



Durham Watershed Planning

2025 Activities Summary Report

2026



**KAWARTHA
CONSERVATION**

Discover • Protect • Restore

About Kawartha Conservation

Who we are

We are a watershed-based organization that uses planning, stewardship, science, and conservation lands management to protect and sustain outstanding water quality and quantity supported by healthy landscapes.

Why is watershed management important?

Abundant, clean water is the lifeblood of the Kawarthas. It is essential for our quality of life, health, and continued prosperity. It supplies our drinking water, maintains property values, sustains an agricultural industry, and contributes to a tourism-based economy that relies on recreational boating, fishing, and swimming. Our programs and services promote an integrated watershed approach that balance human, environmental, and economic needs.

The community we support

We focus our programs and services within the natural boundaries of the Kawartha watershed, which extend from Lake Scugog in the southwest and Pigeon Lake in the east, to Balsam Lake in the northwest and Crystal Lake in the northeast – a total of 2,563 square kilometers.

Our history and governance

In 1979, we were established by our municipal partners under the Ontario Conservation Authorities Act.

The natural boundaries of our watershed overlap the six municipalities that govern Kawartha Conservation through representation on our Board of Directors. Our municipal partners include the City of Kawartha Lakes, Region of Durham, Township of Scugog, Township of Brock, Municipality of Clarington, Municipality of Trent Lakes, and Township of Cavan Monaghan.

Executive Summary

The Durham Watershed Planning project is a collaboration between Kawartha Conservation and the Region of Durham, to provide the newest watershed-based mapping information to help manage land use activities.

In 2025, project activities focused on: land cover and wetland mapping updates, aquatic plants in Lake Scugog, and shoreline inventory of Lake Scugog.

The following are key findings and recommendations from completed activities.

Land Cover Mapping Updates

Key Findings

- There were 27 unique Ecological Land Classification categories, lumped into 6 major land use types. Intensive agriculture (e.g., row crops) is the most widespread land use at 40% of total land area, followed by open water (mostly Lake Scugog) at 14% of total.
- There was no significant widespread change in land use types from 2021 to 2024, as all changes (positive or negative) were 0.2% or below. The most prominent change was intensive agriculture, which experienced an increase of 128 ha.

Recommendations

- Given the apparent increase in intensive agriculture land use since 2021, planning authorities should prioritize management strategies to reduce impacts of this type of activity (e.g., tile drainage, land conversion, fertilizer applications, etc.) on water resources and natural heritage features.

Wetland Cover Mapping Updates

Key Findings

- Approximately 11.5 km² of isolated unevaluated wetlands were verified, which included 227 individual polygon groupings.
- 93 individual polygons were confirmed as wetlands (present), and 27 confirmed as not wetlands (absent), with the remaining polygons being unclassified.
- The 27 confirmed absent wetlands total 16.8 ha. Historical imagery from these areas indicates that natural areas (potential wetlands) did in fact exist in these locations within

the last 5 to 20 years, but have since been converted to intensive agriculture, in most cases (24 of 27).

Recommendations

- Consider from a regulatory approval perspective the removal of 27 unevaluated wetlands confirmed as 'absent' from Kawartha Conservation's Public Property Mapping Tool.
- Consider more detailed means to verify the status of the remaining unclassified unevaluated wetlands, such as more in-depth desktop analyses or through field site visits.

Aquatic Plants in Lake Scugog

Key Findings

- Aquatic plants occupied 83% of Lake Scugog, with plant fullness of 13% abundant, 50% moderate, and 20% sparse.
- Twenty-five aquatic plant taxa were found in the lake, with the following plants being most common (i.e., occupying more than 10%): starry stonewort, Eurasian watermilfoil, mix of starry stonewort and muskgrass, bladderwort, sago pondweed, watermilfoil (other than Eurasian), and tapegrass.
- The aquatic plant community is dominated by taxa that are tolerant of degraded lake conditions, which indicates that the general state of the lake can be considered degraded. Sensitive aquatic plant taxa are present but are relatively rare.
- The maximum depth of plant colonization is 2.9m, there were no plants found deeper than this depth.
- Invasive aquatic plants occupied 70% of the lake and occupied 87% of sites that have plants. Invasive species found in the lake were dominated by starry stonewort, and Eurasian watermilfoil, and curly leaved pondweed was present but rare.

Recommendations

- Continue to assess aquatic plant conditions on a routine basis to track lake health, through tracking improvements in sensitive versus tolerant taxa, invasive versus native taxa, and depth of plant colonization.

Shoreline Inventory of Lake Scugog

Key Findings

- The entire shoreline of Lake Scugog was assessed through the Foreshore Integrated Management Plan methodology, which totaled 134 unique segment classifications, spanning 136,471m in length.
- In terms of shoreline development, approximately 49.8% of Lake Scugog's shoreline remains natural (e.g., treed, wetlands, etc.), while 50.2% is disturbed (e.g., buildings, hardened, lot grading, etc.).
- Single-family residential development is the largest source of disturbance, comprising 43% of the shoreline, with over 94% of these segments altered.
- Key aquatic habitat features include aquatic vegetation along 80% of the shoreline, 260 large woody debris pieces or clusters (1.9 per km), and overhanging vegetation along 4.8% of the shoreline. Invasive aquatic plants were prevalent (notably starry stonewort) and recorded along 58% of the shoreline.
- A total of 3,322 modifications were documented, including 1527 docks (11.2 per km), 81 aquatic thrusters (0.6 per km). Retaining walls occupied 4.8%.
- Nearly 48.2% (65,732 m) of shoreline segments were classified as High Impact (>50% disturbed), primarily in residential areas. Low- and no-impact segments occur mainly within the large expanses of wetlands.

Recommendations

- Disseminate key findings from the Lake Scugog shoreline inventory project through an easily accessible online information dashboard.
- Repeat the shoreline assessment protocol on Lake Scugog on a five-year basis, to track changes in shoreline conditions.
- Given the extent of shoreline alterations around Lake Scugog, planning authorities should prioritize management strategies to reduce impacts of shoreline disturbance (e.g., vegetation removal, frontage hardening, etc.) on water resources and natural heritage features.

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1.0 Introduction

In January 2023, the implementation of Bill 23 – *More Homes Built Faster Act*, was put into place. This meant that Conservation Authorities could no longer provide comments on natural heritage or water components not related to natural hazards for *Planning Act* applications, however, expertise remains within Kawartha Conservation to be able to provide reliable background information for municipal planning purposes.

Municipalities require the most up to date information to make timely decisions on *Planning Act* applications. The Durham Watershed Planning project is a collaboration between Kawartha Conservation and the Region of Durham, to provide the newest mapping information to help the municipality conform to provincial planning guidance related to watershed resources management (e.g., Provincial Planning Statement, Growth Plan, Greenbelt Plan, Oak Ridges Moraine Conservation Plan, etc.), and to contribute to more efficient processing of *Planning Act* applications.

This project is scoped to undertaking four different activities aimed at filling data gaps related to watershed management and other features of interest that are important background considerations for development approvals. The project study area (the jurisdictional overlap between Durham Region and Kawartha Conservation) is shown in Figure 1.1.

