



Adirondack Partnership for Regional Invasive Species Management

STRATEGIC PLAN 2023-2027



**INVASIVE SPECIES
MANAGEMENT**
ADIRONDACKS

ACKNOWLEDGEMENTS

The Adirondack Partnership for Regional Invasive Species Management (PRISM) wishes to thank the following individuals and organizations for their contributions to the 2023-2027 Strategic Plan.

Adirondack Park Invasive Plant Program (APIPP) Staff

Becca Bernacki Terrestrial Invasive Species Coordinator

Brian Greene Aquatic Invasive Species Coordinator

Shaun Kittle Communications Coordinator

Zack Simek Conservation and GIS Analyst

Tammara Van Ryn Program Director

Adirondack PRISM Strategic Planning Committee

Peter Dunleavy NYS Department of Transportation

Bill Farber Adirondack Association of Towns and Villages

Brian Greene APIPP

Kelly McKean NYS Adirondack Park Agency (replaced Leigh Walrath in 2022)

Peg Olsen The Nature Conservancy

Cathy Pedler Adirondack Mountain Club

Zoë Smith Paul Smith's College Adirondack Watershed Institute

Caitlin Stewart Hamilton County Soil and Water Conservation District

Tammara Van Ryn APIPP

Leigh Walrath NYS Adirondack Park Agency (participated until retirement in 2022)

Steve Young NYS Natural Heritage Program

Strategic Planning Consultant

Karen Strong Strong Outcomes, LLC

Adirondack PRISM Sponsors

- The NYS Department of Environmental Conservation Invasive Species Coordination Section
- The Nature Conservancy

Partners and Stakeholders

The strategic planning committee also wishes to thank the 90+ Adirondack PRISM partners and stakeholders who participated in strategic planning interviews and/or responded to the survey, and the staff of the seven other PRISMs in New York. Your feedback and input were essential to the creation of this document.

© 2022 The Nature Conservancy

The Nature Conservancy, PO Box 65, Keene Valley, NY 12943

Adirondack Park Invasive Plant Program, www.adkinvasives.com

Funding for the Adirondack Park Invasive Plant Program is provided through the NYS Environmental Protection Fund and administered as a contract through the NYS Department of Environmental Conservation to The Nature Conservancy.

All photos courtesy of APIPP.

Contents

Executive Summary	2
Introduction	4
The Challenge of Invasive Species	4
The PRISM Solution	4
About the Adirondack PRISM	5
Background	5
Geographic Region	5
Natural Resources	6
Invasive Species in the Adirondack PRISM	7
Invasive Species Pathways of Spread	7
Economic Impact of Invasive Species	8
Adirondack PRISM Strategic Alignment with State and National Programs	9
Alignment with NYSDEC Invasive Species Plans and Guidelines	9
Alignment with NY Climate Mitigation Goals	10
Alignment with The Nature Conservancy's Goals	11
Strategic Plan Part I: Vision, Mission, Goals and Objectives	13
Strategic Plan Part II: Adirondack Park Invasive Plant Program Staff Strategies	17
Implementation and Reporting	22
Appendix A: Adirondack PRISM History	24
Appendix B: Partnership Operating Principles	25
Appendix C: Strategic Planning Process	30

LIST OF ABBREVIATIONS

APA:	New York State Adirondack Park Agency
APIPP:	Adirondack Park Invasive Plant Program
AWI:	Paul Smith's College Adirondack Watershed Institute
LGPC:	Lake George Park Commission
NYS DAM:	New York State Department of Agriculture and Markets
NYS DEC:	New York State Department of Environmental Conservation
NYS DOT:	New York State Department of Transportation
PRISM:	Partnership for Regional Invasive Species Management
TNC:	The Nature Conservancy



Executive Summary

BACKGROUND

The Adirondack Partnership for Regional Invasive Species Management (Adirondack PRISM) is an extraordinary collaboration of nonprofit organizations, government entities, research institutions, and volunteers successfully addressing the threat invasive species pose to the ecology and economy of the Adirondacks.

The Adirondack Park Invasive Plant Program (APIPP), hosted by The Nature Conservancy (TNC), provides staff and program support to the Adirondack PRISM under a contract with the New York State Department of Environmental Conservation (NYSDEC). More than 30 partner organizations and 100 volunteers share their time, ideas, and resources to advance the Adirondack PRISM mission.

Thanks to the dedication of PRISM partners, volunteers, and APIPP staff over the last two decades, the Adirondack PRISM has significantly advanced aquatic invasive species spread-prevention measures, eradicated terrestrial invasive species infestations that threatened important natural resources, increased public awareness about invasive species, and helped safeguard the region from the impact of forest pests and pathogens.

"I think this [invasive species] is one of the toughest threats to our lands and waters, and climate change is only worsening the problem. The Adirondacks have one of the best shots to hold the line across the nation."

— Adirondack PRISM Partner

The threats invasive species pose to the Adirondacks are real and urgent—and are exacerbated by a more mobile population and warming climate. However, the Adirondack region is well positioned to successfully address these threats. The landscape includes large, intact forests with less disturbance, fewer invasive species, and smaller infestations than elsewhere in New York (NY). In addition, there is a long-standing, dedicated group of partners and volunteers committed to addressing invasive species threats.

The Adirondack PRISM partners, volunteers, and APIPP staff look forward to continued success protecting this unique region by achieving the goals and objectives outlined in this strategic plan.



ADIRONDACK PRISM STRATEGIC PLAN 2023-2027

The 2023-2027 Adirondack PRISM Strategic Plan is designed to engage all PRISM partners in the work of protecting the Adirondacks from the negative impacts of invasive species. Part I of the plan lays out the vision, mission, goals, and objectives that all partners can embrace and contribute to. Part II of the plan details the specific priority strategies APIPP staff contribute to the vision and goals of the partnership.

The 2023-2027 Strategic Plan is presented in a more streamlined format than the 2013-2017 Strategic Plan and has the important updates and additional features outlined below.

- Updates the vision and mission statements to be clearer and more concise
- Streamlines the number of goals from 12 to 4, and the number of objectives from 36 to 13, which reduces duplication and makes it easier for partners to communicate their work
- Provides a framework for collective partner action in Part I
- Identifies priority strategies for APIPP staff in Part II
- Defines the PRISM partnership in new partnership operating principles that clarify the roles and responsibilities of APIPP and Adirondack PRISM partners
- Includes implementation and reporting guidance

The strategic plan was developed with significant partner input and was guided by a strategic planning committee of partners and APIPP staff. For a detailed description of the strategic planning process, and results from the partner interviews and survey, see Appendix C.

Introduction

THE CHALLENGE OF INVASIVE SPECIES

An invasive species is any species—plant, animal, fungus, microorganism—that is not native to a region and that is likely to cause harm to the environment, economy, or public health. Invasive species impacts are everywhere. In the Adirondacks, for example, invasive plants and animals in river corridors displace native species and alter wildlife habitat and stormwater flow. Aquatic plant infestations impede boating and require costly removal programs to control. Forest pests threaten to reduce the resilience of Adirondack forests to climate change and financially impact the forest products industry. And, in terms of public health, some plants can burn your skin and other plants can degrade water quality.

THE PRISM SOLUTION

Increased human mobility, more international trade, and changes in the climate have increased the threat of invasive species across NY. To address the growing threat, in 2005 the NY Invasive Species Task Force recommended that the governor and legislature create and fund regional partnerships to help prevent or minimize the harm caused by invasive species. Today, eight PRISMs—funded in part by the Environmental Protection Fund administered by NYSDEC—operate across the state, each hosted by a local institution.

PRISMs are key to NY's nationally recognized integrated approach to invasive species management. PRISMs engage regional partners to advance invasive species prevention and management with programs such as recruiting and training community science volunteers, identifying and delivering education and outreach, establishing early detection and monitoring networks, and implementing direct eradication and control efforts.



Figure 1. NY Partnerships for Regional Invasive Species Management (PRISM) boundaries.



About the Adirondack PRISM

BACKGROUND

In 1998, a small group of state agencies, TNC, and other conservation groups joined efforts to document invasive plant populations along Adirondack roads and formed the "Adirondack Invasive Plant Working Group." In 2001, a parallel effort emerged to assess the distribution of aquatic invasive plants in Adirondack waterways and the "Adirondack Aquatic Invasive Plant Monitoring Program" was launched.

Principal partners of the terrestrial and aquatic invasive species programs—TNC, NYSDEC, NYS Department of Transportation (NYSDOT), and NYS Adirondack Park Agency (APA)—integrated both programs into the single, inclusive, APIPP in 2003. The establishment of APIPP provided a comprehensive framework for invasive species monitoring, management, and community outreach across the Adirondacks.

In 2008, TNC secured funding via a contract with NYSDEC to host APIPP and serve as the Adirondack PRISM, NY's first official regional partnership. Since the establishment of the Adirondack PRISM, the partnership has grown to include more than 30 partner organizations and more than 100 community scientists who volunteer to monitor aquatic and terrestrial invasive species and forest pests.

APIPP's current contract with NYSDEC runs from 2019-2023 and supports four full-time staff (a Program Director, a Terrestrial Invasive Species Coordinator, an Aquatic Invasive Species Coordinator, and a Communications Coordinator), as well as a Conservation and GIS Analyst shared with the St. Lawrence Eastern Lake Ontario (SLELO) PRISM. Seasonal stewards, research assistants, and subcontractors support field work and data collection.

GEOGRAPHIC REGION

The Adirondack PRISM region encompasses 6.6 million acres and includes all or parts of 12 counties and 119 towns (Figure 2). The PRISM region is bordered by the St. Lawrence River to the north, Lake Champlain to the east, and the Adirondack Park boundary to the south and west.

The year-round population in the Adirondack PRISM is approximately 221,000.¹ About 123,000 of the PRISM's year-round population live within the Adirondack Park, which has an additional 200,000 seasonal residents. An estimated 12 million tourists visit the region each year for its historic, cultural, outdoor, and recreational opportunities. The PRISM contains one major throughfare, I-87, which is a major transportation route connecting Canada and the United States.

¹ U.S. Census Bureau; Census 2020 Statistics.

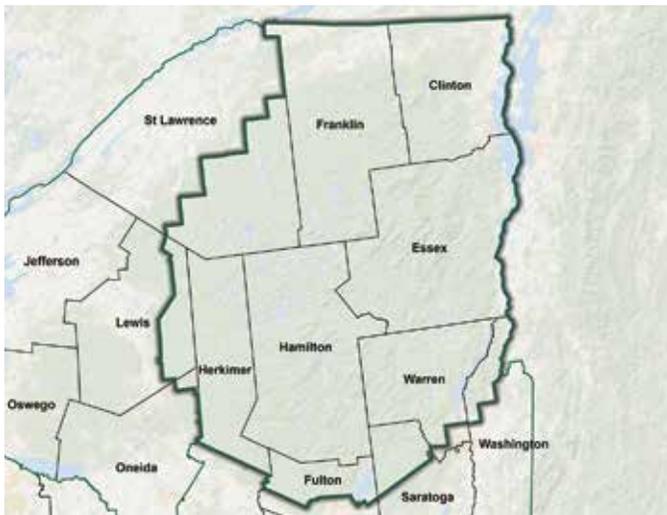


Figure 2. Adirondack PRISM boundary by county. The Adirondack PRISM includes all of Hamilton, Essex, Franklin, and Clinton counties, and portions of St. Lawrence, Lewis, Oneida, Herkimer, Fulton, Saratoga, Warren, and Washington counties.

