Depot Creek Wetland Assessment

1061 South Shore Road

Municipality of East Ferris

Geographic Township of Ferris

June 2026

26-008

FRICORP
ECOLOGICAL SERVICES

Introduction

FRi Ecological Services (FRi) was retained to complete a wetland boundary delineation and assessment in support of a planning application to create lots with frontage on Lake Nosbonsing. The subject property is located at 1061 South Shore Road in the Municipality of East Ferris, Geographic Township of Ferris. The subject property is approximately 26 acres. A preliminary review by the Municipality planning staff noted the presence of a locally significant wetland, the Depot Creek Wetland, along the east boundary of the subject property. The Municipality is requiring a wetland boundary delineation and assessment to determine the location of the wetland as it relates to the subject property and appropriate recommendations to mitigate impacts on the wetland by the proposed development.

This report addresses the wetland boundary as it relates to the subject property to help inform suitable development areas outside of the wetland ecosites and associated setbacks.

Figure 1: Overview of the study area located at 1061 South Shore Road in East Ferris.

Background Information

FRi conducted a desktop review of available background information and databases to supplement the in-person field investigation. The following resources were consulted:

- Make-a-Map, MNRF (Ministry of Natural Resources and Forestry) Natural Heritage Values[1];
- Land Information Ontario Geodatabases;
- Ontario Watershed Information Tool (OWIT)[2];
- Provincial Planning Statement (2024)[3];
- Municipality of East Ferris Official Plan[4];
- Municipality of East Ferris Zoning By-Law[5].

Information from the above-mentioned sources was consolidated and used to assist in informing the in-person field investigation and subsequent reporting.

Approach

FRi conducted a single field investigation on June 8th, 2026, to determine the current conditions of the subject property. The purpose of the field investigation was to assess the vegetation communities present and distinguish the Depot Creek Wetland boundary from adjacent upland terrestrial areas. Ecological land classification was used to help differentiate wetland ecosites from terrestrial areas. FRi field biologists are certified wetland evaluators under the Ontario Wetland Evaluation System (OWES).

Zoning By-Law Mapping

The Municipality of East Ferris Interactive Mapping Tool, specifically the natural heritage features layer, outlines a Lake Nosbonsing Wetland overlapping the east boundary of the subject property. Further review of Land Information Ontario's (LIO) wetland layers outlines the extent of Depot Creek and the associated wetland. This report provides updated mapping and georeferenced photos to support the current extent of the west boundary of the depot creek wetland and its overlap on the subject property.

[1] https://geohub.lio.gov.on.ca/documents/species-occurrence-locally-derived/explore
[2] https://www.lioapplications.lrc.gov.on.ca/OWIT/index.html?viewer=OWIT.OWIT&locale=en-CA#:%7E:text=Ontario%20Map%20Viewer.%20This%20application
[3] https://www.ontario.ca/page/provincial-planning-statement-2024
[4] https://eastferris.ca/uploads/documents/Ministers_Approved_Version_East_Ferris_OP.pdf
[5] https://eastferris.ca/uploads/documents/PAC%20Agenda%20and%20Minutes/ZBA/By-law%202021-60%20-%20Comprehensive%20Zoning%20By-law%20Final.pdf

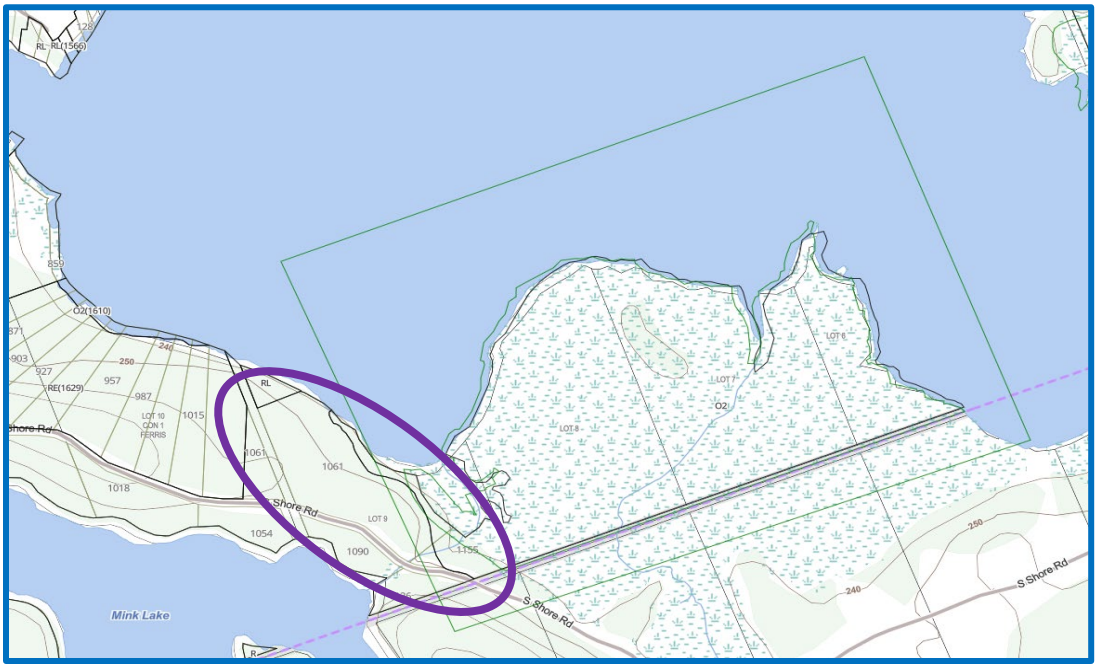

Figure 2: Overview of the Lake Nosbonsing Wetland Area (outlined in green) in relation to the subject property (outlined in purple).

