Item 10.3.1

# Wetland Conservation in the Blue Mountain-Birch Cove Lakes Watershed(s)



**Environment and Sustainability Standing Committee** 

November 4, 2021

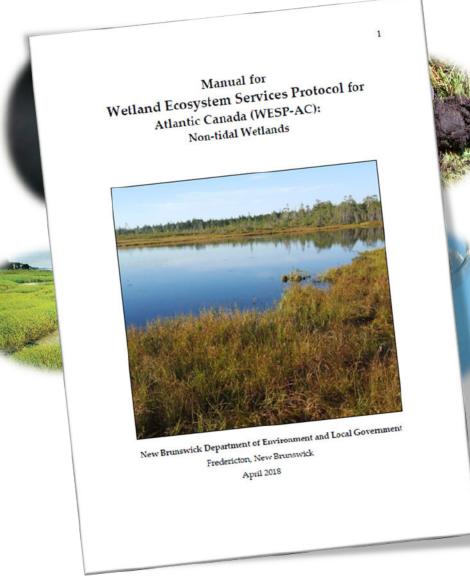
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## Wetlands 101: What is a wetland?

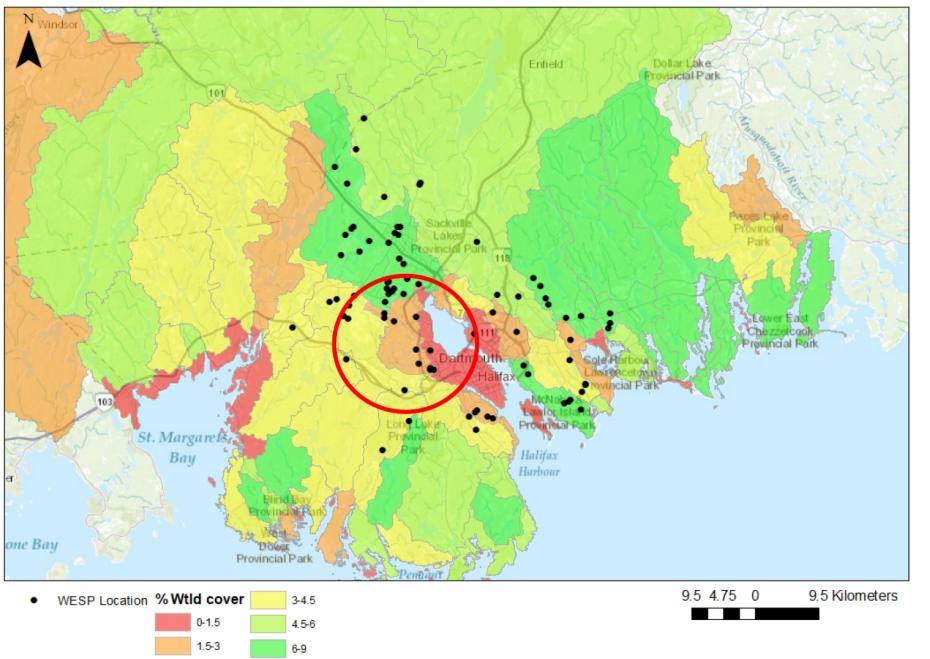


- 5 Types of Wetlands
- Shallow open water
- Marsh (fresh and tidal)
- Swamp
- Fen
- Bog

## Wetlands 101: Ecosystem Services



- Improve water quality
- Carbon storage
- Water storage
- Water cooling
- Biodiversity
- Recreation



 Colour blocks = watersheds

- 2. More red = less wetland cover
- Ideal wetland cover in a watershed is ~4%
- 4. Black dots are wetland assessment locations (2020 & 2021)
- 5. Focus on Kearney Lake watershed

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community



1 - Washmill Lake wetland

#### 2 - Susie Lake wetland

3 - Mainland Common Bog



#### Washmill Lake:

- Wildlife habitat
- Sediment retention
- Nitrate retention

### Susie Lake wetland:

- Wildlife and plant habitat
- Water storage and delay
- Phosphorous retention

### Mainland Common Bog:

- Nitrate retention
- Water storage and delay
- Carbon sequestration

# Key Takeaways

- 1. Watershed-scale planning ensures downstream water quality
- 2. Conserve a diversity of wetland types in a watershed
- 3. Good buffer zones make for healthy wetlands
- 4. Stormwater in-flows degrade wetland function over time

Contact information: