NEW YORK STATE | Adirondack Park Agency

Management of Invasive Milfoil in the Adirondack Park

May 14, 2026

Invasive Species

"species that are non-native to an ecosystem … whose introduction causes, or is likely to cause, economic or environmental harm or harm to human health" - Presidential Order 13122

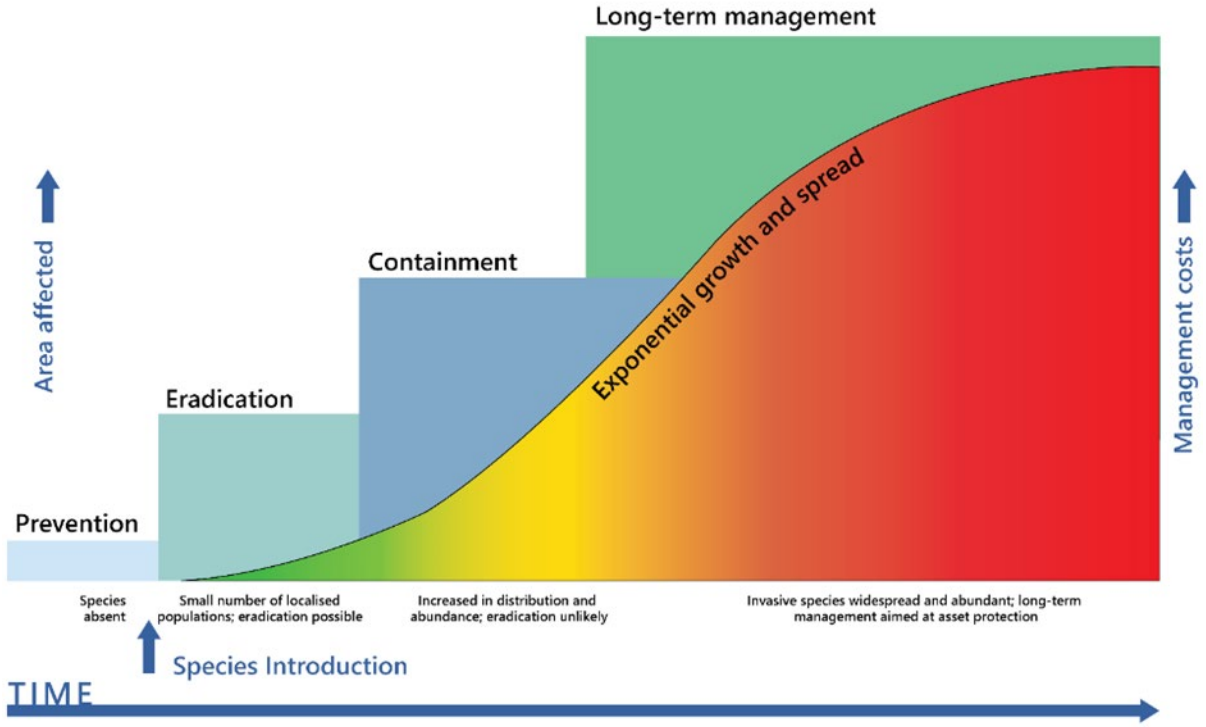
Eurasian watermilfoil – *Myriophyllum spicatum*

- Native to eastern Europe, Asia and North Africa
- Broad tolerances (depth, pH, temperature, turbidity)
- No native predators
- Prolific reproduction → auto fragmentation
- Forms dense canopies at and near the surface of the water


Aqua-Bound

The Invasion Curve

Once an invasive species becomes established, early detection and rapid response is critical to mitigating impacts and achieving successful eradication.



As infestations spread and grow, they become more difficult and more expensive to manage - and may never be completely eradicated.