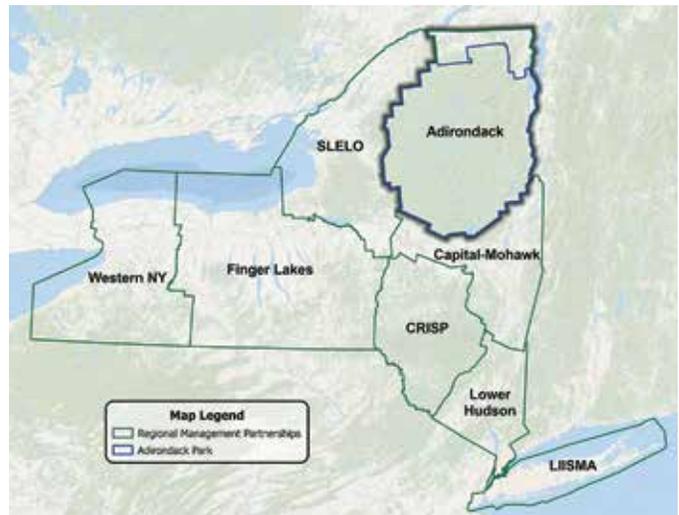


Figure 3. Adirondack Park boundary overlaid over PRISM boundary.

The Adirondack Park makes up most of the Adirondack PRISM (Figure 3). The 5.8-million-acre park was created in 1892 by the state to protect water and forest resources. The state owns around 2.7 million acres within the Park's boundaries. Public lands in the Park range from remote backcountry to state-operated campgrounds and include more than 1,800 miles of marked trails available for people of all interests and abilities. Public lands offer hiking, camping, canoeing, hunting, fishing, trapping, snowmobiling, skiing, mountain biking, and rockclimbing opportunities.

Private lands in the Park support a variety of residential, commercial, recreational, and industrial purposes. There are over 100 towns and villages in the Park, and approximately 2% of the area is classified by the APA as "hamlets" which are the residential and commercial centers of the region. The remaining private lands are devoted principally to forestry, agriculture, and open space recreation and include settlements, farms, timberlands, businesses, homes, and camps.

NATURAL RESOURCES

The Adirondack PRISM includes diverse terrestrial and aquatic systems and is dominated by forested uplands and wetlands that cover 85% of the region (Table 1).

The Adirondack landscape boasts a wide variety of habitats, including globally unique wetland types and old growth forests. The Champlain Valley and northern Franklin and Clinton counties are rich in agricultural lands. The High Peaks region contains rare alpine communities. Much of the Adirondack Park is comprised of boreal forests, mixed temperate deciduous forests, aquatic systems including 3,000 lakes, 30,000 miles of rivers and streams, and more than 800,000 acres of wetlands.

Table 1. Land cover in the Adirondack PRISM (2019).²

PERCENT	%	ACRES
Open water	6%	359,121
Developed	3%	190,614
Barren land	>1%	7,808
Deciduous forest	44%	2,879,421
Evergreen forest	21%	1,345,149
Mixed forest	11%	735,937
Shrub/scrub	1%	71,065
Grassland/herbaceous	>1%	44,449
Pasture/hay	3%	171,378
Cultivated crops	1%	68,747
Woody wetlands	10%	645,605
Emergent herbaceous wetlands	>1%	38,843
TOTAL		6,558,140

² Dewitz, J., and U.S. Geological Survey, 2021, National Land Cover Database (NLCD) 2019 Products (ver. 2.0, June 2021): U.S. Geological Survey data release, doi:10.5066/PgKZCM54.

The Adirondacks are unique, in part, because the region is home to one of the largest intact temperate deciduous forests in the world. TNC has identified the region as part of a network of resilient and connected lands³ that can help mitigate the effects of climate change.

The region contains 12 major watersheds that drain in every direction (Figure 4), with the Black River basin flowing west into Lake Ontario; the Oswagatchie, Grass, Raquette, St. Regis and Salmon/English basins draining into the St. Lawrence River; the Lake George, Ausable/Boquet and Saranac/Chazy basins flowing into Lake Champlain; and the Mohawk River, Upper Hudson and Sacandaga basins flowing into the Hudson River. The Lake Champlain and Hudson watersheds are artificially connected by the Champlain Canal.



Figure 4. Major watershed boundaries in the Adirondack PRISM. (Showing hydrologic unit code "HUC" 8.)

INVASIVE SPECIES IN THE ADIRONDACK PRISM

There are approximately 6,500 mapped infestations of terrestrial invasive species tracked by APIPP in the Adirondack PRISM. These infestations tend to be distributed along roadsides, in hamlets and villages, on private lands, and in campgrounds. Aquatic invasive species are present in at least 110 waterbodies; Lake Champlain and the St. Lawrence River have the most aquatic invasive species in the PRISM. Forest pests and pathogens have spread into the PRISM in greater numbers since the last strategic plan. In 2020, the first major infestation of hemlock woolly adelgid (*Adelges tsugae*) and first occurrence of emerald ash borer (*Agrilus planipennis*) were documented in the Adirondack Park. Beech leaf disease was first detected in 2022.

Despite the increasing threat, there is positive news for the future management of invasive species in the Adirondacks. Eradication is a realistic objective for many priority terrestrial plant infestations, in part because many are small (the average size of an infestation managed by APIPP in 2021 was about 0.06 acres). In fact, 62% of infestations managed by APIPP over the last two decades have been successfully removed. The news is also hopeful for aquatic species, as 76% of the 463 lakes that have been monitored by APIPP and Adirondack PRISM partners are free of invasive aquatic plants and invertebrates. Adirondack PRISM partners are also actively addressing forest pests and pathogens via prevention, monitoring, and management.



INVASIVE SPECIES PATHWAYS OF SPREAD

Pathways are the means and routes by which invasive species are imported and introduced into new environments. These pathways are as varied as the invasive species that are spread by them. New introductions of invasive species populations into and throughout the PRISM occur regularly. Identifying the pathways and prioritizing them for education or outreach programs and for management helps ensure resources are deployed in the most efficient and effective manner possible and have the greatest long-term chance of preventing introductions.

³ Anderson, M.G., Barnett, A., Clark, M., Prince, J., Olivero Sheldon, A. and Vickery B. 2016. Resilient and Connected Landscapes for Terrestrial Conservation. The Nature Conservancy, Eastern Conservation Science, Eastern Regional Office, Boston, MA.

Many invasive species arrive and spread in the PRISM because of human activities. Plant propagules and animal hitchhikers often are inadvertently spread by recreational equipment such as motorized boats and non-motorized watercraft, fishing waders, hiking boots, bicycles, camping trailers, and hay transported by horseback riders. Construction equipment and vehicles are another pathway. Some invasive species, especially forest pests, can also stow away in wood packaging materials and wooden shipping pallets, or can be transported on nursery stock, soil, compost, or firewood. Other pathways of human-mediated introduction include the ornamental plant trade, transportation of contaminated soil, dumping of bait buckets, and release of aquarium plants and animals.

Although invasive species prevention efforts tend to focus on the human drivers of spread, natural spread occurs through pathways such as wind or animal dispersal or extreme weather events. Streams and connected waterways carry plant materials and animals throughout a watershed via water flow. Insects naturally disperse by flight. Plant propagules and seeds attach to fur and feathers and are also spread in animal feces.

ECONOMIC IMPACT OF INVASIVE SPECIES

In 2014, APIPP commissioned a study⁴ of the potential negative ecologic and economic consequences of the spread of invasive species. It included cost estimates for the damage caused by eight invasive species, including six that are currently present in the Park: Asian clam (*Corbicula fluminea*), Eurasian watermilfoil (*Myriophyllum spicatum*), emerald ash borer,⁵ Japanese knotweed (*Reynoutria japonica*), spiny water flea (*Bythotrephes longimanus*), and spotted wing drosophila (*Drosophila suzukii*), and two that are present nearby and of concern: Asian longhorned beetle (*Anoplophora glabripennis*) and hydrilla (*Hydrilla verticillata*).



“There are significant actual and potential direct economic costs associated with invasive species in the Adirondack Park. There are also recurring costs associated with prevention and control of invasive species. Experience elsewhere tells us that prevention is less expensive than control and the failure to prevent and/or control invasive species will result in economic harm.”

- Yellow Wood Associates 2014

A conservative estimate of the potential direct economic impact from the eight species evaluated in the 2014 study was between \$468 and \$893 million in 2014 dollars. This is 100 to 200 times what the Adirondack PRISM partners spent on preventing, monitoring, and managing invasive species in 2013.

⁴ Yellow Wood Associates. 2014. The Actual and Potential Economic Impact of Invasive Species on the Adirondack Park: A Preliminary Assessment. Prepared for the Adirondack Park Invasive Plant Program, Keene Valley, NY.

⁵ Emerald ash borer was not present in the Adirondack Park when the report was written in 2014. It was first detected in 2020 at a Warren County canoe access site and is now known to be in multiple locations throughout the Park.



Adirondack PRISM Strategic Alignment with State and National Programs

INTRODUCTION

As a program funded by NYS, hosted by TNC, and serving over 30 partners, the Adirondack PRISM's work must align with multiple organizational missions. The Adirondack PRISM strategic plan supports NY's invasive species and climate plans and policies and TNC's global "2030 Goals" and regional priorities.

ALIGNMENT WITH NYSDEC INVASIVE SPECIES PLANS AND GUIDELINES

PRISMs were created to address invasive species through coordination, recruitment and training of volunteers, education, early detection, rapid response, eradication, research, and planning. The Adirondack PRISM strategic plan is consistent with the PRISM role outlined in the goals and recommendations in the New York State Invasive Species Comprehensive Management Plan. The state plan has an overarching goal to *minimize the introduction, establishment, proliferation, and negative impacts caused by invasive species*. The plan outlines the important role of PRISMs in the state's invasive species management strategy.

"The Partnerships for Regional Invasive Species Management play a central role in New York's approach to invasive species management by building expertise within their regions of the state and providing regionally adapted, on-the-ground actions regarding invasive species outreach, prevention, management, and monitoring, as well as identifying regional priorities for allocating agency resources."