This technical report provides a summary of key findings of work undertaken in 2025 towards addressing data gaps in the following watershed-based land use planning information.

- Land cover mapping updates: a new aerial imagery dataset for 2024 was acquired, which then permits the determination of land cover classifications.
- Wetland cover mapping updates: the status of the existing provincially derived unevaluated wetland dataset, is largely based on historic satellite imagery and is known to be inconsistent in representing ground conditions.
- Aquatic plants in Lake Scugog: aquatic plants are a key local management issue yet there are no comprehensive lake-wide studies on their distribution, composition, or abundance.
- Shoreline inventory of Lake Scugog: the shoreline is a rapidly changing land use environment, and comprehensive efforts to catalogue valued features have not been made.

Recommendations provided are based primarily on a resource evaluation perspective.

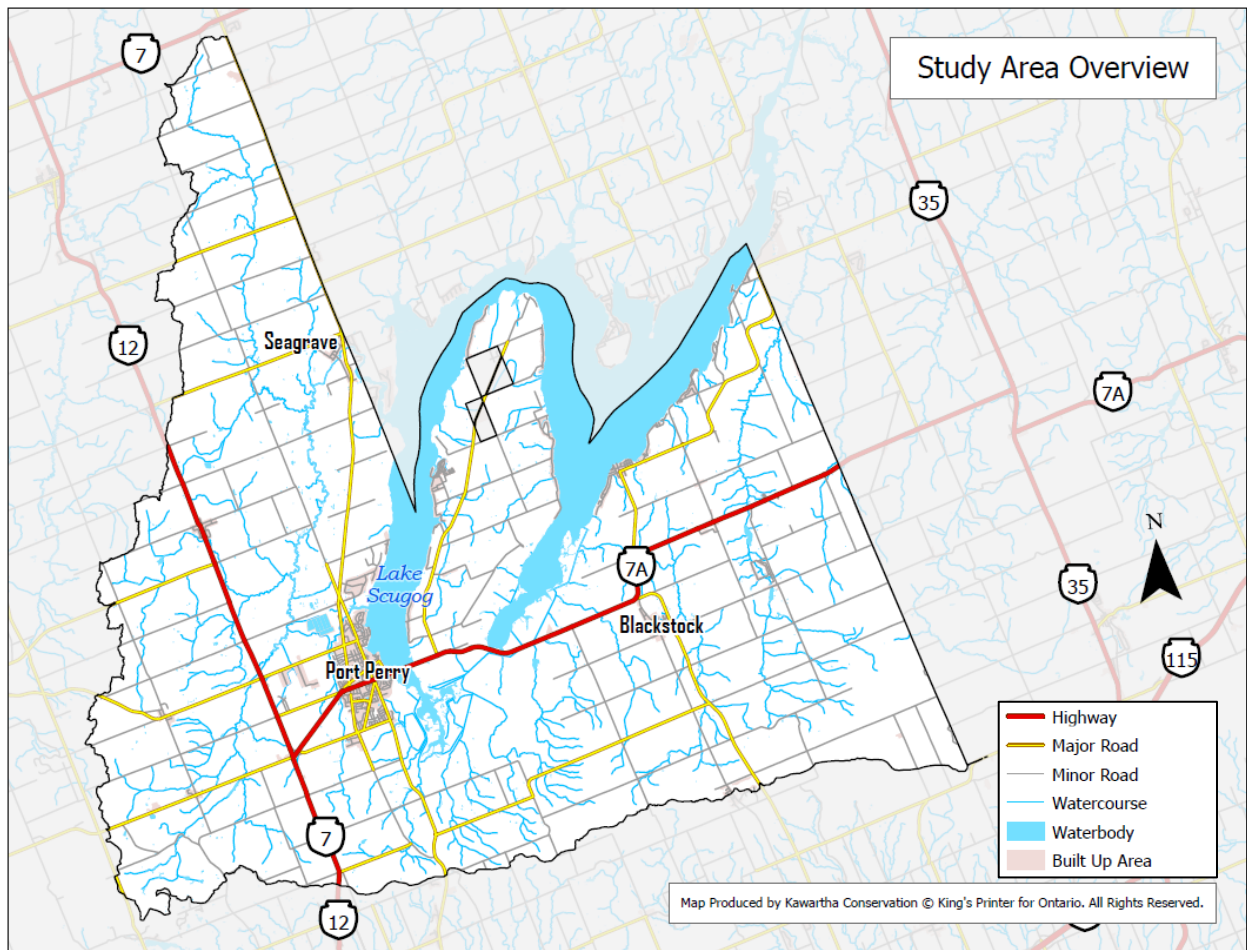


Figure 1.1. Project study area (jurisdictional overlap of Durham Region and Kawartha Conservation).

2.0 Land cover mapping updates.

Background

The purpose of this activity was to update land cover classifications within the shared jurisdictions of Durham Region and Kawartha Conservation using the most recent aerial imagery, which was acquired in late 2024. Prior to this, our most recent land cover dataset was based off 2021 aerial imagery.

Updating land cover information is important for tracking changes in dominant land uses across the landscape, for example the location and surface area coverage of developed areas, natural areas, farmlands, etc. These data provide land use planners with a base-line dataset of existing conditions, as well as flag any large-scale trends in changing conditions, and provide Kawartha Conservation with an approximate location of regulated areas (e.g., wetlands).

Methods

Land cover classifications for the entire overlapping jurisdiction (516 km²) were undertaken according to provincial guidance, using the Ecological Land Classification protocol (Lee et al., 1998). Land use polygons were derived using aerial photograph interpretation obtained from Durham Region. Orthophotography captured in spring (leaf-off) of 2024 was used to delineate polygons (0.5 ha minimum size) of similar land use types, and each polygon was classified based on a 'community-series' code (e.g., coniferous swamp, deciduous swamp, intensive agriculture, non-intensive agriculture, urban development, rural development, etc.).

Key Findings

- There were 27 unique Ecological Land Classification categories (Table 2.1), lumped into 6 major land use types (Figure 2.1). Intensive agriculture (e.g., row crops) is the most widespread land use at 40% of total land area, followed by open water (mostly Lake Scugog) at 14% of total.
- There was no significant widespread change in land use types from 2021 to 2024, as all changes (positive or negative) were 0.2% or below (Table 2.1). The most prominent change was intensive agriculture, which experienced an increase of 128 ha.

Recommendations

- Given the apparent increase in intensive agriculture land use since 2021, planning authorities should prioritize management strategies to reduce impacts of this type of

activity (e.g., tile drainage, land conversion, fertilizer applications, etc.) on water resources and natural heritage features.

Table 2.1. Land cover summaries in 2024, compared to 2021, based on Ecological Land Classification.

