

# 2017 Lake George Aquatic Invasive Species Prevention Program

A Trailered Boat Inspection Program

## Final Report



**Lake George  
Park Commission**

**January 2017**

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## Executive Summary

Year 2017 marked the fourth year of the Commission's mandatory boat inspection program to keep aquatic invasive species out of Lake George. This program exists thanks to a tremendous partnership between State and local partners who fund 100% of the cost of the program, eliminating any cost to the boaters for this important effort. This past year continued trends that have been seen in the past, such as an increased launch activity at the State's beautiful new access site at Million Dollar Beach, boaters coming from all over the northeast to recreate on Lake George, and many boats still (unfortunately) bringing aquatic invasive species to Lake George. If any such invasives are found on the boat and trailer, they are provided with a decontamination through a high pressure, high temperature power wash. In addition, our technicians flush out the motor and bilge if needed, check bait to make sure it is certified, and even the anchor boxes and ropes are checked to make sure they are "clean, drained and dry".



The vast majority of boaters coming to Lake George are aware of the inspection requirements, and fully believe in the efforts being undertaken by the Commission and our many partners. The protection of Lake George from new aquatic invaders is not only linked to the long-term preservation of this tremendous natural resource ecologically, but also protects the long-term economy by helping to keep Lake George as pristine as it is.

The 2017 program operated from May 1<sup>st</sup> 2017 through October 31<sup>st</sup>, 2017. In that time, the Commission processed 31,168 boaters through the seven regional inspection stations. Of that number, 10,869 received full entrance inspections, 12,588 received inspections while exiting Lake George at the inspection sites, and 7,878 boaters arrived at the inspection stations with vessels already having received an inspection seal. Approximately 17 percent of boats receiving an inspection did not meet the "clean, drained, and dry" standard of the program, and required decontamination prior to launch into Lake George. We are always striving to educate boaters about the importance of bringing clean vessels to Lake George, and the goal is to reduce the number of decontaminations required by having people take steps on their own to ensure they are clean and ready to be launched.

The Commission would like to thank Governor Cuomo for his ongoing support of this important program. We also thank our local partners who provide the other half of the cost of this program, including the Warren County Board of Supervisors, the Village of Lake George, the Towns of Bolton, Queensbury and Lake George, the Lake George Association and the Fund for Lake George.

For a full overview of the program's creation, planning and logistics please refer to the Lake George Aquatic Invasive Species Prevention Plan / Environmental Impact Statement on the Commission's website. Also, please review the dedicated website to this program, at [www.lakegeorgeboatinspections.com](http://www.lakegeorgeboatinspections.com).

**Table 1: Boat Inspection Program Summary - By the Numbers**

	2014	2015	2016	2017	Total
Number of inspection sites	6	7	7	7	7
Total boater inspections and contacts (entrance, exit, re-seals)	20,229	27,852	31,128	31,168	141,545
Entrance inspections without VICS seal	10,351	10,247	10,506	10,869	41,973
Exit inspections	5,960	9,949	12,259	12,588	40,756
Returning boats with seals	3,918	7,656	8,363	7,878	27,815
Number of boats decontaminated	1,264	1,631	1,920	1,869	6,684
Average boat inspection time	5 minutes	5 minutes	5 minutes	5 minutes	5 minutes
Average boat decontamination time	9 minutes	9 minutes	9 minutes	9 minutes	9 minutes
Highest total number of inspections conducted in one week	1,703	1,949	2,375	2,287	N / A
Highest total number of decontaminations conducted in one week	118	148	163	182	N / A
Percentage of inspections requiring decontamination	12%	16%	18%	17%	16.00%
Number of boats with visible plant matter present	232	154	127	244	757
Number of boats with visible invasive species present	165	106	109	110	490
Percentage of uninspected boats with visible invasive species present	1.60%	1.03%	1.04%	1.01%	1.17%
Number of distinct waterbodies boaters came from prior to Lake George	457	432	477	449	N / A
Total number of staff at peak season	55	53	48	48	N / A
Total number of decontamination units	9	9	9	9	9
Number of public and commercial launches on Lake George	47	47	47	47	47
Total operational cost	\$ 668,537.00	\$596,486.43	\$491,104.45	\$555,883.85	\$ 2,312,011.73
Total cost of seasonal staff	\$ 548,078.00	\$482,443.00	\$ 434,858.35	\$ 441,162.11	\$ 1,906,541.46
Cost of LANDA equipment (purchased over 3 years)	\$ 204,000.00	\$0.00	\$0.00	\$0.00	\$ 204,000.00
Cost to boater for inspection/decontamination	\$0/\$0	\$0/\$0	\$0/\$0	\$0/\$0	\$0/\$0
Operational cost savings over prior year due to optimized seasonal staffing	N / A	\$ 65,635.00	\$47,584.66	\$ (6,303.77)	\$ 106,915.89



## 2017 Program Description

In 2017, inspections took place from May 1<sup>st</sup> through October 31<sup>st</sup> at seven regional inspection stations located around the lake in locations convenient to boaters. Inspection data is collected on paper logs and then uploaded electronically for weekly review. Any visible plant or animal materials found during an inspection were collected and sent to the Darrin Freshwater Institute or the Lake George Association for identification. Decontamination is performed by using high pressure, hot water. No chemicals are used in the decontamination process.

For more details on the inspection, decontamination and boat sealing processes, please refer to the “Lake George Aquatic Invasive Species Prevention Plan and Generic Environmental Impact Statement” on the Commission website.

## Inspection Site Staffing

All inspection stations were open 7 days a week during the peak boating season. Hours of operation were adjusted in the shoulder seasons (May 1<sup>st</sup> -June 26<sup>th</sup>, September 4<sup>th</sup> – October 31<sup>st</sup>) based on launch activity

from 2014-2016, weather conditions, and local events such as fishing tournaments and regattas. As expected, Fridays through Sundays were the busiest days requiring at least three or more Inspectors on duty at most sites (Figure 6).

Following Labor Day weekend, the Transfer Station site in Lake George was closed as a result of decreased boater activity. The Dunham’s Bay site began weekend-only operations in late September for the same reason.

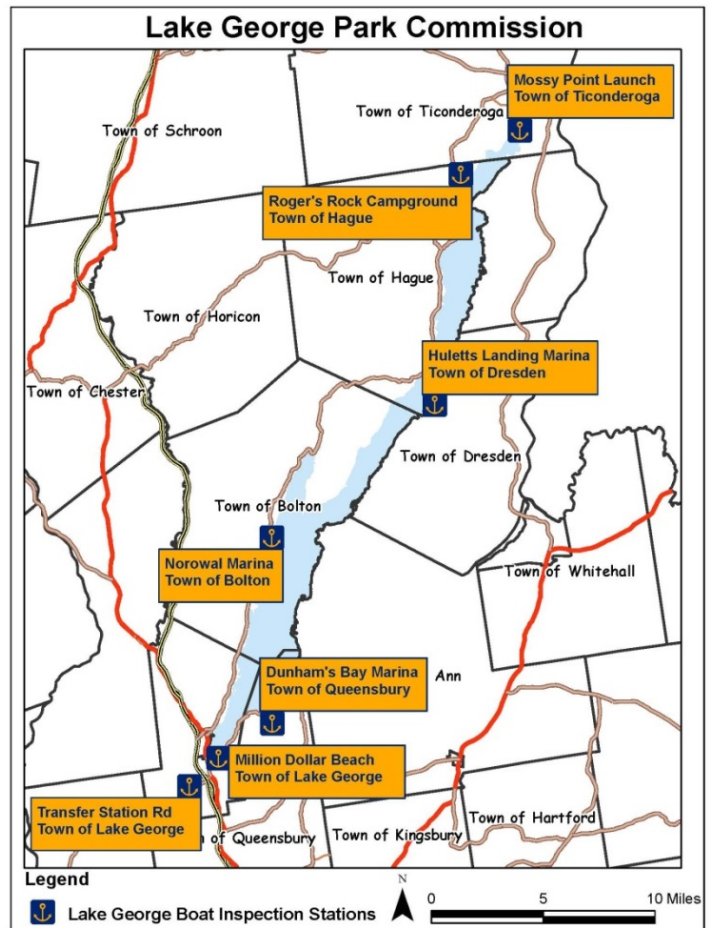
The 2017 season saw a three percent wage increase for returning staff. This was done in an effort to give returning staff an incentive for coming back each year and keep up with minimum wage increases. Total staffing costs increased approximately 1.5% over last season.

### Staffing:

Global Employment Services, Inc. (GES) continued to provide staffing, payroll and administrative services this year. This firm is responsible for providing staffing of all Vessel Inspection Technician positions, liability and worker’s compensation insurance. Commission staff works directly with GES management on the selection and hiring of program personnel. Operational oversight of all seasonal staff falls under the direction of the Commission’s Operations Supervisor III.

