

Partnership for Regional Invasive Species Management

### STRATEGIC PLAN 2025



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### Acknowledgements



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### **Executive Summary**

### **Background**

The Finger Lakes Partnership for Regional Invasive Species Management (Finger Lakes PRISM) is a collaborative program designed to address the threat of invasive species within the 17 counties of the Finger Lakes Region. Housed within the Finger Lakes Institute (FLI) at Hobart and William Smith College, Finger Lakes PRISM develops detection programs, coordinates response efforts, provides education programs and outreach, and works with communities to manage invasive species.

The Finger Lakes Region has over 2.3 million people and includes a significant land base with important economic, natural, agricultural, ecotourism, recreational, educational, and cultural resources. Invasive species pose a significant threat to the region given the multitude of pathways for transmission, including the canalways, public trails, and the multitude of recreational access points and pathways. Each year, new IS are being discovered in the Finger Lakes that threaten to supplant natives, degrade natural communities, and challenge water quality and agricultural production. It is imperative that we protect the health and function of our ecosystems and safeguard our picturesque region from additional outbreaks of new or invading species.

#### Finger Lakes Strategic Plan 2025

The Finger Lakes Strategic Plan 2025 is an update to Finger Lakes PRISM's first strategic plan that was developed and implemented between 2015 and 2021. Strategic Plan 2025 builds on the information contained within the first plan and its implementation over the past several years. In addition to the identification of new information and current IS issues, Strategic Plan 2025 also incorporates important adaptations in approach based on our SWOT (strengths, weaknesses, opportunities, and threats) analysis. These include a shift in the structure of committees and working groups, an update to the wording of our vision and mission, reorganization of primary goals, and streamlining our annual reporting.

#### Finger Lakes PRISM Vision and Mission

Vision: Finger Lakes PRISM preserves the biodiversity of our natural communities through the prevention, detection, and control of invasive species.

Mission: Our mission is to reduce the introduction, spread, and impact of invasive species by working collaboratively with partners to implement effective education, outreach, and control measures.

Strategic Plan 2025 presents five goals (a result of combining some of the original seven goals with significant overlap), a refinement of objectives including the addition of measurable components where possible, a confirmation of strategies, and an identification of key metrics to track progress and guide future action.

#### Goals, Objectives, and Strategies

Goal 1: Prevent the introduction and spread of IS to new areas within the region through targeted prevention efforts for vectors and pathways of transmission.

*Outcome: New invasions to the region are prevented to the greatest extent practicable.* 

Goal 2. Implement early detection and rapid response measures to identify new IS to the area and respond to mitigate the effects.

Outcome: Priority conservation targets are protected from new IS infestations.

Goal 3: Build partnerships and networks that leverage effective public education efforts and facilitate the sharing of information, resources, and expertise.

Outcome: Finger Lakes PRISM is the regional leader in IS management facilitating coordination of active partners, effective public education, and information networks.

Goal 4: Control invasions through eradication, containment, suppression, and restoration targeting high priority conservation areas.

Outcome: The occurrence and impact of highly IS are reduced in priority conservation areas.

Goal 5: Secure funding and legislative support from federal, state, and local governments.

Outcome: Adequate funding and consistent support ensures effective management of IS across the Region.

A current database maintained to support achieving the goals listed above is critical to the success of Finger Lakes PRISM. This database includes lists, maps, measures, and data for partners and people, species and locations, plans and reports, education and funding.

Implementation is the most important part of any strategic plan. An Implementation Table provides a simple framework to guide actions (strategies) under each goal. As the plan is implemented it is recommended that accomplishments are measured, reported, and *celebrated* annually.

As strategies are implemented over the next five years it is critical to track accomplishments regularly. Utilizing key metrics, online reporting by partners, and reporting in a dashboard format is an effective and efficient way to track and celebrate progress. A sample dashboard has been developed as part of this plan update. Key metrics may include:

#### Number of:

- 1. Community members in presentations, workshops, trainings
- 2. Partners pledged
- 3. Highway departments trained and engaged as partners
- 4. Website visits with length of stay > 5 minutes
- 5. Social media followers (listserv, Facebook, Instagram, Twitter)
- 6. Priority conservation areas with designated ED/RR Teams
- 7. Acres or miles surveyed
- 8. Acres treated
- 9. Acres restored
- 10. Priority IS early detections/intercepted
- 11. Shovel ready projects
- 12. Dollars secured and spent on IS management

It is important to modify and adapt when chosen metrics reveal that the selected strategies are ineffective. Strategies can be modified each year to ensure five- year goals are achieved.

### Acronyms and Abbreviations

AgWG	Agricultural Working Group
AWG	Aquatic Working Group
BMP	Best Management Practice
E&OWG	Education & Outreach Working Group
ED	Early Detection
ED/RR	Early Detection Rapid Response
EPF	Environmental Protection Fund
FLI	Finger Lakes Institute
IS	Invasive Species
ISCU	Invasive Species Coordination Unit
ISTF	Invasive Species Task Force
NY	New York
NYSDEC	New York State Department of Environmental Conservation
PRISM	Partnerships for Regional Invasive Species Management
PZ	Prevention Zones
RR	Rapid Response
SC	Steering Committee
SWOT	Strengths, Weaknesses, Opportunities, Threats
TWG	Terrestrial Working Group
USA	United States of America

### Introduction

In response to the 2005 report to the New York (NY) State Invasive Species Task Force (ISTF), eight Partnerships for Regional Invasive Species Management (PRISMs) were formed statewide to address the economic,



Figure 1. Partnerships for Regional Invasive Species Management (PRISMs) in New York State

### **Organizational History**

Finger Lakes PRISM began in 2007 as a volunteer group. This group determined the mission, vision, geographic boundary, and key issues that would guide IS management efforts in the Finger Lakes. A Steering Committee was formed along with terrestrial, aquatic, and education & outreach working groups made up of committed partners and volunteers. The working groups developed a 2008 work plan with five major objectives including: strengthen partnerships, identify funding sources, education and outreach, eradication and control, and monitoring and inventory. In 2013, funding support was awarded to the Finger Lakes Institute (FLI) at Hobart and William Smith Colleges. A Finger Lakes PRISM coordinator (Hilary Mosher) was hired in 2014. The first five-year strategic plan was developed in 2016. Annual Work Plans and Reports have been developed each year and implemented by the Coordinator with guidance and input from the Steering Committee and assistance from the four Working Groups.

ecological, and human health impacts of invasive species (IS) within New York (Figure 1).

The Finger Lakes PRISM is a collaborative program designed to address the threat of invasive species within the 17 counties of the Finger Lakes Region. Housed within the Finger Lakes Institute (FLI) at Hobart and William Smith College, Finger Lakes PRISM develops detection programs, coordinates response efforts, provides education programs and outreach, and works with communities to manage invasive species.

### Finger Lakes Institute



The Finger Lakes Institute (FLI) is a nonprofit organization at Hobart and William Smith College in Geneva, NY. Dedicated to the promotion of environmental research and education about the Finger Lakes and surrounding environments, FLI is well-suited to house and guide Finger Lakes PRISM. In collaboration with regional partners and state and local government offices, FLI fosters environmentally sound development practices throughout the region, and disseminates accumulated knowledge to the public. The goals of the FLI are, in summary, to:

- Advance, coordinate, disseminate scientific understanding.
- Provide interdisciplinary training.
- Serve as an information clearinghouse.
- Enhance understanding of environmental issues.
- Promote sustainable development.
- Create and disseminate educational resources and opportunities.

*FLI goals are achieved through four primary program areas: 1) Research; 2) Education; 3) Community outreach; and 4) Economic development.* 

### **Finger Lakes Region**

The Finger Lakes PRISM area of interest is a 17-county region that encompasses over 7.3 million acres with the City of Rochester to the west, the City of Syracuse to the east, and Elmira-Corning to the south (Figure 2). With breathtaking vistas and a wealth of historical perspectives, the Finger Lakes region hosts travelers, recreationists, and avid enthusiasts from across the world who visit the beautiful land and lakes. Native American legend explains that the Creator looked upon this land with special favor and when reaching out to bless it, left an imprint of a hand on the landscape; thus, the Finger Lakes.

Geological history has a more scarring tale to tell about the origin of the Finger Lakes. During the Pleistocene, a glacial sheet over a mile thick in locations gorged out the land and created enormous holes that filled in to become lakes as the glaciers retreated across the landscape. The numerous gorges, waterfalls, and natural panoramas of the area were born from this incredible geological process. Many of these vistas are accessible to the public within numerous state parks including Letchworth and Watkins Glen State Parks, ranked numbers one and two in the nation over the past several years by various sources including a 2015 USA Today's Reader's Choice poll and by popular vacation rental search engines, Trip Advisor and HomeToGo. Other popular parks within the Finger Lakes region include the Finger Lakes National Forest, the gorges of Ithaca, Chimney Bluffs State Park, and Green Lakes State Park among others.



Figure 2. Map of the Finger Lakes.

There are over 40 State Parks and Historic Sites within the region ranging geographically from Hamlin Beach State Park in Monroe County to Chittenango Falls State Park in Madison County. Additionally, the Finger Lakes boast Zurich Bog, a National Natural Landmark with its unique wetland preserve that is home to several threatened and endangered species on 650 acres in the town of Arcadia; Montezuma Wetlands Complex, a

50,000-acre private, state, and federal partnership in Seneca, Cayuga, and Wayne Counties; and Finger Lakes National Forest in the Town of Hector, a beautiful 16,212-acre area that encompasses the Hector Grazing areas, multi-modal recreation, Finger Lakes Trail access, and camping in the watersheds of Seneca and Cayuga Lakes. These abundant and unique natural areas support federally threatened plants and animals including American hart's tongue fern, bog turtle, Eastern Massasauga, Chittenango ovate amber snail, and Leedy's roseroot.



Leedy's roseroot (left), bog turtle (upper right), eastern massasauga rattlesnake (bottom)

According to estimated census data from 2019, more than 2.3 million people live in the Finger Lakes region which encompasses Broome, Cayuga, Chemung, Chenango, Cortland, Livingston, Madison, Monroe, Onondaga, Ontario, Schuyler, Seneca, Steuben, Tioga, Tompkins, Wayne, and Yates counties (U.S. Census Bureau, 2019a). The mean household income of the region is \$57,012 and the average individual percent poverty rate is 13.55% (U.S. Census Bureau, 2019b). The Finger Lakes is culturally and ethnically diverse with the greatest diversity in the many urban and suburban settings. Given the unique features, aesthetic value, and ease of access to major cities, the Finger Lakes region is reported to be the largest tourism area in New York State north of the Hudson Valley (Finger Lakes Tourism Alliance, 2018). In 2018, tourism in the Finger Lakes added \$3.2 billion in traveler spending and supported 58,853 jobs, equating to 4% of the total traveler spending within NYS. The amount of traveler spending to the Finger Lakes is more than any other region outside of the New York City, Long Island, and Hudson Valley, which collectively made up nearly 80% of traveler spending (Finger Lakes Tourism, 2018). Tourism data excludes the financial impact of Madison, Broome, and Chenango counties, which were included in the Central New York tourism data, and equates to an additional 3.8M dollars in traveler spending and increases the contribution of the region by 0.6 % (Central New York Focus Data, 2018).



Lifeinthefingerlakes.com

#### **Invasive Species Challenges**

Fishing also has a major impact in the Finger Lakes region. According to the Economic Contributions of Recreational Fishing per U.S. Congressional Districts report produced by Southwick Associations for the American Sportfishing Association (February 2019), NY anglers contributed nearly \$3.1B to the NY economy of which the Finger Lakes region accounted for over 25% of the total angler contributions (\$0.775B). NY anglers also contributed \$1.7B to conservation and supported 20,550 jobs.

Invasive species, as defined by the New York State Department of Environmental Conservation (NYSDEC), pose a significant threat to the Finger Lakes region given the multitude of pathways for transmission, including the canalways, public trails, and the multitude of recreational access points and pathways. It is imperative that we protect the health and function of our ecosystems and safeguard our picturesque region from additional outbreaks of new or invading species. The Finger Lakes PRISM is dedicated to collaboration, coordination, and control of IS before they cost our region millions of dollars more and further degrade our fragile ecosystems.

Each year, new IS are being discovered in the Finger Lakes that threaten to supplant natives. For example, in 2019, a new infestation of Japanese stiltgrass was discovered near the Powder Mills Fish Hatchery in Monroe County; an isolated infestation of Hydrilla was discovered (and treated) in a marina in Lansing; and Japanese angelica tree was discovered in a Monroe County park. In addition, the continual spread of hemlock woolly adelgid has the potential to impact gullies and water quality as hemlocks decline. Of particular concern is a new infestation of the spotted lanternfly found in Tompkins County in 2020. New infestations of other insects, invertebrates, fish, and plants are threatening to spread due to direct hydrologic connections between the Great Lakes and Finger Lakes watersheds as well as along other transmission pathways. The current tiered list of priority IS is in Appendix A.



Hemlock wooly adelgid (upper left), Japanese angelica tree (bottom left), spotted lanternfly (right)

### Strategic Planning Process

The Finger Lakes Strategic Plan 2025 is an update to Finger Lakes PRISM's first strategic plan that was developed and implemented between 2015 and 2021. The first strategic plan was developed by the Finger Lakes PRISM Coordinator and Steering Committee (SC) with facilitation by Sharon Anderson (Tompkins County Cornell Cooperative Extension). The Plan reflected the culmination of many hours of data gathering and brainstorming to identify a direction and guide for the Finger Lakes PRISM, partners, roles, outputs, and outcomes.

Through implementation of our Strategic Plan over the past five years we realized significant progress toward our goals and objectives, identified specific strengths, and opportunities for improvement. We also watched our world change, bringing with it new IS and IS challenges, a pandemic, and "pandemic migration" which may be a preview of the projected climate

### Key Updates - Strategic Plan 2025

Based on the experiences and achievements during the first 5-year strategic plan, there are several key updates for Strategic Plan 2025. These include:

- Slight revision to vision and mission statements.
- Reorganization of Steering Committee and Working Groups.
- Addition of Steering Committee bylaws and officer positions.
- Combining goals and reducing duplication in objectives and strategies.
- Identification of key metrics to consistently measure and report accomplishments.
- Aligning annual reports and work plans with the format of the Strategic Plan.
- Streamlining reports using dashboards.

migrations that are anticipated for our region as people relocate to avoid climate-related challenges elsewhere.

Strategic Plan 2025 builds on the information contained within the first plan and its implementation over the past several years. In addition to the identification of new information and current IS issues, Strategic Plan 2025 also incorporates important adaptations in approach based on our SWOT (strengths, weaknesses, opportunities, and threats) analysis. These include a shift in the structure of committees and working groups, an update to the wording of our vision and mission, reorganization of primary goals, and streamlining our annual reporting.

As part of this strategic planning process, the Steering Committee conducted a SWOT analysis (Appendix B). Based on a review of the past five years and our strengths, weaknesses, opportunities, and threats, we concluded that we are particularly adept at growing and maintaining a strong partner and volunteer base, that our four Working Groups evolved to function best as a single group with reporting subgroups, and that due to the complexity and far reaching effects of invasive species, we can easily relate to, and connect with, a broad group of traditional and nontraditional environmental partners. We have excellent staff, strong communication skills and networks, a highly functional website and a large following on social media, high attendance at training events, and representation on many regional committees.

