Watercraft Inspection Steward Program

SLELO PRISM and TILT final Report —2020



Report prepared by Brittney Rogers, SLELO PRISM Aquatic Restoration and Resiliency Coordinator

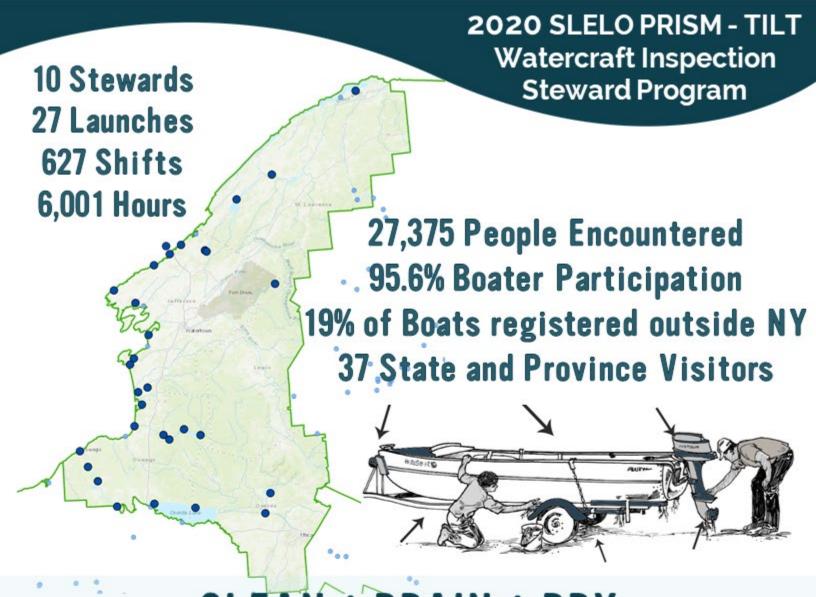






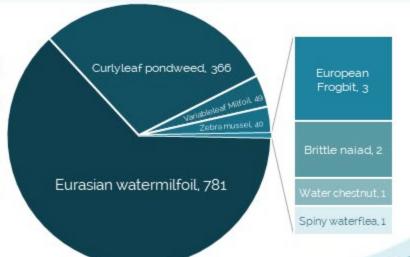






CLEAN + DRAIN + DRY PROTECTING OUR WATERS FROM AQUATIC INVASIVE SPECIES

10,598 Surveys 1,339 "Dirty boats" 1,243 AIS intercepted





"Teaming Up To Stop The Spread of Invasive Species"

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The numerous partner organizations and their representatives who contribute their expertise, time and resources to the development and success of the SLELO PRISM and the 2020 Watercraft Inspection Steward Program.

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City of Fulton

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NYSDEC R6 Fisheries

NYSDEC R6 Forestry

NYSDEC R6 Wildlife

NYSDEC R7 Fisheries

NYSOPRHP

Town of Cape Vincent

Town of Henderson

Town of Massena

Village of Clayton

Village of Heuvelton

Village of Phoenix

Village of Sackets Harbor

Wrights Landing Marina

INTRODUCTION

OVERVIEW OF SLELO PRISM

Historical documentation shows Lake Ontario has been and continues to be a destination for fishing enthusiasts, professional anglers and recreational boating. The Salmon River in Oswego County attracts anglers on a global scale. Recreational travel-boating is also a significant activity with boaters traveling the Great Lakes, Erie Canal, Hudson River and even traversing the "Great Loop" which takes vessels from the Great Lakes down through the Mississippi River around the Florida peninsula up the Atlantic and back into the Great Lakes through the St. Lawrence River. With more than 7,600 freshwater lakes, including the Great Lakes, Finger Lakes and Adirondack regions, the potential for aquatic invasive species (AIS) to be spread in New York State is of high concern.

In 2005 the NYS Invasive Species Task Force developed a comprehensive report on invasive species issues in NY and provided 12 recommendations to the Governor and State Legislature. Among these recommendations was the development of Partnerships for Regional Invasive Species Management (PRISM). Funded by the Environmental Protection Fund and administered by the Department of Environmental Conservation (NYSDEC), NY's eight PRISMs form a network whose cooperation and activities are vital components of an integrated, state-wide approach to invasive species management.

The St. Lawrence Eastern Lake Ontario (SLELO) PRISM was established in 2011 and serves Jefferson, Lewis, Oneida, Oswego, and St. Lawrence counties (Figure 2). The SLELO PRISM, hosted by The Nature Conservancy, strives to protect native biodiversity and freshwater resources through a collaborative approach to invasive species management with an emphasis on core programming and multiple special initiatives (Figure 1).

Core Programming:

Prevention
Early Detection
Rapid Response
Management and Control
Ecological Restoration
Education and Outreach

Special Initiatives:

AIS Macrophyte Nutrient Analysis
Aquatic Restoration Initiative
Environmental DNA Sampling
Pollinator Pathway Project
Spotted Lanternfly Spotters Program
Tug Hill Forest Restoration
Urban Forest Sustainability Initiative
Watercraft Inspection Steward Program

Figure 1 SLELO PRISM Core Programming and Special Initiatives

To guide SLELO's strategic invasive species prevention and management efforts, the PRISM worked with partner organizations to develop a <u>Tiered Species List</u>, which categorizes species by abundance and management feasibility within the SLELO region.

SLELO PRISM is a collaborative effort between numerous principal, at-large and cooperating affiliate partners throughout the region. Contributions and expertise provided by our partners is the key to our success. Current partners include;

- Algonquin to Adirondacks Collaborative
- Central NY Regional Planning and Development Board
- Cornell Cooperative Extension
- County Soil and Water Conservation Districts
- <u>Ducks Unlimited</u>
- Fort Drum Military Installation
- Indian River Lakes Conservancy
- New York Power Authority
- New York Sea Grant
- NYS Department of Transportation
- NYS Office of Parks, Recreation and Historic Preservation
- Onondaga Audubon
- Save the River
- St. Regis Mohawk Tribe
- NYS Department of Environmental Conservation
- The Nature Conservancy
- Thousand Islands Land Trust
- Tug Hill Commission
- Tug Hill Tomorrow Land Trust
- U.S. Coast Guard Auxiliary

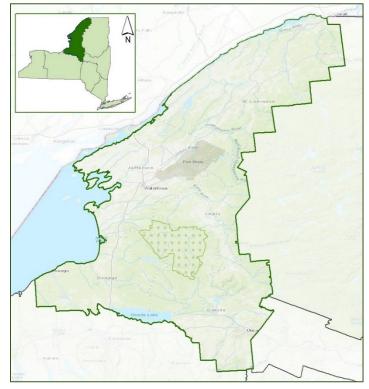


Figure 2 Regional Map of SLELO PRISM in NYS

The SLELO PRISM, encompassing over four million acres of land, is continually threatened by the introduction and spread of new or existing invasive species. Since its founding in 2011, the PRISM has made tremendous progress to prevent the establishment of new species and the mange existing infestations to mitigate their impacts within the PRISM. Watercraft inspection is one of the primary methods to prevent the spread of AIS in the PRISM.