ELC Community Series	Major Land Use	2021 Area (Ha)	2024 Area (Ha)	2024 Area (%)	Change (ha)	Change (%)
Intensive Agriculture	Agriculture	20720	20848	40.4	128	0.2
Open Water	Open Water	7241	7218	14.0	-23	-0.1
Coniferous Forest	Forest	2637	2604	5.0	-33	-0.1
Mixed Forest	Forest	2550	2585	5.0	35	0.1
Treed Swamp	Wetland	2293	2313	4.5	20	<0.1
Rural Development	Development	2381	2289	4.4	-92	-0.2
Deciduous Forest	Forest	2241	2186	4.2	-55	-0.1
Coniferous Swamp	Wetland	2093	2098	4.1	6	<0.1
Mixed Swamp	Wetland	1952	1956	3.8	3	<0.1
Non-Intensive Agriculture	Agriculture	1774	1767	3.4	-7	<0.1
Urban Development	Development	1296	1350	2.6	54	0.1
Cultural Meadow	Meadow	823	748	1.4	-74	-0.1
Shallow Marsh	Wetland	617	621	1.2	4	<0.1
Cultural Plantation	Meadow	624	617	1.2	-8	<0.1
Deciduous Swamp	Wetland	564	584	1.1	20	<0.1
Cultural Woodland	Forest	545	554	1.1	9	<0.1
Meadow Marsh	Wetland	491	511	1.0	20	<0.1
Cultural Thicket	Forest	226	263	0.5	38	0.1
Manicured Open Space	Development	152	182	0.4	30	0.1
Active Aggregate	Development	124	134	0.3	11	<0.1
Cultural Savannah	Meadow	106	103	0.2	-3	<0.1
Floating Submerged Aquatic	Wetland	11	26	<0.1	15	<0.1
Submerged Shallow Aquatic	Wetland	7	20	<0.1	13	<0.1
Mixed Shallow Aquatic	Wetland	23	17	<0.1	-6	<0.1
Disturbance	Development	17	17	<0.1	0	<0.1
Inactive Aggregate	Development	14	14	<0.1	0	<0.1
Open Sand Barren	Meadow	1	5	<0.1	5	<0.1

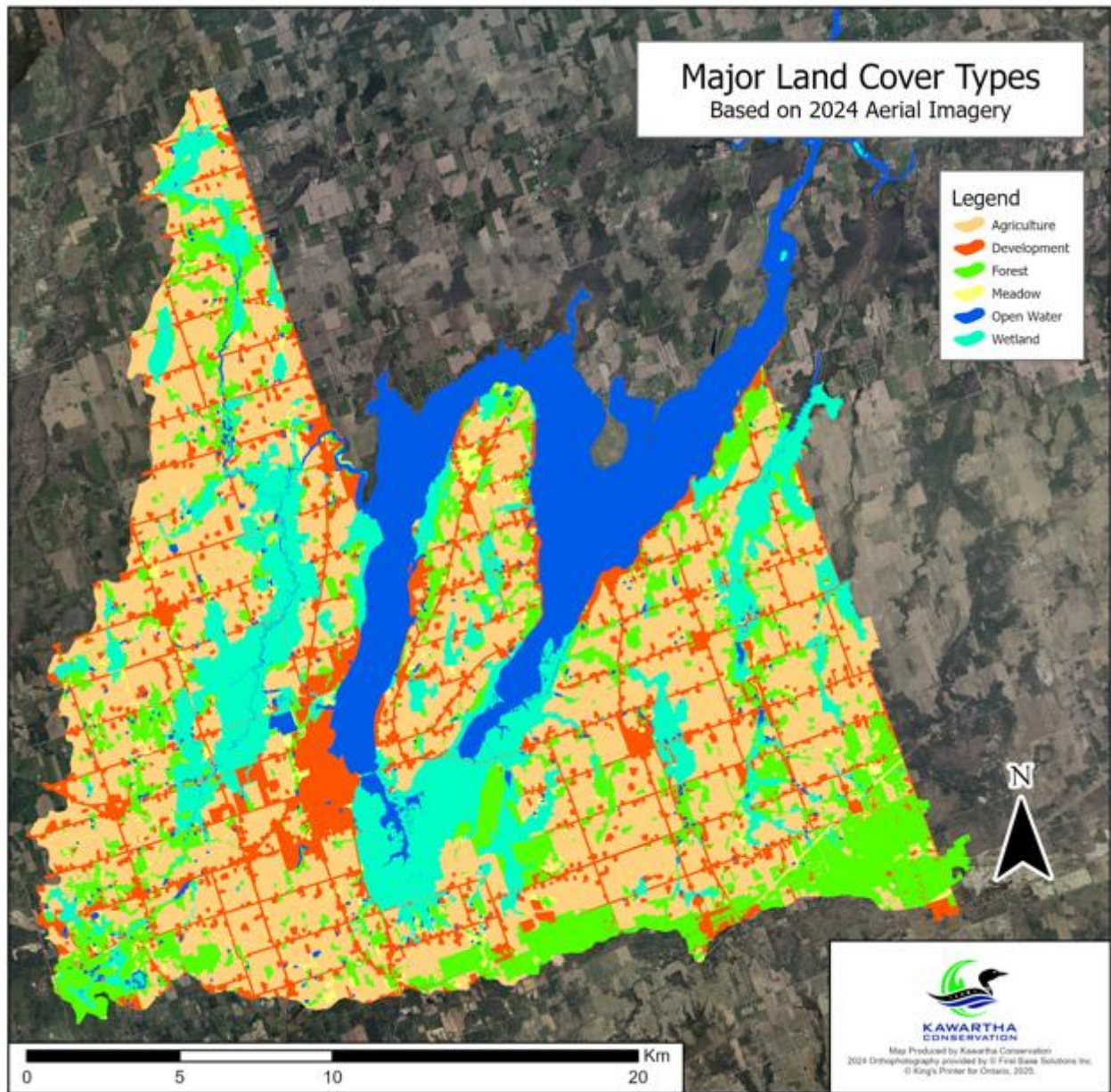


Figure 2.1. Major land use types based on Ecological Land Classification.

3.0 Wetland cover mapping updates.

Background

The purpose of this activity was to update Kawartha Conservation's Public Property Mapping Tool (Kawartha Conservation, 2025), often referred to as 'regulation mapping', by verifying the existence of isolated 'unevaluated' provincially mapped wetlands within the jurisdictional overlap.

The unevaluated wetlands dataset was derived by the province and is largely based on the Southern Ontario Land Resources Information System (SOLRIS), which is a compilation of data from numerous sources including provincial base data (woodland/wetland perimeters, hydrology, built up areas, Ontario road network), satellite imagery and digital elevation models (MNRF, 2015).

The unevaluated wetlands dataset is part of larger provincial wetland mapping layer (Province of Ontario, 2025) which provides a reasonable approximation of the location of wetlands. But as its name implies, the unevaluated wetlands have not been assessed through the Ontario Wetland Evaluation System – a process through which boundaries and features are confirmed through on-the-ground and desktop-level surveys. Therefore, the dataset can be treated as having a 'low level of confidence' until such time their presence/absence can be confirmed.

There are approximately 59 km² of unevaluated wetlands (Kawartha Conservation, 2023). Given the relatively large coverage, the focus of 2025 efforts were to confirm the presence/absence of wetlands within this dataset that are considered 'isolated' (defined as unevaluated wetlands that have not been validated by any other datasets such as through Ecological Land Classification methodology).

Methods

The base map of unevaluated isolated wetlands used for verification purposes was generated by querying unevaluated wetlands from the provincial wetland mapping layer (Province of Ontario, 2025) and removing those that overlapped Kawartha Conservation's internal Ecological Land Classification Community Series mapping of wetlands, generated from 2023 aerial imagery as described in Chapter 2.0.