– New York State Invasive Species
Comprehensive Management Plan (2018)⁶

NYSDEC has several corresponding agency initiatives and documents that informed the Adirondack PRISM strategic plan and that will continue to inform annual work planning as it is implemented, including Strategic Recommendations for NY Invasive Species Education & Outreach 2016-2021, NYS Aquatic Invasive Species Management Plan (2015) and NYSDEC's Framework for Rapid Response for Invasive Species (2016).

⁶ https://www.dec.ny.gov/docs/lands_forests_pdf/iscmpfinal.pdf.



ALIGNMENT WITH NY CLIMATE MITIGATION GOALS

The Adirondack PRISM's work also supports NY's bold climate goals. The 2019 Climate Leadership and Community Protection Act (Climate Act) requires NY to be carbon neutral by 2050. The law created a climate action council charged with developing a scoping plan of recommendations to meet these targets and place NY on a path toward carbon neutrality.

The draft scoping plan released by the climate action council in December 2021 recognized that invasive species negatively impact the ability of NY's forests to store and sequester carbon by altering the forest ecosystem, preventing regeneration, reducing the growth and vigor of trees, and causing direct mortality.

"[C]limate change is expected to increase the competitiveness of invasive plants and increase the range and survival of invasive insects and diseases. Prevention, response, and restoration will be ongoing as new invasive species are introduced and the ranges and competitiveness of existing species in New York expand."

– NY Climate Action Council Draft Scoping Plan⁷

To address the critical threat invasive species pose to successfully implementing the Climate Act, at least eight of the "Agriculture and Forestry Sector Key Strategies" in the 2021 draft scoping plan include actions to prevent and control invasive species. Implementation of the Adirondack PRISM strategic plan advances these strategies and will help NY achieve the ambitious goals outlined in the Climate Act.



ALIGNMENT WITH THE NATURE CONSERVANCY'S GOALS

Global Mission and Goals

The mission of TNC is to conserve the lands and waters on which all life depends. Recognizing that the planet faces the most complex challenges of our lives—the interconnected crises of rapid climate change and biodiversity loss—TNC has adopted six ambitious 2030 goals to ensure that people and nature thrive. Invasive species prevention and management are key to achieving three of the goals.

Tackling Carbon Emissions:

TNC will avoid or sequester 3 billion metric tons of carbon dioxide emissions (CO²e) annually.

Conserving the World's Freshwater:

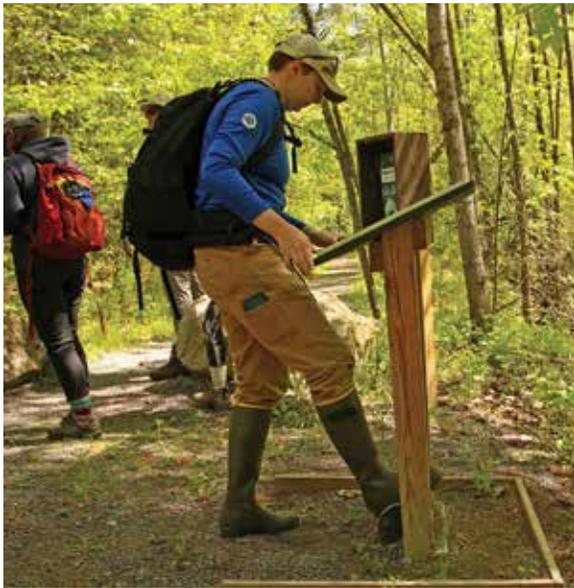
TNC will conserve 1 million kilometers of river systems and 30 million hectares of lakes and wetlands, which includes 20 million hectares of lakes and wetlands with improved management and 3 million hectares of at-risk lakes and wetlands with avoided impact.

Saving Healthy Lands:

TNC will conserve, restore, or improve 650 million hectares of land, which includes 400 million hectares of land area with improved management and 100 million hectares of at-risk lands with avoided impact.

The Nature Conservancy in New York

NY's natural lands store vast amounts of carbon, provide key ecosystem services to people, and support rich biodiversity. As noted earlier, the Adirondack region is home to one of the largest temperate deciduous forests in the world and is identified by TNC as part of a network of resilient and connected lands which, if conserved, will help biodiversity persist in the face of climate change.



In the eastern United States, the TNC-defined resilient and connected land network extends along the Appalachian Mountain range from Alabama through NY and into Nova Scotia, representing a continental-scale corridor for species that will need to move long distances to find suitable habitat as the climate changes. TNC has selected the larger Appalachian region, which includes the Adirondacks, as one of four initial "focal areas" globally. These four geographies are priority areas for innovative TNC-wide efforts to accelerate conservation progress.

Though NY's forests and waterways serve as critical connectors in the Appalachian focal area, forest pests and pathogens put seven of the ten most abundant tree species at risk and invasive species threaten the health of the region's freshwater and terrestrial ecosystems. The Adirondack PRISM strategic plan directly addresses these threats by aligning with three key strategies TNC is deploying in NY to achieve global goals.

Mitigate Climate Change

Natural climate solutions are essential to achieving TNC's global "Tackling Carbon Emissions" and NY's climate mitigation goals. Maintaining the carbon sequestration potential of NY's forests by reducing the threat from invasive species is an important strategy for success. A recent study⁸ showed forest plots damaged by insect pests stored 69% less carbon than less-disturbed plots and plots recently impacted by disease stored about 28% less carbon. Nationally it was estimated that the amount of reduced carbon storage in disturbed forests is equivalent to the carbon dioxide emissions from over 10 million passenger vehicles driven for a year! APIPP's efforts to slow the spread of forest pests and pathogens is a key strategy for sequestering carbon in NY forests.

Conserve Resilient and Connected Lands and Waters

Protecting and restoring a network of resilient and connected lands that will allow species and natural systems to persist in the face of climate change is a key TNC strategy for achieving its global "Saving Healthy Lands" and "Conserving the World's Freshwater" goals. In NY, TNC—via the combined work of the Adirondack and SLELO PRISMs—engages partners across the political and socio-economic spectrum to avoid or minimize the impact of invasive species on 7.4 million acres of NY's resilient and connected lands, waters, and wetlands.

Manage for Resilience

Implementing effective management on public and private lands to improve the resilience and health of terrestrial and aquatic systems is paramount to achieving TNC's goals for hectares of improved management. In the Adirondacks, APIPP is helping to prevent new infestations of invasive species and is restoring invaded lands to natural conditions. APIPP has been successful in removing the invasive species threat on more than 62% of the sites it has managed over the last 20 years, and a study completed in 2022 showed these sites passively restore to a natural state. APIPP also works with PRISM partners to prevent the introduction of invasive species into Adirondack waterways, and to monitor and manage aquatic invasive species infestations in Adirondack lakes and ponds—75% of which remain free of aquatic invasive species. APIPP's invasive species prevention and restoration efforts directly contribute to TNC's managing for resilience goals.



⁸ Quirion, B. R., Domke, G. M., Walters, B. F., Lovett, G. M., Fargione, J. E., Greenwood, L., Serbesoff-King, K., Randall, J. M., & Fei, S. (2021). Insect and Disease Disturbances Correlate with Reduced Carbon Sequestration in Forests of the Contiguous United States. *Frontiers in Forests and Global Change*, 4. <https://doi.org/10.3389/ffgc.2021.716582>.



Strategic Plan Part I: Vision, Mission, Goals and Objectives

VISION

The Adirondack PRISM's vision is what partners hope the Adirondacks will be like in 20 years as a result of their work together and it reflects the reality of the invasive species threat.

The Adirondack PRISM envisions a healthy Adirondack region where impacts of invasive species do not significantly degrade the landscape and partners and the public are actively engaged in minimizing the economic and ecological threats these non-native species pose to our human and natural communities. As a result, native species thrive, community investment in managing invasive species is cost effective, and ecosystems are more resilient to the impacts of climate change.

MISSION

The Adirondack PRISM's mission is a simple statement of what the PRISM does to achieve the mission.

To work in partnership to minimize the impact of invasive species on the Adirondack region's communities, lands, and waters.

ADIRONDACK PRISM PARTNERS COLLECTIVE GOALS AND OBJECTIVES

The Adirondack PRISM is successful because partners have worked together for more than two decades. The goals and objectives described in Part I are a framework for collective action.

The goals are intentionally worded to strategically align PRISM work and allow partners to visualize how their individual contributions advance the PRISM mission. Note that although partners may support all of the goals, not all partners actively contribute to all goals. Examples of how partners contribute to the PRISM vision are included for each goal.

"At a very practical level, it is extremely important to have a strong partnership. No one entity can address invasive species on their own."

- Adirondack PRISM Partner

The objectives are the roadmap Adirondack PRISM partners use to achieve the goals. These objectives recognize that different partners may have different priorities, based on each partner organization's mission. Collectively, however, the work of individual partners is leveraged by that of the other partners advancing similar objectives.

PLAN STRUCTURE

VISION

The Adirondack PRISM envisions a healthy Adirondack region where impacts of invasive species do not significantly degrade the landscape and partners and the public are actively engaged in minimizing the economic and ecologic threats these non-native species pose to our human and natural communities. As a result, native species thrive, community investment in managing invasive species is cost effective, and ecosystems are more resilient to the impacts of climate change.

MISSION

To work in partnership to minimize the impact of invasive species on the Adirondack region's communities, lands, and waters.

GOAL 1



Protect Adirondack PRISM lands from the most significant ecologic and economic impacts of terrestrial invasive plants and animals, including forest pests and pathogens

GOAL 2



Protect Adirondack PRISM waters from the most significant ecologic and economic impacts of aquatic invasive plants and animals

GOAL 3



Build knowledgeable and engaged communities that are empowered to act on invasive species issues

GOAL 4

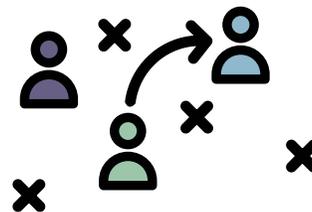


Engage in research and innovation to improve the monitoring and management of invasive species

IMPLEMENTATION



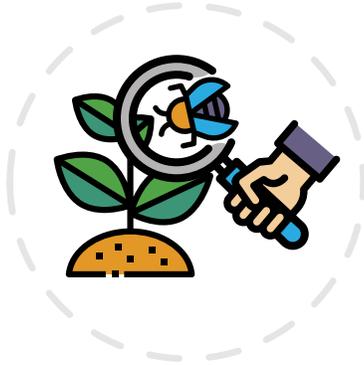
PARTNER EFFORTS



AIPPP STAFF STRATEGIES

GOAL 1

Protect Adirondack PRISM lands from the most significant ecologic and economic impacts of terrestrial invasive plants and animals, including forest pests and pathogens



In a region of more than 6.6 million acres, partners have an essential role in protecting Adirondack PRISM lands from the most severe impacts of terrestrial invasive species, and they contribute in many ways. For example, NYS Department of Agriculture and Markets (NYSDAM) minimizes the spread of invasive species by regulating and inspecting nursery material and NYSDOT manages priority infestations along roadways. NYSDEC, County Soil and Water Conservation Districts, and nonprofit organizations such as the Adirondack Mountain Club and Lake George Land Conservancy, are engaged in terrestrial invasive species and forest pest monitoring and management.