We also learned that we could improve our connection and involvement with some of our region's counties and with other environmental protection and restoration issues such as streambank stabilization, habitat restoration, flood risk, etc. We identified an opportunity to engage more with County Soil & Water Conservation Districts and emphasize our project "wins" and efforts to stakeholders. We identified some specific opportunities relating to climate change, new partners, and the need for municipal planning and zoning language for IS management. We identified the value of ZOOM webinars and other digital access options for public education and information sharing.

### Vision

Finger Lakes PRISM preserves the biodiversity of our natural communities through the prevention, detection, and control of invasive species.

### Mission

Our mission is to reduce the introduction, spread, and impact of invasive species by working collaboratively with partners to implement effective education, outreach, and control measures.

### Finger Lakes PRISM Structure

Finger Lakes PRISM is not an independent entity. Rather, it is one of eight statewide PRISMs and a designated program of the Finger Lakes Institute at Hobart & William Smith Colleges supported contractually by the New York State Department of Environmental Protection (NYSDEC) Invasive Species Coordination Unit (ISCU). The Finger Lakes Institute is a 501(c)(3) organization dedicated to the promotion of environmental research and education about the Finger Lakes and surrounding environments and is well-suited to contract with NYSDEC and house Finger Lakes PRISM. While Finger Lakes PRISM, as a program and not an independent nonprofit entity, is not legally required to develop and adhere to bylaws, committee bylaws are an excellent tool for any organization to clarify the rules and principles that define its structure. Bylaws set forth information about the leadership, members, meetings, terms and positions, decision-making, etc. Bylaws for Finger Lakes PRISM should be relatively simple and help increase clarity and efficiency for staff, the Steering Committee, and the Working Group (Appendix C). An outline for committee bylaws for review, completion, and adoption by the Steering Committee are provided in Appendix D and discussed further below.

#### Staff

The Finger Lakes PRISM is supported by a full time Coordinator, two full time program managers, several additional staff positions that support various aspects of mission implementation, and the Director of the Finger Lakes Institute (parent organization of Finger Lakes PRISM). The Coordinator acts on behalf of Finger Lakes PRISM much like an executive director with guidance and support from the Steering Committee and Working Group.

#### **Steering Committee**

The Steering Committee (SC) is comprised of representatives of the Finger Lakes with expertise or interest in IS and includes staff from key partner organizations with a concern for the overall impact and effectiveness of Finger Lakes PRISM across the entire region. The purpose of the SC is to guide the five-year strategic planning process, plan and set overall direction for priority areas and priority IS, and ensure that major goals and timeline are achieved. The SC will set the annual work plan and monitor progress, which may include tracking timelines and evaluation procedures. The SC will provide strategic direction and coordination of the Working Group and its four subgroups.



Hemlock prioritization meeting

The SC operates under a set of committee bylaws to ensure continuous focus on implementation of the Strategic Plan. These bylaws also maximize efficiency in action and reporting and to provide opportunities for partners and volunteers to hold key leadership positions and contribute directly to the mission of Finger Lakes PRISM. Steering Committee Bylaws guide nominations and elections to officer positions (Chairperson, Vice Chair, Recording Secretary, Working Group posts). As stated above, this structure provides volunteers with specific leadership opportunities, titles and associated recognition and responsibilities (organizing meetings, agendas, minutes). A key benefit of this structure is increased support to the Coordinator whose responsibility it is to manage operations and grow the Finger Lakes PRISM program.

Additional details of the Finger Lakes PRISM SC including SC purpose, and strategies are provided in Appendix C. Some key achievements of the SC during implementation of the first strategic plan between 2016 and 2021 include development of annual work plans, prioritization of projects for funding, and advocacy efforts.

#### Working Group

The Finger Lakes PRISM Working Group operates as a subcommittee under the SC. This group provides important on-the-ground education & outreach, prevention, and control of IS through public forums, trainings, outreach, presentations, and IS surveys throughout the region. Working Group members, like the SC, are people with interest and expertise in IS in the Finger Lakes region. Many volunteers represent partner organizations. The Working Group meets and functions as a single group with a focus on four subgroups: Terrestrial Working Group (TWG), Aquatic Working Group (AWG), Education & Outreach Working Group (E&OWG), and Agricultural Working Group (AgWG).



The establishment of a single Working Group provides an opportunity for consistency in structure, decreased duplication of effort, and increased participation and effectiveness of volunteer members. Formal roles are assigned to the most active Working Group members to coordinate meetings, set agendas, provide meeting summaries, and follow up on action items. A single Working Group also lends flexibility in the focus of the subgroups to adapt to changing opportunities and challenges.

Additional details of the Finger Lakes PRISM Working Group and subgroups including purpose and strategies are provided in Appendix C. A key achievement of the Working Group during implementation of the first strategic plan between 2016 and 2021 was annual prioritization and tier ranking of invasive species.

#### Partners

Finger Lakes PRISM identifies three partnership levels: General Participant, Partner, and Steering Committee member. Each requires an interested participant sign a pledge at varying levels to help manage invasive species. The database of partners provides an excellent source of potential volunteers and project partners to engage in the effective management of IS in the Finger Lakes region.

### Strategic Plan 2025 Priorities

Strategic Plan 2025 presents five goals (a result of combining some of the original seven goals with significant overlap), a refinement of objectives including the addition of measurable components where possible, a confirmation of strategies, and an identification of key metrics to track progress and guide future action.

### Goals, Objectives, and Strategies

### Overview

Goal 1: Prevent the introduction and spread of IS to new areas within the region through targeted prevention efforts for vectors and pathways of transmission.

*Outcome: New invasions to the region are prevented to the greatest extent practicable.* 

Goal 2. Implement early detection and rapid response measures to identify new IS to the area and respond to mitigate the effects.

*Outcome: Priority conservation targets are protected from new IS infestations.* 

Goal 3: Build partnerships and networks that leverage effective public education efforts and facilitate the sharing of information, resources, and expertise.

Outcome: Finger Lakes PRISM is the regional leader in IS management facilitating coordination of active partners, effective public education, and information networks.

Goal 4: Control invasions through eradication, containment, suppression, and restoration targeting high priority conservation areas.

*Outcome: The occurrence and impact of highly IS are reduced in priority conservation areas.* 

Goal 5: Secure funding and legislative support from federal, state, and local governments.

*Outcome: Adequate funding and consistent support ensures effective management of IS across the Region.* 



# Goal 1. Prevention

Prevent the introduction and spread of IS to new areas within the region through targeted prevention efforts for vectors and pathways of transmission.

Finger Lakes PRISM recognizes prevention as the most important way to reduce cost and ecological and human health impacts from IS. Prevention includes stopping the spread of new IS to the region and preventing the continued spread of existing IS.

<u>Objective 1.1</u>: Ensure communities can access information about new IS, high priority areas, and IS Prevention Zones (PZ) and can take action that helps prevent IS spread.

<u>Objective 1.2</u>: Share resources and information regarding prevention management and control methods for priority species.

### **KEY STRATEGIES**

- 1. Identify and map high priority areas and target outreach for at least one IS Prevention Zone per year.
- 2. Provide direct outreach and education about new IS to communities and develop planning tools for municipal use.
- 3. Provide 3 outreach programs per year to boaters/anglers, hikers, and other human-induced pathways of introduction.
- 4. Provide 3 training workshops per year for new IS identification and prevention.
- 5. Maintain existing volunteer monitoring programs and develop 2 new volunteer program partners each year that effectively share surveillance and early detection ED data.
- 6. Serve as a source for current, accurate information about the prevention of IS with the potential for great economic, health, and ecosystem harm.
- 7. Maintain platform for sharing surveillance and ED data.
- 8. Maintain easy to use ID tool for public use.
- 9. Monitor, research, and communicate risks of climate change and spread of IS and support IS management that mitigate risks.

# OUTCOME: New invasions to the region are prevented to the greatest extent practicable.



### METRICS/OUTPUTS:

 Current list/info for new species
 # of communities engaged
 # of active monitoring programs
 # of prevention training workshops
 # of municipal updates to comp plans/zoning for IS management.



# Goal 2. Early Detection/Rapid Response

Implement early detection and rapid response measures to identify new IS to the area and respond to mitigate the effects.

Early detection and rapid response (ED/RR) are critical to controlling the spread of IS and managing impacts. Like prevention, ED requires vigilance and monitoring of key resource areas for priority invasives. A protocol for ED/RR and significant coordination and resources are required.

<u>Objective 2.1</u>: Maintain and use an effective ED (early detection) and RR (rapid response) process.

<u>Objective 2.2:</u> Continuously monitor priority areas for highly invasive species near the region and species considered early detection.

<u>Objective 2.3</u>: Ensure communities can access information about priority ED species, the likelihood of invasion, and the pathways of transmission.

### **KEY STRATEGIES**

- 1. Maintain protocol for ID, reporting, and confirming new IS.
- 2. Maintain current distribution of known priority IS and update survey needs annually.
- 3. Maintain existing volunteer monitors for priority species and add 10 volunteers (focus on students and interns) each year.
- 4. Provide 3 training workshops per year for ED species and RR.
- 5. Designate ED/RR teams for 5 key priority conservation areas.
- 6. Update plans, methods, and costs for ED/RR efforts.
- 7. Utilize communication networks to advertise new infestations of ED species.

OUTCOME: Priority conservation targets are protected from new IS infestations.



### METRICS/OUTPUTS:

Protocol for ED/RR
 Map of priority IS and survey needs
 # of ED volunteers
 # of areas with ED/RR teams
 # of ED/RR training workshops



# Goal 3. Partnerships, Education, Information

Build partnerships and networks that leverage effective public education efforts and facilitate the sharing of information, resources, and expertise.

Partnerships are the foundation of Finger Lakes PRISM. Partners and communication networks are key to effective education, outreach and advancement in the prevention and management of IS.

<u>Objective 3.1</u>: Ensure partners reflect the cultural and ethnic diversity of the Region and actively represent all key stakeholders.

<u>Objective 3.2</u>: Ensure the public is aware of Finger Lakes PRISM and is educated on how to prevent IS introduction and spread.

<u>Objective 3.3:</u> Work with partners to share information, data, materials, and combine strengths to manage IS effectively.

### **KEY STRATEGIES**

- 1. Maintain existing partners; recruit 2 new active partners annually.
- 2. Maintain brand, website, listserv, social media as central sources of information, tools, network, and to recognize partners.
- 3. Conduct one annual partnership workshop to ensure consistency in knowledge, develop online reporting form, leverage resources.
- 4. Annually attend 15 partner meetings or events, include Environmental Justice Communities/urban areas.
- 5. Ensure press coverage of at least 4 IS issues or events each year.
- 6. Utilize and promote existing, related public education campaigns, identifying and utilizing new related campaigns each year.
- 7. Maintain existing educational efforts; identify and fill gaps by creating one new tool each year (e.g., Zoom Webinar Series). Add measures to all programs/tools to evaluate effectiveness.
- 8. Work with academia to annually attend 10 significant community events (100+ people) to promote awareness in the general public.
- 9. Support research through citizen science, maintain scientific database and protocol for prioritizing species and locations.

OUTCOME: Finger Lakes PRISM is the regional leader in IS management facilitating active partners, effective public education, and information networks.



### METRICS/OUTPUTS:

# of committed, active partners
 # of existing campaigns used
 # of effective tools/programs
 # of community events attended
 # of partner events attended
 # website visits and length of stay
 # social media followers
 # of workshops/participants
 # press releases published



# Goal 4. Control and Restoration

Control invasions through eradication, containment, suppression, and restoration targeting high priority conservation areas.

Effective control measures have been identified for many IS. More are being developed. These measures, followed by restoration, can effectively manage some IS impacts. Resource constraints are a significant challenge. Targeting high priority conservation areas is key.

<u>Objective 4.1</u>: Target control measures to stop IS from spreading along predictable pathways to priority conservation areas.

<u>Objective 4.2</u>: Identify isolated outbreaks of priority IS and ED species and eradicate or restrict from spreading.

<u>Objective 4.3:</u> Partner to research, develop, and implement new/improved control measures and restoration techniques; educate and empower targeted landowners and stakeholders.

### **KEY STRATEGIES**

- 1. Develop annual reports and work plans to guide control and restoration efforts and to identify priority areas/projects including likely pathways of transmission.
- 2. Identify site/species specific best management practices (BMPs) and develop management plans.
- 3. Utilize control and restoration BMPs proven effective; evaluate new or unevaluated measures and techniques.
- 4. Work with active partners to develop/improve control measures and restoration techniques; evaluate.
- 5. Maintain/update tools and resources available to partners and public to guide and facilitate IS control and restoration.
- 6. Prioritize resources and subcontracts toward high impact IS and demonstration projects including isolated outbreaks.
- 7. Coordinate control efforts with active partners.

OUTCOME: The occurrence and impact of highly IS are reduced in priority conservation areas.



### METRICS/OUTPUTS:

- Annual reports and work plan
   # of current management plans
   # of control projects/reports
   # acres treated
   # acres restored
   Distribution of IS
- 7.# of priority areas without IS



# Goal 5. Funding and Support

Secure funding and legislative support from federal, state, and local governments.

Management of IS is complex and expensive. A major challenge for Finger Lakes PRISM is to secure the funding and support necessary accomplish our mission and achieve our vision. Strategies to garner funding and support must be targeted, dynamic, and consistent.

<u>Objective 5.1</u>: Maintain and grow diverse funding streams to support all Finger Lakes PRISM priorities.

<u>Objective 5.2</u>: Maintain, develop, and strengthen relationships with elected officials and governmental entities at local, state, and federal levels.

### **KEY STRATEGIES**

- Communicate regularly and facilitate partner communication with entities that have regulatory, enforcement, and funding influence (government staff, elected officials) about IS management needs, PRISM events, education/training opportunities and tools.
- 2. Host 2 educational events for agencies each year.
- 3. Review and comment on IS-related regulations and policies.
- 4. Maintain/grow partnership with highway departments and soil and water conservation districts, adding 2 new partners from these categories to active partner list each year.
- 5. Maintain current communication with stakeholders about ISrelated regulations and legislation; publish 1 regulations/legislative update each year.
- 6. Work with partners to maintain/update sources of funding; share with communities/stakeholders.
- 7. Identify and develop 5 shovel ready projects each year.
- 8. Develop 2 funding applications annually to secure \$250,000 by 2025.
- 9. Conduct a fiscal analysis and develop an annual operating budget.

OUTCOME: Adequate funding and consistent support ensures effective IS management across Region.



### METRICS/OUTPUTS:

 Annual update to governments and elected officials about needs
 Annual IS regs/legislation update
 # of highway dept. partners
 # shovel ready projects
 \$ from grants



# DATABASE

A current database maintained to support achieving the goals listed above is critical to the success of Finger Lakes PRISM. This database includes the following items:

### PARTNERS/PEOPLE

- Steering Committee members
- Working Group/Subgroup members
- Active partners and volunteers
- Management teams
- Invasive species experts
- Inspection areas



### PLANS/REPORTS

- Annual work plans and reports
- Species management plans
- Research and BMP reports
- Rapid response strategies
- Restoration techniques
- Legislation/regulations/policies





### **SPECIES/MAPS**

- Regional invasive species
- Highly invasive species
- Early detection (ED) species
- Tiered species lists
- Priority conservation areas/targets
- Prevention zones/transmission pathways
- Control and restoration projects



### EDUCATION/FUNDING

- Identification guides
- Educational and training tools
- Website/social media platforms
- Existing significant community events
- Funding opportunities (grants list)
- Fundraising techniques/tools
- Marketing materials

### Implementation

Implementation is the most important part of any strategic plan. Table 1 provides a simple framework to guide actions (strategies) under each goal. As the plan is implemented it is recommended that accomplishments are measured, reported, and *celebrated* annually.



