



Natural Heritage of the Wesleyville Site

Delegation to the Port Hope Council,
Sept 7, 2021

Joint Working Group - Wesleyville

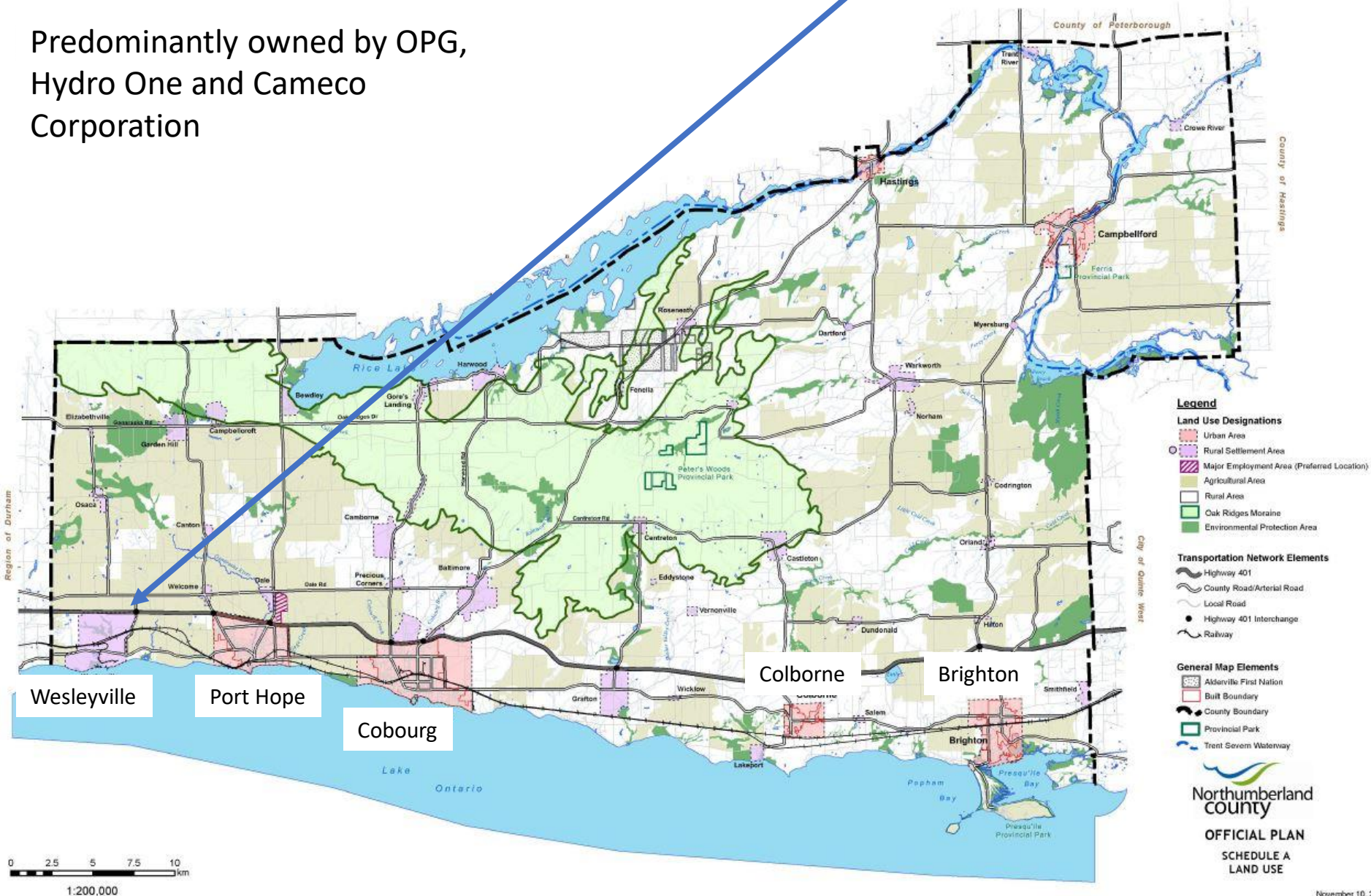


Purpose of this delegation

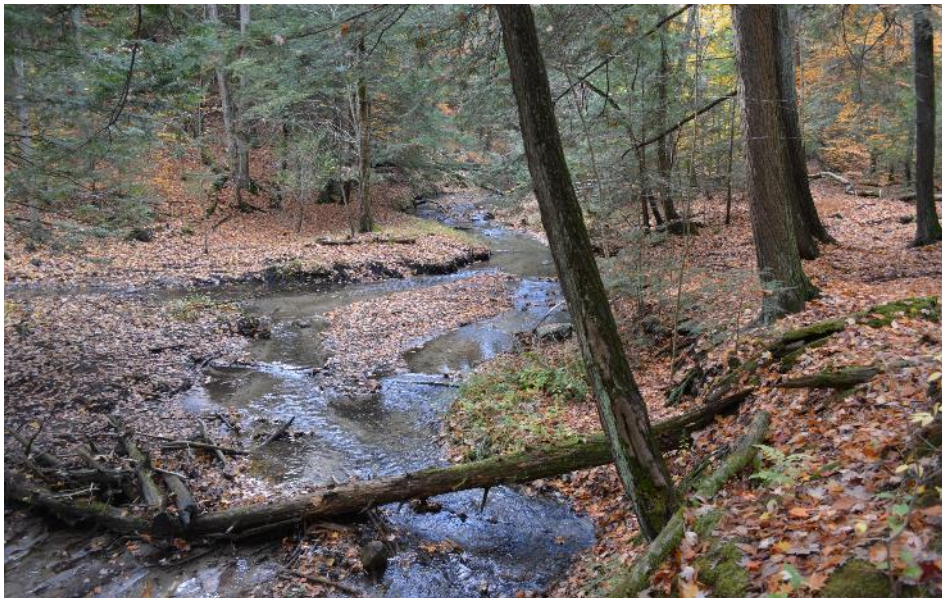
- Describe the natural heritage features and biodiversity at Wesleyville
- Discuss the potential for enhancing protection through the review and update of the Official Plan

Wesleyville is at the SW corner of Northumberland County; designated Rural Settlement
The site is about 1100 hectares (2700 acres) in size.

Predominantly owned by OPG,
Hydro One and Cameco
Corporation



Major Components of NHS at Wesleyville



1. **Wesleyville Ravines**
Provincially significant ANSI
(Area of Natural and Scientific Interest)
2. **Marsh/Wetlands Complex**,
including **Provincially Significant Wetlands**,
Wesleyville Marsh
(Regionally significant ANSI)
and unevaluated wetlands
3. **Wesleyville Creek and Watershed**
4. **Crysler Point Bluffs**
(Regionally Significant ANSI)
5. **Significant Woodlands**
(forested areas outside the
Ravine ANSIs)
6. **Grassland areas** with
indicators for tall grass
prairie

Ravines, Old-Growth Forest and Woodlands



Wesleyville Ravines

(Provincially Significant ANSI)

- Unique microclimate (cooler in summer and milder in winter) with numerous cold, fresh-water springs (Wesleyville Creek).
- Significant old-growth forest
Few such stands remain along the north shore of Lake Ontario, expanding with time.

Significant Woodlands (County NHS feature)

- Mature, regenerating and reforested areas.

Wesleyville Creek Watersheds



- Considered one of the best examples of a high quality cold water stream along the north shore of Lake Ontario.
- Spring-fed stream supports a diverse and unique cold water fishery, including a genetically pure native Brook Trout population.
- Also supports birds, amphibians, reptiles, and mammals (including river otter and beaver).



Wesleyville Grasslands



- Dry, sandy soils - taken out of agricultural production sometime around 1975.
- Indicators species for tall grass prairie are present, 14 indicator species found in our surveys.
- Habitat for grassland birds and other species.