Verification was undertaken through a desktop approach – there was no field verification component. The most recent aerial imagery (2024) was used to visually examine each isolated wetland polygon, and best professional judgement was made by a subject matter expert to confirm if the wetland actually exists. In situations where determination was difficult (for example thick tree canopy cover, or ponds with unknown depths) the polygon was categorized

as ‘unconfirmed’. In situations where a wetland was absent, the ‘historical imagery time-slider’ tool in Google Earth® was used to determine if a wetland did in fact exist at some point previously (e.g., Figure 3.1).

Key Findings

- Approximately 11.5 km² of isolated unevaluated wetlands were verified, which included 227 individual polygon groupings (Figure 3.2).
- 93 individual polygons were confirmed as wetlands (present), and 27 confirmed as not wetlands (absent), with the remaining polygons being unclassified.
- The 27 confirmed absent wetlands total 16.8 ha. Historical imagery from these areas indicates that natural areas (potential wetlands) did in fact exist in these locations within the last 5 to 20 years, but have since been converted to intensive agriculture, in most cases (24 of 27).

Recommendations

- Consider from a regulatory approval perspective the removal of 27 unevaluated wetlands confirmed as ‘absent’ from Kawartha Conservation’s Public Property Mapping Tool.
- Consider more detailed means to verify the status of the remaining unclassified unevaluated wetlands, such as more in-depth desktop analyses or through field site visits.



Figure 3.1. Example of two ‘wetlands now absent’ polygons due to land conversion from natural lands to farmlands. White outline is provincial unevaluated wetlands mapping layer.

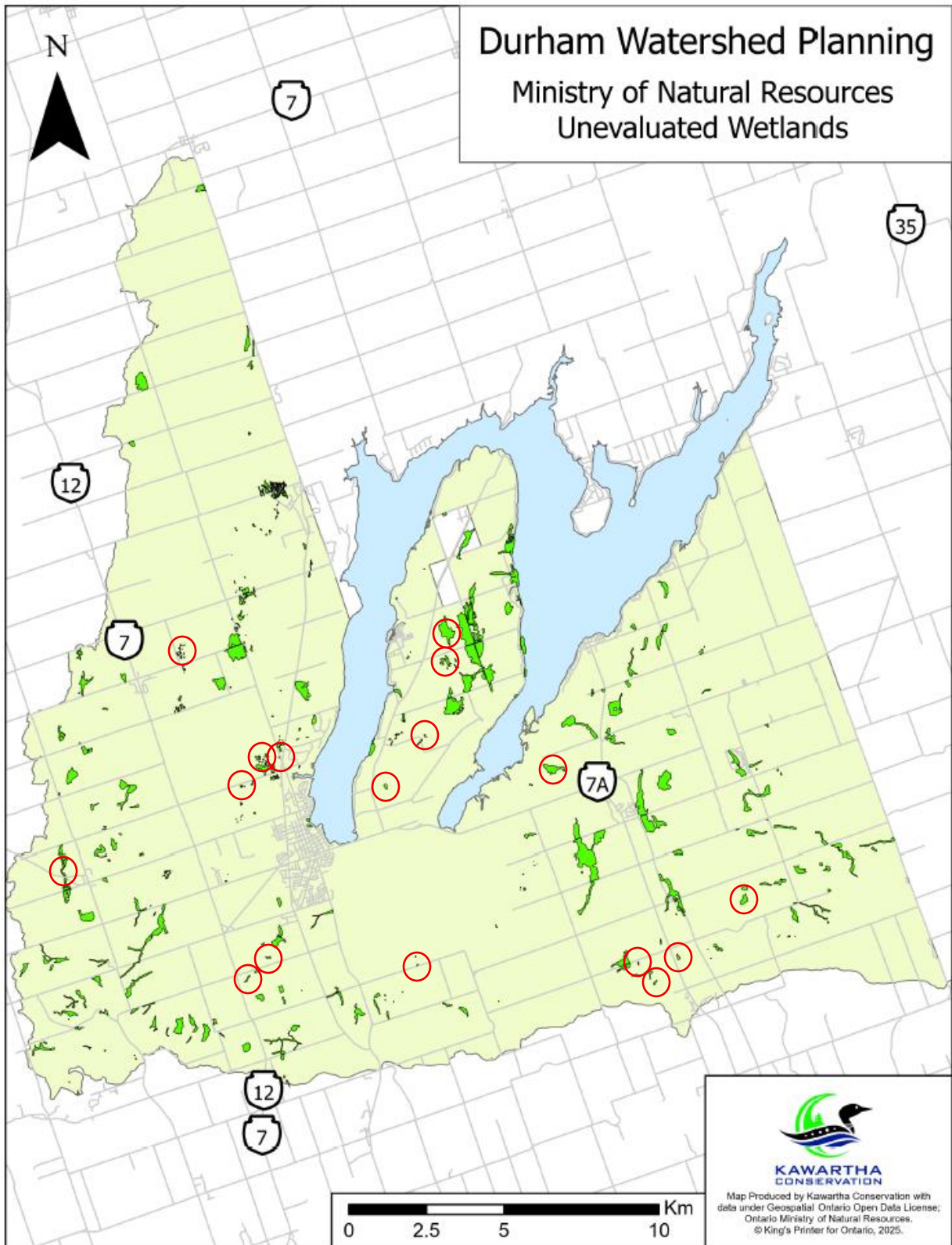


Figure 3.2. Map of isolated unevaluated wetlands (i.e., wetlands that have not been validated by any other data source). Red circles show areas of wetland removals from this project.

4.0 Aquatic plants in Lake Scugog.

Background

The purpose of this activity was to better understand aquatic plants in Lake Scugog, map lake-wide aquatic plant distributions, and integrate aquatic plants into lake health monitoring. Aquatic plant management is a key driver of the Lake Scugog Environmental Management Plan (Kawartha Conservation, 2010), which provides planning guidance for Lake Scugog with an emphasis on addressing nutrient enrichment of the lake.

In Lake Scugog aquatic plants play an integral role in supporting aquatic life. They provide important habitat (e.g., food, reproductive and cover habitat) for fish, invertebrates and wildlife. They also produce oxygen, consume nutrients and absorb contaminants, stabilize the lake bottom and reduce shoreline erosion, among other benefits.

Prior to this project, no comprehensive studies on aquatic plants have been undertaken on Lake Scugog. This project fills these gaps and provides an insight into current conditions and implications for lake management.

Methods

From August 19 – 29, 2025, Kawartha Conservation undertook a submersed aquatic plant assessment of Lake Scugog by boat at 413 locations using the point-intercept method as per Madsen (1999). Sample sites were the approximate centre of a systematic grid of 400 m² squares over the entire lake. Aquatic plants were sampled by tossing a double-sided hard rake onto the lakebed and pulling the vegetation to the surface.