State Senator, Cathy Young, along with partners from the Conesus Lake Associate, Cornell Cooperative Extension of Livingston County, and Livingston County Planning cut the rope on the new watercraft decontamination station on Conesus Lake.

### Reporting

A one-page Finger Lakes PRISM introduction will be developed in Year One of Strategic Plan 2025. This one-pager should be attractive, engaging, and concise identifying the vision, mission, purpose, and structure of Finger Lakes PRISM. This document will be used as a hand-out and in presentations and workshops. It will also be included in annual reports, work plans and funding proposals.

Annual reports and work plans will be in alignment with Strategic Plan 2025 goals, strategies, and the implementation table. The Annual Report will be streamlined to 3-5 pages and consist of a letter from the Coordinator, the one-page introduction to Finger Lakes PRISM, and an Executive Dashboard visually reporting on key metrics (see below). A simple, online survey will be developed in Year One for active partners to enter their relevant data on key metrics in advance of development of the annual report and Executive Dashboard. Attachments to the Annual Report will include species specific information (a one-page data/photo dashboard for each priority species that can be easily updated each year is recommended) and other program and project details for those that would like additional detail beyond the 3-5 page report. Streamlining annual reports and work plans in this way will create a consistent, articulate, and high-quality snapshot of Finger Lakes PRISM activities and advancement of goals. It will also become a more efficient process that will shift efforts from administrative to operations.

### **Evaluation**

As strategies are implemented over the next five years it is critical to track accomplishments regularly. Utilizing key metrics, online reporting by partners, and reporting in a dashboard format is an effective and efficient way to track and celebrate progress. Based on planning workshops and working closely with Finger Lakes PRISM staff, the following 12 key metrics for Strategic Plan 2025 have been identified. A sample Executive Dashboard with some of these key metrics is provided in Appendix E. Dashboard spreadsheets will be developed in Year One.





#### **Key Metrics**

#### Number of:

- 13. Community members in presentations, workshops, trainings
- 14. Partners pledged
- 15. Highway departments trained and engaged as partners
- 16. Website visits with length of stay > 5 minutes
- 17. Social media followers (listserv, Facebook, Instagram, Twitter)
- 18. Priority conservation areas with designated ED/RR Teams
- 19. Acres or miles surveyed
- 20. Acres treated
- 21. Acres restored
- 22. Priority IS early detections/intercepted
- 23. Shovel ready projects
- 24. Dollars secured and spent on IS management

### Adaptive Management

Evaluation facilitates adaptive management. It is important to modify and adapt when chosen metrics reveal that the selected strategies are ineffective. Strategies can be modified each year to ensure five- year goals are achieved.

# IMPLEMENTATION TABLE

An implementation table and dashboard are key to successfully achieving strategic plan goals, measuring, and reporting progress, and adapting to change.

	Goal 1 – Prevention Objectives: 1.1 Ensure communities can access information about new IS, high priority areas, and IS Prevention Zones (PZ) and can take action that helps prevent IS spread. 1.2 Share resources and information regarding prevention management and control methods for priority species.		Years 1-2	Years 3-5	Progression/ Metrics by 2025	NOTES
1	Identify and map high priority areas and target outreach for at least one IS Prevention Zone per year.	Х	2	3	5	
2	Provide direct outreach and education about new IS to communities and develop planning tools for municipal use.	Х				
3	Provide 3 outreach programs per year to boaters/anglers, hikers, and other human-induced pathways of introduction.	Х	6	9	15	
4	Provide 3 training workshops per year for new IS identification and prevention.	Х	6	9	15	
5	Maintain existing volunteer monitoring programs and develop 2 new volunteer programs each year that effectively share surveillance and early detection ED data.	х	4	6	10	Could also use # volunteers now and project to 2025
6	Serve as a source for current, accurate information about the prevention of IS with the potential for great economic, health, and ecosystem harm.	х				
7	Maintain platform for sharing surveillance and ED data.	Х				
8	Maintain easy to use ID tool for public use.	Х				
9	Monitor, research, communicate risks of climate change and spread of IS.		Х			

<ul> <li>Goal 2 – Early Detection/Rapid Response</li> <li>Objectives:</li> <li>2.1 Maintain and use an effective ED (early detection) and RR (rapid response) process.</li> <li>2.2 Continuously monitor priority areas for highly invasive species near the region and species considered early detection.</li> <li>2.3 Ensure communities can access information about priority ED species, the likelihood of invasion, and the pathways of transmission.</li> </ul>			Years 1-2	Years 3-5	Progression/ Metrics by 2025	Lead/Tools/Resources
1	Maintain protocol for ID, reporting, and confirming new IS.	Х				
2	Maintain current distribution of known priority IS and update survey needs annually.	Х				
3	Maintain existing volunteer monitors for priority species and add 10 volunteers (focus on students and interns) each year.	х	20	30	50 New Volunteers	
4	Provide 3 training workshops per year for ED species and RR.	Х				
5	Designate ED/RR teams for 5 key priority conservation areas.	Х	2	3	5 Teams	
6	Update plans, methods, and costs for ED/RR efforts.		Х			
7	Utilize communication networks to advertise new infestations of ED species.	Х				

	<ul> <li>al 3 – Partnerships, Education, Information ectives:</li> <li>3.1 Ensure partners reflect cultural/ethnic diversity of the Region and actively represent all key stakeholders.</li> <li>3.2 Ensure the public is aware of Finger Lakes PRISM and is educated on how to prevent IS introduction and spread.</li> <li>3.3. Work with partners to share information, data, materials, and combine strengths to manage IS effectively.</li> </ul>	Annually	Years 1-2	Years 3-5	Progression/ Metrics by 2025	Lead/Tools/Resources
1	Maintain existing partners; recruit 2 new active partners annually.	Х	4	10	10 New Partners	Could also use # partners now and project to 2025
2	Maintain brand, website, listserv, social media as central sources of information, tools, network, and to recognize partners.	Х				
3	Conduct one annual partnership workshop to ensure consistency in knowledge, develop online reporting form, and leverage resources.	Х	2	3	5 partner workshops	
4	Annually attend 15 partner meetings or events including Environ. Justice Communities/urban areas.	Х	30	45	75 Events	
5	Ensure press coverage of at least 4 IS issues or events each year.	Х	8	12	20 press releases	
6	Utilize and promote existing, related public education campaigns, identifying, and utilizing new related campaigns each year.	Х				Could also use # related campaigns now and project to 2025
7	Maintain existing educational efforts; identify and fill gaps by creating one new tool each year (e.g., Zoom Webinar Series). Add measures to all programs/tools to evaluate effectiveness.	х	2	3	5 new tools or efforts	
8	Work with academia to annually attend 10 significant community events (100+ people) to promote in the general public.	Х	20	30	50 significant events	
9	Support research through citizen science, maintain scientific database and protocol for prioritizing species and locations.	Х		Х		

	<ul> <li>Goal 4 – Control and Restoration</li> <li>Objectives: <ul> <li>4.1 Target control measures to stop IS from spreading along predictable pathways to priority conservation areas.</li> <li>4.2 Identify isolated outbreaks of priority IS and ED species and eradicate or restrict form spreading.</li> <li>4.3 Partner to research, develop, and implement new/improved control measures and restoration techniques; educate and empower targeted landowners and stakeholders.</li> </ul> </li> </ul>		Years 1-2	Years 3-5	Progression/ Metrics by 2025	Lead/Tools/Resources
1	Develop annual reports and work plans to guide control and restoration efforts and to identify priority areas/projects including likely pathways of transmission.	Х			5	
2	Identify site/species specific best management practices (BMPs) and develop 1 new management plan per year		2	3	5 new plans	Can we get more specific?
3	Utilize control and restoration BMPs proven effective; evaluate new or unevaluated measures and techniques.			Х		
4	Work with active partners to develop/improve control measures and restoration techniques; evaluate.		Х			
5	Maintain/update tools and resources available to partners and public to guide and facilitate IS control and restoration.	Х				
6	Prioritize resources and subcontracts toward high impact IS and demonstration projects including isolated outbreaks.	Х				
7	Coordinate control efforts with active partners.	Х				

	<ul> <li>Goal 5 – Funding and Support</li> <li>Objectives:</li> <li>5.1 Maintain and grow diverse funding streams to support all Finger Lakes PRISM priorities.</li> <li>5.2 Maintain, develop, and strengthen relationships with elected officials and governmental entities at local, state, and federal levels.</li> </ul>		Years 1-2	Years 3-5	Progression/ Metrics by 2025	Lead/Tools/Resources
1	Communicate regularly and facilitate partner communication with entities that have regulatory, enforcement, and funding influence (government staff, elected officials) about IS management needs, PRISM events, education/training opportunities and tools.	х				
2	Host 2 educational events for agencies each year.	Х	4	6	10 agency events	
3	Review and comment on IS-related regulations and policies.	Х				
4	Maintain/grow partnership with highway departments and SWCD adding 2 new highway departments/SWCD to active partner list each year.		4	6	10 highway/SWCD partners	
5	Maintain current communication with stakeholders about IS-related regulations and legislation; publish 1 regulations/legislative update each year.	х	2	3	5 regulatory updates	
6	Work with partners to maintain/update sources of funding; share with communities /stakeholders.		Х			
7	Identify and develop 5 shovel ready projects each year.	Х	10	15	25 shovel ready designs	
8	Develop 2 funding applications annually to secure \$250,000 in program funds by 2025	Х	4 \$100K	6 \$150K	10 applications \$250,000	
9	Conduct a fiscal analysis and develop an annual operating budget.		Х			

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U.S. Census Bureau. 2019b. American Community Survey, 2019 American Community Survey 5-Year Estimates, Table DP03. Retrieved February 22, 2021.

U.S. Fish and Wildlife Service. 'The Cost of Invasive Species.' January 2012. Retrieved March 10, 2016. Available here: https://www.fws.gov/verobeach/PythonPDF/CostofInvasivesFactSheet.pdf.

U.S. Department of the Interior Draft Invasive Species Strategic Plan July 29, 2020: There are several current references and data provided in the introduction to the DOI Plan that could be used in the Update. The strategic framework provided is largely reflected in the current Finger Lakes PRISM Strategic Plan. There are a few "Crosscutting Principals" that could have greater emphasis on the Update and specific strategies that could be considered for adaptation to the Finger Lakes PRISM program.

<u>Climate change models, predictions, papers, and news articles:</u> Current data and projections for climate change and the influence it will have on invasive species in the Finger Lakes. A few sources of information and perspectives published since the current Strategic Plan include:

i. An Assessment of the Impacts of Climate Change on the Great Lakes 2019: <u>http://elpc.org/wp-content/uploads/2019/03/Great-Lakes-Climate-Change-Report.pdf</u>

- ii. How a Changing Climate Will Change Life in the Finger Lakes. December 21, 2017: https://www.ithaca.com/news/how-a-changing-climate-will-change-life-in-the-fingerlakes/article\_3328689e-e5a6-11e7-9278-03172ffc62fc.html
- iii. Climate Change and the Finger Lakes. September 21, 2020: http://ccetompkins.org/energy/climate-week-blog/climate-change-the-finger-lakes
- iv. The Ripple Effect Radio Project Part 1: Invasive Species Harmful Algal Blooms [AUDIO] By Park Scholars | January 15, 2020. <u>https://www.wrfi.org/2020/01/15/the-ripple-effect-radio-project-audio/</u>
- v. The Ripple Effect Radio Project Part 2: Invasive Species Hydrilla [AUDIO]
- vi. By Park Scholars | January 21, 2020. <u>https://www.wrfi.org/2020/01/21/the-ripple-effect-radio-project-part-2-hydrilla-audio/</u>
- vii. Genesee/Finger Lakes Severe Weather and Climate Change Impacts. <u>https://seagrant.sunysb.edu/coastalcomm/presentations/SevereWeatherClimateChangeImpa</u> <u>cts-Levan-1117.pdf</u>

# Appendix A Tiered Invasive Species List

### Invasive Species Tiers

Standardized species lists for each PRISM

				tion / Cost of Control PRISM plus Buffer)				
		None in PRISM	Low (Eradication/ Full containment may be feasible)	<b>Medium</b> (Strategic management to contain infestations and slow spread in PRISM)	<b>High</b> (Established/widespread in PRISM; only strategic localized management)			
urrent and future)	Very High or High	Highest level of early detection survey efforts. Should conduct delineation surveys and assign to appropriate Tier if detected.		<b>TIER 3</b> <i>Containment</i> Target strategic management to slow the spread, as likely too widespread for eradication, but many surrounding regions could be at risk if left unattended. For plants, use the IPMDAT. Possible eradication candidate only if adequate resources and effective control methods available.	<b>TIER 4</b> <i>Local Control</i> Eradication from PRISM not feasible; focus on localized management over time to contain, exclude, or suppress to protect high-priority resources like rare species or recreation assets. Be strategic when deciding if / where to control.			
Impact (current	Medium	Evaluate (Medium Impact) Further evaluate impacts and PRISM resources to see if the species should be assigned to one of the other lists. If this species could feasibly become high impact with climatic or other environmental changes, consider moving to the appropriate High Impact row based on abundance. If too little is known, consider moving to "Monitor".						
<u></u>	Unknown Buffer: An are	Image: Non intercent inte						

Impact: Use the PRISM-specific invasiveness rankings if available, or use NYS ranks (see nyis.info for existing ranks). For species that are not ranked yet, or PRISM-specific adjustments of state ranks are deemed necessary, use expert opinion and document justification. Low-impact species not included since cannot justify spending resources to control these.

Abundance: This is left as a qualitative metric, since assigning standardized values to categories is not feasible due to the diversity of species dispersal strategies and data gaps.

This ranking system takes into account populations that have escaped into natural areas, but not intentionally (and legally) distributed individuals. For example, a landscape planting would not be counted.

