



Comprehensive Approach to Invasive Species Management

Gary Fish
State Horticulturist

What's the motivation for this policy analysis?

Deep concern for Maine's ecology and economy

Currently the disparate federal, state, local, non-profit and private programs are not able to address the invasive species onslaught of the 21st century

This is NOT about empire building

We are not prepared financially or with human adequate resources to rapidly respond to a new infestation which might be eradicated

Efforts to address invasive species are generally more efficient and cost effective the earlier they are implemented in the invasion process (Leung et al. 2002)

Why an invasive species council

- The Council would provide a forum through which multiple state agencies and non-governmental entities meet with a common purpose to identify invasive species of concern that threaten the State's economic, natural and agricultural resources

The Council would:

1. Develop and implement a comprehensive state invasive species management plan
2. Provide guidance on prevention, control, and rapid response initiatives
3. Facilitate coordination among federal, regional, state, and local efforts



A Minnesota State Management Plan for Invasive Species

This plan was developed by a workgroup of the Minnesota Invasive Species Advisory Council and revised based upon input gathered at a stakeholder workshop, a public review period, a Tribal meeting and review, MISAC member review, and other input.

October 20, 2009

Michigan's Terrestrial Invasive Species State Management Plan



A Cooperative Effort of the
Michigan Department of Agriculture and Rural Development
Michigan Department of Environmental Quality
Michigan Department of Natural Resources
Michigan Department of Transportation
In Consultation and Partnership with Other Interested Parties

pennsylvania
INVASIVE SPECIES COUNCIL

INVADERS in the commonwealth

Pennsylvania Invasive Species
Management Plan

Developed by the Pennsylvania Invasive Species Council, May 2010, Revised 2016

NEW YORK
STATE OF
OPPORTUNITY

Department of
Environmental
Conservation

Agriculture
and Markets

NEW YORK STATE INVASIVE SPECIES COMPREHENSIVE MANAGEMENT PLAN

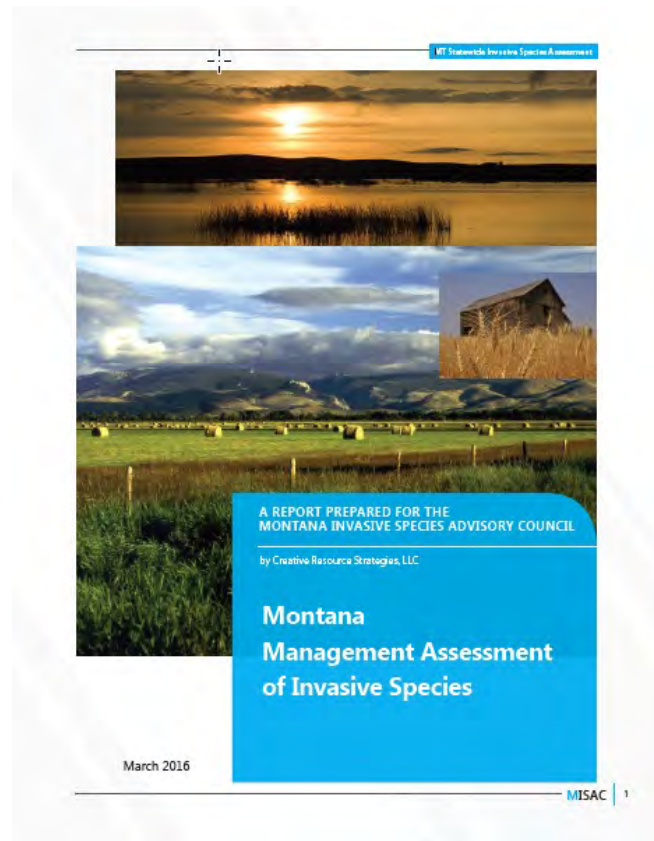
FINAL
November 2018

www.dec.ny.gov

Have other states done this?

An assortment of plans exist... some old some new.

Have other states done this?

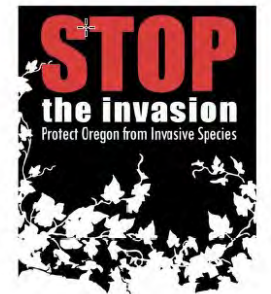


A STATEWIDE MANAGEMENT ASSESSMENT OF INVASIVE SPECIES IN OREGON

February 2010

Prepared for the Oregon Invasive Species Council by:

Creative Resource Strategies, LLC
Salem, Oregon



State of Maine Action Plan For Managing Invasive Aquatic Species



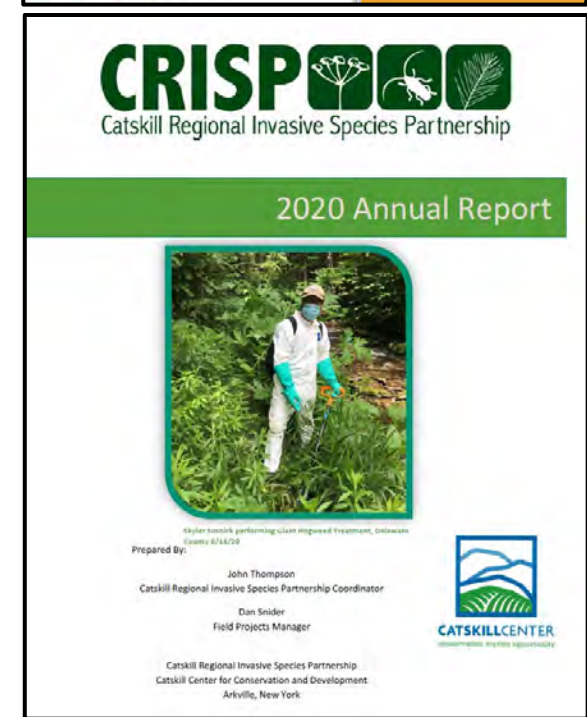
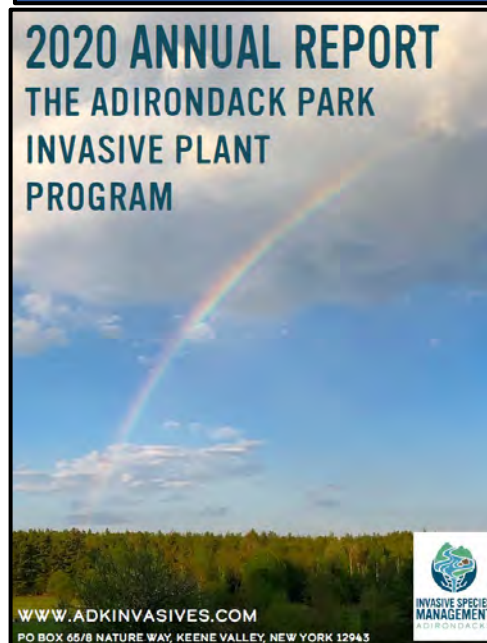
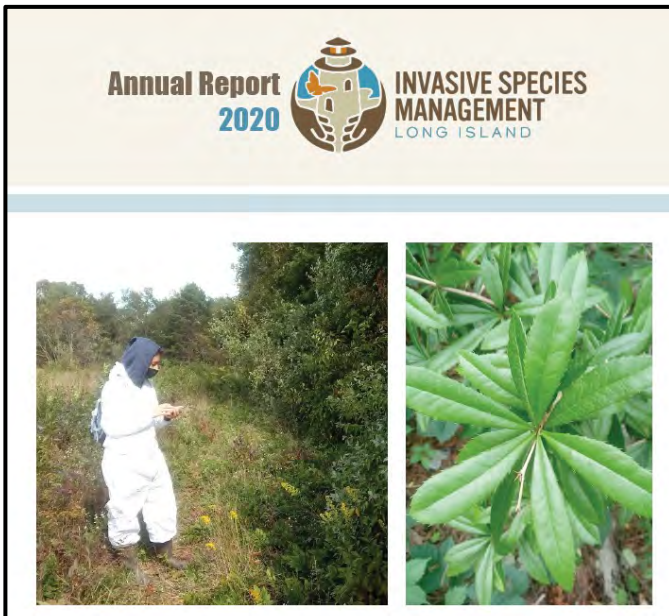
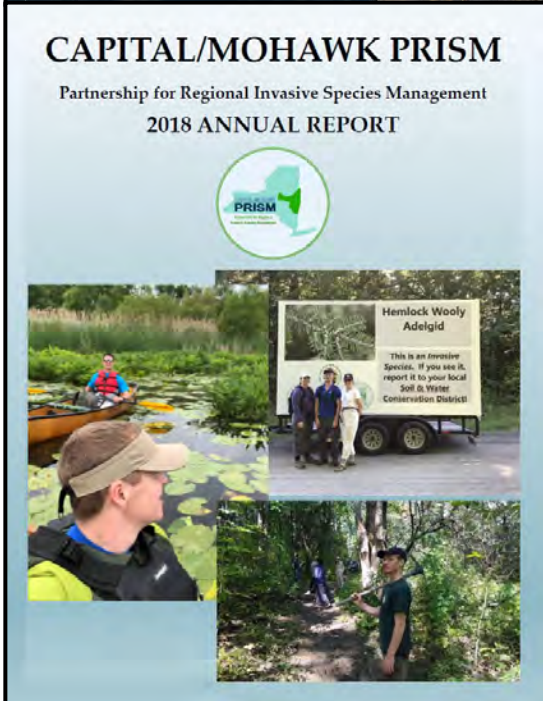
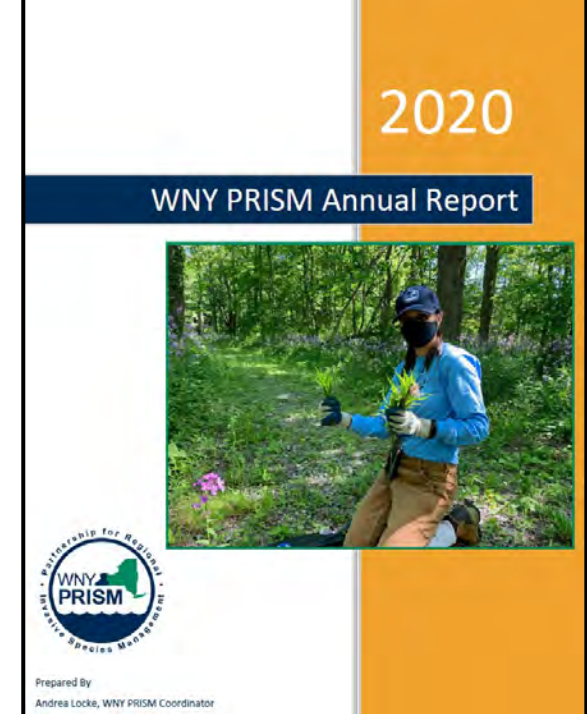
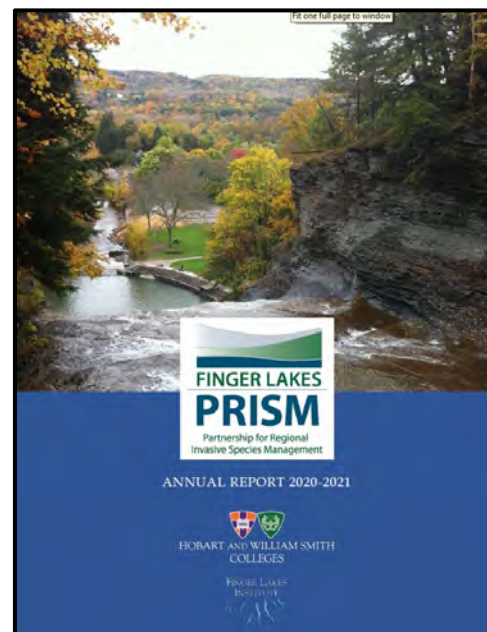
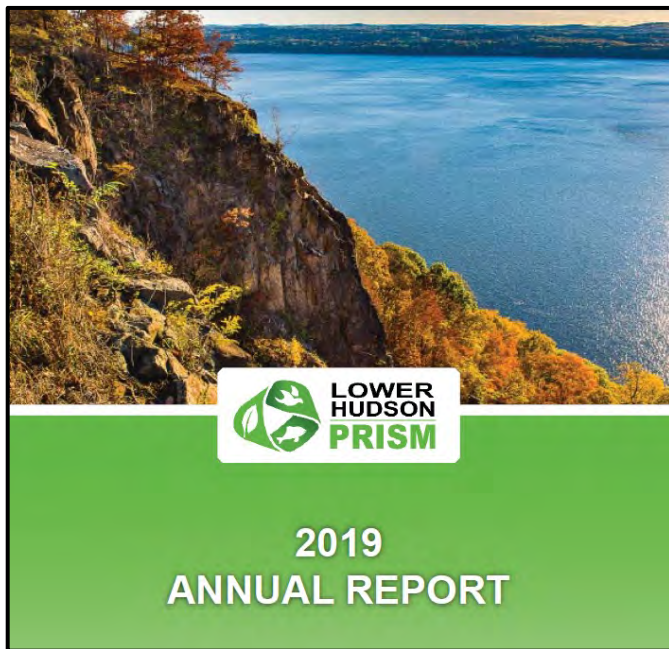
Adopted by the
Land and Water Resources Council