A qualitative assessment of rake fullness (none; sparse, less than 25% of rake; moderate, between 25 and 75%; and, dense, >75%) as per Hauxwell et al. (2010) by plant taxa was undertaken at each site. Water depth and presence of invasive *dreissenid* mussels (e.g. zebra mussel) were also documented. In areas where traversing by boat was not possible, for example within dense stands of emergent plants, site conditions were approximated using binoculars. Voucher specimens were taken back to the laboratory for more detailed identification when necessary. Further, several plant taxa were lumped because they could not be reliably separated in terms of taxonomy.

Data summaries important for lake management purposes include: frequency of occurrence (e.g., % of total sample sites) by each taxa, tolerance to environmental degradation, depth of plant colonization, and invasive species. Lake health improvements are indicated by increases over time in sensitive taxa (e.g., wild rice, water marigold, water stargrass, and water lily),

decreases in invasive taxa (e.g., starry stonewort, Eurasian watermilfoil), and increases in the depth of plant colonization (e.g., through increase in water clarity).

All aquatic plant data can be found in the Appendix.

Key Findings

- Aquatic plants occupied 83% of Lake Scugog (Figure 4.1), with plant fullness of 13% abundant, 50% moderate, and 20% sparse.
- Twenty-five aquatic plant taxa were found in the lake, with the following plants being most common (i.e., occupying more than 10%): starry stonewort, Eurasian watermilfoil, mix of starry stonewort and muskgrass, bladderwort, sago pondweed, watermilfoil (other than Eurasian), and tapegrass (Figure 4.2).
- The aquatic plant community is dominated by taxa that are tolerant of degraded lake conditions (Figure 4.3), which indicates that the general state of the lake can be considered degraded. Sensitive aquatic plant taxa are present but are relatively rare.
- The maximum depth of plant colonization is 2.9m, there were no plants found deeper than this depth (Figure 4.4).
- Invasive aquatic plants occupied 70% of the lake (Figure 4.5) and occupied 87% of sites that have plants. Invasive species found in the lake were dominated by starry stonewort, and Eurasian watermilfoil, and curly leaved pondweed was present but rare.

Recommendations

- Continue to assess aquatic plant conditions on a routine basis to track lake health, through tracking improvements in sensitive versus tolerant taxa, invasive versus native taxa, and depth of plant colonization.

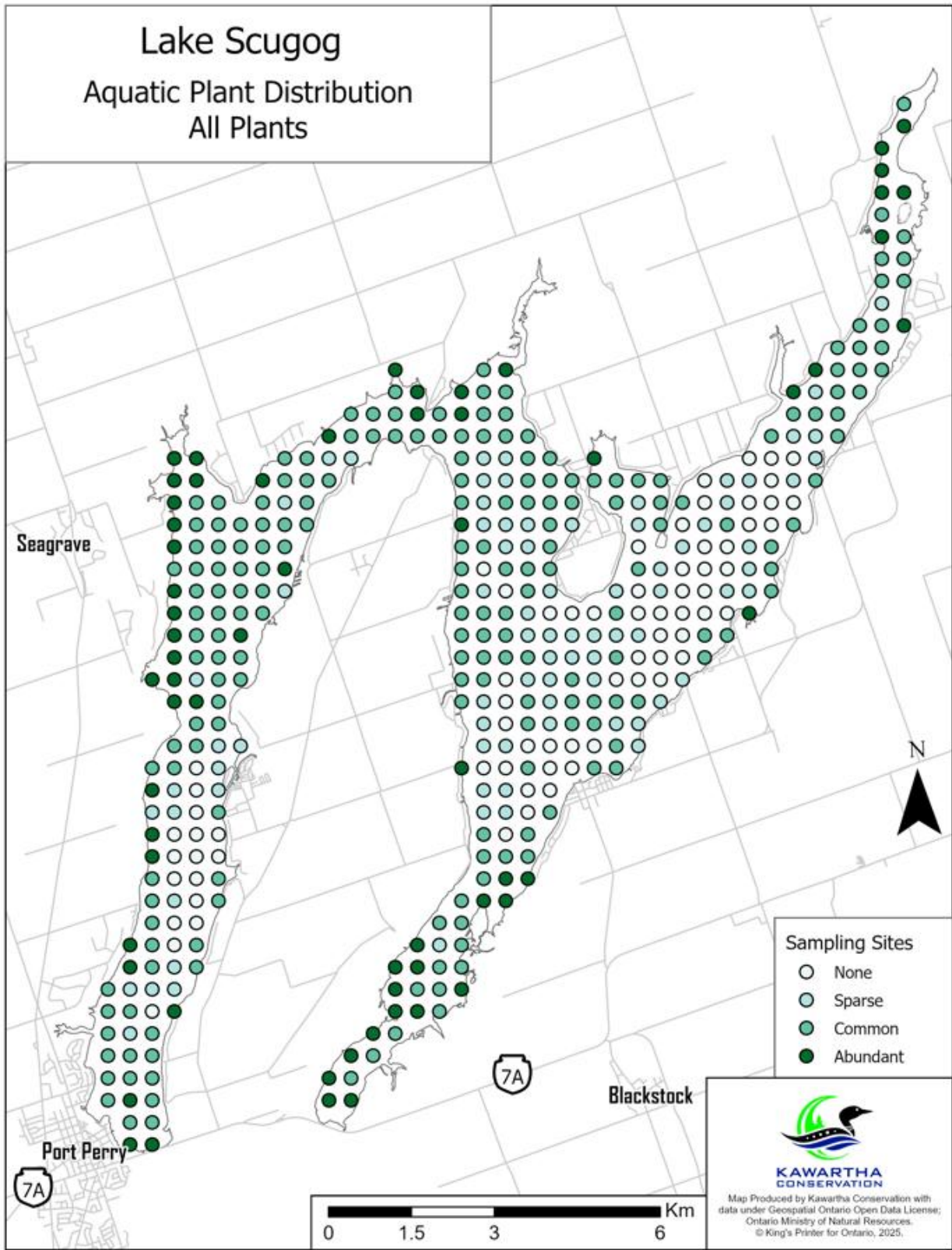


Figure 4.1. Aquatic plant distribution in Lake Scugog.

