



2022 SLELO PRISM Early Detection Program Report



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2022 Highlights: Surveyed 237 Highly Probable Areas within eight Priority Conservation Areas
Report Prepared by SLELO PRISM Staff: Zack Simek, Brittney Rogers, Robert Smith

Protecting our lands and waters through a changing climate must include a focus on invasive species prevention. Second to prevention is early detection – or the ability to detect new invasive species while in low abundance – which provides land managers an opportunity to limit the species spread and associated impacts to the environment, economy, or human health.



The SLELO PRISM Restoration and Resiliency Coordinators along with volunteers conduct invasive species surveys inside and outside of Priority Conservation Areas (PCA's) on a year-round basis. Various invasive species are more observable at different times of the year making seasonal early detection more efficient.



The following report summarizes PCA surveys and findings by the Restoration and Resiliency Coordinators that occurred in 2022. This report may not include all invasive species present at a site, only what was found in 2022.

Summary

During the 2022 field season, SLELO staff visited eight Priority Conservation Areas (PCAs) and surveyed approximately 261 acres of 237 highly probable areas (HPAs) for aquatic and/or terrestrial invasive species. A total of 45 different species were found during the surveys. Overall, pale swallow-wort was the most reported species, present at 73 HPAs. Eurasian watermilfoil was the most frequently encountered aquatic invasive species, present at 38 HPAs (Figure 1). No new infestations of tier 1 or 2 species were detected in 2022.

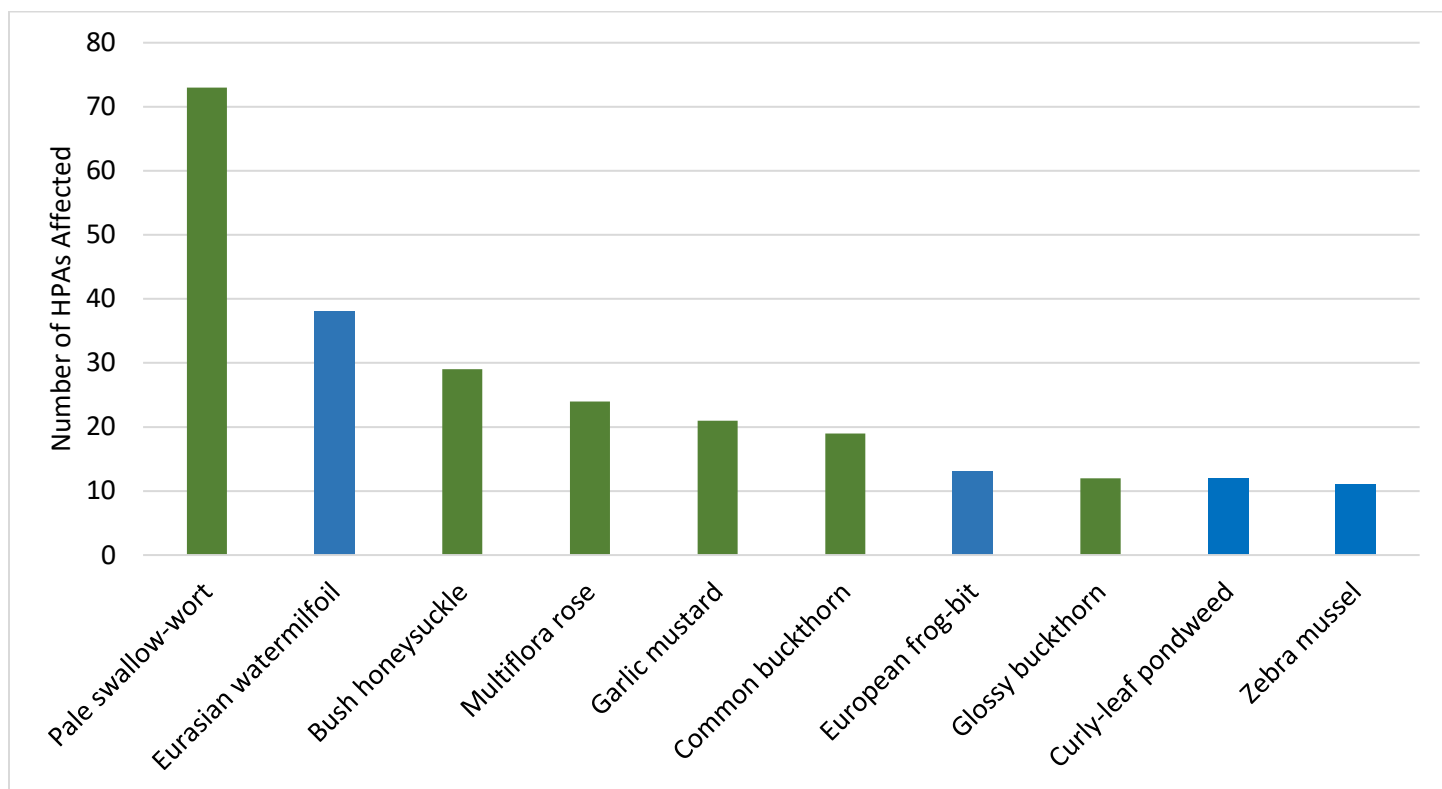
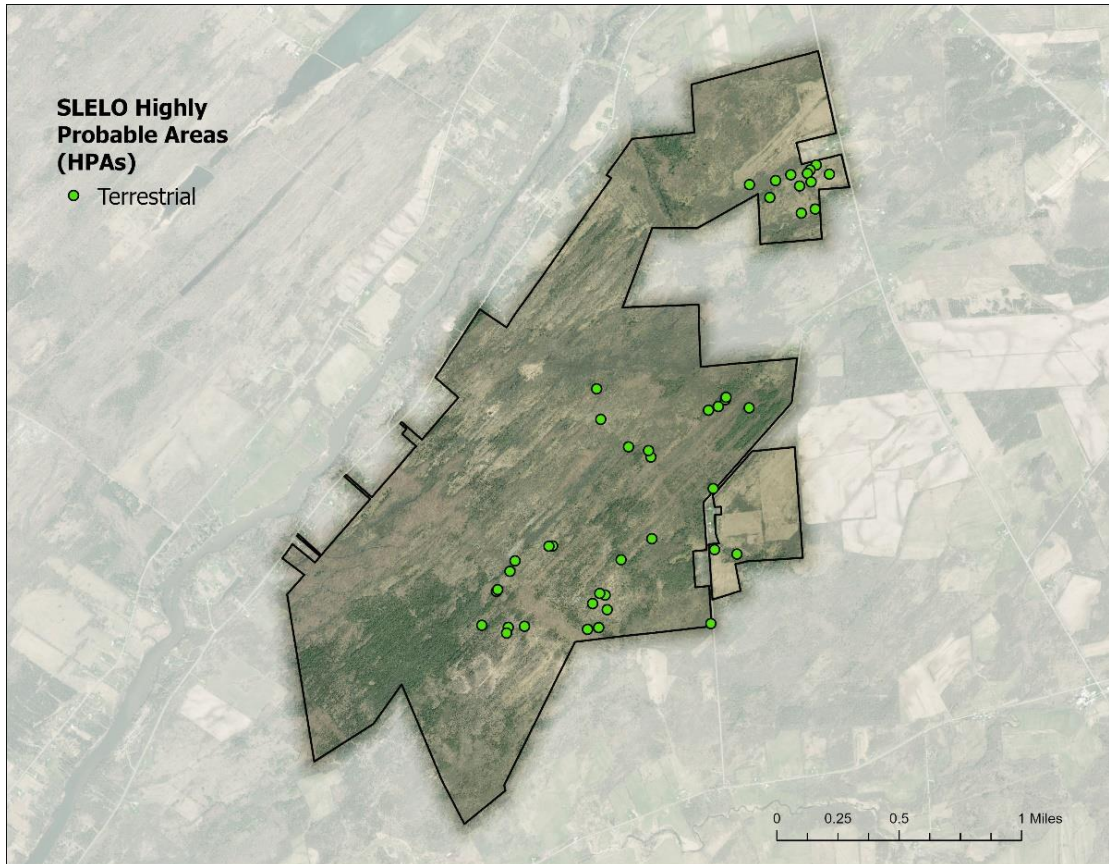