Coastal Wetlands - Wesleyville Marsh Complex

Provincially Significant Wetlands,
Regional ANSI

- Barrier beach wetlands
- Exceptional biodiversity. Breeding and foraging habitat for marsh birds, waterfowl, reptiles and amphibians.
- fish spawning and nursery habitat for lakewide species.



Crysler Point Bluffs

Regional ANSI: Characterized by 8-15m steep clay bluff, ravine, upland scrub and successional old fields. Regionally rare species.

Maintained by groundwater discharge on an active bluff - a very rare ecosystem along the coast; becoming more rare with slope stabilization works in the Greater Toronto Area.



Wesleyville is one of the largest remaining natural areas on the north shore of Lake Ontario, and the largest near the GTA

The ecological zones at Wesleyville are part of an interconnected system.

- It has an extraordinary diversity of habitats, with 38 Ecological Land Classifications.
- It is within the **Glacial Lake Iroquois Plain**, an eco-region that has been identified by ECC as being of the highest priority for protection in southern Ontario.



Extensive damage and erosion caused by trespassing ORV's in all areas including ravines, creeks and waterfront. (referenced in reports since the 1980's). This problem is increasing.

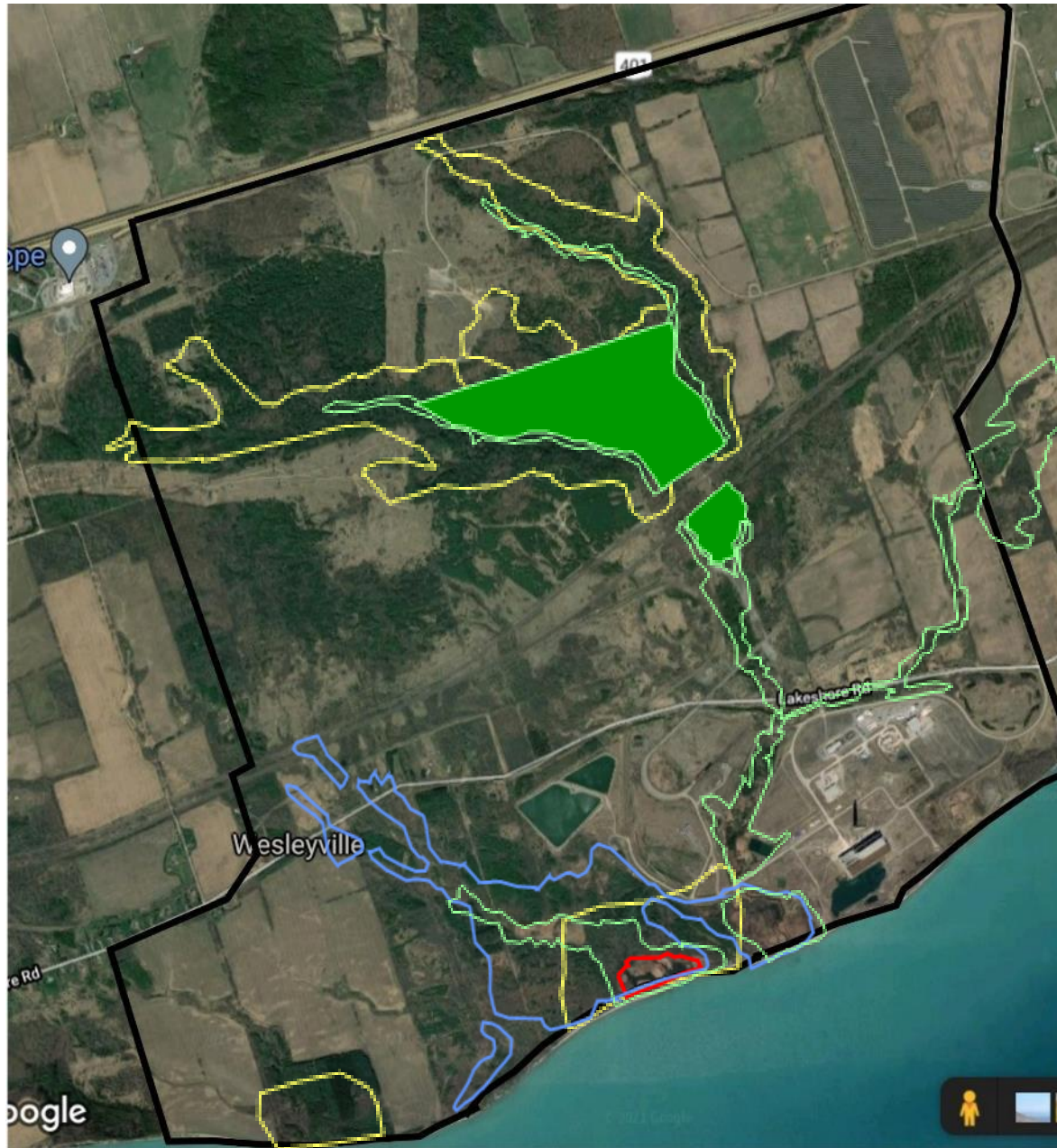


Damage by trespassing ORV's: Increases erosion, destabilizes slopes in Ravines, destroys roots of old-growth – reduces canopy cover, silts Creeks, disturbs spawning and nesting sites...



Natural Heritage Areas, Land Designation and Zoning

Recognized Natural Features



Areas of Natural and Scientific Interest (yellow)

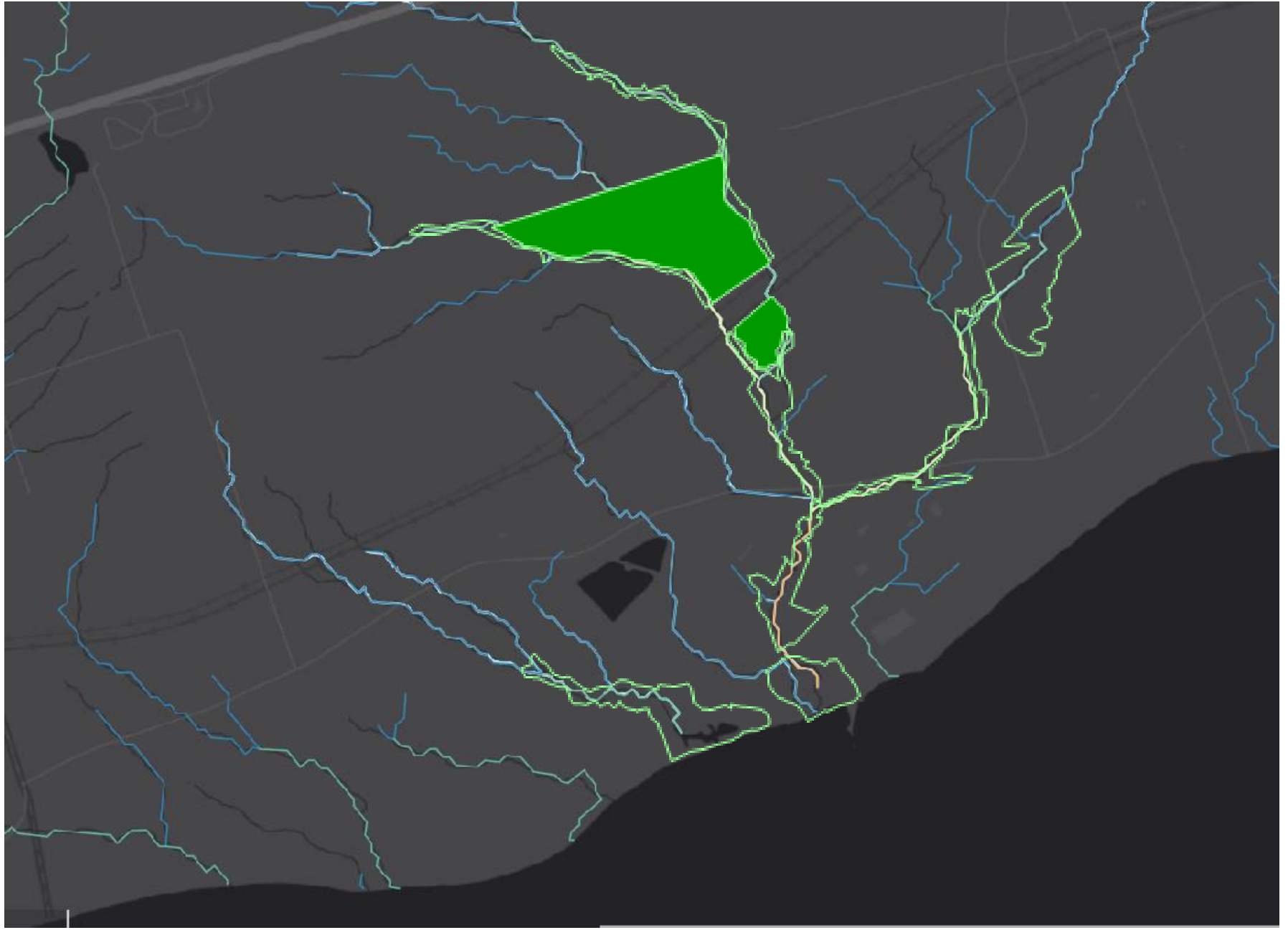
Provincially Significant Wetland (red)

