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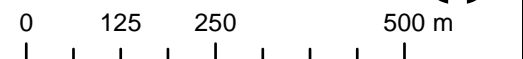
FIGURE 9

Desktop Hydrology Review
Walden Quarry Expansion
Walden, NS

- Flow Accumulation
- NSTDB Contour Line (5 m)
- Mapped Watercourse (NSTDB)
- Depth to Saturation**
- 0 - 0.10m
- 0.11 - 0.50m
- 0.51 - 2.00m
- NSECC Wetland Inventory
- IA Permit Area - Existing Quarry Footprint
- Fish Study Area
- Proposed Quarry Expansion Area
- Study Area



Coordinate System: NAD 1983 CSRS UTM Zone 20N
Projection: Transverse Mercator
Datum: North American 1983 CSRS
Units: Meter



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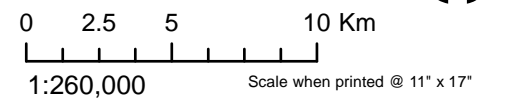
FIGURE 10

Primary and Secondary Watersheds
Walden Quarry Expansion
Walden, NS

-  Gold River Secondary Watershed
-  Marsh Brook Secondary Watershed
-  Martins River Secondary Watershed
-  Middle River Secondary Watershed
-  Mushamush River Secondary Watershed
-  Shore Direct Secondary Watershed
-  Gold River Primary Watershed (1EG)
-  Study Area



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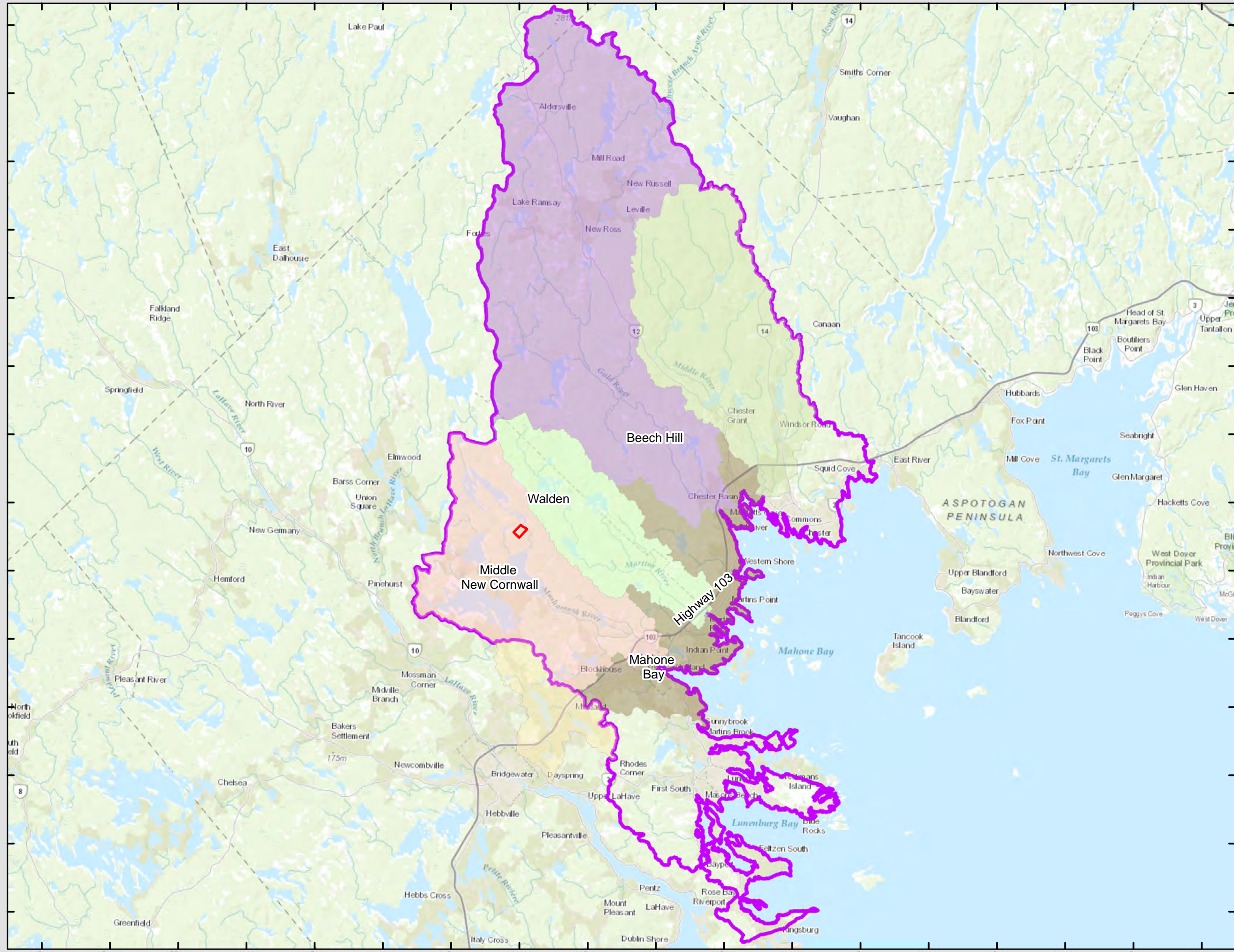