Figure 1. Ten most reported invasive species reported by number of HPAs affected.

Chaumont Barrens

Chaumont Barrens PCA was surveyed in June, July, and September by Brittney Rogers and Robert Smith. SLELO staff surveyed 55.96 acres of 44 HPA's for terrestrial invasive species (Map 1) using visual surveys. Data was recorded using the iMapInvasives Mobile Advanced (iMMA) application.



Map 1. Map of Chaumont Barrens HPAs examined by SLELO staff in 2022.

The following **Invasive Species** were found:

Invasive Species	Tier Ranking	HPA's Affected
Pale swallow-wort	3	39
Bush honeysuckle	4	7
Common buckthorn	4	6
Glossy buckthorn	4	1
Knapweed spp.	4	2
Bittersweet nightshade	*	1
Garlic mustard	*	1

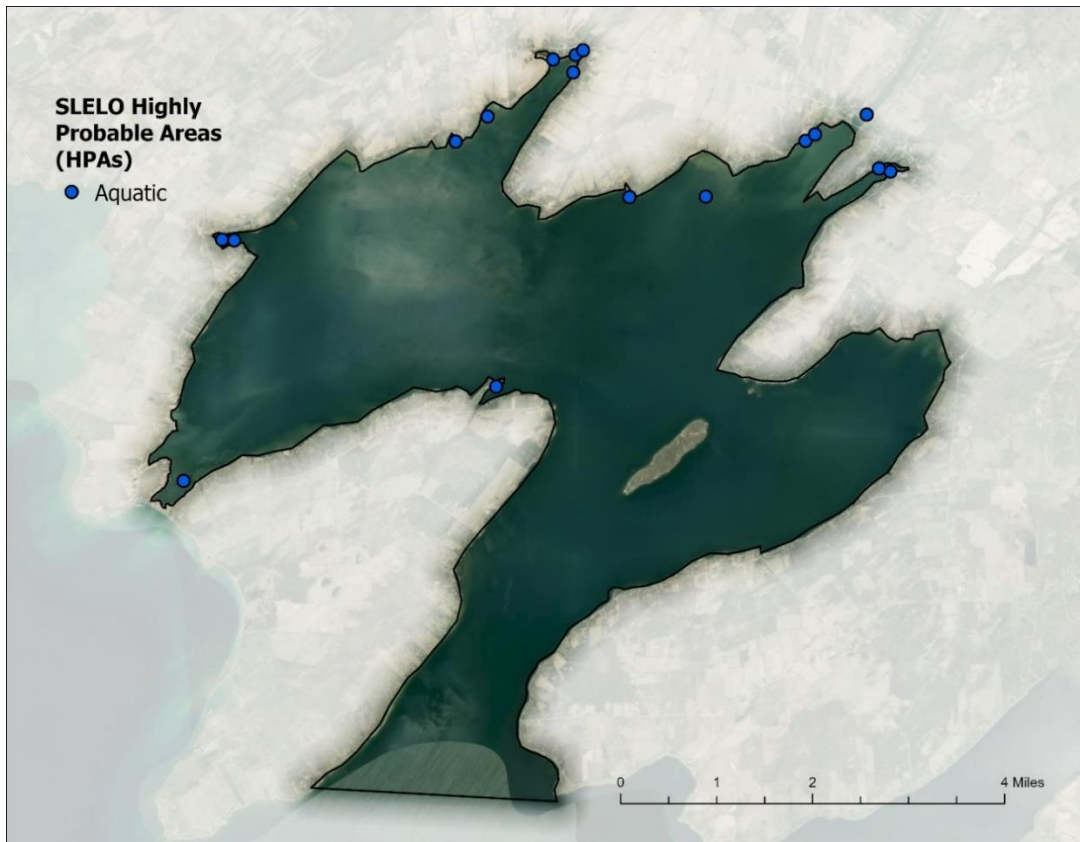
* Species is not currently tier ranked

NO NEW TIER 1 OR TIER 2 SPECIES WERE DETECTED IN 2022