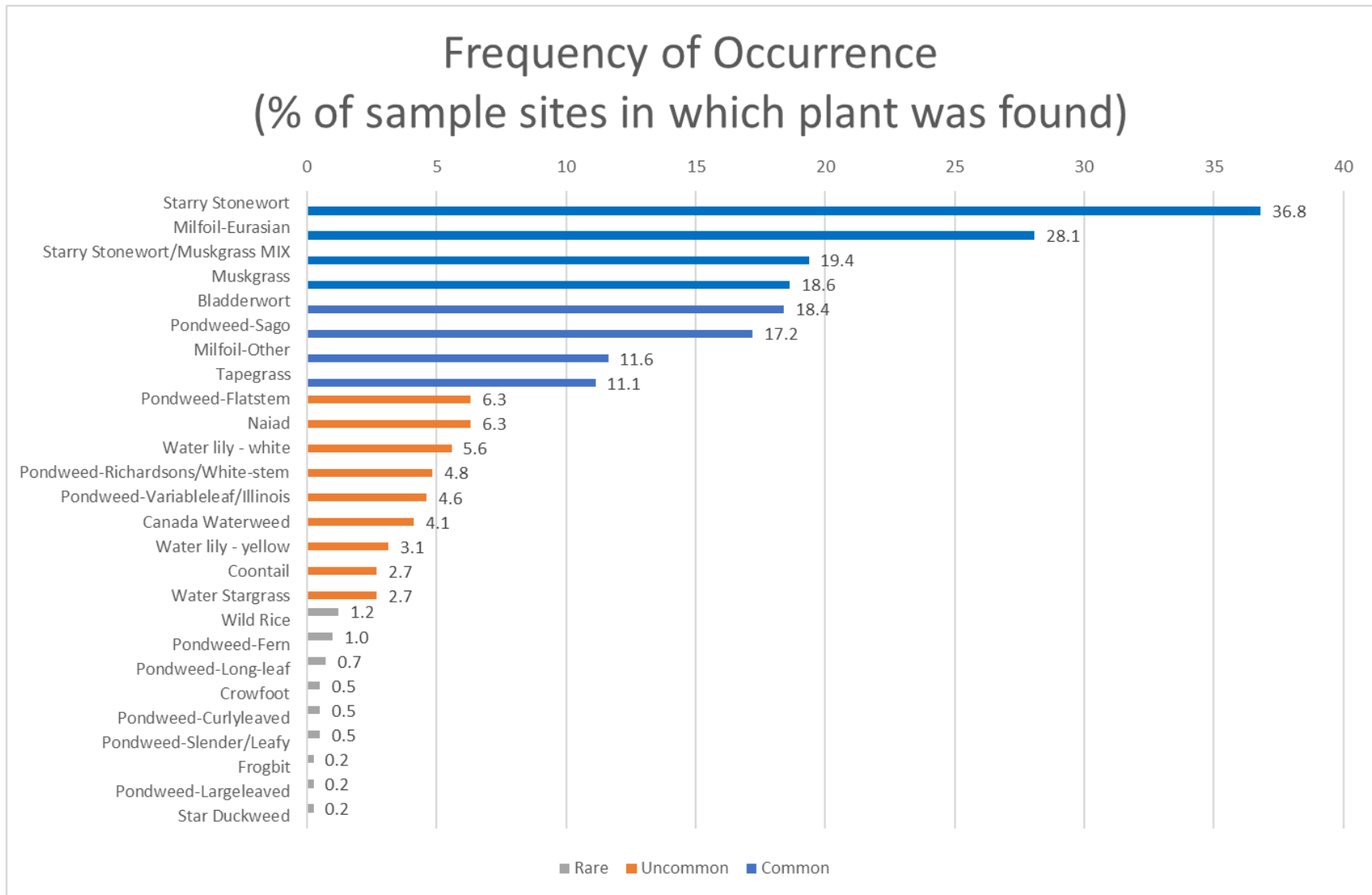


Figure 4.2. Frequency of aquatic plants found, coloured by common to rare.

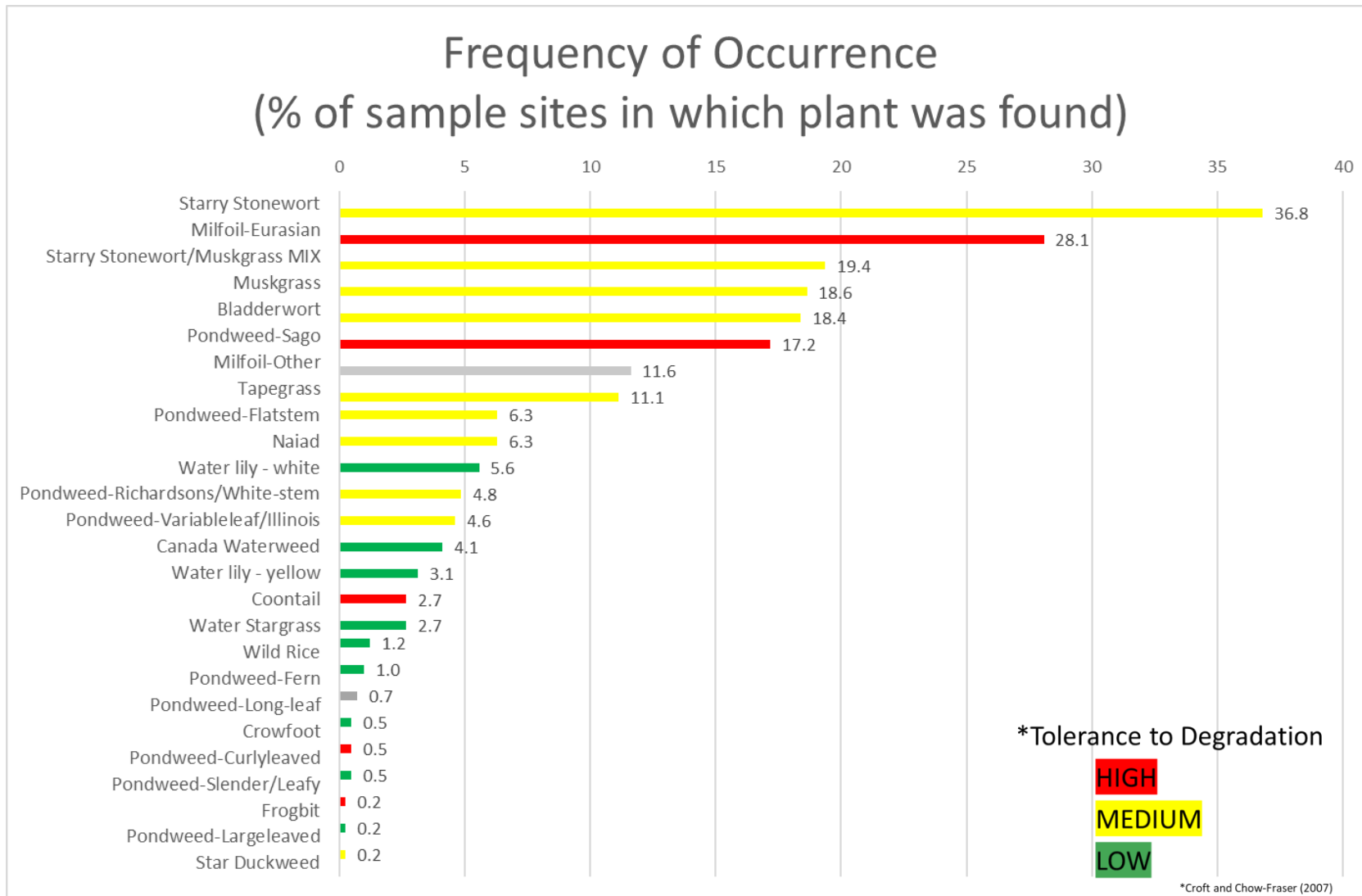


Figure 4.3. Frequency of aquatic plants found, coloured by degradation tolerance.

