



## 13.0

# Existing Conditions - General Characterization

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Characterizations of natural heritage of the Nature Areas to inform the 2021 TLNAP built upon exiting descriptions (from the 2002 Trent Nature Areas Stewardship Plan) and was undertaken using available secondary source information. Secondary sources of information included species atlases and databases, data provided by the Trent community and the public, as well as input from the Nature Areas Stewardship Advisory Committee. Substantial effort was made to engage with members of the Trent community, Michi Saagiig First Nations, and members of the public to ensure a comprehensive understanding of the environment, key issues, sensitivities, uses, and cultural values for the lands included in the study.

Much of the lands within the Nature Area have an agricultural and anthropogenic history that has shaped their current condition. Many of the wetlands and some woodlands have persisted on the landscape for a longer period either due to being unsuitable for agricultural production or as a resource. In their current condition, the Nature Areas contain many natural features and areas that include both aquatic and terrestrial features and functions. These areas provide opportunities for a range of habitat types that could support a broad range of species.

Natural heritage summary sheets have been prepared for each Nature Area (**refer to Appendix B of the Natural Heritage Report, 2021**). These provide an easy reference for each area with key information including vegetation communities, summary of available information (secondary source), and other information that will be important to inform the stewardship and management. A brief description of findings is described below.

### Flora and Wildlife

Botanical inventories and wildlife surveys were not conducted during this planning process. Where possible, species and habitat information obtained through community data sources (e.g., Social Pinpoint), shared Indigenous Traditional Knowledge, other resources with the consulting team (e.g., student studies and papers), and input from the Nature Areas Stewardship Advisory Committee were used to inform preliminary assessments with a specific focus on observations that confirm significance (e.g., Significant Wildlife Habitat). Through the engagement of the First Nations in the Trent community, important values and information on areas of species use and movement were identified on these lands. Available information has been incorporated into the assessments and is included in the Summary Sheet for each Nature Area, as appropriate.

Secondary source observations (e.g., iNaturalist, eBird, etc.) from the Nature Areas include a broad range of species (records or potential to occur in the area) that reflect the habitat types and vegetation present throughout the Nature Areas. Secondary source information included the following notable species below. This is not an exhaustive list of species with potential to use the Nature Areas either for breeding or as a migratory stopover. Site-specific study is required using appropriate protocols to inform presence, use, etc.

### Endangered and Threatened Species (per the Ontario Endangered Species Act 2007)

- Little Brown Myotis (Endangered)
- Tricolored Bat (Endangered)
- Barn Swallow (Threatened)
- Bank Swallow (Threatened)
- Bobolink (Threatened)
- Eastern Meadowlark (Threatened)
- Eastern Whip-poor-will (Threatened)
- Chimney Swift (Threatened)
- Blanding's Turtle (Threatened)
- Least Bittern (Threatened)
- Butternut (Endangered)



### Special Concern Species (per the Ontario Endangered Species Act 2007)

- Bald Eagle
- Red-headed Woodpecker
- Eastern Wood Pewee
- Wood Thrush
- Black Tern
- Canada Warbler
- Common Nighthawk

- Evening Grosbeak
- Golden-winged Warbler
- Grasshopper Sparrow
- Horned Grebe
- Olive-sided Flycatcher
- Peregrine Falcon
- Rusty Blackbird
- Snapping Turtle
- Northern Map Turtle
- Yellow-banded Bumble Bee
- Monarch Butterfly

### Provincially Rare Species and Federal Species at Risk Act

- Western Chorus Frog (Threatened - Species at Risk Act)
- Midland Painted Turtle (Special Concern - Species at Risk Act)
- Milksnake (Special Concern - Species at Risk Act)
- American Bumblebee (Special Concern - Species at Risk Act)
- Blue-spotted salamander
- Imperial Moth
- Indigo Stem Borer
- Green-striped Darner
- Pustulated Carrion Beetle
- Gold-spotted Ghost Moth
- Winged Loosestrife
- Lilypad Clubtail



## Ecological Land Classification

Ecological Land Classification is a standardized approach to delineating and describing vegetation communities in Southern Ontario. This approach can be used at both a landscape and site scale, making it an excellent planning support tool as well as a descriptive method for assessing an area.

Ecological Land Classification was undertaken for the Nature Area using information from The Stewardship Plan for Trent University Nature Areas (2002), air photo interpretation, knowledge of the areas, and comparison against similar habitats in areas for which field inventories were conducted.

Vegetation communities identified across the Nature Areas include forest (coniferous, deciduous, and mixed forests), woodland (cultural woodlands), plantations (pine plantations), wetland (swamp, marsh), savannah, thicket, and meadow. These general community types are presented on **Figure 34**.

Woodlands and wetlands make up much of this natural cover. Woodlands and wetlands on the Symons Campus represent approximately 24 per cent and 32 per cent of the woodland and wetland cover within the City of Peterborough, respectively.

## Current Uses

The Nature Areas are highly valued for their recreation, wellness and education purposes. They provide ideal views of the landscape and campus and are used as an escape; as areas to recharge and/or meditate. The biodiversity of the campus with its varied ecological communities is an asset to many classes that take their learning out of the classroom and into the campus. Whether utilizing the formal or informal trail network, bird watching, or swimming and kayaking along the river, the community values their ability to physically and visually access these assets.