Objective 1.1: Minimize the introduction and spread of terrestrial invasive species

Objective 1.2: Monitor for terrestrial invasive species

Objective 1.3: Manage priority infestations of terrestrial invasive species

Objective 1.4: Collaboratively address terrestrial invasive species threats with partners

GOAL 2

Protect Adirondack PRISM waters from the most significant ecologic and economic impacts of aquatic invasive plants and animals



In a region with more than 3,000 lakes and 30,000 miles of rivers and streams, partners have an essential role in protecting Adirondack PRISM waters from the most severe impacts of aquatic invasive species, and they contribute in various ways. For example, the Paul Smith's College Adirondack Watershed Institute (AWI) and the Lake George Park Commission (LGPC) are important spread-prevention partners, staffing more than 50 locations with trained stewards who educate boaters and who, in 2020, inspected over 120,000 boats. Lake associations help prevent the spread of invasive species and monitor and manage species in their watersheds to protect valuable recreational assets. County Soil and Water Conservation Districts, and nonprofit organizations such as the Ausable River Association, conduct monitoring and management to help improve aquatic resources.

Objective 2.1: Minimize the introduction and spread of aquatic invasive species

Objective 2.2: Monitor for aquatic invasive species

Objective 2.3: Manage priority infestations of aquatic invasive species

Objective 2.4: Collaboratively address aquatic invasive species threats with partners

Build knowledgeable and engaged communities that are empowered to act on invasive species issues

GOAL 3



Human activity is one of the primary pathways of invasive species spread. In a region with over 100 towns and villages, and over 12 million visitors each year, partnerships are essential for building knowledgeable and engaged citizens. For example, the Ausable River Association and Adirondack Mountain Club educate their members about the principles of "Leave No Trace" and responsible stewardship. County Cornell Cooperative Extension offices offer education through their "Master Gardener" programs. The Adirondack Council and Adirondack Association of Towns and Villages are actively working on legislation and policy. Volunteers help survey for invasive species and tell their friends how to avoid spreading them.

Objective 3.1: Increase public awareness of, and participation in, meaningful and effective invasive species prevention, monitoring, and management activities

Objective 3.2: Share information, resources, and expertise among Adirondack PRISM and statewide partners and build a strong partner network

Objective 3.3: Secure funding, programmatic, and legislative support for invasive species initiatives from local, state, and federal governments

Engage in research and innovation to improve the monitoring and management of invasive species

GOAL 4



Addressing invasive species is a scientific, communication, and logistical challenge. Partners use innovation, research, and adaptive management to continually learn and improve the effectiveness of their work. For example, the NY Invasive Species Research Institute helps coordinate research around the state and was a leader in creating the Northeast Regional Invasive Species and Climate Change network. Partner educational institutions, such as Cornell University, Paul Smith's College, and the State University of New York College of Environmental Science and Forestry, are engaged in invasives species research and innovation. Private research companies, such as Adirondack Research, also contribute to the advancement of invasive species science in the region.

Objective 4.1: Implement and evaluate innovative prevention, monitoring, and management techniques, and share findings with partners and the public

Objective 4.2: Collaborate on invasive species research projects

Strategic Plan Part II: Adirondack Park Invasive Plant Program Staff Strategies

SETTING PRIORITIES

Part I is a framework of goals and objectives for the collective work of Adirondack PRISM partners. Part II reflects APIPP's contributions to the Adirondack PRISM's goals and objectives. APIPP must be strategic in the use of NYS Environmental Protection Fund moneys, and staff priorities are intended to maximize the conservation benefit of APIPP's actions. APIPP prioritizes its work using the Tier Ranking System.

TIER RANKING SYSTEM

NY's iMapInvasives and the eight PRISMs developed an invasive species categorization method called the Tier Ranking System to help prioritize management goals and unify the terminology used region-to-region. This statewide system categorizes invasive species into Tiers 1 through 5 for each PRISM based on several factors, including the number of documented occurrences of the species in the PRISM. iMapInvasives works with PRISM staff to update these tier lists on a regular basis. In spring of 2022, there were 74 Tier 2-4 terrestrial species and 23 Tier 2-4 aquatic species in the Adirondack PRISM. There was also a long list of Tier 5 species, which are defined as those of unknown invasiveness that would require additional research, information, or location verification before being considered for management.

Table 2. Description of tier ranking system and priority actions by tier.

DESCRIPTION	PRIORITY ACTIONS BY TIER
<p>Tier 1 species are not yet known to occur within a PRISM boundary but are likely to establish and spread if introduced.</p>	<p>Prevention Because Tier 1 species are not yet found in the area, but occur in neighboring regions, APIPP works to control these species through education, outreach, and awareness-building activities.</p>
<p>Tier 2 species are found in low enough abundance with suitable treatment options available to make eradication possible within the PRISM.</p>	<p>Eradication Tier 2 species are a high priority for monitoring and management. These species are best suited for an early detection and rapid response strategy.</p>
<p>Tier 3 species are likely too widespread or well established for the possibility of eradication.</p>	<p>Containment Strategic management can contain Tier 3 species in their present location and slow their spread into neighboring areas that remain free of harmful infestations.</p>
<p>Tier 4 species cannot be eradicated from the PRISM geography because they are too widespread or too established and management is cost prohibitive.</p>	<p>Suppression In these cases, focus shifts to limited, localized suppression efforts targeted at protecting high-priority resources such as rare habitats, endangered species, and recreational assets.</p>

APIPP further prioritizes infestations for monitoring or management based on the following factors:

- Impact of the infestation on conservation priorities (including TNC's resilient and connected lands network), economic resources, or human health.
- Availability of effective tools to control both the infestation and the source(s) of introduction.
- Availability of resources to monitor or manage the infestation.
- Cost-effectiveness of management options and the opportunity cost of deploying resources.
- Input of relevant Adirondack PRISM partners and APIPP working groups.

APIPP PRIORITY STRATEGIES

The strategies below each objective will be deployed by APIPP staff over the term of the strategic plan to help achieve the Adirondack PRISM's collective vision, mission, goals and objectives.



GOAL 1

Protect Adirondack PRISM lands from the most significant ecologic and economic impacts of terrestrial invasive plants and animals, including forest pests and pathogens

Objective 1.1: Minimize the introduction and spread of terrestrial invasive species

- Prioritize terrestrial invasive species that will be covered in spread-prevention education programs
- Develop specialized terrestrial invasive species spread-prevention materials for land managers (such as NYSDOT and other highway personnel)
- Promote, and assist partners with the creation of, spread-prevention infrastructure to address specific pathways of terrestrial invasive species spread (such as boot brush stations, bike wash stations, construction equipment cleaning stations)

Objective 1.2: Monitor for terrestrial invasive species

- Prioritize species and locations to monitor based on the species' regional distribution, past monitoring results, "no plants observed" monitoring schedule, rare and endangered species information, and other factors
- Deploy contracted professionals and permanent and seasonal staff (such as campground stewards and forest pest research assistants) to monitor distribution and abundance of priority species, to monitor priority locations, and/or to evaluate management effectiveness at known infestation sites
- Train and coordinate volunteers to monitor for terrestrial invasive species, including forest pests and pathogens

Objective 1.3: Manage priority infestations of terrestrial invasive species

- Prioritize infestations for management and secure required permits and permissions for treatment
- Deploy permanent and seasonal staff and contracted professionals to manage invasive species as follows:
 - ~ Work to eradicate infestations of Tier 2 species where possible
 - ~ Strategically manage infestations of Tier 3 species to contain their spread
 - ~ Strategically manage and suppress infestations of Tier 4 species that threaten high-value resources

Objective 1.4: Collaboratively address terrestrial invasive species threats with partners

- Regularly update terrestrial invasive species best management practices
- Provide technical advice to landowners and partners on the identification and management of terrestrial invasive species
- Collaborate with partners to address terrestrial invasive species issues (such as the PRISM terrestrial invasive species coordinators group, regional working groups for emerald ash borer and hemlock woolly adelgid, and statewide giant hogweed and jumping worm working groups) and create additional working groups as needed



GOAL 2

Protect Adirondack PRISM waters from the most significant ecologic and economic impacts of aquatic invasive plants and animals

Objective 2.1: Minimize the introduction and spread of aquatic invasive species

- Prioritize aquatic invasive species that will be covered in spread-prevention education programs
- Assist AWI, LGPC, NYSDEC, and lake associations with the watercraft inspection steward and boat decontamination programs by providing information about steward programs and decontamination infrastructure and by offering technical assistance with monitoring and analyzing aquatic invasive species distribution
- Develop specialized aquatic invasive species spread-prevention materials for targeted user groups (such as organizers of fishing tournaments, partners working to slow the spread of invasive species via the canal system)

Objective 2.2: Monitor the Adirondack PRISM for aquatic invasive species

- Prioritize species and locations to monitor with input from partners
- Deploy contracted professionals and staff to monitor distribution and abundance of priority species and/or to monitor priority locations using a variety of techniques (such as visual surveys, eDNA sampling, remote vehicles)
- Recruit and train partners and "Lake Protector" volunteers to participate in monitoring lakes and streams to detect aquatic invasive species
- Refine the Lake Management Tracker methodology, support the technology, and recruit participants to monitor aquatic invasive species to evaluate management effectiveness and to inform future management strategies

Objective 2.3: Manage priority infestations of aquatic invasive species

- Lead projects and collaborations to remove small populations of aquatic invasive species that have a high probability of successful eradication or containment across the region (priority locations of Tier 2 and Tier 3 species)
- Help partners and volunteers manage Tier 3 and Tier 4 species by assisting with the assessment of various management techniques, and by providing information about the effectiveness of various management techniques and about the permitting process

Objective 2.4: Collaboratively address aquatic invasive species threats with partners

- Convene a working group of key Adirondack aquatic invasive species partners to inform members about regional activities, recommend metrics and benchmarks for regional goals, and collaborate on projects
- Participate in regional working groups (such as the PRISM aquatic invasive species coordinators group, Northeast Aquatic Nuisance Species Panel, Lake Champlain Basin Program committees)
- Work with regional partners (such as the New York State Federation of Lake Associations, Adirondack Lake Assessment Program, Citizens Statewide Lake Assessment Program) to incorporate aquatic invasive species monitoring into other monitoring and study programs related to lake threats (such as water quality, harmful algal blooms, climate change)
- Regularly update aquatic invasive species best management practices



GOAL 3

Build engaged and knowledgeable communities that are empowered to act on invasive species issues

Objective 3.1: Increase public awareness of, and participation in, meaningful and effective invasive species prevention, monitoring, and management activities