OVERVIEW OF WATERCRAFT INSPECTION

The goal of the Watercraft Inspection Steward Program (WISP) is for trained stewards to engage the public, specifically boaters, on how to look for and remove aquatic invasive species from their boating and fishing equipment. This program is designed to equip stakeholders with information that can help them reduce the potential spread of aquatic invasive species in the absence of stewards, while also collecting important data on where boaters are travelling, their awareness of AIS and if any organisms are being transported by the watercraft. Boater participation in the SLELO PRISM WISP is 100% voluntary, though some programs in other parts of NY are mandatory.

With boaters, the stewards:

- Walk through inspection checkpoints using a standardized protocol and survey tool
- Engage boaters in dialogue about AIS, their impacts on the environment, and the importance of taking measures to prevent their spread
- Provide AIS educational materials
- Collect boater usage and aquatic invasive species data

HISTORY OF WATERCRAFT INSPECTION

The transportation of aquatic species by recreational watercraft has been clearly established as a primary vector in the spread of AIS across North America (Leung, Bossenbroek, & Lodge, 2001; Johnson, Ricciardi, & Carlton, 2001; Drury & Rothlisberger, 2008).

Watercraft inspection programs are one of the most cost-effective methods to prevent of spread of AIS. The first watercraft inspection program in NY was initiated by Paul Smith's College on the St. Regis Chain of Lakes in 2000. The Lake Champlain Basin Program and the Lake George Association initiated programs in 2007 and 2008, respectfully. Steward programs in the Finger Lakes and Eastern Lake Ontario began in 2012 and were federally funded through the Great Lakes Restoration Initiative. In 2014, the New York State Office of Parks, Recreation and Historic Preservation (NYSOPRHP) received funds through the Great Lakes Restoration Initiative to develop a boat launch steward program at state managed launches along portions of the Lake Ontario Shoreline. Although this effort was substantial, partners of the SLELO PRISM, including NYSOPRHP and NYS DEC, identified gaps for which increased stewardship coverage would benefit the region tremendously.

Through a \$100,000 grant from the NYS DEC Invasive Species Spread Prevention Grants Program (NYS Environmental Protection Fund) in 2016, four AIS stewards were strategically placed at high use, high priority boat launches along Eastern Lake Ontario in Cape Vincent, Sackets Harbor, Henderson Harbor, and Wrights Landing in Oswego. Between 2016 and 2018, a total of 2,605 watercraft were inspected across four high-use boat launch sites adjacent to Lake Ontario. Invasive species were intercepted 230 times over a three-year period.

The NYS AIS Management Plan, released in 2015, called for expanding and standardizing steward programs across the state (NYSDEC, 2015). In 2018, NYSDEC began funding pilot boat steward programs in each of the PRISMs across the state. This expansion of the state-wide boat steward programs has allowed SLELO PRISM to initiate and expand the program in 2020 and through the duration of the contract, expiring in 2023.

State-wide programs have worked together to carefully implement public AIS prevention campaigns. These campaigns are showing increased public adoption and include the Protect Your Waters and Clean-Drain-Dry

protocol (Figure 3). Campaign and messaging consistency between programs is important to build recognition and improve public perception of watercraft inspection programs and steward presence at launches.



Figure 3 Sample of strategic campaigns to build program recognition.

OVERVIEW OF THE 2020 REPORT

This report captures the multiple components of SLELO PRISM's 2020 watercraft inspection program. The program overview section provides an overview of the training and methods; followed by a summary of results which interprets the data obtained by the stewards; outreach and staff section regarding the 2020 staff and a brief recommendation section for programmatic improvements and plans in 2021. Launch Profiles which break down the data based on location including maps and information about each launch will be found in the appendix.

2020 PROGRAM OVERVIEW

In 2020, WISP, administered by SLELO PRISM and the Thousand Islands Land Trust (TILT), hired 10 stewards to cover 30 launches across the region, with each steward splitting their time between multiple sites (Figure 4).

This program expansion contributed to the statewide effort focusing on preventing and slowing the spread of AIS. There were nearly 325 launches in NYS with steward coverage in 2019, and over 248,000 inspections conducted, which resulted in 12,000 potential invasive species spread interceptions. In 2020, there were 349,800 records submitted with 19,122 organisms detected on watercraft.

The co-administering organization, TILT, works to conserve the natural beauty, diverse wildlife habitats, water quality, and outdoor recreation opportunities of the 1000 Islands region, for present

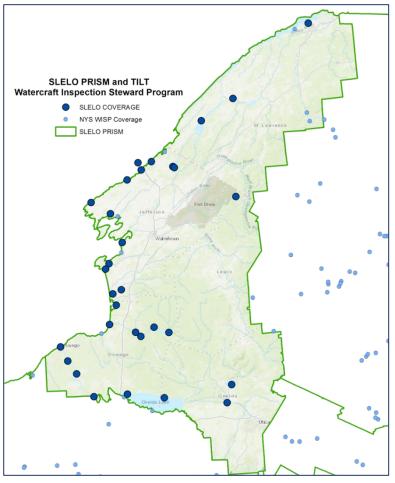


Figure 4 Overview map of SLELO/TILT Steward Launch Coverage

and future generations. Since 1985, TILT has helped to safeguard over 10,000 acres of land in Jefferson and St. Lawrence Counties through conservation easements, land acquisition, and by establishing accessible areas for public enjoyment (including open spaces for hiking, biking, fishing, hunting, birding, and kayaking).