## Launch Management and Controls

There are three types of launches on Lake George, Public (State and Municipal), Commercial (Marinas and motels), and Private (Home Owners Associations and individual homeowners), totaling over 80 locations. The Commission has signed Launch Agreements with these launches to ensure compliance with the program. Each Launch Agreements requires the recording of all launches and retrievals of vessels and securement of the launch during off hours.



## Off-Hours Operations at State launches

By NYS DEC operational policy, Rogers Rock and Mossy Point state-owned launches on Lake George are open to the public at all times. Million Dollar Beach is administered as a day-use site, and closes at night in the primary boating season. During the off hours when the Commission's inspection facilities are closed, boaters demonstrate compliance with the regulations by signing into a launch register, removing their VICS and placing it into a secure lock-box provided at the inspection site. When VITs arrive at the launch in the morning, the seals are recovered from the night drop box, and these seals are compared with the number of vessel trailers in the parking lot. Any discrepancies between seals and trailers in the lot are researched to ensure compliance.

## Management Efficiencies: "Lake George Only" Boats

In preparation for the Lake George AIS regulations it was recognized that a significant portion of the regulated constituency are boats that are stored locally and only used on Lake George. In consideration of this, the Commission organized programs that would allow these boats to forego the inspection process knowing that they were not a threat to bring new AIS to Lake George.

The Commission continued the management of Residential and Homeowner Association (HOA) launches and local marine services professionals through the use of Launch Agreements and Hauler Agreements, respectively. These agreements are updated and Haulers provide new manifests of the vessels under their care, custody and control each season.

If and when a boat listed within a launch agreement or a hauler manifest travels to another waterbody, it may only be launched into Lake George once it has passed a Commission sanctioned Cleaned-Drained-Dry inspection and/or decontamination and received a vessel inspection control seal.

## Trout Lake

Trout Lake was included in the boat inspection program for the 2017 season. Trout Lake is tributary to Lake George, falls within the Lake George Park boundary, and currently has no known AIS. Including Trout Lake in the AIS program serves to protect both waterbodies from potential ecological damage.

There are no public launches on Trout Lake, but there are several private and HOA launches. The Commission executed Launch Agreements with Trout Lake launch owners as was done with launch owners/operators on Lake George. These Launch Agreements allow vessels owned by the launch owner and listed on the agreement to be launched into Trout Lake. If the vessel was launched anywhere other than Trout Lake, it must be taken to an Inspection Station, inspected and if necessary, decontaminated prior to its launch into Trout Lake.

## Program Cost, Funding, and Partners

This program exists through generous funding provided through a cost-sharing between the NYS Environmental Protection Fund and through local municipal and nonprofit contributions. Expenses and income are detailed in the tables in this section.

To get a full understanding of the program, below are the itemized costs and contributions of the program since 2014.

## Expenses

### 1. Staffing and Program Administration

Table 2: Direct costs associated with staffing and program administration are as follows:

Expense Type	Amount	Amount	Amount	Amount	Amount
One Time Expenses	2014	2015	2016	2017	Total
Decontamination units (9, see Table 1)	\$204,000.00	\$0.00	\$0.00	\$0.00	\$204,000.00
Site Work and Signage	\$49,722.41	\$1,617.00	\$0.00	\$55.00	\$51,394.41
Safety/Security (fire extinguishers, lock boxes)	\$1,648.49	\$68.10	\$0.00	\$0.00	\$1,716.59
Radios/Cellphones/tablets/credit card terminals	\$7,155.54	\$2,125.69	\$573.83	\$437.76	\$10,292.82
Inspection site offices (1 in 2015 at MDB)	\$31,627.00	\$7,700.00	\$0.00	\$0.00	\$39,327.00
Secure Storage Unit Delivery/Set up	\$1,828.62	\$350.00	\$0.00	\$0.00	\$2,178.62
Canvas Covers for Landas (2 in 2014, 4 in 2015)	\$1,500.00	\$3,000.00	\$0.00	\$0.00	\$4,500.00
Cloud Setup for Data Reporting	\$251.27	\$0.00	\$0.00	\$0.00	\$251.27
<b>Subtotal</b>	<b>\$297,733.33</b>	<b>\$14,860.79</b>	<b>\$573.83</b>	<b>\$492.76</b>	<b>\$313,660.71</b>
<b>Recurring Expenses</b>					
Wash Unit Maintenance/misc. parts	\$6,594.44	\$1,445.16	\$3,748.59	\$2,321.50	\$14,109.69
Training Facility/ Refreshments	\$1,093.48	\$0.00	\$0.00	\$0.00	\$1,093.48
Seals and Wire	\$12,212.40	\$3,094.00	\$10,494.45	\$5,663.00	\$31,463.85
Fuel & Truck Maintenance	\$4,983.56	\$3,621.70	\$3,000.47	\$2,794.52	\$14,400.25
Advertising/Rack Cards	\$2,077.14	\$1,285.00	\$0.00	\$0.00	\$3,362.14
Hardware/Supplies	\$8,028.29	\$865.51	\$1,248.76	\$5,241.47	\$15,384.03
Hulett's Landa Parking Rental	\$3,500.00	\$3,500.00	\$3,500.00	\$8,900.00	\$19,400.00
Uniforms	\$3,258.99	\$3,770.90	\$3,286.40	\$0.00	\$10,316.29
<b>Subtotal</b>	<b>\$41,748.30</b>	<b>\$17,582.27</b>	<b>\$25,278.67</b>	<b>\$24,920.49</b>	<b>\$109,529.73</b>
<b>Monthly Expenses</b>					
Utilities (season total: electrical service, outhouses, landlines, water)	\$4,141.96	\$3,633.24	\$2,783.94	\$3,865.23	\$14,424.37
Secure Storage (Annual total)	\$3,321.25	\$3,247.68	\$3,247.68	\$3,831.24	\$13,647.85
Cellular Phones (2014: season total; 2015 & 2016: through Nov.)	\$5,819.44	\$1,485.41	\$2,028.88	\$941.00	\$10,274.73
Cloud Services	\$269.91	\$269.91	\$269.91	\$269.91	\$1,079.64
SnapSurvey WebHost Service (annual subscription)	\$2,553.00	\$3,350.00	\$4,500.00	\$4,124.00	\$14,527.00
<b>Subtotal</b>	<b>\$16,105.56</b>	<b>\$11,986.24</b>	<b>\$12,830.41</b>	<b>\$13,031.38</b>	<b>\$53,953.59</b>

<b>Staffing</b>					
Seasonal Staff Labor Cost	\$548,078.47	\$482,433.11	\$434,858.35	\$441,751.04	\$1,907,120.97
Background Checks	\$4,865.00	\$3,050.02	\$2,904.79	\$1,342.18	\$12,161.99
Marina Liability Insurance	\$13,383.00	\$13,800.00	\$14,658.40	\$15,500.00	\$57,341.40
Finance charges	\$501.94	\$0.00	\$0.00	\$0.00	\$501.94
Full time Park Ranger with Benefits	\$49,738.05	\$52,774.00	\$0.00	\$58,846.00	\$161,358.05
<b>Subtotal</b>	<b>\$616,566.46</b>	<b>\$552,057.13</b>	<b>\$452,421.54</b>	<b>\$517,439.22</b>	<b>\$2,138,484.35</b>
<b>Summary: Program Annually Recurring Expense</b>	<b>\$674,420.32</b>	<b>\$581,625.64</b>	<b>\$490,530.62</b>	<b>\$555,391.09</b>	<b>\$2,301,967.67</b>
<i>Original Estimated Cost</i>	<i>\$700,000.00</i>	<i>\$700,000.00</i>	<i>\$520,000.00</i>	<i>\$579,000.00</i>	<i>\$2,499,000.00</i>
<i>Percent under budget</i>	<i>3.65</i>	<i>16.91</i>	<i>5.67</i>	<i>4.08</i>	<i>7.88</i>
<b>Summary: Program One-Time Up-Front Expense</b>	<b>\$297,733.33</b>	<b>\$14,860.79</b>	<b>\$573.83</b>	<b>\$492.76</b>	<b>\$313,660.71</b>
<i>Original Estimated Cost</i>	<i>\$300,000.00</i>				
<i>Percent under budget</i>	<i>0.76</i>				
<b>TOTAL Program Cost to Date</b>	<b>\$972,153.65</b>	<b>\$596,486.43</b>	<b>\$491,104.45</b>	<b>\$555,883.85</b>	<b>\$2,615,628.38</b>
<i>Percent under budget</i>	<i>2.78</i>	<i>14.79</i>	<i>5.56</i>	<i>3.99</i>	<i>6.55</i>

\* In 2016, Park Ranger salary and benefits paid for out of the Commission budget, not Inspection Program funding.

