats launching	Previous Waterway	# found on boats retrieving	Previous Waterway
Curly leaf pondweed	0	N/A	3	Lake Flower (3)
Eurasian water milfoil	9	Lake Flower (6), *None* (2), Tupper Lake (1)	36	Lake Flower (21), None (10), Great Sacandaga Lake (1), Lake George (1), Lower Saranac Lake (1), Second Pond (1), Upper Saranac Lake (1)
Variable leaf milfoil	7	Lake Flower (7)	21	Lake Flower (12), *None* (5), *Did not ask* (1), *Rental* (1), Sacandaga Lake (1), *Unknown* (1)
Totals	**16**		**60**	

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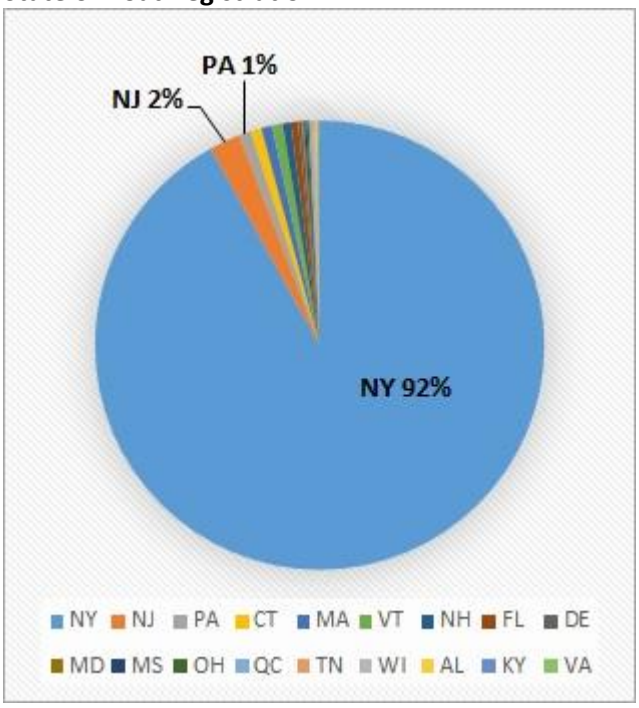
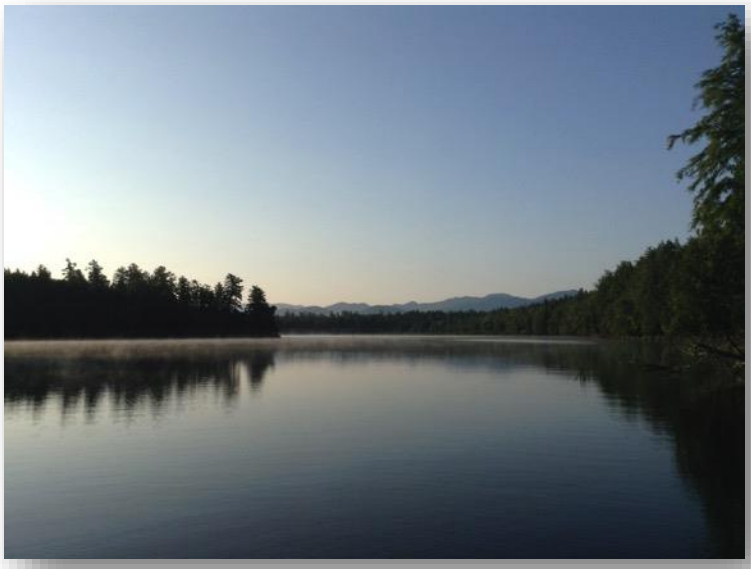
Previous Waterways visited, 2015	# visits
Lake Flower	559
None	384
Lake Placid	51
Unknown	43
Upper Saranac Lake	35
Lower Saranac Lake	28
Rental	19
Lake Champlain	16
Second Pond	13
Saranac Lake Chain	12
Rainbow Lake	10
Tupper Lake	8
St. Lawrence River	7
Upper St Regis Lake	7
Hudson River	6
Lake George	6
Osgood Pond	6
Chateaugay Lake	5
Did not ask	5
Oneida Lake	5
Schroon Lake	5

Previous Waterways visited, 2015	# visits
Cranberry Lake	4
Fish Creek Ponds	4
Fourth Lake	4
Great Sacandaga Lake	3
Lake Erie	3
Long Lake	3
Lower St Regis Lake	3
Middle Saranac Lake	3
Mohawk River	3
Atlantic Ocean	2
Sacandaga Lake	2
Saranac River	2
St. Regis River	2
Lake Kushaqua	2
Niagara River	2
Lake Titus	2
Lake Sunapee, Sullivan/Merrimack	2
Buck Pond	1
Cayuga Lake	1
Conesus Lake	1
Fulton Chain of Lakes	1

Previous Waterways visited, 2015	# visits
Indian Lake	1
Lake Colby	1
Meacham Lake	1
Mirror Lake	1
Mountain View Lake	1
Raquette River	1
Saratoga Lake	1
Skaneateles Lake	1
Oseetah Lake	1
Ballston Lake, Ballston NY	1
Paradox Lake	1
Lake Durant	1
Lake Clear	1
Silver Lake, Wyoming County NY	1
Loon Lake, Franklin County NY	1
Bog River Flow	1
Passaic River	1
Greenwhich Lake	1
French River, ON	1
Total	**1299**

State of Boat Registration





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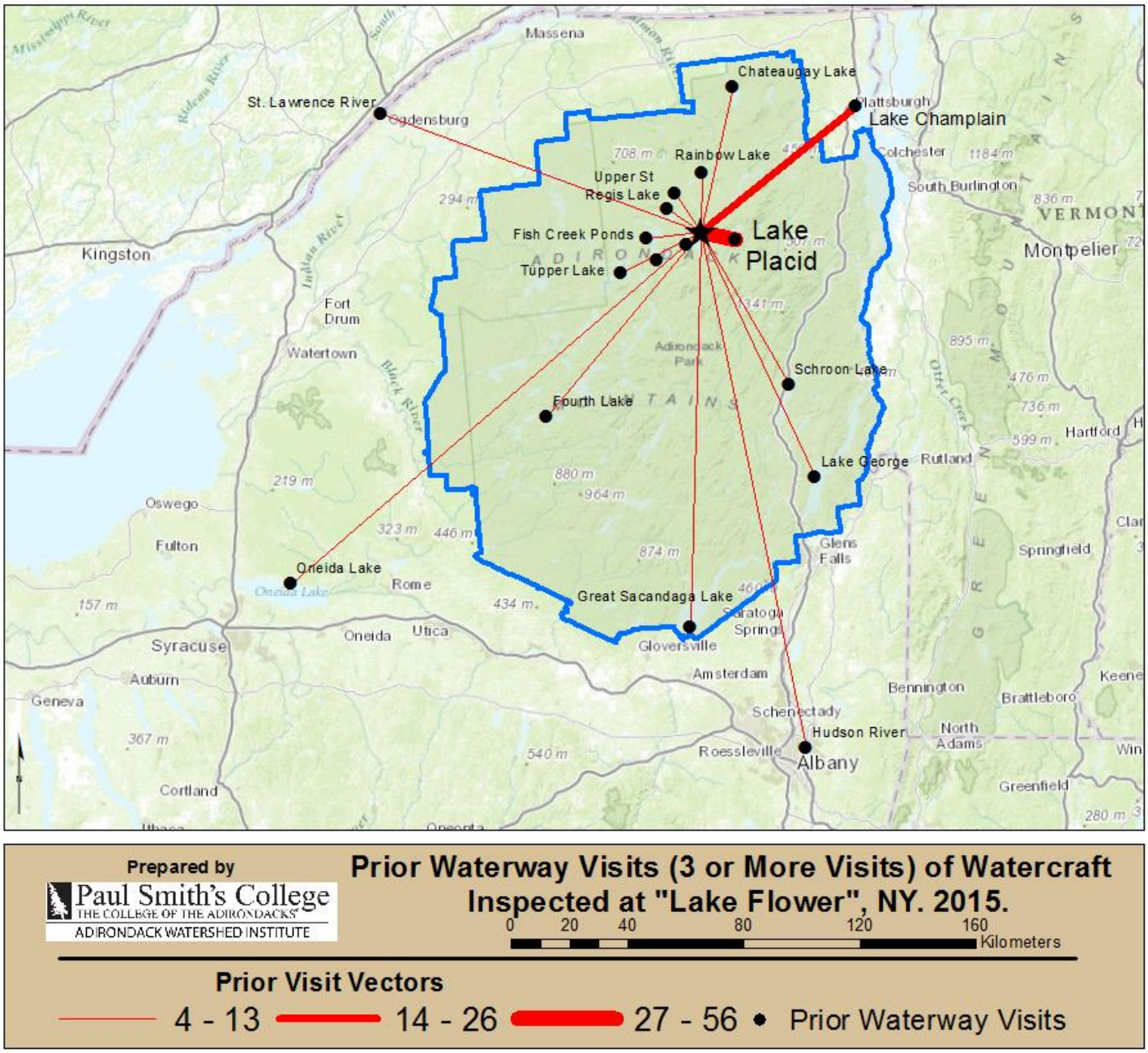

Waterways visited in previous 2 weeks by incoming vessels to Lake Flower. Vectors weighted to denote quantity of visits to previous waterbodies.

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Lake Placid

Boats inspected: 2,665
AIS intercepted: 4
Number of visitors: 5,217

Visitors taking spread prevention measures: 66%
Inspected boats with organisms: 5.3%
Number of previously visited waterways: 73

Waterbody	Boat Type									total # boats
	M	PWC	S	C	K	B	R	SUP	Docks	
Lake Placid	1508	1	20	238	879	1	14	142	0	2803
percentage of total boats	54%	0%	1%	8%	31%	0%	0%	5%	0%	100%

Boats observed at launch. M = motorboat; PWC = personal watercraft; S = sailboat; C = canoe; K = kayak; B = construction barge; R = rowboat; SUP= stand-up paddleboard; Docks = boat docks launched for seasonal installation/maintenance

Waterbody	total # people	organisms found		# boats dirty	# of inspections	% of inspected boats dirty
		entering	leaving			
Lake Placid	5217	129	46	141	2665	5.3%

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

Waterbody	# groups taking AIS spread prevention measures									# groups asked
	yes	I	WB	DB	BB	LW	Dis	Dry	didn't ask	
Lake Placid	1336	604	933	410	10	17	3	433	217	2016
percentage of total # groups asked	66%	30%	46%	20%	0%	1%	0%	21%	NA	

Yes = took one or more AIS spread prevention measures; I = inspected boat; WB = washed boat; DB = drained bilge; BB = emptied bait bucket; LW = drained livewell; Dis = disposed of unused bait; Dry = dried boat.

Waterbody	Organism Type																total AIS	% of inspected boats with AIS
	BW	CLP*	ELO	GRS	EWM*	NM	UM	VLM*	MUD	NON	NP	SWF*	WC*	WL	ZM*	other		
Lake Placid	3	0	4	51	3	0	0	1	21	83	2	0	0	1	0	6	4	0.2%
percentage of organisms removed	2%	0%	2%	29%	2%	0%	0%	1%	12%	47%	1%	0%	0%	1%	0%	3%		

BW = bladderwort; CLP = curly-leaf pondweed; ELO = elodea; GRS = grass; EWM = Eurasian watermilfoil; NM = native milfoil; UM = unknown milfoil; VLM = variable leaf milfoil; MUD = mud; NON = non-aquatic debris; NP = native pondweed; SWF = spiny waterflea; WC= water chestnut; WL= water lily; ZM = Zebra mussel; */AIS = aquatic invasive species.

Lake Placid: Aquatic Invasive Species Intercepted by Stewards, 2015	# found on boats launching	Previous Waterway	# found on boats retrieving	Previous Waterway
Eurasian water milfoil	3	Lake Placid (1), *None* (1), *Unknown* (1)	0	N/A
Variable leaf milfoil	1	Lake Placid (1)	0	N/A
Totals	**4**		**0**	

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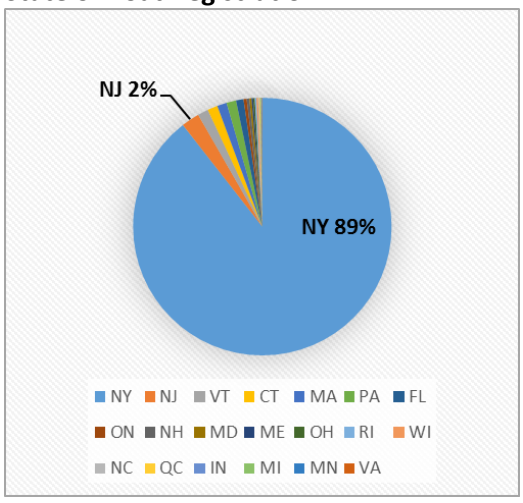
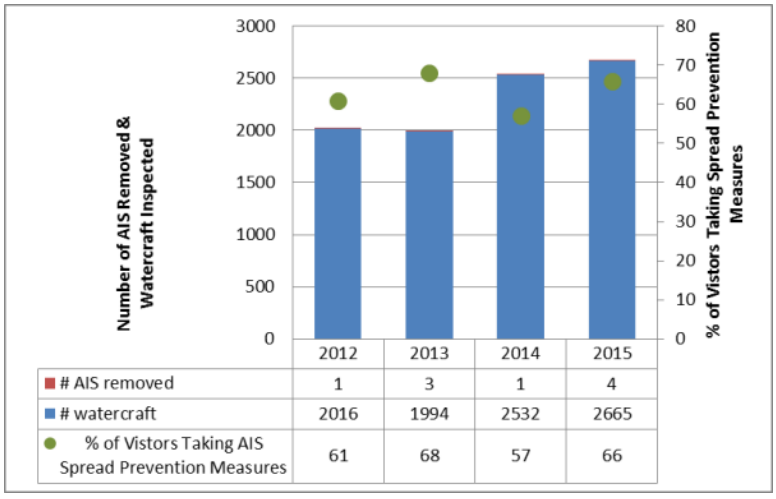
Previous Waterways visited, 2015	# visits
Lake Placid	948
None	497
Rental	283
Unknown	98
Mirror Lake	45
Lake Champlain	41
Lower Saranac Lake	28
Lake Flower	27
Upper Saranac Lake	23
Lake George	22
Atlantic Ocean	16
Saranac Lake Chain	13
Hudson River	12
Lake Colby	10
Upper St Regis Lake	10
Schroon Lake	9
Taylor Pond	9
Did not ask	8
Second Pond	7
Cranberry Lake	6
Lake Erie	6
St. Lawrence River	6
Tupper Lake	6
Buck Pond	4
Lake Ontario	4
Mohawk River	4

Previous Waterways visited, 2015	# visits
Raquette Lake	4
Raquette River	4
Saratoga Lake	4
Lake Everest, Wilmington NY	4
Brant Lake	4
Canandaigua Lake	3
Follensby Clear Pond	3
Great Sacandaga Lake	3
Cayuga Lake	2
Connecticut River	2
Erie Canal	2
Fish Creek Ponds	2
Long Lake	2
Meacham Lake	2
Middle Saranac Lake	2
Rainbow Lake	2
Round Lake	2
Sacandaga Lake	2
Saranac River	2
White Lake	2
Floodwood Pond	2
Heart Lake	2
Kiwassa Lake	2
Ausable River	2
Cascade Lakes	2
Putnam Pond, Ticonderoga NY	2

Previous Waterways visited, 2015	# visits
Blue Mountain Lake	1
Carry Falls Reservoir	1
Chazy Lake	1
Conesus Lake	1
Eighth Lake	1
Kayuta Lake	1
Lake Pleasant	1
Little Tupper Lake	1
Lower St Regis Lake	1
Mountain View Lake	1
Oneida Lake	1
Piseco Lake	1
somewhere in Connecticut	1
Paradox Lake	1
Long Pond (St Regis Canoe Area)	1
somewhere in New Jersey	1
Lake Bonaparte	1
Lake Clear	1
somewhere in Vermont	1
Lake Kushaqua	1
Pacific Ocean	1
Lincoln Pond	1
somewhere in New Hampshire	1
Fern Lake, Clinton County NY	1
Union Falls	1
Sand Pond	1
Total	**2233**

State of Boat Registration





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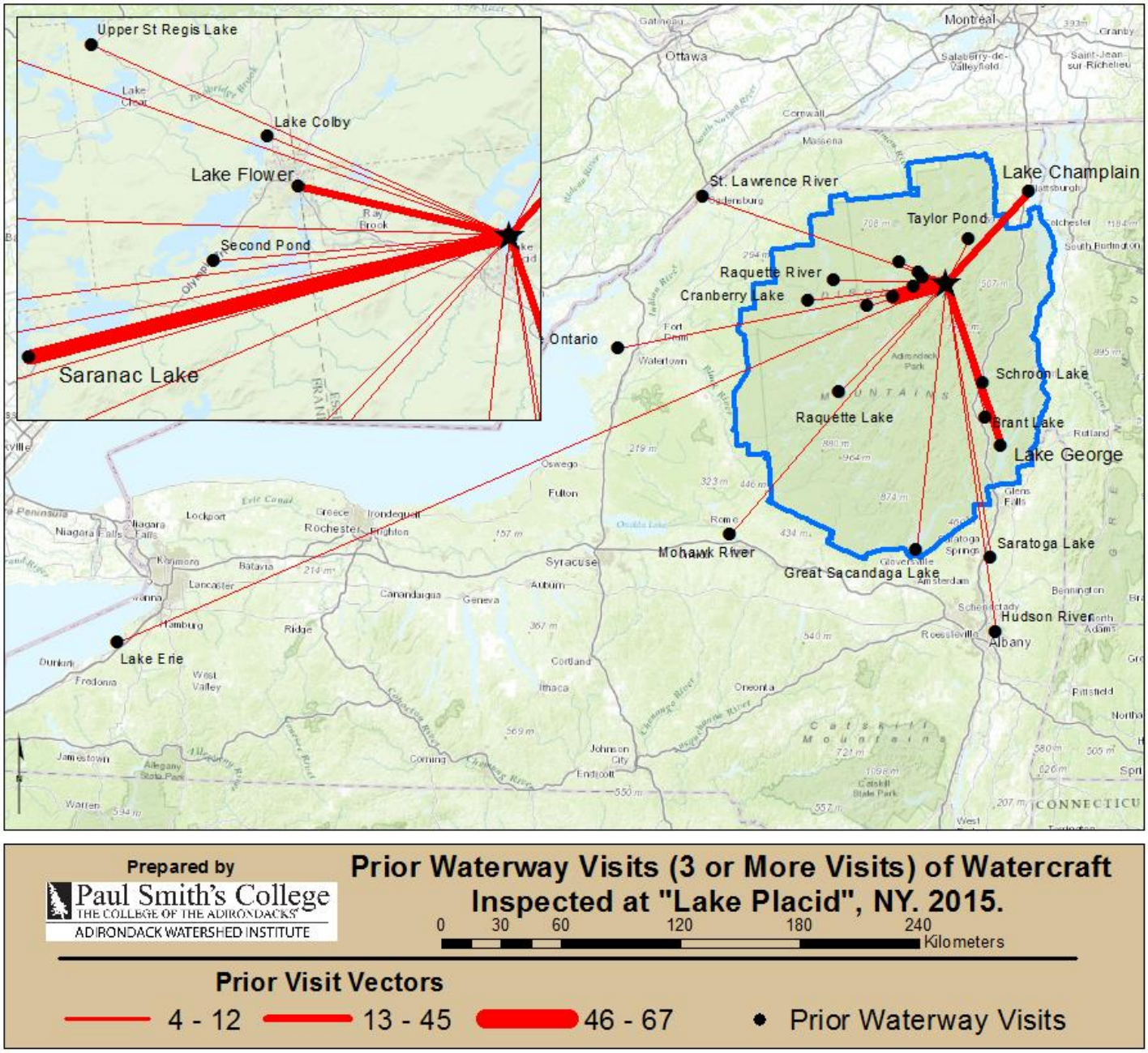

Waterways visited in previous 2 weeks by incoming vessels to Lake Placid. Vectors weighted to denote quantity of visits to previous waterbodies.

Okara Lakes Decontamination Station

Opening date: 25 June 2015

Boats inspected: 208
Visitors taking spread prevention measures: 39%
AIS intercepted: 4
Inspected boats with organisms: 4.8%
Number of visitors: 413
Number of previously visited waterways: 33

Waterbody	Boat Type									total # boats
	M	PWC	S	C	K	B	R	SUP	Docks	
Okara Lakes DECON SITE	192	9	3	1	2	0	1	0	0	208
percentage of total boats	92%	4%	1%	0%	1%	0%	0%	0%	0%	100%

Boats observed at site. M = motorboat; PWC = personal watercraft; S = sailboat; C = canoe; K = kayak; B = construction barge; R = rowboat; SUP= stand-up paddleboard; Docks = boat docks launched for seasonal installation/maintenance

Waterbody	total # people	organisms found	# boats dirty	# of inspections	% of inspected boats dirty
Okara Lakes DECON SITE	413	14	10	208	4.8%

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

Waterbody	# groups taking AIS spread prevention measures									# groups asked
	yes	I	WB	DB	BB	LW	Dis	Dry	didn't ask	
Okara Lakes DECON SITE	77	26	56	8	0	3	0	22	10	197
percentage of total # groups asked	39%	13%	28%	4%	0%	2%	0%	11%	NA	

Yes = took one or more AIS spread prevention measures; I = inspected boat; WB = washed boat; DB = drained bilge; BB = emptied bait bucket; LW = drained livewell; Dis = disposed of unused bait; Dry = dried boat.

Waterbody	Organism Type																total AIS	% of inspected boats with AIS
	BW	CLP*	ELO	GRS	EWM*	NM	UM	VLM*	MUD	NON	NP	SWF*	WC*	WL	ZM*	other		
Okara Lakes DECON SITE	2	0	0	4	3	0	0	0	0	3	0	0	0	0	1	1	4	1.9%
percentage of organisms removed	14%	0%	0%	29%	21%	0%	0%	0%	0%	21%	0%	0%	0%	0%	7%	7%		

BW = bladderwort; CLP = curly-leaf pondweed; ELO = elodea; GRS = grass; EWM = Eurasian watermilfoil; NM = native milfoil; UM = unknown milfoil; VLM = variable leaf milfoil; MUD = mud; NON = non-aquatic debris; NP = native pondweed; SWF = spiny waterflea; WC= water chestnut; WL= water lily; ZM = Zebra mussel; */AIS = aquatic invasive species.