2	0	2	0

Tier Ra	<mark>n</mark> Terrest	Scientific Name	Common Name	NYS Rank	Score	NYS Profile
1	A	Aldrovanda vesiculosa	Waterwheel	NA	NA	
1	Т	Anoplophora glabripennis	Asian Longhorn Beetle	Н	72	NYS PDF
1	A	Channa argus	Northern Snakehead	Н	77	NYS PDF
1	Т	Cryptococcus fagisuga	Beech Scale	Н	80	NYS PDF
1	A	Egeria densa	Brazilian waterweed	Н	74.71	NYS PDF
1	A	Gambusia affinis	Western Mosquitofish	VH	80.43	NYS PDF
1	A	Gambusia holbrooki	Eastern Mosquitofish	VH	81.72	NYS PDF
1	A	Hypophthalmichthys molitrix	Silver Carp	Н	79	NYS PDF
1	A	Limnoperna fortunei	Golden Mussel			
1	A	Ludwigia peploides (Kunth) Raver	Floating primrose-willow	VH	89.36	NYS PDF
1	Т	Myocastor coypus	Nutria	VH	81	NYS PDF
1	A	Myriophyllum aquaticum	Parrot-feather, Brazilian milfoil	Н	76.67	NYS PDF
1	A	Nymphoides peltata	Yellow Floating Heart	Н	74.47	NYS PDF
1	A	Potamopyrgus antipodarum	New Zealand Mud Snail	Н	79	NYS PDF
1	Т	Pueraria montana	Kudzu	VH	84.44	NYS PDF
1	A	Stratiotes aloides	Water Soldier			NYS PDF
1	A	Tinca tinca	Tench	Н	77	NYS PDF
2	Т	Ampelopsis glandulosa var. brevij	Porcelain Berry	Н	71.26	NYS PDF
2	Т	Cardamine impatiens	Narrowleaf Bittercress	Н	76.32	NYS PDF
2	Т	Euphorbia esula	Leafy Spurge	Н	75.9	NYS PDF
2	A	Hydrocharis morsus-ranae	European Frogbit	VH	85.57	NYS PDF
2	A	Misgurnus anguillicaudatus	Oriental Weatherfish	VH	80.25	NYS PDF
3	Т	Adelges tsugae	Hemlock woolly adelgid	н	76	
		Bellamya chinensis	, ,			
3	A	(Cipangopaludina chinensis)	Chinese Mystery Snail	VH	83	NYS PDF
		Bellamya japonica				
3	A	(Cipangopaludina japonica)	Japanese Mystery Snail	М	62.5	NYS PDF
3	A	Bithynia tentaculata	Faucet Snail	Н	71.28	NYS PDF
3	Т	Celastrus orbiculatus	Oriental Bittersweet	VH	86.67	NYS PDF
3	A	Cercopagis pengoi	Fishhook Water Flea	VH	84.04	NYS PDF
3	Т	Cynanchum Iouiseae	Black Swallow-wort	VH	89.69	NYS PDF
3	Т	Cynanchum rossicum	Pale Swallow-wort	VH	87.63	NYS PDF
3	A	Hemimysis anomala	Bloody Red Shrimp	Н	70.23	NYS PDF
3	A	Hydrilla verticillata	Hydrilla	VH	91.4	NYS PDF
3	A	Myriophyllum heterophyllum	Broadleaf Water-milfoil	VH	93.62	NYS PDF
3	А	Neogobius melanostomus	Round Goby	Н	78.57	NYS PDF
3	A	Nitellopsis obtusa	Starry Stonewort			
3	A	Orconecte rusticus	Rusty Crayfish	Н	78	NYS PDF
3	A	Procambarus clarkii	Red Swamp Crayfish			
3	Т	Ranunculus ficaria	Lesser Celandine, Fig Buttercup	VH	85.56	NYS PDF

Tier Ran	Terrest	Scientific Name	Common Name	NYS Rank	Score	NYS Profile
3	А	Trapa natans	Water Chestnut	VH	82	NYS PDF
4	Т	Acer platanoides	Norway Maple	VH	82	NYS PDF
4	Т	Agrilus planipennis	Emerald Ash Borer	VH	96	NYS PDF
4	Т	Ailanthus altissima	Tree of heaven	М	68	NYS PDF
4	Т	Alliaria petiolata	Garlic Mustard	VH	84	NYS PDF
4	А	Alosa pseudoharengus	Alewife	М	56.7	NYS PDF
4	А	Carassius auratus	Gold Fish	VH	81.63	NYS PDF
4	А	Corbicula fluminea	Asian Clam	Н	73.68	NYS PDF
4	A/T	Cygnus olor	Mute Swan	Н	76	NYS PDF
4	A	Cyprinus carpio	Common Carp	VH	90.43	NYS PDF
4	А	Dreissena polymorpha	Zebra Mussel	VH	83	NYS PDF
4	А	Dreissena rostriformis bugensis	Quagga Mussel	VH	88	NYS PDF
4	А	Gymnocephalus cernuus	Ruffe	М	59.57	NYS PDF
4	Т	Iris pseudacorus	Yellow Iris	Н	76	NYS PDF
4	Т	Lythrum salicaria	Purple Loosestrife	VH	91	NYS PDF
4	А	Osmerus mordax	Rainbow Smelt			
4	А	Potamogeton crispus	Curly Leaved Pondweed	Н	79.79	NYS PDF
4	Т	Pyrus calleryana	Callery Pear	М	65.06	NYS PDF
4	Т	Rosa multiflora	Multiflora Rose	VH	89	NYS PDF
4	А	Scardinius erythrophthalmus	Rudd	М	54	NYS PDF
5	А	Eichhornia crassipes	(Common) Water Hyacinth	NA	NA	NYS PDF
5	А	Pistia stratiotes	Water Lettuce			NYS PDF
NA	А	Eriocheir sinensis	Chinese Mitten Crab	М	62	NYS PDF
NA	А	Hemigrapsus sanguineus	Asian Shore Crab	VH	88.75	NYS PDF
NA	А	Monopterus albus	Asian Swamp Eel	М	53	NYS PDF
NA	А	Rapana venosa	Veined Rapa Whelk	Н	72	NYS PDF
NA	А	Styela plicata	Asian Sea Squirt	М	65	NYS PDF
		Aćunniopunux siskoldiarus Makino)				
	Т	Acer ginnala	Amur maple	М	66.22	NYS PDF
	Т	Acer palmatum Thunb.	Japanese maple	М	50	NYS PDF
	Т	Acer pseudoplatanus	Sycamore Maple	Н	71.11	NYS PDF
	А	Achatina achatina	Giant Ghana Snail	Insig.	31.25	NYS PDF
	Т	Achatina fulica (Lissachatina fulic	Giant African Land Snail	L	40	NYS PDF
	Т	Achyranthes japonica	Japanese Chaff Flower	Н	71.08	NYS PDF
	Т	Aegopodium podagraria Agrostis giguntea Kotti	Bishop's goutweed	М	63.75	NYS PDF
	Т		Redtop, black bentgrass	М	67.5	NYS PDF
	Т	Akebia quinata	Chocolate vine	М	52.38	NYS PDF
	Т	Albizia julibrissin Durazz.	Silktree, mimosa	L	40	NYS PDF
	Т	Alnus glutinosa	European alder, black alder	М	64.44	NYS PDF
	A/T	Alopochen aegyptiacus	Egyptian Goose	М	52	NYS PDF
	T	Amylostereum areolatum	Sirex Wasp Fungus	Н	75	NYS PDF
	Т	Amynthas spp.	Asian Earthworms	Н	71	NYS PDF

Tier Ran	Terrest	Scientific Name	Common Name	NYS Rank	Score	NYS Profile
	Т	Anthriscus sylvestris (L.) Hoffm.	Wild chervil	н	78.75	NYS PDF
	Т	Apis mellifera scutellata x A. mell	Africanized Honey Bee	М	56	NYS PDF
	Т	Aralia elata	Japanese Angelica Tree	VH	80.46	NYS PDF
	A	Archachatina marginata	Giant West African Snail	Unkn.	15.15	NYS PDF
	Т	Artemesia vulgaris L.	Common wormwood, Mugwort	Н	79.31	NYS PDF
	Т	Arthraxon hispidus Arunamana gigantea (waiter)	Small carpgrass	Н	75.68	NYS PDF
	Т		Bamboo, canebreak, giant cane	NA	59.74	NYS PDF
	Т	<del>Berberlis aludioergn (mci. в.</del>	Japanese barberry	VH	91	NYS PDF
	Т	Berberis vulgaris	Common barberry	М	68.75	NYS PDF
	Т	Brachypoulani subations (Hude) D. Beauw	Slender falsebrome	VH	86.6	NYS PDF
	Т	Bromus tectorum L.	Cheat grass, downy brome	М	50	NYS PDF
	Т	<i>Buddleja davidii</i> Franch.	Orange-eye butterfly bush	L	45.45	NYS PDF
	Т	Butomus umbellatus L.	flowering-rush	М	63.75	NYS PDF
	А	Bythotrephes cederstroemi (B. lo	Spiny Water Flea	VH	82.42	NYS PDF
	А	Ann	Carolina fanwort	Н	72.34	NYS PDF
	A/T	Cairina moschata	Muscovy Duck	М	59	NYS PDF
	А	Callitriche stagnalis Scop.	Pond water-starwort	L	48.75	NYS PDF
	Т	Caragana arborescens Lam.	Siberian peashrub	U		NYS PDF
	А	Carcinus maenas	European Green Crab	М	63	NYS PDF
	Т		Japanese sedge/largehead	М	68.6	NYS PDF
	А	Caulerpa taxifolia	Killer alga	NA		NYS PDF
	Т	<del>centialed<sup>in</sup>e Chiere C</del>	Black knapweed, black star-	М	62.34	NYS PDF
	Т	ctentudied	Spotted knapweed, spotted	Н	78.89	NYS PDF
	A	Channa marulius	Bullseye Snakehead	М	57	NYS PDF
	A	Channa micropeltes	Giant Snakehead	L	45	NYS PDF
	Т	cirsiam arvense (E.) scop. (c. citsiampáiastre (E.) scop	Creeping thistle, Californian	Н	71	NYS PDF
	Т	Carduus palustris	Marsh thistle, European swamp	М	67.9	NYS PDF
	A	Clarias batrachus	Walking Catfish	М	51.25	NYS PDF
	Т	Clematis terniflora	Japanese Virgin's Bower	Н	72.6	NYS PDF
	Т	uaria )	Crownvetch	М	62.07	NYS PDF
	А	Crassostrea ariakensis	Suminoe Oyster	Н	76.25	NYS PDF
	А	Ctenopharyngodon idella	Grass Carp	fish	68.82	NYS PDF
	Т	Cyperus difformis L.	Variable flatsedge	М	51.95	NYS PDF
	А	Cyprinella lutrensis	Red Shiner	М	56	NYS PDF
	А	Daphnia lumholtzi	Water Flea	М	54	NYS PDF
	Т	Datura stramonium L.	Jimsonweed, common thorn	М	50	NYS PDF
	А	Didemnum vexillum	Carpet Tunicate	М	68.89	NYS PDF
	Т	<i>Digitalis lanata</i> Ehrh.	Grecian foxglove	L	36.78	NYS PDF
	Т	Digitalis purpurea L	Purple foxglove	М	53.33	NYS PDF
	Т	annacitifalia I micanalical	Chinese yam, Cinnamon vine	Н	77.5	NYS PDF
	Т	Dipsacus laciniatus L.	Cut-leaf teasel	Н	75.56	NYS PDF
	Т	Elaeagnus angustifolia	Russian olive	Μ	68	NYS PDF

Tier Ran	Terrest	Scientific Name	Common Name	NYS Rank	Score	NYS Profile
	Т	Elaeagnus umbellata	Autumn Olive	VH	94	NYS PDF
	Т		Five-leaved Aralia	NA		NYS PDF
	Т	Epilobium hirsutum L.	Great hairy willow-herb, codlins	М	62.5	NYS PDF
	Т	Eragrostis curvula	Weeping lovegrass	М	57.14	NYS PDF
	Т	Euonymus alatus	Winged burning bush, winged	VH	81.25	NYS PDF
	Т	Euonymus europaeus L.	European spindletree	М	60	NYS PDF
	Т	Euonymus fortunei	Winter Creeper	Н	77.78	NYS PDF
	Т	Euphorbia cyparissias	Cypress Spurge	Н	75.32	NYS PDF
	Т	Euphorbia lathyris	Caper spurge, moleplant	М	56.98	NYS PDF
	Т	Fallopia baldschuanica	Bukhara fleeceflower, China	М	50.6	NYS PDF
	Т	тапоріа јаропіса (поцг.) оспе.	Japanese knotweed, giant	VH	97.94	NYS PDF
	Т	Festuca filiformis Pourret	Hair fescue	М	60.27	NYS PDF
	Т	Ficaria verna (Ranunculus ficaria)		VH	85.56	NYS PDF
	Т		Smooth Buckthorn	н	72.73	NYS PDF
	T		Slender cottonweed	M	53.25	NYS PDF
	T	Galega officinalis	Professor-weed, common	M	59.72	NYS PDF
	Т		Sweet bedstraw	L	47.78	NYS PDF
	Т	Geomyces destructans	White-nose Syndrome	VH	82.22	NYS PDF
	Т	Geosmithia morbida	Thousand Canker Disease	М	66	NYS PDF
	Т	Glaucium flavum Crantz	Yellow hornpoppy	М	65.75	NYS PDF
	Т	Giossostiginia	Mudmats	L	34.88	NYS PDF
	Т	Glyceria maxima	Reed Manna Grass	н	79.52	NYS PDF
	T	<i>Glyceria maxima</i> (Hartm.) Holb.	Tall glyceria, English	Н	79.52	NYS PDF
	Т	Hedera helix	English ivy	М	66	NYS PDF
	Т	Hemerocallis fulva (L.)	Orange daylily	L	46.25	NYS PDF
	A	Hemigrapsus penicillatus	Grapsid Crab	aquatic ir		NYS PDF
	A	Hemigrapsus takanoi (H. penicilla			50.54	NYS PDF
	T	neručietim	Giant hogweed	Н	72	NYS PDF
	T	Hesperis matronalis	Dame's rocket	M	56.98	NYS PDF
	T	norueum murmum L.	Leporinum barley; Hare barley	NA		NYS PDF
	Т	Humulus japonicus Sieb. & Zucc.	Japanese hops	Н	74.03	NYS PDF
	T	Hypericum perforatum L.	Common St. John's-wort	L	46.75	NYS PDF
	A	Hypophthalmichthys harmandi	Largescale Silver Carp	M	63	NYS PDF
	A	Hypophthalmichthys nobilis	Bighead Carp	М	62	NYS PDF
	A	Ictalurus furcatus	Blue Catfish	fish	38	NYS PDF
	T	llex crenata Thunb.	Japanese holly	L	46.67	NYS PDF
	T		Ornamental jewelweed	M	66.67	NYS PDF
	т	Impatiens glandulifera	Cogongrass, Cogon satin-tail	Н	79	NYS PDF
	Т	kulina scopana (c.) sciirau.	Mexican summer-cypress,	M	68.75	NYS PDF
	T	Lepidium latifolium L.	Broadleaved Pepperweed,	Н	79.38	NYS PDF
	T	Lepus europaeus	European Hare	L	45	NYS PDF
	Т	Lespedeza bicolor Turcz.	Shrub lespedeza, bicolor	M	63.33	NYS PDF
# Finger Lakes PRISM Tiered Species List 2020