## Program Funding

Table 3: Staffing and program administration costs incurred by the Commission were shared by New York State and the "Save Lake George Partnership" of locally-based municipal and nonprofit entities:

<b>Source</b>	<b>Funding (For 2017 Annual Program Cost)</b>
NYS Environmental Protection Fund	\$350,000
Warren County	\$100,000
Village of Lake George	\$30,000
Town of Lake George	\$30,000
Town of Bolton	\$30,000
Town of Queensbury	\$30,000
Fund for Lake George	\$30,000
Lake George Association	\$30,000
<b>Total</b>	<b>\$630,000</b>



Table 4: Funds invested in furtherance of the effective administration of this program are as follows:

	<b>Staff Hours</b>	<b>Town Contribution</b>	<b>LGA Grant Money</b>	<b>Total</b>
<b>Putnam Launch</b>	2,222	\$6,666.00	\$19,998.00	\$26,664.00
<b>Hague Launch</b>	972.5	\$2,674.37	\$8,023.13	\$10,697.50

The Lake George Association administered funds from their New York Aquatic Invasive Species Spread Prevention Program Grant to aid the towns of Putnam and Hague in their efforts to staff the town launches.

## 2017 Inspection Program Results

The Lake George Park Commission boat inspection program had a total of 31,055 boater contacts in 2017 (Figure 1, see Appendices for all figures and tables referenced henceforth). Thirty-five percent of these (10,801) were boats arriving at Lake George without a Vessel Inspection Control Seal (VICS), requiring a full inspection (Figure 2). Of those 10,801 trailered boats, 17.25% posed a threat of aquatic invasive species transport, and received onsite decontamination (Figure 3).

Just over 25 percent of program boater contacts were boats returning to Lake George with a Vessel Inspection Control Seal (Figure 4), meaning they had either already had an entrance inspection from a previous visit or they were returning to Lake George following a previous exit inspection. The exit inspection of trailered boats being retrieved from Lake George represents roughly 40.4% of all boater contacts.

During the 2017 season, 244 vessels arrived at inspection stations with visible organisms (plant and/or animal) attached to the vessel or trailer. A total of 117 visible aquatic invasive species were found on vessels throughout the season, equating to approximately 0.38% of boats arriving at Lake George. (Table 5)

Table 5: Visible AIS retrieved during entrance inspections in 2014, 2015, 2016, and 2017

<b>Species</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Eurasian watermilfoil	119	67	69	70
Zebra mussels	23	20	11	29
Curly leaf pondweed	13	12	17	5
Water chestnut	8	7	11	12
Rusty Crayfish	0	0	1	0
Variable leaf milfoil	0	0	0	1
Snail	2	0	0	0
<b>Total Collected</b>	<b>165</b>	<b>106</b>	<b>109</b>	<b>117</b>

For more detailed results, please see Table 8 in the attached appendices, which break the data out further by origin of the vessel and what species was found.

In 2017, boats arriving at Lake George had previously visited 449 unique waterbodies across the United States and Canada (Figure 6, Table 7). The ten most common waterbodies visited prior to coming to Lake George include the Hudson River, Saratoga Lake, and Lake Champlain (Table 9).

As expected, inspection activity is significantly greater during the short “peak” summer season (June 26th-September 4th) compared to the longer shoulder season (May 1st -June 25th, September 5th – October 31st). Expanding upon

seasonal differences in boater activity, Figures 7 and 8 show the number of entrance inspections and decontaminations throughout the boating season. Staffing levels were adjusted in accordance to these trends in activity. Total staff hours for 2017 ranged from 387 to 1,410 hours per week from late May through early September (Figures 7 and 8).

Diminishing boater activity late in the 2017 season resulted in a relatively costly program, with the cost per inspection rising from a low of \$13.34 the week of August 4th into the hundreds of dollars per inspection in the month of October (Figure 10).

## Program Compliance

Program compliance is conducted primarily by the Commission's Marine Patrol. The patrol devoted considerable time to the aquatic invasive species programs in 2017 (Figure 11). This year, the patrol spent 145 hours at the inspection stations around the lake speaking with inspectors, educating the public, and helping to enforce the Commission's regulations.

The patrol spent 791 hours and made 6,510 checks on launches, both public and private, around the lake. During those checks, there was activity present 317 times. Several of those checks resulted in finding vessels that were not registered to launch at certain private launches.

The patrol also spent 64 hours on AIS support time. This time includes participation in the annual Asian clam survey and boater education.

In 2017, three tickets were written under this regulation related to launching without an inspection.

## Sanitary Inspections

In 2017, Vessel Sanitary Inspections also took place at boat inspection stations when time allowed. Pursuant to 6 NYCRR Subpart 646-1.6(i), "No person shall launch any vessel into the waters of the park, or operate a vessel on the waters of the park, which is not permanently sealed to prevent the discharge of wastewater into the waters of the park." Vessels that were found not permanently sealed were provided rubber stoppers as a means of sealing wastewater systems.

Table 6: Vessel sanitary inspections at AIS stations

Location	Sanitary Inspections
Mossy Point	22
MDB/Transfer	149
Norowal	123
Dunham's	18
Rogers' Rock	3
<b>Total</b>	<b>315</b>

## Conclusions and Recommendations

Year 2017 saw a successful program for the LGPC's boat inspection program. The Million Dollar Beach (MDB) site continues to be the busiest inspection station on Lake George due to its low cost, accessibility and availability of parking. It was indeed a busy summer, as inspection activity records were broken twice within two weeks this summer at the MDB. There may be opportunities to reduce program costs for the Lake George program as the Adirondack Aquatic Invasive Species Spread Prevention Program expands. The planned opening of an Inspection and Decontamination

station at the Exit 18 Rest Area on NY I-87 Northway could lead to a reduction in uninspected boats arriving in the Lake George region. The Commission applauds the efforts of the DEC, DOT, and the rest of the Adirondack AIS Spread Prevention Program partners in their efforts to get this site up and running.

Year 2017, the fourth year of the Lake George Park Commission's Boat Inspection Program succeeded in preventing over one hundred boats from entering the lake with confirmed invasive species, and potentially many others that arrived to the lake not clean, drained and dry, and possibly carrying invasives not easily spotted through visual inspection. This program is only successful because of the incredible support for it. Without the aid of the local municipalities (all 9 municipalities surrounding Lake George have written resolutions of support), the media, recreational users, and local businesses, this program could not exist. The Commission gives special thanks to Governor Andrew Cuomo's Office, Warren County, the local municipalities and our nonprofit lake-based partners including the Lake George Association and the Fund for Lake George.

As the Commission seeks to maintain a sustainable, long-term program, it is conscious of these partners and their considerable efforts to make it happen. The Commission strives to make the program as cost-effective and public-friendly as possible. Lake George still has the relatively enviable position of having only five invasive species in its crystal clear waters, and with public support and community partnerships, we endeavor to keep it that way for generations to come.

## Appendices

Figure 1: Total boater interactions by inspection station in 2017 including boats arriving without VICS, boats arriving with VICS, and exit inspections