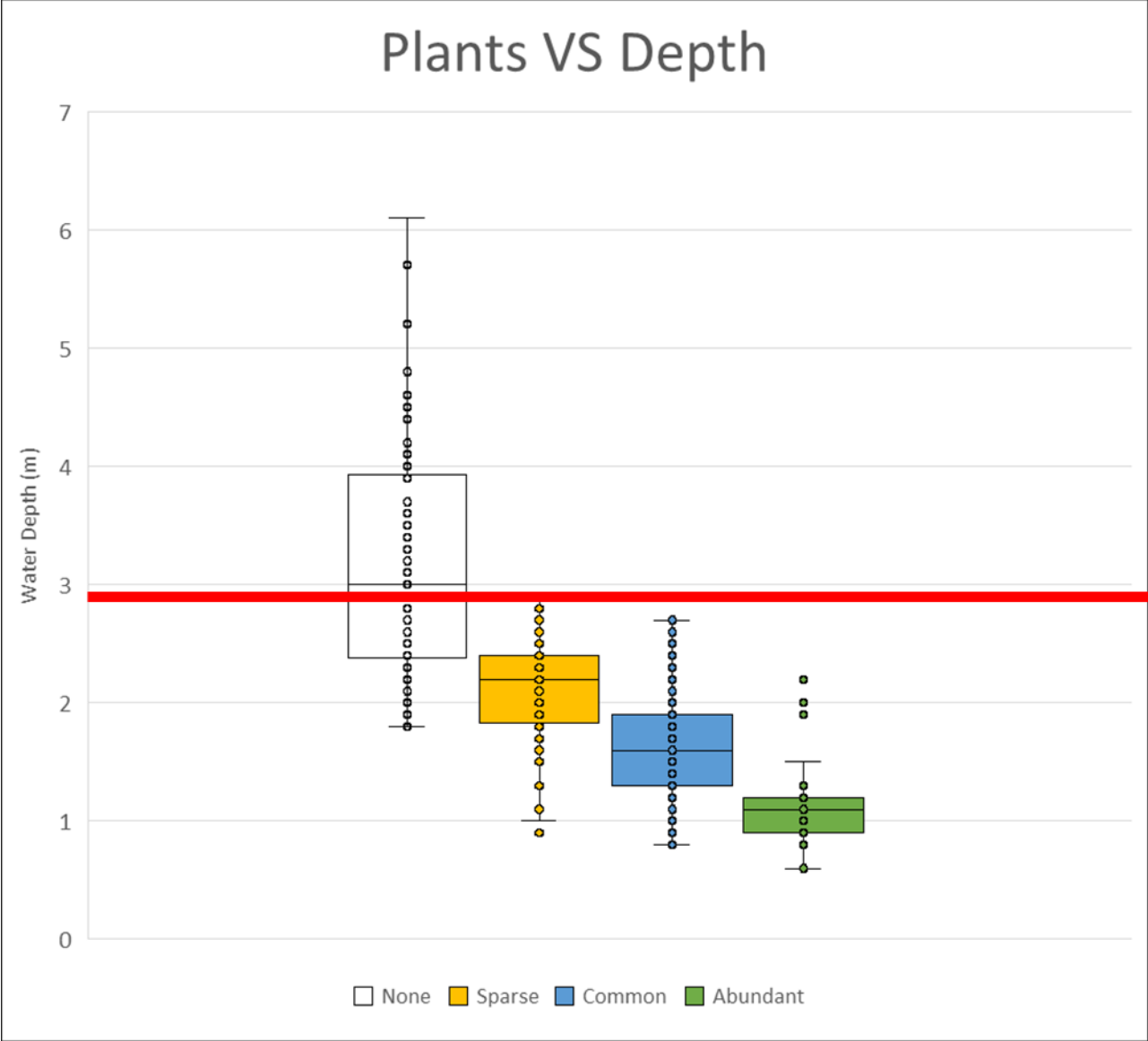


Figure 4.4. Boxplot of depth of plant colonization by rake cover category. Red line is the maximum depth of plant colonization.

**Boxplot presents data according to individual values (dots), maximum (top of line), minimum (bottom of line), 75% percentile (75% of values at or below the top box line), median (50% of values at or below the middle box line), and 25% percentile (25% of values at or below bottom box line).*

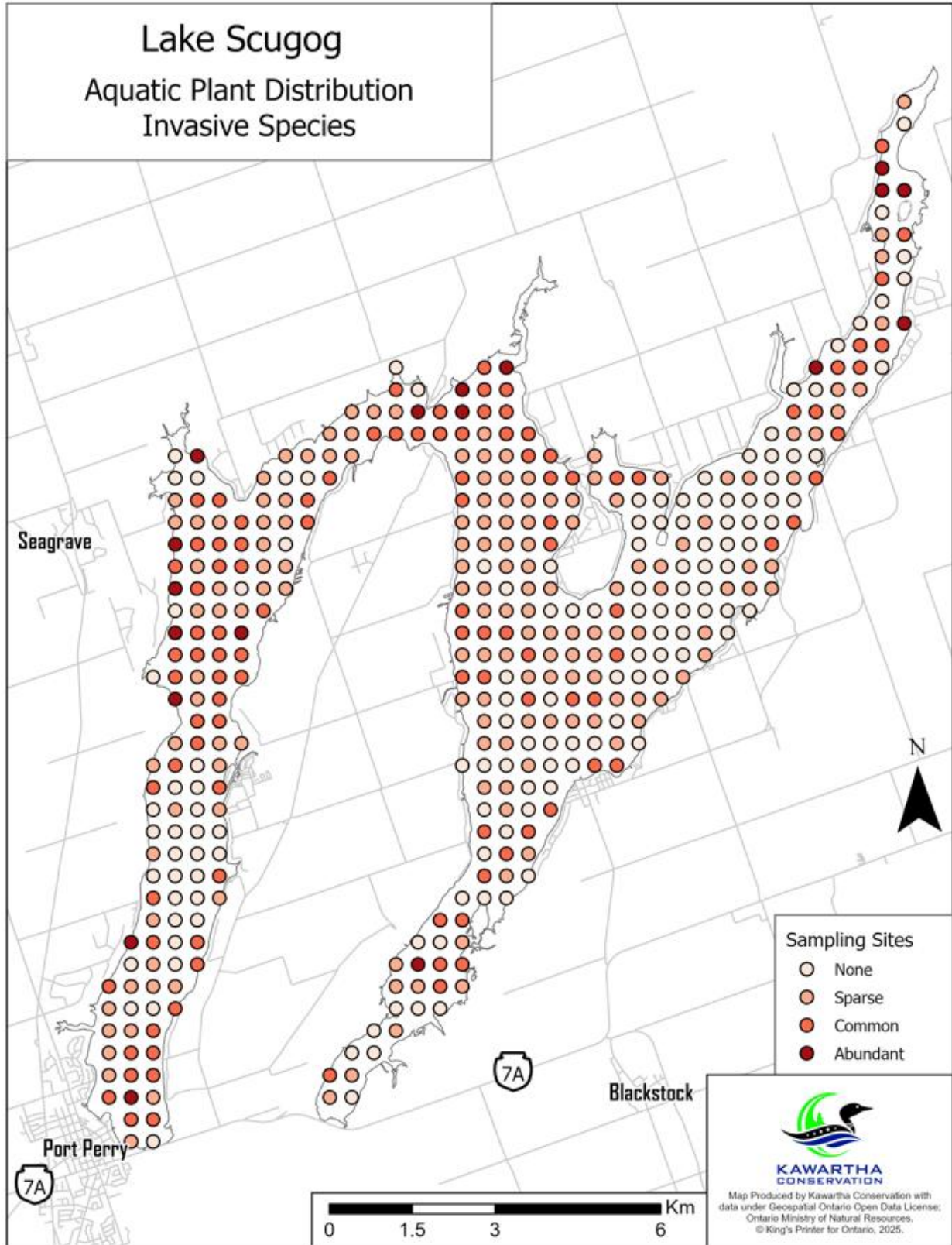


Figure 4.5. Invasive aquatic plant distribution in Lake Scugog.