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Chaumont Bay

The Chaumont Bay PCA was surveyed in August 2022 by SLELO staff Brittney Rogers, Robert Smith and Rob Williams with assistance from Watercraft Inspection Steward, Alisa Trudell. The team examined 17 HPA's for aquatic invasive species (Map 2) using visual surveys and rake toss. Data was recorded using the iMapInvasives Simple Aquatic Survey (SAS) application.



Map 2. Map of Chaumont Bay PCA HPAs examined by SLELO staff in 2022.

The following **Invasive Species** were found:

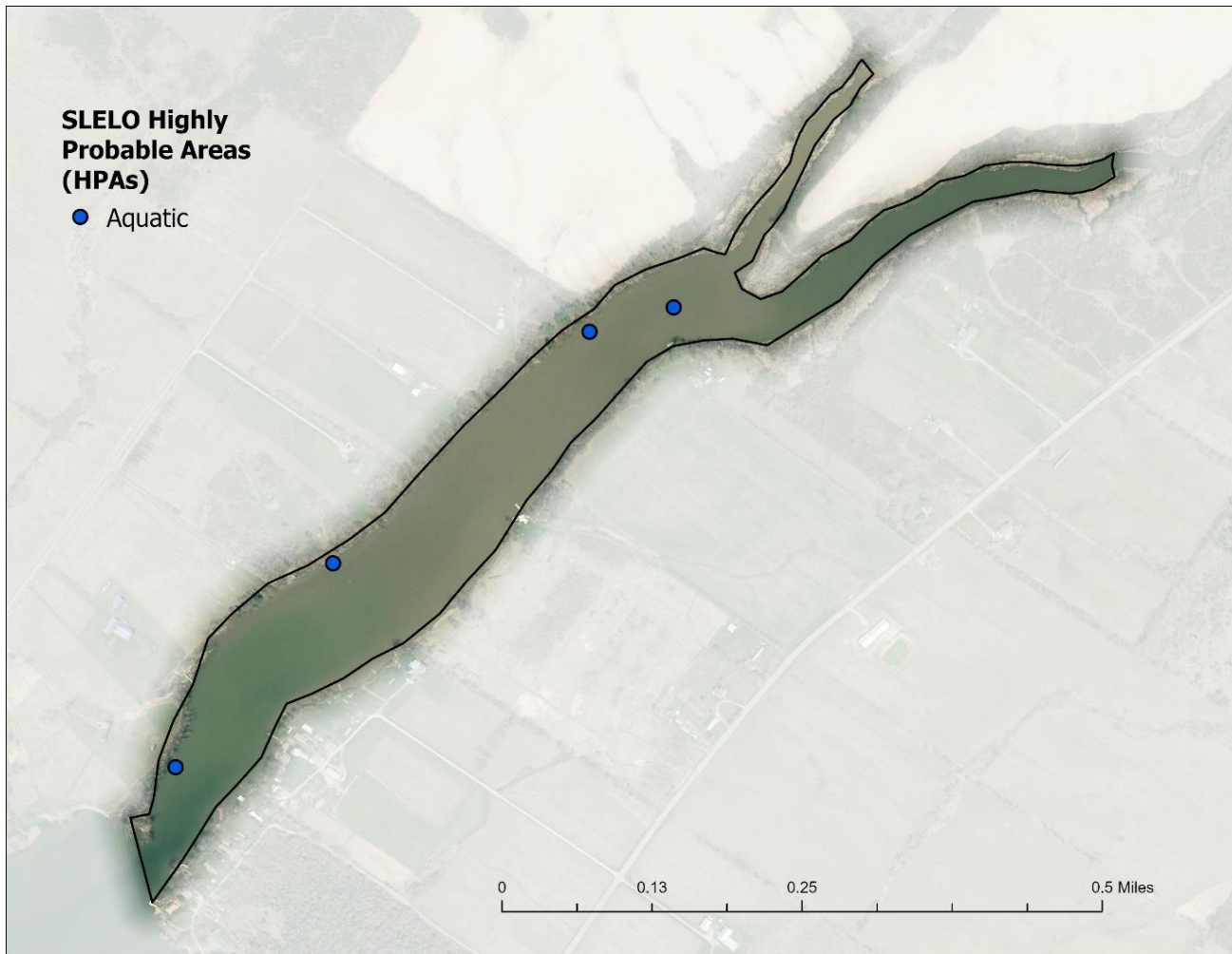
Invasive Species	Tier Ranking	HPA's Affected
Curly-leaf pondweed	4	2
Eurasian watermilfoil	4	11
European frog-bit	4	1
Purple loosestrife	4	1
Quagga mussel	4	1
Zebra mussel	4	11
Flowering rush	*	1