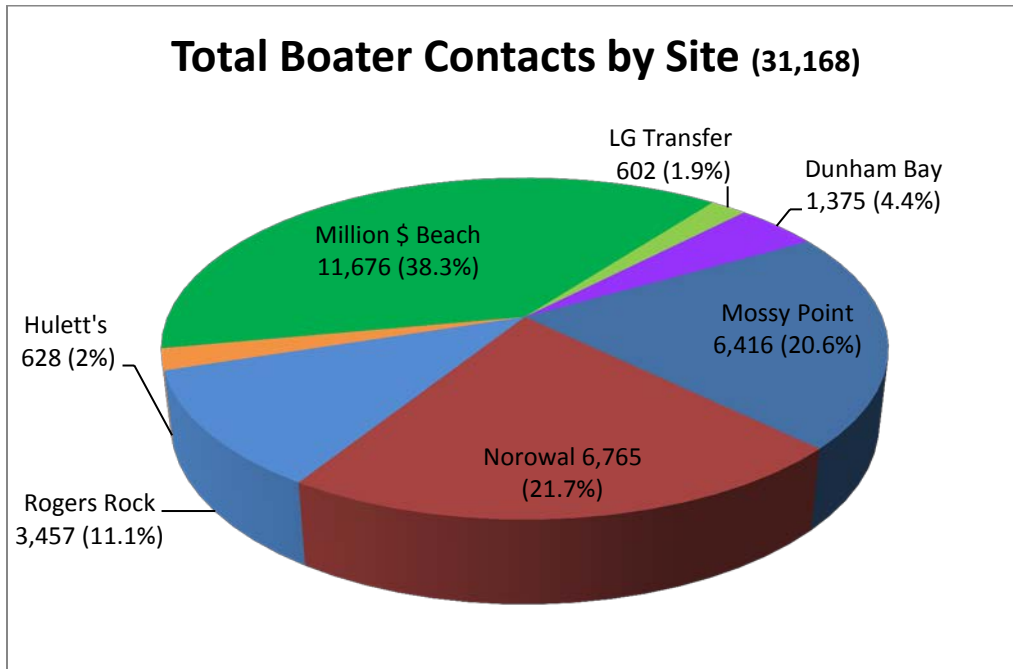


Figure 2: Total number of vessel inspections for boats arriving without VICS

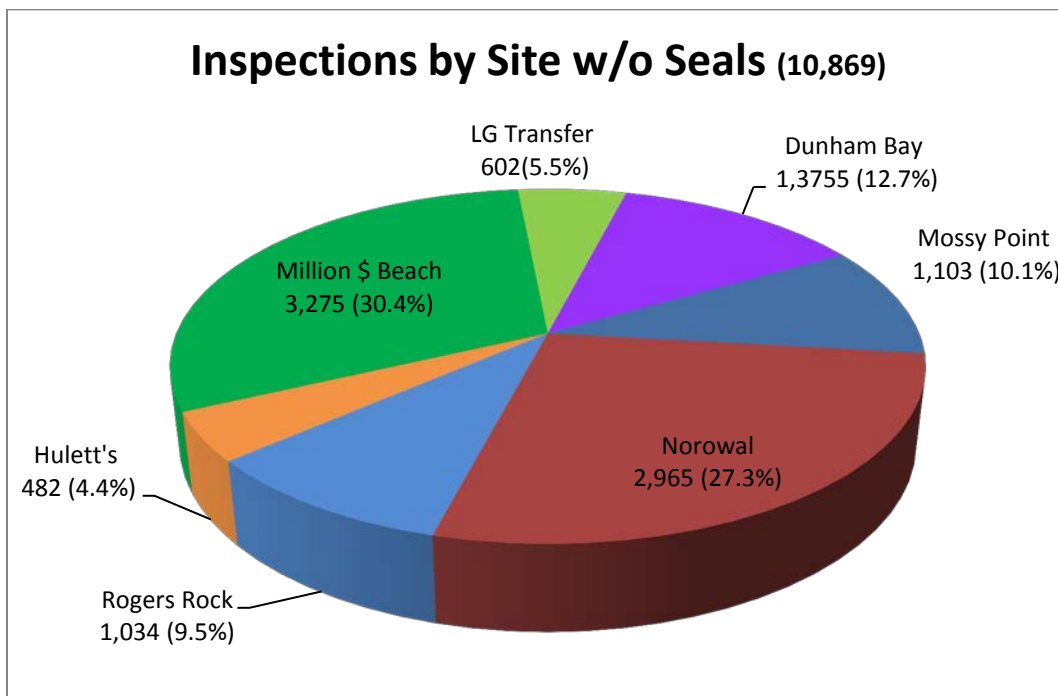


Figure 3: Total number of decontaminations

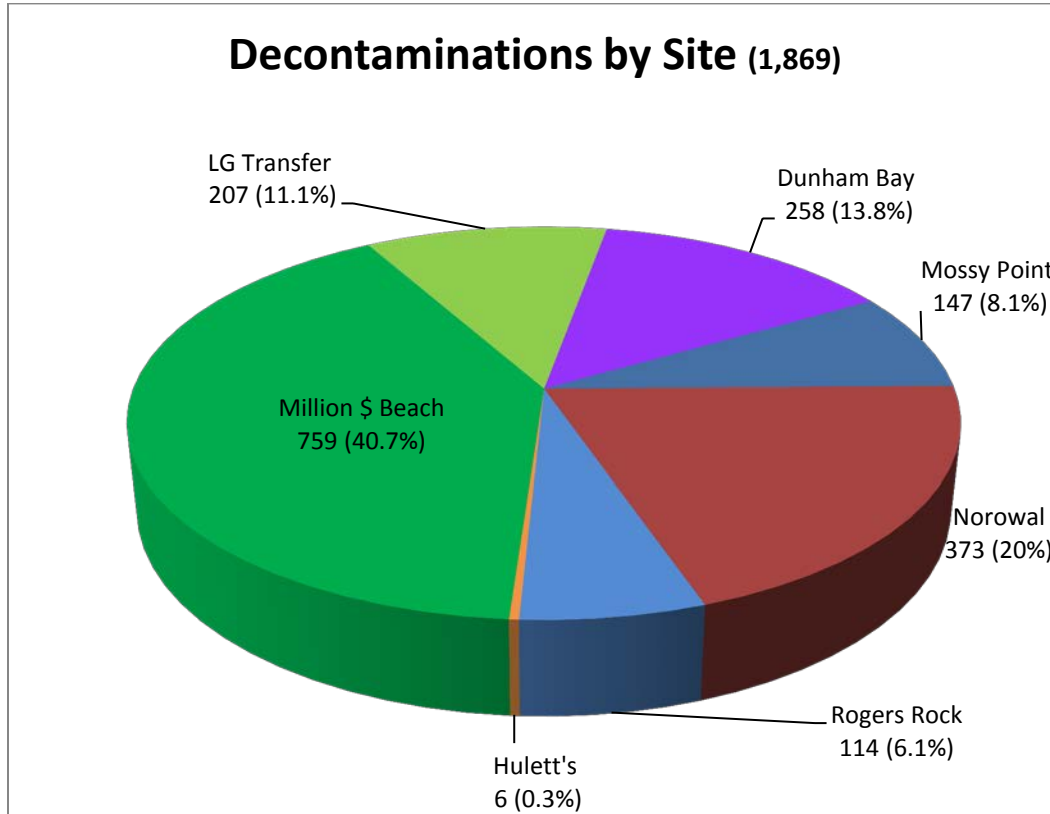


Figure 4: Total number of vessel inspections for boats arriving with VICs

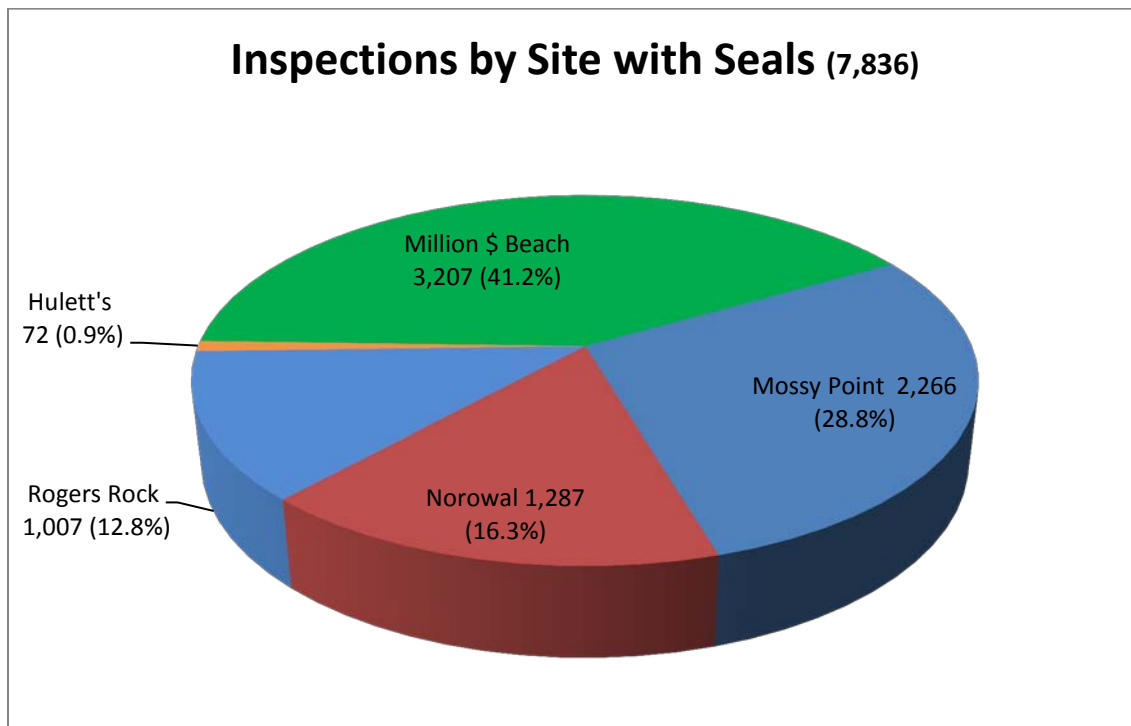




Figure 5: Geographic depiction of waterbodies visited prior to arriving at Lake George