And the
Interagency Task Force On Invasive Aquatic Plants and Nuisance Species

October 10, 2002

Maine has one
20-year-old
aquatic invasive
species plan

What are PRISMs?



NY State ISC Coordinator – Thomas Allgaier

Yes, the ISC has greatly improved inter-agency cooperation and allows for better use of limited resources and coordination of outreach on IS issues.

The PRISM's have augmented the state agencies' staff to survey and respond to IS issues. including:

- outreach,
- trapping,
- visual survey,
- data collection,
- treatment,
- detector dogs, and
- acquiring additional federal funding.



Invasive Species Advisory Council – Potential Members

Government Members

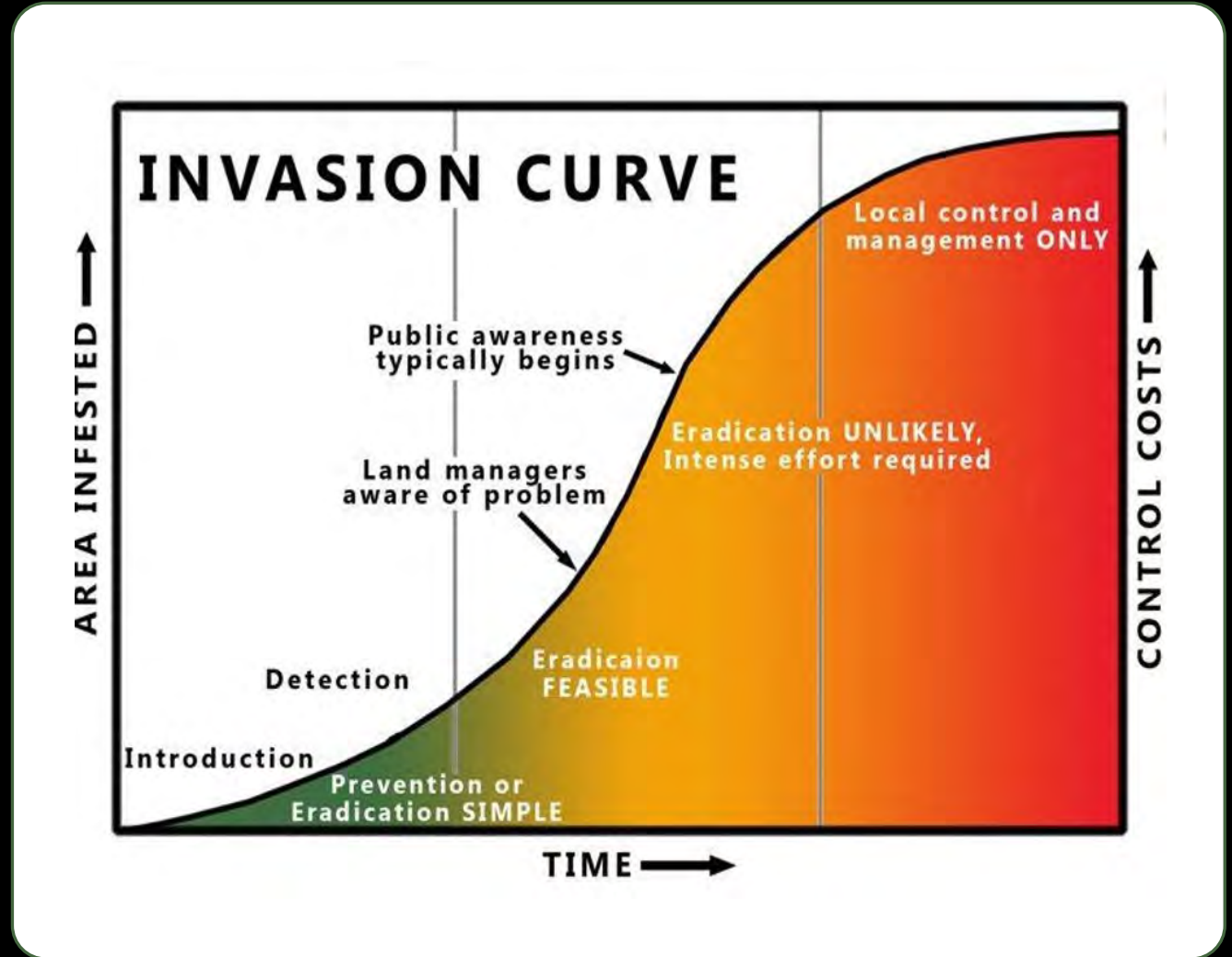
- Maine Department of Agriculture, Conservation & Forestry
- Maine Department of Marine Resources
- Maine Department of Environmental Protection
- Maine Department of Inland Fisheries & Wildlife
- Maine Department of Transportation
- Maine CDC
- Maine Association of Conservation Districts or Conservation Commissions

• NGO/Industry Members

- Maine Audubon
- The Nature Conservancy
- Maine Forest Products Council
- Maine Woodlands
- Maine Invasive Species Network
- Tribal Governments
- Native Plant Trust/Wild Seed Project
- Maine Landscape and Nursery Association
- Maine Lakes
- University of Maine Climate Center

Major goal

- Establish a rapid response fund






**MEETING THE
INVASIVE
SPECIES
CHALLENGE**

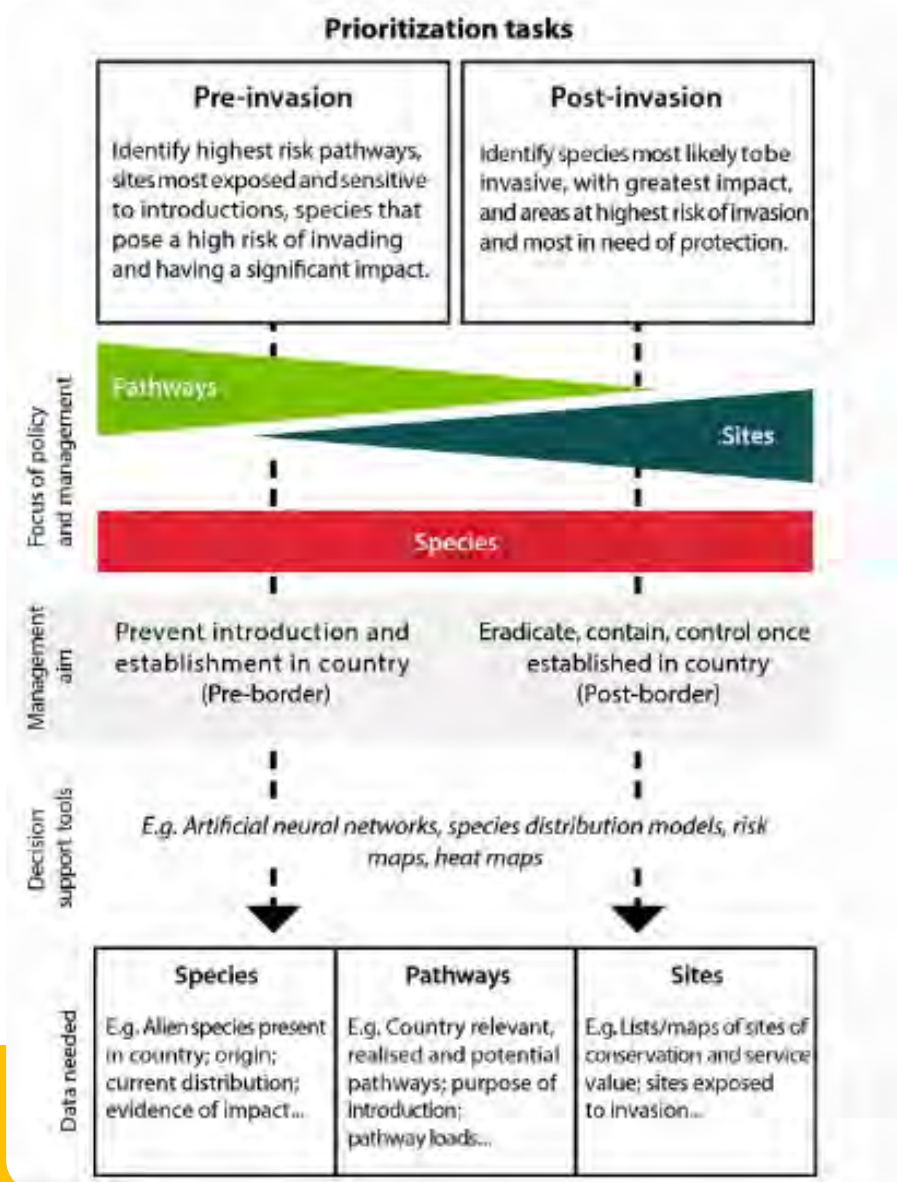
Management Plan
National Invasive Species Council
2001



Major Goal

Develop a 5-year
comprehensive, multi-taxa
invasive species
management plan





Major goal

- Better understanding of species' risk and prioritization of management decisions
 - Utilize risk assessments or conduct new evaluations to prioritize non-native invasive species
 - Establish and prioritize:
 - a) a list of invasive species not present in Maine and that should be prevented from entry, and
 - b) a list of invasive species with occurrences in Maine and for which the prevention of expansion or establishment is intended
 - List these species on the Invasive Species Advisory Council website and communicate them to lawmakers, program managers, and the public

Major goal

Develop Regional Invasive
Species Management
Partnerships



Better Prioritization, Better
Funding, Better Management

StoryMap



Major goal

Improve outreach and
education on all
invasive species taxa



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Should Maine Develop a More Comprehensive Approach to Invasive Species Management?

A 2022 Survey of Likely Invasive Species Managers in Maine and Policy
Recommendations to Strengthen Maine's Resilience to Invasive Species

Gary Fish

Capstone paper for
Master of Policy, Planning, and Management Program
Muskie School of Public Service
University of Southern Maine

December 2022
Professor Yuseung Kim, Capstone Advisor



Recent
invasive
species
survey

Quick
Summary

Quick survey summary

- This paper analyzes the status of Maine's public and private invasive species management efforts and attempts to answer the question, “Should Maine develop a more comprehensive approach to invasive species management?”
- 197 respondents (sent to approximately 600 IS representatives)
- Top 3 impediments to effective IS management
 - Public knowledge
 - Funding
 - Staffing



Summary Continued

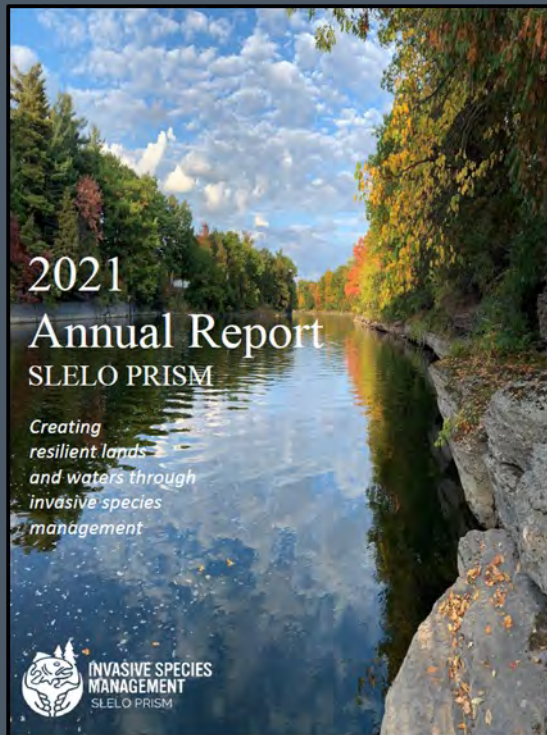


Britt Slattery, US FWS

- **Top regional species of concern**
 - Invasive terrestrial plants
 - Forest insects
 - Invasive aquatic plants
 - Ticks

- **Species currently managed or of concern**
 - 9 Invasive terrestrial plants
 - 3 invasive aquatic plants
 - 3 forest insects

Summary Continued



- Suggestions for improvement
 - Increased funding
 - Education & Outreach
 - Agency coordination & partnerships
 - Increased staffing

- Alternative policy models suggested
 - Partnerships like New York PRISMs
 - Contingency plans
 - Rapid response teams
 - Landowner cost-share programs

Summary Continued



■ Staffing and budgets

- Total staffing for all organizations 120 FTE
 - Total budgets for all organizations \$3.2 million
 - Lake associations employ the most staff and have the largest collective budgets
 - Followed by
 - State agencies
 - Forestry organizations
 - National parks & lands
 - Land trusts
- Numbers do not include all state agency staff or budgets

Summary Continued



LAKES ENVIRONMENTAL ASSOCIATION
Protecting Maine Lakes Since 1970



- Current invasive aquatic plant management programs provide a good example
 - Strong partnerships
 - Consistent funding from the “milfoil sticker”
 - Interagency task force
 - Rapid response capabilities
 - Strong feedback loop to the legislature

Summary Continued



- **Strengthening resiliency**
 - Doing nothing seems imprudent
 - Develop ongoing, dedicated funding sources
 - Add state agency staff to continue this research (Senior Planner?)
 - Add an ISAC reporting to the Governor's Office
 - Add IS management liaison positions at DACF, IF&W, DEP, DHHS, MDOT and DMR

Summary Continued

BILL S.563
192nd (2021 - 2022)

AN ACT RESPONDING TO THE THREAT OF INVASIVE SPECIES

By Ms. Jehlen, a petition (accompanied by bill, Senate, No. 563) of Patricia D. Jehlen, Michael J. Barrett, Paul R. Feeney, Mike Connolly and other members of the General Court for legislation to respond to the threat of invasive species. Environment, Natural Resources and Agriculture.

Presenter: Patricia D. Jehlen

[View Text](#) [Print Preview](#) [Download PDF](#)

Pennsylvania Department of Agriculture

Animals Business & Industry Consumer Protection Food

Governor's Invasive Species Council



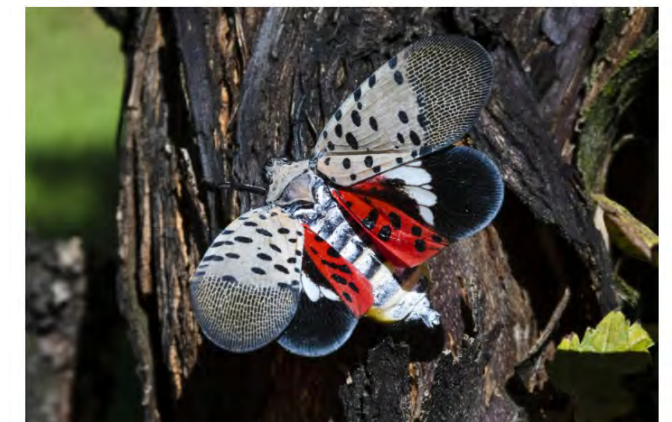
From left clockwise: Spotted lanternfly, Japanese knotweed, emerald ash borer, hydrilla

- About Us
- News
- Invasive Species of Concern for...
- Managing Invasive Species
- Proposed Partnerships for Regional...
- Report an Invasive Species

- **Conclusions**
 - Consider new legislation like MA and PA
 - Put aside a robust rapid response fund
 - Develop partnerships (PRISMs or CISMAs?)
 - Increase funding, staffing, outreach
 - Improve coordination with abutting landowners

Pennsylvanians struggle to fight invasive species, as experts push for a regional approach

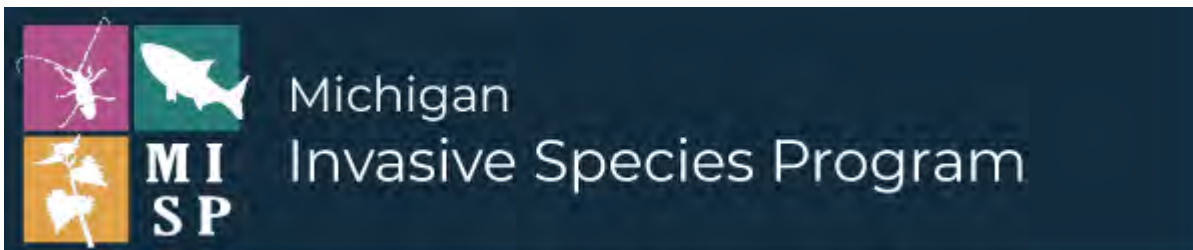
90.5 WESA | By Oliver Morrison
Published March 20, 2023 at 5:30 AM EDT



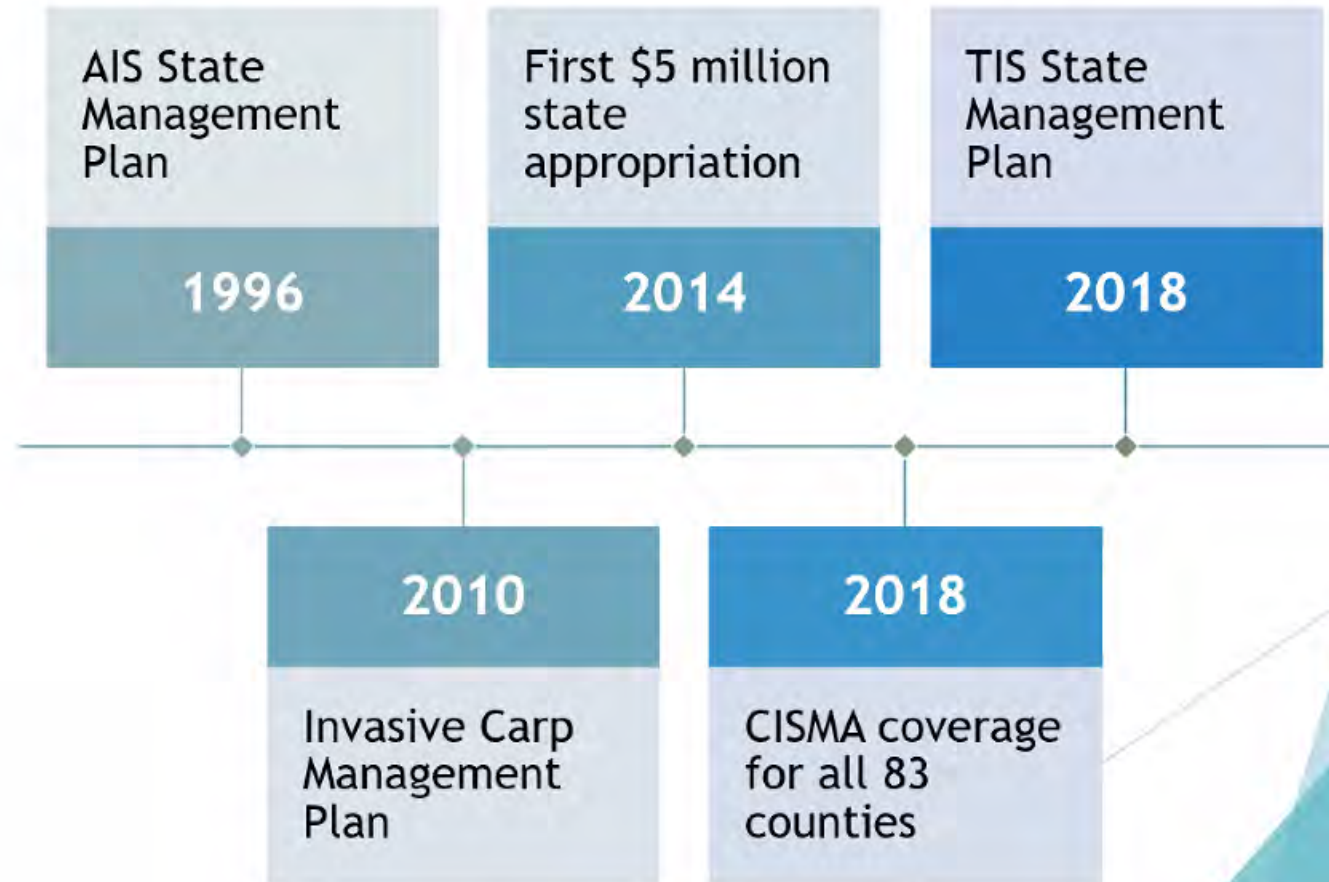
A quick look at the Michigan experience

These slides are courtesy of :

