



2023 SLELO PRISM Early Detection Program Report



2023 Highlights: Surveyed 241 Highly Probable Areas within 12 Priority Conservation Areas
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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 2023. This report may not include all invasive species present at a site, only what was found in 2023.

Summary

During the 2023 field season, SLELO staff visited twelve Priority Conservation Areas (PCAs) and surveyed approximately 153.27 acres of 241 highly probable areas (HPAs) for aquatic and/or terrestrial invasive species. A total of 37 different species were found during the surveys. Overall, wild parsnip was the most reported species, present at 39 HPAs. Eurasian watermilfoil was the most frequently encountered aquatic invasive species, present at 27 HPAs (Figure 1). No new infestations of tier 1 or 2 species were detected in 2023.

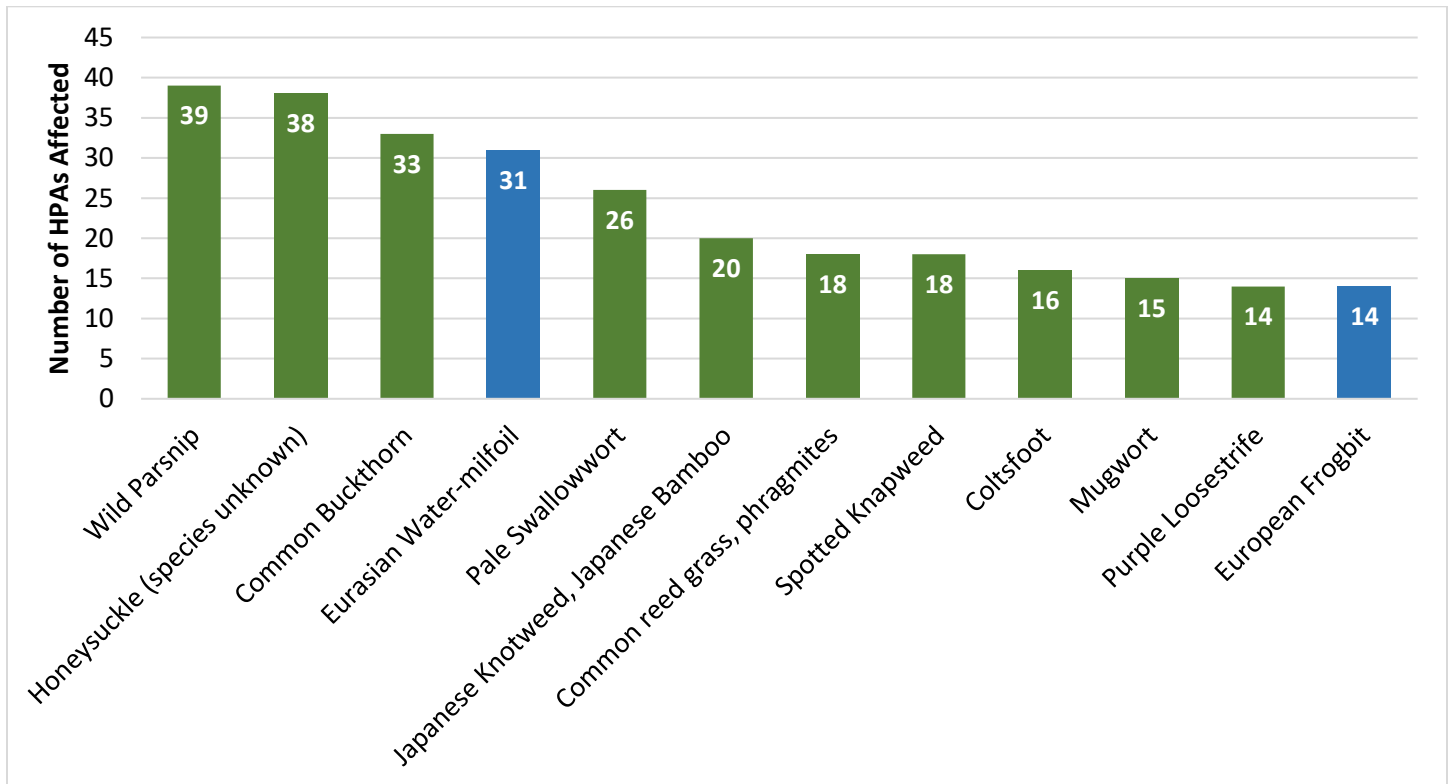


Figure 1. Top 12 most reported invasive species reported by number of HPAs affected.