Previous Destinations: Watercraft entering Lake George -2017

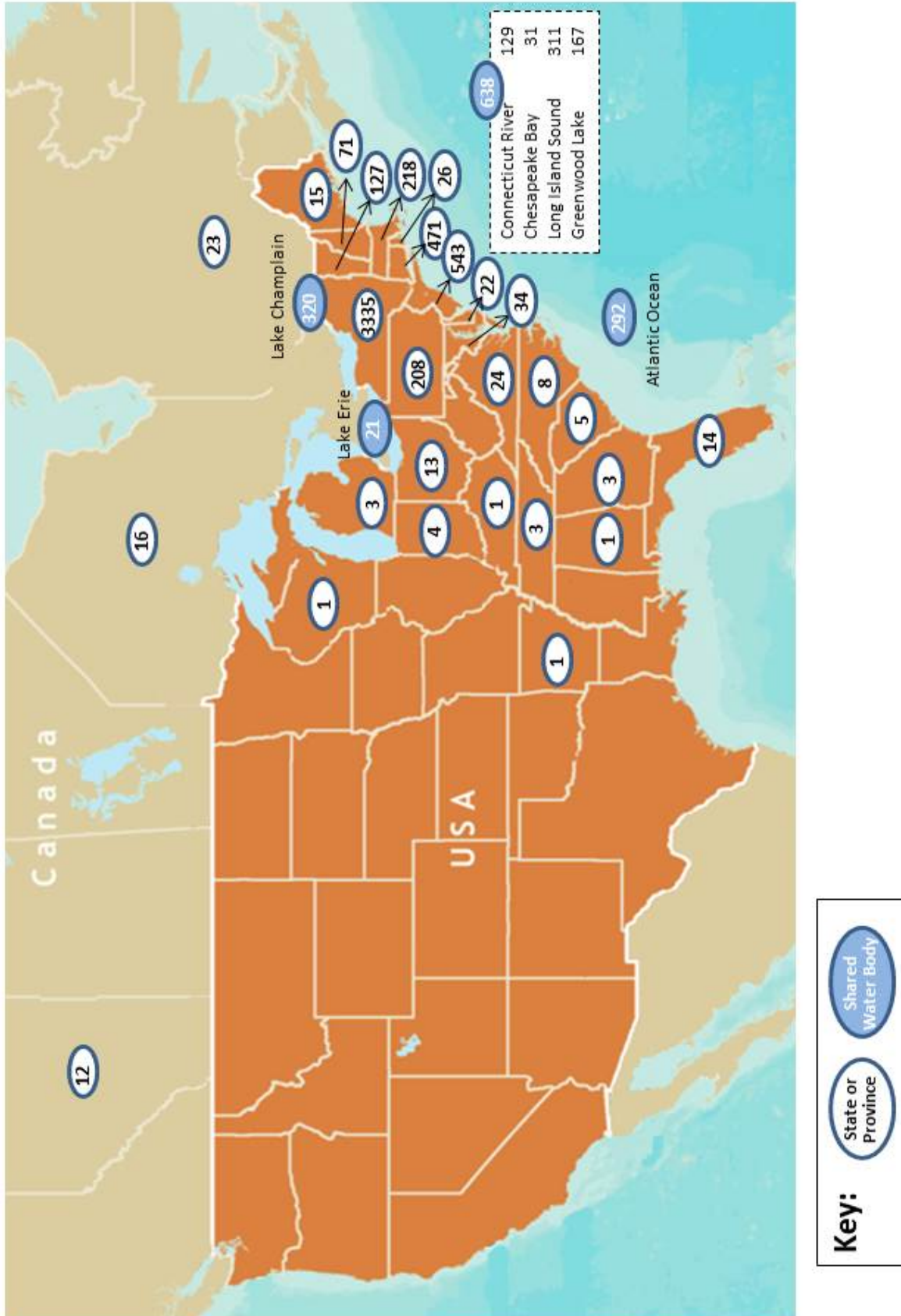


Table 7: Tabular list of 449 waterbodies visited prior to arriving at Lake George

**Last Water Bodies Visited (449) for Boats Entering Lake George - 2017**

<b><u>Alabama</u></b>	Florida Keys	Concord River
Lake Martin	Gulf of Mexico	Connecticut River
	Intracoastal Waterway	Goose Pond
	Lake Butler	Hamilton Reservoir
<b><u>Arkansas</u></b>		Hampton Pond
Lake Dardanelle		Lake Attitash
	<b><u>Georgia</u></b>	Lake Buel
<b><u>Connecticut</u></b>	Lake Allatoona	Lake Chaubunagungamaug
Atlantic Ocean	Lake St. Clair	Lake Cochituate
Bantam Lake	Lake Lanier	Lake Congamond
Barnegat Bay	Lake Harding	Lake Lashaway
Beach Pond Lake		Lake Mahkeenac
Beseck Lake	<b><u>Indiana</u></b>	Lake Pearl
Candlewood Lake	Brookville Lake	Lake Pontoosuc
Cedar Lake	Dugan Lake	Lake Quinsigamond
Colebrook River Dam	Geist Reservoir	Lake Sabbatia
Columbia Lake	Lake Shaffer	Lake Shirley
Connecticut River		Leadmine Pond
Coventry Lake	<b><u>Kentucky</u></b>	Long Pond
Crystal Lake	Yatesville Lake	Manchaug Pond
Gardner Lake		Manasquan River
Highland Lake	<b><u>Maryland</u></b>	Merrimack River
Housatonic River	Chesapeake Bay	Nantucket Sound
Lake Congamond	Chester River	Onota Lake
Lake Lillinonah	Delaware Bay	Otis Reservoir
Lake Mahopac	Elk River	Pantoosuc Lake
Lake McDonough	Northeast River	Plantain Pond
Lake Pocotopaug	Potomac River	Plunkett Reservoir
Lantern Hill Pond	Sassafras River	Quabbin Reservoir
Lake Zoar		Salem Harbor
Little Pond	<b><u>Maine</u></b>	Wallum Lake
Long Island Sound	Atlantic Ocean	Walker Pond
Pachaug Pond	Clear Lake	Webster Lake
Quaddick Reservoir	Lake Arrowhead	Wickaboag Lake
Rain Bow Reservoir	Lake Auburn	Winona Lake
Staffordville Lake	Little Sebago Lake	
Thames River	Lovewell Pond	<b><u>Michigan</u></b>
Twin Lakes	Moosehead Lake	GullLake
Tyler Lake	Range Pond	Houghton Lake
Waramaug Lake	Sebago Lake	St. Clair River
West Hill Pond	Thompson Lake	
Wononpakook Lake		<b><u>Minnesota</u></b>
	<b><u>Massachusetts</u></b>	Lake Superior
<b><u>Delaware</u></b>	Anoda Lake	
Atlantic Ocean	Atlantic Ocean	<b><u>New Hampshire</u></b>
Chesapeake Bay	Big Alum Lake	Ackers Pond
Delaware River	Big pond Lake	Atlantic Ocean
Delware Bay	Boston Harbor	Connecticut River
McGinnis Pond	Buzzard Bay	Contoocook Lake
Nauticoke River	Cape Cod Bay	Lake Monomonic
Silver Lake	Ceder Lake	Lake Ossipee
	Charles River	Lake Sunapee
<b><u>Florida</u></b>	Chauncy Lake	Lake Winnepesaukee
Atlantic Ocean	Cheshire Lake	

## Last Water Bodies Visited (449) for Boats Entering Lake George - 2017

Lake Winnisquam	Raritan Bay	Franklin Falls Pond
Merrimack River	Raritan River	Fulton Chain
Moore Dam Reservoir	Round Lake Reservoir	Garnet Lake
Newfound Lake	Round Valley reservoir	Genesee River
Pawtuckaway Lake	Sandy Hook Bay	Glass Lake
Pleasant Lake	Shark River	Glen Lake
Silver Lake	Shrewsbury River	Great Sacandaga Lake
Spofford Lake	South River	Great South Bay
Squam lake	Spruce Reservoir	Greenwood Lake
	Swartswood Lake	Guilford Lake
<b><u>New Jersey</u></b>	Swinging Bridge Lake	Hadlock Pond
Assumpink Lake	Toms River	Harris Lake
Atlantic Ocean	White Meadow Lake	Hinckley Reservoir
Barnegat Bay		Honeoye Lake
Budd Lake	<b><u>New York</u></b>	Hudson River
Canistear Reservoir	Alexander Bay	Indian Lake
Clinton Reservoir	Alexander Lake	Jamaica Bay
Collier Mills Lake	Allegany Sate Park	Jones Inlet
Cranberry Lake	Atlantic Ocean	Keuka Lake
Culver Lake	Auger:Lake	Kinderhook Lake
Delaware River	Ballston Lake	Kingsley Reservoir
Echo Lake	Big Moose Lake	Lake Abanakee
Egg Harbor Bay	Black Lake	Lake Algonquin
Farmington Lake	Black River	Lake Carmel
Fords Pond	Blue Mountain Lake	Lake Champlain
Green Pond	Brant Lake	Lake Erie
Greenwood Lake	Brantingham Lake	Lake Luzerne
Harmony Lake	Burden Lake	Lake Mahopac
Hudson River	Canada Lake	Lake Ontario
Keyport Harbor	Canadarago Lake	Lake Oscawana
Lake Apacon	Canandaigua Lake	Lake Placid
Lake Carnegie	Caroga Lake	Lake Pleasant
Lake Hopatcong	Cayuga Lake	Lake Sebago
Lake Mohawk	Cazenovia Lake	Lake Wallenpaupack
Lake Riviera	Chautauqua Lake	Lebanon Reservoir
Lake Owassa	Chenango River	Limekiln Lake
Lake Wallace	Collins Lake	Lincoln Pond
Lake Wallenpaupack	Conesus Lake	Lily Lake
Lake Wawayanda	Copake Lake	Long Island Oyster Bay
Manahawkin Bay	Cossayuna Lake	Long Island Sound
Manasquan Reservoir	Cranberry Lake	Long Lake
Manasquan River	Cross Lake	Loon Lake
Merrill Creek Reservoir	Crystal Lake	Lower Saranac
Metedeconk River	Delta Lake	Manhasset Bay
Monksville Reservoir	Eagle Lake	Mariaville Lake
Mountain Lake	East Sidney Reservoir	'Merrick Bay
Mullica River	Eaton Brook Reservoir	Middle Bay
Navesink River	Eire Canal	Mine Kill State Park
Newton Lake	First Lake	Mirror Lake
New York Harbor	Fish Creek Pond	Mohawk River
Oak Ridge Reservoir	Forked Lake	Mohegan Lake
Passaic River	Fourth Lake	Mohican Lake
Pompton Lakes	Friends Lake	Montauk Bay



