





FINAL REPORT

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LAKE CHAMPLAIN HEADWATERS SUMMER EDUCATION PROGRAM

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EXECUTIVE SUMMARY

The Lake Champlain Headwaters Summer Education Program supported the design and delivery of hands-on aquatic invasive species (AIS) education on the NYS side of the Lake Champlain Basin during spring, summer and fall of 2022.

The project leveraged PSC AWI's existing network of Watercraft Inspection stewards and dozens of municipal partners and lake association members in New York State to provide interactive education and interpretation focusing on protecting water quality in the Lake Champlain basin. The project leveraged the partnership with APIPP by utilizing its existing educational materials, leveraging its extensive network of partners, and ensuring coordinated delivery of education to the public. AWI worked in close collaboration with the NYS DEC throughout the summer and during Invasive Species Awareness Week to coordinate our regional efforts with their statewide communication network and utilize their reach to promote this project. AWI also coordinated with LCBP's educators and watercraft inspection program to share ideas and leverage educational resources for seasonal staff.

The objectives were to design and deliver engaging, immersive learning experiences for shore owners, sportsmen, visitors, residents, and students focused on preventing the spread of aquatic invasive species in our waterways; mentor and oversee AWI stewards' efforts to deliver enhanced educational messaging and displays during Invasive Species Awareness Week and Adirondack Water Week to highlight the threat of AIS and ways in which the public can participate in clean, drain, dry practices; and develop tailored presentations to lake associations in the Basin that inform stakeholders about AIS issues, provide lake-specific AIS information and trends, and help lake associations make decisions about future management of AIS.

Through this project, AWI staff tabled and/ presented at 14 community events including farmer's markets, canoe races, public meetings, and ISAW programs. As a result of this project, 500+ members of the public were engaged with information about the threat of AIS and introduced to ways in which to prevent the spread of AIS in Basin waterbodies. Many more people were exposed to AIS education through enhanced training of 12 Watercraft Inspection Stewards at boat launches in the Champlain Basin.

As a result of this project, the public was introduced or otherwise engaged with watershed science in the region. It also allowed us to further our reach on AIS spread prevention beyond our steward efforts at the boat launches.

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PROJECT SYNOPSIS

This project took place on the New York State side of the Lake Champlain Basin, primarily in Essex, Franklin, and Clinton counties in June- September 2022. Some of the events occurred outside of the Champlain Basin but we believe that building a greater level of awareness across the region ultimately helps protect the Champlain Basin as well. The Lake Champlain Headwaters Summer Education Program delivered engaging, hands-on learning experiences for community members that focused on the importance of aquatic invasive species spread prevention. This project assisted with efforts to interpret scientific and technical information to the public, as well as assist with the efforts to increase public appreciation for shared water resources. Our team also developed additional materials to assist Watercraft Inspection Stewards implement education and community engagement activities.

Highlights included the development of new table top educational displays for Watershed Inspection Stewards to engage the public at boat launches and the development of the Junior Watershed Steward Program, a place-based interactive education activity for youth ages 9-12. AWI presented an in depth look at educational tools for lake associations at the Adirondack Lakes Alliance annual meeting in collaboration with APIPP and the Adirondack Council and worked closely with APIPP to conduct regional coordination for ISAW in the Adirondack region.

In total, this project reached 500+ people through in-person events and programs including a concerted effort to promote Invasive Species Awareness Week. Through social media posts, website content, and press releases, additional members of the community were reached. Materials created through this project were utilized across the Adirondacks at outreach events outside of the Basin, reaching community members in neighboring watersheds.

We collaborated with the Adirondack Lakes Alliance (ALA), Adirondack Park Invasive Plant Program (APIPP), Northern Forest Canoe Trail, Adirondack Lakes and Trails Outfitters, Hotel Saranac, several lake associations and community groups, Adirondack Center for Loon Conservation, Saranac Lake Central School, Saranac Lake Public Library, LCBP educators, Ausable River Association, and NYSDEC to conduct these programs and outreach. The majority of staff time was for AWI's Education and Outreach Program Specialist and AWI's Science Communication Fellow.