Okara Lakes DECON SITE: Aquatic Invasive Species Intercepted by	# found at roadside site	Previous Waterway
Eurasian water milfoil	3	Cayuga Lake (1), *None* (1), Oneida Lake (1)
Zebra mussel	1	Oneida Lake (1)
Totals	**4**	

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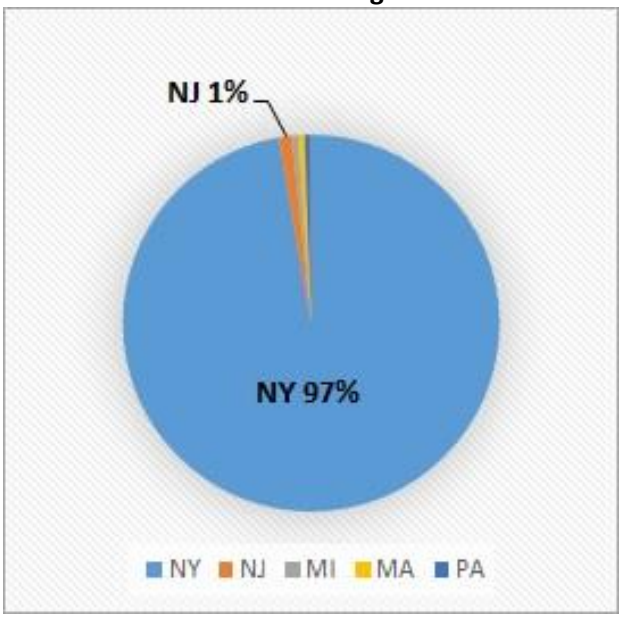
Previous Waterways visited, 2015	# visits
None	66
Unknown	20
Fourth Lake	15
Canandaigua Lake	13
Oneida Lake	12
First Lake	9
Fulton Chain of Lakes	9
Delta Lake	7
Lake Ontario	7
Seventh Lake	5
Cayuga Lake	4
Erie Canal	3
Hinckley Flow Reservoir	3
Lake George	3
Long Lake	3
Raquette Lake	3
Eighth Lake	2
Sacandaga Lake	2

Previous Waterways visited, 2015	# visits
Skaneateles Lake	2
St. Lawrence River	2
White Lake	2
Blue Mountain Lake	1
Carry Falls Reservoir	1
Chateaugay Lake	1
Conesus Lake	1
Did not ask	1
Fish Creek Ponds	1
Limekiln Lake	1
Piseco Lake	1
Raquette River	1
Seneca Lake	1
Otter Lake	1
Lake Moraine	1
Lebanon Reservoir, Hamilton NY	1
Roundabout Bay	1
Hamilton Reservoir, Holland MA	1
Total	**207**

State of Boat Registration



Long Lake

Boats inspected: 2,109
AIS intercepted: 7
Number of visitors: 4,495

Visitors taking spread prevention measures: 48%
Inspected boats with organisms: 50.5%
Number of previously visited waterways: 61

Waterbody	Boat Type									total # boats
	M	PWC	S	C	K	B	R	SUP	Docks	
Long Lake	1298	97	14	417	318	1	5	0	5	2155
percentage of total boats	60%	5%	1%	19%	15%	0%	0%	0%	0%	100%

Boats observed at launch. M = motorboat; PWC = personal watercraft; S = sailboat; C = canoe; K = kayak; B = construction barge;
R = rowboat; SUP= stand-up paddleboard; Docks = boat docks launched for seasonal installation/maintenance

Waterbody	total # people	organisms found		# boats dirty	# of inspections	% of inspected boats dirty
		entering	leaving			
Long Lake	4495	826	640	1065	2109	50.5%

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

Waterbody	# groups taking AIS spread prevention measures									# groups asked
	yes	I	WB	DB	BB	LW	Dis	Dry	didn't ask	
Long Lake	807	297	646	107	2	9	4	178	78	1681
percentage of total # groups asked	48%	18%	38%	6%	0%	1%	0%	11%	NA	

Yes = took one or more AIS spread prevention measures; I = inspected boat; WB = washed boat; DB = drained bilge; BB = emptied bait bucket; LW = drained livewell; Dis = disposed of unused bait; Dry = dried boat.

Waterbody	Organism Type																total AIS	% of inspected boats with AIS
	BW	CLP*	ELO	GRS	EWM*	NM	UM	VLM*	MUD	NON	NP	SWF*	WC*	WL	ZM*	other		
Long Lake	14	0	1	199	2	0	2	3	184	970	50	0	2	31	0	8	7	0.3%
percentage of organisms removed	1%	0%	0%	14%	0%	0%	0%	0%	13%	66%	3%	0%	0%	2%	0%	1%		

BW = bladderwort; CLP = curly-leaf pondweed; ELO = elodea; GRS = grass; EWM = Eurasian watermilfoil; NM = native milfoil; UM = unknown milfoil; VLM = variable leaf milfoil; MUD = mud; NON = non-aquatic debris; NP = native pondweed; SWF = spiny waterflea; WC= water chestnut; WL= water lily; ZM = Zebra mussel; */AIS = aquatic invasive species.

Long Lake: Aquatic Invasive Species Intercepted by Stewards, 2015	# found on boats launching	Previous Waterway	# found on boats retrieving	Previous Waterway
Eurasian water milfoil	2	*None* (1), Oneida Lake (1)	0	N/A
Variable leaf milfoil	2	*Unknown* (2)	1	*None* (1)
Water chestnut	2	*None* (1), *Unknown* (1)	0	N/A
Totals	**6**		**1**	

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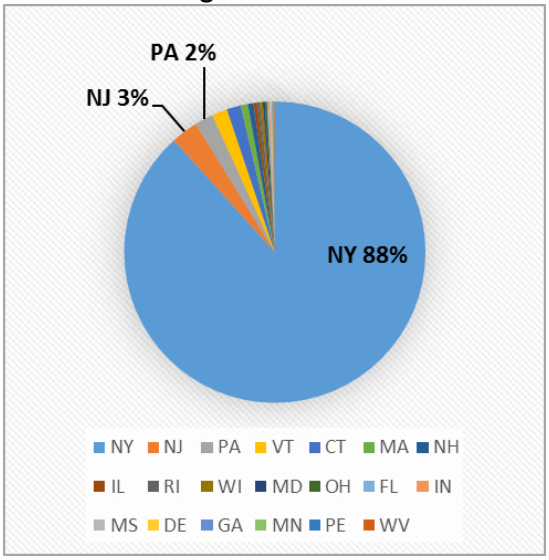
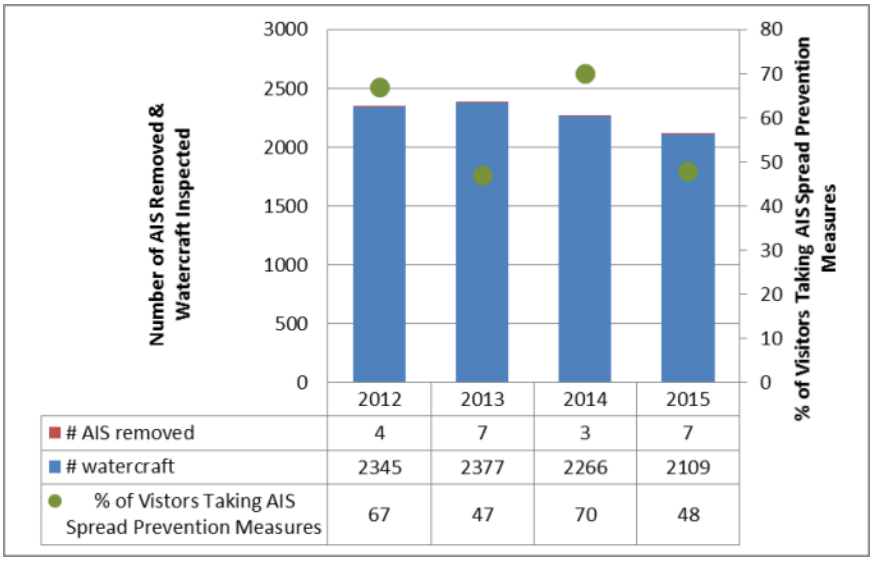
Previous Waterways visited, 2015	# visits
None	756
Long Lake	553
Unknown	69
Raquette Lake	38
Tupper Lake	29
Hudson River	22
Forked Lake	20
Rental	18
Sacandaga Lake	17
Lake Eaton	15
Schroon Lake	15
Indian Lake	12
Blue Mountain Lake	11
Saratoga Lake	11
Seventh Lake	10
Lake George	9
Oneida Lake	9
Upper Saranac Lake	9
St. Lawrence River	8
Big Moose Lake	6
Did not ask	6
Great Sacandaga Lake	6

Previous Waterways visited, 2015	# visits
Lake Ontario	6
Lake Pleasant	6
Little Tupper Lake	6
Lows Lake	6
Fourth Lake	5
Fulton Chain of Lakes	5
Lower Saranac Lake	5
Saranac Lake Chain	5
Cayuga Lake	4
Delta Lake	4
Lake Erie	4
Mohawk River	4
Canandaigua Lake	3
Cranberry Lake	3
Raquette River	3
Seneca Lake	3
Atlantic Ocean	2
Lake Champlain	2
Mirror Lake	2
Upper St Regis Lake	2
Lake Algonquin	2
Lake Durant	2

Previous Waterways visited, 2015	# visits
Lake Harris, Newcomb NY	2
Mirror Lake, Carroll County NH	2
Spy Lake, Arietta NY	2
Lake Nockamixon, Bucks County PA	2
Carry Falls Reservoir	1
Conesus Lake	1
Eighth Lake	1
Erie Canal	1
Fish Creek Ponds	1
Hinckley Flow Reservoir	1
Lewey Lake	1
Little Clear Pond	1
Middle Saranac Lake	1
Rollins Pond	1
Stillwater Reservoir	1
White Lake	1
Paradox Lake	1
Oxbow Lake	1
Lake Adirondack, Indian Lake NY	1
Brant Lake	1
Little Wolf Pond	1
Little Square Pond	1
Total	**1759**

State of Boat Registration





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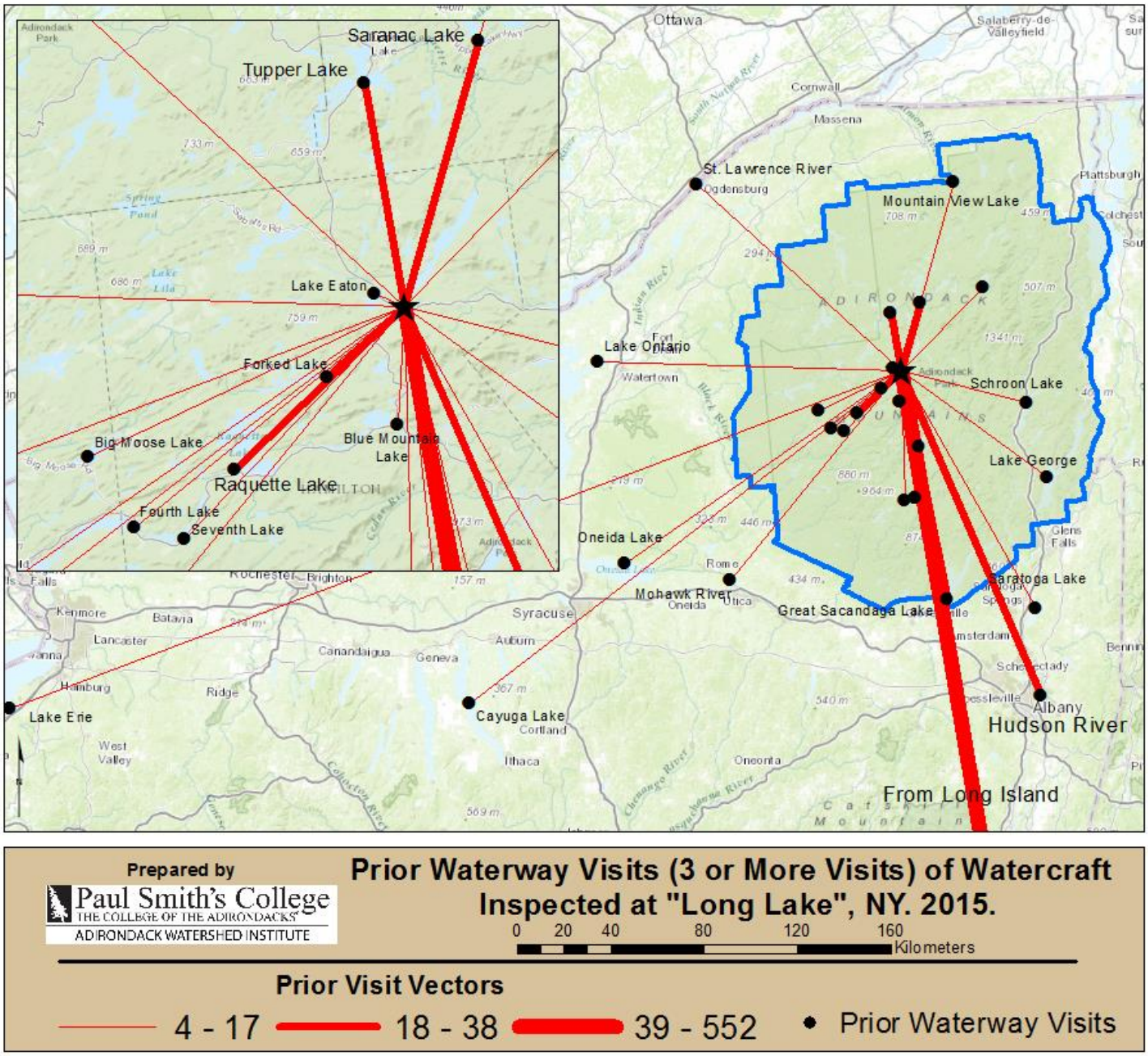


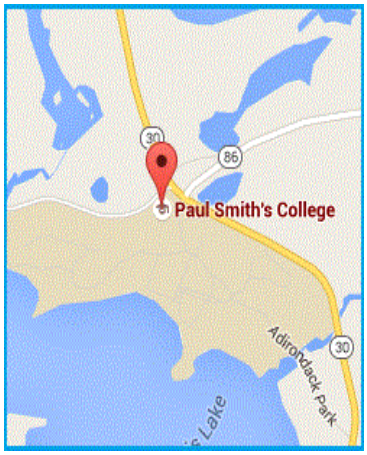
Waterways visited in previous 2 weeks by incoming vessels to Long Lake. Vectors weighted to denote quantity of visits to previous waterbodies.

Paul Smith's College Decontamination Station

Opening date: 3 July 2015

Boats inspected: 59
AIS intercepted: 1
Number of visitors: 93

Visitors taking spread prevention measures: 58%
Inspected boats with organisms: 10.2%
Number of previously visited waterways: 17



Waterbody	Boat Type									total # boats
	M	PWC	S	C	K	B	R	SUP	Docks	
Paul Smith's DECON SITE	11	0	0	28	20	0	0	0	0	59
percentage of total boats	19%	0%	0%	47%	34%	0%	0%	0%	0%	100%

Boats observed at site. M = motorboat; PWC = personal watercraft; S = sailboat; C = canoe; K = kayak; B = construction barge; R = rowboat; SUP= stand-up paddleboard; Docks = boat docks launched for seasonal installation/maintenance

Waterbody	total # people	organisms found	# boats dirty	# of inspections	% of inspected boats dirty
Paul Smith's DECON SITE	93	11	6	59	10.2%

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

Waterbody	# groups taking AIS spread prevention measures									# groups asked
	yes	I	WB	DB	BB	LW	Dis	Dry	didn't ask	
Paul Smith's DECON SITE	22	16	16	3	0	0	0	2	2	38
percentage of total # groups asked	58%	42%	42%	8%	0%	0%	0%	5%	NA	

Yes = took one or more AIS spread prevention measures; I = inspected boat; WB = washed boat; DB = drained bilge; BB = emptied bait bucket; LW = drained livewell; Dis = disposed of unused bait; Dry = dried boat.

Waterbody	Organism Type																total AIS	% of inspected boats with AIS
	BW	CLP*	ELO	GRS	EWM*	NM	UM	VLM*	MUD	NON	NP	SWF*	WC*	WL	ZM*	other		
Paul Smith's DECON SITE	0	0	0	0	1	1	0	0	0	5	4	0	0	0	0	0	1	1.7%
percentage of organisms removed	0%	0%	0%	0%	9%	9%	0%	0%	0%	45%	36%	0%	0%	0%	0%	0%		

BW = bladderwort; CLP = curly-leaf pondweed; ELO = elodea; GRS = grass; EWM = Eurasian watermilfoil; NM = native milfoil; UM = unknown milfoil; VLM = variable leaf milfoil; MUD = mud; NON = non-aquatic debris; NP = native pondweed; SWF = spiny waterflea; WC= water chestnut; WL= water lily; ZM = Zebra mussel; */AIS = aquatic invasive species.

Paul Smith's DECON SITE: Aquatic Invasive Species Intercepted by	# found at roadside site	Previous Waterway
Eurasian water milfoil	1	Upper Saranac Lake (1)

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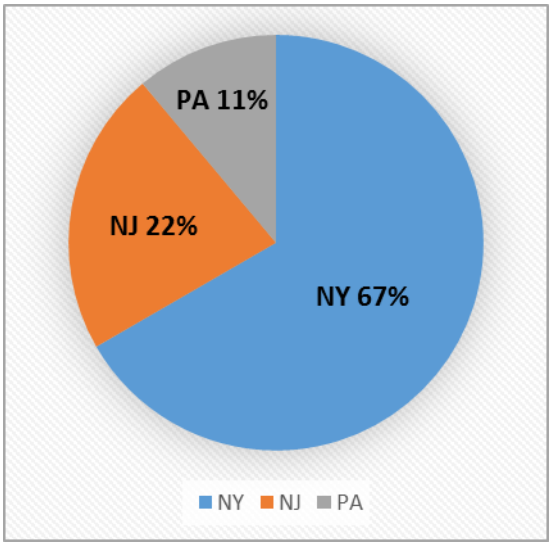
Previous Waterways visited, 2015	# visits
None	10
Unknown	6
Osgood Pond	4
Lake Placid	2
Lower St Regis Lake	2
Mountain View Lake	2
Second Pond	2
Buck Pond	1
Lake Colby	1
Lake Flower	1

Previous Waterways visited, 2015	# visits
Little Clear Pond	1
Meacham Lake	1
Middle Saranac Lake	1
Mirror Lake	1
Raquette River	1
Rollins Pond	1
Saratoga Lake	1
Tupper Lake	1
Upper Saranac Lake	1
Total	**40**

State of Boat Registration

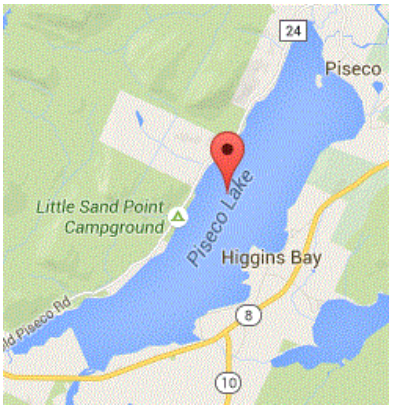


Regional Supervisors, Christiaan and Jorge, and Program Manager, Jeff, test the Paul Smith's decontamination unit before opening the station

Piseco Lake

Boats inspected: 549
AIS intercepted: 0
Number of visitors: 1,362

Visitors taking spread prevention measures: 82%
Inspected boats with organisms: 0.2%
Number of previously visited waterways: 28



Waterbody	Boat Type									total # boats
	M	PWC	S	C	K	B	R	SUP	Docks	
Piseco Lake	432	46	9	13	62	0	3	1	2	568
percentage of total boats	76%	8%	2%	2%	11%	0%	1%	0%	0%	100%

M = motorboat; PWC = personal watercraft; S = sailboat; C = canoe; K = kayak; B = construction barge; R = rowboat; SUP= stand-up paddleboard; Docks = boat docks launched for seasonal installation/maintenance

Waterbody	total # people	organisms found		# boats dirty	# of inspections	% of inspected boats dirty
		entering	leaving			
Piseco Lake	1362	1	0	1	549	0.2%

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

Waterbody	# groups taking AIS spread prevention measures									# groups asked
	yes	I	WB	DB	BB	LW	Dis	Dry	didn't ask	
Piseco Lake	425	291	243	217	85	99	60	305	14	518
percentage of total # groups asked	82%	56%	47%	42%	16%	19%	12%	59%	NA	

Yes = took one or more AIS spread prevention measures; I = inspected boat; WB = washed boat; DB = drained bilge; BB = emptied bait bucket; LW = drained livewell; Dis = disposed of unused bait; Dry = dried boat.

Waterbody	Organism Type																total AIS
	BW	CLP*	ELO	GRS	EWM*	NM	UM	VLM*	MUD	NON	NP	SWF*	WC*	WL	ZM*	other	
Piseco Lake	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
percentage of organisms removed	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	

BW = bladderwort; CLP = curly-leaf pondweed; ELO = elodea; GRS = grass; EWM = Eurasian watermilfoil; NM = native milfoil; UM = unknown milfoil; VLM = variable leaf milfoil; MUD = mud; NON = non-aquatic debris; NP = native pondweed; SWF = spiny waterflea; WC= water chestnut; WL= water lily; ZM = Zebra mussel; */AIS = aquatic invasive species.

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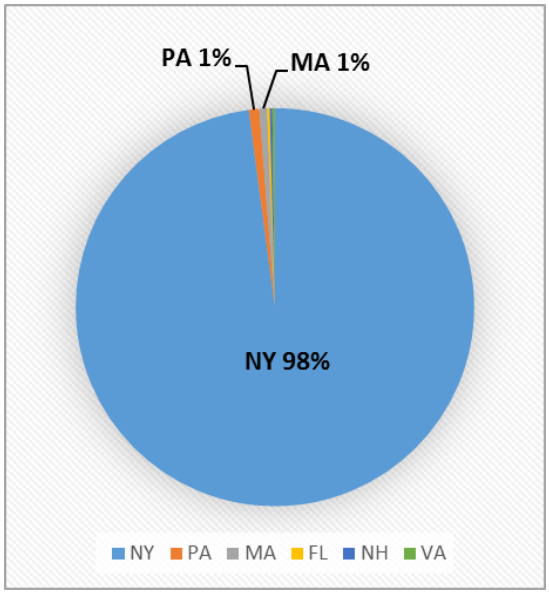
Previous Waterways visited, 2015	# visits
None	293
Piseco Lake	133
Unknown	26
Sacandaga Lake	10
Did not ask	7
Hinckley Flow Reservoir	7
Great Sacandaga Lake	6
Lake Pleasant	6
Rental	6
Canandaigua Lake	3
Fourth Lake	3
Mohawk River	3
Saratoga Lake	3
Upper Saranac Lake	3
Lake George	2
Little Tupper Lake	2
Oneida Lake	2

Previous Waterways visited, 2015	# visits
Canada Lake	2
Blue Mountain Lake	1
Cayuga Lake	1
Erie Canal	1
Hudson River	1
Indian Lake	1
Lake Ontario	1
Long Lake	1
Raquette Lake	1
Skaneateles Lake	1
Thompson's Lake, Albany NY	1
Paradox Lake	1
Oxbow Lake	1
Heken	1
Lake Moraine	1
Twin Lakes, Salisbury CT	1
Total	**532**

State of Boat Registration

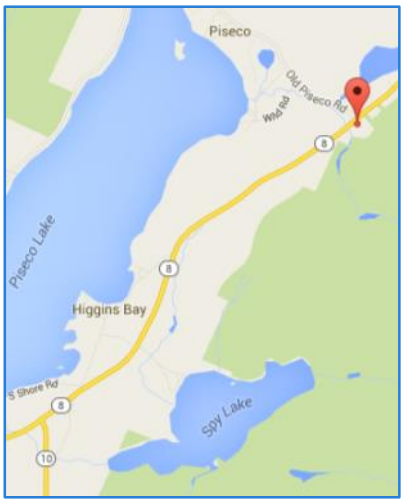


Piseco Decontamination Station

Opening date: 20 June 2015

Boats inspected: 90
AIS intercepted: 0
Number of visitors: 146

Visitors taking spread prevention measures: 96%
Inspected boats with organisms: 0%
Number of previously visited waterways: 10



Waterbody	Boat Type									total # boats
	M	PWC	S	C	K	B	R	SUP	Docks	
Piseco Lake DECON SITE	55	7	3	17	7	0	1	0	0	90
percentage of total boats	61%	8%	3%	19%	8%	0%	1%	0%	0%	100%

Boats observed at site. M = motorboat; PWC = personal watercraft; S = sailboat; C = canoe; K = kayak; B = construction barge; R = rowboat; SUP= stand-up paddleboard; Docks = boat docks launched for seasonal installation/maintenance

Waterbody	total # people	organisms found	# boats dirty	# of inspections	% of inspected boats dirty
Piseco Lake DECON SITE	146	0	0	90	0%

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

Waterbody	# groups taking AIS spread prevention measures									# groups asked
	yes	I	WB	DB	BB	LW	Dis	Dry	didn't ask	
Piseco Lake DECON SITE	69	50	28	35	17	15	12	49	1	72
percentage of total # groups asked	96%	69%	39%	49%	24%	21%	17%	68%	NA	

Yes = took one or more AIS spread prevention measures; I = inspected boat; WB = washed boat; DB = drained bilge; BB = emptied bait bucket; LW = drained livewell; Dis = disposed of unused bait; Dry = dried boat.