The 2020 SLELO PRISM and TILT program successfully launched the week before Memorial Day Weekend and continued to the weekend prior to U.S. Indigenous Peoples' Day. Unfortunately, similar to many organization's projects, COVID-19 changed the way WISP would have traditionally operated. Stewards were deemed essential by the NYS Governor and were fortunate enough to staff launches, so long as they closely followed a COVID-19 response plan and updated TILT staff on their health, safety and any potential concerns related to the pandemic. PPE was provided by NYS DEC, which included masks, gloves and sanitizer. Although this year was unique for everybody, especially as the pandemic surged throughout the summer, people looked to the water for a way to escape into nature. Many locals enjoyed the bountiful opportunities of excellent boating, fishing or general aquatic recreation that the SLELO region has to offer, and the stewards still met visitors from all over the world.



Image 1 SLELO and TILT Program lead Staff and half of the 2020 Stewards, specifically those covering southern launches in SLELO PRISM

Stewards were recruited via job announcements on the TILT website, SLELO website, newspapers and even social media. The 10 stewards, three of whom were considered returning stewards, were trained virtually via Zoom Video Communications Inc., May 20-22, 2020. Training sessions included WISP overview, invasive species identification, communicating with the public and how to use the Survey123 application that is being

used by all programs in NYS. See Appendix for the full agenda.

Standard launch coverage was 5-days per week from Wednesday to Sunday, approximately 8:00-4:30pm with built in breaks. Stewards were provided a standard uniform including a light blue T-shirt with SLELO PRISM, TILT and Protect Your Waters logos and a light blue safety vest. Each steward was provided with the necessary supplies to set up an information table with signs, brochures, handouts, identification guides and other resources that may expand the information shared regarding AIS and spread prevention.



Image 2 Screenshot from virtual training event including SLELO PRISM staff, TILT Staff and 10 stewards

Stewards are trained to gather initial data on each launch visitor including party size, type of watercraft, state of boat registration, and if the watercraft is being launched or retrieved. Once they greet the party, they share educational information, perform the inspection looking for any plant, animal or mud material and work with the visitor to remove any material found and drain all compartments that may hold water. While the steward is engaging the boater, they conduct a short survey, asking the boater if they have visited a waterbody in the previous two weeks, if they are aware of invasive species, what steps they take specifically to prevent the spread of invasive species and what waterbody they plan to visit next. All information collected during the survey is recorded into a Samsung tablet using the Watercraft Inspection Steward Program App (WISPA), which was developed by the NY Natural Heritage Program using Esri's Survey 123 application. This standardized survey is used by all WISP programs across NYS.

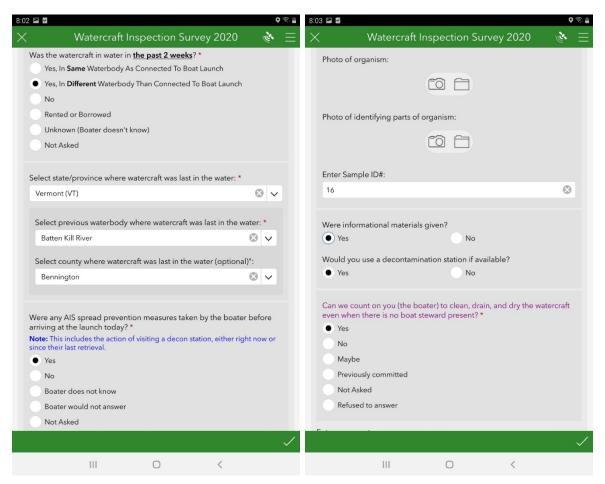


Image 3 Screen Capture of WISPA survey developed for use in Survey 123

SUMMARY OF RESULTS

The 2020 steward program operated Memorial Day Weekend and continued to the weekend prior to U.S. Indigenous Peoples' Day. In total, 27 launches were staffed for 697 shifts, totaling 6,001 hours. During this time, stewards conducted 10,598 surveys with 95.6% of boaters agreeing to the voluntary inspection (Table 1). Inspections per site ranged from zero at Bellamy Harbor Park to 1,418 at Lake Bonaparte. Number of visitors at each site varied depending on weather, typical launch use, and COVID-19. There were 27,375 people engaged by stewards, many receiving educational materials while the stewards inspected 12,455 watercraft. In instances when a group had multiple watercraft, for example a group of three kayakers, one survey was collected but each of the three watercraft were inspected. The busiest launches staffed by stewards in 2020 were Butterfield Lake, Cape Vincent, Lake Bonaparte and North Sandy Pond. Lake Bonaparte averaged 34 surveys per day while the other three launches averaged 21-22 surveys per day.

Table 1 Comprehensive data summary from 2020 WISP

Launch	Total Surveys Completed	DAYS	% Agreed	People	Total Count Invasive and Native Spp.	% of ALL SPP AIS
ButterfieldLake	1308	58	100.0%	3195	254	54%
CapeVincent	1393	63	93.0%	3410	256	41%
DeltaLakeStatePark	580	46	81.7%	1378	0	0%
GodfreyPoint	681	36	81.4%	1560	0	0%
GrassPointStatePark	97	8	96.9%	255	11	55%
HendersonHarbor	506	40	99.0%	1628	148	61%
HeuveltonBoatLaunch	210	49	100.0%	445	1	100%
IndianPointLanding	76	21	100.0%	153	0	0%
KeewaydinStatePark	103	6	99.0%	270	1	100%
LakeBonaparte	1418	41	98.9%	4138	307	79%
MaryStreetBoatLaunch	680	50	96.8%	1627	180	61%
MassenaDamIntake	239	16	100.0%	530	2	0%
MillsiteLake	158	16	100.0%	333	23	87%
MontarioPtRd	96	14	99.0%	330	2	50%
NorthSandyPond	1101	52	98.5%	2998	880	52%
PhoenixBoatlaunch	71	24	100.0%	154	0	0%
PineGrove	113	7	97.3%	295	5	80%
SacketsHarbor	235	29	89.8%	550	18	0%
JacksonRdSalmonRiver	202	16	94.6%	508	3	67%
RedfieldReservoirSalmonRiver	546	27	98.4%	1384	3	33%
SouthSandyCreek	331	27	96.7%	1047	18	0%
SportsmanPool	9	4	100.0%	19	0	0%
ThreeMileBay	118	21	93.2%	289	106	56%
ToadHarbor	7	2	57.1%	9	0	0%
WellseleyIslandStatePark	9	1	100.0%	23	1	100%
WrightsLandingMarina	311	23	99.0%	847	3	100%
Grand Total	10,598	697	95.6%	27,375	2,222	56%