Other Wetlands, showing the full Wesleyville Wetland Complex (blue)

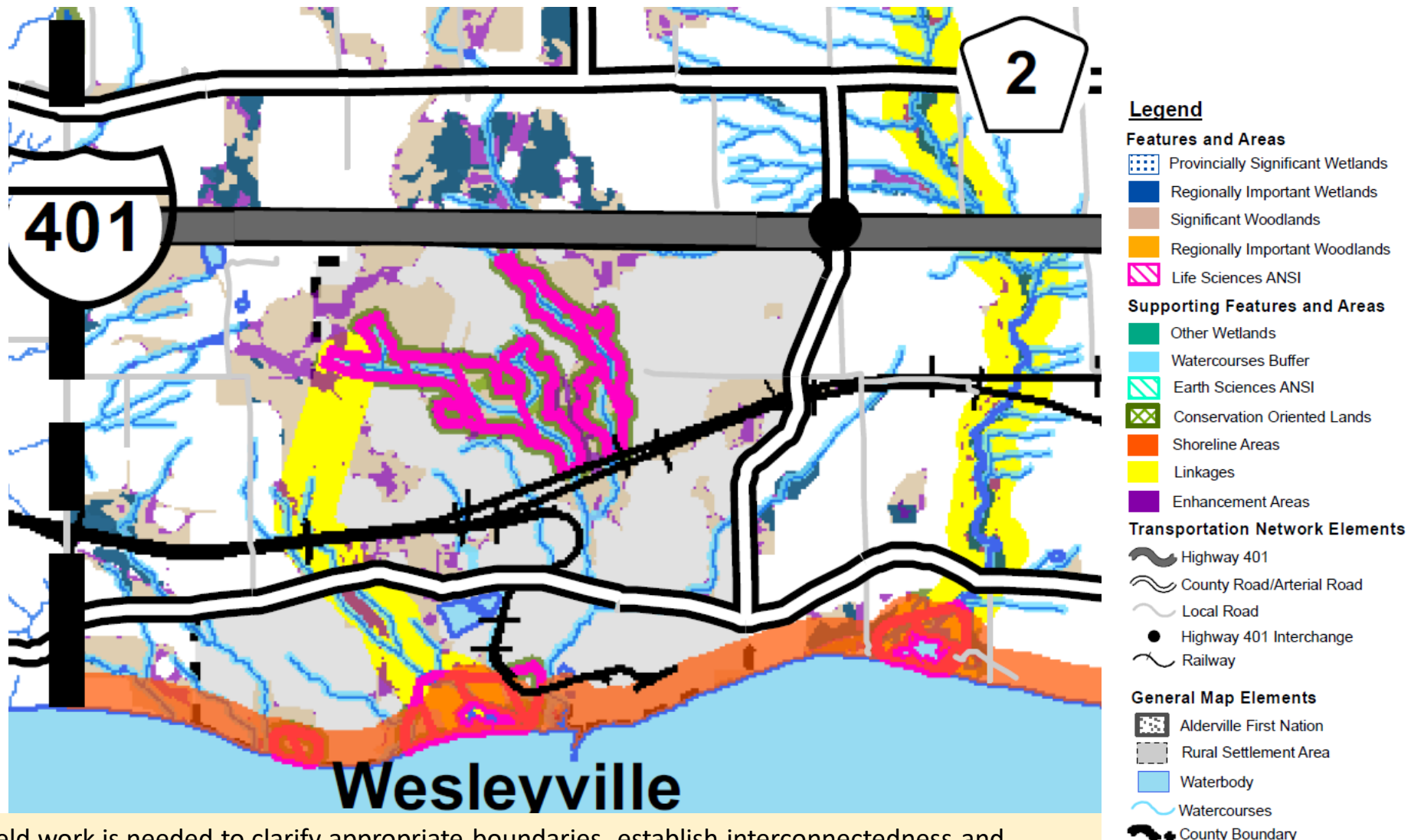
What's currently zoned Environmentally Protected (green) by the current Official Plan.