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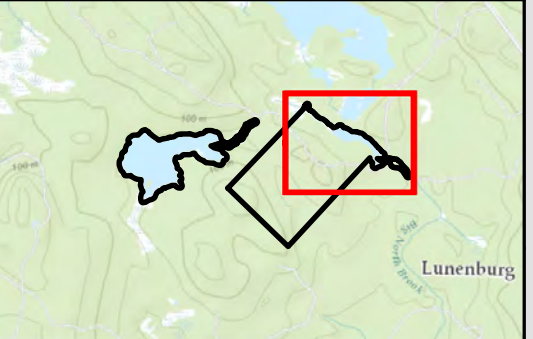


FIGURE 11

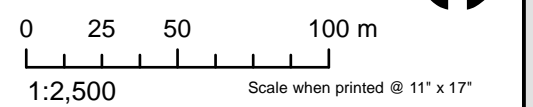
Fish Collection Methods and Results Pond 1

Walden Quarry Expansion
Walden, NS

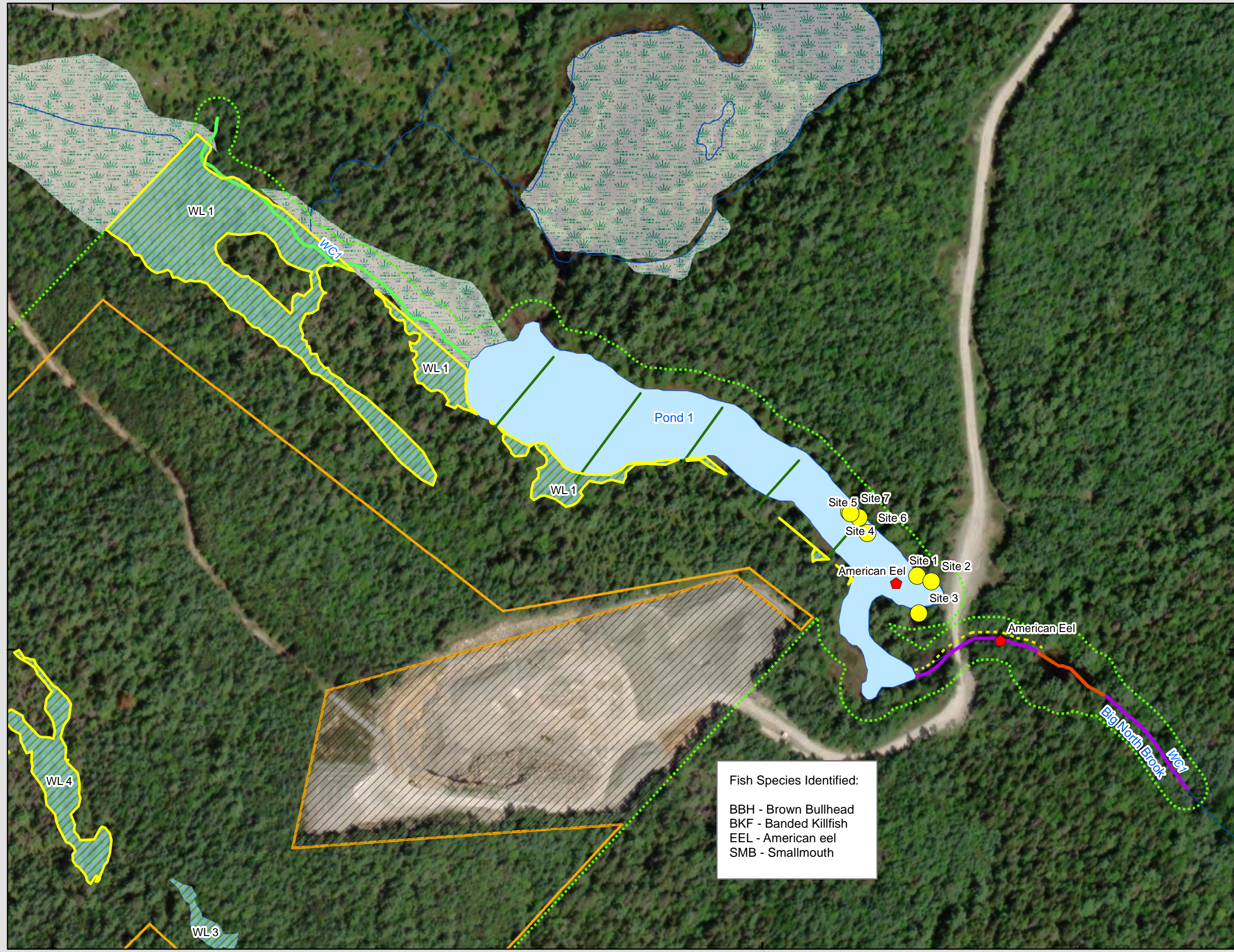
- SAR/SOCI Fish Observation
- Fish Trap
- Mapped Watercourse (NSTDB)
- Field Verified Watercourse
- Habitat Type**
- Flat
- Riffle
- Run
- Lacustrine Transects
- E-Fishing Reach
- Potential Wetland of Special Significance
- NSECC Wetland Inventory
- Field Delineated Wetland
- Field Verified Open Water
- IA Permit Area - Existing Quarry Footprint
- Proposed Quarry Expansion Area
- Fish Study Area