- Create and implement an annual communications plan to reach a broad audience with spread prevention and other invasive species messages using a variety of outreach tools
- Develop an annual APIPP education calendar that includes core educational workshops (such as those for transportation professionals, pesticide applicators, aquatic and terrestrial invasive species volunteers) and topical workshops (such as those focused on specific pathways of spread, information about new species, management of specific species); include iMapInvasives training information as appropriate; secure speakers and promote workshops
- Participate in NY's Invasive Species Awareness Week
- Respond promptly to requests for information from the public

Objective 3.2: Share information, resources, and expertise among Adirondack PRISM and statewide partners and build a strong partner network

- Provide a clearinghouse of information via a well-designed and maintained website that includes species information and best management practices, displays monitoring results, and serves as a mechanism for sharing reports, maps, and other resources
- Expand the Adirondack PRISM partnership to engage new constituencies as needs and opportunities arise
- Regularly coordinate with state and regional partners (such as NYSDEC, NYSDOT, NYSDAM, iMapInvasives, other NY PRISMs, AWI, and other Adirondack nonprofits) and create working groups as needed
- Support partners by sharing APIPP expertise and resources at partners' meetings, outreach events, and educational workshops
- Host or participate in conferences and symposia focused on sharing the latest invasive species technical information with partners, volunteers, and others
- Host a minimum of two partner meetings each year
- Convene and coordinate with Adirondack partners engaged in communications, outreach, and education
- Create and disseminate an APIPP Annual Report and annual metrics

Objective 3.3: Secure funding, programmatic, and legislative support for invasive species work from local, state, and federal governments

- Provide letters of support for partners seeking funding and share notices of funding opportunities with partners
- Seek funding for special projects as opportunities permit
- Provide information about invasive species issues to policy makers, NY's Invasive Species Council, and others
- Assist state agencies with enforcement by providing information about invasive species laws to the public
- Work with regional partners to better understand invasive species prevention, monitoring, and management capacity constraints (such as lack of qualified pesticide applicators, lack of companies to conduct aquatic invasive species management, lack of funding) in order to identify opportunities for collective action



GOAL 4

Engage in research and innovation to improve the monitoring and management of invasive species

Objective 4.1: Implement and evaluate innovative prevention, monitoring, and management techniques and share findings with partners and the public

- Identify, deploy, and/or evaluate innovative approaches to invasive species prevention, monitoring, and management (such as use of remote sensing, eDNA analysis, new chemical treatment options for terrestrial and aquatic invasive species, biological controls)
- Foster the exchange of knowledge about innovative techniques with partners and the public

Objective 4.2: Collaborate on invasive species research projects

- Coordinate with the NY Invasive Species Research Institute and other partners to identify and advance priority empirical and applied research projects
- Assist with statewide or region-wide research projects, including monitoring ash species plots for emerald ash borer-induced mortality, monitoring hemlock plots, and assessing the impact of deer on native vegetation
- Complete a within-lake spatial analysis to identify abiotic, biotic, and human factors that predict which areas in a lake would be most susceptible to invasive species invasion
- Identify and prioritize applied research projects (such as revising the 2014 economic impact report, testing outreach message effectiveness, analyzing alternative knotweed treatments, evaluating tools for monitoring and managing common reed grass, assessing the effectiveness of targeted Eurasian watermilfoil removal) and secure funding and partnerships to implement as feasible

MANAGE

Adirondack PRISM Operations

Managing Adirondack PRISM operations is an important task for APIPP staff that contributes to the success of all four goals. Staff will deploy the following priority strategies in carrying out this work.

- Work closely with the NYSDEC Invasive Species Coordination Section to manage TNC's contract with NYSDEC
- Submit all required reports to NYSDEC
- Hire and support APIPP permanent and seasonal staff
- Integrate APIPP staff with TNC's programs
- Evaluate, adapt, and revise the Adirondack PRISM strategic plan



Implementation and Reporting

INTRODCUTION

This section describes the tools to support implementation of the plan. For partners, the Adirondack PRISM strategic plan can be used to describe how their work on invasive species fits into the PRISM mission. For APIPP staff, this plan will guide annual work planning, annual reporting, and communication throughout the year.

PARTNER DATA DASHBOARD

One way of tracking partner contributions to the strategic plan objectives could be through a data dashboard. A data dashboard is a centralized, interactive way of capturing data and displaying information visually. A dashboard shows key performance indicators (KPIs) that can be used to evaluate and demonstrate program progress at a snapshot in time. (A printed dashboard can show simple indicators, and an online dashboard can show additional analytics). Developing a partner data dashboard is a multi-step, multi-year project.

In the first step, completed during the strategic planning process, the purpose of the data dashboard was clarified, potential metrics were explored, and partner enthusiasm for the concept was confirmed. The purpose of a partner data dashboard for the Adirondack PRISM would be to show the annual collective efforts and accomplishments of Adirondack PRISM partners, and would have the following uses.

- Help partners illustrate their contributions to the PRISM
- Show policy makers and the public the collective return on investment
- Show the progress of collaborative efforts over time



In the second step, collective metrics need to be explored and defined. After that, data-collection systems must be tested. It is hoped that data collection can be piloted in 2023. Several challenges must be overcome during this second phase.

- Indicators must be easy to measure, and all partners need to agree to measure things the same way
- Data input must be easy
- Partners must report consistently to avoid skewing collective results

To address these challenges, initial implementation in step three will start small, and will focus on measures of collective partner effort (outputs) that are relatively straightforward to define, agree upon, and consistently collect. Examples might include the number of terrestrial invasive species monitored, number of waterbodies managed for aquatic invasive species, number of active PRISM partners, and number of research projects underway.

If initial versions of the dashboard are successful and useful for partners, new metrics may be added over time. Ways to evaluate and display the impact (outcomes) of our collective work can be explored in later phases of plan implementation.

APIPP ANNUAL REPORT

The APIPP Annual Report summarizes the work APIPP does to achieve the vision and to fulfill its contract with NYSDEC. The report includes a wide variety of annual metrics, including the number of introductions of Tier 1 species, number of Tier 2 species detected, number of terrestrial invasive plant infestations presumed eradicated, number of lakes infested with invasives species, number of volunteers, and number of education programs and audiences reached.

It is expected that the Annual Report will continue to report on program accomplishments. The strategic planning committee also encouraged APIPP staff to further explore outcome-based metrics. At a meeting in February 2022, the committee suggested several metrics and trends using data that are not currently being collected; these were provided to staff in a separate document. Because there is a potentially high cost associated with assessing outcomes, each potential new metric needs to be carefully evaluated for feasibility, utility, and funding.

IMPLEMENTATION TRACKING TABLE FOR APIPP PRIORITY STRATEGIES

In addition to reporting on progress via the Annual Report, APIPP can explore summarizing its implementation of the priority strategies by annually noting which strategies were implemented. Should it prove useful and feasible, a color-coding system could be added (such as green for fully implemented, yellow for partially implemented or room for improvement, red for not implemented). An example of an annual tracking table for Goal 1, Objective 1.1. is shown below.

APIPP PRIORITY STRATEGIES	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
OBJECTIVE 1.1: MINIMIZE THE INTRODUCTION AND SPREAD OF TERRESTRIAL INVASIVE SPECIES					
Prioritize terrestrial invasive species that will be covered in spread-prevention education programs	✓				
Develop specialized terrestrial invasive species spread-prevention materials for land managers (such as NYSDOT and other highway personnel)	✓				
Promote, and assist partners with the creation of, spread-prevention infrastructure to address specific pathways of terrestrial invasive species spread (such as boot brush stations, bike wash stations, construction equipment cleaning stations)	✓				

APPENDIX A:

Adirondack PRISM History

In 1998, a small group of state agencies and conservation groups joined efforts to document invasive plant populations along Adirondack roads. The "Adirondack Invasive Plant Working Group" (AIPWG) was formed and soon discovered an expanding pattern of invasive plant growth along Adirondack travel corridors. With the assistance of community scientists, the AIPWG established the first Park-wide database for roadside invasive plant distributions and, concurrently, initiated a seasonal campaign to control selected infestations.

Meanwhile, a parallel effort emerged to assess the distribution of aquatic invasive plants in Adirondack waterways through observations by shoreline owners and academic institutions. Several organizations participating in the AIPWG responded to public requests to document these infestations, implementing a community-science based, Adirondack Aquatic Invasive Plant Monitoring Program (AAIPMP) with EPA start-up funds in 2001. Housed at the Adirondack Park Agency, the AAIPMP trained participants to map and describe invasive plant infestations in lakes and ponds and established an internet-based data repository for species distributions, management activities, and research.

Principal partners of the terrestrial and aquatic invasive species programs—NYSDOT, NYSDEC, TNC, and APA—identified an opportunity to strategically align both programs. In 2003, the AIPWG and AAIPMP integrated into a single inclusive Adirondack Park Invasive Plant Program (APIPP). The establishment of APIPP provided a comprehensive framework for invasive plant monitoring, management, and community outreach in the Adirondack Park. Under the leadership of its first full-time coordinator, APIPP expanded its list of partner organizations and broadened its scope of work in the Adirondacks. Full-time aquatic and terrestrial invasive species coordinators established core programming to document the distribution of priority species through partner and volunteer community science engagement.

In 2008, APIPP secured funding through the NYS Environmental Protection Fund, as administered by NYSDEC, to become NY's first PRISM. With increased funding, APIPP continued to expand its list of cooperating partners and advanced several novel initiatives including NY's first region-wide terrestrial invasive species early detection and rapid response team and an Adirondack-wide Invasive Species Awareness Week.

APIPP was awarded its second NYSDEC contract in 2014. Renewed funding allowed for the addition of a region-wide aquatic invasive species detection team and facilitated the publishing of multiple seminal reports, including an economic impact study. APIPP's was awarded its third contract in 2019, which provided the additional full time staff capacity of a communications and education coordinator and part time information management coordinator, and included funding for advancing innovative early-detection tools.

**Partnership Operating Principles
for the
Adirondack Partnership for Regional Invasive Species Management
managed by
The Adirondack Park Invasive Plant Program**

I. ABOUT THE ADIRONDACK PRISM

More than 30 partner organizations and 100 volunteers share their ideas, time, and resources to advance the mission of the Adirondack Partnership for Regional Invasive Species Management (PRISM), one of eight partnerships across New York. The Adirondack Park Invasive Plant Program (APIPP) provides staff and program support to the Adirondack PRISM.

APIPP was founded in 1998 by The Nature Conservancy (TNC), New York State (NYS) Department of Environmental Conservation (NYSDEC), NYS Department of Transportation, and NYS Adirondack Park Agency. APIPP is hosted by the Adirondack Chapter of TNC and receives funding from the Environmental Protection Fund administered by NYSDEC.