Launches varied in use due to location and accessibility, among other reasons. The primary activity reported to stewards were to utilize the water for recreation (56%) and fishing (42%). Other purposes included commercial, research or as part of governmental work. Of the 12,455 total watercraft inspected, 66% were motorboats, 23% were kayaks and 7% were personal watercrafts (Table 2). The type and quantity of watercraft varied greatly by location. Some launches, such as South Sandy Creek and Montario Point Road, are better designed for launching non-motorized watercraft. Kayaks accounted for 87% and 76%, respectively, of all watercraft surveyed at these locations. Other launches, such as Henderson Harbor and Massena, were mostly visited by motorboats, accounting for 85% or higher of the watercrafts at these launches. **Knowing which watercraft are encountered most at each launch is important because certain watercraft are more likely to have organisms found on them.** For example, in 2020, 14% of motorboats inspected had organisms on them, while only 2% of kayaks had organisms on them (Table 3). Organisms encountered varied by launch, boater traffic, and whether the site had areas where boats are more likely to encounter AIS during navigation.

Table 2 Comprehensive data summary, Watercraft Type

Launch	Sum of Total Watercraft	Motorboat	Kayak	PWC	Canoe	SUP	Sailboat	Rowboat	Barge
ButterfieldLake	1462	73.26%	19.97%	3.49%	1.98%	0.55%	0.14%	0.48%	0.07%
CapeVincent	1434	82.85%	5.30%	9.90%	0.70%	0.21%	0.42%	0.63%	0.00%
DeltaLakeStatePark	776	51.42%	41.24%	5.93%	0.77%	0.64%	0.00%	0.00%	0.00%
GodfreyPoint	711	85.51%	9.99%	2.81%	0.28%	1.13%	0.28%	0.00%	0.00%
GrassPointStatePark	113	67.26%	17.70%	13.27%	0.88%	0.88%	0.00%	0.00%	0.00%
HendersonHarbor	516	86.82%	0.78%	11.82%	0.39%	0.00%	0.19%	0.00%	0.00%
Heuvelton	240	63.75%	27.08%	7.08%	2.08%	0.00%	0.00%	0.00%	0.00%
IndianPointLanding	106	28.30%	67.92%	0.00%	3.77%	0.00%	0.00%	0.00%	0.00%
KeewaydinStatePark	107	79.44%	1.87%	18.69%	0.00%	0.00%	0.00%	0.00%	0.00%
LakeBonaparte	1705	62.64%	27.21%	8.21%	1.06%	0.59%	0.06%	0.18%	0.00%
MaryStreetBoatLaunch	695	84.03%	3.02%	12.37%	0.58%	0.00%	0.00%	0.00%	0.00%
MassenaDamIntake	250	87.60%	1.20%	11.20%	0.00%	0.00%	0.00%	0.00%	0.00%
MillsiteLake	223	31.39%	54.71%	1.35%	4.04%	7.17%	0.00%	1.35%	0.00%
MontarioPtRd	192	8.33%	76.04%	0.00%	15.10%	0.52%	0.00%	0.00%	0.00%
NorthSandyPond	1135	83.26%	4.32%	11.81%	0.53%	0.09%	0.00%	0.00%	0.00%
Phoenix	89	42.70%	49.44%	2.25%	3.37%	0.00%	0.00%	1.12%	1.12%
PineGrove	127	66.14%	13.39%	17.32%	1.57%	1.57%	0.00%	0.00%	0.00%
SacketsHarbor	247	73.68%	6.07%	15.38%	1.62%	1.21%	2.02%	0.00%	0.00%
SalmonRiverJackson	262	51.15%	35.11%	6.87%	3.82%	0.76%	1.91%	0.38%	0.00%
SalmonRiverRedfield	609	79.97%	12.64%	4.93%	1.81%	0.33%	0.33%	0.00%	0.00%
SouthSandyCreek	963	0.73%	87.02%	0.00%	9.66%	2.60%	0.00%	0.00%	0.00%
SportsmanPool	9	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%
ThreeMileBay	122	75.41%	9.84%	12.30%	1.64%	1.64%	0.00%	0.00%	0.00%
ToadHarbor	9	11.11%	88.89%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
WellseleyIslandStatePark	9	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
WrightsLandingMarina	344	77.91%	15.99%	3.20%	0.58%	2.03%	0.29%	0.00%	0.00%
Grand Total	12455	66.33%	23.16%	7.22%	2.02%	0.77%	0.20%	0.26%	0.02%

During each inspection, stewards identified and reported all organisms found. Stewards reported 2,222 native and invasive species present in 1,291 inspections. Boats with organisms present are considered in this report to be "dirty". SLELO defines "dirty" as boats that are transporting any aquatic organisms, including both native and invasives. Of the 2,222 organisms found, 56% were AIS. Stewards found the highest number of organisms at North Sandy Pond, Lake Bonaparte, Butterfield Lake and Cape Vincent. This also correlated with the four launches where stewards conducted the highest number of inspections.

Of the 2,222 observed organisms, the most common invasives found included Eurasian and variable-leaf watermilfoils (781), curly leaf pondweed (366) and zebra mussels (40). The most common native species included elodea (312), eel grass (239) and coontail (158). Less common invasive species, though still important, included European frogbit, brittle naiad, water chestnut and spiny/fishhook water flea. It is essential to track and remove all organisms encountered, even if they are native, to reduce spread to other waterbodies beyond the species current range. This program is meant to not only prevent species from entering the waters in the SLELO region, but to also prevent species from leaving our region. This is especially important for vessels exiting Lake Ontario, a known high-risk waterbody with over 180 non-native or invasive species present.