Everything outside the EP boundaries is zoned for employment.

Headwaters (NCC mapping) and EP and EP-F zoning



Schedule B2 of the Northumberland County Natural Heritage System – Natural Heritage Features and Components



Field work is needed to clarify appropriate boundaries, establish interconnectedness and examine grasslands. It's not clear how the Rural Settlement designation and Employment zoning will impact environmental protection for the site's natural features

Schedule B2 (crudely) overlaid on a satellite image



Planning and Conservation Considerations /1

- The new County Natural Heritage System is a clear improvement ...BUT... **protection is weakened by the Rural Settlement Designation and Employment Zoning.**
- The Rural Settlement Designation, Employment Zoning and boundaries of the Environmentally Protected areas are established by the Municipality (Port Hope).
 - *There is a prohibition on development north of the railway tracks pending development of a secondary plan for the site.*

Planning and Conservation Considerations / 2

- The **Provincial Policy Statement** applies to Wesleyville and defines what is protected
 - *The Growth Plan for the GGH does not recognize NH features in Settlement Areas*
 - **PPS protects Provincially-significant features**, e.g. Wesleyville Ravines, Significant Woodlands and Provincially Significant Wetlands – not regionally important features such as Crysler Point Bluffs and the remainder of the wetland complex.
 - Any development would require an Environmental Impact Assessment.
- The GRCA, through the **Conservation Authority Act**, reviews proposed development near waterways, and considers (among other things) “the protection of fragile stream environments, reduction of erosion and sedimentation, and the maintenance and improvement of fisheries.”

Planning and Conservation Considerations / 2

We understand the Municipality can:

- add details to the NHS (such as designating Wesleyville Creek as a linkage, refining the boundaries of the NHA);
- change the boundaries of Environmentally Protected areas and the Rural Settlement designation.

These should be examined and adjusted to provide appropriate protection in the review and update of the Port Hope Official Plan.

In Closing

- Wesleyville is a magnificent, unique natural system that could be protected in perpetuity for the benefit of all.
- We urge you to consider your options to add longer-term ecological protection for the site's biodiversity, and its role in limiting climate change.