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Fish Species Identified:
 BBH - Brown Bullhead
 BKF - Banded Killfish
 EEL - American eel
 SMB - Smallmouth

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FIGURE 12

Fish Collection Methods and Results Bagpipe Lake

Walden Quarry Expansion
Walden, NS

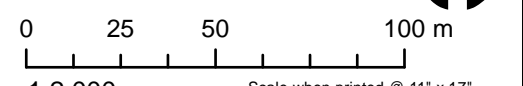
- SAR/SOCI Fish Observation
 - Fish Trap
 - Lacustrine Transects
 - Mapped Watercourse (NSTDB)
 - Field Verified Watercourse
- Habitat Type**
- Dry
 - Flat
 - No Defined Channel
 - E-Fishing Reach
 - NSECC Wetland Inventory
 - Field Delineated Wetland
 - Field Verified Open Water
 - Proposed Quarry Expansion Area
 - Fish Study Area

Fish Species Identified:

BBH - Brown Bullhead
 BKF - Banded Killfish
 EEL - American eel
 GSH - Golden Shiner
 SMB - Smallmouth Bass



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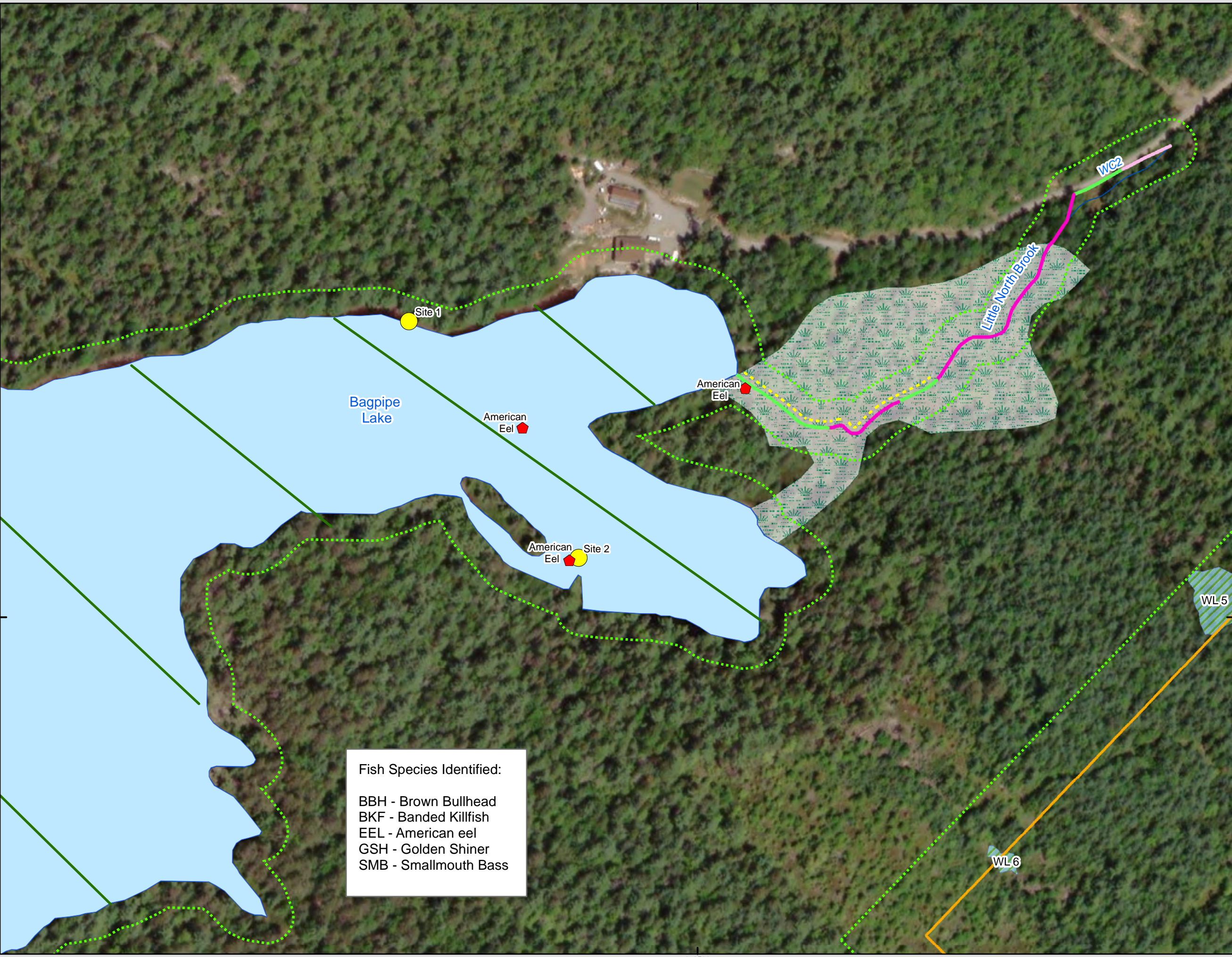


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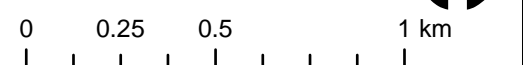
FIGURE 13

Surficial Geology Walden Quarry Expansion Walden, NS

- Roads
- 5m Contour Line (NSTDB)
- Mapped Watercourse (NSTDB)
- Mapped Waterbody (NSTDB)
- Bedrock
- Organic Deposits
- Silty Drumlin
- Stony Till Plain
- None
- Fish Study Area
- IA Permit Area - Existing Quarry Footprint
- Proposed Quarry Expansion Area
- Study Area