TASKS COMPLETED

Task 1: Outreach to community organizations, agencies: AWI's staff conducted outreach with: (1) the local event coordinators at farmer's markets in Saranac Lake, (2) the Northern Forest Canoe Trail to coordinate educational programming at the start and finish of local paddling races and events throughout the summer, (3) several lake associations to coordinate presentations and programming at their annual meetings, (4) a 4th grade classroom at Petrova Elementary School in Saranac Lake, (5) Saranac Lake Free Library to plan Libraries Love Lakes event in July, (6) several partners with whom we planned activities for Invasive Species Awareness week (Hotel Saranac, Adirondack Park Invasive Plant Program, and Adirondack Lakes and Trails Outfitters in Saranac Lake), (7) Adirondack Lakes Alliance to schedule presentations at its annual meeting in August, (8) Franklin County Soil and Water Conservation District, Saranac Lake High School, and Hamilton County Soil and Water Conservation District for hands on, outdoor programming, and (9) partners at the Adirondack Park Invasive Plant

Program (APIPP), the Lake Champlain Basin Program (LCBP), Fulton Chain of Lakes Association, Hamilton County Soil and Water Conservation District, the Northwood School and others to plan and implement programs during Adirondack Water Week. See Schedule of Events in Task 6 below

Task 2: Watercraft Inspector training: AWI staff developed and delivered an education training presentation to AWI's seasonal Watercraft Inspection Stewards in May 2022 to recruit stewards interested in delivering deeper public education at the boat launches. Through this effort, AWI's Education Specialist worked with a team of 12 Stewards on additional education projects throughout the summer, concluding these efforts in the fall.

Task 3: Hands-on educational materials and lessons: Five table-top models of a truck, trailer and motorboat were distributed to seasonal stewards, which were placed strategically throughout the basin to demonstrate clean, drain, dry to the public as they interact with watershed stewards. Additionally, AWI worked with 12 stewards to implement additional education programs such as writing blog posts about AIS, contributing to social media accounts, and demonstrating CDD to a group of teenagers enrolled in the AuSable River Associations Teen Aquatic Stewardship program. AWI also developed and pilot tested the Junior Watershed Steward Program. The program's booklet contains information regarding aquatic invasive species in the Lake Champlain Basin, and encourages youth to complete activities, interview and learn from a Watercraft Inspection Steward, learn about their local lake, and receive a certificate. Interactive lessons, maps, and learning exercises assist participants in learning about watershed science and protection.

Task 4: Summer Programming: AWI conducted a series of programs during the June-September project period: (1) public events during Invasive Species Awareness Week including the showing of the film, Uninvited: The Spread of Invasive Species, at the Hotel Saranac, tabling at the Saranac Lake Farmer's Market highlighting CDD, and delivered an aquatic invasive species spread prevention education program to 4th graders with assistance from the Lake Flower Watercraft Inspection Steward, (2) hosted the film, No Other Lake, in collaboration with the Paul Smith's College Visitor Interpretation Center, (3) presented a state of the lake overview at the Mirror Lake Watershed Association Celebration, (4) implemented education programming in coordination with the Library Loves Lakes program with Saranac Lake Free Library, (5) delivered a presentation on AIS in the Adirondacks to 47 people during Bike Adirondacks Paul Smith's Weekender event, (6) led conversations surrounding AIS and youth engagement to 96 people at the Adirondack Lakes Alliance symposium, (7) provided AIS education at the conclusion of the Northern Forest Canoe Trail Adirondack Canoe Classic (90-miler) race,(8) supporting Watercraft Inspection Steward educational programs resulting in 12 stewards utilizing enhanced educational tools at their tables at the boat launches including the Junior Watershed Steward program and table top truck -boat - trailer displays Nearly 100 Junior Watershed Steward Program booklets were distributed, with nearly 50 participants returning to receive a certificate.

Task 5: Program Evaluation: AWI facilitated program evaluations that allowed participating Steward staff the opportunity to produce feedback on the success of summer education programs and give feedback on ideas for future improvements. Although we received a low response rate, we compiled some of the highlights from the survey responses. In total, 12 Watercraft Inspection Stewards engaged in additional education projects. When asked what the highlight of offering these programs were, several quotes stood out: "Teaching the children and

seeing how interested they were to learn", "Families that would always come visit my table to play with the boat display", and "I learned how to communicate better professionally with others". When asked for ideas to improve education programs in the future, stewards offered suggestions: "Include small crayon packages or more pens for kids to fill out booklets, print booklets on half sheets of paper, provide a small prize for completing booklet (sticker, patch)", and "I believe we need to get more involved during school times and have field trips to our local stewards. Also have stickers and small gifts to pass out helped them return and learn more!!". Additional ideas for future education programs included: "coloring pages for younger children!", and, "Maybe a club for teens to get together and learn how to make a difference for our waters." We will consider these ideas for future summer educational efforts. The NYS DEC is quite interested in AWI expanding its Junior Watershed Steward materials and will be working with us over the winter to explore opportunities.