Tier Ran	Terrest	Scientific Name	Common Name	NYS Rank	Score	NYS Profile
	Т	Lespedeza cuneata	Chinese Lespedeza	н	74.44	NYS PDF
	Т	Ligustrum amurense Caar.	Amur privet	NA		NYS PDF
	Т	Ligustrum obtasijonum siebolu	Border privet	н	76.67	NYS PDF
	Т	Ligustrum ovalifolium	California privet	L	44.83	NYS PDF
	Т	Ligustrum sinense	Chinese privet	NA		NYS PDF
	Т	Ligustrum vulgare	European privet	М	67.82	NYS PDF
	Т	Lobelia chinensis Lour.	Chinese lobelia	L	36.99	NYS PDF
	Т	Lonicera japonica Thunberg	Japanese Honeysuckle	VH	83.51	NYS PDF
	Т	Lonicera maackii (Rupr.) Maxim.	Amur Honeysuckle	VH	84.44	NYS PDF
	Т	tomcera morrown' Loivioz, L.	Morrow's honeysuckle,	VH	85.54	NYS PDF
	Т	Lonicera tatarica	Tartarian Honeysuckle	VH	85.54	NYS PDF
	Т	Lonicera x bella	Fly Honeysuckle	VH	85.54	NYS PDF
	Т	Lonicera xylosteum	European Fly Honeysuckle	U		NYS PDF
	Т	Lotus corniculatus L.	Bird's-foot trefoil	М	59	NYS PDF
	Т		Uruguayan Primrose-willow	VH	88.3	NYS PDF
	Т	Croutor & Durdot con Ludwigia hexapetala (L. grandiflo	Uruguayan Primrose Willow	VH	88.3	NYS PDF
	Т	Lymantria dispar	Asian and European Gypsy Moth	Н	73	NYS PDF
	Т	Lysimacina cietinoiaes Duby	Goose-neck loosestrife	NA		NYS PDF
	Т	Lysimachia nummularia	Creeping Jenny, moneywort	М	64.29	NYS PDF
	Т	Lysimachia punctata L.	Spotted loosestrife	М	57.14	NYS PDF
	Т	Lysimachia vulgaris	Garden Loosestrif	Н	72.73	NYS PDF
	А	Marsilea quadrifolia	European water-fern	U		NYS PDF
	Т	Microstegium vimineum	Japanese stiltgrass, Eulalia,	VH	85	NYS PDF
	Т	wisculturus	Japanese Silver Grass	NA		NYS PDF
	Т	Miscanthus sinensis Anderss.	Chinese silvergrass, eulalia	Н	77.78	NYS PDF
	Т	Monochamus alternatus	Japanese Pine Sawyer	L	48	NYS PDF
	Т	Morus alba	White mulberry	М	68.67	NYS PDF
	Т	iviuruuminu keisuk (massk.)	Marsh dewflower, wart-	н	78.16	NYS PDF
	Т	Myiopsitta monachus	Monk Parakeet	М	53	NYS PDF
	A	Mylopharyngodon piceus	Black Carp	М	56	NYS PDF
	Т	Myosotis scorpioides L.	True forget-me-not	U		NYS PDF
	A	Myriophyllum heterophyllum x M	Broadleaf Water-milfoil Hybrid			
	A	Myriophyllum spicatum L.	Eurasian water-milfoil	VH	100	NYS PDF
	A	Najas minor All. Nastartium ojjiemaie K. Br. ex	Brittle water nymph	М	64.84	NYS PDF
	A	Ait (Deringe resturtions	Watercress	М	65.75	NYS PDF
	A	Nelumbo nucifera	Sacred lotus	М	64.38	NYS PDF
	Т	Nyctereutes procyonoides	Asian Raccoon Dog	М	57	NYS PDF
	A	Oncorhynchus kisutch	Coho Salmon	fish	46	NYS PDF
	A	Oncorhynchus mykiss	Rainbow Trout	fish	68	NYS PDF
	A	Oncorhynchus tshawytsha	Chinook Salmon	fish	52	NYS PDF
	Т	opinsmenus miterius (L.) Beauv.	Wavyleaf basketgrass, bristle	Н	70.27	NYS PDF
	A	Oreochromis aureus	Blue Tilapia	М	58	NYS PDF

# Finger Lakes PRISM Tiered Species List 2020

Tier Ran	Terrest	Scientific Name	Common Name	NYS Rank	Score	NYS Profile
	A	Oreochromis niloticus	Nile Tilapia	М	57	NYS PDF
	Т	Oryctolagus cuniculus	European Rabbit	М	59	NYS PDF
	Т	Paulownia tomentosa	Princess-tree	М	51.11	NYS PDF
	Т		Creeping smartweed	М	60.27	NYS PDF
	Т	<del>Fërsicunu' Nebuiensis" (ivieisii.) n.</del>	Nepal smartweed	U		NYS PDF
	Т	Persicaria perfoliata	Mile-a-minute weed, mile-a-	VH	91.11	NYS PDF
	А	Petromyzon marinus	Sea Lamprey	М	66.67	NYS PDF
	Т	Phalaris arundinacea	Reed canarygrass	Н	77.78	NYS PDF
	Т	Phasianus colchicus, P. colchicus	Ring-necked Pheasant, Sichuan I	terrestria	51	NYS PDF
	Т	Phellodendron amurense	Amur Cork Tree	Н	74	NYS PDF
	Т	Phleum pratense	Timothy	М	63.75	NYS PDF
	Т	rirugmites austrans ssp.	Common reed	VH	92	NYS PDF
	Т	Phyllostachys aurea	Golden Bamboo	NA	NA	NYS PDF
	Т	Filyilostucitys	Yellow groove bamboo [grove	NA		NYS PDF
	Т	Phytophthora ramorum	Sudden Oak Death	М	54	NYS PDF
	A	Piaractus brachypomus	Red-bellied Pacu	fish	18	NYS PDF
	Т		Crowdipper, green dragon	L	39.73	NYS PDF
	Т	Pinus thunbergii	Japanese black pine	М	58.62	NYS PDF
	Т	Pityophthorus juglandis	Walnut Twig Beetle	М	66	NYS PDF
	Т	Poa bulbosa L.	Bulbous bluegrass	L	48.75	NYS PDF
	Т	Poa compressa L.	Canada bluegrass	М	68.75	NYS PDF
	Т	Poa pratensis L.	Kentucky bluegrass	М	67.78	NYS PDF
	Т	Podarcis sicula	Italian Wall Lizard, Istanbul Lizar	terrestria		NYS PDF
	Т	Populus alba	White poplar	М	55.95	NYS PDF
	A	Proterorhinus semilunaris (P. mar	· · ·	М	54.55	NYS PDF
	Т	Prunus avium L.	Sweet cherry	М	55	NYS PDF
	Т	Prunus cerasus L.	Sour Cherry	М	55	NYS PDF
	Т	Prunus padus L.	European bird cherry	М	51.11	NYS PDF
	Т	rseuuosusu jupomicu (siebolu &	Arrow bamboo	NA	55.17	NYS PDF
	A	Pterois miles	Common Lionfish	М	64	NYS PDF
	A	Pterois volitans	Red Lionfish	М	64	NYS PDF
	T	Ranunculus repens L.	Creeping Butter-cup	M	63.22	NYS PDF
	Т	Reynoutria sachalinensis (Fallopic	· •	VH	97.94	NYS PDF
	Т	Reynoutria x bohemica (Fallopia x		VH	97.94	NYS PDF
	Т	Rhamnus cathartica	Common Buckthorn	VH	81	NYS PDF
	Т	Rhodotypos scandens	Jetbead	М	69.33	NYS PDF
	Т	NODITIÚ ITISPIUU L. (VAL. TELLIIS &	Bristly locust, mossy locust,	L	48.28	NYS PDF
	Т	Robinia pseudoacacia Rohppu ampinola L. Besser	Black Locust	VH	81.11	NYS PDF
	Т		Great yellowcress, water	U		NYS PDF
	T	Rosa rugosa	Rugosa rose, Japanese rose,	M	63.44	NYS PDF
	Т	nubus bijrons vest. ex matt. (n.	Himalayan blackberry	М	56.67	NYS PDF
	т	Rubus laciniatus	Cutleaf Evergreen Blackberry,	M	63.22	NYS PDF

# Finger Lakes PRISM Tiered Species List 2020

Tier Ran	Terrest	Scientific Name	Common Name	NYS Rank	Score	NYS Profile
	Т	Rubus phoenicolasius	Wineberry	VH	85.56	NYS PDF
	Т	Rumex acetosella	Sheep sorrel	М	66.25	NYS PDF
	Т	Salix atrocinerea/cinerea	Large gray willow, European	VH	84.44	NYS PDF
	Т	Salmo trutta	Brown Trout	fish	60	NYS PDF
	А	Salvinia molesta	Water fern	NA		NYS PDF
	A	Sander lucioperca (Stizostedion lu	Zander	Μ	60	NYS PDF
	Т	Saponaria officinalis L.	Bouncing-bet, bouncing betty,	Μ	52.5	NYS PDF
	Т	Letub (C. grundiageous (Cebreb)	Tall Fescue, Kentucky Fescue,	Μ	65	NYS PDF
	Т	Senecio jacobaea L.	Tansy-ragwort	Μ	60	NYS PDF
	Т	Silphium perfoliatum	Cup-plant	H	77.78	NYS PDF
	Т	Sirex noctilio; Amylostereum arec	Sirex Woodwasp; Symbiotic Fun	algae and	75	NYS PDF
	Т	dulcomoro	Trailing nightshade, bittersweet	Μ	50.52	NYS PDF
	Т	Sorbaria sorbifolia (L.) A. Braun	False spiraea	U		NYS PDF
	Т	Spiraea japonica	Japanese spiraea	Μ	62.34	NYS PDF
	Т	Sus scrofa (excluding Sus scrofa d	Eurasian Boar	VH	82	NYS PDF
	Т	L Horo[(_C_gmuronsis_(Pupr)	Japanese tree lilac	U		NYS PDF
	A	Tachypleus gigas, T. tridentatus, (	Asian Horseshoe Crabs	aquatic ir	43.28	NYS PDF
	Т	Tanacetum vulgare L.	Common tansy	Μ	52.38	NYS PDF
	A	Tilapia buttikoferi	Zebra Tilapia	fish	20.93	NYS PDF
	A/T	Trachemys scripta elegans	Red-eared Slider	Μ	60	NYS PDF
	Т	Tussilago farfara L.	Coltsfoot	Μ	57.5	NYS PDF
	Т	Ulmus pumila L.	Siberian elm	Μ	52.5	NYS PDF
	Т	Valeriana officinalis	Common valerian	Μ	62.16	NYS PDF
	Т	benerionsis	Purpletop vervain	NA		NYS PDF
	Т	Veronica beccabunga L.	European speedwell	Μ	61.84	NYS PDF
	Т	Veronica officinalis L.	Common speedwell, gypsy-	Μ	51.95	NYS PDF
	Т	Viburnum dilatatum Thunb.	Linden arrowwood	Μ	57.14	NYS PDF
	Т	Viburnum lantana L.	Wayfaring-tree	Μ	53.75	NYS PDF
	Т	Viburnum opulus L. var. opulus	European cranberry bush,	Μ	67.09	NYS PDF
	Т	Viburnum setigerum	Tea viburnum	L	41.25	NYS PDF
	Т	Viburnum sieboldii	Siebold's arrow-wood,	Μ	62.5	NYS PDF
	Т	Vicia cracca L. S.I.	Bird vetch, cow vetch, winter	Μ	54.44	NYS PDF
	Т	Vinca minor	Common periwinkle	М	57.14	NYS PDF
	Т	Vitex rotundifolia L.F.	Roundleaf chastetree, beach	Н	73	NYS PDF
	Т	Wisteria sinensis/W. floribunda	Chinese wisteria/Japanese	М	56.7	NYS PDF
	А	Xenopus laevis	African Clawed Frog	М	55	NYS PDF

## 6 NYCRR Part 575 Prohibited and Regulated Invasive Species September 10, 2014

## ALGAE AND CYANOBACTERIA

#### **Prohibited:**

*Caulerpa taxifolia*, Killer Green Algae *Didymosphenia geminata*, Didymo *Prymnesium parvum*, Golden Algae

#### **Regulated:**

Cylindrospermopsis raciborskii, Cylindro Grateloupia turuturu, Red Algae

## PLANTS

#### **Prohibited:**

Acer pseudoplatanus, Sycamore Maple Achyranthes japonica, Japanese Chaff Flower Alliaria petiolata, Garlic Mustard Ampelopsis brevipedunculata, Porcelain Berry Anthriscus sylvestris, Wild Chervil Aralia elata, Japanese Angelica Tree Artemisia vulgaris, Mugwort Arthraxon hispidus, Small Carpet Grass Berberis thunbergii, Japanese Barberry Brachypodium sylvaticum, Slender False Brome Cabomba caroliniana, Fanwort Cardamine impatiens. Narrowleaf Bittercress Celastrus orbiculatus, Oriental Bittersweet Centaurea stoebe (C. biebersteinii, C. diffusa, C. maculosa misapplied, C. xpsammogena), Spotted Knapweed Cirsium arvense (C. setosum, C. incanum, Serratula arvensis), Canada Thistle Cynanchum louiseae (C. nigrum, Vincetoxicum nigrum), Black Swallow-wort Cynanchum rossicum (C. medium, Vincetoxicum medium, V. rossicum), Pale Swallow-wort Dioscorea polystachya (D. batatas), Chinese Yam Dipsacus laciniatus, Cut-leaf Teasel Egeria densa, Brazilian Waterweed Elaeagnus umbellata, Autumn Olive Euphorbia cyparissias, Cypress Spurge Euphorbia esula, Leafy Spurge Ficaria verna (Ranunculus ficaria), Lesser Celandine Frangula alnus (Rhamnus frangula), Smooth Buckthorn Glyceria maxima, Reed Manna Grass Heracleum mantegazzianum, Giant Hogweed Humulus japonicus, Japanese Hops Hydrilla verticillata, Hydrilla/ Water Thyme Hydrocharis morsus-ranae, European Frogbit Imperata cylindrica (I. arundinacea, Lagurus cylindricus), Cogon Grass Iris pseudacorus, Yellow Iris

Lepidium latifolium, Broad-leaved Pepper-grass Lespedeza cuneata, Chinese Lespedeza Ligustrum obtusifolium, Border Privet Lonicera japonica, Japanese Honeysuckle Lonicera maackii, Amur Honeysuckle Lonicera morrowii, Morrow's Honeysuckle Lonicera tatarica, Tartarian Honeysuckle *Lonicera x bella*, Fly Honeysuckle Ludwigia hexapetala (L. grandiflora), Uruguayan Primrose Willow Ludwigia peploides, Floating Primrose Willow Lysimachia vulgaris, Garden Loosestrife Lythrum salicaria, Purple Loosestrife Microstegium vimineum, Japanese Stilt Grass Murdannia keisak, Marsh Dewflower Myriophyllum aquaticum, Parrot-feather *Myriophyllum heterophyllum*, Broadleaf Water-milfoil *Myriophyllum heterophyllum x M. laxum*, Broadleaf Water-milfoil Hybrid Myriophyllum spicatum, Eurasian Water-milfoil Nymphoides peltata, Yellow Floating Heart Oplismenus hirtellus, Wavyleaf Basketgrass Persicaria perfoliata (Polygonum perfoliatum), Mile-aminute Weed Phellodendron amurense, Amur Cork Tree Phragmites australis, Common Reed Grass Phyllostachys aurea, Golden Bamboo Phyllostachys aureosulcata, Yellow Groove Bamboo Potamogeton crispus, Curly Pondweed Pueraria montana, Kudzu Reynoutria japonica (Fallopia japonica, Polygonum cuspidatum), Japanese Knotweed Reynoutria sachalinensis (Fallopia sachalinensis, Polygonum sachalinensis), Giant Knotweed Reynoutria x bohemica (Fallopia x bohemica, *Polygonum x bohemica*), Bohemian Knotweed Rhamnus cathartica, Common Buckthorn Rosa multiflora, Multiflora Rose Rubus phoenicolasius, Wineberry Salix atrocinerea, Gray Florist's Willow Silphium perfoliatum, Cup-plant Trapa natans, Water Chestnut Vitex rotundifolia, Beach Vitex