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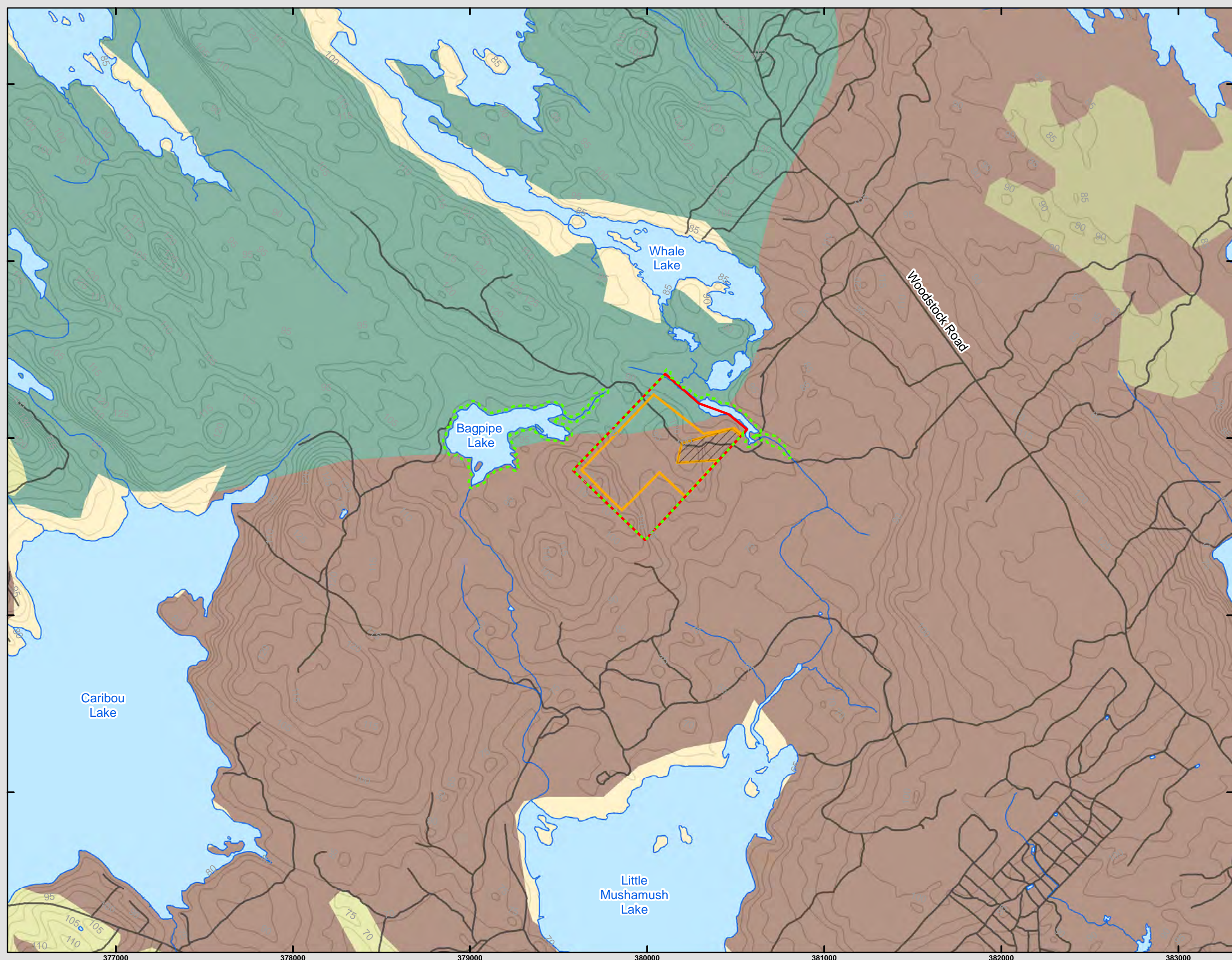


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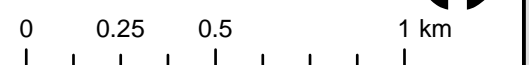
FIGURE 14

Bedrock Geology Walden Quarry Expansion Walden, NS

- Roads
- 5m Contour Line (NSTDB)
- Mapped Watercourse (NSTDB)
- Mapped Waterbody (NSTDB)
- Goldenville Formation
- Halifax Formation
- Middle - Late Devonian biotite monzogranite
- Middle - Late Devonian leucomonzogranite
- Middle - Late Devonian muscovite biotite monzogranite
- Fish Study Area
- IA Permit Area - Existing Quarry Footprint
- Proposed Quarry Expansion Area
- Study Area