Waterbody	Organism Type																total AIS	% of inspected boats with AIS
	BW	CLP*	ELO	GRS	EWM*	NM	UM	VLM*	MUD	NON	NP	SWF*	WC*	WL	ZM*	other		
Piseco Lake DECON SITE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
percentage of organisms removed	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		

BW = bladderwort; CLP = curly-leaf pondweed; ELO = elodea; GRS = grass; EWM = Eurasian watermilfoil; NM = native milfoil; UM = unknown milfoil; VLM = variable leaf milfoil; MUD = mud; NON = non-aquatic debris; NP = native pondweed; SWF = spiny waterflea; WC= water chestnut; WL= water lily; ZM = Zebra mussel; */AIS = aquatic invasive species.

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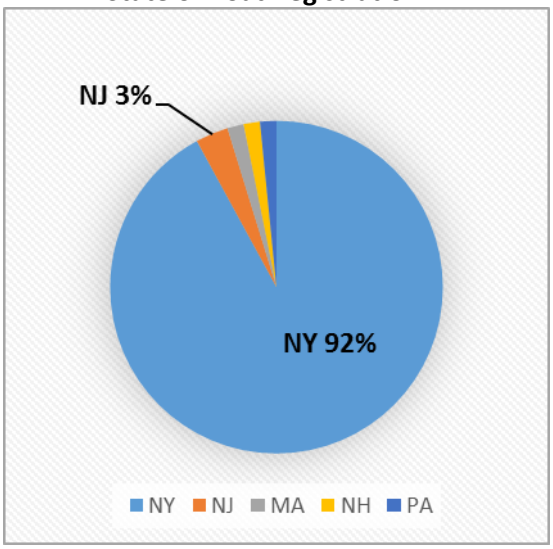
Previous Waterways visited, 2015	# visits
None	24
Piseco Lake	14
Unknown	13
Sacandaga Lake	9
Lake Pleasant	5
Long Lake	2
Canandaigua Lake	1
Fourth Lake	1
Great Sacandaga Lake	1
Indian Lake	1
Lewey Lake	1
Lake Durant	1
Total	**73**

State of Boat Registration



Rainbow Lake

Boats inspected: 740
AIS intercepted: 2
Number of visitors: 1,258

Visitors taking spread prevention measures: 72%
Inspected boats with organisms: 41.6%
Number of previously visited waterways: 40

Waterbody	Boat Type									total # boats
	M	PWC	S	C	K	B	R	SUP	Docks	
Rainbow Lake	216	4	0	138	374	0	4	10	1	747
percentage of total boats	29%	1%	0%	18%	50%	0%	1%	1%	0%	100%

Boats observed at launch. M = motorboat; PWC = personal watercraft; S = sailboat; C = canoe; K = kayak; B = construction barge; R = rowboat; SUP= stand-up paddleboard; Docks = boat docks launched for seasonal installation/maintenance

Waterbody	total # people	organisms found		# boats dirty	# of inspections	% of inspected boats dirty
		entering	leaving			
Rainbow Lake	1258	217	192	308	740	41.6%

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

Waterbody	# groups taking AIS spread prevention measures									# groups asked
	yes	I	WB	DB	BB	LW	Dis	Dry	didn't ask	
Rainbow Lake	362	165	218	21	6	10	3	63	22	504
percentage of total # groups asked	72%	33%	43%	4%	1%	2%	1%	13%	NA	

Yes = took one or more AIS spread prevention measures; I = inspected boat; WB = washed boat; DB = drained bilge; BB = emptied bait bucket; LW = drained livewell; Dis = disposed of unused bait; Dry = dried boat.

Waterbody	Organism Type																total AIS	% of inspected boats with AIS
	BW	CLP*	ELO	GRS	EWM*	NM	UM	VLM*	MUD	NON	NP	SWF*	WC*	WL	ZM*	other		
Rainbow Lake	14	0	3	20	2	0	1	0	78	232	18	0	0	3	0	38	2	0.3%
percentage of organisms removed	3%	0%	1%	5%	0%	0%	0%	0%	19%	57%	4%	0%	0%	1%	0%	9%		

BW = bladderwort; CLP = curly-leaf pondweed; ELO = elodea; GRS = grass; EWM = Eurasian watermilfoil; NM = native milfoil; UM = unknown milfoil; VLM = variable leaf milfoil; MUD = mud; NON = non-aquatic debris; NP = native pondweed; SWF = spiny waterflea; WC= water chestnut; WL= water lily; ZM = Zebra mussel; */AIS = aquatic invasive species.

Rainbow Lake: Aquatic Invasive Species Intercepted by Stewards, 2015	# found on boats launching	Previous Waterway	# found on boats retrieving	Previous Waterway
Eurasian water milfoil	2	Chateaugay Lake (1), *Unknown* (1)	0	N/A

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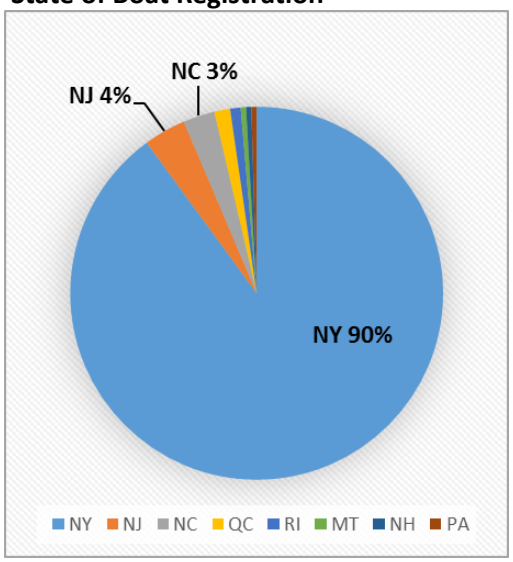
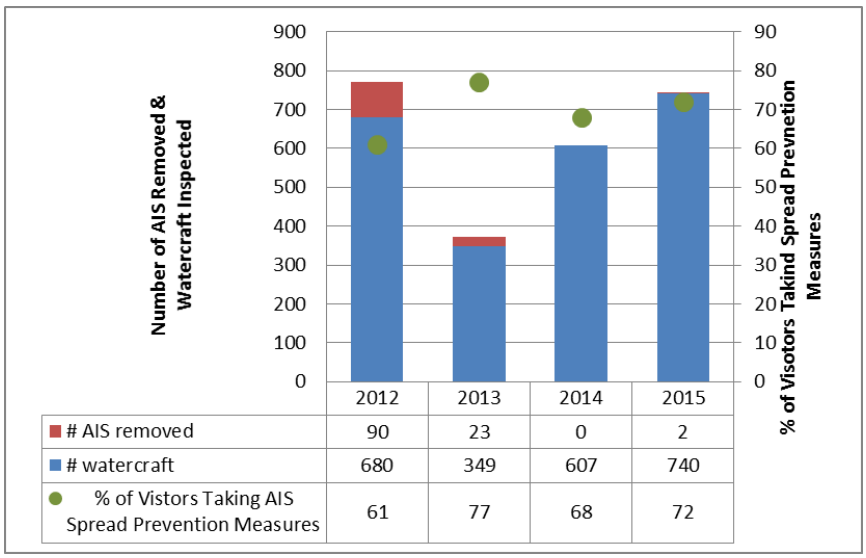
Previous Waterways visited, 2015	# visits
None	170
Rainbow Lake	124
Buck Pond	49
Unknown	48
Lake Champlain	17
Saranac River	12
Lower Saranac Lake	10
Chateaugay Lake	7
Lake Flower	7
Osgood Pond	6
Raquette River	6
Rollins Pond	6
Taylor Pond	5
Fish Creek Ponds	4
Lake Placid	4

Previous Waterways visited, 2015	# visits
Lake Colby	3
Meacham Lake	3
Rental	3
St. Lawrence River	3
Upper Saranac Lake	3
Upper St Regis Lake	3
Cascade Lakes	3
Chazy Lake	2
Follensby Clear Pond	2
Middle Saranac Lake	2
Saranac Lake Chain	2
Saratoga Lake	2
Chazy River	2
White River, VT	2
Cayuga Lake	1

Previous Waterways visited, 2015	# visits
Fourth Lake	1
Franklin Falls Flow	1
Lake Erie	1
Lake George	1
Little Clear Pond	1
Little Tupper Lake	1
Schroon Lake	1
Tupper Lake	1
Hoel Pond	1
Lake Harris, Newcomb NY	1
Simon Pond	1
Ausable River	1
Loon Lake, Franklin County NY	1
Mountain Pond	1
Apple Glen Pond, Hudson QC	1
Total	**526**

State of Boat Registration





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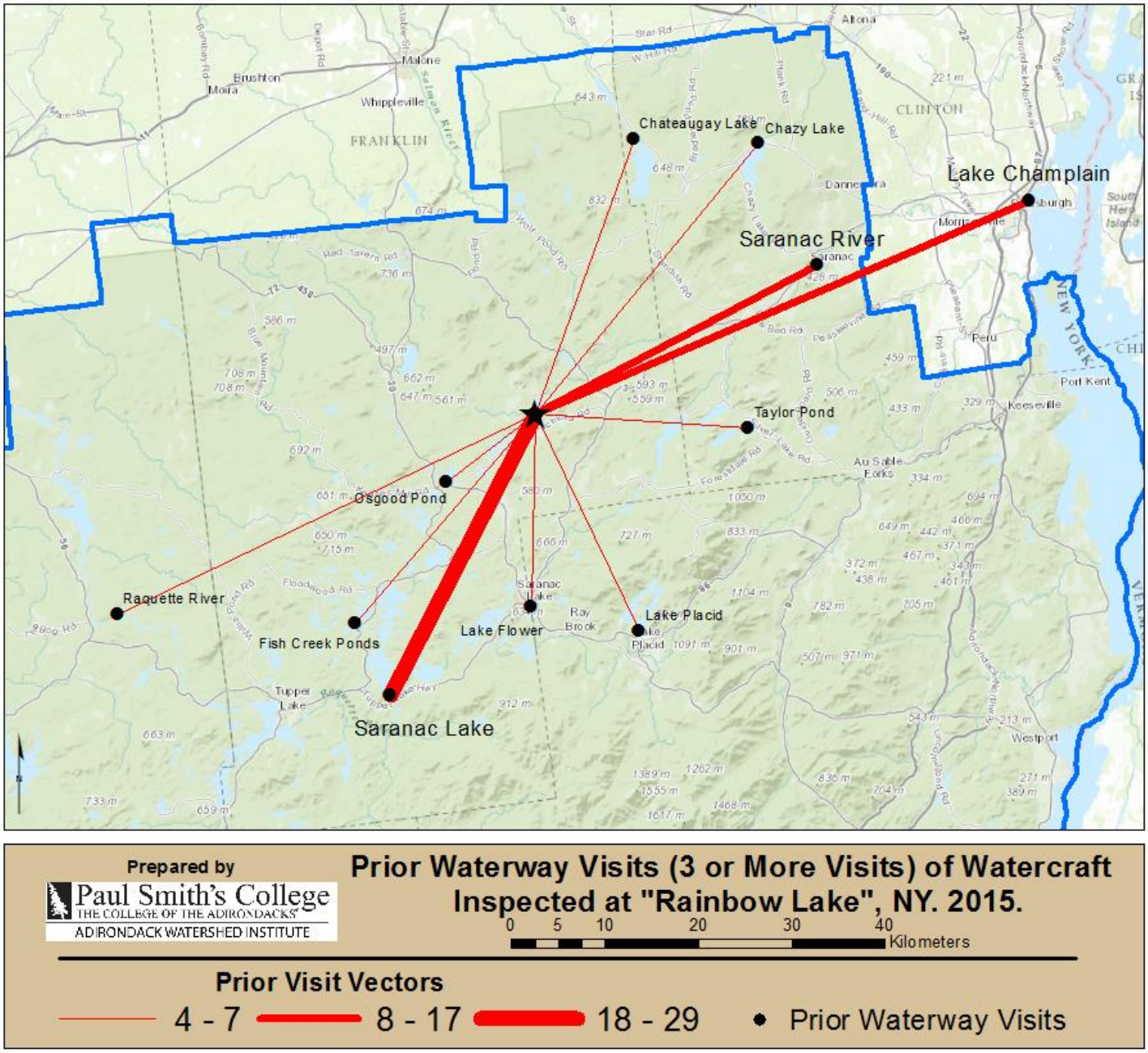

Waterways visited in previous 2 weeks by incoming vessels to Rainbow Lake. Vectors weighted to denote quantity of visits to previous waterbodies.

Raquette Lake

Boats inspected: 1,619
AIS intercepted: 12
Number of visitors: 3,035

Visitors taking spread prevention measures: 75%
Inspected boats with organisms: 17.0%
Number of previously visited waterways: 67

Waterbody	Boat Type									total # boats
	M	PWC	S	C	K	B	R	SUP	Docks	
Raquette Lake	821	56	7	388	405	0	0	9	2	1688
percentage of total boats	49%	3%	0%	23%	24%	0%	0%	1%	0%	100%

Boats observed at launch. M = motorboat; PWC = personal watercraft; S = sailboat; C = canoe; K = kayak; B = construction barge; R = rowboat; SUP= stand-up paddleboard; Docks = boat docks launched for seasonal installation/maintenance

Waterbody	total # people	organisms found		# boats dirty	# of inspections	% of inspected boats dirty
		entering	leaving			
Raquette Lake	3035	83	297	276	1619	17.0%

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

Waterbody	# groups taking AIS spread prevention measures									# groups asked
	yes	I	WB	DB	BB	LW	Dis	Dry	didn't ask	
Raquette Lake	614	361	308	216	31	20	34	373	402	820
percentage of total # groups asked	75%	44%	38%	26%	4%	2%	4%	45%	NA	

Yes = took one or more AIS spread prevention measures; I = inspected boat; WB = washed boat; DB = drained bilge; BB = emptied bait bucket; LW = drained livewell; Dis = disposed of unused bait; Dry = dried boat.

Waterbody	Organism Type																total AIS	% of inspected boats with AIS
	BW	CLP*	ELO	GRS	EWM*	NM	UM	VLM*	MUD	NON	NP	SWF*	WC*	WL	ZM*	other		
Raquette Lake	27	0	0	105	0	23	0	11	49	104	2	0	0	36	1	22	12	0.7%
percentage of organisms removed	7%	0%	0%	28%	0%	6%	0%	3%	13%	27%	1%	0%	0%	9%	0%	6%		

BW = bladderwort; CLP = curly-leaf pondweed; ELO = elodea; GRS = grass; EWM = Eurasian watermilfoil; NM = native milfoil; UM = unknown milfoil; VLM = variable leaf milfoil; MUD = mud; NON = non-aquatic debris; NP = native pondweed; SWF = spiny waterflea; WC= water chestnut; WL= water lily; ZM = Zebra mussel; */AIS = aquatic invasive species.

Raquette Lake: Aquatic Invasive Species Intercepted by Stewards, 2015	# found on boats launching	Previous Waterway	# found on boats retrieving	Previous Waterway
Variable leaf milfoil	5	None (2), Brown's Tract Pond (2), Sacandaga (1)	6	Brown's Tract Pond (5), *Unknown* (1)
Zebra mussel	1	*None* (1)	0	N/A
Totals	**6**		**6**	

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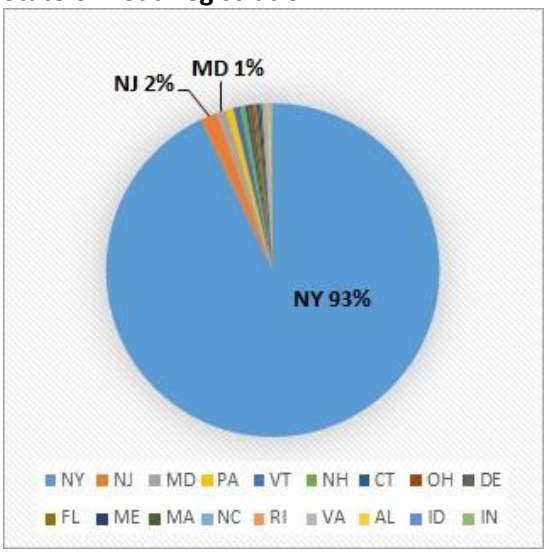
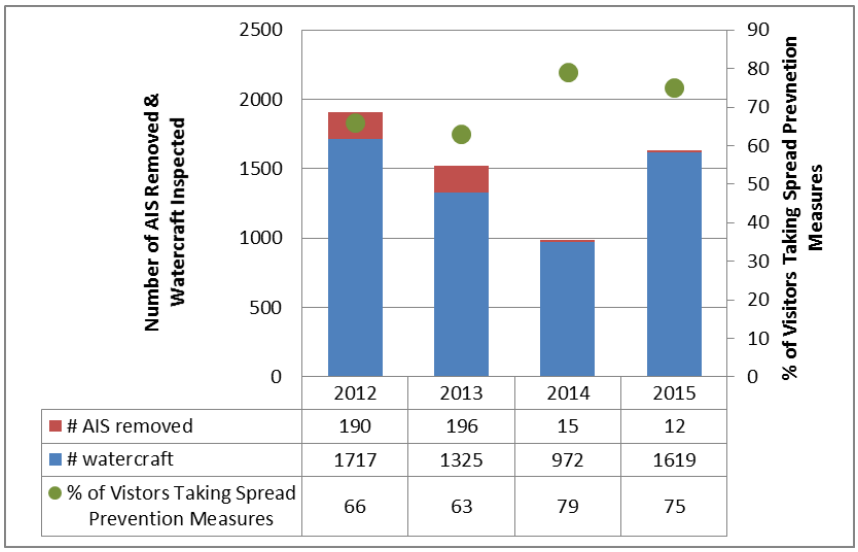
Previous Waterways visited, 2015	# visits
None	622
Raquette Lake	132
Did not ask	98
Unknown	48
Fourth Lake	47
Brown's Tract Pond	30
Seventh Lake	22
Rental	19
Blue Mountain Lake	18
Tupper Lake	12
Indian Lake	9
Long Lake	9
Delta Lake	8
Lake Ontario	7
Sacandaga Lake	7
Saratoga Lake	7
Big Moose Lake	6
Canandaigua Lake	6
Eighth Lake	6
Cayuga Lake	5
Hudson River	5
Lower Saranac Lake	5
Oneida Lake	5
St. Lawrence River	5

Previous Waterways visited, 2015	# visits
Forked Lake	4
Fulton Chain of Lakes	4
Hinckley Flow Reservoir	4
Little Tupper Lake	4
Raquette River	4
Otsego Lake	4
Rainbow Lake	3
Schroon Lake	3
Stillwater Reservoir	3
Utowana Lake	3
Cranberry Lake	2
Great Sacandaga Lake	2
Lake George	2
Lake Placid	2
Limekiln Lake	2
Middle Saranac Lake	2
Piseco Lake	2
Saranac Lake Chain	2
Moss Lake, Herkimer County NY	2
9 Mile Swamp, Madison County NY	2
Atlantic Ocean	1
Chateaugay Lake	1
Conesus Lake	1
Erie Canal	1

Previous Waterways visited, 2015	# visits
First Lake	1
Lake Champlain	1
Lake Erie	1
Lower St Regis Lake	1
Mirror Lake	1
Skaneateles Lake	1
Upper St Regis Lake	1
West Canada Lake	1
North-South Lake, Hunter NY	1
Lake Algonquin	1
Lake Durant	1
Black Lake	1
Neversink Resevoir, Neversink NY	1
Sagamore Lake, Putnam County NY	1
Shelburne Pond, Montpelier VT	1
Moose River	1
Bog River Flow	1
Onondaga Lake	1
Rock Lake, Blue Mountain NY	1
Otawana Lake	1
Rondaxe Lake, Old Forge NY	1
Mad River, Warren VT	1
Hanging Bog, Allegany County NY	1
Cheney Pond, Minerva NY	1
Total	**1222**

State of Boat Registration





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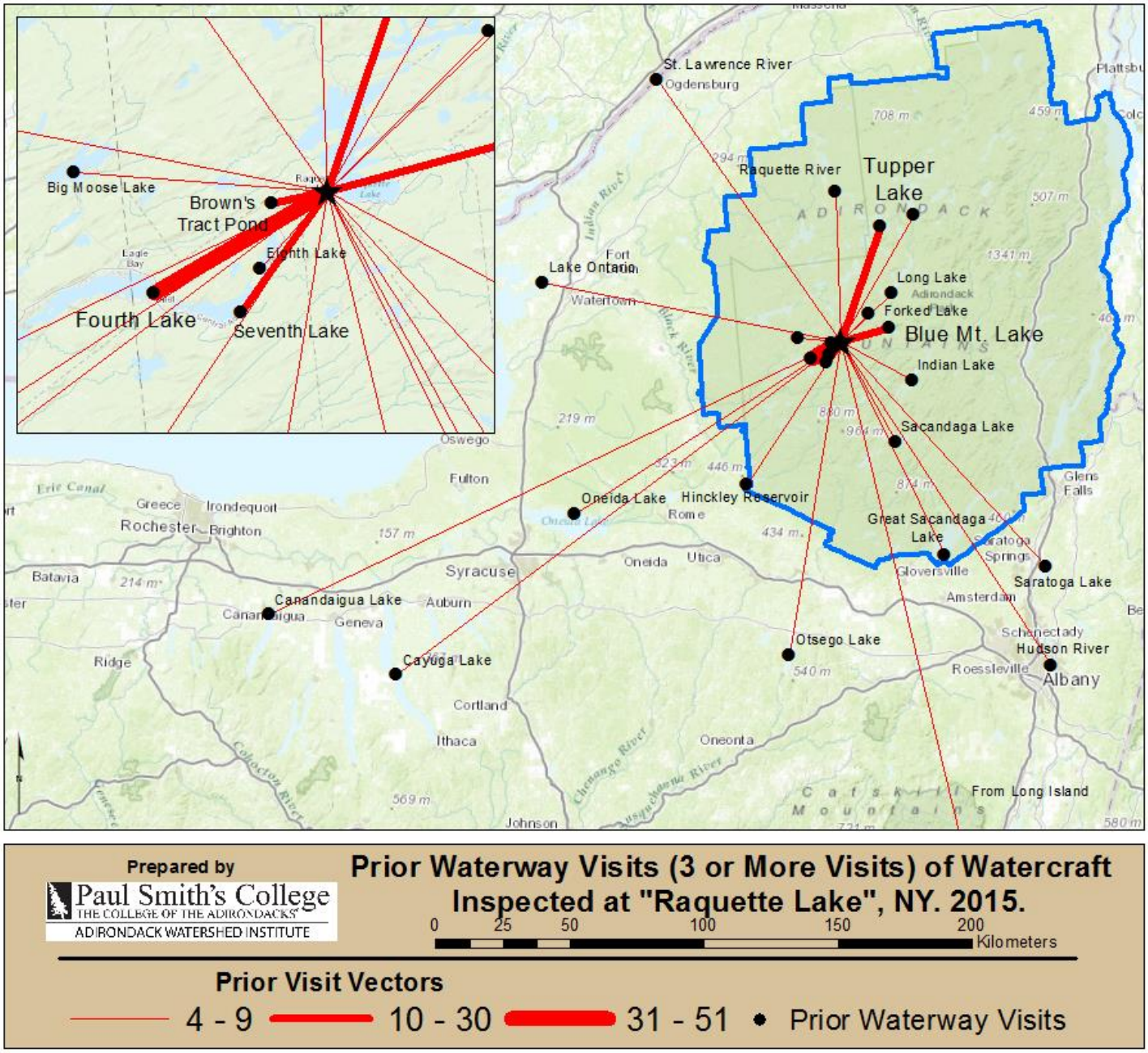

Waterways visited in previous 2 weeks by incoming vessels to Raquette Lake. Vectors weighted to denote quantity of visits to previous waterbodies.