* Species is not currently tier ranked

NO NEW TIER 1 OR TIER 2 SPECIES WERE DETECTED IN 2022

Guffin Bay

The Guffin Bay PCA was surveyed in August 2022 by Brittney Rogers and Megan Pistolese during the 2022 water chestnut pull. SLELO staff examined four HPA's for aquatic invasive species (Map 3) using visual surveys and rake toss. Data was recorded using the iMapInvasives Simple Aquatic Survey (SAS) application.



Map 3. Map of Guffin Bay PCA HPAs examined by SLELO staff in 2022.

The following **Invasive Species** were found:

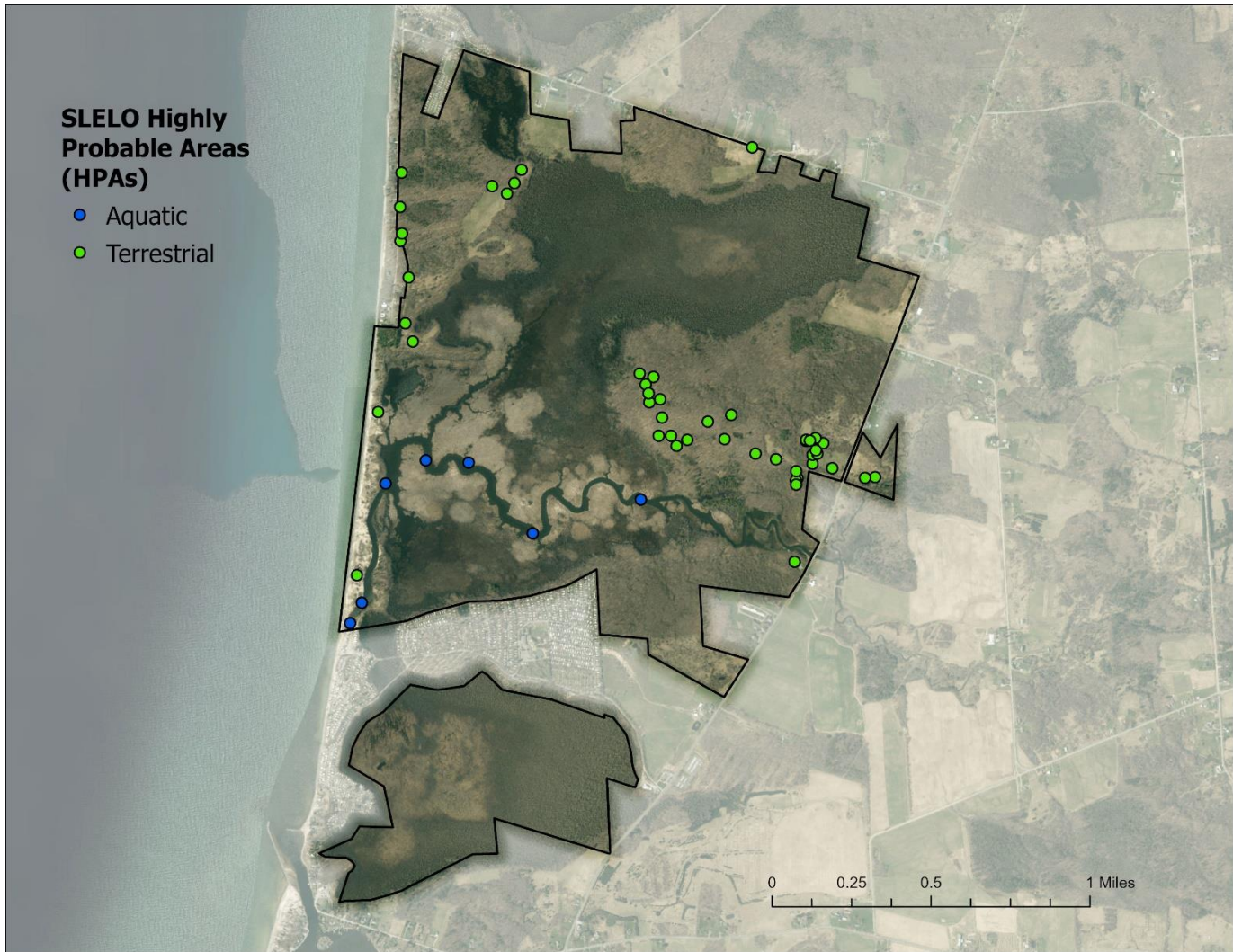
Invasive Species	Tier Ranking	HPA's Affected
Water chestnut	4	2
Eurasian watermilfoil	4	2
European frog-bit	4	2
Brittle naiad	*	2