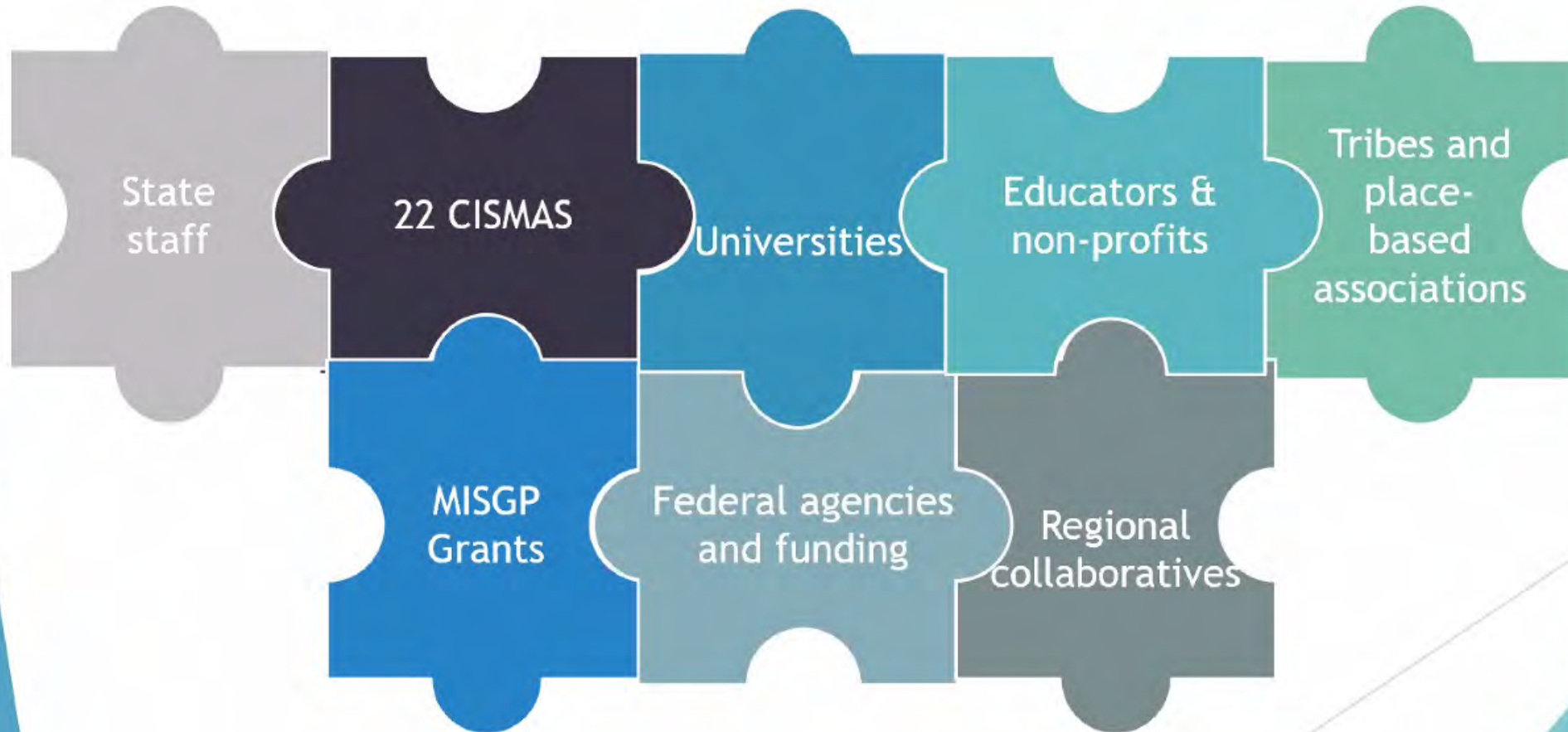
Joanne Foreman
Communications Coordinator
Invasive Species Program - DNR,
EGLE, MDARD



MISP Milestones



Key program elements



Looking ahead



Where we are:

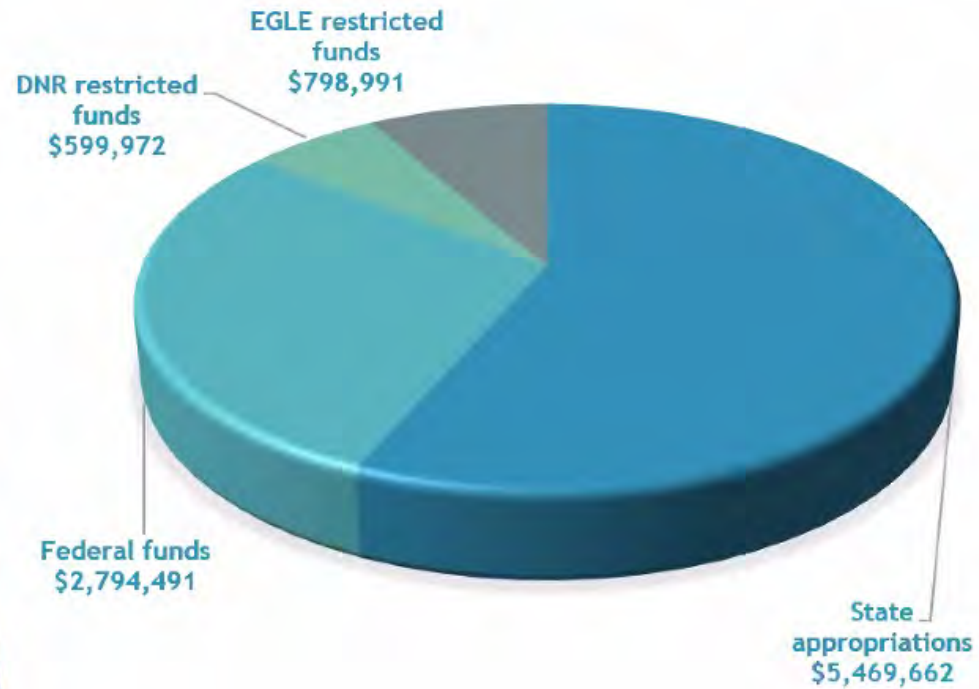
- ▶ Clearer picture of statewide scope of invasive species.
- ▶ Prioritizing management of established species in high-priority areas.
- ▶ Working on leading edges of recent invaders.
- ▶ Educating about prevention measures.

Things to consider:

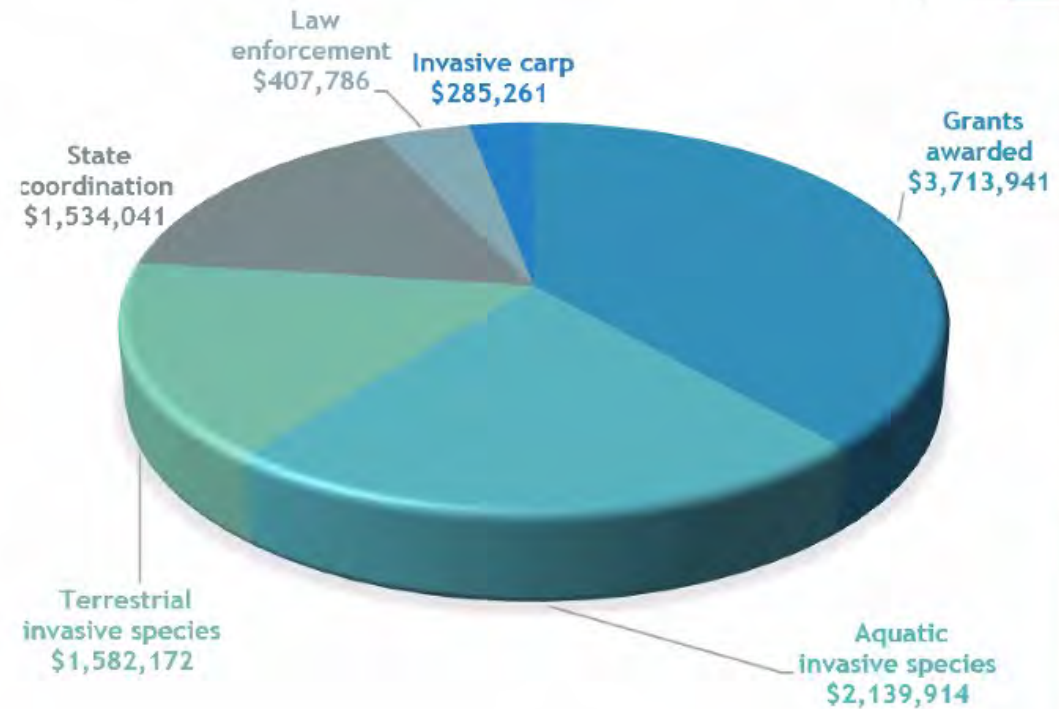
- ▶ Response efforts are multi-year.
- ▶ 8 new invaders since 2015.
- ▶ Each new arrival compounds response needs.
- ▶ Heavy reliance on federal and non-program funds.

2022 MISP Budget: \$9,663,116

Funding by source



Expenditures by program area



2022 Michigan IS funded grants

- 35 projects funded
- Funding ranges from \$400,000 - \$30,000
- Projects include everything from monitoring, survey, outreach, policy analysis, and control
- Projects funded for all taxa groups as well



2022 Michigan
Invasive Species Grant Program

Governor Whitmer's 2024 Budget Proposal

- ▶ \$6.1 million in ongoing funds.
 - ▶ Reduce reliance on federal funds and annual grants for strategic early responses.
 - ▶ Support invasive species response teams for CISMAs and state land management.
 - ▶ Promote prevention through outreach and enforcement.
- ▶ \$5.7 million one-time funding.
 - ▶ \$5 million to Invasive Species Response Fund for immediate response to new invasive species.
 - ▶ \$0.7 million for equipment.

Keys to a successful early detection and response initiative for watchlist species



DEDICATED
STAFF



CONSISTENT
FUNDING



PARTNER
NETWORK



PUBLIC
PARTICIPATION



RESEARCH AND
TOOLS



COMMUNICATION



SUSTAINED
EFFORT

QR for link
to the full
Capstone
Paper and
Executive
Summary