#### **Regulated:**

Acer platanoides, Norway Maple Clematis terniflora, Japanese Virgin's Bower Euonymus alatus, Burning Bush Euonymus fortunei, Winter Creeper Miscanthus sinensis, Chinese Silver Grass Robinia pseudoacacia, Black Locust

## FISH

**Prohibited:** *Channa argus*, Northern Snakehead Channa marulius, Bullseye Snakehead Channa micropeltes, Giant Snakehead Clarias batrachus, Walking Catfish Gambusia affinis, Western Mosquitofish Gambusia holbrooki, Eastern Mosquitofish Hypophthalmichthys harmandi, Largescale Silver Carp Hypophthalmichthys molitrix, Silver Carp Hypophthalmichthys nobilis, Bighead Carp Misgurnus anguillicaudatus, Oriental Weatherfish Mylopharyngodon piceus, Black Carp Neogobius melanostomus, Round Goby Petromyzon marinus, Sea Lamprey Proterorhinus semilunaris (P. marmoratus), Tubenose Goby Tinca tinca, Tench

#### **Regulated:**

Carassius auratus, Goldfish Cyprinella lutrensis, Red Shiner Cyprinus carpio, Common Carp/ Koi Gymnocephalus cernuus, Ruffe Monopterus albus, Asian Swamp Eel Oreochromis aureus, Blue Tilapia Oreochromis niloticus, Nile Tilapia Pterois miles, Common Lionfish Pterois volitans, Red Lionfish Sander lucioperca (Stizostedion lucioperca), Zander Scardinius erythrophthalmus, Rudd

## **AQUATIC INVERTEBRATES**

#### **Prohibited:**

Bellamya chinensis (Cipangopaludina chinensis), Chinese Mystery Snail Bellamya japonica, Japanese Mystery Snail Bithynia tentaculata, Faucet Snail Bythotrephese longimanus (B. cederstroemi), Spiny Water Flea Cercopagis pengoi, Fishhook Water Flea Corbicula fluminea, Asian Clam Crassostrea ariakensis, Suminoe Oyster Didemnum spp., Carpet Tunicate Dreissena polymorpha, Zebra Mussel Dreissena rostriformis bugensis, Quagga Mussel Eriocheir sinensi, Chinese Mitten Crab Hemigrapsus sanguineus, Asian Shore Crab Hemimysis anomala, Bloody Red Shrimp Orconectes rusticus, Rusty Crayfish Potamopyrgus antipodarum, New Zealand Mud Snail Rapana venosa, Veined Rapa Whelk Styela plicata, Asian Sea Squirt

#### **Regulated:**

Carcinus maenas, European Green Crab Daphnia lumholtzi, Water Flea Hemigrapsus takanoi (H. penicillatus), Brush-clawed Shore Crab/ Grapsid Crab

## **TERRESTRIAL INVERTEBRATES**

#### **Prohibited:**

Achatina achatina, Giant Ghana Snail Achatina fulica (Lissachatina fulica), Giant African Land Snail Adelges tsugae, Hemlock Woolly Adelgid Agrilus planipennis, Emerald Ash Borer Amynthas spp., Asian Earthworms Anoplophora glabripennis, Asian Longhorn Beetle Apis mellifera scutellata x A. mellifera ligustica/A. mellifera iberiensis, Africanized Honey Bee Archachatina marginata, Giant West African Snail Cryptococcus fagisuga, Beech Scale Lymantria dispar, Asian and European Gypsy Moth Monochamus alternatus, Japanese Pine Sawyer Pityophthorus juglandis, Walnut Twig Beetle Sirex noctilio, Sirex Woodwasp

# TERRESTRIAL AND AQUATIC VERTEBRATES

#### **Prohibited:**

Cygnus olor, Mute Swan Lepus europaeus, European Hare Myocastor coypus, Nutria Nyctereutes procyonoides, Asian Raccoon Dog Sus scrofa (excluding Sus scrofa domestica), Eurasian Boar

#### **Regulated:**

Alopochen aegyptiacus, Egyptian Goose Cairina moschata, Muscovy Duck Myiopsitta monachus, Monk Parakeet Oryctolagus cuniculus, European Rabbit Trachemys scripta elegans, Red-eared Slider Xenopus laevis, African Clawed Frog

# FUNGI

#### **Prohibited:**

Amylostereum areolatum, Sirex Wasp Fungus Geomyces destructans, White-nose Syndrome Geosmithia morbida, Thousand Canker Disease Phytophthora ramorum, Sudden Oak Death

For the official regulations and species lists please see: <u>http://www.dec.ny.gov/animals/265.html</u>.

### New York State Department of Environmental Conservation Part 575 Invasive Species Regulations Questions and Answers

#### What are invasive species?

Invasive species means a species that is non-native to the ecosystem under consideration; and whose introduction causes or is likely to cause economic or environmental harm or harm to human health.

#### Why are invasive species a problem?

Invasive species have a detrimental effect upon the State's natural communities and systems by outcompeting native species, diminishing biological diversity, altering community structure and, in some cases, changing ecosystem processes. They can even harm human health.

#### How will these regulations help?

The regulations were developed by the Department of Environmental Conservation, in cooperation with the Department of Agriculture and Markets. These regulations, once implemented, are expected to help control invasive species by reducing the introduction and spread of invasive species populations by limiting commerce in such species, thereby having a positive impact on the environment.

#### How were the lists of species in the regulations developed?

The lists of prohibited and regulated species were developed using the standardized species assessment and listing process outlined in the 2010 report "A Regulatory System for Non-native Species". Lists of candidate non-native invasive species were compiled by reviewing other state regulations, reports, lists and consulting with agency experts. A rapid assessment was conducted to determine if the species warranted listing and was already federally regulated. Ecological invasiveness assessments were conducted on each potential invasive species followed by a socio-economic assessment for those ranking High or Very High. The assessment team then placed the species in the appropriate regulatory classification of Prohibited or Regulated. The initial recommendations were submitted to the Invasive Species Advisory Committee (25 Non-Government Organizations) and Council (9 State Agencies) for review and comment. The lists were then incorporated into the regulations.

## Why isn't a particular species included on the prohibited or regulated lists?

Due to staffing limitations and time constraints, the initial list of prohibited and regulated species is not all-encompassing. We anticipate that the regulations will be updated on a regular basis. The regulations include language for petitioning for addition or removal of species from the prohibited and regulated lists. Some species were assessed, but do not meet the criteria for prohibition or regulation.

## Aren't some of the species listed as either prohibited or regulated already established?

Yes, however, there are areas of the State in which they have not yet established populations and these regulations are intended to slow the spread by reducing the number of individuals of a species released into a region, to which they are not native, associated with the sale and introduction of such species.

#### When did the regulation become final?

The part 575 invasive species regulations were proposed, and a 60 day to public comment held between October and December 2013. During this time, four public hearings were scheduled across the State. All comments received were reviewed and a summary of public comments and agency responses was compiled. Required changes were made to the final regulations. A summary of the final regulations was published in the State Register September 10, 2014 and the full express terms were published on the Department's website.

#### Once finalized, when will the regulations become implemented?

A summary of the final regulations was published in the State Register September 10, 2014. The part 575 regulations take effect 6 months later (March 10, 2015).

#### What is the difference between prohibited and regulated invasive species?

Prohibited invasive species cannot be knowingly possessed with the intent to sell, import, purchase, transport or introduce. In addition, no person shall sell, import, purchase, transport, introduce or propagate prohibited invasive species. Regulated invasive species, on the other hand, are species which cannot be knowingly introduced into a free-living state, or introduced by a means that one should have known would lead to such an introduction, although such species shall be legal to possess, sell, buy, propagate and transport.

#### What is considered a free-living state?

A species is considered in a free-living state if it is introduced to public lands or lands connected to public lands, natural areas, and public waters or waters connected to public waters.

#### Are there any exceptions to the definition of a free-living state?

Yes, such exceptions include artificial ponds and water gardens with no outlet to public waters, waters entirely within private land not connected to public waters, and water-use facilities with outflows not providing access to public waters.

# Do the regulations require existing populations of species on the prohibited and regulated lists be managed or destroyed by the land-owner?

No, existing populations of non-native invasive species listed as prohibited or regulated and established prior to the implementation of the final part 575 regulations do not require management by the owner. However, once implemented, the final regulations do prohibit commerce involving those species listed as prohibited species and the release of regulated species into a free-living state.

#### What species have grace periods established in the regulations?

A one year grace period is included in the regulations for Japanese Barberry (*Berberis thunbergii*), during which existing stock of this species may be sold. In addition, a person may possess, sell, offer for sale, distribute, transport, or otherwise market or trade live Eurasian boars (*Sus scrofa*) until September 1, 2015. No person shall knowingly import, propagate or introduce Eurasian boars into a free-living state.

Will there be a fee for permits? No fee is anticipated for permits issued for research, education or other approved activity.

## Who will enforce the final regulations?

The regulations will be enforced by the Department of Environmental Conservation, with assistance from the Department of Agriculture and Markets.

# Appendix B

# Workshop Summaries and SWOT Analysis



# **Steering Committee** Kickoff Meeting Summary

# Attendees:

- Web Pearsall
- Don Cook
- Caroline Marschner
- Emily Sheridan
- Hilary Mosher
- Jon Harman
- Lisa Cleckner

- Katie Amatangelo
- Sheila Hess
- Abby Lanterman
- Mary Underhill
- Bruce Gilman
- Michele Wunderlich
- Terry and Dorothy

# Plan update: Proposed Process and Schedule - See Attached Schedule

- <u>Objective of the update:</u> Have a solid plan in place, it just needs additional facilitation, review, and updating. Opportunity to get input from a facilitator regarding improvements that could be made.

# Steering Committee Roles/ Responsibilities – See Attached List of Responsibilities

- As requested, provided clarification by creating heading for strategic plan specific roles and responsibilities, and a second heading for general roles and responsibilities.

# Vision and Mission Check – Activity - See Attached Worksheets

What descriptive words come to mind when you think about FL-PRISM at its very best?

- Diverse natural community
- Adaptive
- Partnerships
- Effective
- Proactive
- Progressive







- Protecting ecosystems
- Sharing IS knowledge
- Amply resourced
- Educated public
- What are some key natural and physical features that you consider important and do they look in light of FL PRISM achievements by 2030?
  - Healthy native, self-sustaining fisheries
  - Healthy productive ecosystems
  - Diverse plant communities that support native animals
  - State lands/Parks are free of negative impacts from invasives
  - Source waters in the Finger Lakes provide clean drinking water
  - Ability to recreate
  - Maintaining/restoring historic biodiversity
  - Being able to enjoy nature without the negative impacts of invasive species.
- What are some key economic, community, and historic assets that you consider important in the Finger Lakes?
  - State lands and parks free of negative impacts.
  - Addressing key invasives species across multiple ecosystems
  - Tourism
  - Value of FL Fisheries
  - Seneca Falls and Geneva Convention is an important historic site (park of National Park Service)
  - Rush oak openings
- What are some important issues for FL\_PRISM right now and/or potentially in the future that are positively impacted due to your success by 2030?
  - Water quality
  - Tick-borne disease
  - Expanding boat stewardship programs
  - Loss of hemlock stands especially in riparian areas
  - Eradicating hydrilla
  - Pre-mortem
  - Sustaining healthy lands and waters
- What is your reaction to the current vison developed during the previous strategic plan? Is there something you would add or subtract?
  - Must consider, who is the audience?
  - Comes across as a bit "sciencey" and "dry"
  - Make it more concise
  - Remove abbreviation for "invasive species" (IS) from vision.



- Possibly make it more concise by saying "The FL PRISM and its partners are recognized for their collaborative work in invasive species detection, prevention, control and education and outreach within the 17-county region of the Finger Lakes."
- How do we measure whether the vison statement is working?
  - Where does it show up in your activities?
  - How often are you using it?
  - Do you need to explain your vision to those listening?
- Possibly add in some imagery (photos) to help paint the picture of your vision statement
- Should statement include the name of the organization?
  - Optional/ Personal preference

# Next Steps, Future Meetings, In the Meantime

- Please feel free to send any additional thoughts on the questions in the visioning activity between now and our fall workshop!





# Finger Lakes PRISM Strategic Plan Update – 2020



	May	Jun 15	Jun 30	Jul	Aug	Sep 15	Sep 30	Oct 15	Oct 30	Nov 15	Nov 30	Dec 15
Report Preparation		existing Strate ints to date, Cu							Draft Plan		F	inal Plan
Report				Ada	ptive Managel	ment Review a	nd Summary	Impleme Strategy				
Meetings/Workshops		Kickoff Advisory Committee Call/Vision		Working Group Outreach	I	Advisory Committee Workshop	Working Group Meetings				Steering Committee Plan Review Call	
Deliverables		Summary of call, vision notes, schedule		of r of ex	nmary eview cisting lan	Finalize Vision and SWOT Table	Recom Update Meetin Materic	ig		Draft Plan	Find	il Plan
FL-PRISM Staff Check-in	•		•			•		•		•		

# FL-PRISM Strategic Plan Steering Committee Roles and Responsibilities



# 5-year Strategic Plan Update

- Serve as a first forum: react, comment, suggest, guide
- Identify problems, issues and solutions otherwise missed
- Inform and enrich understanding
- Engage stakeholders

# General- further discussion at workshop

- Seek public support to ensure implementation and plan and projects.
- Encourage/facilitate media coverage
- Provide updates to stakeholder groups, community, and elected representatives
- Have committee members represent a regional focus
  - Members can provide regional expertise regarding PRISM
- SC meetings 3-4/year, emails
- Website/ Social media
- Develop purpose statement
- Not market but educate people about PRISM when possible.

# Finger Lakes PRISM

# Vision

The FL-PRISM is recognized as the primary organization for IS detection, prevention, control, and education and outreach within the 17-county region of the Finger Lakes. The FL-PRISM will work collaboratively with its partners and the public to provide education and mitigate the impacts of IS within our region.

# Mission

The mission of the FL-PRISM is to reduce the introduction, spread, and impact of IS within the Finger Lakes PRISM region through coordinated education, detection, prevention, and control measures (adopted by the SC, June 2014).

VISIONING - <u>https://topnonprofits.com/examples/vision-statements/</u>

# Definition

**Vision Statement: (Desired End-State)** A one-sentence statement describing the clear and inspirational long-term desired change resulting from an organization or program's work. The following vision statements were selected from the <u>top 100 nonprofits</u> (based on a series of web, social, and financial metrics).

# Key Findings of 30 Example Vision Statements

- The best visions are inspirational, clear, memorable, and concise.
- Avg length for the full 30 organizations listed here is **only 14.56 words** (excluding brand references)
- Avg length for the first 15 organizations is only **10.5 words** (excluding brand references).
- The shortest contains only three words (Human Rights Campaign)
- The longest contains 32 words (Amnesty International)

**Smithsonian**: Shaping the future by preserving our heritage, discovering new knowledge, and sharing our resources with the world

Oceana seeks to make our oceans as rich, healthy and abundant as they once were.