Agency’s Charge: To protect the resources of the Adirondack Park

Treatment Options

Mechanical Harvesting

Benthic Barriers

	Selectivity	Large Infestations	Fragmentation Potential
Mechanical Harvesting	-	+	-
Benthic Barriers	-	-	+
Hand Harvesting	+ -	+ -	+ -
Chemical Treatment	+ -	+	+

Hand Harvesting and DASH

Careful removal of the entire plant, including roots, prevents re-growth. *Photo: Lakes Environmental Association.*

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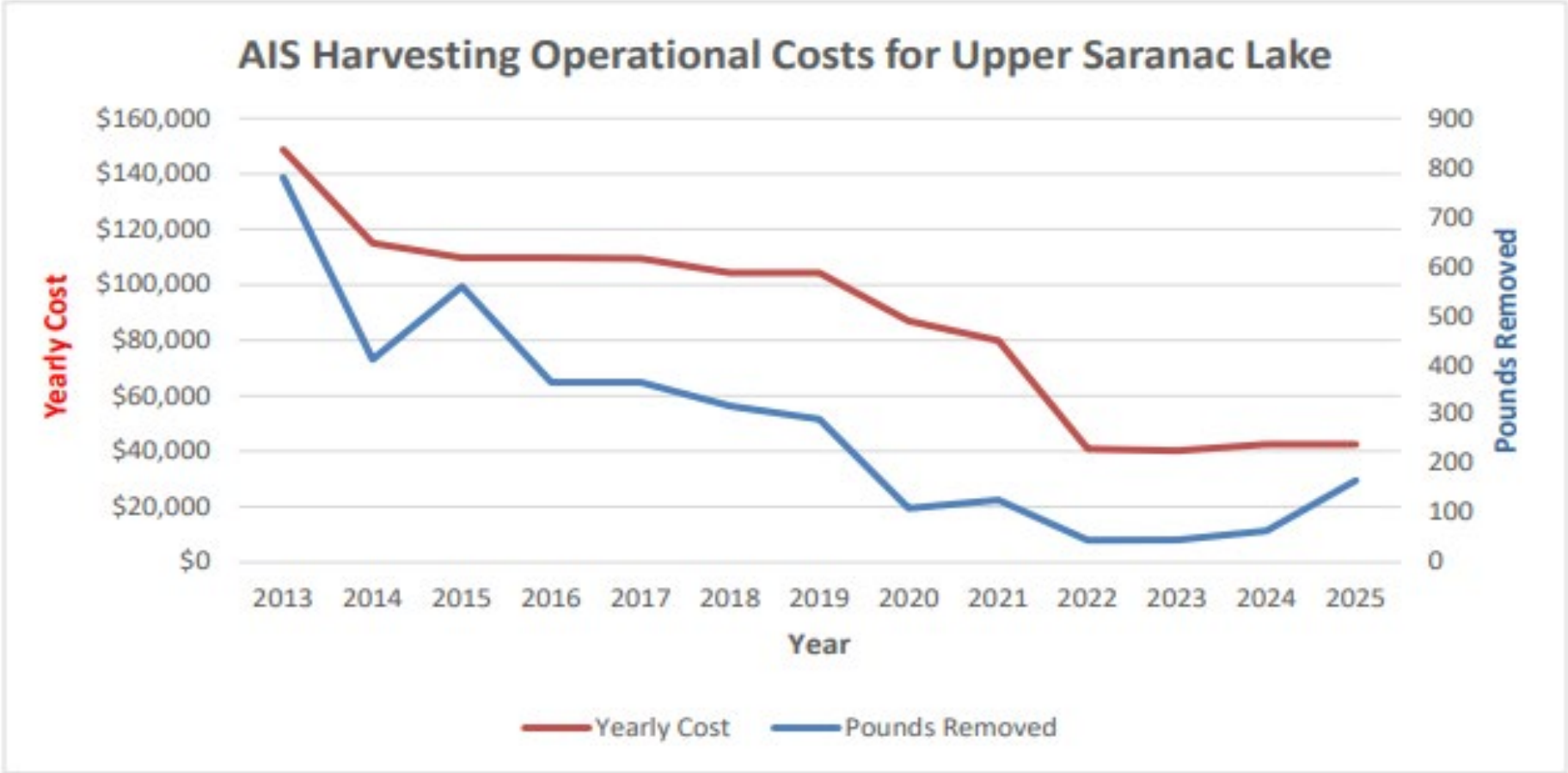