Image 4 Images of aquatic species, which includes invasive Eurasian watermilfoil, curlyleaf pond weed, and native eel grass, elodea and coontail among others, which were uploaded to WISPA by stewards, Gary and Lauren, found on separate watercraft during inspections

Table 3 Inspection Summary, Watercraft Encountered while Launching and Retrieving

	SUMMARY OF WATERCRAFT INSPECTIONS												
	TOTAL	% OF TOTAL WATERCRAFT LAUNCHING	% OF TOTAL WATERCRAFT RETRIEVING	% OF TOTAL WATERCRAFT "CLEAN"	% OF TOTAL WATERCRAFT "DIRTY"	% OF "DIRTY" WATERCRAFT WITH AIS							
Watercraft Total	12455	61.69%	38.31%	89.22%	10.78%	8.17%							
Motorboat	8262	58.15%	41.85%	85.78%	14.22%	11.21%							
Kayaks	2885	65.68%	34.32%	97.75%	2.25%	0.52%							
PWC	899	76.86%	23.14%	90.10%	9.90%	7.90%							
Canoes	252	74.60%	25.40%	96.43%	3.57%	0.79%							
SUPs	96	69.79%	30.21%	96.88%	3.13%	1.04%							
Sailboat	25	64.00%	36.00%	96.00%	4.00%	4.00%							
Rowboat	33	60.61%	39.39%	96.97%	3.03%	3.03%							
Barge	2	50.00%	50.00%	100%	0%	0%							
Docks	2	100%	0%	100%	0%	0%							
		IN	SPECTIONS CC	MPLETED PRIOR TO	LAUNCH								
	TOTAL	% TYPE OF WATERCRAFT	% OF TOTAL WATERCRAFT LAUNCHING	% LAUNCHING "CLEAN"	% LAUNCHING "DIRTY"	% LAUNCHING "DIRTY" WITH AIS							
Watercraft Total	12455	100%	61.69%	96.47%	3.53%	66.05%							
Motorboat	8262	66.33%	58.15%	95.19%	4.81%	67.53%							
Kayaks	2885	23.16%	65.68%	99.31%	0.69%	7.69%							
PWC	899	7.22%	76.86%	96.38%	3.62%	84.00%							
Canoes	252	2.02%	74.60%	99.47%	0.53%	0%							
SUPs	96	0.77%	69.79%	100%	0.00%	0%							
Sailboat	25	0.20%	64.00%	93.75%	6.25%	100%							
Rowboat	33	0.26%	60.61%	100%	0%	0%							
Barge	2	0.02%	50.00%	100%	0%	0%							
Docks	2	0.02%	100%	100%	0%	0%							
		IN	ISPECTIONS CO	OMPLETED UPON RI	ETRIEVAL								
	TOTAL	% TYPE OF WATERCRAFT	% OF TOTAL WATERCRAFT RETRIEVING	% RETRIEVING "CLEAN"	% RETRIEVING "DIRTY"	% RETRIEVING "DIRTY" WITH AIS							
Watercraft Total	12455	100%	38.31%	77.62%	22.38%	78.46%							
Motorboat	8262	66.33%	41.85%	72.82%	27.18%	81.91%							
Kayaks	2885	23.16%	34.32%	94.75%	5.25%	26.92%							
PWC	899	7.22%	23.14%	69.23%	30.77%	78.13%							
Canoes	252	2.02%	25.40%	87.50%	12.50%	25.00%							
SUPs	96	0.77%	30.21%	89.66%	10.34%	33.33%							
Sailboat	25	0.20%	36.00%	100%	0%	0%							
Rowboat	33	0.26%	39.39%	92.31%	7.69%	100%							
Barge	2	0.02%	50.00%	100%	0%	0%							
Docks	2	0.02%	0%	0%	0%	0%							

When asked by stewards, 78% of boaters were familiar with AIS spread prevention measures and reported taking at least one preventative action. Stewards are trained to not lead the boaters toward a particular answer.

For example, when the steward asks if the boater has taken any steps to prevent the spread of AIS, the steward allows the boater to provide the answer, rather than listing choices for the boater to say yes or no to. In May, launch users indicated they used spread prevention measures 70% of the time, and by September 89% of boaters indicated they were taking prevention measures, a 19% increase (Figure 5). Survey data also showed that as the season progressed, more boaters reported a previous encounter with a steward and had a higher level of awareness of spread prevention measures. October was omitted from this analysis as only 22 boats were inspected with only one launch being covered. Though boaters are reporting increased awareness of spread prevention measures, stewards

2020 Boater's Previous Contact with a Steward and Prevention Awareness

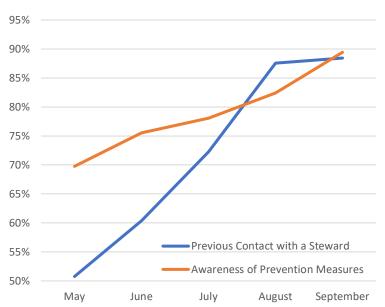


Figure 5 Change in boater contact with Steward and Prevention Awareness over time, a 35% increase in boaters who have encountered stewards and a 19% increase in boater's awareness of aquatic invasive species prevention measures.

still encountered organisms on 22.8% of retrieving watercraft and 3.53% of launching watercraft.

Of the 10,598 inspections completed, the most common measures that boaters indicated they were taking included draining their bilge (5,786), washing (4,290), drying (3,529) and inspecting boats (2,432). The launches with the highest percentage of awareness and measures being taken included Heuvelton (100%), Millsite Lake (100%) and Indian Point Landing (99%). The launches with the lowest number of boaters taking spread prevention measures included Montario Point Road (23%) and Lake Bonaparte (59%). Stewards were only at Toad Harbor (57%) and Wellesley Island State Park (56%) for 1-2 shifts and it is important to note that the data may not be representative of the larger population of launch users.

The goal of watercraft inspection is for trained stewards to engage the public, specifically boaters, on how to look for and remove aquatic invasive species from their boating and fishing equipment.

Table 4 Spread Prevention Awareness

LAUNCH	Total Surveys	% Yes	Drain Bilge	Wash	Dry	Inspect	Drain Livewell	Drain Bait Bucket	Dispose Of Bait	Decon
ButterfieldLake	1308	98%	984		1	1274	19			2
CapeVincent	1393	73%	958	785	532	5	593	87	84	14
DeltaLakeStatePark	580	81%	230	295	368	3	29	2	4	1
GodfreyPoint	681	81%	312	428	394	28	64	3	3	2
GrassPointStatePark	97	79%	73	70	73	10	65	29	29	
HendersonHarbor	506	74%	310	96	40	15	86	109	132	2
Heuvelton	210	100%	207			209				
IndianPointLanding	76	99%		42	22	27				
KeewaydinStatePark	103	86%	85	84	88	11	81	19	20	
LakeBonaparte	1418	59%	374	685	463	41	87	2		9
MaryStreet	680	73%	475	447	440	101	428	210	202	4
MassenaDamIntake	239	87%	192			202	1			
MillsiteLake	158	100%	64		1	157				
MontarioPtRd	96	23%	3	15	4	1		3	5	
NorthSandyPond	1101	75%	545	420	386	169	183	90	89	3
Phoenix	71	96%		56	11	12				
PineGrove	113	94%	99	45	48	17	31	18	16	
SacketsHarbor	235	60%	54	131	128		41	1		1
SalmonRiverJacksonRd	202	90%	171	53	84	18	51	37	31	
SalmonRiverRedfield	546	94%	503	151	179	64	185	118	107	1
SouthSandyCreek	331	65%	1	190	201					
SportsmanPool	9	89%	8							
ThreeMileBay	118	68%	69	49	34		52	15	14	1
ToadHarbor	7	57%			4					
WellseleyIslandSP	9	56%	5	1	2		5	3	3	
WrightsLanding	311	97%	64	247	26	68	32	19	17	
Grand Total	10598	78%	5786	4290	3529	2432	2033	765	756	40