II. OUR SHARED PURPOSE

These Partnership Operating Principles define how Adirondack PRISM partners and APIPP volunteers and staff engage in the work to achieve the shared vision, mission, and goals of the Adirondack PRISM.

A. VISION

The Adirondack PRISM envisions a healthy Adirondack region where the impacts of invasive species do not significantly degrade the landscape and partners and the public are actively engaged in minimizing the economic and ecologic threats these non-native species pose to our human and natural communities. As a result, native species thrive, community investment in managing invasive species is cost effective, and ecosystems are more resilient to the impacts of climate change.

B. MISSION

To work in partnership to minimize the impact of invasives species on the Adirondack region's communities, lands and waters.

C. GOALS

The goals in the 2023-2027 strategic plan are a framework for PRISM partners' collective action. And while partners may support all the goals, not all partners actively contribute to all goals.

Goal 1: Protect Adirondack PRISM lands from the most significant ecologic and economic impacts of terrestrial invasive plants and animals, including forest pests and pathogens

Goal 2: Protect Adirondack PRISM waters from the most significant ecologic and economic impacts of aquatic invasive plants and animals

Goal 3: Build knowledgeable and engaged communities that are empowered to act on invasive species issues

Goal 4: Engage in research and innovation to improve the monitoring and management of invasive species

III. NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC)

The NYSDEC Invasive Species Coordination Section coordinates NY's PRISM network. NYSDEC administers the distribution of Environmental Protection Fund moneys to TNC for the Adirondack PRISM via a multi-year contract. The obligations of NYSDEC and TNC are further detailed in the contract, the terms of which supersede these Operating Principles.

In addition, NYSDEC interacts with the Adirondack PRISM in myriad ways, such as by providing technical expertise on the management of invasive species, coordinating with APIPP on the "Campground Steward" program, working with APIPP on Forest Preserve management, and certifying APIPP's pesticide applicators. In these and other ways, APIPP shares many programmatic goals with NYSDEC and works collaboratively with the agency to help implement the "New York State Invasive Species Comprehensive Management Plan."

IV. HOST ORGANIZATION

APIPP is hosted by TNC. APIPP staff are hired by and are employees of TNC and are responsible for the everyday activities of the PRISM. APIPP staff host and chair Adirondack PRISM partner meetings, develop meeting agendas and prepare and distribute minutes of meetings.

TNC has responsibility for personnel and financial management and for oversight of the contract with NYSDEC and, in consultation with NYSDEC, has the authority to make decisions about how Adirondack PRISM contract funds are spent in accordance with the terms of the contract.

TNC also has responsibility for soliciting, managing, and implementing grants, contracts, subcontracts, programs, and agreements entered into on behalf of APIPP. In addition, APIPP staff lead the development and implementation of the Adirondack PRISM strategic plan.

V. ADIRONDACK PRISM PARTNERS AND VOLUNTEERS

A. Adirondack PRISM Partners

1. Adirondack PRISM Partners Defined

Partners are public agencies or private organizations actively working to achieve outcomes on the ground to minimize the impact of invasives species on the Adirondack region's communities, lands, and waters.

2. Adirondack PRISM Partner Agreements

Partners agree to advance the Adirondack PRISM mission in ways that are compatible with their own missions and directives. Partners also agree to respond to APIPP inquires and requests for information. Partners who actively participate in the Adirondack PRISM in one or more of the following ways are officially recognized as an Adirondack PRISM Partner on APIPP's website and in its Annual Report.

- Attend at least one Partner Meeting a year.
- Contribute data to the Adirondack PRISM dashboard.
- Participate in an Adirondack PRISM working group.
- Partner with APIPP staff on an invasive species project.

3. Adirondack PRISM Partner Benefits

The individual contribution of each partner is magnified by its engagement in the Adirondack PRISM. In addition, partners receive many benefits by joining in the collective efforts of the Adirondack PRISM, including the following.

- Connection: Adirondack PRISM partner meetings and events provide an opportunity to engage with other organizations and individuals committed to minimizing the impact of invasive species. These meetings and events allow for sharing ideas and knowledge about natural resource management practices, exploring ways to collaborate and make the most effective use of resources, and identifying innovations.
- Expertise: Adirondack PRISM partners are at the forefront of regional invasive species research and development of best management practices. Partners can access and contribute to the region's collective knowledge of regional invasive species management issues. In addition, APIPP maintains an extensive collection of technical resources on its website, which is accessible to partners, and APIPP staff are available to make presentations at or help with events held by partners.
- Recognition: Partners are recognized by APIPP in its Annual Report and in other ways. This recognition can help partners demonstrate how their individual contributions add to the collective accomplishments of the Adirondack PRISM.

B. APIPP Volunteers

1. APIPP Volunteers Defined

Volunteers provide valuable services to many Adirondack PRISM partners. The contributions of volunteers engaged with partner organizations are essential, and are reflected in the annual accomplishments of each partner. Partner organizations may have documents that further define roles, agreements, and benefits for their volunteers.

For the purposes of these Operating Principles and for APIPP's implementation of the priority strategies outlined in the Adirondack PRISM strategic plan, APIPP volunteers are defined as individuals donating their time or expertise to the Adirondack PRISM as part of a formal volunteer program hosted by APIPP and TNC.

2. APIPP Volunteer Agreements

- APIPP volunteers agree to perform the specific services outlined in their volunteer role and to serve as representatives of TNC when performing these duties.
- APIPP volunteers must sign any required liability or risk waivers.
- APIPP volunteers are asked to annually submit a record of their activities and the number of hours of service provided.

3. APIPP Volunteer Benefits

The individual contribution of each volunteer is magnified by their engagement in the Adirondack PRISM. In addition, APIPP volunteers receive many benefits by joining in the collective efforts of the Adirondack PRISM, including the following.

- Satisfaction: Volunteers make a difference by helping to protect the places they care about from the threats from invasive species and are able to connect with other people concerned about the same issues.
- Knowledge: Volunteers are provided with technical training and skill-development opportunities to enhance their ability to identify, survey, manage, and report invasive species.
- Recognition: APIPP thanks individual volunteers in a variety of ways, and the collective contribution of volunteers is widely shared in APIPP's Annual Report, media stories, and other documents.

VI. PARTNER MEETINGS

There shall be a minimum of two Partner Meetings each year. Meetings will be announced via electronic communications at least two weeks prior to the meeting. Minutes of the meetings will be recorded by APIPP and made publicly available after the meeting. There are no quorum requirements for meetings, but participation by a majority of partners is strongly encouraged. Partner meetings are also open to partners' members, volunteers, and the general public.

VII. WORKING GROUPS

Working groups foster collaboration among partners and can be an important way to share information.

A. APIPP Working Groups

APIPP may convene either i) standing working groups or ii) *ad hoc* project groups to guide Adirondack PRISM projects or programs, set priorities, establish benchmarks for success, and implement components of the PRISM strategic plan.

- i. Members of standing working groups convened by APIPP will be selected by APIPP staff based on the skills or experience needed for the effective operation of the group.
- ii. Participation in *ad hoc* project groups convened by APIPP may be by invitation only or may be open to any individual, depending on the nature of the project.

Working groups may select a chair from among the working group membership. If a chair is not selected, APIPP staff will fill that role. APIPP will keep informal notes of working group meetings; formal minutes are not required.

B. Partner Working Groups

Adirondack PRISM partners may also have or establish working groups. APIPP staff may participate in working groups convened by others and, as appropriate, may engage these working groups in guiding Adirondack PRISM projects or programs, reviewing APIPP priorities, establishing benchmarks for success, and implementing components of the Adirondack PRISM strategic plan. Partner organizations may have documents that further define participation in their working groups.

VIII. LOBBYING AND POLICY ACTIVITIES

A. Lobbying

Accomplishing the Adirondack PRISM goals may require lobbying at the state or federal level. Adirondack PRISM partners, including TNC, may engage in lobbying to the fullest extent permissible by law. State contract funds may not be used for certain lobbying purposes and APIPP staff operate under these laws.

B. Policy Activities

Adirondack PRISM partners are encouraged to actively engage in policy efforts that advance the Adirondack PRISM mission. Partners may convene discussions about emerging invasive species issues and local, state, or federal policy solutions; APIPP staff may serve as technical advisors in these discussions as appropriate. APIPP staff may also convene partners to discuss emerging invasive species issues that might result in policy recommendations, as appropriate and in consultation with NYSDEC.

IX. FUNDRAISING

Adirondack PRISM partners are encouraged to raise funds for projects that advance the PRISM mission. APIPP staff may provide letters of support for partners' funding requests, as appropriate and as time permits. PRISM partners are also encouraged to seek to sustain NYS Environmental Protection Fund support for the PRISM as appropriate.

TNC may seek public and private funds to support the work of the Adirondack PRISM, in accordance with TNC's standard operating procedures, and may request letters of support from partners. TNC retains the right to decline gifts that do not comply with its operating procedures and/or that do not align with its programmatic priorities.



APIPP staff and a strategic planning committee made up of partners worked with Karen Strong of Strong Outcomes, LLC to create a new strategic plan to guide the work of the Adirondack PRISM from 2023 to 2027. The consultant led the staff and committee through a process shown in Figure C1.



Figure C1. Strategic Planning Process.

PLAN TO PLAN

The first step was to define the purposes, parameters, and audiences of the plan, which informed the plan's structure and overall content. Conversations with the staff and the strategic planning committee during Fall 2021 revealed that the plan needed to accomplish the following:

- Help staff and partners strategically focus work to fulfill the vision and work together more effectively
- Give staff enough direction to set priorities and have a process to answer other questions as they come up
- Define the PRISM partnership
- Clarify roles of APIPP staff, Adirondack PRISM, and partners
- Be useful to partners, including
 - ~ brief, clear language
 - ~ partners seeing themselves in the plan
 - ~ measures of success that show how partners contribute to the whole
- Align with TNC's 2030 goals
- Be consistent with NYSDEC invasive species plans and guidance documents

LEARN AND VALIDATE

The next phase of the process focused on information collection, primarily listening to partners through surveys and interviews, and learning from the experience of other PRISMs. The purpose of the learning and validation phase was to evaluate what's happening now, elicit partner motivations, assess partner needs, and solicit and test ideas. Results from this phase are shared in the "Process the Data" section.

Interviews

The interviews, conducted from September to November 2021, sought feedback from a wide variety of partners who have been involved in APIPP throughout its history to gauge the partnership's strengths, challenges, and opportunities. The consultant and APIPP staff interviewed 43 partners and stakeholders who address invasive species in many ways, including volunteers, researchers, lake association leaders, nonprofit leaders, state and local elected officials, and state agency staff.