Task 6: **Quarterly and Final Reports**: All quarterly reports were submitted throughout the period of this contract, with the final report completed at this time.

METHODOLOGY

The Paul Smith's College Adirondack Watershed Institute's mission is to protect clean water, conserve habitat and support the health and well-being of people in the Adirondacks through scientific inquiry, stewardship, and real-world experiences for students. AWI achieves this mission through cross departmental collaboration, partnerships with other local and regional organizations, and the experience of over a dozen full-time staff. The Education and Outreach Program Specialist worked with administration and science colleagues to develop training, education materials, and to complete deliverables of this project. AWI's Science Communication Fellow assisted with many of the programs.

QUALITY ASSURANCE TASKS COMPLETED

Not applicable to this project.

DELIVERABLES COMPLETED

Task 1: Meeting announcements, press releases; schedule of events & presentations.

Press releases include: Uninvited: The Spread of Invasive Species film screening set for June 8,

Celebrate Adirondack waterways: Water Week starts Aug. 5, Adirondack Lakes Alliance

symposium slated for Aug. 5, Celebrate Paddling ADK: "No other Lake" Documentary Film

about adventure & conservation on Lake Champlain", schedule of community events is included below

Task 2: Training module delivered to 140+ Watercraft Inspection Stewards at annual steward training. Photos of training with Watercraft Inspection Stewards are included below.

Task 3: Traveling AIS educational displays.

Junior Watershed Steward (22).pdf (Command Line)

PDF of Junior Watershed Steward Program is attached:

Photo of table top display is included in photos section below.

Task 4: AIS educational materials developed, # of programs implemented, meetings attended, people reached. AWI developed engaging opportunities for Watercraft Inspection Stewards including the implementation of the model truck and boat displays, the pilot of the Junior Watershed Steward Program, and the creation of a board game. Additionally, AWI created displays that were utilized at the events highlighted below, under schedule of events. Materials produced include localized AIS information, maps of AIS spread, and information on AIS prevention. A traveling exhibit of AIS materials was developed to be used for steward led programs. In total, AWI reached 500+ people through the education materials provided in this funding opportunity, through steward engagement, and in-person events and activities, highlighted in the schedule of events below.

Task 5: Survey Monkey results, compiled in 'Tasks Completed' section.

Task 6: Approved quarterly reports; approved final report w 3-5 high resolution photos, press articles, project summary. This deliverable is complete upon final approval from funder.

Schedule of Events:

Event:	Date:	Location:	Description:	Attendance:
Invasive Species	08/06	Harrietstown,	AWI staff providing interactive	10
Awareness Week	/2022	Franklin Co.	activities for families, a brief	
Kickoff Celebration			presentation, and a clean-drain-	
			dry demonstration.	
Hands on Invasive	06/08	Harrietstown,	Tabling with APIPP during ISAW.	20
Species Family Event	/2022	Franklin Co.	AIS samples, outreach materials,	
			and games for groups.	
Uninvited: The Spread	06/08	Harrietstown,	Showing of "Uninvited: The	25
of Invasive Species film	/2022	Franklin Co.	Spread of Invasive Species"	
screening			followed by a brief discussion with	
			AWI and partners.	
Saranac Lake Farmers	06/11	Harrietstown,	Education Specialist tabling at	47
Market	/2022	Franklin Co.	farmers Market with AIS	
			information.	
Invasive Species in Our	06/13	Harrietstown,	Education Specialist delivers AIS	15
Waters	/2022	Franklin Co.	program to Saranac Lake Central	
			School 4 th grade classroom,	
			including taking a visit to the Lake	
			Flower Boat launch to meet a	
			steward.	
Mirror Lake Celebration	06/21	North Elba,	Update on water quality of Mirror	35
	/2022	Essex Co.	Lake and surrounding watershed.	
Celebrate Paddling	06/26	Harrietstown,	Tabling at Saranac Lake	35
Invitational	/2022	Franklin Co.	Waterfront Park during the	
			invitational.	
Libraries Love Lakes	07/06	Harrietstown,	Development of an AIS	5
	/2022	Franklin Co.	informational display to be	
			showcased during July, as well as	
			a watershed themed reading	
			lesson to kickoff the celebration.	
Bike ADK – Weekender	07/30	Paul Smiths,	Education Specialist gives an	47
	/2022	Franklin Co.	overview of the Lake Champlain	
			Watershed, the challenges it	
			faces, and the opportunities to	
			improve water quality. Delivered	