Black Lake

Black Lake PCA was surveyed in October by Brittney Rogers, Robert Smith, Megan Pistolese-Shaw, and Alisa Trudell. SLELO staff surveyed 14 HPA's for aquatic invasive species (Map 1) using visual surveys and rake tosses. Data was recorded using the Simple Aquatic Survey (SAS) application.



Map 1. Map of Black Lake HPA's examined by SLELO staff in 2023.

The following **Invasive Species** were found:

Invasive Species	Tier Ranking	HPA's Affected
Curly Pondweed	4	2
Eurasian Water-milfoil	4	9
Zebra Mussel	4	4
Mystery snail (species unknown)	*	6

* Species is not currently tier ranked

NO NEW TIER 1 OR TIER 2 SPECIES WERE DETECTED IN 2023

Delta Lake

Delta Lake PCA was surveyed for terrestrial and aquatic invasive species in October 2023 by Brittney Rogers, Robert Smith, Alisa Trudell. SLELO staff surveyed 1.49 acres of 3 HPA's for terrestrial invasive species using visual surveys. Four additional aquatic HPA were surveyed using visual surveys and rake tosses (Map 2). Data was recorded using the iMapInvasives Mobile Advanced (iMMA) and Simple Aquatic Survey (SAS) applications.



Map 2. Map of Delta Lake PCA HPAs examined by SLELO staff in 2023.

The following **Invasive Species** were found:

Invasive Species	Tier Ranking	HPA's Affected
Common reed grass, phragmites	3	3
Eurasian Water-milfoil	4	4
Zebra Mussel	4	3
Brittle Naiad	*	2
Mystery snail (species unknown)	*	1

* Species is not currently tier ranked

NO NEW TIER 1 OR TIER 2 SPECIES WERE DETECTED IN 2023

Fish Creek WMA

Fish Creek WMA PCA was surveyed for aquatic and terrestrial invasive species in September 2023 by Brittney Rogers and Alisa Trudell. SLELO staff surveyed 9.04 acres of 7 HPA's for terrestrial invasive species using visual surveys. An additional 12 aquatic HPA's were surveyed using visual surveys and rake tosses (Map 3). Data was recorded using the iMapInvasives Mobile Advanced (iMMA) and Simple Aquatic Survey (SAS) applications.



Map 3. Map of Fish Creek WMA PCA HPAs examined by SLELO staff in 2023.

The following **Invasive Species** were found:

Invasive Species	Tier Ranking	HPA's Affected
Common reed grass, phragmites	3	1
Pale Swallowwort	3	1
Common Buckthorn	4	3
Eurasian Water-milfoil	4	2
European Frogbit	4	7
Glossy Buckthorn	4	2
Honeysuckle (species unknown)	4	5
Purple Loosestrife	4	1
Wild Parsnip	4	4
Coltsfoot	*	1

* *Species is not currently tier ranked*

NO NEW TIER 1 OR TIER 2 SPECIES WERE DETECTED IN 2023

French Creek WMA

French WMA PCA was surveyed for terrestrial invasive species in August and for aquatic invasive species in September by Brittney Rogers and Robert Smith. SLELO staff surveyed 7.3 acres of 6 HPA's for terrestrial invasive species using visual surveys. An additional 10 aquatic HPAs using visual surveys and rake tosses (Map 4). Data was recorded using the iMapInvasives Mobile Advanced (iMMA) and Simple Aquatic Survey (SAS) applications.



Map 4. Map of French Creek WMA HPAs examined by SLELO staff in 2023.