* Species is not currently tier ranked

NO NEW TIER 1 OR TIER 2 SPECIES WERE DETECTED IN 2022

Deer Creek Marsh WMA

Deer Creek Marsh WMA PCA was surveyed for terrestrial invasive species in June-July and for aquatic invasive species in October by Brittney Rogers and Robert Smith with assistance from Watercraft Inspection Steward Amanda Cooper for the aquatic survey. SLELO staff surveyed 48.41 acres of 47 HPA's for terrestrial invasive species (Map 4) using visual surveys. An additional seven aquatic HPAs using visual surveys and rake tosses. Data was recorded using the iMapInvasives Mobile Advanced (iMMA) and Simple Aquatic Survey (SAS) applications.



Map 4. Map of Deer Creek Marsh WMA HPAs examined by SLELO staff in 2022.

NO NEW TIER 1 OR TIER 2 SPECIES WERE DETECTED IN 2022

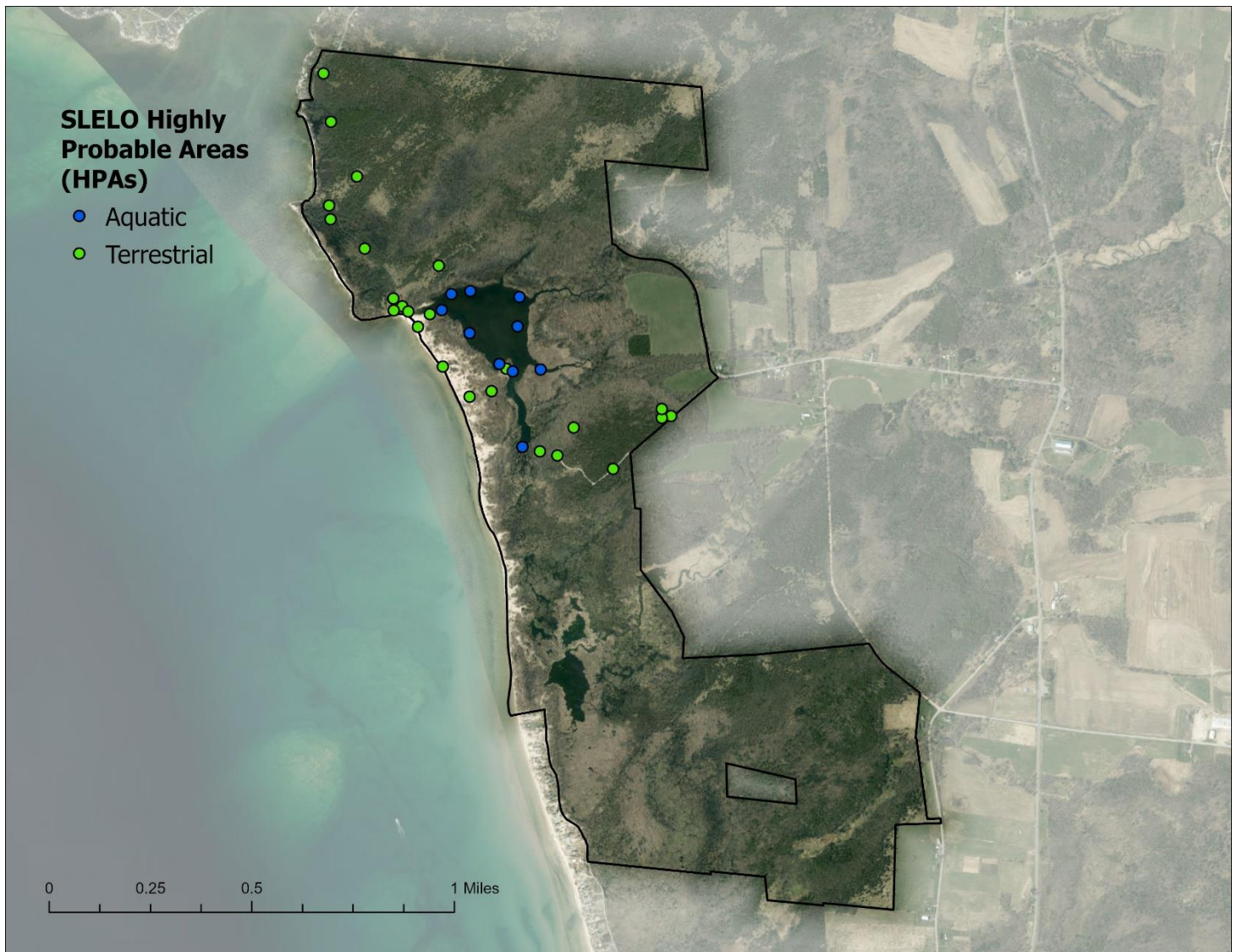
The following **Invasive Species** were found:

Invasive Species	Tier Ranking	HPA's Affected
Common reed grass	3	2
Japanese knotweed	3	4
Japanese stiltgrass	3	1
Multiflora rose	3	19
Pale swallow-wort	3	32
Amur honeysuckle	4	2
Bush honeysuckle	4	6
Common buckthorn	4	6
Curly-leaf pondweed	4	2
Eurasian watermilfoil	4	7
Glossy buckthorn	4	10
Knapweed spp.	4	2
Morrow's honeysuckle	4	5
Purple loosestrife	4	1
Yellow iris	4	1
Bittersweet nightshade	*	3
Black locust	*	3
Blue plantain-lily	*	1
Colt's foot	*	2
Common mullein	*	2
Common St. John's wort	*	1
Common wormwood	*	3
Dame's rocket	*	2
Eastern helleborine	*	2
Garden stonecrop	*	4
Garlic mustard	*	17
Japanese barberry	*	6
Orange daylily	*	3
Tufted vetch	*	1

* Species is not currently tier ranked

El Dorado Preserve – Black Pond WMA

El Dorado Preserve – Black Pond WMA PCA was surveyed for terrestrial invasive species in June, August, and September and for aquatic invasive species in October by Brittney Rogers and Robert Smith. SLELO staff surveyed 39.36 acres of 25 HPA's for terrestrial invasive species (Map 5) using visual surveys. An additional nine aquatic HPAs using visual surveys and rake tosses. Data was recorded using the iMapInvasives Mobile Advanced (iMMA) and Simple Aquatic Survey (SAS) applications.



Map 5. Map of El Dorado Preserve – Black Pond WMA HPAs examined by SLELO staff in 2022.

The following **Invasive Species** were found:

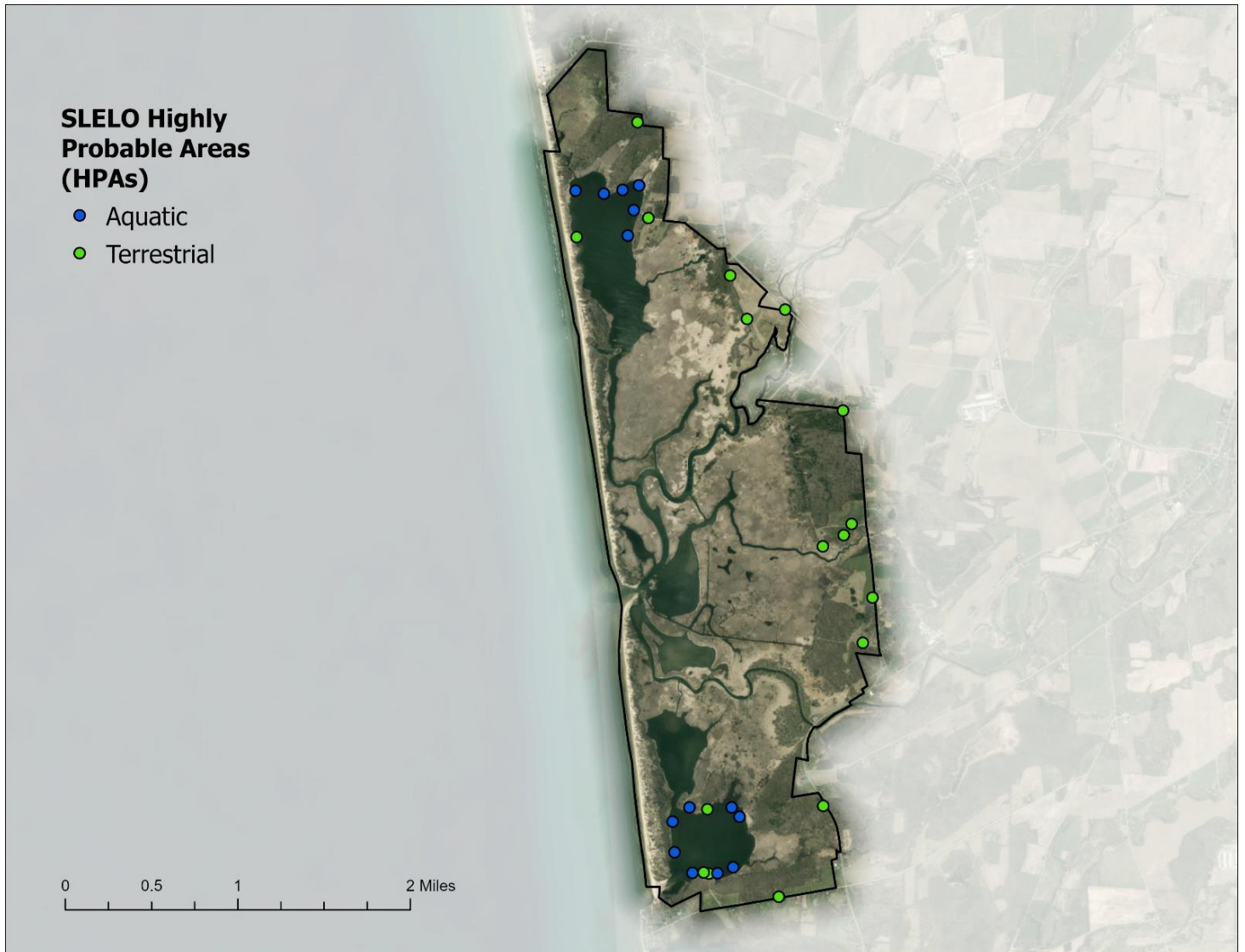
Invasive Species	Tier Ranking	HPA's Affected
Common reed grass	3	2
Multiflora rose	3	2
Pale swallow-wort	3	14
Starry stonewort	3	3
Water chestnut	3	2
Bush honeysuckle	4	12
Common buckthorn	4	14
Curly-leaf pondweed	4	1
Eurasian watermilfoil	4	3
European frog-bit	4	8
Knapweed spp.	4	3
Purple loosestrife	4	7
Yellow iris	4	3
Bittersweet nightshade	*	4
Brittle naiad	*	1
Butter-and-eggs	*	2
Common mullein	*	1
Creeping jenny	*	4
Eastern helleborine	*	1
European barberry	*	1
Flowering rush	*	1
Garlic mustard	*	2
Lesser periwinkle	*	1