The data collected showed that of the 7,683 boats launching, 259 were launching "dirty" or had organisms present. As part of the survey, boaters are asked if their boat had been in the water in the past two weeks, and if so, where, because this increases the risk of species being spread to different waters as they may still be viable during that time period. Survey data indicated that 21.6% of "dirty" boats launching in our region had previously been in another waterbody within the last two weeks. This includes boaters with watercraft registered to numerous states including, New York, Pennsylvania, New Jersey, and Virginia. Many of these boaters also indicated they did not take any efforts to prevent the spread of invasive species. It is important to understand where boaters have traveled from to better assess what species could potentially be introduced and which waters are at the highest risk of new species introduction. The following maps (Figure 5-7) show locations visited by launching vessels within two weeks of inspection for SLELOs three busiest and "dirtiest" launches.

Table 5 Overview of Registration state and Launch Visitor Travels

Row Labels	Total	Launching	Retrieving	Different Waterbody Previously	Same Waterbody Previously	Unknown if vessel was elsewhere	No Spread Prevention Efforts	Unknown if Efforts were taken
ButterfieldLake	1308	674	634	283	277	748	10	17
CapeVincent	1393	711	682	90	409	894	294	84
DeltaLakeStatePark	580	261	319	1	171	408	8	101
GodfreyPoint	681	213	468	3	150	528	10	117
GrassPointStatePark	97	65	32	7	46	44	11	9
HendersonHarbor	506	393	113	4	203	299	120	12
Heuvelton	210	163	47		152	58		1
IndianPointLanding	76	49	27		44	32		1
KeewaydinStatePark	103	63	40	13	32	58	11	3
LakeBonaparte	1418	941	477	161	449	808	566	16
MaryStreet	680	488	192	58	272	350	124	60
MassenaDamIntake	239	168	71	1	147	91	18	12
MillsiteLaked	158	87	71	51	18	89		0
MontarioPtRd	96	86	10		36	60	67	7
NorthSandyPond	1101	739	362	139	418	544	253	27
Phoenix	71	48	23	1	40	30	3	0
PineGroveSLELO	113	86	27	30	33	50	3	4
SacketsHarbor	235	158	77	10	98	127	79	16
SalmonRiverJacksonRd	202	126	76	26	63	113	11	9
SalmonRiverRedfield	546	348	198	70	191	285	16	17
SouthSandyCreek	331	267	64	14	128	189	104	11
SportsmanPool	9	9	0	0	9	0	1	0
ThreeMileBay	118	63	55	8	37	73	26	12
ToadHarbor	7	5	2		1	6		3
WellseleyIsland	9	8	1	2	2	5	4	0
WrightsLanding	311	192	119	8	161	142	2	7
Grand Total	10598	6411	4187	980	3587	6031	1741	546

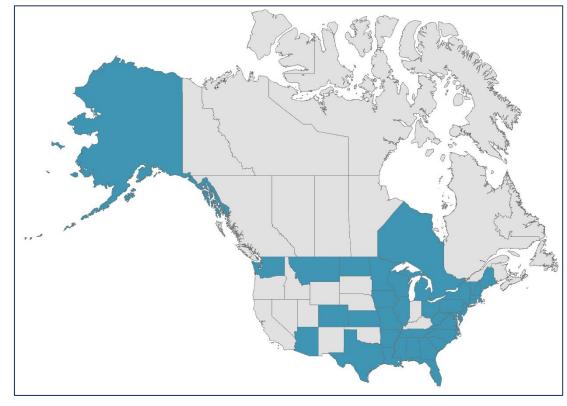


Figure 6 Registration state/province of watercraft inspected by SLELO / TILT stewards in 2020.

Note: Registration state is not indicative of potential for AIS introduction and/or spread and only representative of where boats are registered to.

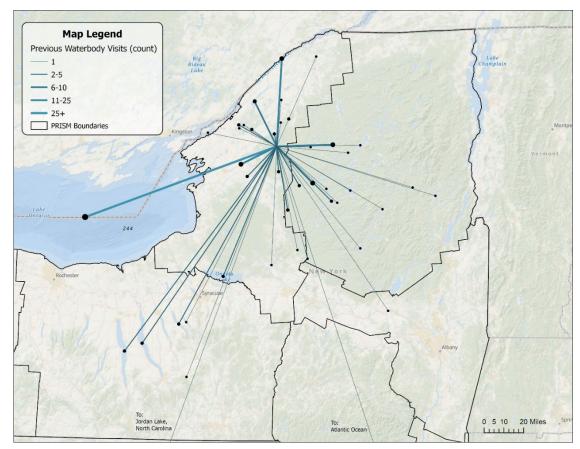


Figure 7 Waterbodies visited by vessels launching at Lake Bonaparte Public Boat Launch (Harrisville NY) within two weeks of inspection. Not featured on map: 450 vessels reported prior visits to the destination waterbody (Lake Bonaparte) and 16 vessels reported previous launch date/location as unknown. An additional 316 vessels launching at Lake Bonaparte did not visit any waterbodies within the past two weeks.