5.0 Shoreline inventory of Lake Scugog

Background

The purpose of this activity was to assess the condition of the shoreline of Lake Scugog using key indicators of lake health. Shoreline development is a key planning concern because of the implications that certain land use activities, and land use change, can have on the health of Lake Scugog.

Currently there is no industry standard approach in Ontario to evaluate the status and impacts of shoreline land use on large inland lakes, such as Lake Scugog. To address this gap, Kawartha Conservation partnered with the federal government (Parks Canada - project lead), and other project partners in 2025 to test and refine the Foreshore Integrated Management Planning protocol (FIMP) (Schlepp et al., 2020) for use on Lake Scugog. The FIMP has been widely adopted as an industry standard approach for helping manage inland lakes in western Canada.

The FIMP process is intended to help planning authorities understand lake shoreline values and the prospective risks from proposed shore-altering activities. It follows three general steps: (1) undertaking shoreline attribute inventories, (2) rank the sensitivity of shoreline segments, (3) identify risks posed by different shore-altering activities to inform land use decisions.

Methods

A pre-field assessment involved delineating the shoreline around Lake Scugog into unique segments, using aerial photography. Segment breaks occurred where there was an obvious change in contiguous uniform shoreline character, for example land cover, land use and/or habitat conditions. These segments were considered preliminary and were adjusted as necessary based on field assessments.

Video documentation of the lake was undertaken via a remotely piloted aircraft system (RPAS - drone), over four days between September 12 – 23, 2025. The RPAS survey collected video of the entire Lake Scugog foreshore, excluding some inland canals. The RPAS survey was conducted using a DJI Mini 3 Pro[®] operated autonomously using DroneLink[®] software, with staff following it on a boat. RPAS flight settings included: 70m offshore approximate distance from shore-water interface, 20m height above water level, -20 degree camera gimbal angle, and a flight speed of approximately 15km/hr. Video processing involved adding telemetry details (e.g., altitude, GPS coordinates, speed, etc.) stamped to the video files by first extracting the flight log data using AirData[®] software/webservice and then importing the processed flight logs into Telemetry Overlay[®] software. Raw video capture was 4K and final video resolution, post processing, was approximately 1080p.

Field assessments by boat with a crew of 3 to 4 people were conducted to collect the biophysical and habitat attribute data. QGIS® and QFields® applications were used to georeferenced certain attributes (e.g., important habitat/wildlife observations, wetland vegetation, etc.) on a mobile Android tablet as a point, line, or polygon. Table 5.1 provides a list of key data collected for each segment.

The foreshore area within scope of the project included: the littoral zone (the area from the shoreline typical 5-year average low water level, extending out in the lake 30m), foreshore zone (the area between 5-year average low water level and 5-year average high water level), and from the start of the littoral area extending inland 50m), and riparian zone (from the upper limit of the foreshore zone, extending 50m inland).

Table 5.1. List of key attributes collected for each shoreline segment.

Shore type	Substrate	Erosion severity
Slope	Large woody debris	Veteran trees
Land use	Overhanging vegetation	Snags
Riparian vegetation	Aquatic vegetation	Wildlife dens/lodges/trails/nests
Stream mouths and wetlands	Human modifications	Invasive species

Key Findings

- The entire shoreline of Lake Scugog was assessed through the Foreshore Integrated Management Plan methodology, which totaled 134 unique segment classifications, spanning 136,471m in length (MacDonald and Cyr, 2026).
- In terms of shoreline development, approximately 49.8% of Lake Scugog’s shoreline remains natural (e.g., treed, wetlands, etc.), while 50.2% is disturbed (e.g., buildings, hardened, lot grading, etc.).
- Single-family residential development is the largest source of disturbance, comprising 43% of the shoreline, with over 94% of these segments altered.
- Key aquatic habitat features include aquatic vegetation along 80% of the shoreline, 260 large woody debris pieces or clusters (1.9 per km), and overhanging vegetation along 4.8% of the shoreline. Invasive aquatic plants were prevalent (notably starry stonewort) and recorded along 58% of the shoreline.

- A total of 3,322 modifications were documented, including 1527 docks (11.2 per km), 81 aquatic thrusters (0.6 per km). Retaining walls occupied 4.8%.
- Nearly 48.2% (65,732 m) of shoreline segments were classified as High Impact (>50% disturbed), primarily in residential areas. Low- and no-impact segments occur mainly within the large expanses of wetlands.

Recommendations

- Disseminate key findings from the Lake Scugog shoreline inventory project through an easily accessible online information dashboard.
- Repeat the shoreline assessment protocol on Lake Scugog on a five-year basis, to track changes in shoreline conditions.
- Given the extent of shoreline alterations around Lake Scugog, planning authorities should prioritize management strategies to reduce impacts of shoreline disturbance (e.g., vegetation removal, frontage hardening, etc.) on water resources and natural heritage features.

6.0 Summary and Recommendations

In 2025, Kawartha Conservation undertook various activities to update existing watershed-based information, to help planning authorities better make land use management decisions, within the overlapping jurisdictions of Kawartha Conservation and Durham Region.

Activities focused on: land cover mapping updates, wetland cover mapping updates, aquatic plants in Lake Scugog, and shoreline inventory of Lake Scugog.

After completion of the activities, the following recommendations will help to further improve the useability and applicability of this information:

Land cover mapping updates:

- Given the apparent increase in intensive agriculture land use since 2021, planning authorities should prioritize management strategies to reduce impacts of this type of activity (e.g., tile drainage, land conversion, fertilizer applications, etc.) on water resources and natural heritage features.

Wetland cover mapping updates:

- Consider from a regulatory approval perspective the removal of 27 unevaluated wetlands confirmed as 'absent' from Kawartha Conservation's Public Property Mapping Tool.
- Consider more detailed means to verify the status of the remaining unclassified unevaluated wetlands, such as more in-depth desktop analyses or through field site visits.

Aquatic plants in Lake Scugog:

- Continue to assess aquatic plant conditions on a routine basis to track lake health, through tracking improvements in: sensitive versus tolerant taxa, invasive versus native taxa, and depth of plant colonization.

Shoreline inventory of Lake Scugog

- Disseminate key findings from the Lake Scugog shoreline inventory project through an easily accessible online information dashboard.
- Repeat the shoreline assessment protocol on Lake Scugog on a five-year basis, to track changes in shoreline conditions.

- Given the extent of shoreline alterations around Lake Scugog, planning authorities should prioritize management strategies to reduce impacts of shoreline disturbance (e.g., vegetation removal, frontage hardening, etc.) on water resources and natural heritage features.

7.0 References

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