			before two days of riding in the Basin.	
Adirondack Canoe Classic	09/09 /2022	Harrietstown, Franklin Co.	Tabling at the finish of the 90-miler. AIS information, water quality display, etc. Interacted with all age groups from 10:30-3:00.	65
Saratoga Lake Association	9/20/ 2022	Saratoga Springs, NY	Presented on the threats to lakes from development, AIS and road salt	45
Hamilton County Soil and Water Conservation District	09/22 /2022	Lake Pleasant, NY	Taught 5th and 6th graders about the threats from AIS at the 43rd annual Hamilton County Conservation Field Day	72
Franklin County Conservation Field Day		Duane, NY	Taught 5th, and 6th graders from Chateguay, Saranac Lake, and Brushton-Moira school districts about watershed science.	98
Saranac Lake Advanced Placement Environmental Science Class	09/30 /2022	Paul Smith's College, NY	Students learned how to delineate a watershed, collect water samples aboard AWI's Watershield Workshop floating classroom, and understand the threats from AIS and other stressors.	10
Total number of public directly engaged as a result of this project				529

CONCLUSIONS

This support allowed us to reach 500+ individuals in the Lake Champlain Basin, through tailored presentations, outreach events, and through the creation of education materials. In addition, we reached hundreds more through socials media posts, blog posts and press releases that drew attention to the work that was the result of this funding.

Support from NEIWPCC and the Lake Champlain Basin Program allowed AWI to have the opportunity to conduct both formal and informal outreach to our local communities, aligning with LCBP's efforts to have an informed and involved public. Through meetings and presentations with stakeholders at Lake Association meetings and tabling at partner events, we developed relationships and had meaningful conversations about efforts to prevent the spread of AIS and preserve water quality with members of our greater community. The creation of education materials allows us to reach a younger audience, connecting the next generation of stewards to the watershed. Nearly 100 Junior Watershed Steward booklets were distributed across the region, with nearly 50 receiving a certificate of stewardship. Additionally, tabletop displays of model trucks and boats assisted Watercraft Inspection Stewards, and our Education Specialist with reaching a younger audience. The development of additional training for our seasonal staff aligns with our goals of improving job satisfaction and employee retention, as well as with NEIWPCC's strategic goal of workforce development. In working with our seasonal staff, we have developed additional means to conduct outreach to the broader basin community.

AWI navigated the challenges of this project through collaboration across departments. With the assistance of colleagues, AWI's Education and Outreach Program Specialist received input on

program planning and implementation. Although we were unable to coordinate outreach at local fishing derbies, team members assisted with outreach to additional community events.

The tasks were completed as scheduled, with slight difficulty during the program evaluation phase. Although information was collected, the Education Specialist received a lower response rate than expected. The low survey response rate can be attributed to timing and implementation. The survey was delivered at the end of the season, when many stewards had already completed their season. For future programs, we will plan for in-person implementation of education programs surveys.

The Paul Smith's College Adirondack Watershed Institute is grateful for the support of the Lake Champlain Basin Program and NEIWPCC. This project greatly contributed to our efforts to provide education and outreach to the communities in the Lake Champlain Basin. We plan to continue this work, improving upon this past year's efforts to grow our capacity to reach additional members of the community.

REFERENCES

Not applicable to this project.

APPENDICES

Appended Documents:

Related Press Releases, articles, and news coverage of this project is included below:

Uninvited: The Spread of Invasive Species film screening set for June 8

Celebrate Adirondack waterways: Water Week starts Aug. 5

Adirondack Lakes Alliance symposium slated for Aug. 5

<u>Celebrate Paddling ADK: "No other Lake" Documentary Film about adventure & conservation on Lake Champlain"</u>

Photos:



Image 1: Steward Nicole Z. at Port Douglas Launch.



Image 2: Stewards James, Whitney, and Emily at Lake Placid Launch. Three of our stewards more deeply involved in education this summer.



Image 3: Education Specialist with Petrova Elementary/Saranac Lake Central School 4th graders.



Image 5: Edcautional programming at the conclusion of the 90-miler canoe race.



Image 4: Education Specialist speaking at Hotel Saranac film screening, Uninvited, flowed by questions and answers with AWI and APIPP staff.



Image 6: Junior Watershed Steward Participants.