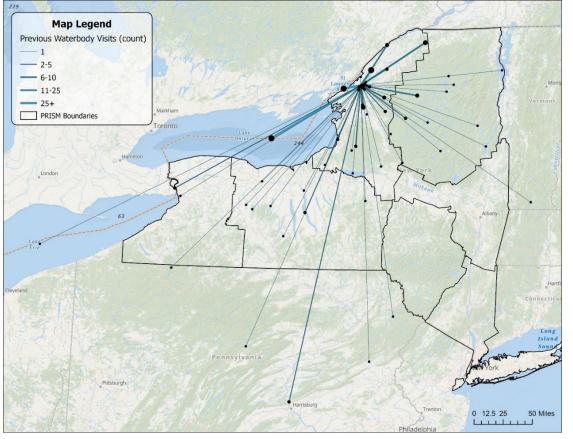


Figure 8 Waterbodies visited by vessels launching at Butterfield Lake Fishing Access Site (Alexandria NY) within two weeks of inspection. Not featured on map: 277 vessels reported prior visits to the destination waterbody (Butterfield Lake) and 34 vessels reported previous launch date/location as unknown. An additional 82 vessels launching at Lake Bonaparte did not visit any waterbodies within the past two weeks.

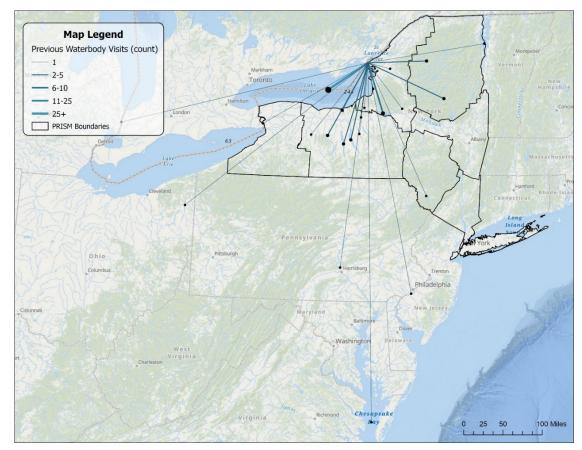


Figure 9 Waterbodies visited by vessels launching at Cape Vincent municipal launch on the St. Lawrence River within two weeks of inspection. Not featured on map: 409 vessels reported prior visits to the destination waterbody (Cape Vincent) and 30 vessels reported previous launch date/location as unknown. An additional 183 vessels launching at Cape Vincent did not visit any waterbodies within the past two weeks.

Boaters were also asked what waterbody they planned to visit next. In total, 104 different locations were disclosed. The most frequently reported waterbodies that aren't within the SLELO PRISM include;

- Cayuga Lake
- Cranberry Lake
- Stillwater Reservoir
- Lake Erie
- Fourth Lake
- Brantingham Lake

- Keuka Lake
- Lake Champlain
- Lake George
- Owasco Lake
- Potomac River
- Raquette Lake

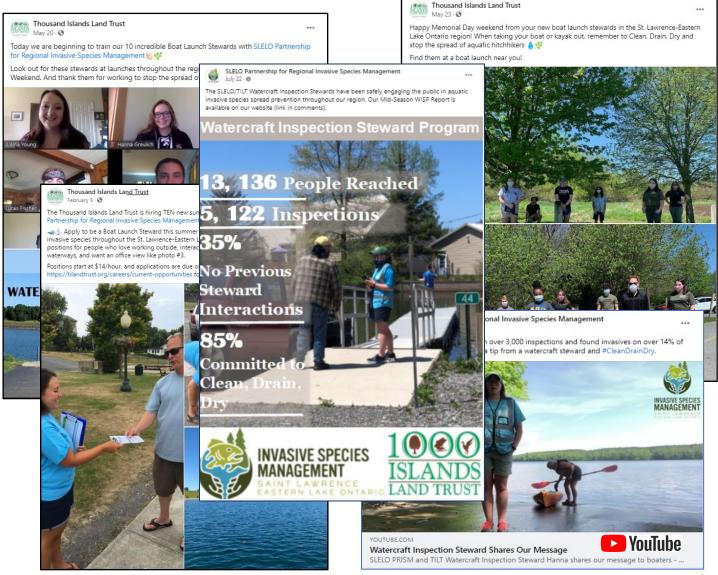
The surrounding areas mentioned include Quebec, Finger Lakes, Buffalo, Ohio, Pennsylvania, New Jersey and Maine, though no exact waterbodies were shared.

PROGRAM OUTREACH AND 2020 STEWARDS

The SLELO PRISM has developed a webpage to host information regarding the WISP, which includes highlights from the past programs, reports and resources with more information on watercraft inspection and AIS. This page is periodically updated, visit www.sleloinvasives.org/watercraftinspection for more information.

As part of the continued collaboration, both hosting organizations created and shared multiple posts and articles with the public regarding the 2020 Watercraft Inspection Steward Program. The Thousand Islands Land Trust Facebook page shared 14 posts about the 2020 program, reaching 9,808 people with 686 engagements. The job description webpage on TILT's website had 302 views. In addition, SLELO PRISM shared six posts, reaching 1,060 people with 165 engagements. Periodic posts and updates can be found on www.facebook.com/sleloprisminvasives throughout the season.

The following pages include highlights of social media posts and steward reflections submitted as part of their closing interviews and shared in the TILT newsletter.









A great number of boaters were thankful to have their waters protected and pledged to continue doing their part to prevent the spread of invasive species, both by cleaning their own equipment and by taking with other boaters on their travels. Hanna





Speaking to the boaters was fun for me because they were always very nice and understanding of what I was doing.

Gabe



Some skills I obtained during this job was becoming a more self-sufficient, independent worker and I can now identify many invasive and native species of plants on my

Janey



Schooling for this line of work is fascinating, but you cannot get a real appreciation for it until you are out and doing the work. I hope that after schooling, I can find work that gives me the same feeling of joy that comes with this. Both TILT and SLELO PRISM were great to work for, and it was such a fun experience to see all the people being able to enjoy our waterways. Because of that, it makes me happy that there are people out in the world trying their best to protect it, and I got to be part of that.







CONCLUSION

SLELO PRISM is committed to preventing and slowing the spread of AIS in to and out of our region. Even as the pandemic surged, our stewards were able to communicate with nearly 30,000 people the importance of slowing the spread of invasive species. This year, the program showcased the region-wide expansion to increase coverage across the SLELO PRISM, enhanced the already strong partnership with the Thousand Islands Land Trust and continued to collaborate with other largescale programs in surrounding regions, including the Adirondack Watershed Institute and Finger Lakes PRISM among others, to enhance standardization and improve program practices.