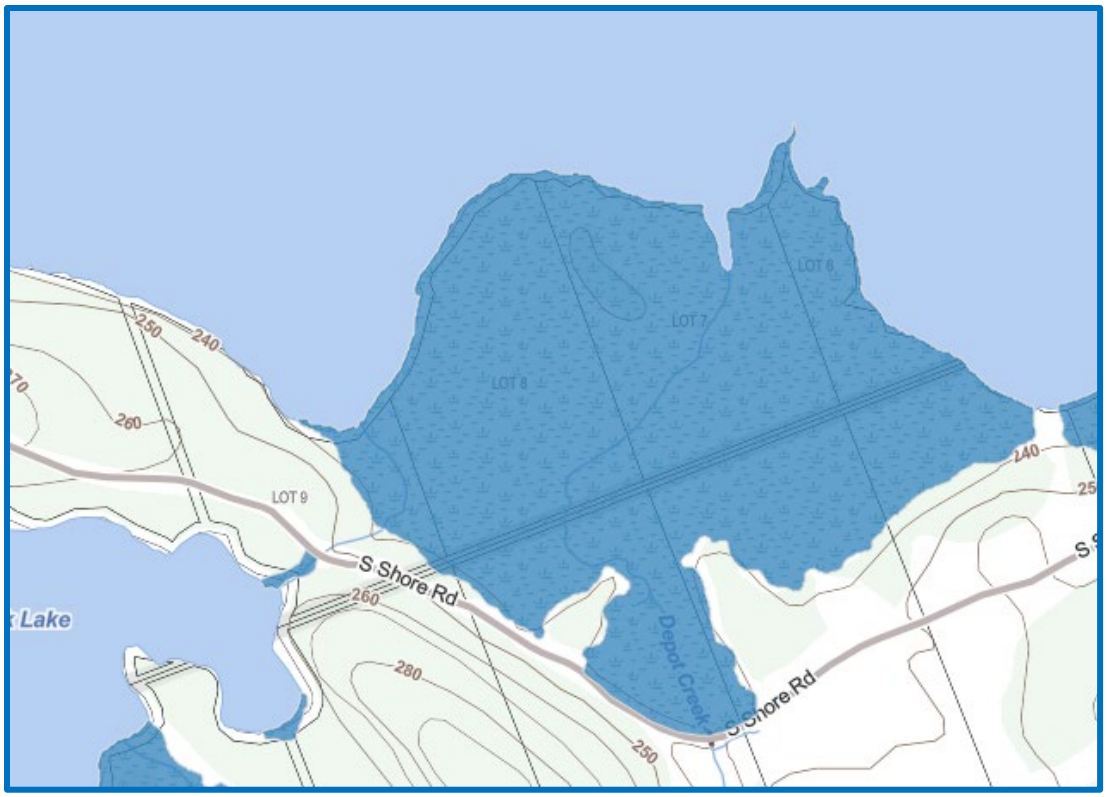

Figure 3: Overview of the Depot Creek Wetland extent as outlined by Land Information Ontario's mapping and geodatabases.

Ecological Setting

The subject property is located within the Ontario Shield Zone, Ecoregion 5E (Georgian Bay Ecoregion). This ecoregion is typically dominated by mixedwood forests with some areas of deciduous forests, coniferous forests, and sparse forests. There are a wide range of temperatures, precipitation, and diverse surficial geology and substrates, as well as complex drainage patterns.[6]

The subject property is more specifically within the North Bay Ecodistrict (5E-5). The climate in this region is cool, temperate, and humid; with mean annual temperatures ranging from 2.8 to 6.2˚C and a growing season between 183 and 219 days. Mean precipitation ranges between 771 and 1134 mm annually.

The North Bay Ecodistrict is situated on the southern edge of the Precambrian Shield and is comprised of gneissic and granite bedrock. Exposed bedrock is common, and is bedrock covered by limited unconsolidated matter; reflecting the bedrock-controlled geology of this region. There are localized pockets of clay and silt throughout the ecodistrict; wetlands are present in lower areas adjacent to the upland bedrock knobs. The forest composition in this region is dominated by mixedwood forests with pure deciduous and coniferous stands.

Ecological Land Classification

Ecological land classification or 'ecosites' are determined by assessing the soil and vegetation characteristics of a site. An ecosite is a contiguous area that shares soil, moisture, and vegetation characteristics, and is at least 0.5 hectares in size. Areas smaller than 0.5 hectares are typically not considered as standalone ecosites. However, where small unique areas are present on the landscape, they are assessed and delineated as ecoelements.

The ecosite assessment of the subject property followed the provincial standard supported by the Ecosites of Ontario Field Manual. A hand-held soil auger was used to assess the soil texture, depth, and moisture regime as well as assess the presence of gleys and/or mottles. The Field Guide to the Substrates of Ontario (OMNRF, 2015) was used to classify soils as organic or mineral, and the effective texture was assigned based on the standards outlined in the field guide, e.g. course mineral. The depth was assessed based on the depth to bedrock, e.g. 15 cm; if the entire 120 cm auger length was exceeded, the soil depth was recorded as '>120 cm.'

Note that ecosites were classified as shallow – a condition where soil depths average less than 15 cm over bedrock, to deep – where soils were more than 15 cm deep over bedrock. The moisture regime was similarly assessed following the criteria outlined in the Ecosites of Ontario guidance document.

[6] Crins, William J., Paul A. Gray, Peter W. C. Uhlig, and Monique C. Wester. 2009. The Ecosystems of Ontario, Part 1: Ecozones and Ecoregions. Ontario Ministry of Natural Resources, Peterborough Ontario. Inventory, Monitoring and Assessment, SIV TER IMA TR-01, 71pp.

Soil moisture ranged from dry to fresh to wet. Ecosites with standing water or very wet/saturated soils were considered as potential wetland ecosites. Wetland ecosites were assessed using 'Key 10: Permanently Flooded or Hydric Ecosites'; where there was a good 'fit' the wetland ecosite was determined.

The soil texture and depth as well as the associated moisture regime have the most significant influence on the ecosite designation. Vegetation communities such as trees, shrubs, and herbaceous vegetation present can also aid in determining the ecosite present. When there is uncertainty, FRi relies on the longest-lived on-site vegetation (e.g. trees) to support a conclusion.

Following the Ontario Wetland Evaluation System Northern Manual, certain vegetation species and communities can be used as wetland indicators which can aid in determining wetland boundaries from upland terrestrial areas. In addition, the Wetland Evaluation System uses soils to determine the potential for historic wetlands, fluctuating water levels using gleying or mottles, and substrate types to determine water retention properties.

To avoid trespassing, FRi assessed the ecosites in the adjacent lands or other private property by visually observing them from the subject property boundary lines. Visual observations were later confirmed using online publicly available resources and various sources of imagery.

There are five (5) ecosites represented on the subject property. Two (2) of these ecosites are considered wetland ecosites while the other three (3) ecosites represent upland terrestrial area. Lake Nosbonsing was also mapped to show where open water is present without wetland or aquatic vegetation along the shoreline of the subject property. The ecosites represented on the subject property include:

- G016Tt – Very Shallow, Dry to Fresh: Aspen – Birch Hardwood
- G055Tt – Dry to Fresh, Coarse: Aspen – Birch Hardwood
- G076Tt – Moist, Coarse: Mixedwood
- G134S – Mineral Thicket Swamp
- G151N – Open Water Marsh: Mineral

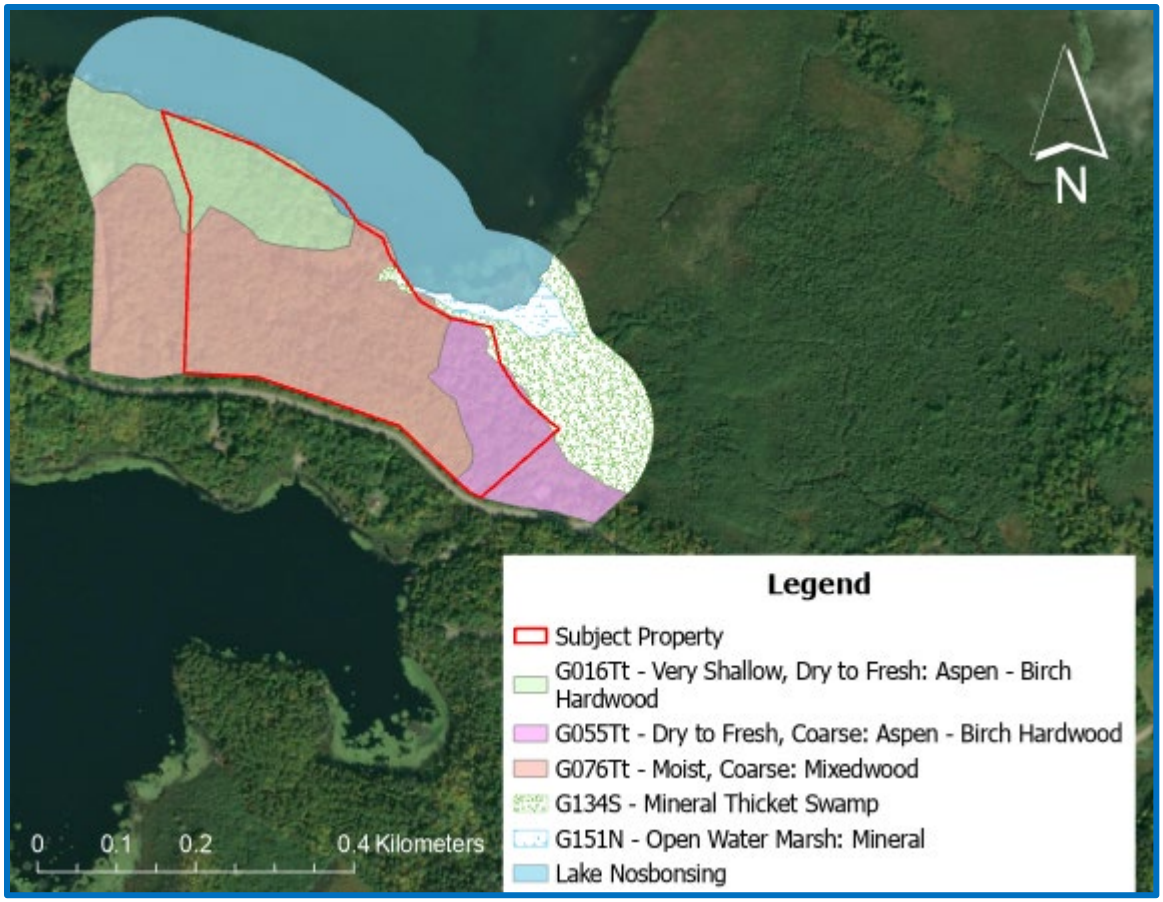

Figure 4: Overview of the ecosites represented within the subject study area and adjacent lands.

G016Tt – Very Shallow, Dry to Fresh: Aspen – Birch Hardwood

This ecosite is located near the northwest corner of the subject property. The mineral soils are generally shallower than 15 cm and overlay bedrock or large stones near the surface. The soils are coarse, sandy loam, and fresh.

The dominant canopy cover in this ecosite includes white birch (*Betula papyrifera*), white spruce (*Picea glauca*), and some balsam fir (*Abies balsamea*). Some Eastern Hemlock (*Tsuga canadensis*) and Eastern white cedar (*Thuja occidentalis*) can be found along the shoreline. The understory contains similar species to the canopy with larger quantities of white birch. The shrub and herb layer are moderate and contains species such as beaked hazel (*Corylus cornuta*), Canada mayflower (*Maianethmum canadense*), spinulose wood fern (*Dryopteris carthusiana*), bunchberry (*Cornus canadensis*), lady fern (*Athyrium filix-femina*), and various species of clubmosses (lycopodiopsida spp.).

Figure 5 & Figure 6: Overview of the elements of cedar and balsam near the shoreline (left) and birch forest in the upland area (right).

G055Tt – Dry to Fresh, Coarse: Aspen – Birch Hardwood

This ecosite is similar to the shallow aspen – birch hardwood along the west boundary however it contains slightly deeper soils. The soils in this ecosite are generally greater than 15 cm with sections of exposed bedrock near the wetland boundary. The soils consist of a sandy loam and have a moisture regime of fresh.

The dominant canopy cover in this ecosite is white birch. There are occasional elements of yellow birch (*Betula alleghaniensis*), white ash (*Fraxinus americana*), and American Basswood (*Tilia americana*). The understory contains mostly birch species with elements of ash and very few balsam fir. The shrub and herb layer are moderate and contains species such as striped maple (*Acer pensylvanicum*), beaked hazel, lady fern, wild sarsaparilla (*Aralia nudicaulis*), bunchberry, Canada mayflower, yellow trout lily (*Erythronium americanum*) and various species of grasses.

Figure 7 & Figure 8: Representative photo of the understory and stoney inclusions (left) and birch canopy cover (right).

G076Tt – Moist, Coarse: Mixedwood

This ecosite comprises a large portion of the subject property. The soils in this ecosite are generally greater than 15 cm deep with some stoney inclusions at the surface. There are pockets of shallower soils present. The soils are moist and consist of sandy loam.

The canopy cover in this ecosite is highly variable including species such as yellow birch, American basswood, sugar maple, (*Acer saccharum*), white ash, and some American beech (*Fagus grandifolia*). The understory is highly variable and contains the same species found in the canopy cover. There are some elements of Eastern hemlock where soils are slightly shallower near the water. The shrub and herb layer are moderately abundant and contain species such as beaked hazel, striped maple, Canada mayflower, lady fern, bluebead lily (*Clintonia borealis*), wild sarsaparilla, and some sensitive fern (*Onoclea sensibilis*) in low lying areas.

Figure 9 & Figure 10: Overview of the sandy loam soils (left) and mixedwood canopy (right).

G134S – Mineral Thicket Swamp

This ecosite forms part of the Depot Creek Wetland Complex and contains deep mineral materials that are saturated with areas of water at the surface. This wetland is connected to Lake Nosbonsing and has some lacustrine wetland properties.

This ecosite does not contain a treed community but is rather dominated by shrubs. Shrub species found include speckled alder (*Alnus incana*) and red-osier dogwood (*Cornus sericea*). Periodic elements of red maple (*Acer rubrum*) and birch (*Betula spp.*) may be present. The shrub and herb layers are abundant and contains species such as spotted jewelweed (*Impatiens capensis*), sensitive fern, dwarf raspberry (*Rubus acaulis*), blue skullcap (*Scutellaria lateriflora*), sweet gale (*Myrica gale*), panicled aster (*Aster lanceolatum*), and various species of grasses and sedges.


Figure 11 & Figure 12: Overview of the height of land between Lake Nosbonsing and thicket swamp (left) and the dominant alder shrub cover (right).

G151N – Open Water Marsh: Mineral

This ecosite is saturated and generally submerged below the waters surface. The soils are deep and mineral and the water is less than 2-metres deep. This ecosite does not contain woody vegetation but is rather composed of submergent and emergent aquatic vegetation. This ecosite makes up part of the Depot Creek Wetland complex.

The vegetation present in this wetland includes watershield (*Brasenia schreberi*), common bladderwort (*Utricularia vulgaris*), spiked water milfoil (*Myriophyllum sibiricum*), various species of pondweeds (*Pomatogeton spp*.), Pickerel weed (*Pontederia cordata*), and various species of rush.

Figure 13 & Figure 14: Overview of the emergent and floating leaved vegetation (left) and some submergent vegetation (right).

Wetland Evaluations

For planning purposes in Ontario, wetlands are either classified as 'evaluated-significant', 'evaluated-not significant', or 'unevaluated'. The Ministry of Natural Resources (MNR) is responsible for assigning provincial designations to wetlands. The MNR does not typically undertake wetland evaluations, but rather they review assessments completed by others for official designation as described below.

There is a provincial evaluation system, Ontario Wetland Evaluation System (OWES), which provides a framework for assessing the biological, hydrological, social, and special features components of a wetland against a set of established criteria to generate an overall 'wetland score.' An overall score of 600 points or more or a score of 250 points in any one of the four (4) categories results in the designation of the wetland as 'significant' or what is commonly referred to as a provincially significant wetland (PSW).

FRi field biologists are qualified Ontario Wetland Evaluation System (OWES) evaluators and are aware that the OWES manual includes a list of plant species found in wetlands, including those that are considered 'indicator' species. An indicator species is one that should cue an observer to look further for evidence to support the classification of an area as 'wetland'.

A review of available background information and correspondence with the Municipality has confirmed that the Depot Creek Wetland is unevaluated. However, the Municipal planning staff verified that the wetland is considered locally significant within the Municipality of East Ferris.

Official Plan and Zoning By-Law

As outlined by Municipality's planning staff section 5.3.7.3 of the Official Plan outlines the following protection policies for Lake Nosbonsing:

'1. General

The Shoreline wetlands of Lake Nosbonsing are critical components of the lake's ecosystems. They serve as rearing areas for fish, refuges for wildlife, traps for nutrients from inflowing streams and to maintain special vegetative communities that contribute to the landscape quality. Major wetlands bordering Lake Nosbonsing include Astorville Wetland Complex, the Depot Creek Wetland, the South Shore Road Wetland, and the Quae Quae Wetland Complex.

2. Development Policies

Development shall be located a minimum of 120 linear metres from the edge of a Lake Nosbonsing wetland unless it can be demonstrated there will be no negative impacts on the wetland or its function. (See also Section 6).

This report assesses the values associated with the depot creek wetland and provides recommendations to avoid impacts to the natural heritage values while supporting the proposed lot creations.

Depot Creek Wetland Values

Following the Ontario Wetland Evaluation System FRi assessed the potential values this wetland complex offers to the ecosystem from a natural heritage perspective. As previously stated, the Depot Creek wetland that fronts the subject property is largely associated with Lake Nosbonsing and forms a lacustrine wetland. Lacustrine wetlands offer a variety of values including shoreline protections, wildlife habitat, and hydrology values. Only the west portion of the Depot Creek wetland was assessed; where the wetland borders the subject property. The remaining sections of the wetland are located in excess of 120-metres and will not be impacted by the proposed lot creation and any future development on the same.

Potential Wildlife Habitat

The G134S mineral thicket swamp portions of the wetland have the potential to offer suitable nesting habitat for breeding birds such as Canada Warbler (*Cardellina Canadensis*) and other moist forest or swamp nesting species. Migratory birds could be using the low shrub community for nesting during the active season.

In addition, the vernal pools present within the wetland ecosite could offer suitable breeding habitat for amphibians. Although the wetland is located along the edge of Lake Nosbonsing, there is generally a height of land separating the wetland from the lake proper which provides amphibians with protection from fish. It is possible that the wetland is hydrologically connected during highwater conditions, but amphibians would be protected for the majority of the active season.

FRi noted the presence of vernal pools and water at the surface within the thicket swamp. These shallow pools could be used by turtles in the spring when water temperatures heat-up quicker in wetlands than in open bodies of water such as Lake Nosbonsing. Turtles will bask in the sunlight during the day when air temperatures are warm and use the warmer water in wetlands when air temperatures drop lower in the spring. Turtles will use shallow wetlands for hibernation; however, the water observed in the mineral thicket swamps would likely freeze which his not suitable hibernation habitat for turtles. However, the open water marsh portion of the Depot Creek wetland offers suitable summer habitat for turtles. Logs and other woody debris caught in the aquatic vegetation can be used by turtles for basking. It is also possible that turtles could use the edge of the thicket swamp and open water marsh as hibernacula where inland pockets of water may allow turtles to survive below the surface.

Finally, the open water swamp could provide suitable waterfowl stopover or staging areas. Waterfowl will use these locations during migration periods or shoulder seasons to rest between flights. They feed on aquatic vegetation while using emergent vegetation for shelter.

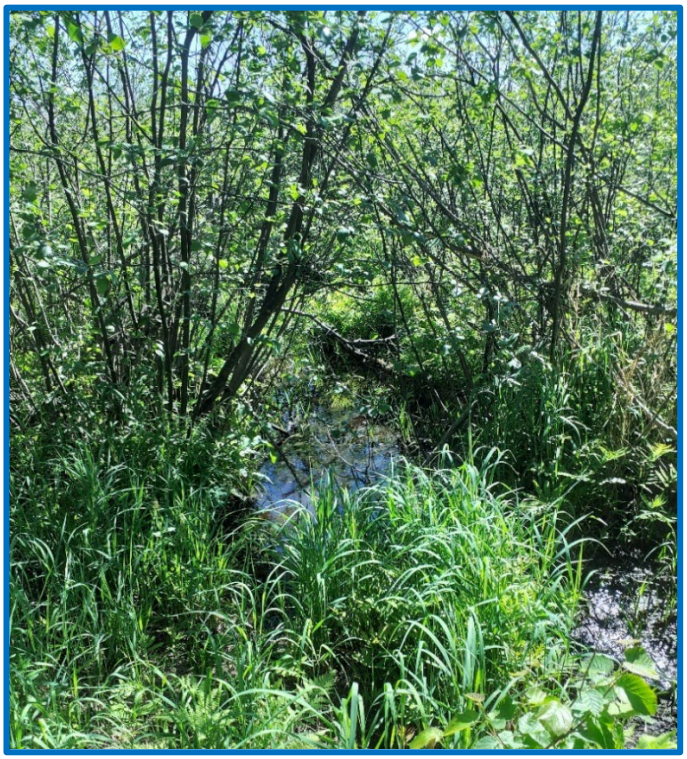

Figure 15: Representative photo of a vernal pool observed within the thicket swamp.

Fish Habitat

The mineral thicket swamp portions of the Depot Creek Wetland generally do not contain enough water to support a fish population. This wetland may flood under highwater conditions in the spring; however, it is likely the fish will become stranded and die during the summer when water levels recede, and the wetland is no longer directly connected to the lake (**Figure 11**).

However, the open water marsh contains ample suitable nursery habitat for fish. The dense aquatic vegetation provides protection from predators for both young and adult fish. FRi observed approximately 15 pumpkinseed (sunfishes) during the in-person field investigation using the aquatic vegetation. The fish observed were feeding on insects on the surface of the water within the aquatic vegetation.

Figure 16: Representative photo of aquatic vegetation present where fish were observed.

Shoreline Protection

The thick vegetation present within the mineral thicket swamp located along the shoreline of Lake Nosbonsing helps protect the shoreline and nearshore riparian area from erosion risks. The dense alder community present within a mineral thicket swamp helps created a vegetative

buffer between the shoreline and the lake proper. The vegetation in the nearshore riparian area also helps intercept water running downhill from the adjacent slope. The vegetation intercepts the run-off and allows sediments to settle into the ground before reaching the lake or suitable habitats potentially present within the wetland ecosites.

In addition, sections of the Depot Creek Wetland currently act as a catchment area for adjacent run-off from hillsides. The topography of the site naturally slopes downhill, north and east towards the lake and the wetland. As stated, the vegetation in the wetlands helps capture and filter water before it reaches the lake. The terrestrial ecosites located adjacent to the Depot Creek Wetland also help intercept water and filter sediments before they reach the wetland. The terrestrial ecosites in partnership with the Depot Creek Wetland help filter run-off before it enters Lake Nosbonsing or Depot Creek.

Recommendations and Mitigation Measures

The following sections of this report outline various mitigation measures and setbacks to protect the natural heritage values associated with the Depot Creek Wetland and the associated wetland ecosites. The mitigation measures proposed will ensure the values previously identified are not impacted by any future proposed development on the lots.

The severance of lots does not include and physical alterations to the landscape. Instead, any potential impacts to the wetland could occur in the future if development occurs on the sites. The recommendations in this report address impacts from potential future development.

Development Setbacks

To protect the natural heritage values associated with the Depot Creek Wetland, FRi recommends a 30-metre development setback from the edge of the wetland. As outlined, there is a slope and associated bank along the edge of the terrestrial ecosites where upland areas transition to the wetland. A 30-metre setback from the edge of the wetland, captures the top of bank and a large portion of the sloped, transition area which will protect the values associated with the Depot Creek Wetlands.

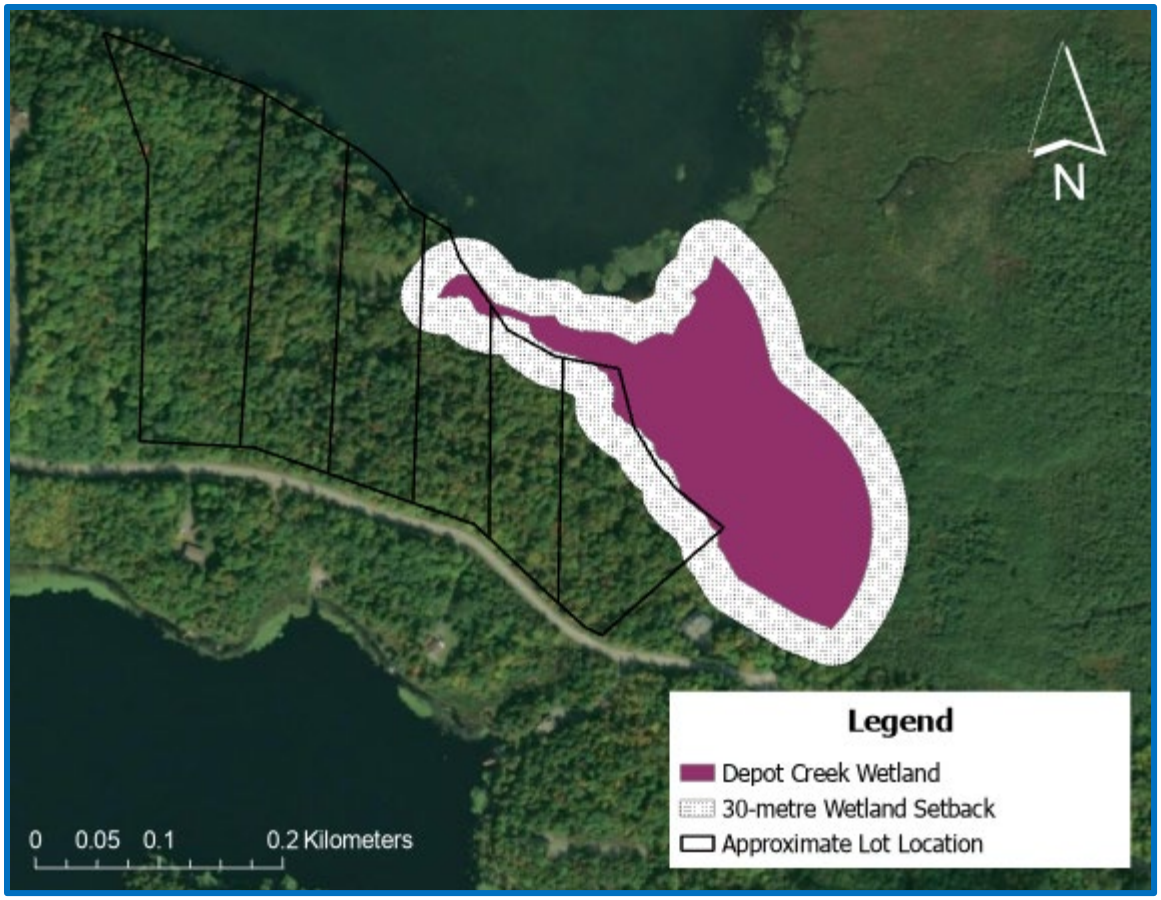

Figure 17: Overview of the recommended 30-metre development setback from the edge of the wetland.

When assigning a setback on a wetland the average tree height is considered. Trees and vegetation provide shade, protection, and thermal controls for the wetland. Therefore, the average tree height is considered to protect any shade qualities and the thermal regime associated with the wetland of interest. As stated, the wetland ecosites associated with the Depot Creek Wetland abutting the subject property are shrub dominant or aquatic. These wetlands do not have tall treed communities. The majority of the thermal regime is controlled by the adjacent terrestrial ecosites and treed areas south of the shoreline on the subject property. The 30-metre recommended setback from the edge of the wetland protects the adjacent treed area and well exceeds the average vegetation height located in a mineral thicket swamp or open water swamp. The recommended setback will adequately protect the thermal regime of the wetlands.

In addition, the Natural Heritage Reference Manual[7] provides guidance for protecting fish habitat under any thermal conditions. The most prescriptive setback recommended is 30-metres. In accordance with the Natural Heritage Reference Manual, by recommending a 30-

[7] http://docs.files.ontario.ca/documents/3270/natural-heritage-reference-manual-for-natural.pdf

metre development setback, any fish species regardless of the thermal regime, using the shoreline area or open water marsh portion of the wetland are adequately protected.

As outlined, breeding birds, amphibians, and reptiles could be using the mineral thicket swamp as habitat during the active season. The recommended 30-metre setback provides a vegetative buffer between the wetland and any future proposed development. As previously stated, the vegetative buffer provides protection for the thermal qualities of the wetland which are important for reptiles in early spring, a visual barrier for breeding birds, and cover available for amphibians.

Vegetation Retention

As outlined in Section 5.3.7.2 of the Official Plan, generally a 30-metre vegetative buffer is encouraged from the edge of Lake Nosbonsing to protect the shoreline areas. The same recommendation and concept can be applied to the edge of the Depot Creek Wetland. A 30-metre vegetative buffer will protect the shoreline vegetation present. As previously stated, the wetland vegetation is assisting with erosion control for the shoreline of the lake. The recommended 30-metre development setback adequately protects the vegetation within the wetland ecosites and will help intercept any increases in run-off from the development.

Surface Run-off Mitigations

As highlighted in this report, the topography of the subject property slopes northwards towards Lake Nosbonsing and the Depot Creek Wetland. When considering development, landowners should attempt to direct surface run-off away from the edge of this slope to prevent excess overland flow from entering the wetland. Maintaining the recommended 30-metre vegetative buffer will help intercept overland flow. To further reduce potential run-off from an increase in hard surfaces, the following should be considered:

Eavestroughs and Downspouts

The inclusion of an appropriate eavestrough and downspout system should direct the water to soak-away pits which will offset any increased volume of run-off from hard surfaces associated with development. Eavestroughs and downspouts should be directed away from the slope to allow water to settle before reaching the wetland. Where possible, eavestroughs should outlet into a soak-away pit or rain garden to increase water retention time on land before reaching the lake.

Rain Gardens and Soak-Away Pits

Soak-away pits or dry wells are approximately 60-90 cm deep holes lined with landscape fabric and backfilled with medium to large sized stones. The fabric prevents fine sediment from filling the spaces between the stones and allows the pit to collect water. This results in increased infiltration time which will result in improved water quality. These systems can be visually enhanced by including a rain garden approach; planting of species which thrive in very wet to saturated environments can be added to further remove excess nutrients from the runoff.

Rain gardens provide similar mitigative measures as soak-away pits but are composed of native vegetation rather than rocks. Native species are planted to help intercept run-off and promote absorption through their root structures. This in-turn slows the run-off and decreases the amount of sediment entering the lake.

Directing downspouts and eavestrough systems towards rain gardens and soak-away pits can help with water retention and reducing the amount of sediment potential entering the wetland.

Reduce Hard Surfaces

Generally, development increases hard-surfaces present on a landscape which creates excess run-off. Where possible avoiding hard materials such as asphalt is recommended. Using landscaping stones, gravel or other porous materials is encouraged. FRi understands some hard surfaces and non-porous materials may be required, but alternatives should be considered when applicable.

Alternative Mitigation Options

Appropriate mitigative tools for reducing run-off entering the wetland are designed to mimic a natural analogue. The proposed mitigation measures (eavestroughs to soak-away pits or rain gardens) treat the water as if development is not occurring; their intent is to mimic a natural system; run-off is intercepted, captured, filtered, and slowed down before it reaches the lake. Eavestroughs to rain gardens are not the only system that successfully functions to capture, filter, and slow water. For example, rain chains can be used in-place of a downspout to intercept run-off and direct flow to a designated area where filtration can occur. As long as the mitigation tools selected capture the water and direct it to a location to filter or slow run-off (away from the slope), it should adequately function to reduce run-off and mimic a natural system.

Conclusions

In conclusion, this report provides updated mapping of the west boundary of the Depot Creek Wetland with frontage on the subject property and applies appropriate setbacks and mitigation measures to protect the values associated with the wetland.

The recommendations provided in this report apply to future development on the proposed lots to avoid disturbing the wetland ecosites. The severed lots will not have any immediate impacts on the wetland features; instead, any potential impacts are associated with future development on the lots and can be mitigated by following the recommendations in this report including the recommended 30-metre development setback, vegetation retention, and surface run-off mitigation considerations.

It is in our opinion that if the recommendations in this report are appropriately implemented, the proposed severed lots and future development can occur without negatively impacting the Depot Creek Wetland Complex.

Respectfully submitted,

Katie Schankula

Field Biologist

FRi Ecological Services

Appendix A – Native Species and Tips

Timing of Planting

The Ministry of Natural Resources recommends planting trees and shrubs in the fall to provide the tree with more time to root before the dry season in the following summer. Planting in the fall may also require less watering. Planting a variety of native species will help minimize pests and disease outbreaks. Purchasing trees and plants from local sellers may also help with successful growth because they will be adapted to the local conditions and climate.

Native Tree Species

- American beech (*Fagus grandifolia*)
- Balsam fir (*Balsamea abies*)
- Balsam poplar (*Populus balsamifera*)
- Basswood (*Tilia americana*)
- Black ash (*Fraxinus nigra*)
- Black spruce (*Picea mariana*)
- Eastern hemlock (*Tsuga canadensis*)
- Eastern white cedar (*Thuja occidentalis*)
- Eastern white pine (*Pinus strobus*)
- Ironwood (*Ostrya virginiana*)
- Largetooth aspen (*Populus grandidentata*)
- Red maple (*Acer rubrum*)
- Red oak (*Quercus rubra*)
- Silver maple (*Acer saccharinum*)
- Sugar maple (*Acer saccharum*)
- Trembling aspen (*Populus tremuloides*)
- White ash (*Fraxinus americana*)
- White birch (*Betula papyrifera*)
- White oak (*Quercus alba*)
- White spruce (*Picea glauca*)
- Yellow birch (*Betula alleghaniensis*)

Native Shrub Species

The MNR's Tree Atlas program lists the following species as native and appropriate for the North Bay region. FRi supplemented the list provided by the MNR with species that were observed in the area:

- Alternate leaved dogwood (*Cornus alternifolia*)
- Chokecherry (*Prunus virginiana*)
- Mountain maple (*Acer spicatum*)

- Pin cherry (*Prunus pensylvanica*)
- Red osier dogwood (*Cornus sericea*)
- Serviceberry (*Amelanchier*)
- Speckled alder (*Alnus incana*)
- Striped maple (*Acer Pensylvanicum*)
- Sweet gale (*Myrica gale*)
- White meadowsweet (*Spirea alba*)

Please note that this list is not exhaustive and there are ample native wildflowers that could be planted as part of a rain garden feature not included in this appendix. Local greenhouses often have the best advice for which native species to plant in your region for the best survival rate.