NO NEW TIER 1 OR TIER 2 SPECIES WERE DETECTED IN 2023

The following **Invasive Species** were found:

Invasive Species	Tier Ranking	HPA's Affected
Common reed grass, phragmites	3	1
Oriental Bittersweet	3	1
Pale Swallowwort	3	2
Common Buckthorn	4	4
Curly Pondweed	4	1
Eurasian Water-milfoil	4	8
European Frogbit	4	7
Honeysuckle (species unknown)	4	6
Purple Loosestrife	4	3
Spotted Knapweed	4	4
Wild Parsnip	4	4
Coltsfoot	*	1
Common mullein	*	1
Elecampane	*	1
Garlic Mustard	*	1
Ground Ivy	*	1

* Species is not currently tier ranked

Limerick Cedars Preserve

Limerick Cedars Preserve PCA was surveyed for terrestrial invasive species in August, and September by Brittney Rogers and Robert Smith. SLELO staff surveyed 17.65 acres of 5 HPA's for terrestrial invasive species using visual surveys (Map 5). Data was recorded using the iMapInvasives Mobile Advanced (iMMA) application.



Map 5. Map of Limerick Cedars Preserve HPAs examined by SLELO staff in 2023.

The following **Invasive Species** were found:

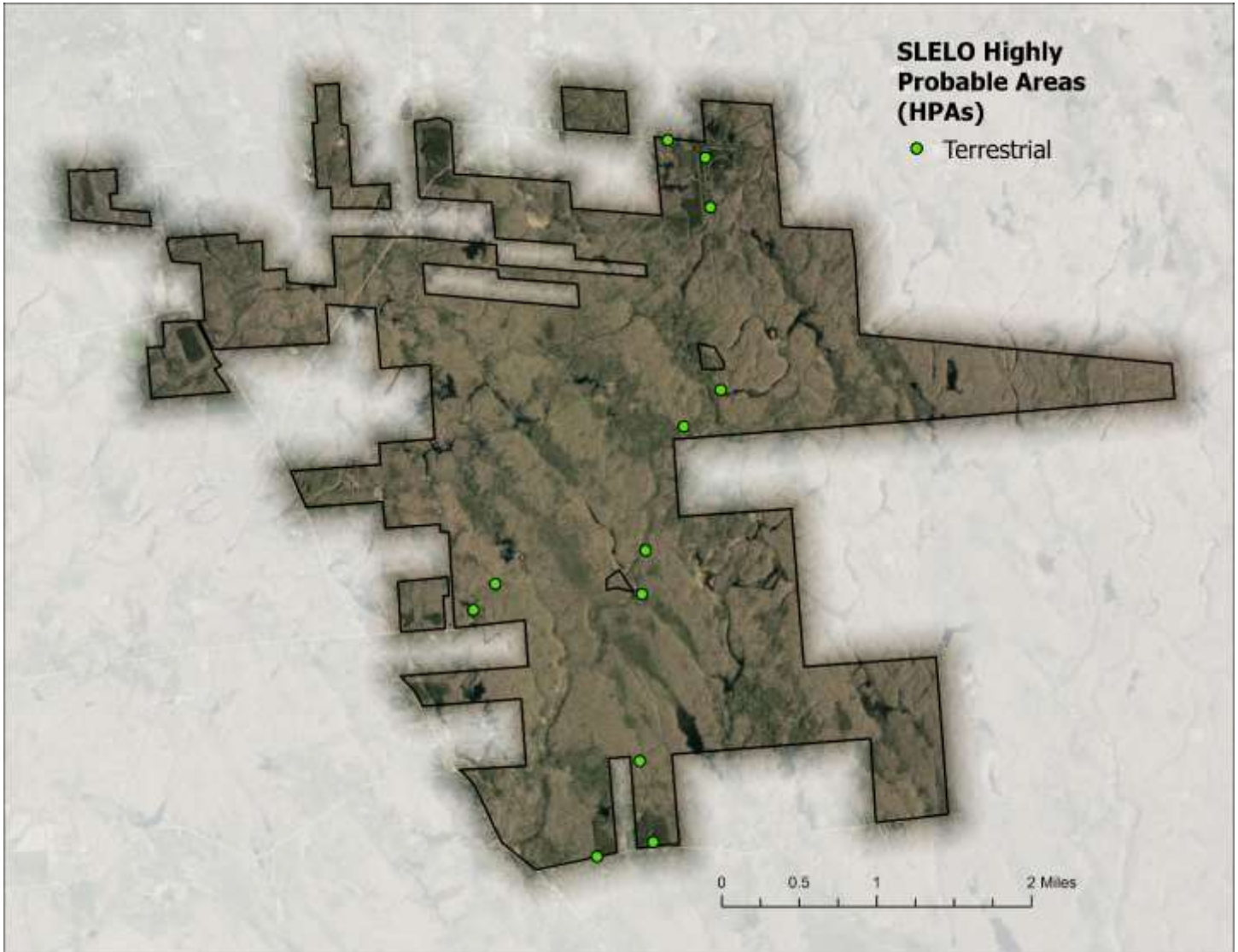
Invasive Species	Tier Ranking	HPA's Affected
Common reed grass, phragmites	3	1
Pale Swallowwort	3	5