## Last Water Bodies Visited (449) for Boats Entering Lake George - 2017

Moreau Lake  
New York Harbor  
Niagara River  
Oneida Lake  
Orange Lake  
Oscawana Lake  
Oswego River  
Otisco Lake  
Otsego Lake  
Owasco Lake  
Oyster Bay  
Paradox Lake  
Peach Lake  
Peconic Bay  
Peconic Lake  
Piseco Lake  
Putnam Pond  
Racquette Lake  
Racquette River  
Rainbow Lake  
Reynolds Channel  
Round Lake  
Salmon River  
Saranac Lake  
Saratoga Lake  
Schroon Lake  
Seneca Lake  
Seneca River  
Sherman Lake  
Skaneateles Lake  
Sleepy Hollow Lake  
Snyders Lake  
Sodas Bay  
South Bay LI  
St. Lawrence River  
Stewarts Pond  
Starlight Lake  
Stillwater Reservoir  
Sullivan Reservoir  
Summit Lake  
Susquehanna River  
Swinging Bridge Reservoir  
Taylor Pond  
Tennanah Lake  
Thompson Lake  
Thousand Islands  
Toronto Reservoir  
Trout Lake  
Tupper Lake  
Upper Saranac  
Upper St. Regis  
Warner's Lake  
Whaley Lake

White Lake

### North Carolina

Altantic Ocean  
Cape Fear River  
Falls Lake  
Hickory Lake  
Intercoastal  
Lake Norman  
Mountain Island Lake

### Ohio

Alum Creek Lake  
Lake Erie  
Lake Shawnee  
Mosquito Lake  
Ohio River  
Springfield Lake  
Pleasant Hill Lake  
West Branch Reservoir

### Pennsylvania

Tioga-Hammond Reservoir  
Belmont Lake  
Beltzville Reservoir  
Blue Marsh Lake  
Conneaut Lake  
Conowingo Reservoir  
Deep Creek Lake  
Delaware Bay  
Delaware River  
Duck Harbor Pond  
Fawn Lake  
Harvey's Lake  
Hiawatha Lake  
Lake Ariel  
Lake Bethlehem  
Lake Carey  
Lake Erie  
Lake Harmony  
Lake Ladore  
Lake Nockamixon  
Lake Wynonah  
Lake Wallenpaupack  
Lily Lake  
Memorial Lake  
Onota Lake  
Raystown Lake  
Roamingwood Lake  
Schuylkill River  
Susquehanna River  
Van Sciver Lake

### Rhode Island

Atlantic Ocean  
Burlingame Lake  
Echo Lake  
Johnsons Pond  
Keech Pond  
Narragansett Bay  
Warwick Pond  
Waterman Reservoir

### South Carolina

Intracoastal Waterway  
Lake Carolina  
Lake Hartell  
Lake Kowee

### Tennessee

Patrick Henry Lake  
Pickwick Lake  
Tennessee River

### Vermont

Crystal Lake  
Dunmore  
Harriman Reservoir  
Lake Bomoseen  
Lake Champlain  
Lake St. Catherine  
Lake Dunmore  
Lake Fairlee  
Lake Hortonia  
Lake Iroquois  
Lake Seymour  
Lake Whitingham  
Lake Willoughby  
Otter Creek  
Perch Pond  
Somerset Reservoir  
Waterbury Reservoir  
Woodard Reservoir  
Wrightsville Reservoir

### Virginia

Chesapeake Bay  
Chickanhominy Lake  
Chincoteague Bay  
James River  
Lake Anna  
Smith Mountain Lake  
Potomac River

### Canada - Alberta

**Last Water Bodies Visited (449) for Boats Entering Lake George - 2017**

Genesee Lake  
Lake Claire

**Canada - Ontario**

Charleston Lake  
Lake Ontario  
Lake Huron  
Lake Rochelle  
Maskinonge Lake  
Ottawa River  
Salmon Lake  
St. Lawrence River

**Canada - Quebec**

Deux Montagnes  
Lac Brome  
Lake Magog  
Lac Memphremagog  
Lac Parent  
Lake Archambault  
Lake Massawippi  
Little Cedar Lake  
Musquaro Lake  
Richelieu River  
Saint Maurice River  
St Lawrence River



Table 8: Visible AIS recovered at inspection stations in 2017 and the last waterbody visited by the subject vessel prior to Lake George

Origins of Aquatic Invasives in 2017						
Water Body last visited	Boats With Invasives	State	Eurasian Milfoil	Zebra Mussel	Curly Leaf Pondweed	Water Chestnuts
Candlewood Lake	4	CT	✓			
Coventry Lake	1	CT	✓			
Salem Harbor	1	MA	✓			
Deep Creek Lake	1	MD	✓			
Delaware River	1	NJ	✓			
Greenwood Lake	5	NJ	✓		✓	
Lake Hopatcong	8	NJ	✓		✓	
Lake Tahoe	1	NV	✓			
Ballston Lake	3	NY	✓	✓		✓
Butterfield Lake	1	NY			✓	
Fulton Chain Lakes	1	NY		✓		
Glen Lake	1	NY		✓		
Great Sacandaga	2	NY	✓			✓
Hadlock Pond	1	NY			✓	
Hudson River	14	NY	✓	✓	✓	✓
Lake Champlain	2	NY	✓			
Lake Mahopac	2	NY	✓	✓		
Lake Moraine	1	NY	✓			
Long Island Sound	1	NY	✓			
Loon Lake	2	NY	✓		✓	
Mohawk River	7	NY	✓	✓		✓
Niagara River	1	NY	✓			
Owasco Lake	1	NY	✓			✓
Saranac Lake	3	NY	✓		✓	
Saratoga Lake	23	NY	✓	✓	✓	✓
Swinging Bridge	1	NY	✓			
Lake Catherine	2	VT	✓		✓	

Table 9: Top ten waterbodies visited prior to arriving at Lake George

### Top ten waterbodies visited prior to arriving at Lake George

	Water Body	Number of AIS	Number of watercraft from			
			2017	2016	2015	2014
1	Hudson River	122	542	602	515	379
2	Saratoga Lake	4	371	386	375	279
3	Lake Champlain	50	320	281	251	203
4	Great Sacandaga Lake	3	270	272	263	196
5	Long Island Sound	Salt Water	311	253	246	124
6	Lake Hopatcong	3	222	216	197	185
7	Schroon Lake	3	204	196	204	114
8	Greenwood Lake	2	167	157	127	122
9	Candlewood Lake	3	147	146	141	125
10	Connecticut River	4	129	124	127	91

Figure 6: Shows peak season Entrance Inspection activity by day for each inspection station.