For 2021, we plan to improve steward training using detailed employee feedback and information collected during the season. In hope that the pandemic will slow, SLELO and TILT are also planning to increase outreach and education programming beyond the launches to include steward presence at events such as Invasive Species Awareness Week and the SLELO PRISM Invasive Species Symposium. It would be beneficial to begin exploring the possibility of constructing decontamination stations at the launches with the highest visitor volume, organisms found during inspections, and with visitors who travel the most frequently. When surveyed, 76% of visitors indicated they would use a decontamination station if one was available.

During the 2021 field season, SLELO will hold more frequent steward staff meetings to increase opportunities for information exchange and professional development by inviting outside professionals to share their work. The stewards hired as part of this program need to have the skills to communicate with the public in an outgoing and friendly way, must be mature and responsible enough to work in remote areas while unsupervised and be dedicated to and enthusiastic about the work they are conducting. SLELO strives to find the best fit staff for each launch and find ways to benefit both the program and the steward professionally.

SLELO PRISM is appreciative of the continued support of partnering organizations, agencies, municipalities and stakeholders who all play a role in protecting the lands and waters on which all life depends from the threat of aquatic invasive species.

APPENDIX

BIBLIOGRAPHY

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SCHEDULE AT A GLANCE

All sessions facilitated by: Brittney Rogers, SLELO PRISM and Alaina Young, TILT

WEDNESDAY May 20th - Click Here for Zoom Registration

- INTRODUCTIONS
- EMPLOYMENT AND TIMESHEETS
- NYS PRISM OVERVIEW, INITIATIVES AND CURRENT PROJECTS
- THOUSAND ISLANDS LAND TRUST OVERVIEW
- INTRODUCTION TO WATERCRAFT INSPECTION
- CITIZEN SCIENCE OPPORTUNITIES
- LANGUAGE TRAINING
- SEXUAL HARASSMENT TRAINING

THURSDAY May 21st - Click Here for Zoom Registration

- OUTREACH, EDUCATION AND INTERPRETATION
- AQUATIC INVASIVE SPECIES IDENTIFICATION
- SURVEY123 WISPA
- IMAPINVASIVES
- TERRESTRIAL INVASIVE SPECIES IDENTIFICATION
- DATA COLLECTION; STANDARDS AND PROTOCOL

FRIDAY May 22nd – IN-PERSON TRAINING AT SOUTH SANDY CREEK LAUNCH

- SCENARIOS, TESTING AND SUPPLIES DISTRIBUTION
 - MORNING: NORTH GROUP STEWARDS 1-5 ONLY
 - AFTERNOON: SOUTH GROUP STEWARDS 6-10 ONLY





2020 LAUNCH PROFILES

Launch Profiles will be released in 2021.

BUTTERFIELD LAKE PROFILE NYS DEC Fishing Access Site - Redwood NY

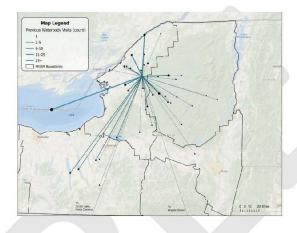
People Encountered	3195
Total Surveys	1308
Launching	674
Retrieving	634

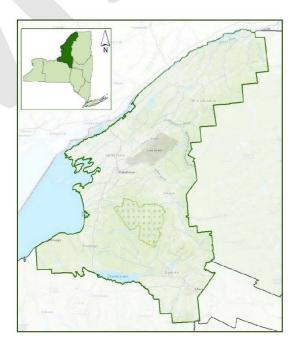
total watercraft	1462
Sum of #Motorboat:	1071
Sum of #Kayaks:	292
Sum of #PWC:	51
Sum of #Canoes:	29
Sum of #SUPs:	8
Sum of #Rowboat:	7
Sum of #Sailboat:	2
Sum of #Barge:	1
Sum of #Docks:	1
Sum of #Windsurfers:	0

Activity Reported	
Commercial	29
Fishing	1046
Government	4
Recreation	227
Research	2

Spread Prevention Measures	1281
Different Waterbody	283
Surveys with Organisms present	200 - 254 spp
Surveys with AIS	127 - 136 spp

Native and AIS Encountered	
Sum of Curly Leaf Pondweed	33
Sum of Eurasian Watermilfoil	103
Sum of Coontail	63
Sum of Elodea	17
Sum of Native pondweed (Potamogeton spp)	32
Clasping Leaf Pondweed	5
Cattail	1
Native Pondweed	1





ADDITIONAL DATA TABLES

LAUNCH	Eurasian Watermi Ifoil	Curly Leaf Pondw eed	Elod ea	Eel Gra ss	Coon tail	Potamog eton spp.	Attac hed Debri s	Varia ble- leaf Milfoi l	Zebr a Mus sel	Nati ve lily	Fr og bit	Brit tle naia d	Bladder wort	Water Chest nut	Spiny/Fish hook Waterflea
ButterfieldLake	103	33	9	0	63	32	0	0	0	0	0	0	0	0	0
CapeVincent	63	27	16	90	0	13	31	9	6	0	0	0	0	0	0
DeltaLakeStatePa rk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GodfreyPoint	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GrassPointStateP ark	0	6	0	0	0	1	3	0	0	0	0	0	0	0	0
HendersonHarbo r	31	59	57	1	0	0	0	0	0	0	0	0	0	0	0
Heuvelton	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
IndianPointLandi ng	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KeewaydinStateP ark	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
LakeBonaparte	207	5	8	13	11	8	0	28	2	1	1	0	0	0	0
MaryStreet	27	82	44	19	0	1	6	0	0	0	0	0	0	0	0
MassenaDamInta ke	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MillsiteLake	18	0	0	0	0	3	0	0	0	0	1	1	0	0	0
MontarioPtRd	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
NorthSandyPond	305	118	164	102	80	32	1	3	32	20	1	1	2	1	0
Phoenix	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PineGrove	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0
SacketsHarbor	0	0	0	0	3	0	15	0	0	0	0	0	0	0	0
SalmonRiverJack sonRd	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0
SalmonRiverRedf ield	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0
SouthSandyCree k	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0
SportsmanPool															
ThreeMileBay	22	28	12	14	1	8	11	9	0	0	0	0	0	0	0
ToadHarbor															
WellseleyIslandSt atePark	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
WrightsLanding Marina	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1
Grand Total	781	366	312	239	158	99	85	49	40	22	3	2	2	1	1

Watercraft Inspection Steward Program

SLELO PRISM and TILT final Report —2020