* Species is not currently tier ranked

NO NEW TIER 1 OR TIER 2 SPECIES WERE DETECTED IN 2023

Little John WMA

Little John WMA PCA was surveyed for terrestrial invasive species in July by Brittney Rogers and Robert Smith. SLELO staff surveyed 12.10 acres of 12 HPA's for terrestrial invasive species using visual surveys (Map 6). Data was recorded using the iMapInvasives Mobile Advanced (iMMA) application.



Map 6. Map of Little John WMA HPAs examined by SLELO staff in 2023.

The following **Invasive Species** were found:

Invasive Species	Tier Ranking	HPA's Affected
Common reed grass, phragmites	3	2
Common Buckthorn	4	2
Glossy Buckthorn	4	2
Spotted Knapweed	4	5
Wild Parsnip	4	8
Coltsfoot	*	2
Common mullein	*	1
Crabapple (species unknown)	*	1
Creeping Jenny, Moneywort	*	1
Eastern Helleborine	*	4
Garlic Mustard	*	3
Goutweed	*	1
Mugwort	*	6
Orange Daylily	*	1

NO NEW TIER 1 OR TIER 2 SPECIES WERE DETECTED IN 2023

Mud Bay

Fish Creek WMA PCA was surveyed for terrestrial invasive species in July 2023 and aquatic invasive species in September by Brittney Rogers and Robert Smith. SLELO staff surveyed 2.27 acres of 9 HPA's for terrestrial invasive species using visual surveys. An additional 9 aquatic HPAs were surveyed using visual surveys and rake tosses (Map 7). Data was recorded using the iMapInvasives Mobile Advanced (iMMA) and Simple Aquatic Survey (SAS) applications.



Map 7. Map of Mud Bay HPAs examined by SLELO staff in 2023.

The following **Invasive Species** were found:

Invasive Species	Tier Ranking	HPA's Affected
Pale Swallowwort	3	5
Starry Stonewort	3	4
Common Buckthorn	4	6
Curly Pondweed	4	1
Eurasian Water-milfoil	4	6
Honeysuckle (species unknown)	4	5
Wild Parsnip	4	1
Zebra Mussel	4	2
Elecampane	*	3

* *Species is not currently tier ranked*

NO NEW TIER 1 OR TIER 2 SPECIES WERE DETECTED IN 2023

Mud Lake

Black Lake PCA was surveyed in August by Brittney Rogers and Alisa Trudell. SLELO staff surveyed 1 HPA's for aquatic invasive species using visual surveys and rake tosses (Map 8). Data was recorded using the Simple Aquatic Survey (SAS) application.



Map 8. Map of Mud Lake HPAs examined by SLELO staff in 2023.