Engagement with the Trent community, the public, and knowledge sharing from First Nations identified a range of existing uses and values associated with the Nature Areas which include, but are not limited to, the following:

- Indigenous Traditional Knowledge uses and sharing including identification and collection of medicinal plants, materials gathering, spiritual or cultural sites of potential significance, wildlife habitat.
- Research and teaching locations / areas for 7 different disciplines, and over 22 course topic areas were identified. It is likely that such uses are more extensive than reported through this process

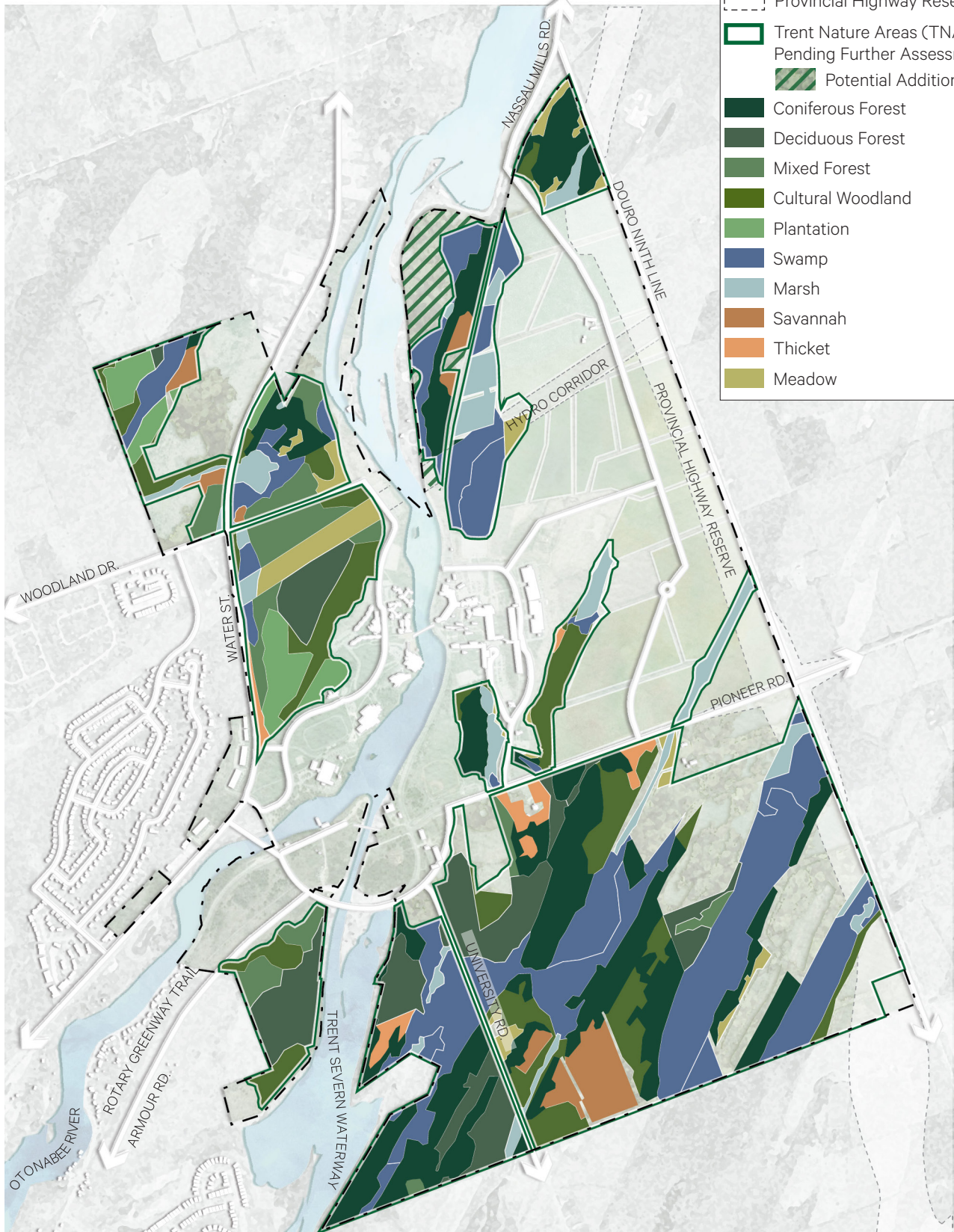
Extensive use of the Nature Areas for recreation and cultural activities including pedestrian use (walk, hike, run), dog walking, naturalist observation / nature appreciation, mental health (time in nature), and cycling.

## General Management Issues

Many of the human impacts observed and reported on in the 2002 Stewardship Plan persist today. While there is an interest in maintaining the use of these parcels as important resources to the community, management of human activity and the disturbance that results from unplanned access is a key concern. Human impacts and concerns generally include:

- Informal trail creation;
- Lack of signage along trails;
- Disturbance from overuse of trails;
- Litter;
- Off-leash dogs and their feces;
- Domestic cats (outdoor cats);
- Fragmentation;
- Lack of safe wildlife crossings/corridors;
- Existing areas of invasive/non-native plants; and
- Spread of invasive species.

Figure 34: Vegetation within the Trent Nature Areas



**LEGEND:**

- Trent University Boundary
- Provincial Highway Reserve
- Trent Nature Areas (TNA)
- Pending Further Assessment:
  - Potential Addition
- Coniferous Forest
- Deciduous Forest
- Mixed Forest
- Cultural Woodland
- Plantation
- Swamp
- Marsh
- Savannah
- Thicket
- Meadow