Interviewees

Thom Allgaier, NYS Department of Agriculture and Markets (NYSDAM)

Jackie Bowen, Adirondack Council

Carrie Brown-Lima, NY Invasive Species Research Institute (NYISRI)

Brittany Christenson, AdkAction

Ellen Collins, Knotweed Management Partnership Volunteer

Carolyn Cyr, Hemlock Woolly Adelgid Volunteer

Bill Farber, Hamilton County Board of Supervisors

Randy Fredlund, Canada Lake Association

Linda L. Gilliland, Cornell Cooperative Extension of Essex County

Julia Goren, Adirondack Mountain Club

Christina Gravelding, NYS Department of Transportation (NYSDOT)

Marcus Harazin, Canada Lake Association

Mary Johnson, Chateaugay Lake Foundation

Billy Jones, Assemblymember, NYS Assembly District 115

Dan Kelting, Paul Smith's College, Adirondack Watershed Institute (AWI)

Walt Lender, Lake George Association

Larry Master, Knotweed Management Partnership Volunteer

Jessica Ottney Mahar, The Nature Conservancy

Guy Middleton, Upper Saranac Foundation

Rebecca Miller, NYS Department of Transportation (NYSDOT)

Meg Modley, Lake Champlain Basin Program

Lorrie Mott, Canada Lake Association

Blake Neumann, Adirondack Council

Jim Olsen, Lake Pleasant Sacandaga Lake Association

Jamie Parslow, Hamilton County Soil and Water Conservation District

Cathy Peddler, Adirondack Mountain Club

Justin Perry, NYSDEC Bureau of Invasive Species and Environmental Health

Carrienne Pershyn, Ausable River Association

Tom Rippere, Lake Pleasant Sacandaga Lake Association

Matt Simpson, Assemblymember, NYS Assembly District 114

Hilary Smith, Senior Advisor for Invasive Species, US Department of the Interior

Zoë Smith, Paul Smith's College, Adirondack Watershed Institute

Dan Spada, Terrestrial Volunteer

Caitlin Stewart, Hamilton County Soil and Water Conservation District

Ezra Schwartzberg, Adirondack Research

Josh Thiel, NYSDEC Invasive Species Coordination Section

Peter Tobiesen, Lake Pleasant Sacandaga Lake Association

Leigh Walrath, Adirondack Park Agency (APA)

Lee Warren, Aquatic Volunteer with Lake Protectors

Dave Wick, Lake George Park Commission

Kristen Wilde, Lake George Association

Rob Williams, St. Lawrence Eastern Lake Ontario Partnership for Regional Invasive Species Management

Steve Young, NY Natural Heritage Program



Interview Questions

We asked each interviewee 9 – 11 questions about invasive species, the APIPP program, and the partnership. The findings informed committee conversations as well as the survey questions.

1. How concerned are you about invasive species in the Adirondacks?
2. How does your organization address invasive species?
3. How is APIPP's work valuable to you (to you personally or to your organization)?
4. How effective do you think APIPP has been at protecting the Adirondacks from the threats of invasive species? What might make it more effective?
5. What are the most important ways APIPP can help you better manage invasive species?
6. What are the most effective ways that APIPP staff work/communicate/connect with you?
7. Do you feel that the larger APIPP partnership collectively is able to accomplish things that the participating organizations couldn't do on their own?
8. Do you feel there is a clear shared vision and/or that a shared vision would be desirable?
9. How does APIPP help you achieve your organization's objectives?
10. What do you bring to APIPP as a partner or volunteer?
11. What would make you more invested in the collective outcome of APIPP's work?

Survey

The survey, conducted from January 19 to February 11, 2022, allowed for detailed feedback about how partners participate in the PRISM, and their hopes, challenges, and thoughts on PRISM and APIPP priorities. Individuals and organizations answered questions relevant to their participation in the PRISM; there were 10 questions for individuals and 22 questions for organizations.

To get as much partner participation as possible, the survey was shared via the APIPP listserv (3 emails), Facebook (1 post), and winter terrestrial and aquatic roundtable meetings. Seventy-six people started the survey, however only responses with at least one content question were included in this summary. After removing 20 responses for lack of content, 56 responses remained, representing 12 people who participate in the PRISM as individuals and 44 who participate in the PRISM as part of organizations.

Individuals represented included concerned citizens (58%) and involved volunteers (33%). All individuals were concerned about both aquatic and terrestrial invasive species. Organizations that responded (Table C1) included nonprofit organizations or lake associations (57%), colleges, universities, or research institutions (16%), and state government (9%). Most of these focused on local areas within the Adirondack Park (81% county, town, village, lake, trail, or watershed); 14% were focused Adirondack-wide, 12% focused statewide, and 9% focused outside the Adirondacks (note: respondents could choose more than one area of focus).

Most of the organizations work on both aquatic and terrestrial invasive species (26/44); 12/44 focus on aquatic species, and just 5/44 focus on terrestrial species.

Table C1. Organizational Partner Survey Respondents.

HIGHER EDUCATION AND RESEARCH	OTHER NON-PROFIT ORGANIZATIONS
Adirondack Ecological Center	Adirondack Council
Cornell University	Adirondack Mountain Club
NYS Hemlock Initiative	Ausable River Association
Paul Smith's College Adirondack Watershed Institute	Lake Champlain Basin Program
SUNY College of Environmental Science and Forestry	Lake George Association, Inc.
LAKE AND LANDOWNER ASSOCIATIONS	Sober Active Recovery Adirondacks
Canada Lake Conservation Association	Shatagee Woods ADK Chapter
Chateauguy Lake Foundation	LOCAL GOVERNMENT
East Shore Schroon Lake Association	Adirondack Park Local Government Review Board
Friends Lake Property Owners Association	Hamilton County Soil and Water Conservation District
Garnet Lake Conservation Association	Warren County Soil and Water Conservation District
Lake Clear Association	STATE AGENCIES
Lake Pleasant Sacandaga Association	NYSDEC Region 5, Lake Champlain
Osgood Pond Owners Association	NYS Department of Transportation
Paradox Lake Association	NYS Department of Agriculture and Markets
Rainbow Lake Association	OTHER
Raquette Lake Preservation Foundation, Inc.	Japanese Knotweed Management Partnership
Star Lake Protective Association	Capital Region PRISM
BUSINESS	
Adirondack Research	

Learning from Other PRISMS

The PRISM network is a great resource for ideas and for testing assumptions about plans and partnership structures. APIPP Director, Tammara Van Ryn, spoke with all of the other PRISM leaders to learn how the partnerships were structured and how they defined partners. All PRISM strategic plans were reviewed to see how the PRISMs structured their plans, described their visions and missions, and framed their goals.

Process the Data

Overall, the Adirondack PRISM received feedback from more than 90 partners and stakeholders, highlights from which are summarized below.

Concern About Invasive Species

Partners have a high level of concern about invasive species for many reasons. In the survey, 44% of organizational partners said addressing invasive species was an essential priority, and 47% said it was a high priority.

“Invasive species are one of the biggest threats overall to the continued recreation, tourism, and viability of the Adirondacks.”
 – Adirondack PRISM Partner

The top three reasons organizational partners address invasive species are ecological impacts (88%), economic impacts (70%), and recreational impacts (67%).

Collective PRISM Priorities

The interviews found that partners agree they accomplish more together. In the survey, we asked respondents to rank the relative importance of program elements for the partners' collective work (Figure 6).

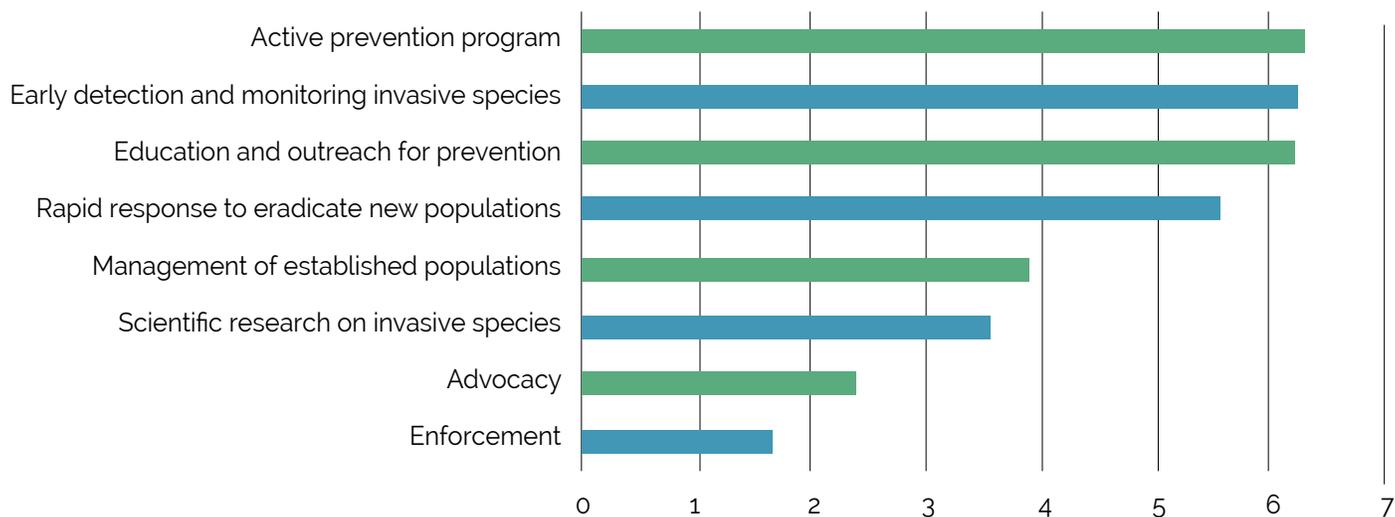


Figure C2. Relative partnership priorities from partner survey.

Overall, partners wanted to see more effort focused on active prevention programs, education and outreach for prevention, early detection and monitoring, and rapid response than on management of established populations, advocacy, and enforcement. This reflects the recommendations of NYSDEC and APIPP's economic study. It also largely reflects the current staff program, and generally reflects the number of partners involved in those efforts. A large majority of partners reported they are involved education and outreach as well as early detection (Table C2). Though active prevention programs (boat stewards and decontamination stations) ranked highest in the relative priority, fewer partners are working on this strategy (58%).

Table C2. Partners' current role in addressing invasive species.

HOW DOES YOUR ORGANIZATION ADDRESS INVASIVES SPECIES?	PROPORTION OF SURVEY RESPONSES	EXAMPLE ACTIVITIES (FROM INTERVIEWS)
Education and outreach	86%	Training, articles, website information, educational events, boat/river stewards, K-12 education, tabling at events
Early detection and monitoring	86%	Species identification, lake surveys, forest pest surveys, training volunteers
Active prevention program (e.g., boat steward, decontamination)	58%	Boat stewards, boat inspections, and decontamination
Rapid response and management of established populations	49%	Management plans, active management, providing (or supporting) funding for management
Scientific research on invasive species	35%	Biological control research, pathway analysis, monitoring effectiveness of prevention programs, basic biological work
Advocacy	19%	Talking with state legislators about laws and funding, working with local governments, monitoring state and local policies
Regulation (and enforcement)	12%	Issuing wetland permits, horticulture inspector surveys, seed regulation

Note: the percent column reflects the proportion of partners engaged in these activities; it is not a measure of effort.

Program Value and Effectiveness

The interviews confirmed that APIPP is widely respected and valued by partners for many reasons. For example:

- Staff are a reliable, trusted resource: *"Seen as a neutral science-based player that brings together diverse stakeholders"*
- The PRISM connects partners to information and each other: *"I see a lot of value in the networking that they do, connecting with and sharing information in various organizations."*
- Staff are leaders on invasive species issues: *"A lot has been accomplished across this large region and it has focused state attention on the issue. APIPP has been a leader of the PRISMs."*
- Partners extend the reach for early detection: *"The eyes and ears of the APIPP partners looking for invasive species that are of great concern amplifies our ability to detect introductions early and respond sooner."*
- The staff are doing what other organizations can't: *"APIPP has the ability to work across boundaries and help organizations help themselves."*
- Staff has increased education and outreach capacity: *"APIPP has been very valuable in raising the awareness of invasive species and educating the public."*

The survey elicited the specific APIPP program areas partners valued most, as well as the program areas they thought could be improved (Table C3). Many more people agreed on what they valued than what needed improvement, indicating there was not a strong signal for change. Partners were looking for more assistance from APIPP staff on their projects, indicating a strong demand for staff services.

Table C3. Staff program areas most valued and in need of improvement.

MOST VALUED PROGRAMS	PROGRAM AREAS FOR IMPROVEMENT
Training volunteers (57%)	Assisting with my organization's invasive species initiatives (29%)
Providing useful education and outreach materials (52%)	Sharing new techniques and technology (19%)
Monitoring invasive species (48%)	
Deploying rapid response teams (40%)	

APIPP is viewed as effective overall, although partners struggled with how to measure effectiveness. Several mentioned APIPP is doing well considering the nature and scope of the problem. Generally, partners thought APIPP was most effective at:

- Raising public awareness
- Preventing invasive species that there would be otherwise
- Managing invasive species in the Adirondack Park
- Sharing technical information and expertise

All suggestions to improve effectiveness in the interviews involved APIPP doing more: more public outreach, more interactive website, more on-the-ground management, and more science and monitoring to guide the work. One interviewee noticed that, and asked, "Does APIPP have capacity to do all the things we all envision them doing?"

Longer-term partners were interested in having strategic conversations with APIPP staff about geographic priorities, management priorities, balancing capacity to manage invasive species, research and monitoring, and emerging invasive species threats.

“The Adirondacks are 6 million acres, and the massive size of the Park requires us to have a strong prioritization strategy, let alone that our and many other organizations work with a skeleton staff. Even if we had ten times the staff, we couldn't get everything we need to get done, done.”

– Adirondack PRISM Partner

The survey asked partners about specific APIPP program areas, and whether more, less, or the same amount of effort should be expended in the next five years. Table C4 shows the program areas where partners requested more effort in green and less effort in yellow. Overall, partners were satisfied with program effort. They asked for more effort on managing terrestrial and aquatic invasive species populations that can be eradicated and increasing chemical and biological treatment of forest pests. Partners did not suggest less effort for any program areas.

Table C4. Partner opinions on future effort of specific APIPP programs.

TERRESTRIAL INVASIVE PROGRAM	AQUATIC INVASIVE PROGRAM	EDUCATION, OUTREACH, AND ENGAGEMENT
Monitor terrestrial invasive species (TIS)	Monitor aquatic invasive species (AIS)	Host education programs
Manage TIS that can be eradicated	Deploy AIS early detection team	Support partner education programs
Manage Tier 3 and 4 TIS	Manage AIS that can be eradicated	Host partner meetings and roundtables
Monitor forest pest populations	Provide technical assistance to help partners manage Tier 3 and 4 AIS	Provide outreach materials, fact sheets, brochures and posters, and best management practices guides
Treat forest pest populations	Provide resources to help partners manage Tier 3 and 4 AIS	

Program areas highlighted in dark blue = same effort Program areas highlighted in light blue = more effort

Barriers

When asked about obstacles encountered in addressing invasive species, 88% of organizations reported they do not have enough funding, equipment, or staff to address invasive species. Individuals had a different top barrier; 54% of individuals reported the biggest obstacle is limited jurisdiction to manage species (the second most popular answer was not enough resources, 38%).

Partnership Structure

A key part of the plan was defining the partnership, which had not been clearly defined in recent years. From the interviews, it was clear that partners do not have the same needs or expectations for participating in the PRISM. As part of understanding partner interest in PRISM participation, survey respondents were asked how they wanted to be involved in the PRISM, given their organization's capacity and interest in invasive species.

Ten partners are willing to make a significant commitment of time to attend regular meetings to have a role in guiding PRISM priorities. Some of the reasons shared in the interviews for why this would be helpful included:

- To explore "the next big thing" to work on together
- To develop shared legislative goals and priorities for the PRISM
- To build partner buy-in with a smaller, more engaged group of people/organizations
- To coordinate on advocacy and local government roles
- To discuss what's working and not working and what have others have tried

Twenty-two partners are willing to attend occasional meetings, share information and data about invasive species activities, and/or work on specific projects. Some of the interests of partners in being involved at this level included:

- To coordinate monitoring locations, stewardship sites, and education and outreach efforts
- To foster collaboration among partners for specific projects
- To coordinate on advocacy, and local government roles

Seventeen partners indicated they would like to stay informed on invasive species in the Adirondacks, training opportunities, and partner meetings. These partners may be slightly less engaged; however, building this part of the network is valuable as people may become more engaged in the future as interests change and align.

Develop the Plan

Early in the process, the strategic planning committee decided it preferred to provide feedback on ideas developed by staff. APIPP staff met with the consultant four times to work through the vision, mission, goals, objectives, and partnership, from January – April 2022. The planning committee met three times to provide input and feedback (February – June 2022). The draft plan was based on an outline developed with staff and committee input and was reviewed by the staff and committee before it was finalized in summer 2022.

Responding to Themes of Partner Outreach

The interviews of 43 people and the 56 survey responses elicited many ideas about what APIPP should do to address invasive species. Given limited capacity, APIPP cannot do it all. In this section, the themes of the specific feedback are summarized, along with how these themes were addressed in the plan.

Terrestrial and Aquatic Invasive Species

Quite a few people mentioned the need for more effort on terrestrial invasive species. One person noted that partnership “has been successful with aquatic [invasive species], and I would like to see the same level of effort with terrestrial species.” Others noted the need for terrestrial species prevention strategies and the importance of addressing infestations on private lands. People expressed general concern about the impact hemlock woolly adelgid and emerald ash borer will have on Adirondack forests and highlighted the need to get ahead of the problem as much as possible by expanding monitoring and continuing to coordinate with the state and other PRISMs.

Response: Create separate terrestrial goal, participate in and explore additional terrestrial working groups (Goal 1, Objective 1.4).

As reported in Table C4, partners wanted to see more effort on managing terrestrial species that can be eradicated.

Response: Include in priority strategy to eradicate Tier 2 species where possible using rapid response teams (Objective 2.3).

Partners wanted to see more effort on managing aquatic species that can be eradicated.

Response: Because the aquatic program uses different management strategies, add how the aquatic program will focus collaborative work on Tier 2 species (Objective 1.3).

Partners wanted to understand how decisions are made about which species to monitor and manage.

Response: Add information about how APIPP prioritizes in the introduction to Part II. The aquatic invasive species workgroup is involved in priority-setting, and the terrestrial and education and outreach programs will explore additional working groups (Objectives 1.4 and 3.1).

Building Engaged Communities

Partners had many suggestions for education and outreach, which included a wide range of activities, including communicating with partners, broadcast messaging (brochures, posters, website, annual report), and working with specific audiences to change behavior.

Many people suggested "more outreach and awareness," which is related to broadcast (or one-way) communications. Some of these suggestions were for APIPP staff to reach out to specific people or groups (e.g., to county and town leaders, local press).

One suggestion addressed the need to prioritize communications:

"I think to improve effectiveness there could be more effective communications to narrow the focus. Sometimes it feels like a shotgun approach and getting targeted communications can help you reach specific audiences with more specific information in a deeper way."

- Adirondack PRISM Partner

Response: Develop an annual communications plan (Objective 3.1).

There were several suggestions to create a prevention culture which is a clear outcome yet difficult to achieve. Developing effective programs to reach specific audiences and prompt them to change behavior can be expensive and time consuming; the boat steward and decontamination program is an example.

Partners also identified specific audiences to engage in prevention, monitoring, and managing invasive species, including absentee landlords, short- and long-term visitors, hikers, bicyclists, municipal officials, state officials, fishermen and women, hunters.

Response: Develop active spread prevention resources for specific audiences in Objectives 1.1 and 2.1.

Partnerships

In the interviews, partners emphasized that relationships are vital to the Adirondack's PRISM success.

"[APIPP] is very effective now because it's taken a long time to get here. The last five years have been the fruits of the labor of the first 15. Working with experts to build awareness, meet with local government, and build trust, all of that allowed the success to happen."

- Adirondack PRISM Partner

The interviews revealed how the partnership has changed. Over time, it is normal for relationships in a partnership to change, becoming more formal as more money is invested in contracts. And as partners with different interests in the invasive species issue became involved, partner roles (and possibly the vision) have become less clear. As this was happening, the partners did not discuss the change and what it meant for their relationships.

There is a feeling that those relationships need some attention, primarily among longer-term partners, who talked about the importance of investing in the partnership. Several interviewees expressed interest in spending more time in building partner relationships and recognized the challenge it poses.

"I recognize that having partnerships that are more individualized is a challenge, but having deep, authentic connections between organizations would be the best way to allow us to do more meaningful work together in the future." – Adirondack PRISM Partner

Response: APIPP heard this need. The key obstacle to more investment in the partnership is the significant amount of time that it takes to build relationships, and the current TNC contract with NYSDEC does not have enough APIPP staff time allocated for it. This is an important issue that APIPP will explore in future funding requests. There is a potential for working groups to help facilitate more frequent conversations.

Securing Sufficient Funding and Policy Support

Adirondack PRISM partners had lots of ideas and questions about APIPP's role in funding and advocacy. Securing support was also a common objective in other PRISM plans.

Response: There are some organizational and contractual constraints with regard to APIPP's role in funding and advocacy; these are clarified in the Partnership Operating Principles (Appendix B). See also Objective 3.3: Work with regional partners to better understand capacity constraints.





Adirondack Partnership for Regional Invasive Species Management

STRATEGIC PLAN 2023-2027



**INVASIVE SPECIES
MANAGEMENT**
ADIRONDACKS

Adirondack Park Invasive Plant Program

The Nature Conservancy

PO Box 65, Keene Valley, NY 12943

www.adkinvasives.com