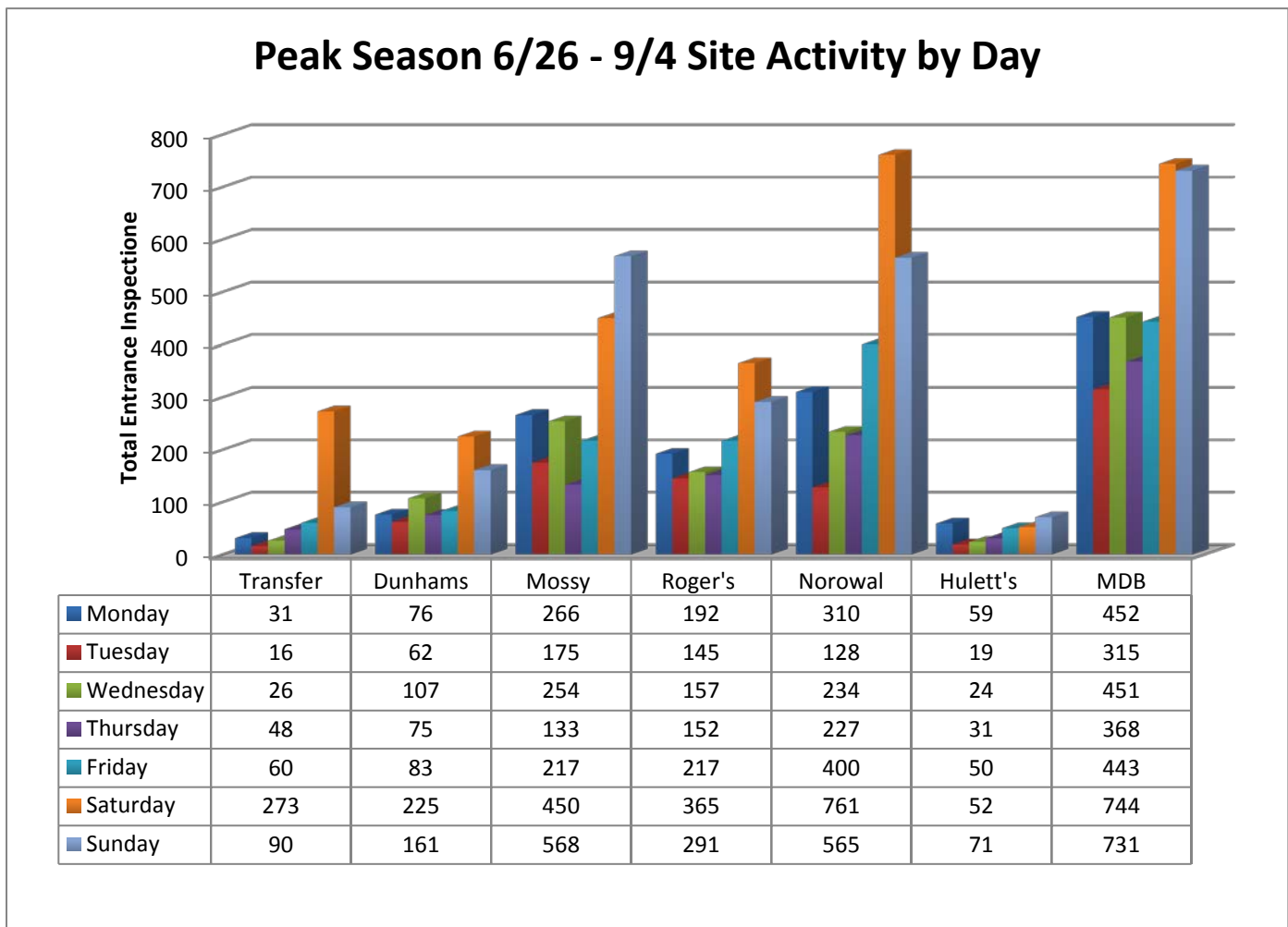


Figure 7: Temporal distribution of entrance inspections by week throughout the boating season

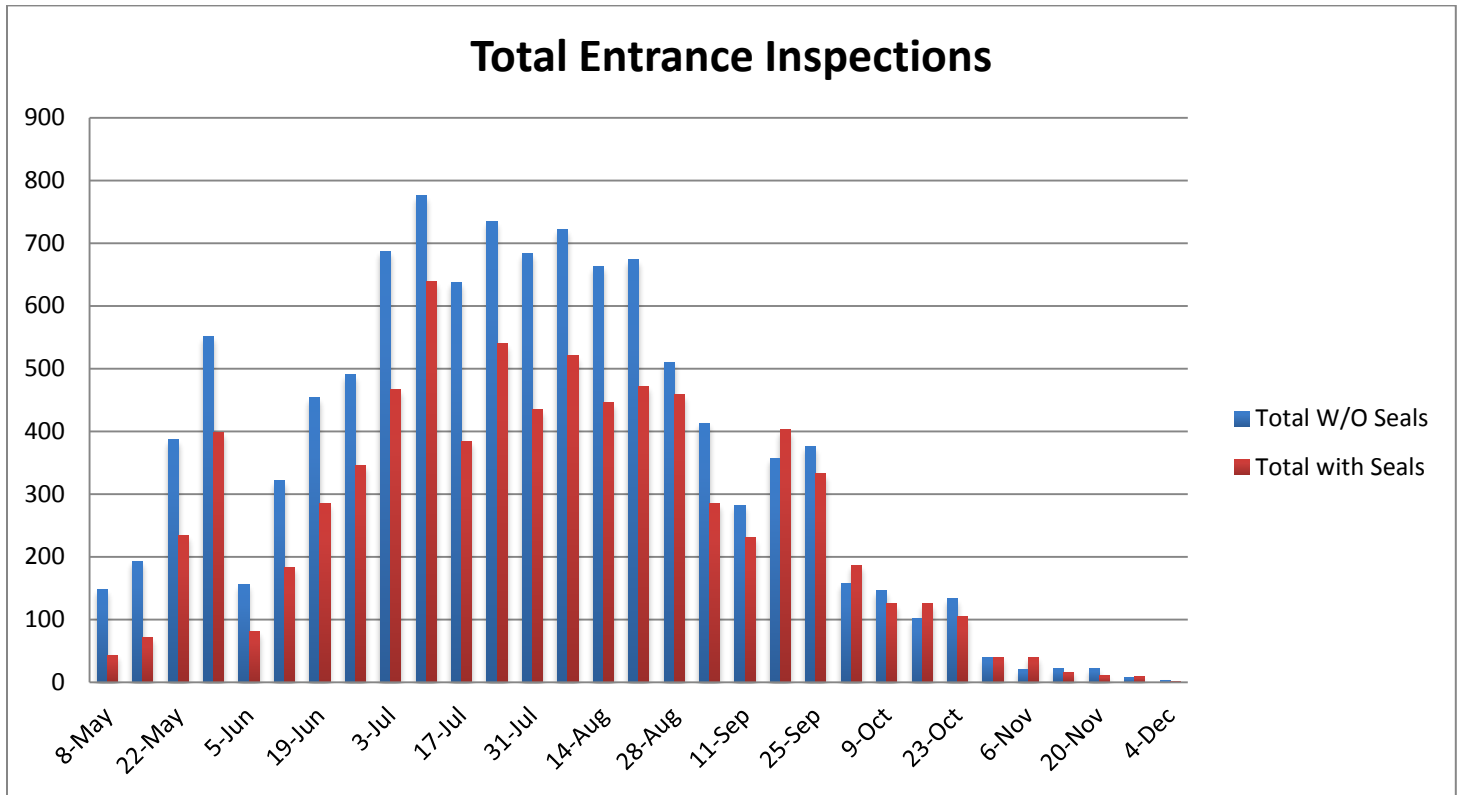


Figure 8: Temporal distribution of inspections and decontaminations by week throughout the boating season