The following **Invasive Species** were found:

Invasive Species	Tier Ranking	HPA's Affected
Eurasian Water-milfoil	4	2
Banded Mysterysnail	*	1

* Species is not currently tier ranked

NO NEW TIER 1 OR TIER 2 SPECIES WERE DETECTED IN 2023

OBI/Three Mile Creek

OBI/Three Mile Creek PCA was surveyed for terrestrial invasive species in August and September by Brittney Rogers and Robert Smith. SLELO staff surveyed 44.58 acres of 14 HPA's for terrestrial invasive species using visual surveys (Map 11). Data was recorded using the iMapInvasives Mobile Advanced (iMMA) application.



Map 9. Map of OBI/Three Mile Creek HPAs examined by SLELO staff in 2023.

The following **Invasive Species** were found:

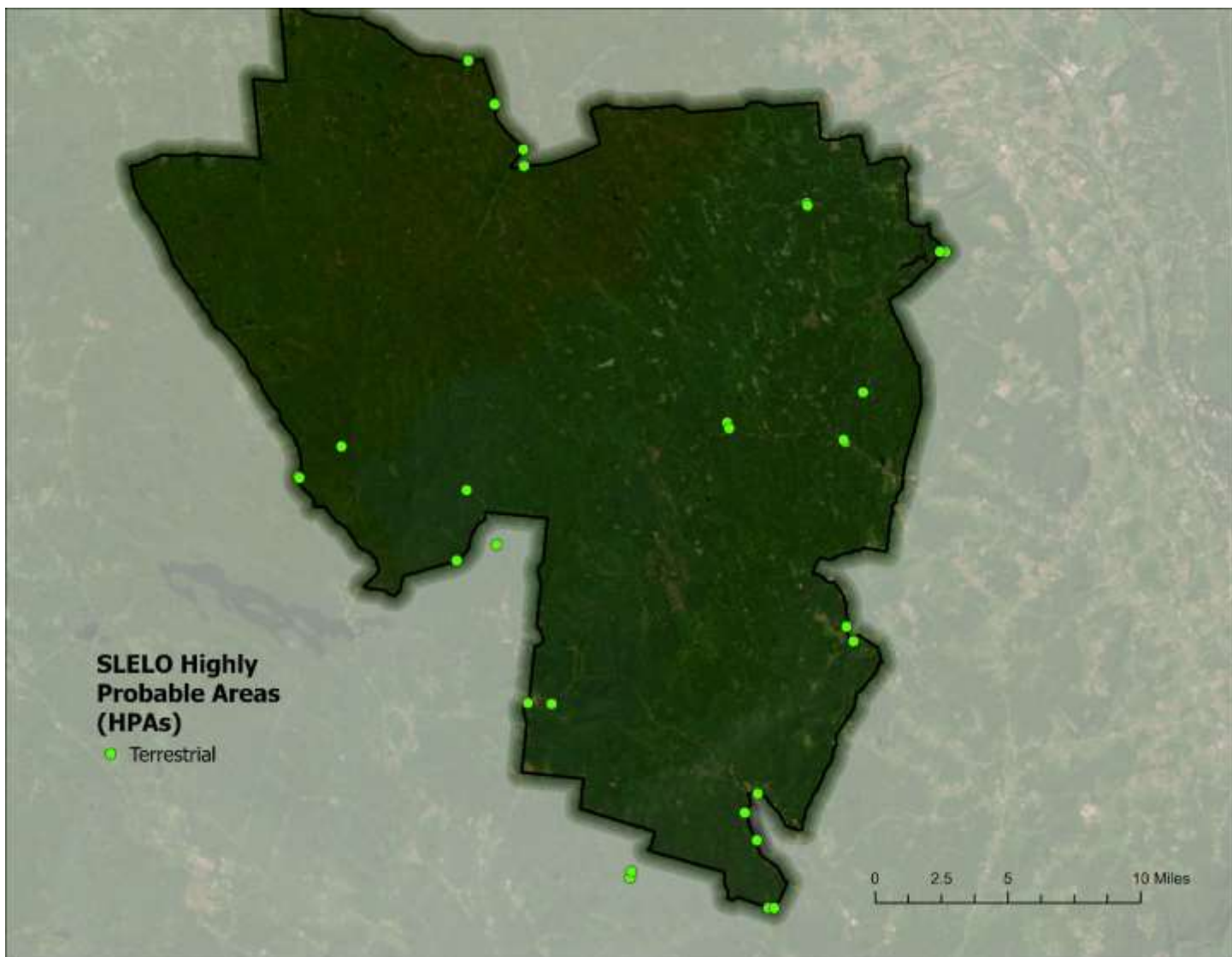
Invasive Species	Tier Ranking	HPA's Affected
Pale Swallowwort	3	12