**Ducks Unlimited** is wetlands sufficient to fill the skies with waterfowl today, tomorrow and forever.

# Town of Batavia, New York Regional, Rural, Resilient

# **OUR VISION**

Batavia, New York is a creative, diverse, and vibrant community offering rural charm, a regional business hub, and high quality of life for all ages. With a focus on smart growth, agri-business, future technologies, safety, stewardship, and municipal services, the Town of Batavia is a place where people want to work, play, and, most importantly, to call home.

# Regional

Located in between Buffalo and Rochester and surrounding the City of Batavia, our town is a regional hub for business and commerce. We work closely with residents, business owners, and regional economic development entities to help facilitate prudent business development decisions guided by smart growth and what is best for our community.

[link to more information – include Comp Plan, GC Smart Growth and Comp Plan, Freight and Goods Movements Strategies, Route 63 Corridor]

# Rural

We are rich in natural resources – fields, forests, and streams – contributing toward our rural character, recreational opportunities, and high quality of life. We safeguard our environment with investment in land use planning and responsible stewardship of our natural resources.

[link to more information – include Ag and Farmland Protection Plan, Green Genesee Road Map, Batavia Green Action Plan, Town Park Master Plan, Ellicott Trail, Smart Growth]

# Resilient

Our focus is on the people who live, work, and visit our Town. We provide municipal services and modern infrastructure that support businesses of all sizes and people of all ages. Safety, education, employment, and participation are emphasized to ensure we make the kind of decisions that result in innovative and fiscally sound leadership which in turn ensures resilience in our environment, our economy, and our community.

[link to more information – include Genesee County Central Corridor Plan, Water Projects, Sewer Capacity Plan, Athletic Fields Needs Assessment, East Pembroke Fire District Master Plan]



# *Imagine for a moment, what FL-PRISM is at its very best...*

# **VISIONING WORKSHEET INSTRUCTIONS**

Imagine what it would look like if FL-PRISM were to achieve success on every level. Imagine it is 10 years from now – June 24, 2030. As a member of the FL-PRISM Steering Committee you are in at a conference accepting a prestigious science and natural resources award recognizing FL-PRISM achievements. Now, give some thought to the questions below. You can also take a worksheet with you to return later. <u>Thank you!</u>

- 1. What descriptive words come to mind when you think about FL-PRISM at its very best?
- 2. What are some key natural and physical features that you consider important and do they look in light of FL-PRISM achievements by 2030. You can be specific.
- 3. What are some key economic, community, and historic assets that you consider important in the Finger Lakes? Label on map if location relevant.
- 4. What are some important issues for FL-PRISM right now and/or potentially in the future that are positively impacted due to your success by 2030?
- 5. What is your reaction to the current vision developed during the previous strategic plan. Is there something you would add or subtract?



Use additional pages if necessary!



# FL-PRISM Working Group ZOOM Workshop Summary

# Attendees:

- Sheila Hess
- Abby Lanterman
- Sam Beck-Anderson
- Travis Glazier
- Heidi Himes
- Patricia Shulenburg
- Nathan Haynes
- Michele Wunderlich
- Kate Monacelli
- Tom Snyder
- Mary Underhill
- David Carr
- Amy Samuels
- Katie Amatangelo
- MaryBeth Deller

- Dave Will
- Tom Hughes
- Nicole Smeenk
- Brian Eshenaur
- Roxanna Johnston
- Colleen Keefer
- Gene Little
- Hilary Mosher
- Jeremy Brady
- Jon Harman
- Meg Wilkinson
- Kyle Webster
- PLUS 10 Unrecorded

# Plan update: Proposed Process and Schedule - See Attached Schedule

- Preliminary recommendations for strategic plan update:
  - Collapse goals into a more concise list
  - Annual report sections do not reflect format of strategic plan but do reflect DEC framework – will recommend alignment
  - Include a dashboard for ease of reporting
  - Reconsider structure of working groups
  - Etc. a Review/Recommendations Report will be provided to Coordinator and Steering Committee.

# Working group session summaries:

# Terrestrial Working Group:

- 1. Does the stated purpose of the working group accurately reflect the need?
  - a. The purpose should be more targeted. Generally, yes but could drop clearinghouse.
- 2. What is the current structure and function of the working group? Who leads/coordinates? How often does it meet? Is this enough? Who is missing?
  - a. Coordinator leads and schedules, meets 2-3 times a year, that is enough, well represented. An outreach component would be a good addition. THIS ANSWER HOLDS FOR ALL WORKING GROUPS
- 3. How much time do you dedicate to this working group? How much time would you be willing to dedicate?
  - a. Time dedicated to working group yearly varies depending on projects, travel, etc.
     2-15hrs.
- 4. Have specific resources been developed by this working group?
  - Yes work with Coordinator for list THIS ANSWER HOLDS FOR ALL WORKING GROUPS
- 5. What are the best metrics to measure IS and IS management efforts?
  - a. Metrics for measuring should include acres treated and acres surveyed
  - b. Weight or volume
  - c. Amount in region
  - d. Potential environmental harm
  - e. Partner participation
  - f. Number of volunteers/ vol. hours
  - g. Centrality of efforts
  - h. Important to capture negative data or not detected data.
  - i. Standardize a method for data collection
  - j. Post treatment assessments
  - k. Competitive plantings >>> assessment of plantings

# \*SPECIES DEPENDENT\*

# 6. What are the top 3 species and/or issues facing this working group?

- a. Spotted lanternfly poses a major threat to agriculture
- b. Swallowwort
- c. Wild parsnip harmful to people
- d. Oriental bittersweet kills trees
- e. Oak wilt
- f. Hemlock wooly adelgid
- g. EAB
- h. Need prioritization list that can be changed over time and over geographic location
- i. Lacking in survey
- j. Barrier to communication
- 7. What is the single most important thing this working group could do over the next 5 years?
  - a. Need more regulation to help prevent spread (State level and regional)
  - b. More education and outreach about regulations and identification of species
  - c. Importance of what to do varies depending on species
  - d. More treatment and more funding are needed
  - e. Growing participation among peers in the working groups
  - f. Consolidation of efforts among working groups
  - g. Gain better distribution knowledge for native and invasive species
  - h. Increase networking
  - i. FLPRISM could use satellite offices
- 8. Is there significant overlap with other working groups? Working groups have been meeting jointly for some time. Is there value in combining one or all into a single working group?
  - a. Yes value in combining as has been done for about 2 years THIS HOLDS FOR ALL WORKING GROUPS

# Aquatic Working Group:

- 5. What are the best metrics to measure IS and IS management efforts?
- The metrics would be very species-specific but could include area surveyed or treated (acres or similar, individuals, % coverage), weight or volume removed (lbs, garbage bags). This could also be described in terms of number of infestations managed. Negative data is also important- "not detected".



- It is important to quantify effort, both in effort expended for early detection surveys as well as control and management projects
  - number of areas surveyed
  - number of nets/traps set
  - number of staff or volunteer hours
  - weight or volume
- there are challenges to recording some of the 'Not Detected' points that could result from larger scale early detection efforts that some agencies are doing
  - Example: A fish early detection survey is looking for any non-native species in that sample. How would we record (or would it be useful to record) that there were essentially non-detects for every invasive fish listed in NY iMap?
- Survey- Floating veg- acreage, submerged veg, density, point-intercept survey, tubers, number per square meter/foot
- Post treatment efficacy
- 6. What are the top 3 species and/or issues facing this working group?
- Hydrilla, Starry Stonewort, round gobi, water fleas
- Continue with the aquatic area prioritization
- Assess the aquatic species priority list for bias toward plants or species that would potentially be easier to control or eradicate
  - If a bias exists, is there a reason and should it be maintained or somehow mitigated?
- Data management- improve the quality of the data, share data, used standardized metrics so data are comparable. This will help prioritize areas for survey & management
- 7. What is the single most important thing this working group could do over the next 5 years?
- Rapid response/treatment
- Boat restrictions and Mandatory boat inspections
- Involve boat stewards in monitoring
- Unanimous agreement that prevention and outreach are the most important items
- Aquatics are hard to control (especially animals) which makes prevention even more important

# Education/ Outreach Working Group:

- 5. What are the best metrics to measure IS and IS management efforts?
- Event-type, duration of event, people/attendees,
- Participation/retention of program after taking training



- We reach people who have an interest, how do you get people interested? how can you get people to take points after taking a training
- Measure engagement through: Tabling- # number of people at event Boat launch/walkups- # of people encountered Presentations- # of people attending and hours Workshops/hands on/field based control activity-# of people participating and hours Social media posts

# 6. What are the top 3 species and/or issues facing this working group?

- Education of volunteers- people coming in and out of program- keeping them engaged and sustained volunteerism
- Relevance of E&O- you can give 3 species on their waterbody and they get it Educating legislators about the harm and impact and getting teeth behind regulations
- An outreach component specific to current and potential TIS would be a good addition.
- Quality control of data (verifying that an organism is an invasive)
- Barriers to communication across programs
  - Reporting organisms that may not seem 'high risk'
- 7. What is the single most important thing this working group could do over the next 5 years?
- Teaching partners how to keep returning volunteers active- making sure the message gets through or having people care about the issue- making IS personal to people so that they'll engage in prevention, detection, or control.
- Encourage volunteer education and submitting data that they find
- Tiered list of species
  - Can we take 5-10 species to track them to see what the impact is versus the top 1000 species
  - Can we take and make AIS chunkable- trainings need Shared communication across programs
- Consider adding a component regarding prioritizing rare plant and animal occurrences.
   Maybe through some partnership with the Natural Heritage Program and public private landowners. PRISM seems like an ideal group for this type of rare species protection.
  - NYNHP does have a GIS set of layers Spatial Prioritization it has high quality natural areas, risk of spread and more.

END





FL-PRISM

# Finger Lakes PRISM Strategic Plan Update – 2020



	May	Jun 15	Jun 30	Jul	Aug	Sep 15	Sep 30	Oct 15	Oct 30	Nov 15	Nov 30	Dec 15
Report Preparation		existing Strate ents to date, Cu							Draft Pla	in	F	inal Plan
Report					Adapti	ve Manageme	nt Review and	Summary	Implementat Strategy	tion		
Meetings/Workshops		Kickoff Advisory Committee Call/Vision					Work Groi Outrei Meeti	up Comm ach/ Works	ittee		Steering Committee Plan Review Call	
Deliverables		Summary of call, vision notes, schedule				Finalize Vision/ Mission	Summary of review of existing plan		SWOT Table Recom. Updates, Meeting Materials		Draft Plan	Final Plan
Staff Check-in	•		•				•				•	



# FL-PRISM Working Group ZOOM Workshop Summary 11-17-2020

# Attendees:

- Sheila Hess
- Abby Lanterman
- Katie Amatangelo
- Michele Wunderlich
- Mary Underhill
- Bruce Gilman

- Hilary Mosher
- Emily Sheridan
- Jon Harman
- Lisa Cleckner
- Terry & Dorothy Gronwall
- Whitney Carleton

# Plan update: Proposed Process and Schedule - See Attached Schedule

- <u>Recommendations for strategic plan update:</u>
  - Refine vision and mission statement, create a purpose statement
  - Collapse goals into a more concise list
  - Annual report sections do not reflect format of strategic plan but do reflect DEC framework – recommend alignment
  - Include a dashboard for ease of reporting
  - Reconsider structure of working groups
  - Review/Recommendations Report was provided to Coordinator and Steering Committee.
- Further recommendations for strategic plan update:
  - It is recommended that you identify at least 2-3 metrics to become real indicators.
  - Include one or two metrics that have a wow factor. This can help garner support.
  - Provide incentives to get committee members to take a larger role.
  - It is possible that committee members are underutilized.
  - How do we empower people beyond this group?
  - Maybe reach out to people looking to give some of their time and efforts to people who may want to build their resume.
  - Can help balance the workload and age spread.
  - Put out a request for applications for working group office positions



# Metrics:

- Which metrics stand out as good indicators?
  - Acres treated/ acres surveyed.
  - Outreach, people, contact hours
  - Number of acres/sites not found
  - Acres treated chemical/mechanical removal (terrestrial)/ weight volume (aquatic).
  - Level of effort a partner contributes
- How many of the top priority species do you have mapping for?
  - We do not have broad sweeping maps but iMap does provide a lot of useful information for many species. However, its power is in its use.

It is possible that different metrics may need to be used for different species.

# Things we do well:

Other PRISM groups struggle with getting partners and a volunteer base. We are good at engaging partners/ volunteer base and getting partners to show up.

We have strong connections with municipalities and organizations that are involved with other finger lakes/great lakes groups. We also seek out partnerships that are broader than just natural resource management.

We target broader reaching programs that we can serve or be involved in.

Our mission is complex, which covers many topics and species. Provides us with an opportunity to easily connect our mission with other missions.

# Things we can/ would like to improve on:

Other PRISMs focus largely on terrestrial IS. We do not have a terrestrial coordinator which can make communicating with other PRISM groups difficult.

Objectives hold different kinds of value. We cannot put 100% of our efforts into one or two objectives.

Our mission is complex, which could pose as a threat.

Can be hard to communicate to others and explain the importance.

We would like to get all 17 counties across to get involved and engaged in PRISM efforts

# SEE ATTACHED SWOT RESULTS





FL-PRISM

# Finger Lakes PRISM Strategic Plan Update – 2020/2021



	May	Jun 15	Jun 30	Jul	Aug	Sep 15	Sep 30	Oct 15	Nov 30	Dec 15	Jan 30	Feb 15
Report Preparation	Review of Achieveme	existing Strate ents to date, Cu	egic Plan, Wor prrent issues, u	k Plans, Annu update referen	al Reports aces				Draft Pla	ın	F	inal Plan
Report					Adapti	ve Manageme	nt Review and	Summary	Implementa Strategy	tion		
Meetings/Workshops		Kickoff Steering Committee Call/Vision						Working Group Outreach/ Meetings	Steering Committee Workshop		Steering Committee Plan Review Call	
Deliverables		Summary of call, vision notes, schedule				Finalize Vision/ Mission	Summary of review of existing plan		SWOT Table Recom. Updates, Meeting Materials		Draft Plan	Final Plan
Staff Check-in	•		•				•		•		•	

CC ENVIRONMENT & PLANNING



# Strategic Planning

**SWOT:** Brainstorm the strengths, weaknesses, opportunities, and threats for quality and efficacy of Finger Lakes PRISM – <u>NEXT FIVE YEARS</u>

Strengths (internal)	Weaknesses (internal)
<ul> <li>Exceptional personnel</li> <li>Excellent website – effective educational and engagement tool.</li> <li>Very large geographical region.</li> <li>Hardworking members and great partners.</li> <li>The PRISM does a good job of Educating the users of our resources (public).</li> <li>Rapid response to emerging issues, quick contact to relevant committee members.</li> <li>EPF and GLRI funding has been consistently awarded.</li> <li>Planning, recruitment of staff with ongoing commitment, connecting with researchers, leveraging state and federal funding, developing resources, and coordinating among many partners.</li> <li>Serve on regional committees.</li> </ul>	<ul> <li>Distinction between aquatic WG and terrestrial WG has caused there to be a lack of focus on wetlands. Needs to be recognized as a vital resource.</li> <li>The large size of FLX PRISM makes inclusivity difficult. There are many areas/ counties that are not involved.</li> <li>More focus on agriculture WG.</li> <li>Making connections with other environmental protection and restoration issues that are affected by invasive species (clean water, flood risk mitigation).</li> <li>Need to engage County Soil &amp; Water Conservation Districts more effectively.</li> <li>Need to do a better job of presenting or highlighting our 'wins' and engagement efforts to stakeholders.</li> </ul>
<ul> <li>Opportunities (external) <ul> <li>Digital access has engaged more people, increased our reach.</li> <li>Past successes can demonstrate value and accomplishments</li> <li>Launch a Zoom FLX-PRISM Invasive Presentation Series that Lake Associations, Soil &amp; Water Districts, CCE, etc. can promote to their clients &amp; members.</li> <li>Assisting communities by providing technical and financial assistance.</li> <li>Taking advantage of working with organizations such as 4H, Girlscouts, Boyscouts to get the public involved in mapping or removal efforts.</li> <li>When life returns back to normal hosting more events to get the public excited and involved.</li> <li>Partnerships with watershed intermunicipal organizations to promote education, funding opportunities.</li> <li>Climate migration of people and animals.</li> <li>Assisting communities: provided sample language that can go into zoning or planning projects – provide with information.</li> </ul> </li> </ul>	<ul> <li>Threats (external)</li> <li>Some partners have the perception that we are not doing enough because we may not communicate all our efforts to them.</li> <li>Climate migration of people and animals. (Could cause spread if IS).</li> <li>Lack of funding and support due to economic crisis and pandemic</li> </ul>

# Appendix C

# Steering Committee and Working Group Documentation

# Finger Lakes - Partnership for Regional Invasive Species Management Working Group Purpose, Strategy, and Priority Invasive Species List\*

# I. Steering Committee (SC)

## Purpose:

To guide the 5-yr strategic planning process, plan and set overall direction for priority areas and IS and ensure that major goals and timeline are achieved. Set annual work plan and monitor progress, which may include tracking timelines and evaluation procedures. Provide strategic direction and coordination for the four working groups and serve as a liaison for the NYS IS Council and IS TF

## Structural Statement

The steering committee will be made up of representatives from the Finger Lakes PRISM with an interest in the mission of the FL-PRISM. The working groups represent the larger stakeholder group. The structure of the PRISM, the steering committee and working groups is designed to ensure equality in decision-making for the Finger Lakes region (see structure document).