Sacandaga Lake

Boats inspected: 1,112
AIS intercepted: 5
Number of visitors: 2,943

Visitors taking spread prevention measures: 94%
Inspected boats with organisms: 3.2%
Number of previously visited waterways: 49

Waterbody	Boat Type									total # boats
	M	PWC	S	C	K	B	R	SUP	Docks	
Sacandaga Lake	945	142	2	14	81	0	5	1	1	1191
percentage of total boats	79%	12%	0%	1%	7%	0%	0%	0%	0%	100%

Boats observed at launch. M = motorboat; PWC = personal watercraft; S = sailboat; C = canoe; K = kayak; B = construction barge; R = rowboat; SUP= stand-up paddleboard; Docks = boat docks launched for seasonal installation/maintenance

Waterbody	total # people	organisms found		# boats dirty	# of inspections	% of inspected boats dirty
		entering	leaving			
Sacandaga Lake	2943	24	16	36	1112	3.2%

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

Waterbody	# groups taking AIS spread prevention measures									# groups asked
	yes	I	WB	DB	BB	LW	Dis	Dry	didn't ask	
Sacandaga Lake	1074	903	191	428	26	23	19	456	10	1139
percentage of total # groups asked	94%	79%	17%	38%	2%	2%	2%	40%	NA	

Yes = took one or more AIS spread prevention measures; I = inspected boat; WB = washed boat; DB = drained bilge; BB = emptied bait bucket; LW = drained livewell; Dis = disposed of unused bait; Dry = dried boat.

Waterbody	Organism Type																total AIS	% of inspected boats with AIS
	BW	CLP*	ELO	GRS	EWM*	NM	UM	VLM*	MUD	NON	NP	SWF*	WC*	WL	ZM*	other		
Sacandaga Lake	0	2	0	9	3	0	1	0	2	9	0	0	0	0	0	14	5	0%
percentage of organisms removed	0%	5%	0%	23%	8%	0%	3%	0%	5%	23%	0%	0%	0%	0%	0%	35%		

BW = bladderwort; CLP = curly-leaf pondweed; ELO = elodea; GRS = grass; EWM = Eurasian watermilfoil; NM = native milfoil; UM = unknown milfoil; VLM = variable leaf milfoil; MUD = mud; NON = non-aquatic debris; NP = native pondweed; SWF = spiny waterflea; WC= water chestnut; WL= water lily; ZM = Zebra mussel; */AIS = aquatic invasive species.

Sacandaga Lake: Aquatic Invasive Species Intercepted by Stewards, 2015	# found on boats launching	Previous Waterway	# found on boats retrieving	Previous Waterway
Curly leaf pondweed	2	Oxbow Lake (1), Sacandaga Lake (1)	0	N/A
Eurasian water milfoil	3	Great Sacandaga Lake (1), Lake Ontario (1), St. Lawrence River (1)	0	N/A
Totals	**5**		**0**	

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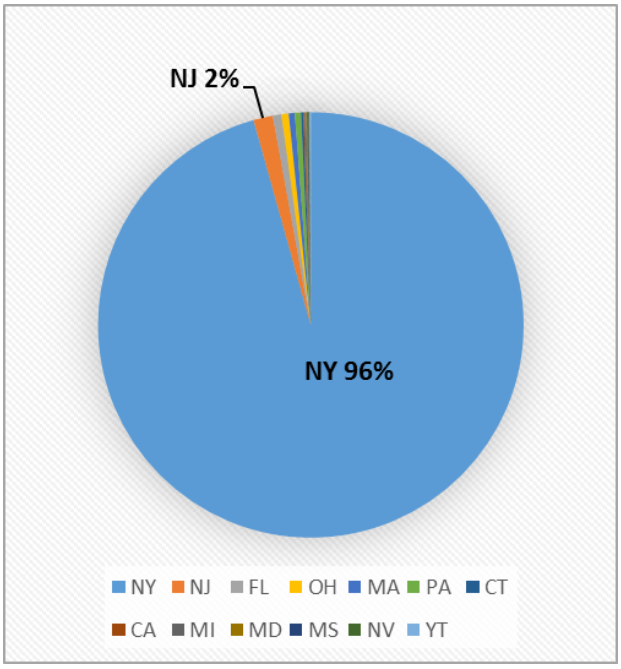
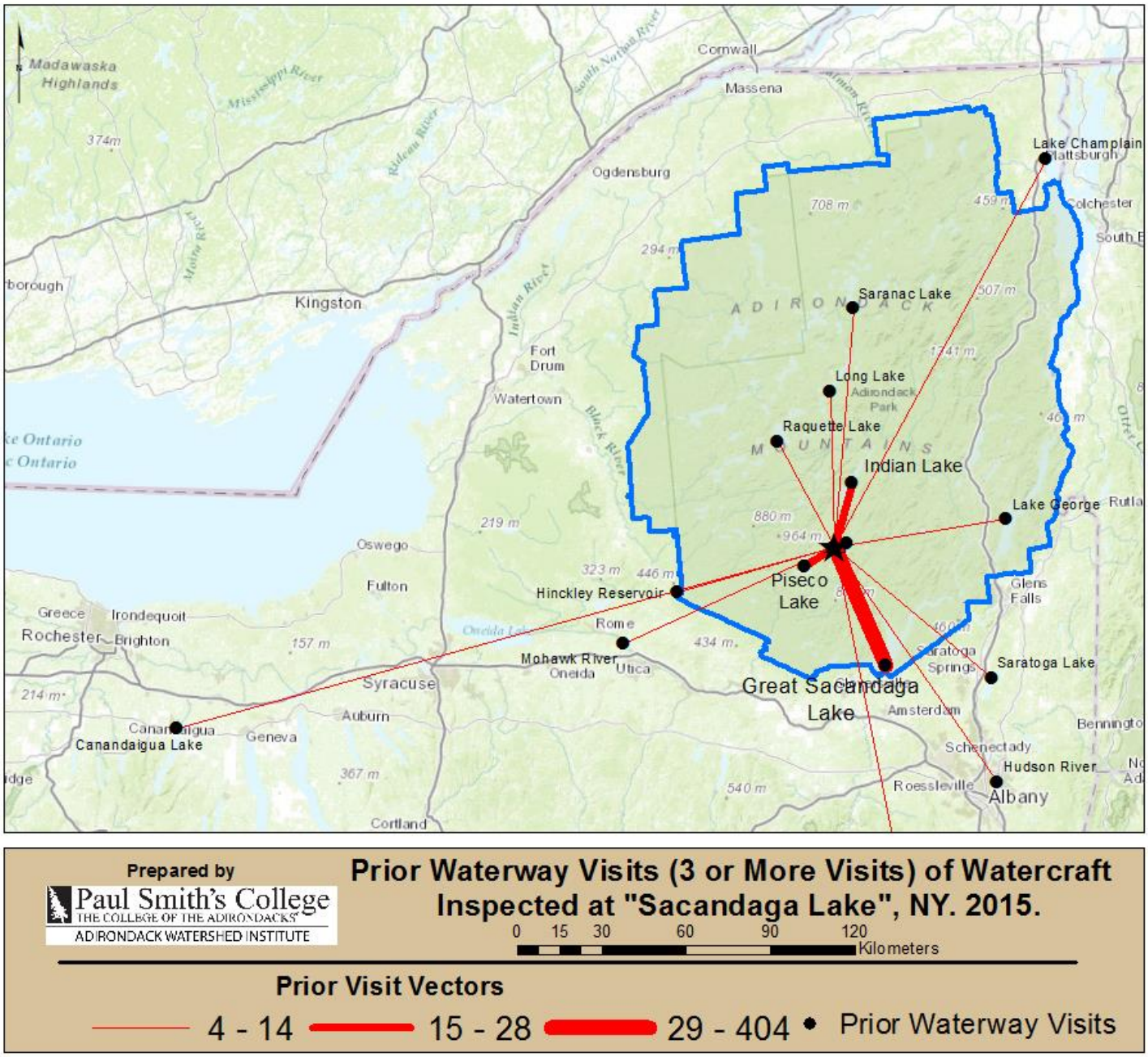
Previous Waterways visited, 2015	# visits
None	469
Same Lake - Previous Visit	350
Great Sacandaga Lake	61
Unknown	40
Lake Pleasant	28
Piseco Lake	28
Rental	20
Indian Lake	18
Saratoga Lake	14
Hudson River	11
Lake George	9
Raquette Lake	8
Did not ask	7
Long Lake	7
Delta Lake	6
Canandaigua Lake	5
Hinckley Flow Reservoir	5
Mohawk River	5

Previous Waterways visited, 2015	# visits
Lake Champlain	4
Upper Saranac Lake	4
Lewey Lake	3
Oneida Lake	3
Oxbow Lake	3
Loon Lake, Franklin County NY	3
Eighth Lake	2
Saranac Lake Chain	2
Schroon Lake	2
St. Lawrence River	2
Stillwater Reservoir	2
Paradox Lake	2
Lake Algonquin	2
Canadarago Lake	2
Big Moose Lake	1
Blue Mountain Lake	1
Cayuga Lake	1
Connecticut River	1

Previous Waterways visited, 2015	# visits
Fish Creek Ponds	1
Lake Ontario	1
Lake Placid	1
Limekiln Lake	1
Raquette River	1
Round Lake	1
Seneca Lake	1
Tupper Lake	1
Canada Lake	1
Tripp Lake, Chesterton NY	1
Cedar River Flow	1
Kinderhook Lake, Rensselaer County NY	1
Galway Lake, Galway NY	1
Copake Lake, Columbia County NY	1
Lake Moraine	1
Echo Lake, Warrensburg NY	1
East Caroga Lake	1
Lake Sunapee, NH	1
Total	**1149**

State of Boat Registration





Waterways visited in previous 2 weeks by incoming vessels to Sacandaga Lake. Vectors weighted to denote quantity of visits to previous waterbodies.

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Saratoga Lake

Boats inspected: 5,811
AIS intercepted: 759
Number of visitors: 13,402

Visitors taking spread prevention measures: 69%
Inspected boats with organisms: 18.8%
Number of previously visited waterways: 53

Waterbody	Boat Type									total # boats
	M	PWC	S	C	K	B	R	SUP	Docks	
Saratoga Lake	5422	262	24	24	150	0	15	8	0	5905
percentage of total boats	92%	4%	0%	0%	3%	0%	0%	0%	0%	100%

Boats observed at launch. M = motorboat; PWC = personal watercraft; S = sailboat; C = canoe; K = kayak; B = construction barge; R = rowboat; SUP= stand-up paddleboard; Docks = boat docks launched for seasonal installation/maintenance

Waterbody	total # people	organisms found		# boats dirty	# of inspections	% of inspected boats dirty
		entering	leaving			
Saratoga Lake	13402	649	1310	1092	5811	18.8%

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

Waterbody	# groups taking AIS spread prevention measures									# groups asked
	yes	I	WB	DB	BB	LW	Dis	Dry	didn't ask	
Saratoga Lake	3186	1162	2381	694	43	155	16	538	1148	4625
percentage of total # groups asked	69%	25%	51%	15%	1%	3%	0%	12%	NA	

Yes = took one or more AIS spread prevention measures; I = inspected boat; WB = washed boat; DB = drained bilge; BB = emptied bait bucket; LW = drained livewell; Dis = disposed of unused bait; Dry = dried boat.

Waterbody	Organism Type																total AIS	% of inspected boats with AIS
	BW	CLP*	ELO	GRS	EWM*	NM	UM	VLM*	MUD	NON	NP	SWF*	WC*	WL	ZM*	other		
Saratoga Lake	2	189	172	664	356	60	0	0	10	36	233	0	28	5	186	18	759	13.1%
percentage of organisms removed	0%	10%	9%	34%	18%	3%	0%	0%	1%	2%	12%	0%	1%	0%	9%	1%		

BW = bladderwort; CLP = curly-leaf pondweed; ELO = elodea; GRS = grass; EWM = Eurasian watermilfoil; NM = native milfoil; UM = unknown milfoil; VLM = variable leaf milfoil; MUD = mud; NON = non-aquatic debris; NP = native pondweed; SWF = spiny waterflea; WC= water chestnut; WL= water lily; ZM = Zebra mussel; */AIS = aquatic invasive species.

Saratoga Lake: Aquatic Invasive Species Intercepted by Stewards, 2015	# found on boats launching	Previous Waterway	# found on boats retrieving	Previous Waterway
Curly leaf pondweed	64	Saratoga Lake (53), *None* (8), *Unknown* (2), Saranac River (1)	125	Saratoga Lake (102), *None* (15), *Unknown* (7), Lake Champlain (1)
Eurasian water milfoil	122	Saratoga Lake (89), *None* (18), Unknown (4), Lake Champlain (2), Sacandaga Lake (2), Cayuga Lake (1), *Did not ask* (1), Great Sacandaga Lake (1),Mohawk River (1), Oneida Lake (1), *Rental* (1), Saranac River (1)	234	Saratoga Lake (177), *Did not ask* (23), *None* (18), *Unknown* (11), Erie Canal (1), Great Sacandaga Lake (1), Lake Champlain (1), Lake George (1), Mohawk River (1)
Water chestnut	24	Saratoga Lake (12), *None* (6), Mohawk River (4), Lake Champlain (1), Sacandaga Lake (1)	4	Saratoga Lake (4)
Zebra mussel	71	Saratoga Lake (43), *None* (21), Hudson River (2), Great Sacandaga Lake (1), Lake Ontario (1), Mohawk River (1), *Rental* (1), *Unknown* (1)	115	Saratoga Lake (75), *Unknown* (23), *None* (8), *Did not ask* (6), Lake George (1), *Rental* (1), Second Pond (1)
Totals	**281**		**478**	

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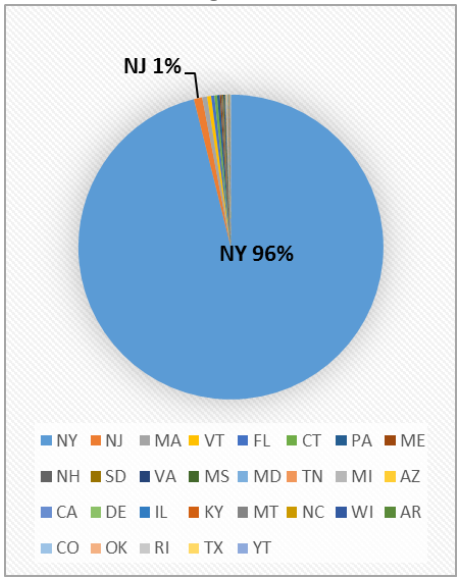
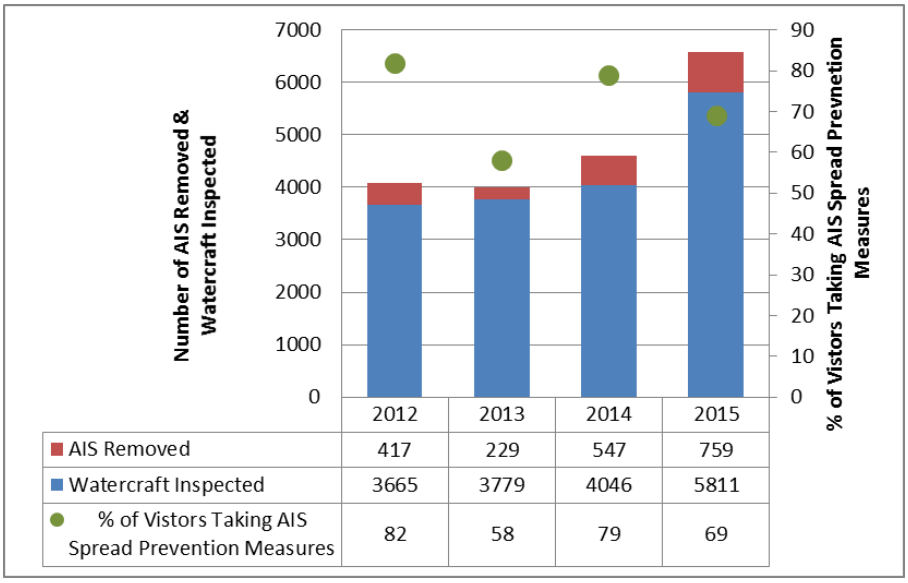
Previous Waterways visited, 2015	# visits
Saratoga Lake	3399
None	1369
Unknown	311
Lake George	130
Sacandaga Lake	102
Hudson River	90
Did not ask	84
Mohawk River	65
Lake Champlain	32
Schroon Lake	30
Round Lake	21
Great Sacandaga Lake	20
Rental	14
Oneida Lake	9
Cayuga Lake	8
Canandaigua Lake	7
Long Lake	7
St. Lawrence River	6
Atlantic Ocean	4
Lake Ontario	4

Previous Waterways visited, 2015	# visits
Erie Canal	3
Indian Lake	3
Saranac Lake Chain	3
Saranac River	3
Otsego Lake	3
Brant Lake	3
Chateaugay Lake	2
Cranberry Lake	2
First Lake	2
Lake Erie	2
Raquette Lake	2
Seventh Lake	2
Canada Lake	2
Lake Lonely, Saratoga Springs NY	2
Ballston Lake, Ballston NY	2
Glen Lake, Rutland County VT	2
Moreau Lake, Saratoga County NY	2
Connecticut River	1
Fourth Lake	1
Hinckley Flow Reservoir	1

Previous Waterways visited, 2015	# visits
Lake Pleasant	1
Lower Saranac Lake	1
Lower St Regis Lake	1
Second Pond	1
Seneca Lake	1
Stillwater Reservoir	1
Tupper Lake	1
Paradox Lake	1
Stewarts Bridge Reservoir, Saratoga C	1
Snyder's Lake, Rensselaer County NY	1
Lake Bomoseen, Rutland County VT	1
somewhere in Vermont	1
Lake Luzerne	1
Pootasho, MA	1
Kinderhook Lake, Rensselaer County	1
Batten Kill River, NY	1
Merrimack River, MA	1
Cossayuna Lake	1
Total	**5773**

State of Boat Registration





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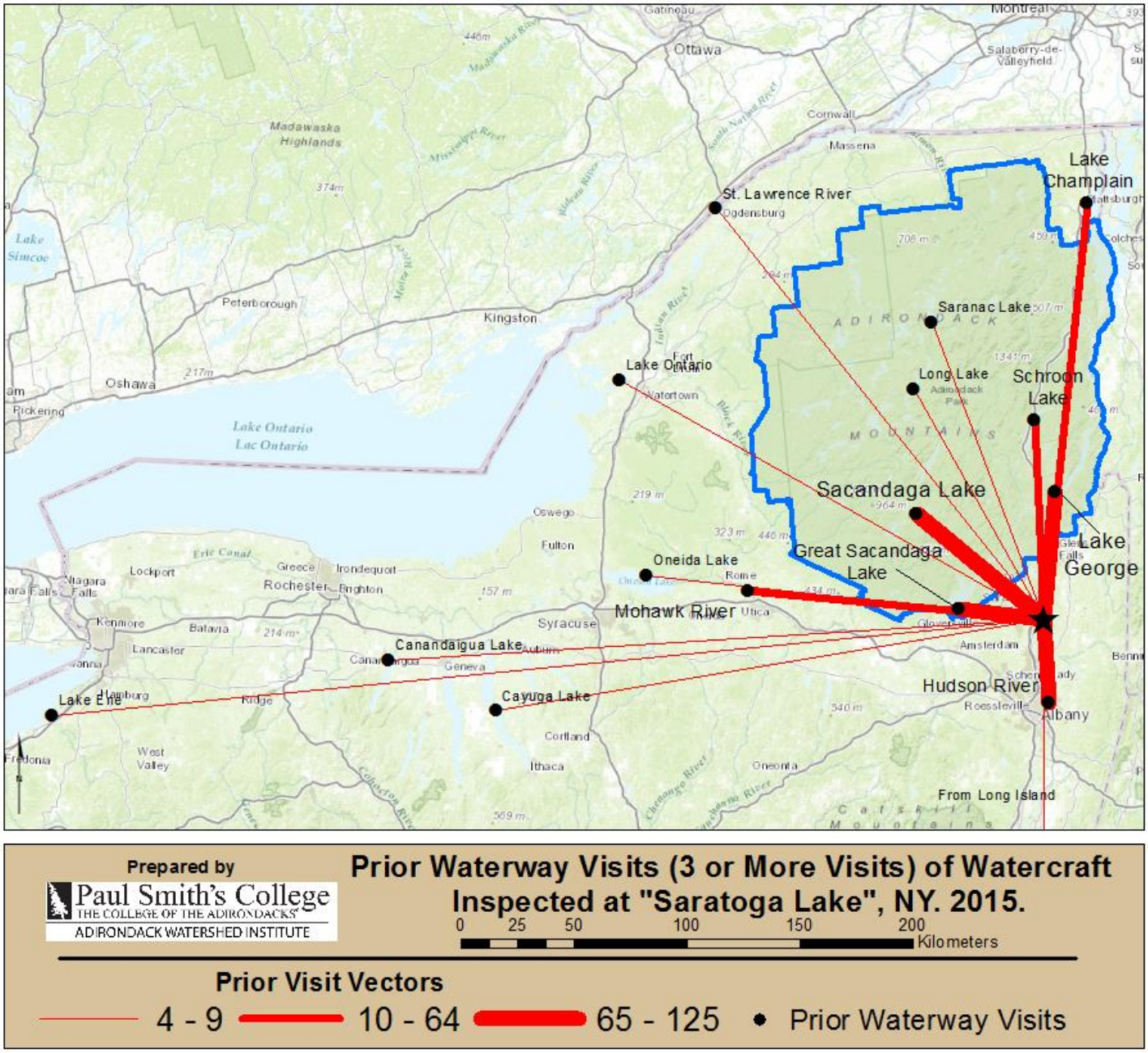

Waterways visited in previous 2 weeks by incoming vessels to Saratoga Lake. Vectors weighted to denote quantity of visits to previous waterbodies.