* *Species is not currently tier ranked*

NO NEW TIER 1 OR TIER 2 SPECIES WERE DETECTED IN 2023

Tug Hill ISPZ

The Tug Hill ISPZ PCA was surveyed for terrestrial invasive species in August and September by Brittney Rogers and Robert Smith. SLELO staff surveyed 31.38 acres of 31 HPA's for terrestrial invasive species using visual surveys (Map 11). Data was recorded using the iMapInvasives Mobile Advanced (iMMA) application.



Map 10. Map of Tug Hill ISPZ HPAs examined by SLELO staff in 2023.

The following **Invasive Species** were found:

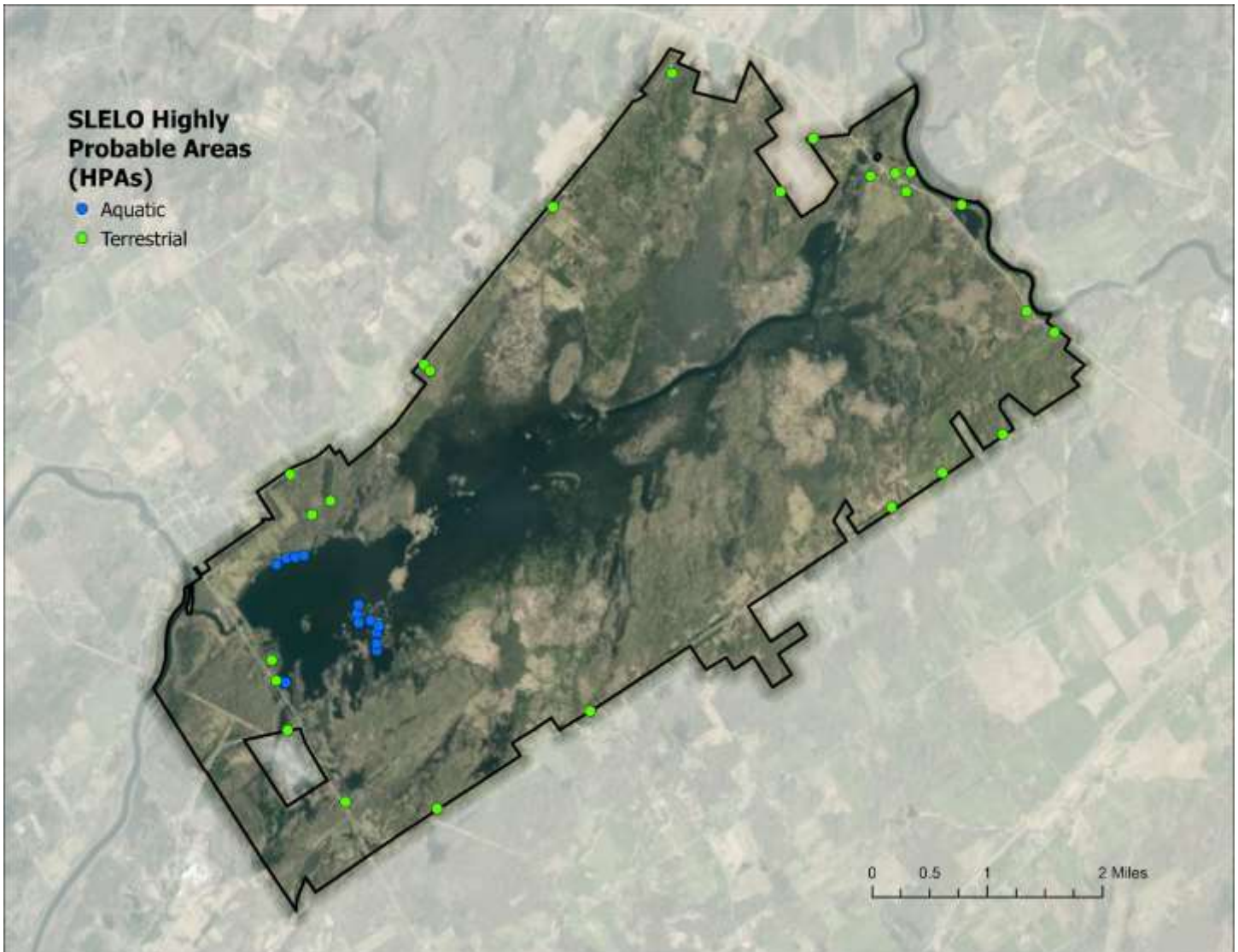
Invasive Species	Tier Ranking	HPA's Affected
Common reed grass, phragmites	3	5
Japanese Knotweed, Japanese Bamboo	3	6
Honeysuckle (species unknown)	4	4
Purple Loosestrife	4	3
Spotted Knapweed	4	8
Wild Parsnip	4	8
Black Locust	*	1
Coltsfoot	*	12
Common mullein	*	1
Creeping Jenny, Moneywort	*	1
Eastern Helleborine	*	2
European Lily-of-the-valley	*	1
Garlic Mustard	*	6
Goutweed	*	2
Mugwort	*	8
Policemen's Helmet, Himalayan Balsam	*	2
Reed Canarygrass	*	2
St. Johnswort	*	3

* *Species is not currently tier ranked*

NO NEW TIER 1 OR TIER 2 SPECIES WERE DETECTED IN 2023

Upper and Lower Lakes WMA

Upper and Lower Lakes WMA PCA was surveyed for terrestrial invasive species in July and aquatic invasive species in August by Brittney Rogers, Robert Smith, Alisa Trudell, and Cole Richards. SLELO staff surveyed 27.46 acres of 25 HPA's for terrestrial invasive species using visual surveys (Map 11). Terrestrial data was recorded using the iMapInvasives Mobile Advanced (iMMA) application. Point intercept survey techniques were used to survey 14 HPA's for aquatic invasive species. AIS survey data was recorded using a custom Survey123 application.



Map 11. Map of Upper and Lower Lakes WMA HPAs examined by SLELO staff in 2023.

The following **Invasive Species** were found:

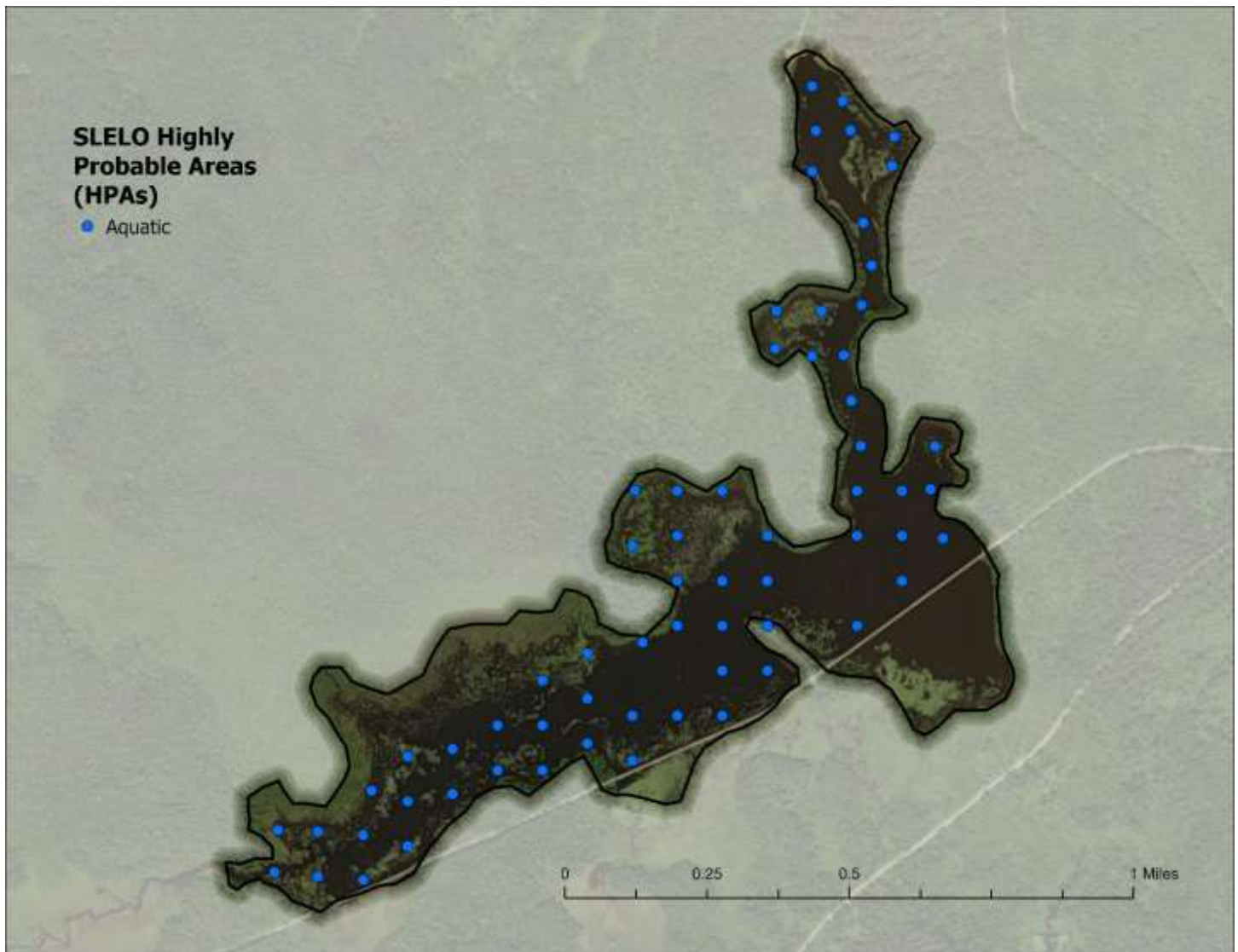
Invasive Species	Tier Ranking	HPA's Affected
Common reed grass, phragmites	3	2
Japanese Knotweed, Japanese Bamboo	3	5
Oriental Bittersweet	3	7
Pale Swallowwort	3	1
Common Buckthorn	4	18
Honeysuckle (species unknown)	4	18
Purple Loosestrife	4	7
Spotted Knapweed	4	1
Wild Parsnip	4	14
Bird's Foot Trefoil	*	1
Black Locust	*	1
Climbing Nightshade, Bittersweet Nightshade	*	1
Common mullein	*	4
Elecampane	*	1
Garlic Mustard	*	2
Mugwort	*	1
Orange Daylily	*	1
White Poplar	*	1

* Species is not currently tier ranked

NO NEW TIER 1 OR TIER 2 SPECIES WERE DETECTED IN 2023

Whetstone Reservoir

Whetstone Reservoir was surveyed in September 2023 by Brittney Rogers, Robert Smith, Megan Pistolese-Shaw, and Alisa Trudell. SLELO staff performed a point intercept survey, visiting 65 points located in pre-determined 4-acre grids (Map 12). Data was recorded using a custom point intercept monitoring Survey123 application.



Map 12. Map Whetstone Reservoir HPAs examined by SLELO staff in 2023.

The following **Invasive Species** were found:

Invasive Species	Tier Ranking	HPA's Affected
No Invasive Species Detected		

* Species is not currently tier ranked

NO NEW TIER 1 OR TIER 2 SPECIES WERE DETECTED IN 2023