* Species is not currently tier ranked

NO NEW TIER 1 OR TIER 2 SPECIES WERE DETECTED IN 2022

Lakeview WMA

The Lakeview WMA PCA was surveyed in July, August, and September 2022 by Brittney Rogers and Robert Smith. SLELO staff examined 28.89 acres of 17 terrestrial HPA's for terrestrial invasive species. An additional 14 aquatic HPA's were surveyed for aquatic invasive species (Map 6) using visual surveys and rake tosses. Data was recorded using the iMapInvasives Mobile Advanced (iMMA) and Simple Aquatic Survey (SAS) applications.



Map 6. Map of Lakeview WMA PCA HPAs examined by SLELO staff in 2022.

The following **Invasive Species** were found:

Invasive Species	Tier Ranking	HPA's Affected
Common reed grass	3	1
Multiflora rose	3	5
Oriental bittersweet	3	4
Pale swallow-wort	3	2
Starry stonewort	3	5
Bush honeysuckle	4	9
Common buckthorn	4	7
Curly-leaf pondweed	4	6
Eurasian watermilfoil	4	9
European frog-bit	4	4
Glossy buckthorn	4	1
Knapweed spp.	4	1
Purple loosestrife	4	5
Wild parsnip	4	7
Yellow iris	4	3
Bittersweet nightshade	*	6
Brittle naiad	*	3
Butter-and-eggs	*	1
Colt's foot	*	1
Common St. John's wort	*	1
Creeping jenny	*	1
Cut leaf teasel	*	1
Dame's rocket	*	1
Garlic mustard	*	3
Goutweed	*	4
Japanese barberry	*	1
Leafy spurge	*	1
Orange daylily	*	1
Tufted vetch	*	3
Velvetleaf	*	3
White mulberry	*	1