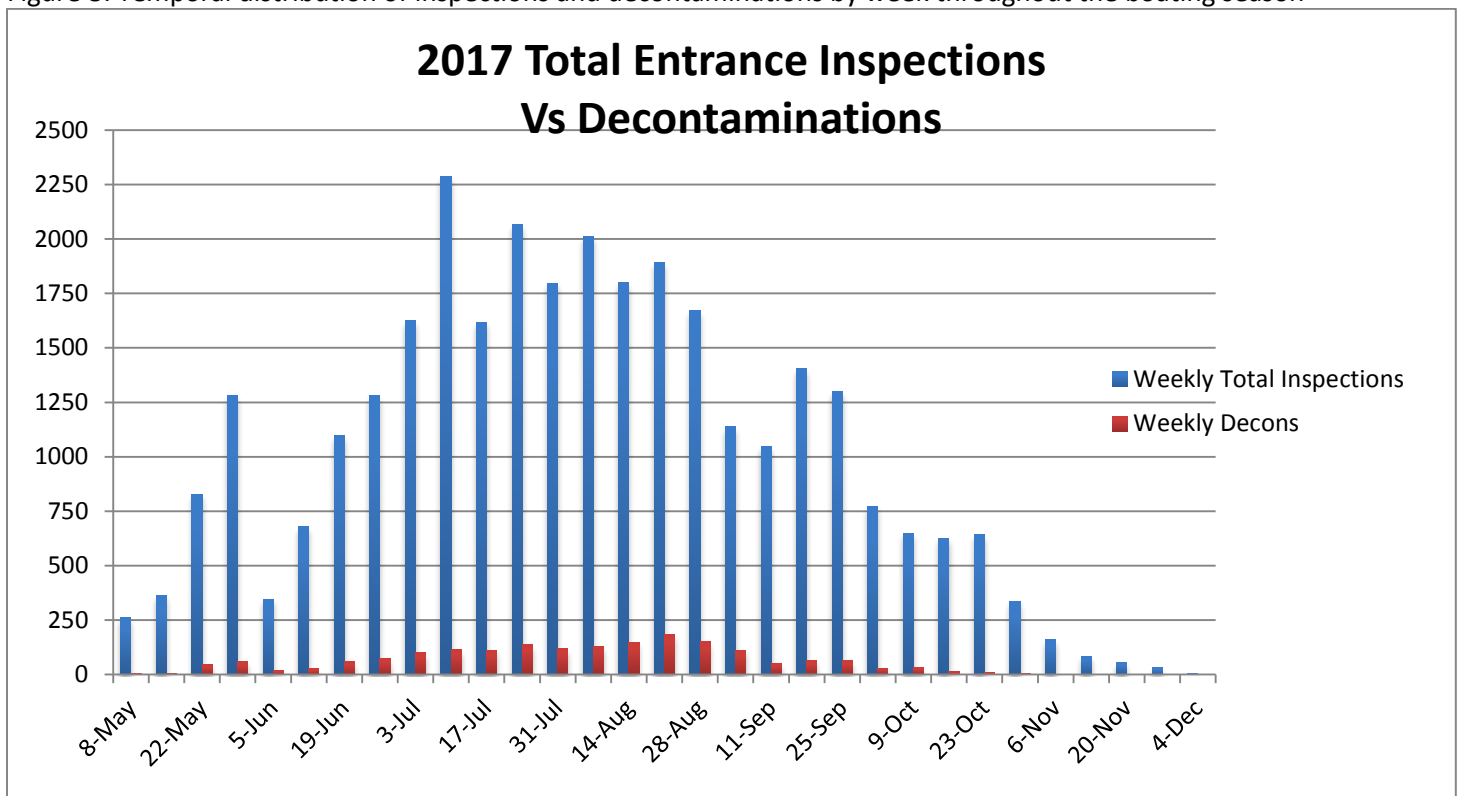


Figure 9: Temporal distribution of staff hours by week throughout the boating season

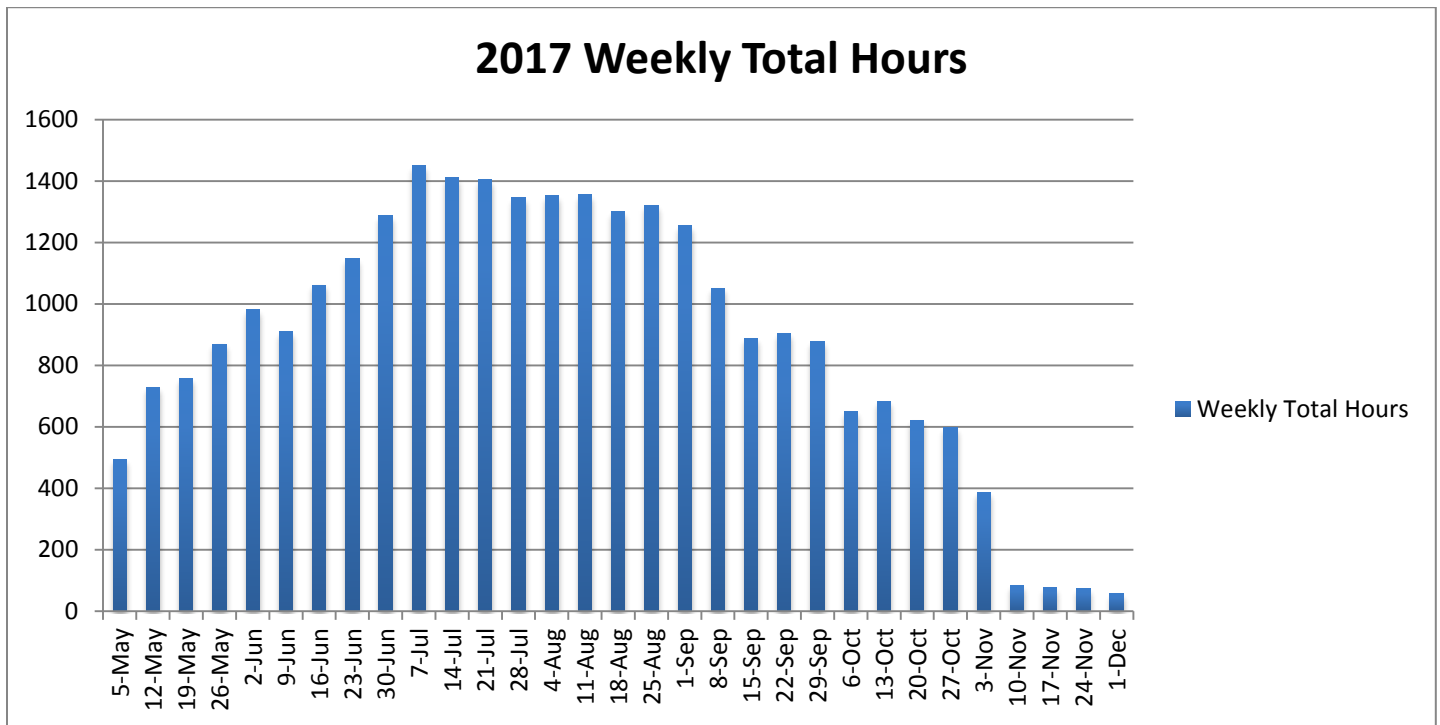


Figure 10: Temporal distribution of cost per interaction (entrance w/ seal, entrance w/o seal, exit inspections combined) by week throughout the 2017 boating season.

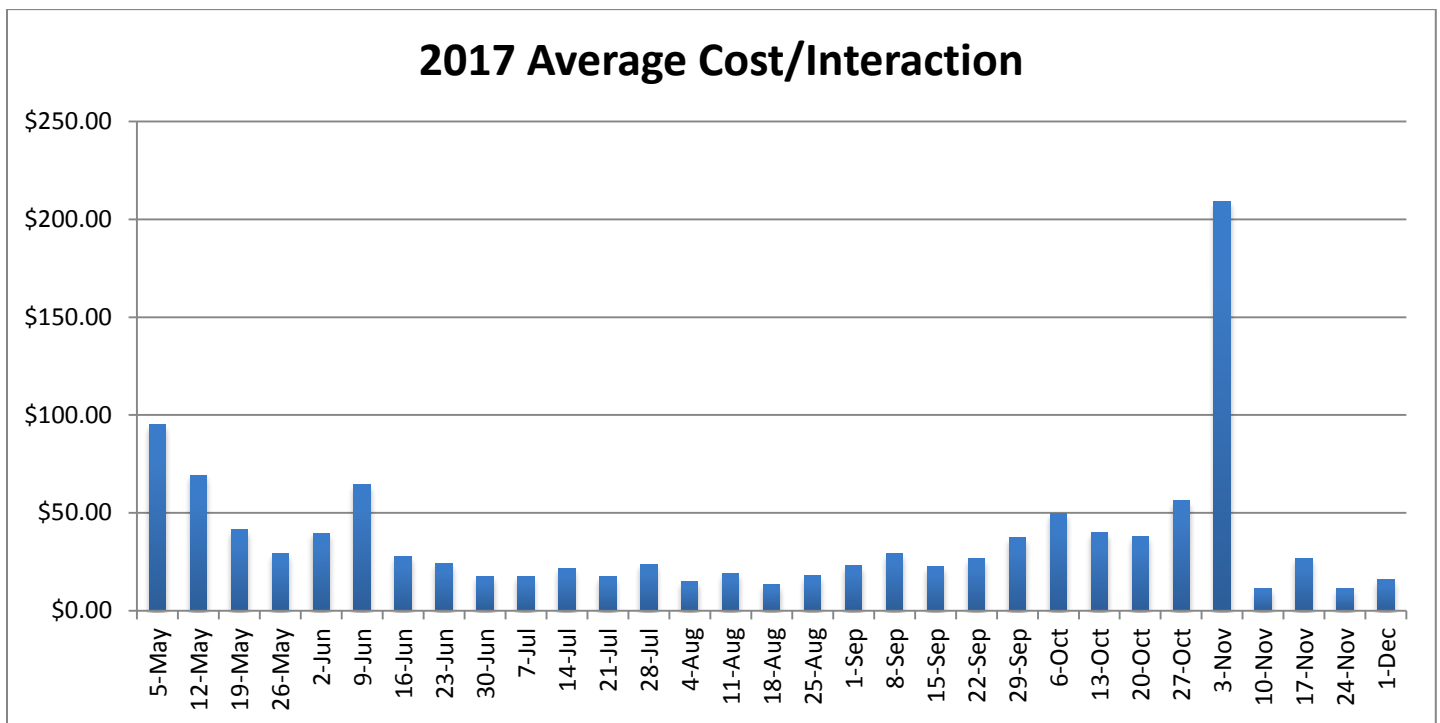


Figure 11: Commission Marine Patrol time dedicated to AIS program compliance, totaling 791 hours.