# Strategies to accomplish purpose:

- To develop bylaws
- Establish a good working relationship with partners and working groups.
- Work in partnership with the working groups to develop priorities such as key invasive species to monitor and control, and locations in the FL region.
- Adopt a monitoring strategy for IS in the FL-region based on the outcomes from the WGs
- Adopt an Early Detection Rapid Response (ED/RR) plan that will help communities detect and respond to IS coming into the region, based on outcomes from the WGs.
- Develop the annual and work plan that brings together various stakeholders to establish the synergy necessary to tackle IS within the community through clear and concise strategies for prevention, control and remediation
- Help communicate the priority list and methods of introduction, which will include information about vectors of transmission, information about where IS are coming from and where they will go to be disseminated via FL-PRISM website.
- Develop a marketing and communication strategy, including a robust and all-inclusive website, to enable the community to recognize and consider FL-PRISM as the entity for information, management ideas, ED/RR, and all things invasive in the region providing a key element for citizen science or community members to submit their questions or early detection organisms- Report invasive species sighting utilizing tools such as iMap, or reporting fields to identify IS



\*Developed and approved by the FL-PRISM working groups and Steering Committee, fall 2014. FINGER LAKES INSTITUTE

HOBART AND WILLIAM SMITH COLLEGES

# II. Agricultural Working Group (AgWG)

# Purpose of Agriculture Working Group:

• To create agriculture- specific priorities for invasive species management and prevention, determine highly probable locations and conditions appropriate for invasion and develop agricultural invasive species management plan. This working group will develop an agriculture-focused work plan, support best management practices intended to reduce or control invasive species, and support the steering committee as needed.

# Strategies to accomplish purpose:

- Establish good working relationships with partners such as farmers, Cornell, DEC, Ag and Markets, and others.
- Working in concert with the E&OWG and the SC, determine the target audience in order to provide an Ag ISspecific toolbox with items to effectively and efficiently educate people about the impact of Ag IS and how to detect, prevent, mitigate and report Ag IS.
- Develop or identify a monitoring strategy, including monitoring protocols, for Ag IS in the FL-region
- Create an ED/RR plan that will help communities detect and respond to Ag IS coming into the region.
- Develop or identify a mitigation strategy with best management practices to mitigate impacts and help farmers deal with impacts.
- Develop or identify a prevention, management and work plan that brings together various stakeholders to establish the synergy necessary to tackle Ag IS within the community through a clear and concise strategies for prevention, control and remediation
- Develop or identify a protocol for the FL-region to deal with Ag IS issues at locations such as hedgerows, fallow field, etc. to provide consistent and clear messaging.
- Develop or identify a priority list and methods of introduction, which will include information about vectors of transmission, information about where Ag IS are coming from and where they may go, and how to prevent them to be disseminated via FL-PRISM website.
- Synthesize and disseminate data to the public via the FL-PRISM website.
- Create material on priority Ag IS for the FL-region (fliers, handbooks, datasheets, etc.).
- Establish the FL-PRISM website as the premiere location for all information on invasive species.

Develop a matrix to use when determining priority organisms and locations for IS invasion and management.

# Priority invasives of concern:

## Plants

- 1. Autumn and Russian olive
- 2. Canada thistle
- 3. Field bindweed
- 4. Japanese knotweed
- 5. Johnson grass
- 6. Ragweed
- 7. Spotted knapweed
- 8. Swallow-wort
- 9. Velvet leaf
- 10. Wild parsnip

## Diseases

1. Basil downy mildew, Peronospora belbahrii

- 2. Grape crown gall, Agrobacterium tumefaciens
- 3. Late blight, Phytophthora infestans
- 4. Phytophthora blight, Phytophthora capsici
- 5. Plum pox virus, Potyvirus

## Insects

- 1. BMSB (Halyomorpha halys)
- 2. Garlic bloat nematode (Ditylenchus dipsaci).
- 3. Golden nematode (Globodera rostochiensis) not an inser should be included
- 4. Spotted wing drosophila (Drosophila suzukii)
- 5. Swede Midge (*Contarinia nasturtii*)

# III. Aquatic Working Group (AWG)

# Purpose of Aquatic Working Group:

- To develop aquatic- specific invasive species priorities, determine highly probable areas, create an aquatic invasive species management, and work plan.
- The AIS working group will help in the prevention of new invasive species into the region, focus on early detection/rapid response of AIS, and support the steering committee as needed.
- The AWG and FL-PRISM will serve as the direct point of reference for AIS and establish a simple and effective means for preventing, detecting, reporting, controlling, and managing priority AIS of concerns
- To develop a robust website that serves as a clearinghouse for AIS issues (prevention, detection, response, management, control) in the Finger Lakes region.
- A secondary focus of this working group will be on the containment and management of established invaders within the region and provide information about conferences, workshops, and literature to the E&O WG.

# Strategies to accomplish purpose:

- Establish a good working relationships with partners such as NYS OPRHP, DEC, NYSFOLA, and others
- Develop protocols for lakes without stewards.
- Working in concert with the E&OWG and the SC, determine whom the FLPRISM target audience is and how to provide an AIS-specific toolbox to effectively and efficiently educate people about the impact of AIS and how to detect, prevent, mitigate and report AIS.
- Develop a monitoring strategy, including monitoring protocols, for AIS in the FL-region
- Create an ED/RR plan that will help communities detect and respond to AIS coming into the region.
- Develop a mitigation strategy with best management practices to mitigate impacts and help communities deal with impacts.
- Develop a prevention, management, and work plan that brings together various stakeholders to establish the synergy necessary to tackle AIS within the community through a clear and concise strategies for prevention, control, and remediation.
- Develop a protocol for the FL-region to deal with AIS issues at locations such as boat launches, marinas, etc. at all the waterbodies in the region to provide consistent and clear messaging (Lake Ontario, Sodus Bay, Finger Lakes, Oneida Lake, Erie Canal, small glacial lakes).
- Develop a priority list and methods of introduction, which will include information about vectors of transmission, information about where AIS are coming from and where they may go, and how to prevent them to be disseminated via FL-PRISM website.
- Synthesize and disseminate watercraft steward/boat steward data to the public via the FL-PRISM website.
  - Develop a consistent marketing strategy to convey the importance of watercraft stewards to the public (i.e., Clean, Drain, Dry!, Stop Aquatic Hitchhikers!)
- Create material on priority AIS for the FL-region (fliers, handbooks, datasheets, etc.).
- Establish the FL-PRISM website as the premiere location for all information on invasive species.
  - I.e., create a simple spreadsheet with highlighted AIS where the public can click and find a simple page with the biology and information regarding which waterbody has infestation. Public can determine the highly probable areas (HPAs) of the area, etc. This will help to clarify and provide information on experts, points of contact for species of concern, legislation enacted, etc.
- Develop a matrix to use when determining priority organisms and locations for AIS invasion and management.
  - $\circ$  ~ Create information about regional AIS and then lake-specific AIS ~

## Priority areas:

- Boat launches
- Primary inlets and tributaries
- Marinas and bait shops
- HPA

# Priority invasives of concern:

- 1. Macrophytes
  - a. Hydrilla
  - b. Trapa natans (water chestnut)
- 2. Macroalgae
  - a. Nitellopsis obtuse (starry stonewort)
- 3. Invertebrates
  - a. Corbicula fluminea (Asian clam)
  - b. Hemimysis (bloody red shrimp)
- 4. Fish and Fish Diseases
  - a. Web to send list of fish diseases to group
  - b. Neogobius melanostomus(round goby)
- 5. HABs—is there a need to put this information on the website? Reach out to SUNY Buffalo to see about Asian clam connection HABs

# IV. Education and Outreach Working Group (E&OWG)

# Purpose of the Education and Outreach WG:

- To establish a strong connection between FL-PRISM and the general public, volunteers, institutions of higher education, NGOs, agencies and other stakeholders.
- To promote FL-PRISM in a way that fosters awareness of our mission; generates interest in being a partner; enhances visibility within agencies, and the Finger Lakes region to increase general knowledge (detection, prevention, control) of invasive species.
- The E&O WG will educate the Finger Lakes community on invasive species issues and provide the tools necessary to make sound management decisions.
- The E&O WG will determine appropriate means for education and outreach based on resources available.
- The E&O WG also seeks to demonstrate to the general public and others the mutual benefit of investing human and economic resources in the FL-PRISM.

## Strategies to accomplish purpose:

- Generate and increase invasive species awareness and education within the FL-PRISM
- Create a network of information sharing for marketing collateral and resource sharing across the FL-PRISM
- Create a strong web-presence for the FL-PRISM E&O to include necessary resources for managers, general public, lake associations, etc. on dealing with invasive species- flow chart
- Create fact sheets and information for professionals and educators
- Develop a list of venues/events to offer opportunities to raise awareness about the FL-PRISM and invasive species
- Sponsor education and outreach conferences, symposiums and public forums to increase invasive species awareness across the region
- Offer technical training on IS identification and management options for professionals and educators in the region
- Create a list of experts in the field to draw upon for a speaker series- who is doing what (GAP analysis)
- Support the Agric, Aquat, and Terrest WGs to ensure that their priorities and products are delivered to the general public and the FL-PRISM
- Develop a process to ensure that FL-PRISM publications are consistent and appropriate for the region (vetted through Steering Committee)

# V. Terrestrial Working Group (TWG)

# Purpose of Terrestrial Working Group:

- To guide terrestrial- specific invasive species priorities, determine highly probable areas for invasion and engage in invasive species research
- The TWG will develop a terrestrial-focused work plan and invasive species management plan.
- The TWG will assist in the prevention of new invasive species into the region, focus on early detection/rapid response of invasive species and support the steering committee as needed.
- A secondary focus of this working group will be on the containment and management of established invaders within the region and provide information on terrestrial invasive species of concern, conferences, workshops, and literature to the E&O committee.
- Engaging in regional research on terrestrial invasive species (TIS)
- Promoting the FL-PRISM as a central clearinghouse for TIS

## Strategies to accomplish purpose:

- Prevent new invasions through rapid detection and remediation of new invasions of plants
- Manage invaded areas
- Promote native planting (i.e., as landscaping) thereby decreasing potential for invasion
- Collaborate and network with regional invasive species educational institutions
- Inventory, survey and map populations of invasive plants
- Restore sites where weed management and control have occurred
- Monitor changes and evaluate management results

## Priority areas:

- a. Areas where the infestation is low on the invasion curve and our effort can make a difference—i.e., Japanese knotweed in the Natl Forest is very low abundance
- b. Easily accessible areas for recreation where the plant can be spread—highly probably areas (HPAs) for invasion
- c. Edge of ecological important communities
- d. Transportation corridors/right aways

# Priority invasives of concern:

- 1. EAB
- 2. Hogweed
- 3. HWA
- 4. Japanese knotweed
- 5. Oriental bittersweet
- 6. Swallow-wort (pale and black)
- 7. Wild parsnip

# Appendix D

# Sample Committee Bylaws

# **Outline for Steering Committee Bylaws**

Committee Bylaws may not contradict the current Institutional policies or procedures.

I. Name:

II. Purpose:

## III. Membership Distribution List:

### **IV. Selection of Members**

- A. Membership requirements
- B. Meeting attendance requirements
- C. [Clarify election or appointment procedures for officers including who votes/appoints
- D. members and officers]
- E. [Election/Appointment Timeline]
- F. Clarify start date and length of members/officers' terms]

#### V. Officers Duties:

- A. The Chair shall:
  - 1. [Call regular meetings]
  - 2. [Create agenda using the template provided]
  - 3. [Distribute agenda and draft minutes of previous meeting electronically to all]
  - 4. committee members no less than 7 calendar days prior to each scheduled
  - 5. meeting]
  - 6. [Preside over meetings (clarify who presides if Chair is absent)]
  - 7. [Provide reports if needed]
  - 8. [Attend meetings]
  - 9. [Verify the committee's web postings/Google groups are accurate and up-to-date]
  - 10. [Report upcoming openings on the committee?]
  - 11. [Hold elections for the committee officers?]
  - 12. [Report membership list and officers for the upcoming year by May 1]
  - 13. [Other duties; lines can be added as needed]
- B. The Secretary shall:
  - 1. [Take accurate minutes (including attendance records) of each committee meeting]
  - 2. [Submit draft of minutes to committee chair no less than 10 days prior to the meetings using the template provided]
  - 3. [Provide committee members with approved minutes or post to Google groups/web, etc.]
  - 4. [Track membership rotation and report to the committee chair before March 15]
  - 5. [Other duties; lines can be added as needed]

#### VI. Meetings:

- A. [The(committee name) will meet the \_\_\_\_\_\_ of every \_\_\_\_\_\_]
- B. [Define process for calling special meetings including notification requirements]
- C. [Define quorum]
- D. [Clarify acceptability and process of virtual meetings including agenda, attendance
- E. records and, minutes]

## VII. Attendance:

A. [Define committee's attendance policy]

## VIII. Voting:

- A. [Who may vote and who may not (chair? past chair?)]
- B. Percentage of members needed to certify vote
- C. Process for Voting
- D. [Clarify process for proxy voting]
- E. [Clarify process for virtual voting]

## IX. Amendments:

A. [Define the process for amending these bylaws]

# Appendix E Sample Dashboard

# STRATEGIC PLAN 2025 - SAMPLE DASHBOARD