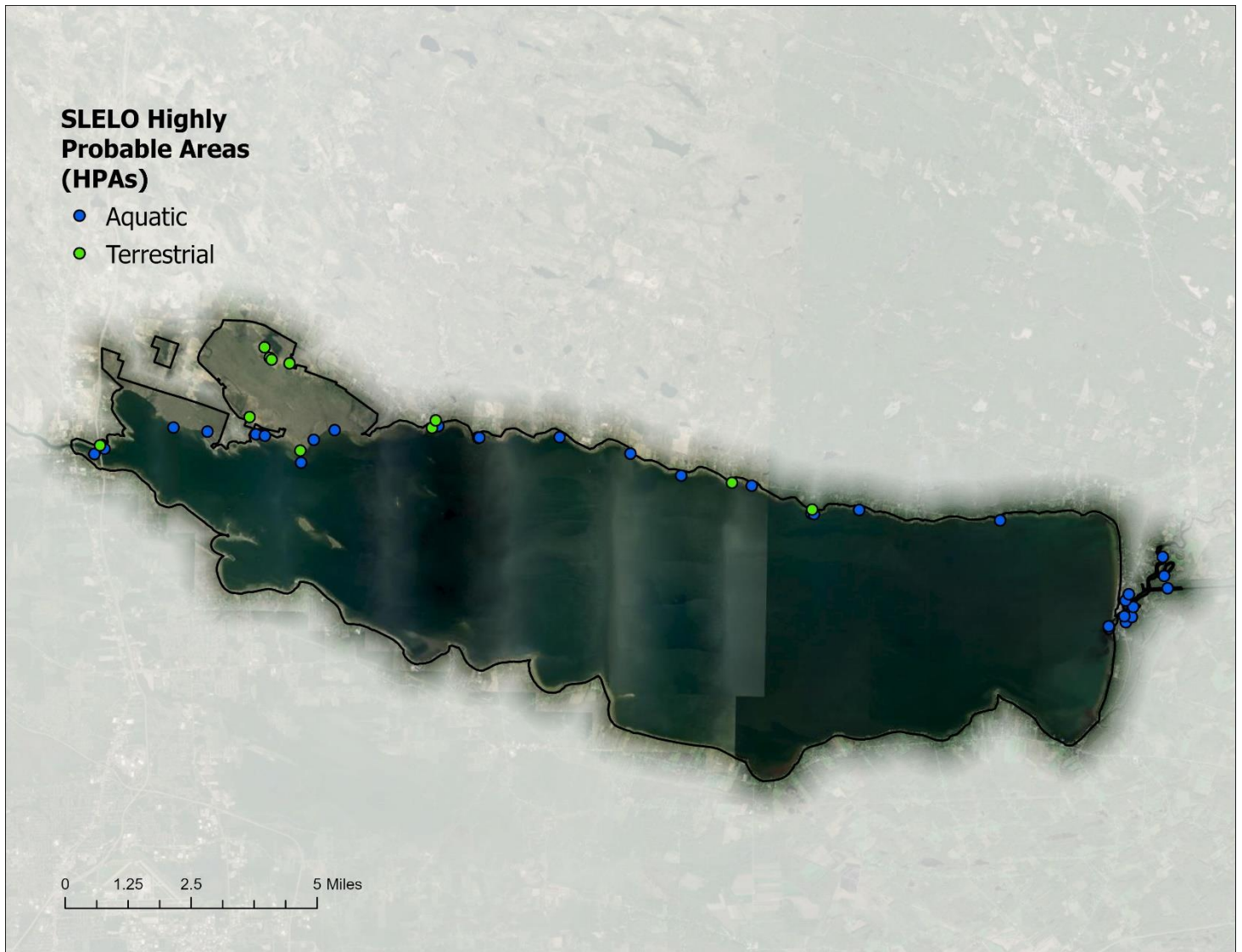
NO NEW TIER 1 OR TIER 2 SPECIES WERE DETECTED IN 2022

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Oneida Lake and Three Mile Bay WMA

Three Mile Bay WMA – Oneida Lake PCA was surveyed for terrestrial invasive species in June, July, and August and for aquatic invasive species in September and October by Brittney Rogers and Robert Smith with assistance from Watercraft Inspection Stewards Kiernan LaFaver, Amanda Cooper, and Alisa Trudell. SLELO staff surveyed 87.94 acres of 11 HPA's for terrestrial invasive species (Map 7) using visual surveys. An additional 31 aquatic HPAs using visual surveys and rake tosses. Data was recorded using the iMapInvasives Mobile Advanced (iMMA) and Simple Aquatic Survey (SAS) applications.



Map 7. Map of Oneida Lake – Three Mile Bay WMA HPAs examined by SLELO staff in 2022.

The following **Invasive Species** were found:

Invasive Species	Tier Ranking	HPA's Affected
Common reed grass	3	5
Japanese knotweed	3	1
Multiflora rose	3	1
Oriental bittersweet	3	1
Pale swallow-wort	3	2
Starry stonewort	3	3
Bush honeysuckle	4	4
Common buckthorn	4	1
Eurasian watermilfoil	4	14
Purple loosestrife	4	4
Yellow iris	4	3
Zebra mussel	4	16
Brittle naiad	*	4
Autumn olive	*	1
Elecampane	*	1
Garden stonecrop	*	1
Lesser periwinkle	*	1
Orange daylily	*	1
Tree-of-heaven	*	1

* Species is not currently tier ranked

NO NEW TIER 1 OR TIER 2 SPECIES WERE DETECTED IN 2022

Salmon River Estuary

The Salmon River Estuary PCA was surveyed in September 2022 by Brittney Rogers and Watercraft Inspection Steward Alisa Trudell. SLELO staff examined 11 HPA's for aquatic invasive species (Map 8) using visual surveys and rake toss. Data was recorded using the iMapInvasives Simple Aquatic Survey (SAS) application.



Map 8. Map of Salmon River Estuary HPA's examined by SLELO staff in 2022.

The following **Invasive Species** were found:

Invasive Species	Tier Ranking	HPA's Affected
Water chestnut	3	1
Curly-leaf pondweed	4	2
Eurasian watermilfoil	4	9
European frog-bit	4	6

** Species is not currently tier ranked*

NO NEW TIER 1 OR TIER 2 SPECIES WERE DETECTED IN 2022