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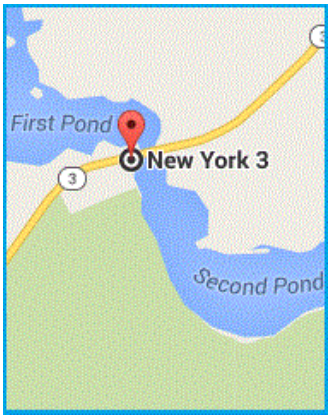
Second Pond

Decontamination station opening date: 3 July 2015

Boats inspected: 4193
AIS intercepted: 74
Number of visitors: 8,180

Visitors taking spread prevention measures: 66%
Inspected boats with organisms: 5.9%
Number of previously visited waterways: 109



Waterbody	Boat Type									total # boats
	M	PWC	S	C	K	B	R	SUP	Docks	
Second Pond (launch & decon)	1630	71	8	1299	1381	1	8	33	1	4432
percentage of total boats	37%	2%	0%	29%	31%	0%	0%	1%	0%	100%
Second Pond (decon only)	1152	57	8	846	917	1	3	25	0	3009
percentage of total boats	38%	2%	0%	28%	30%	0%	0%	1%	0%	100%

Boats observed at site. M = motorboat; PWC = personal watercraft; S = sailboat; C = canoe; K = kayak; B = construction barge; R = rowboat; SUP= stand-up paddleboard; Docks = boat docks launched for seasonal installation/maintenance

Waterbody	total # people	organisms found		# boats dirty	# of inspections	% of inspected boats dirty
		entering	leaving			
Second Pond (launch & decon)	8180	141	172	246	4193	5.9%
Second Pond (decon only)	5662	63	105	142	2798	5.1%

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

Waterbody	# groups taking AIS spread prevention measures									# groups asked
	yes	I	WB	DB	BB	LW	Dis	Dry	didn't ask	
Second Pond (launch & decon)	1887	965	978	720	6	16	6	569	223	2874
percentage of total # groups asked	66%	34%	34%	25%	0%	1%	0%	20%	NA	
Second Pond (decon only)	1297	673	628	589	3	9	2	389	151	1975
percentage of total # groups asked	66%	34%	32%	30%	0%	0%	0%	20%	NA	

Yes = took one or more AIS spread prevention measures; I = inspected boat; WB = washed boat; DB = drained bilge; BB = emptied bait bucket; LW = drained livewell; Dis = disposed of unused bait; Dry = dried boat.

Waterbody	Organism Type																total AIS	% of inspected boats with AIS
	BW	CLP*	ELO	GRS	EWM*	NM	UM	VLM*	MUD	NON	NP	SWF*	WC*	WL	ZM*	other		
Second Pond (launch & decon)	3	0	11	60	72	0	2	2	33	84	21	0	0	4	0	21	74	1.8%
percentage of organisms removed	1%	0%	4%	19%	23%	0%	1%	1%	11%	27%	7%	0%	0%	1%	0%	7%		
Second Pond (decon only)	2	0	6	31	55	0	1	2	12	29	16	0	0	1	0	13	57	2.0%
percentage of organisms removed	1%	0%	4%	18%	33%	0%	1%	1%	7%	17%	10%	0%	0%	1%	0%	8%		

BW = bladderwort; CLP = curly-leaf pondweed; ELO = elodea; GRS = grass; EWM = Eurasian watermilfoil; NM = native milfoil; UM = unknown milfoil; VLM = variable leaf milfoil; MUD = mud; NON = non-aquatic debris; NP = native pondweed; SWF = spiny waterflea; WC= water chestnut; WL= water lily; ZM = Zebra mussel; */AIS = aquatic invasive species.

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Second Pond (launch & decon): Aquatic Invasive Species Intercepted by Stewards, 2015	# found on boats launching	Previous Waterway	# found on boats retrieving	Previous Waterway
Eurasian water milfoil	15	Second Pond (9), Lake Flower (4), Saranac Lake Chain (1), Lake Hopatcong, Sussex/Morris Counties NJ (1)	57	Second Pond (22), *None* (12), Lake Flower (3), *Unknown* (3), Rental (3), Atlantic Ocean (2), Cranberry Lake (2), Lake George (2), Tupper Lake (2), Ausable River (1), *Did not ask* (1), Lake Champlain (1), Lake Placid (1), Saranac Lake Chain (1), Stillwater Reservoir (1)
Variable leaf milfoil	0	N/A	2	Second Pond (1), Upper Saranac Lake (1)
Totals	**15**		**59**	

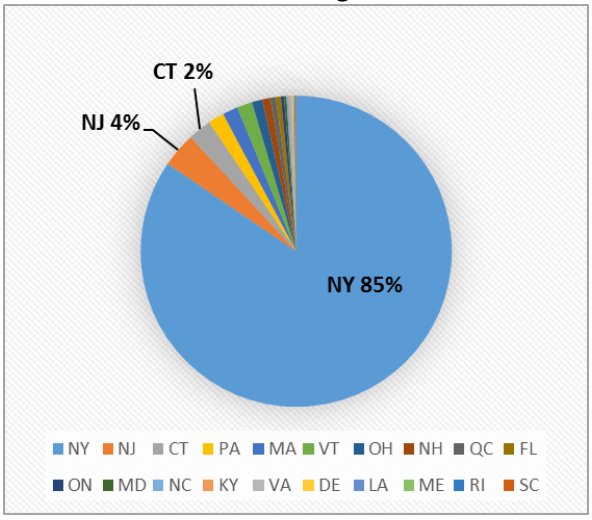
Second Pond (decon only): Aquatic Invasive Species Intercepted by Stewards, 2015	# found on boats launching	Previous Waterway	# found on boats retrieving	Top 5 Previous Waterway
Eurasian water milfoil	15	Second Pond (9), Lake Flower (4), Saranac Lake Chain (1), Lake Hopatcong, Morris/Sussex Counties NJ (1)	40	Second Pond (20), *None* (6), *Unknown* (3), Atlantic Ocean (2), Lake Flower (2), Tupper Lake (2), Ausable River (1), Lake George (1), Lake Placid (1), Saranac Lake Chain (1), Stillwater Reservoir (1)
Variable leaf milfoil	0	N/A	2	Second Pond (1), Upper Saranac Lake (1)
Totals	**15**		**42**	

Previous Waterways visited, 2015	# visits
Same Lake - Previous Visit	539
None	379
Rental	277
Unknown	154
Saranac Lake Chain	94
Lake Flower	90
Lake Placid	62
Middle Saranac Lake	54
Upper Saranac Lake	51
Lake Champlain	36
Tupper Lake	26
Lower Saranac Lake	22
Raquette River	14
Follensby Clear Pond	12
Upper St Regis Lake	12
Chateaugay Lake	11
Did not ask	11
Fish Creek Ponds	11
Atlantic Ocean	10
Mirror Lake	10
St. Lawrence River	10
Lake Colby	9
Lake George	9
Long Lake	9
Schroon Lake	9
Canandaigua Lake	8
Hudson River	8
Lake Ontario	8
Rollins Pond	8
Ausable River	7
Lake Erie	7
Franklin Falls Flow	6
Raquette Lake	6
Cayuga Lake	5
Cranberry Lake	5
Oneida Lake	5
Bog River Flow	4
Delaware River	4

Previous Waterways visited, 2015	# visits
Lower St Regis Lake	4
Osgood Pond	4
Rainbow Lake	4
Round Lake	4
Chazy Lake	3
Fern Lake, Clinton County NY	3
Hoel Pond	3
Lake Durant	3
Limekiln Lake	3
Little Clear Pond	3
Mountain View Lake	3
Sacandaga Lake	3
Saranac River	3
Saratoga Lake	3
Seventh Lake	3
Stillwater Reservoir	3
Taylor Pond	3
Big Moose Lake	2
Black River	2
Connecticut River	2
Great Sacandaga Lake	2
Keuka Lake	2
Lake Hopatcong, Sussex/Morris Counti	2
Lewey Lake	2
Piseco Lake	2
Polliwog Ponds	2
Stony Creek, Corey's Road	2
Adams Reservoir, Woodford VT	1
Black Pond	1
Blue Lake (Sterling Forest Lake)	1
Blue Mountain Lake	1
Buck Lake, ON	1
Cazenovia Lake	1
Charleston Lake, Athens ON	1
Conesus Lake	1
Cross Lake, Cayuga/Onondaga Countie	1
Donnell Pond, Franklin ME	1
Eastman Pond, Grantham NH	1

Previous Waterways visited, 2015	# visits
Eighth Lake	1
Floodwood Pond	1
Forked Lake	1
Fourth Lake	1
Fulton Chain of Lakes	1
Green Pond	1
Green River, VT	1
Harvey's Lake	1
Hitchens Pond	1
Kinderhook Lake, Rensselaer County NY	1
Kiwassa Lake	1
Lake Abacon, NY	1
Lake Anna, Louisa/Spotsylvania Counties	1
Lake Bonaparte	1
Lake Clear	1
Lake Huron	1
Lake Kushaqua	1
Lake Pleasant	1
Lake Wayne NY	1
Loon Lake, Franklin County NY	1
Meacham Lake	1
Moody Pond	1
Moose Pond	1
Onondaga Lake	1
Oseetah Lake	1
Oswegatchie River	1
Otsego Lake	1
Round Valley Reservoir, Lebanon NJ	1
Sebago Lake, Cumberland County ME	1
Skaneateles Lake	1
Soft Maple Reservoir, Lewis County NY	1
somewhere in Ohio	1
somewhere in the Pine Barrens, NJ	1
South Pond, Blue Mountain NY	1
St. Regis River	1
Thorn Bay, NH	1
Thorndike Pond, Cheshire County NH	1
White Lake, Blairstown NJ	1
Total	**2126**

State of Boat Registration



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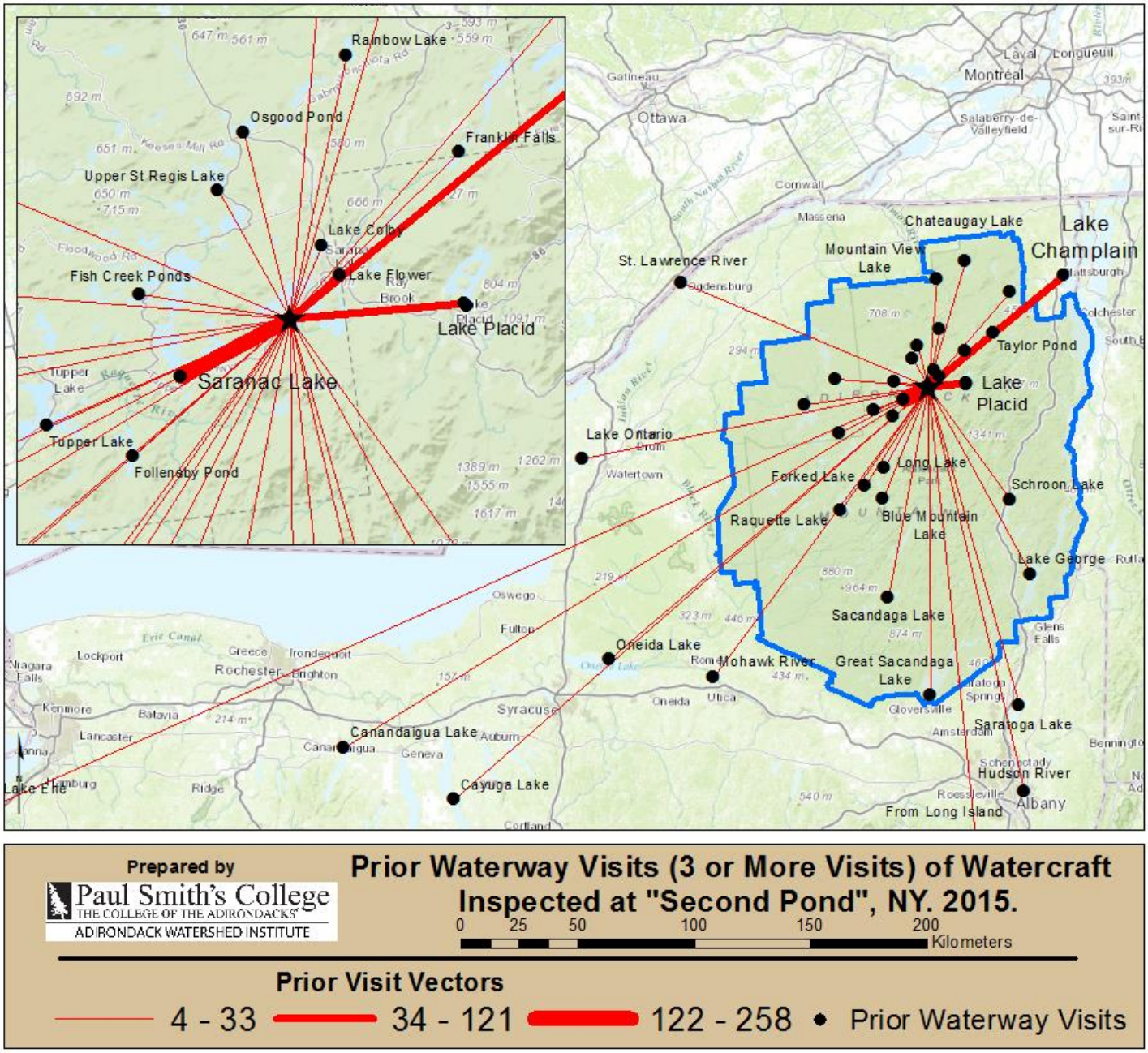

Waterways visited in previous 2 weeks by incoming vessels to Second Pond. Vectors weighted to denote quantity of visits to previous waterbodies.

South Colton Decontamination Station

Opening date: 27 July 2015

Boats inspected: 43
AIS intercepted: 0
Number of visitors: 113

Visitors taking spread prevention measures: 32%
Inspected boats with organisms: 0%
Number of previously visited waterways: 8

Waterbody	Boat Type									total # boats
	M	PWC	S	C	K	B	R	SUP	Docks	
South Colton DECON SITE	38	0	0	3	2	0	2	0	0	45
percentage of total boats	84%	0%	0%	7%	4%	0%	4%	0%	0%	100%

Boats observed at site. M = motorboat; PWC = personal watercraft; S = sailboat; C = canoe; K = kayak; B = construction barge; R = rowboat; SUP= stand-up paddleboard; Docks = boat docks launched for seasonal installation/maintenance

Waterbody	total # people	organisms found	# boats dirty	# of inspections	% of inspected boats dirty
South Colton DECON SITE	113	0	0	43	0%

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

Waterbody	# groups taking AIS spread prevention measures									# groups asked
	yes	I	WB	DB	BB	LW	Dis	Dry	didn't ask	
South Colton DECON SITE	14	9	12	6	0	1	0	10	0	44
percentage of total # groups asked	32%	20%	27%	14%	0%	2%	0%	23%	NA	

Yes = took one or more AIS spread prevention measures; I = inspected boat; WB = washed boat; DB = drained bilge; BB = emptied bait bucket; LW = drained livewell; Dis = disposed of unused bait; Dry = dried boat.

Waterbody	Organism Type																total AIS	% of inspected boats with AIS
	BW	CLP*	ELO	GRS	EWM*	NM	UM	VLM*	MUD	NON	NP	SWF*	WC*	WL	ZM*	other		
South Colton DECON SITE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
percentage of organisms removed	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		

BW = bladderwort; CLP = curly-leaf pondweed; ELO = elodea; GRS = grass; EWM = Eurasian watermilfoil; NM = native milfoil; UM = unknown milfoil; VLM = variable leaf milfoil; MUD = mud; NON = non-aquatic debris; NP = native pondweed; SWF = spiny waterflea; WC= water chestnut; WL= water lily; ZM = Zebra mussel; */AIS = aquatic invasive species.

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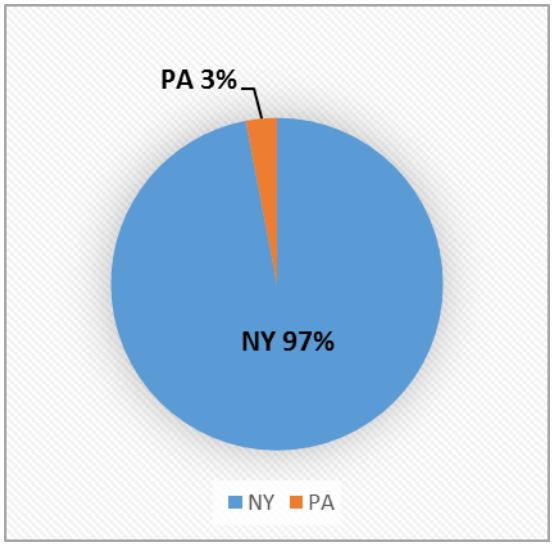
State of Boat Registration



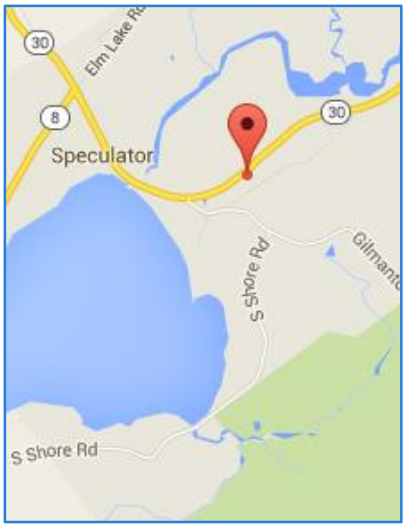
Previous Waterways visited, 2015	# visits
None	12
Unknown	8
Raquette River	7
St. Lawrence River	5
Carry Falls Reservoir	4
Cranberry Lake	4
Sacandaga Lake	1
Black Lake	1
Higley Flow Reservoir	1
Blake Falls Reservoir, St. Lawrence County NY	1
Total	**44**

Speculator Decontamination Station

Opening date: 17 July 2015

Boats inspected: 178
AIS intercepted: 5
Number of visitors: 298

Visitors taking spread prevention measures: 66%
Inspected boats with organisms: 8.4%
Number of previously visited waterways: 26



Waterbody	Boat Type									total # boats
	M	PWC	S	C	K	B	R	SUP	Docks	
Speculator DECON SITE	108	11	3	20	34	0	3	0	0	179
percentage of total boats	60%	6%	2%	11%	19%	0%	2%	0%	0%	100%

Boats observed at site. M = motorboat; PWC = personal watercraft; S = sailboat; C = canoe; K = kayak; B = construction barge; R = rowboat; SUP= stand-up paddleboard; Docks = boat docks launched for seasonal installation/maintenance

Waterbody	total # people	organisms found	# boats dirty	# of inspections	% of inspected boats dirty
Speculator DECON SITE	298	18	15	178	8.4%

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

Waterbody	# groups taking AIS spread prevention measures									# groups asked
	yes	I	WB	DB	BB	LW	Dis	Dry	didn't ask	
Speculator DECON SITE	96	18	67	53	21	22	10	73	2	145
percentage of total # groups asked	66%	12%	46%	37%	14%	15%	7%	50%	NA	

Yes = took one or more AIS spread prevention measures; I = inspected boat; WB = washed boat; DB = drained bilge; BB = emptied bait bucket; LW = drained livewell; Dis = disposed of unused bait; Dry = dried boat.

Waterbody	Organism Type																total AIS	% of inspected boats with AIS
	BW	CLP*	ELO	GRS	EWM*	NM	UM	VLM*	MUD	NON	NP	SWF*	WC*	WL	ZM*	other		
Speculator DECON SITE	0	1	0	1	3	0	0	0	0	8	2	0	0	0	1	2	5	2.8%
percentage of organisms removed	0%	6%	0%	6%	17%	0%	0%	0%	0%	44%	11%	0%	0%	0%	6%	11%		

BW = bladderwort; CLP = curly-leaf pondweed; ELO = elodea; GRS = grass; EWM = Eurasian watermilfoil; NM = native milfoil; UM = unknown milfoil; VLM = variable leaf milfoil; MUD = mud; NON = non-aquatic debris; NP = native pondweed; SWF = spiny waterflea; WC= water chestnut; WL= water lily; ZM = Zebra mussel; */AIS = aquatic invasive species.

Speculator DECON SITE: Aquatic Invasive Species Intercepted by Stewards, 2015	# found at roadside site	Previous Waterway
Curly leaf pondweed	1	Lake Erie (1)
Eurasian water milfoil	3	Lake Erie (1), Lake Ontario (2)
Zebra mussel	1	Saratoga Lake (1)
Totals	**5**	

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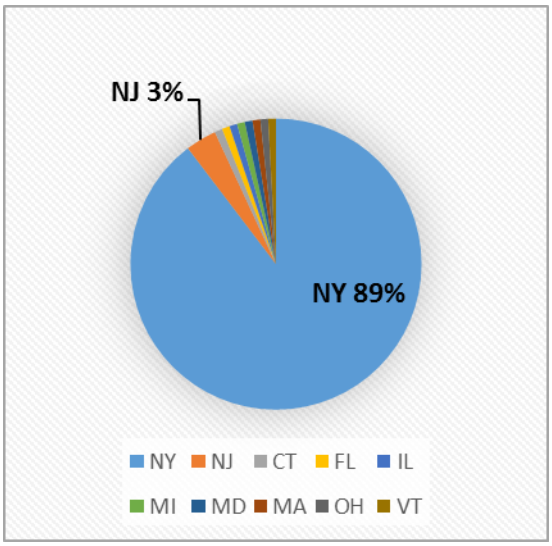
Previous Waterways visited, 2015	# visits
None	39
Lake Pleasant	14
Unknown	14
Indian Lake	13
Great Sacandaga Lake	12
Sacandaga Lake	12
Piseco Lake	6
Hudson River	4
Lake Ontario	3
Mohawk River	3
Raquette Lake	3
Schroon Lake	3
Lake George	2
Long Lake	2

Previous Waterways visited, 2015	# visits
Saratoga Lake	2
Stillwater Reservoir	2
Lake Algonquin	2
Cayuga Lake	1
Fish Creek Ponds	1
Forked Lake	1
Lake Champlain	1
Lake Erie	1
Lewey Lake	1
Oneida Lake	1
Saranac Lake Chain	1
St. Lawrence River	1
Niagara River	1
Long Pond, Willsboro NY	1
Total	**147**

State of Boat Registration



Steward decontaminating a personal watercraft at the Speculator decontamination station.