Chemical Treatment

	Selectivity	Large Infestations	Fragmentation Potential
Mechanical Harvesting	-	+	-
Benthic Barriers	-	-	+
Hand Harvesting	+ -	+ -	+ -
Chemical Treatment	+ -	+	+

Chemical Treatment - ProcellaCOR EC - A Selective Systemic Herbicide

- Limited non-target impacts
- Rapid plant uptake (2-6 hours)
- Low dosage (<8 parts per billion)
- Mimics plant growth hormone - causes uncontrolled rapid growth that ultimately kills the plant

<u>Plant fragments are not viable.</u>

Applied while plants are growing early in the season for efficient product uptake.

Reviews and Registrations

US EPA registration approved: 2018

European Union approval for agricultural use: 2019

NYSDEC registration approved: 2019 (Reviews by NYSDOH, Division of Fish and Wildlife)

"The product application was fully reviewed regarding human health as well as ecosystem health. There were no objections to the registration of this product in New York State"

Health Canada Pest Management Regulatory Agency: 2022

"When used according to label directions, florpyrauxifen-benzyl and its transformation products do not pose a risk to wild mammals, birds, beneficial invertebrates, earthworms, bees, aquatic invertebrates, fish, amphibians, or algae."

Restrictions

NYSDEC Use Restrictions:

- Drinking Water: No restrictions under 50 ppb. Can and has been used in public drinking water supplies

- Swimming / Fishing : No restrictions

- Irrigation & Livestock Watering: Restriction until concentration is <1 ppb for protection of non-target terrestrial plants

Restrictions

Maximum Treatment Concentration Allowed by Label for Controlling EWM is 7.72 parts per billion (ppb)

To avoid herbicide resistance:

Label limits treatments to 3 per year

Not to be used in the same treatment area for more than 2 consecutive years unless used in combination or rotated with an herbicide with an alternate mode of action

Toxicity

Toxicity	
Fish	Practically NonToxic (Lowest Value Assigned by EPA)
Invertebrates	Slightly Toxic (Second Lowest Value Assigned by EPA)
Birds, Mammals, Amphibians, Reptiles	Practically NonToxic (Lowest Value Assigned by EPA)

US Environmental Protection Agency (2017). Environmental Fate and Ecological Effects Risk Assessment for the Registration of the New Herbicide for the Use on Rice and Aquatics Florpyrauxifen-benzyl (D429728)

Environmental Fate and Persistence

Half Life of ProcellaCOR EC		
Aquatic	Aerobic	4 to 6 Days
	Anaerobic	2 Days
Sediment	Aerobic	8 Days
	Anaerobic	3 Days
Metabolites in Sediment	Aerobic	21.5 Days
	Anaerobic	28.9 Days

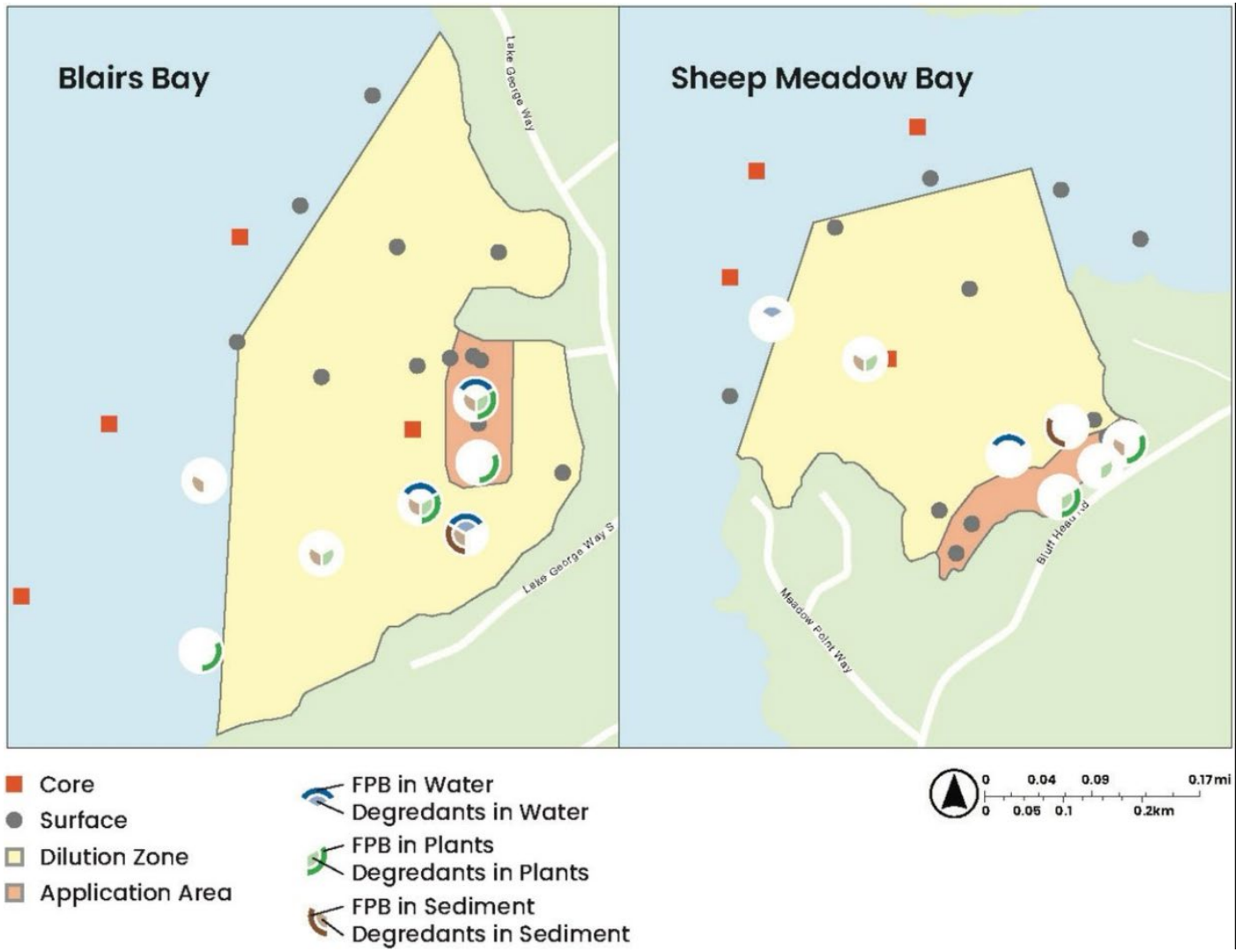
- US Environmental Protection Agency (2017). Environmental Fate and Ecological Effects Risk Assessment for the Registration of the New Herbicide for the Use on Rice and Aquatics Florpyrauxifen-benzyl (D429728)

LGA Paper

Persistence of florpyrauxifen-benzyl in sediments following application to a large oligotrophic lake to control Eurasian watermilfoil

Wiltse B.[1], Mattes B.[2], Navitsky C.[1], Chakraborty S.[5], Stager J.C.[5], Buell E.[1] & Rose K.C.[2,3,4]

- ProcellaCor remained in sediment at one sampling location in each bay up to 1 year post treatment
- Concentration in sediment was above the “no observable adverse effect” level for benthic invertebrates
- Degradants were also present



LGA Paper – Remaining Questions

- Were there any impacts from ProcellaCor that remained in sediment?
  - It is unclear whether ProcellaCor in sediment is biologically available to organisms
  - Study did not monitor potential impacts to organisms

- Whether ProcellaCor will accumulate with additional treatments

ProcellaCor

Potential Benefits

Potential Impacts

Adirondack Park Agency