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Stillwater Reservoir

Boats inspected: 845
AIS intercepted: 2
Number of visitors: 2,005

Visitors taking spread prevention measures: 49%
Inspected boats with organisms: 1.2%
Number of previously visited waterways: 66

Waterbody	Boat Type									total # boats
	M	PWC	S	C	K	B	R	SUP	Docks	
Stillwater Reservoir	672	18	6	58	77	0	18	0	0	849
percentage of total boats	79%	2%	1%	7%	9%	0%	2%	0%	0%	100%

Boats observed at launch. M = motorboat; PWC = personal watercraft; S = sailboat; C = canoe; K = kayak; B = construction barge; R = rowboat; SUP= stand-up paddleboard; Docks = boat docks launched for seasonal installation/maintenance

Waterbody	total # people	organisms found		# boats dirty	# of inspections	% of inspected boats dirty
		entering	leaving			
Stillwater Reservoir	2005	9	1	10	845	1.2%

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

Waterbody	# groups taking AIS spread prevention measures									# groups asked
	yes	I	WB	DB	BB	LW	Dis	Dry	didn't ask	
Stillwater Reservoir	377	178	243	82	25	26	21	67	7	765
percentage of total # groups asked	49%	23%	32%	11%	3%	3%	3%	9%	NA	

Yes = took one or more AIS spread prevention measures; I = inspected boat; WB = washed boat; DB = drained bilge; BB = emptied bait bucket; LW = drained livewell; Dis = disposed of unused bait; Dry = dried boat.

Waterbody	Organism Type																total AIS	% of inspected boats with AIS
	BW	CLP*	ELO	GRS	EWM*	NM	UM	VLM*	MUD	NON	NP	SWF*	WC*	WL	ZM*	other		
Stillwater Reservoir	0	0	0	0	1	0	0	0	0	7	0	0	1	0	0	1	2	0.2%
percentage of organisms removed	0%	0%	0%	0%	10%	0%	0%	0%	0%	70%	0%	0%	10%	0%	0%	10%		

BW = bladderwort; CLP = curly-leaf pondweed; ELO = elodea; GRS = grass; EWM = Eurasian watermilfoil; NM = native milfoil; UM = unknown milfoil; VLM = variable leaf milfoil; MUD = mud; NON = non-aquatic debris; NP = native pondweed; SWF = spiny waterflea; WC= water chestnut; WL= water lily; ZM = Zebra mussel; */AIS = aquatic invasive species.

Stillwater Reservoir: Aquatic Invasive Species Intercepted by Stewards, 2015	# found on boats launching	Previous Waterway	# found on boats retrieving	Previous Waterway
Eurasian water milfoil	1	Oneida Lake (1)	0	N/A
Water chestnut	1	Seneca Lake (1)	0	N/A
Totals	**2**		**0**	

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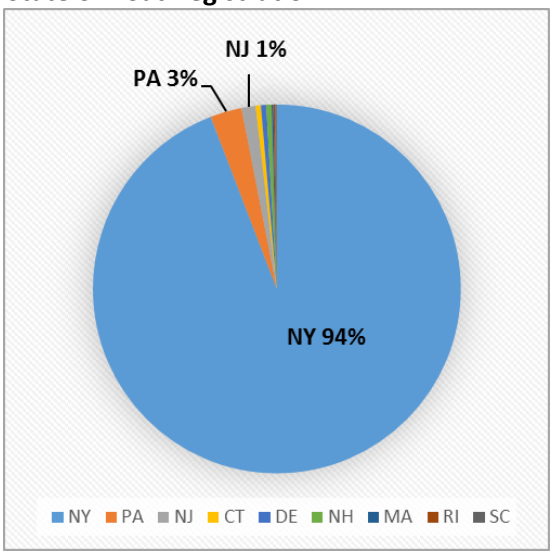
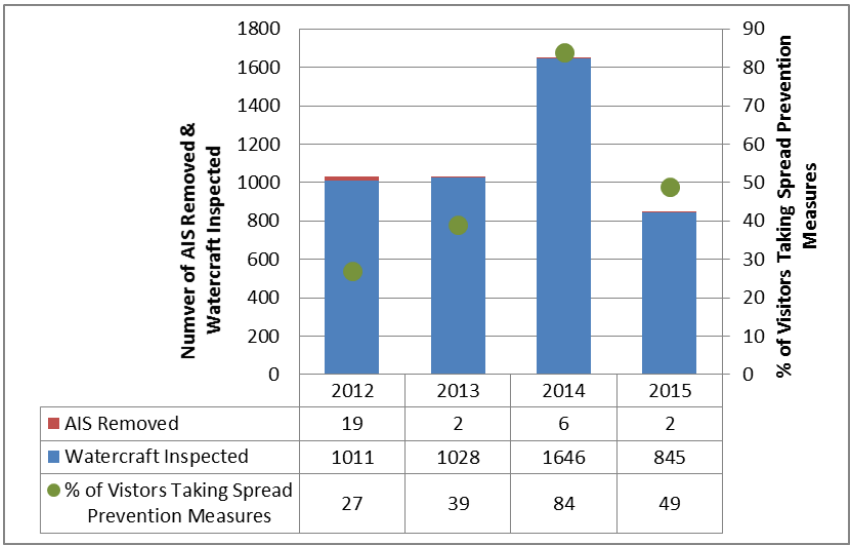
Previous Waterways visited, 2015	# visits
Stillwater Reservoir	352
Unknown	115
None	99
Lake Ontario	28
Oneida Lake	18
Cranberry Lake	11
Black River	11
Cayuga Lake	9
Big Moose Lake	8
Delta Lake	8
Canandaigua Lake	7
Seneca Lake	6
Indian Lake	5
Fourth Lake	4
Raquette Lake	4
Lake Bonaparte	4
Connecticut River	3
Fulton Chain of Lakes	3
Kayuta Lake	3
Lake Champlain	3
Rental	3
Skaneateles Lake	3
St. Lawrence River	3
Lake Moraine	3

Previous Waterways visited, 2015	# visits
First Lake	2
Hudson River	2
Lake Erie	2
Lake Pleasant	2
Saratoga Lake	2
White Lake	2
Canada Lake	2
Salmon River Reservoir	2
Owasco Lake	2
Mud Lake	2
Cazenovia Lake	2
White Lake, ON	2
Atlantic Ocean	1
Blue Mountain Lake	1
Buck Pond	1
Did not ask	1
Erie Canal	1
Follensby Clear Pond	1
Forked Lake	1
Hinckley Flow Reservoir	1
Keuka Lake	1
Lake George	1
Little Clear Pond	1
Long Lake	1

Previous Waterways visited, 2015	# visits
Mohawk River	1
Piseco Lake	1
Sacandaga Lake	1
Saranac Lake Chain	1
Seventh Lake	1
Tupper Lake	1
Hemlock Lake, Livingston County NY	1
Oswego River	1
Sixtown Pond, Henderson NY	1
North-South Lake, Hunter NY	1
Long Pond (St Regis Canoe Area)	1
Black Lake	1
Francis Pond, Oswego County NY	1
Nicks Lake, Old Forge NY	1
somewhere in Ontario	1
Canadarago Lake	1
Silver Lake, Wyoming County NY	1
Rondout Creek, High Falls NY	1
Otisco Lake	1
Soft Maple Reservoir, Lewis County NY	1
Butternut Creek, Onondaga County NY	1
Buffalo River	1
Beaver Lake, Onondaga County NY	1
Total	**772**

State of Boat Registration





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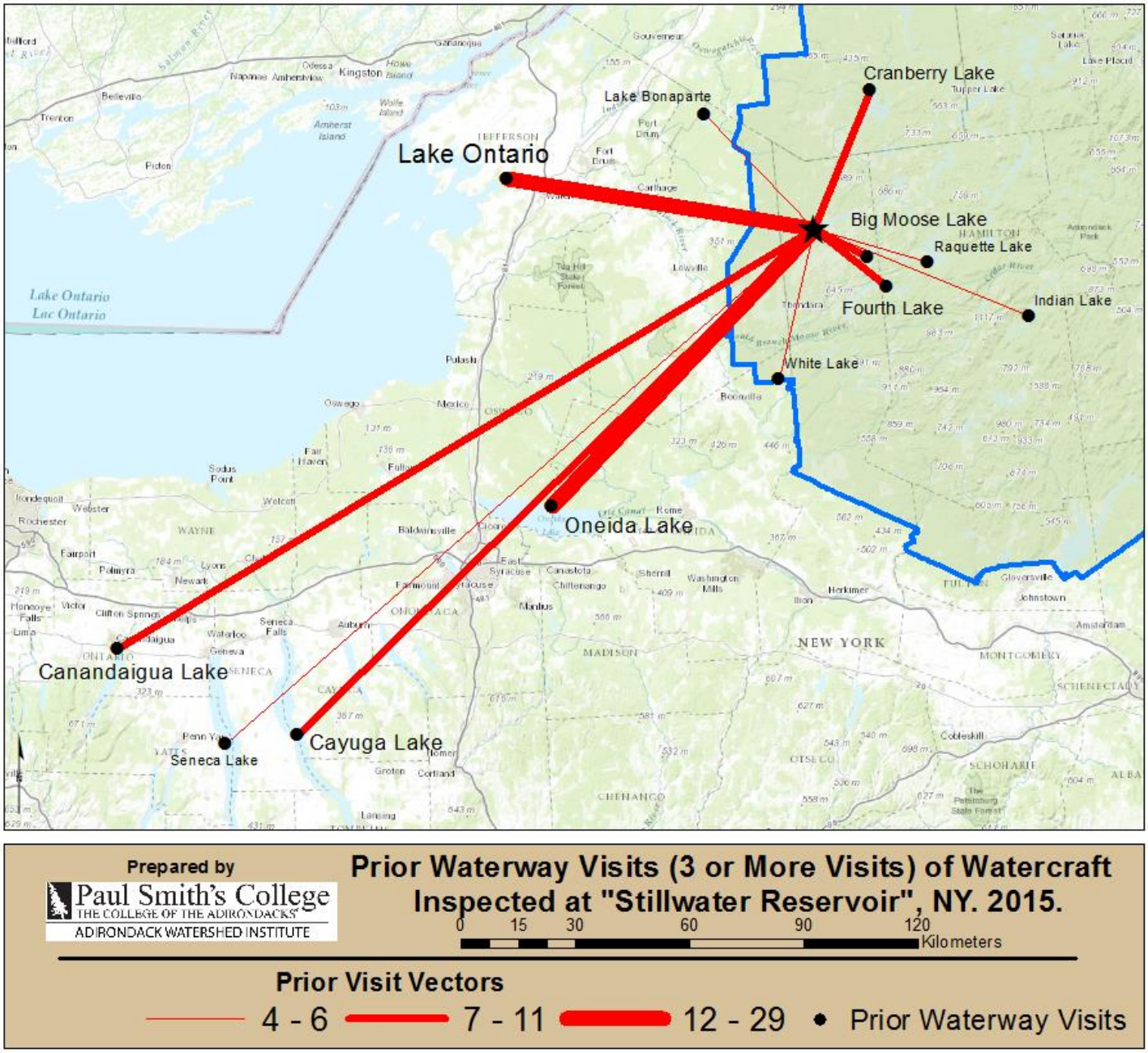

Waterways visited in previous 2 weeks by incoming vessels to Stillwater Reservoir. Vectors weighted to denote quantity of visits to previous waterbodies.

Tupper Lake

Boats inspected: 1,719
AIS intercepted: 6
Number of visitors: 3,742

Visitors taking spread prevention measures: 58%
Inspected boats with organisms: 27.2%
Number of previously visited waterways: 65

Waterbody	Boat Type									total # boats
	M	PWC	S	C	K	B	R	SUP	Docks	
Tupper Lake	1152	64	57	220	245	6	3	11	1	1759
percentage of total boats	65%	4%	3%	13%	14%	0%	0%	1%	0%	100%

Boats observed at launch. M = motorboat; PWC = personal watercraft; S = sailboat; C = canoe; K = kayak; B = construction barge; R = rowboat; SUP= stand-up paddleboard; Docks = boat docks launched for seasonal installation/maintenance

Waterbody	total # people	organisms found		# boats dirty	# of inspections	% of inspected boats dirty
		entering	leaving			
Tupper Lake	3742	203	512	468	1719	27.2%

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

Waterbody	# groups taking AIS spread prevention measures									# groups asked
	yes	I	WB	DB	BB	LW	Dis	Dry	didn't ask	
Tupper Lake	788	229	641	120	8	23	4	100	68	1368
percentage of total # groups asked	58%	17%	47%	9%	1%	2%	0%	7%	NA	

Yes = took one or more AIS spread prevention measures; I = inspected boat; WB = washed boat; DB = drained bilge; BB = emptied bait bucket; LW = drained livewell; Dis = disposed of unused bait; Dry = dried boat.

Waterbody	Organism Type																total AIS	% of inspected boats with AIS
	BW	CLP*	ELO	GRS	EWM*	NM	UM	VLM*	MUD	NON	NP	SWF*	WC*	WL	ZM*	other		
Tupper Lake	9	0	3	290	2	1	1	4	103	225	21	0	0	40	0	16	6	0.3%
percentage of organisms removed	1%	0%	0%	41%	0%	0%	0%	1%	14%	31%	3%	0%	0%	6%	0%	2%		

BW = bladderwort; CLP = curly-leaf pondweed; ELO = elodea; GRS = grass; EWM = Eurasian watermilfoil; NM = native milfoil; UM = unknown milfoil; VLM = variable leaf milfoil; MUD = mud; NON = non-aquatic debris; NP = native pondweed; SWF = spiny waterflea; WC= water chestnut; WL= water lily; ZM = Zebra mussel; */AIS = aquatic invasive species.

Tupper Lake: Aquatic Invasive Species Intercepted by Stewards, 2015	# found on boats launching	Previous Waterway	# found on boats retrieving	Previous Waterway
Eurasian water milfoil	2	Lower Saranac Lake (1), *Unknown* (1)	0	N/A
Variable leaf milfoil	2	Lake Flower (1), Tupper Lake (1)	2	Tupper Lake (1), *Unknown* (1)
Totals	**4**		**2**	

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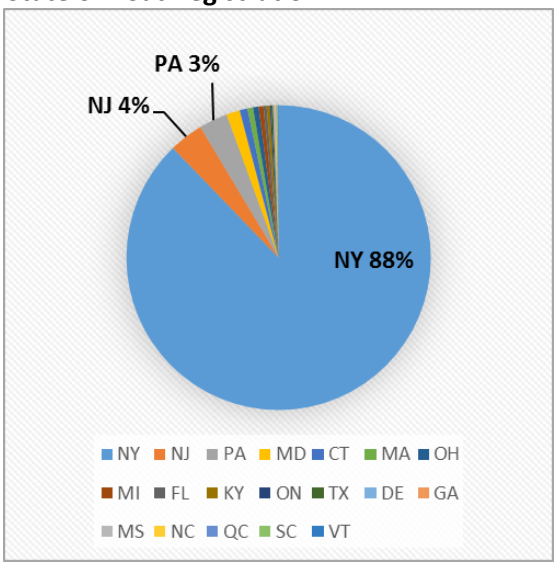
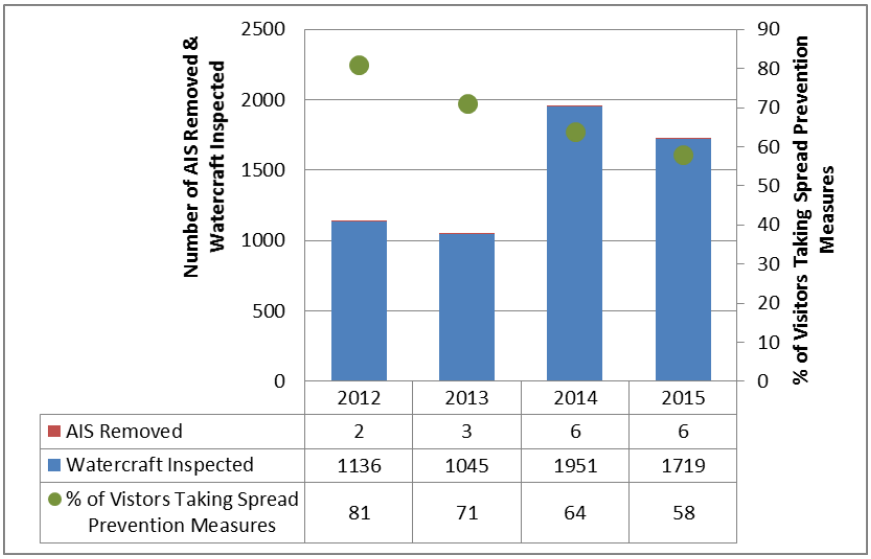
Previous Waterways visited, 2015	# visits
Tupper Lake	731
None	369
Unknown	52
Raquette River	39
Upper Saranac Lake	21
Long Lake	13
Rental	13
Lake Flower	11
Lake Champlain	10
Lower Saranac Lake	9
Saranac Lake Chain	9
St. Lawrence River	9
Lake Placid	8
Cranberry Lake	7
Did not ask	7
Raquette Lake	7
Saratoga Lake	7
Lake George	6
Mohawk River	6
Fish Creek Ponds	5
Hudson River	5
Indian Lake	5
Blue Mountain Lake	4
Fourth Lake	4

Previous Waterways visited, 2015	# visits
Lake Ontario	4
Sacandaga Lake	4
Saranac River	4
Stillwater Reservoir	4
Otsego Lake	4
Atlantic Ocean	3
Conesus Lake	3
Middle Saranac Lake	3
Oneida Lake	3
Oswegatchie River	3
Seneca Lake	3
Carry Falls Reservoir	2
Cayuga Lake	2
Little Tupper Lake	2
Upper St Regis Lake	2
Lake Lonely, Saratoga Springs NY	2
Kiwassa Lake	2
Buck Pond	1
Canandaigua Lake	1
Delta Lake	1
Eighth Lake	1
Erie Canal	1
First Lake	1
Forked Lake	1

Previous Waterways visited, 2015	# visits
Fulton Chain of Lakes	1
Lake Colby	1
Lake Eaton	1
Lake Pleasant	1
Lower St Regis Lake	1
Lows Lake	1
Meacham Lake	1
Piseco Lake	1
Rollins Pond	1
Round Lake	1
Schroon Lake	1
Taylor Pond	1
Lake Adirondack, Indian Lake NY	1
Simon Pond	1
Silver Lake, Wyoming County NY	1
Horseshoe Lake	1
Susquehanna River	1
Twitchell Lake	1
Lake St. Catherine, Poultney VT	1
Candlewood Lake, Cranberry CT	1
Chaumont River, Watertown NY	1
Big Wolf Pond	1
Total	**1436**

State of Boat Registration





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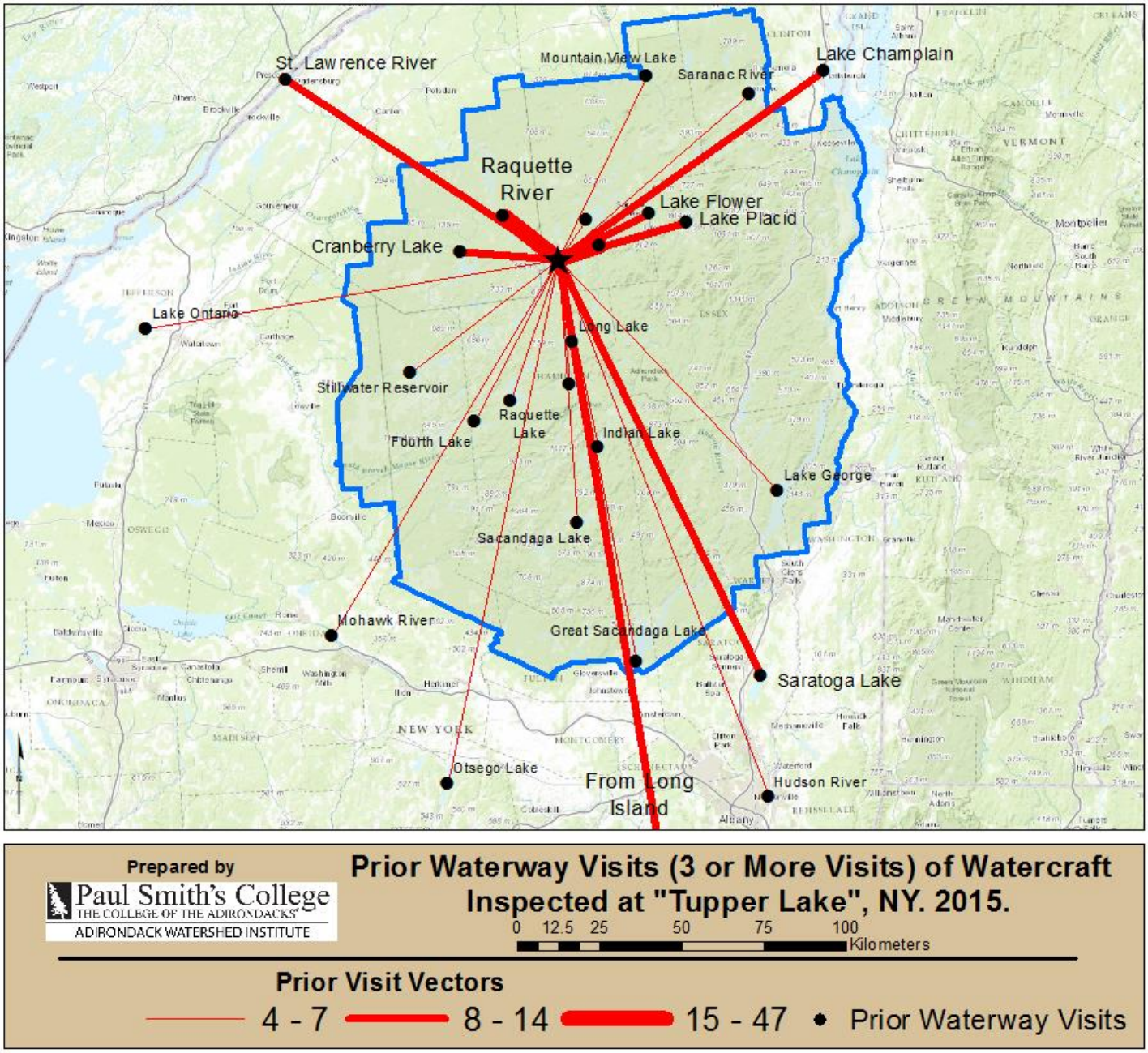

Waterways visited in previous 2 weeks by incoming vessels to Tupper Lake. Vectors weighted to denote quantity of visits to previous waterbodies.

Tupper Lake Decontamination Station

Opening date: 15 July 2015

Boats inspected: 55
AIS intercepted: 0
Number of visitors: 79

Visitors taking spread prevention measures: 61%
Inspected boats with organisms: 23.6%
Number of previously visited waterways: 16

Waterbody	Boat Type									total # boats
	M	PWC	S	C	K	B	R	SUP	Docks	
Tupper Lake DECON SITE	22	2	0	19	11	0	1	0	0	55
percentage of total boats	40%	4%	0%	35%	20%	0%	2%	0%	0%	100%

Boats observed at site. M = motorboat; PWC = personal watercraft; S = sailboat; C = canoe; K = kayak; B = construction barge; R = rowboat; SUP= stand-up paddleboard; Docks = boat docks launched for seasonal installation/maintenance

Waterbody	total # people	organisms found	# boats dirty	# of inspections	% of inspected boats dirty
Tupper Lake DECON SITE	79	17	13	55	23.6%

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

Waterbody	# groups taking AIS spread prevention measures									# groups asked
	yes	I	WB	DB	BB	LW	Dis	Dry	didn't ask	
Tupper Lake DECON SITE	20	7	13	0	0	0	0	1	3	33
percentage of total # groups asked	61%	21%	39%	0%	0%	0%	0%	3%	NA	

Yes = took one or more AIS spread prevention measures; I = inspected boat; WB = washed boat; DB = drained bilge; BB = emptied bait bucket; LW = drained livewell; Dis = disposed of unused bait; Dry = dried boat.

Waterbody	Organism Type																total AIS	% of inspected boats with AIS
	BW	CLP*	ELO	GRS	EWM*	NM	UM	VLM*	MUD	NON	NP	SWF*	WC*	WL	ZM*	other		
Tupper Lake DECON SITE	0	0	0	3	0	0	0	0	2	11	1	0	0	0	0	0	0	0%
percentage of organisms removed	0%	0%	0%	18%	0%	0%	0%	0%	12%	65%	6%	0%	0%	0%	0%	0%		

BW = bladderwort; CLP = curly-leaf pondweed; ELO = elodea; GRS = grass; EWM = Eurasian watermilfoil; NM = native milfoil; UM = unknown milfoil; VLM = variable leaf milfoil; MUD = mud; NON = non-aquatic debris; NP = native pondweed; SWF = spiny waterflea; WC= water chestnut; WL= water lily; ZM = Zebra mussel; */AIS = aquatic invasive species.

Steward performing boat decontamination.

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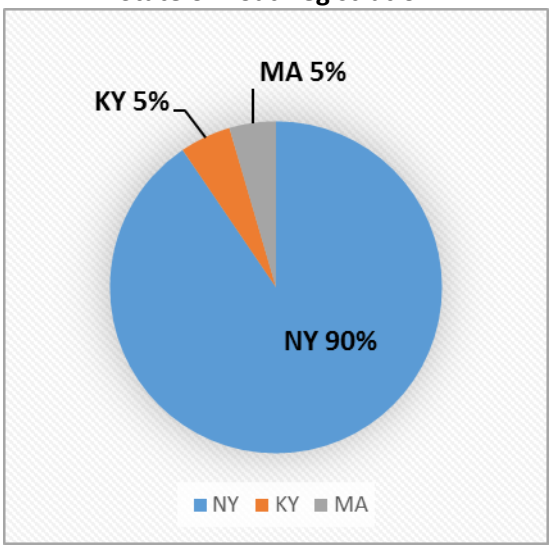
Previous Waterways visited, 2015	# visits
Tupper Lake	11
None	8
Cranberry Lake	1
Fish Creek Ponds	1
Fulton Chain of Lakes	1
Great Sacandaga Lake	1
Hudson River	1
Lake George	1
Lake Pleasant	1
Little Tupper Lake	1
Long Lake	1
Lower Saranac Lake	1
Lows Lake	1
Raquette River	1
Rental	1
Rollins Pond	1
Unknown	1
Thompson's Lake, Albany NY	1
Lake St. Catherine, Poultney VT	1
Total	**36**

State of Boat Registration



Upper St. Regis Lake

Boats inspected: 968
AIS intercepted: 1
Number of visitors: 1,727

Visitors taking spread prevention measures: 77%
Inspected boats with organisms: 5.8%
Number of previously visited waterways: 65

Waterbody	Boat Type									total # boats
	M	PWC	S	C	K	B	R	SUP	Docks	
Upper St. Regis Lake	285	1	5	398	310	6	3	4	0	1012
percentage of total boats	28%	0%	0%	39%	31%	1%	0%	0%	0%	100%

Boats observed at launch. M = motorboat; PWC = personal watercraft; S = sailboat; C = canoe; K = kayak; B = construction barge; R = rowboat; SUP= stand-up paddleboard; Docks = boat docks launched for seasonal installation/maintenance

Waterbody	total # people	organisms found		# boats dirty	# of inspections	% of inspected boats dirty
		entering	leaving			
Upper St. Regis Lake	1727	27	51	56	968	5.8%

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

Waterbody	# groups taking AIS spread prevention measures									# groups asked
	yes	I	WB	DB	BB	LW	Dis	Dry	didn't ask	
Upper St. Regis Lake	529	242	383	99	4	13	0	137	20	691
percentage of total # groups asked	77%	35%	55%	14%	1%	2%	0%	20%	NA	

Yes = took one or more AIS spread prevention measures; I = inspected boat; WB = washed boat; DB = drained bilge; BB = emptied bait bucket; LW = drained livewell; Dis = disposed of unused bait; Dry = dried boat.

Waterbody	Organism Type																total AIS	% of inspected boats with AIS
	BW	CLP*	ELO	GRS	EWM*	NM	UM	VLM*	MUD	NON	NP	SWF*	WC*	WL	ZM*	other		
Upper St. Regis Lake	4	1	0	7	0	0	0	0	18	41	3	0	0	1	0	3	1	0.1%
percentage of organisms removed	5%	1%	0%	9%	0%	0%	0%	0%	23%	53%	4%	0%	0%	1%	0%	4%		

BW = bladderwort; LP = curly-leaf pondweed; ELO = elodea; GRS = grass; EWM = Eurasian watermilfoil; NM = native milfoil; UM = unknown milfoil; VLM = variable leaf milfoil; MUD = mud; NON = non-aquatic debris; NP = native pondweed; SWF = spiny waterflea; WC= water chestnut; WL= water lily; ZM = Zebra mussel; */AIS = aquatic invasive species.

Upper St. Regis Lake: Aquatic Invasive Species Intercepted by Stewards, 2015	# found on boats launching	Previous Waterway	# found on boats retrieving	Previous Waterway
Curly leaf pondweed	1	Lake Champlain (1)	0	N/A

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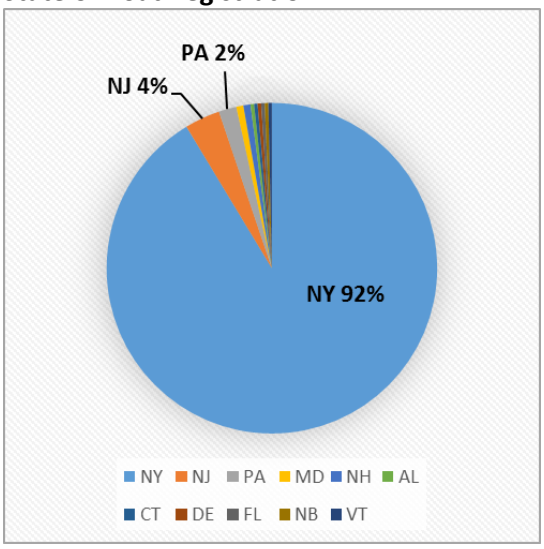
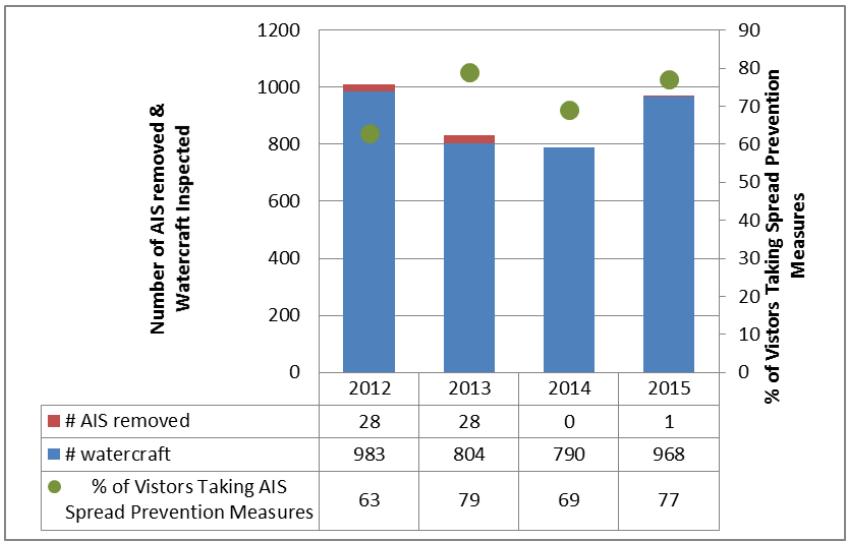
Previous Waterways visited, 2015	# visits
None	223
Upper St. Regis Lake	151
Unknown	65
Rental	30
Upper Saranac Lake	19
Osgood Pond	17
Lake Flower	15
Lake Placid	14
Did not ask	12
Lower Saranac Lake	12
Lake Champlain	11
Fish Creek Ponds	10
Raquette River	9
St. Lawrence River	9
Lower St Regis Lake	7
Hoel Pond	7
Chateaugay Lake	6
Lake Colby	6
Rainbow Lake	6
Buck Pond	5
Little Clear Pond	4
Meacham Lake	4
Kiwassa Lake	4
Chazy Lake	3

Previous Waterways visited, 2015	# visits
Long Lake	3
Saranac Lake Chain	3
Black Pond	3
Lake Kushaqua	3
Blue Mountain Lake	2
Middle Saranac Lake	2
Saratoga Lake	2
Taylor Pond	2
Floodwood Pond	2
Lake Clear	2
Bog Pond	2
Bear Pond	2
Canandaigua Lake	1
Cranberry Lake	1
Follensby Clear Pond	1
Hudson River	1
Indian Lake	1
Lake Eaton	1
Little Tupper Lake	1
Mirror Lake	1
Oneida Lake	1
Oswegatchie River	1
Raquette Lake	1
Rollins Pond	1

Previous Waterways visited, 2015	# visits
Saranac River	1
Schroon Lake	1
Second Pond	1
Skaneateles Lake	1
Tupper Lake	1
Tripp Lake, Chesterton NY	1
Polliwog Ponds	1
St. Regis River	1
Long Pond (St Regis Canoe Area)	1
somewhere in Massachusetts	1
Grasse River, St. Lawrence County NY	1
Ausable River	1
Loon Lake, Franklin County NY	1
Parishville res	1
Russell Lake, Schoharie County NY	1
Deer River Flow	1
Little Grass Pond	1
East Pine Pond	1
Kaniels Pond	1
Mud Pond	1
Henderson Lake, Newcomb NY	1
Marsh Reservoir VT	1
Total	**711**

State of Boat Registration





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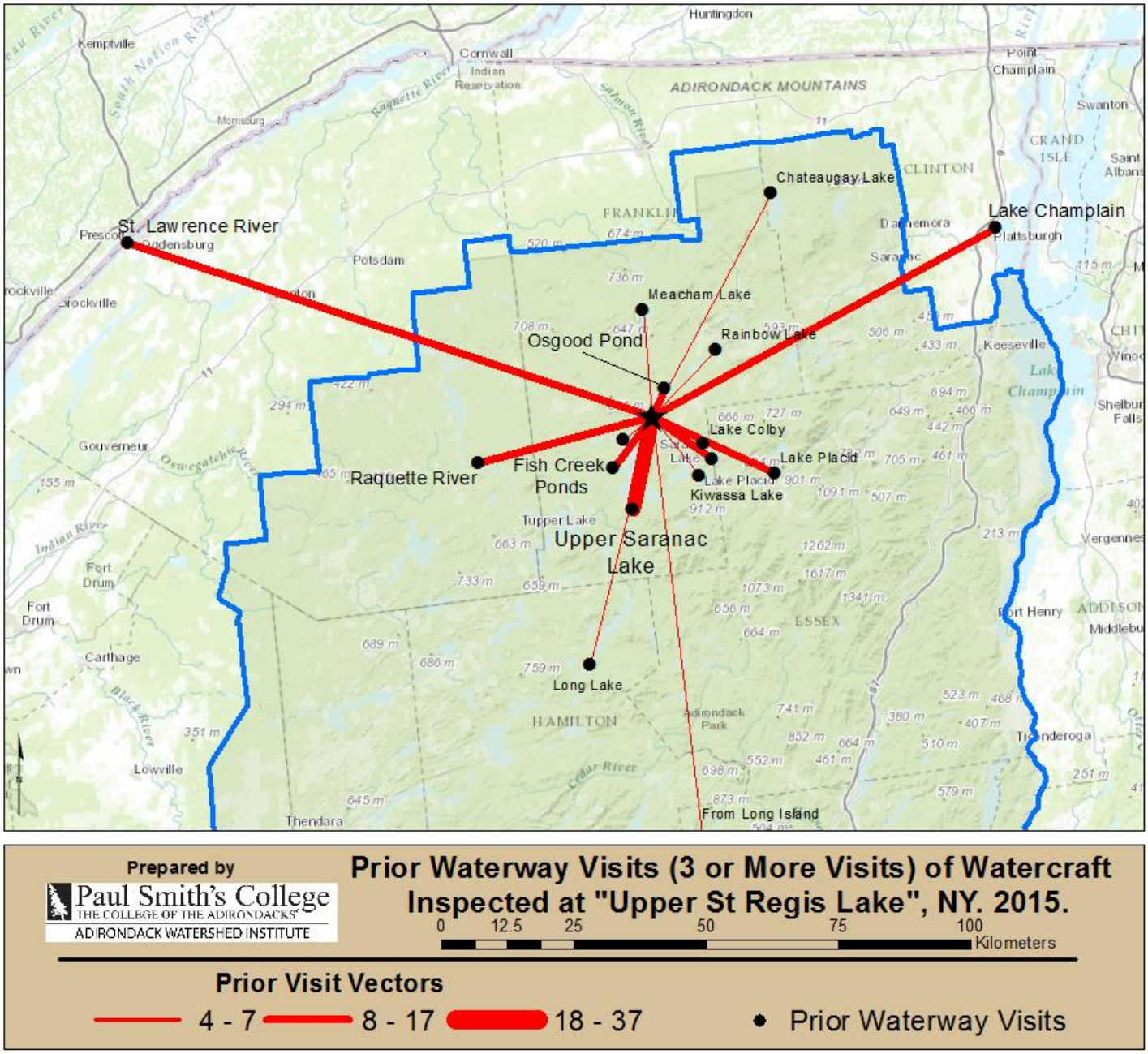

Waterways visited in previous 2 weeks by incoming vessels to Upper St. Regis Lake. Vectors weighted to denote quantity of visits to previous waterbodies.

Upper Saranac Lake

Boats inspected: 1,215
AIS intercepted: 6
Number of visitors: 2,924

Visitors taking spread prevention measures: 74%
Inspected boats with organisms: 6.9%
Number of previously visited waterways: 57

Waterbody	Boat Type									total # boats
	M	PWC	S	C	K	B	R	SUP	Docks	
Upper Saranac Lake	1019	65	11	110	80	0	5	5	0	1295
percentage of total boats	79%	5%	1%	8%	6%	0%	0%	0%	0%	100%

Boats observed at launch. M= motorboat; PWC = personal watercraft; S = sailboat; C = canoe; K = kayak; B = construction barge; R = rowboat; SUP= stand-up paddleboard; Docks = boat docks launched for seasonal installation/maintenance

Waterbody	total # people	organisms found		# boats dirty	# of inspections	% of inspected boats dirty
		entering	leaving			
Upper Saranac Lake	2924	59	47	84	1215	6.9%

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

Waterbody	# groups taking AIS spread prevention measures									# groups asked
	yes	I	WB	DB	BB	LW	Dis	Dry	didn't ask	
Upper Saranac Lake	838	347	588	305	7	13	4	159	64	1137
percentage of total # groups asked	74%	31%	52%	27%	1%	1%	0%	14%	NA	

Yes = took one or more AIS spread prevention measures; I = inspected boat; WB = washed boat; DB = drained bilge; BB = emptied bait bucket; LW = drained livewell; Dis = disposed of unused bait; Dry = dried boat.

Waterbody	Organism Type																total AIS	% of inspected boats with AIS
	BW	CLP*	ELO	GRS	EWM*	NM	UM	VLM*	MUD	NON	NP	SWF*	WC*	WL	ZM*	other		
Upper Saranac Lake	3	0	1	20	5	0	0	1	13	43	11	0	0	2	0	7	6	0.5%
percentage of organisms removed	3%	0%	1%	19%	5%	0%	0%	1%	12%	41%	10%	0%	0%	2%	0%	7%		

BW = bladderwort; CLP = curly-leaf pondweed; ELO = elodea; GRS = grass; EWM = Eurasian watermilfoil; NM = native milfoil; UM = unknown milfoil; VLM = variable leaf milfoil; MUD = mud; NON = non-aquatic debris; NP = native pondweed; SWF = spiny waterflea; WC= water chestnut; WL= water lily; ZM = Zebra mussel; */AIS = aquatic invasive species.

Upper Saranac Lake: Aquatic Invasive Species Intercepted by Stewards, 2015	# found on boats launching	Previous Waterway	# found on boats retrieving	Previous Waterway
Eurasian water milfoil	3	*None* (2), Lake Placid (1)	2	*Did not ask* (1), Rainbow Lake
Variable leaf milfoil	1	Lake Flower (1)	0	N/A
Totals	**4**		**2**	

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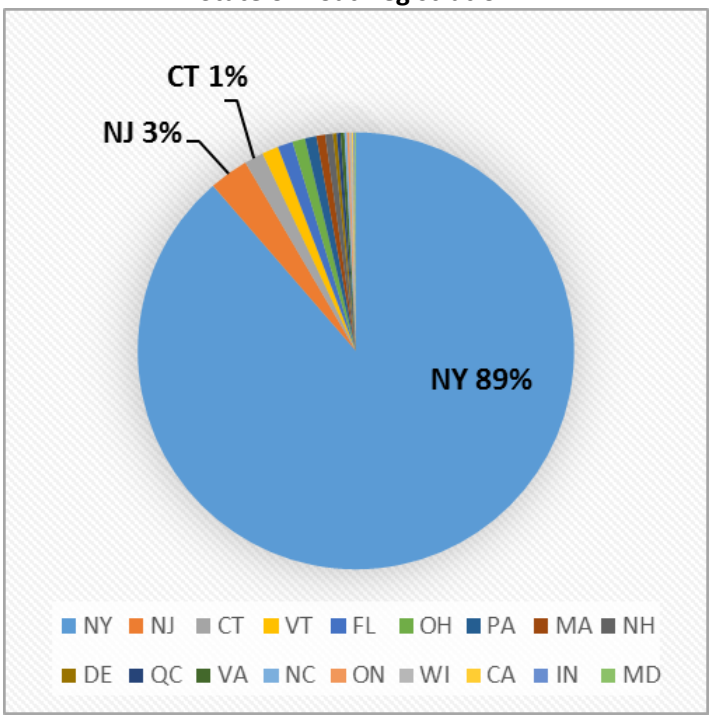
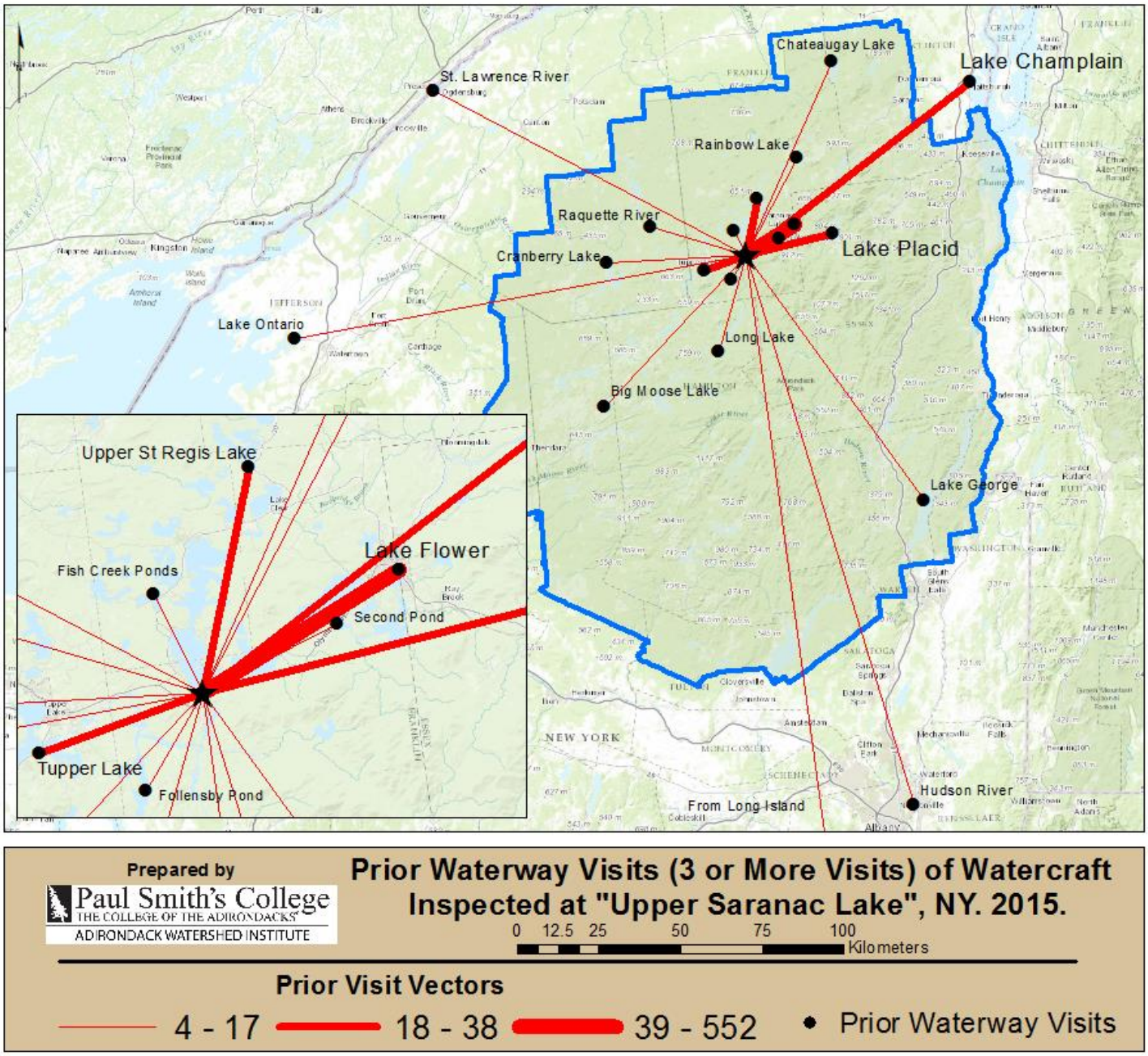
State of Boat Registration



Previous Waterways visited, 2015	# visits
Upper Saranac Lake	450
None	304
Unknown	57
Lower Saranac Lake	51
Lake Flower	40
Lake Placid	35
Tupper Lake	30
Did not ask	18
Lake Champlain	18
Saranac Lake Chain	18
Rental	17
Upper St Regis Lake	13
Middle Saranac Lake	12
Fish Creek Ponds	8
Follensby Clear Pond	8
Second Pond	8
Lake Ontario	7
Rainbow Lake	7
Raquette River	7
Lower St Regis Lake	6
Big Moose Lake	5

Previous Waterways visited, 2015	# visits
Chateaugay Lake	5
Lake George	5
Cranberry Lake	4
Hudson River	4
Little Clear Pond	4
Long Lake	4
St. Lawrence River	4
St. Regis River	4
Connecticut River	3
Lake Colby	3
Osgood Pond	3
Canandaigua Lake	2
Carry Falls Reservoir	2
Lows Lake	2
Piseco Lake	2
Saranac River	2
Seneca Lake	2
Hoel Pond	2
Simon Pond	2
Lake Dunmore, Salisbury VT	2
Blue Mountain Lake	1

Previous Waterways visited, 2015	# visits
Buck Pond	1
Delta Lake	1
Erie Canal	1
Great Sacandaga Lake	1
Hinckley Flow Reservoir	1
Indian Lake	1
Lake Erie	1
Meacham Lake	1
Mirror Lake	1
Oneida Lake	1
Raquette Lake	1
Rollins Pond	1
Sacandaga Lake	1
Schroon Lake	1
Chittning Pond	1
Lake Kushaqua	1
Grasse River, St. Lawrence County NY	1
Church Pond	1
Trout Pond	1
somewhere in Pennsylvania	1
Total	**1201**



Waterways visited in previous 2 weeks by incoming vessels to Upper Saranac Lake. Vectors weighted to denote quantity of visits to previous waterbodies.

White Lake

Boats inspected: 596
AIS intercepted: 0
Number of visitors: 1,191

Visitors taking spread prevention measures: 51%
Inspected boats with organisms: 1%
Number of previously visited waterways: 29

Waterbody	Boat Type									total # boats
	M	PWC	S	C	K	B	R	SUP	Docks	
White Lake	239	143	6	33	152	3	8	21	1	606
percentage of total boats	39%	24%	1%	5%	25%	0%	1%	3%	0%	100%

Boats observed at launch. M = motorboat; PWC = personal watercraft; S = sailboat; C = canoe; K = kayak; B = construction barge; R = rowboat; SUP= stand-up paddleboard; Docks = boat docks launched for seasonal installation/maintenance

Waterbody	total # people	organisms found		# boats dirty	# of inspections	% of inspected boats dirty
		entering	leaving			
White Lake	1191	9	1	6	596	1.0%

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

Waterbody	# groups taking AIS spread prevention measures									# groups asked
	yes	I	WB	DB	BB	LW	Dis	Dry	didn't ask	
White Lake	230	139	192	67	14	5	14	108	54	455
percentage of total # groups asked	51%	31%	42%	15%	3%	1%	3%	24%	NA	

Yes = took one or more AIS spread prevention measures; I = inspected boat; WB = washed boat; DB = drained bilge; BB = emptied bait bucket; LW = drained livewell; Dis = disposed of unused bait; Dry = dried boat.

Waterbody	Organism Type																total AIS	% of inspected boats with AIS
	BW	CLP*	ELO	GRS	EWM*	NM	UM	VLM*	MUD	NON	NP	SWF*	WC*	WL	ZM*	other		
White Lake	0	0	0	1	0	0	0	0	3	3	0	0	0	0	0	3	0	0%
percentage of organisms removed	0%	0%	0%	10%	0%	0%	0%	0%	30%	30%	0%	0%	0%	0%	0%	30%		

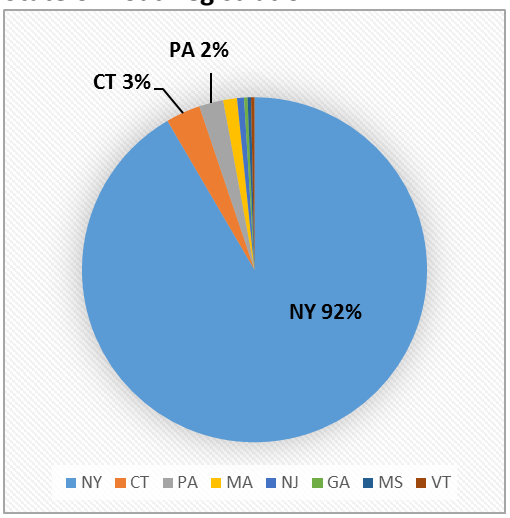
BW = bladderwort; CLP = curly-leaf pondweed; ELO = elodea; GRS = grass; EWM = Eurasian watermilfoil; NM = native milfoil; UM = unknown milfoil; VLM = variable leaf milfoil; MUD = mud; NON = non-aquatic debris; NP = native pondweed; SWF = spiny waterflea; WC= water chestnut; WL= water lily; ZM = Zebra mussel; */AIS = aquatic invasive species.

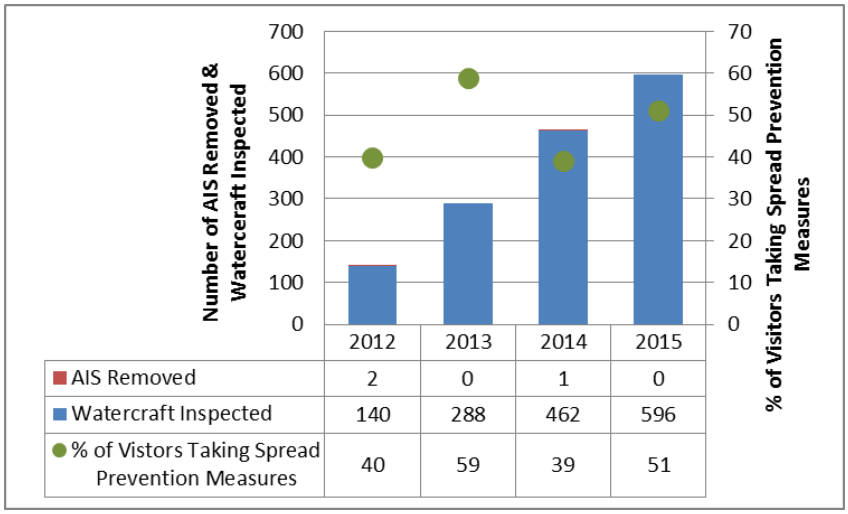
Adirondack Watershed Institute Stewardship Program
Dr. Eric Holmlund, Director. P.O. Box 265, Paul Smiths NY, 12970
Telephone: (518) 327-6341. Email: eholmlund@paulsmiths.edu

Previous Waterways visited, 2015	# visits
White Lake	235
None	165
Unknown	40
Cayuga Lake	9
Rental	7
Erie Canal	4
Fulton Chain of Lakes	4
Hinckley Flow Reservoir	4
Otter Lake	4
Big Moose Lake	3
Chateaugay Lake	3
Fourth Lake	3
Delta Lake	2
First Lake	2
Lake Ontario	2
Oneida Lake	2
Seneca Lake	2

Previous Waterways visited, 2015	# visits
North-South Lake, Hunter NY	2
Moose River	2
Atlantic Ocean	1
Buck Pond	1
Canandaigua Lake	1
Connecticut River	1
Hudson River	1
Oswegatchie River	1
Raquette Lake	1
Round Lake	1
Skaneateles Lake	1
St. Lawrence River	1
Stillwater Reservoir	1
Black Lake	1
Nicks Lake, Old Forge NY	1
Old Forge Pond	1
Total	**509**

State of Boat Registration





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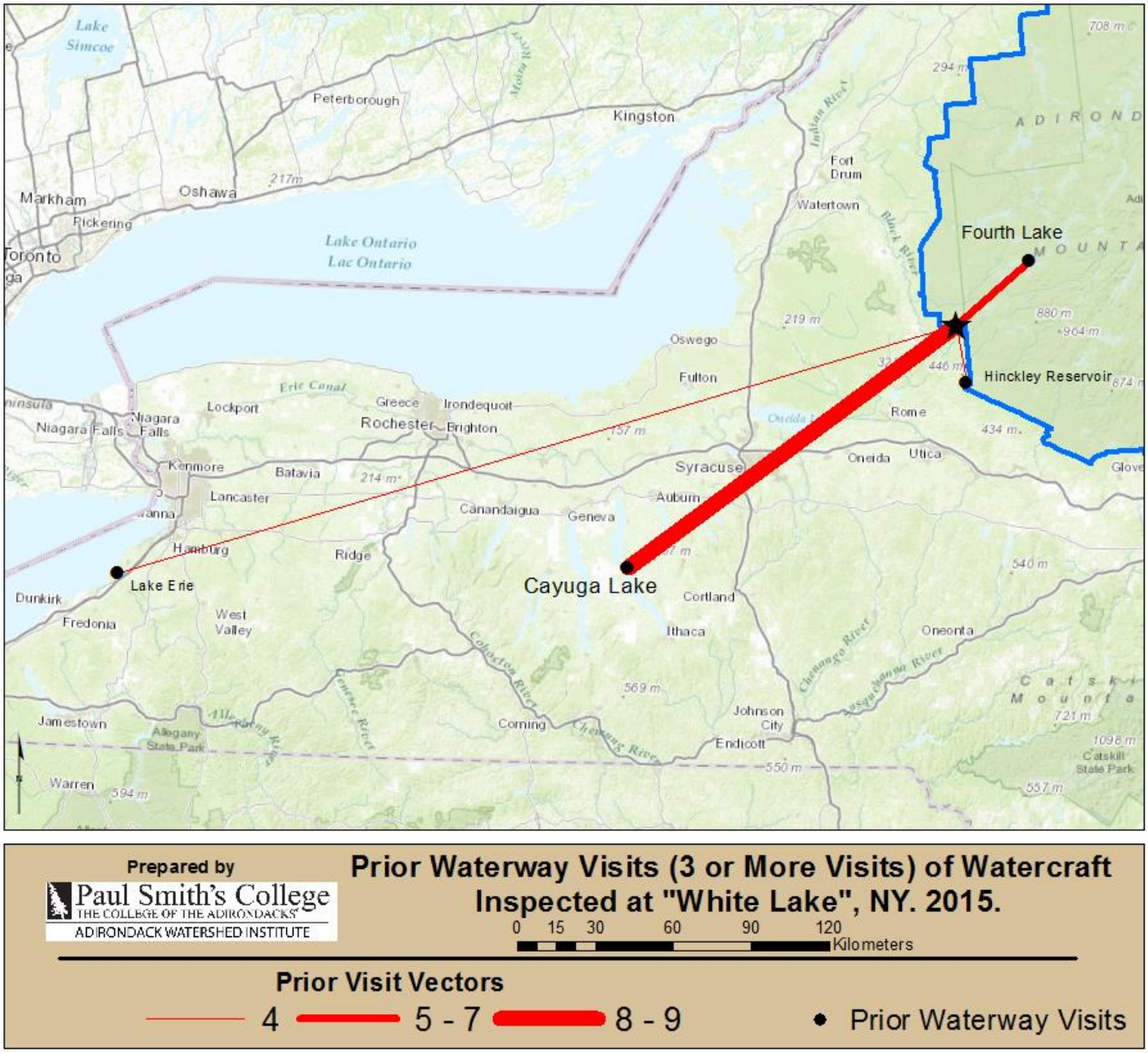
Paul Smith's College
THE COLLEGE OF THE ADIRONDACKS



Waterways visited in previous 2 weeks by incoming vessels to White Lake. Vectors weighted to denote quantity of visits to previous waterbodies.

Appendices

Appendix A: Staff Profiles

Regional Supervisors	Hometown	Education
Antolos, Emma	St. Augustine, FL	SUNY Binghamton, SUNY ESF
King, Christiaan	Bloomingdale, NY	Paul Smith's College, University of Rochester
Parslow, Jaime	Piseco, NY	SUNY ESF
Pfau, Deanna	Schenectady, NY	Paul Smith's College
Troy, Teresa	Saranac Lake, NY	Paul Smith's College
Velazquez, Jorge	Saranac Lake, NY	Paul Smith's College
Weekend Supervisors	**Hometown**	**Education**
Dumais, Phil	Fort Johnson, NY	Paul Smith's College
Garrison, Paul	Petersburgh, NY	Paul Smith's College
Leveille, Kristen	Saranac Lake, NY	Paul Smith's College
O'Reilly, Sue	Saranac Lake, NY	University of New Orleans
Pollack, Tyrah	Corning, NY	SUNY ESF
Smith, Jessie	Pittstown, NJ	Paul Smith's College
Stewards	**Hometown**	**Education**
Adams, Logan	Johnson City, NY	Clarkson University
Baker, Tim	Wilton, NY	Paul Smith's College
Ball, Jacob	Glenwood, NJ	Paul Smith's College
Barnes, Jeffrey	Malone, NY	SUNY Plattsburgh
Becker, Richard	Ellenburg Depot, NY	N/A
Blue, Christian	Saranac Lake, NY	Paul Smith's College
Boni, Jacob	Piseco, NY	Siena College
Boyer-Rechlin, Nathan	Paul Smiths, NY	Principia College
Brault, Nathan	Lake Placid, NY	Peru Central School
Cooper, Izaack	Plainfield, NJ	Paul Smith's College
Deyette, Noel	Malta, NY	Paul Smith's College
Dyer, Darcy	Saranac Lake, NY	Paul Smith's College
Empsall, Margaret	Chataguay, NY	SUNY Plattsburgh
Favreau, Hunter	Massena, NY	Paul Smith's College
Fischer, Jessie	Saranac Lake, NY	Paul Smith's College
Flannery, Tim	Saranac Lake, NY	Paul Smith's College
Foutch, Darcy	Wells, NY	N/A
Goolden, Jeffery	Potsdam, NY	SUNY Potsdam
Gorss, Megan	Greenfield Center, NY	SUNY ESF
Guimara, Kristel	Saranac Lake, NY	Paul Smith's College, Green Mountain College
Henderson, Lauren	Rainbow Lake, NY	Paul Smith's College
Hodge, Ashley	Adams, NY	Paul Smith's College
Hodgson, Alexandria	Syracuse, NY	North Country Community College
Hoh, Janelle	Saranac Lake, NY	SUNY Potsdam

Holvik, Jacob	Gabriels, NY	Unity College
Howard, Joshua	Hampstead, NH	Paul Smith's College
Hunter, Karl	Coeymans Hollow, NY	ESF Ranger School
Jones, Mitchell	Brewerton, NY	Clarkson University
Kennady, Kevin	Piseco, NY	Excelsior College
Knapp, Anna	Burlington, VT	University of Vermont
Kuryla, Jake	North Syracuse, NY	Paul Smith's College
Lavoie, Kaitlyn	Malone, NY	SUNY Potsdam
Mattilio, Chloe	Lancaster, PA	Paul Smith's College
McIntosh, Elisa	Lake Placid, NY	SUNY ESF, SUNY Plattsburgh
Michienzi, Emily	Lake Pleasant, NY	Keuka College
Michienzi, Matthew	Lake Pleasant, NY	Niagara University
Monroe, Luke	Old Forge, NY	Town of Webb School District
Morency, Alexandra	Argyle, NY	Alfred University
Morey, Nate	Moravia, NY	SUNY ESF
Nielsen, Jon	Saranac Lake, NY	SUNY Plattsburgh
O'Connor, Sean	Wells, NY	Clarkson University
Osborn, Derek	Ballston Spa, NY	Paul Smith's College
Pendergast, Shayne	Saratoga Springs, NY	Clarkson University
Plant, Zoe	Canajoharie, NY	Canajoharie High School
Rider, Abigail	Long Lake, NY	Mountainside Christian Academy
Ritz, Joe	East Aurora, NY	Paul Smith's College
Runyon, Miranda	Lake Placid, NY	Keene Central School
Ryan, Jennifer	Waddington, NY	SUNY Potsdam
Scheppard, Edward	Pulaski, NY	Paul Smith's College
Schultz, Sarah	Kingston, NY	Paul Smith's College
Setter, Jessica	Ballston Lake, NY	Paul Smith's College
Shoback, Kimberly	Plattsburgh, NY	Rutgers, State University of New Jersey
Smith, Cougar	Keene Valley, NY	Keene Central School
Sporn, Jacob	Bloomingdale, NY	Paul Smith's College
Staley, Austin	Saranac, NY	Paul Smith's College
Stoddard, Erin	Cicero, NY	ESF Ranger School
Trowbridge, Benjamin	Baldwinsville, NY	SUNY ESF
Wells, Nate	Paul Smiths, NY	Paul Smith's College
Young, Casey	Feura Bush, NY	Bloomsburg University

Appendix B: Education and Outreach Events

Outreach Events

Title	Location	Date	# of people reached
Environmental Education	Keene Central School	January 26	-
SUNY Albany Job and Internship Fair	Albany	February 12	25
SUNY ESF Career Fair	Syracuse	February 25	25
Cornell Non-profit & Government Career Fair	Ithaca	February 26	12
Science Slam	Keene Central School	March 5	-
SUNY Cortland Job Fair	Cortland	March 11	5
PSC Career Fair	Paul Smiths	March 26	-
Adirondack Day	Albany, NY	April 27	-
EMS Club Days	Lake Placid	May 1-2	21
DEC Campground Staff Training	Ray Brook	May 5	-
Nature Walk with Peru Elementary School	VIC	May 29	75
Educational Table	VIC	June 7	-
Blackfly Challenge	Inlet	June 13	8
Champlain Valley Bio-blitz	Westport	June 13	-
SUPfest	Lake Colby	June 20	17
Paddle Classic/ SUPfest	Old Forge	June 27	60
Old Forge Boat Show	Old Forge	June 29	30
Teen Aquatic Stewardship Program	Lake Placid	July 9	-
Waterfront Park Opening	Saratoga	July 9	-
Lifeguard Outreach	4 parks in SW Region	July 9	-
Tupper Lake Woodsmen's Day	Tupper Lake	July 11	50
Old Forge Boat Show	Old Forge	July 11	30
Day in the Dacks	Paul Smith's College	July 11	-
Annual Assembly - Wooden Canoe Heritage Association	Paul Smith's College	July 15-17	-
Childrens' Program at Moffitt Beach Campground	Speculator	July 16	11
Northville Woodworking and Fine Arts Weekend	Northville	July 17-19	-
Arts in the Park	Inlet	July 18	30
SUNY ESF Ranger School Lecture	Wanakena	Juy 23	10
Property Owners Workshop	Saratoga	July 23	10
St. Regis Paddle Outing	Paul Smith's College	July 27	-
Big Moose Lake Recreation Program	Big Moose Lake	July 27	20
Adirondack Lakes Alliance 2015 Symposium	Paul Smith's College	July 28	-
Adirondack Waterfest	Speculator	July 31	75
Campground Craft Day at North Hampton	Northville	August 1	-
Play Outside Festival at The Wild Center	Tupper Lake	August 2	56
Hamilton County Family Fun Day	Speculator	August 3	100
High School Student Research Q & A		August 19	-

Blue Mountain Lake Museum	Blue Mountain Lake	August 25	-
90-Miler	Old Forge–Saranac Lake	September 11-13	34
Nature-fest	Moreau Lake state park	September 26	100
Family Weekend	Paul smiths	September 25-26	-
Adirondack Kids Day	Inlet	October 3	30
EMS Club Days	Lake Placid	October 22-24	30
PSC Career Days	Paul Smiths	October 22	20

Meetings and Conferences

Title/Description	Date
Northeast Aquatic Plant Management Society Annual Meeting – Presentation by Kathleen Wiley	January 21
ADK Parkwide AIS Spread Prevention Program	March 12
AIS Spread Prevention - Saratoga Lake	April 2
ADK Invasive Species Regional Strategy Group	April 3
Village of Saranac Lake Meeting – Presentation by Eric Holmlund	April 13
ADK AIS Committee Meeting	April 24
APIPP Spring Partners Meeting	April 28
NYSFOLA Conference – Presentation by Eric Holmlund	May 1-2
International Association of Great Lakes Research National Conference – Presentation by Eric Holmlund	May 25-29
Black River Watershed Conference – Presentation by Eric Holmlund	June 3
Hamilton County Federation of Sportsmen	June 3
Piseco Lake Association - Board Member Meeting	June 7
Fulton Chain of Lakes	June 27, August 7, 29
Regional Inlet Invasive Plant Program	June 28
Cossyuna Lake Association	July 1
Rainbow Lake Association	July 11
Osgood Pond Association	July 12, August 16
Town of Arietta - Board Meeting	July 15
Piseco Lake Association - Annual Summer Meeting	July 25
Big Moose Property Owners' Association	July 25
6th & 7th Lake Association Annual Meeting & Picnic	August 1
Lake Placid Association	August 1
Indian Lake Association	August 8
Long Lake Association	August 14
Lake Pleasant/Sacandaga Lake Association	August 16
ADK Parkwide AIS Spread Prevention - Evaluation Meeting	September 25
Adirondacks Invasive Coordination Meeting	November 6
ALA Region D Meeting	December 9
ADK Boat Inspection Program & Planning for 2016 (DEC Fisheries)	December 15
NY Great Lakes Action Agenda (Northeast Sub Basin)	December 14
Cornell Co-op Ag & Food Systems In-service: Invasive Species Tract	November 3-5
NY Sea Grant Webinar "Standardized Watercraft Inspection Data Collection"	November 5

Farmers Markets

Market Location	Date(s)	Number of People Reached
Lake Placid	July 1st, 8th, 15th, 22nd, August 5th, September 9th	49
Long Lake	July 19th & 30th	40
Malone	June-August (Wednesdays)	70-80
Old Forge	July 17th	30
Potsdam	August 2nd	30
Tupper Lake	June 25th	15

Fishing Tournaments

Tournament	Location	Date
Long Lake Fishing Derby	Long Lake, NY	June 20
The Kid's Fishing Derby	Lake Colby, NY	June 21
Raquette Lake Fishing Derby	Raquette Lake, NY	July 25
Bourbon Bassmaster Elite Tournament	St, Lawrence River, NY	July 29
Northern NY Bassmaster Tournament	Cranberry Lake, NY	August 8
Bass For Cash Fishing Tournament	Oxbow Lake, NY	August 8

Media Mentions

Title	Publication	Date
"New Boat Wash Opens in Star Lake"	Watertown Daily Times	May 27, 2015
"Boat washing station opens in Okara Lakes"	Adirondack Express	July 14, 2015
"Saratoga rowers learn about lake ecology on floating classroom"	The Saratogian	July 21, 2015
"Boat washes are open in the ADK"	Hamilton County Express	July 22, 2015
"Adirondack steward protecting Stillwater from invasive species"	Watertown Daily Times and Lowville Journal and Republic	July 26, 2015

Water Shield Workshops

Group	Location	Date
Keene Central School	Lake Flower	June 8, September 17
Upper Saranac Lake Foundation & Association	Upper Saranac Lake	June 8, August 12
East Shore Schroon Lake Association	Schroon Lake	July 14, August 4
Saratoga Rowing Association	Saratoga Lake	July 21
BOCES Administrator Conference	Lake Placid	August 12
Lake Placid High School	Lake Placid	September 10