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 Projection: Transverse Mercator
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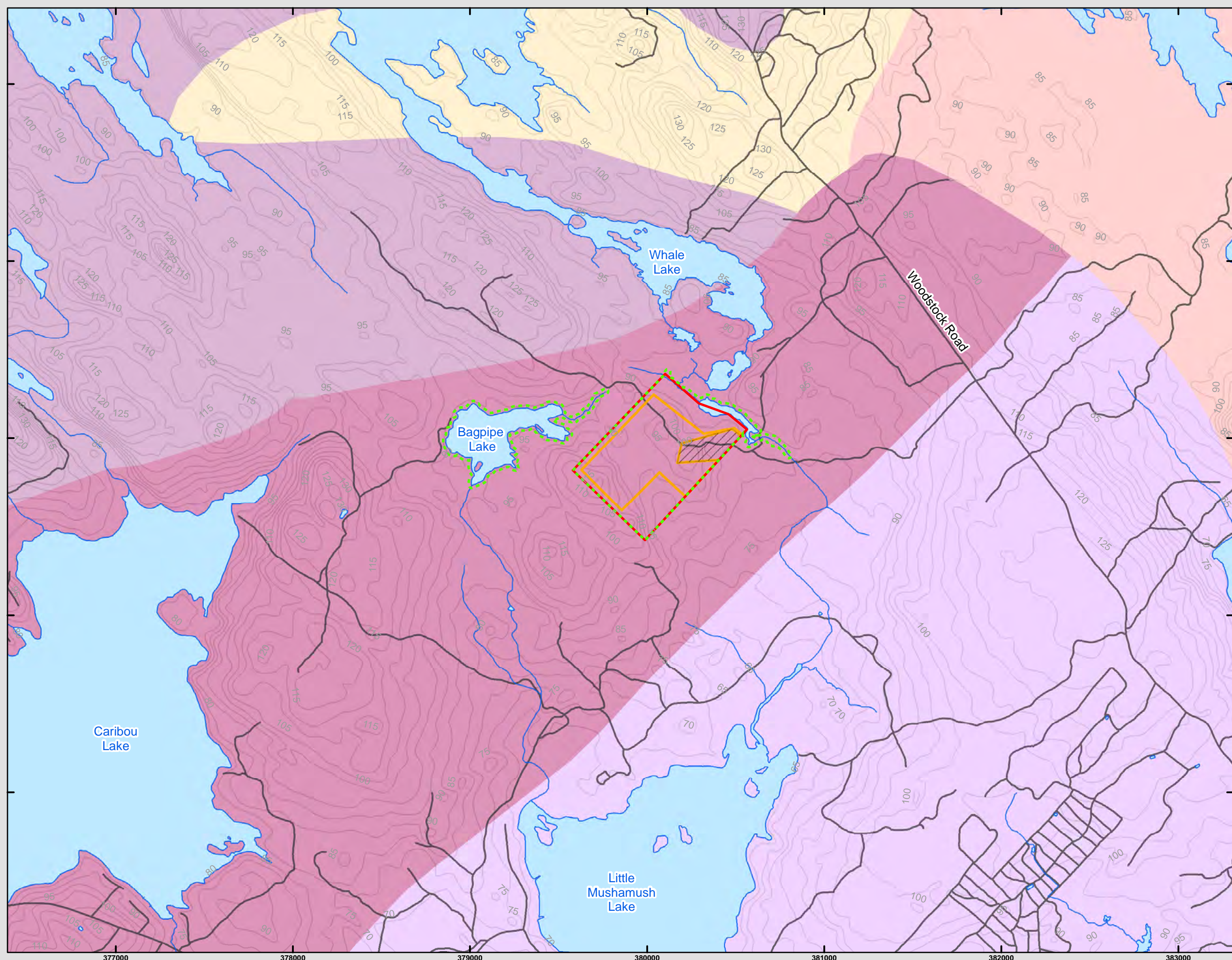


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FIGURE 15

Fauna Results

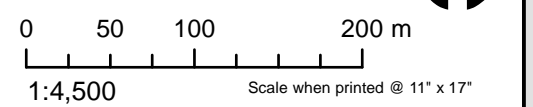
Walden Quarry Expansion

Walden, NS

- Eastern Painted Turtle
- Snapping Turtle
- Unknown Turtle Tracks
- Turtle Nest (potential Snapping Turtle)
- Mapped Watercourse (NSTDB)
- Field Verified Watercourse
- Field Verified Open Water
- NSECC Wetland Inventory
- Field Delineated Wetland
- IA Permit Area - Existing Quarry Footprint
- Proposed Quarry Expansion Area
- Study Area



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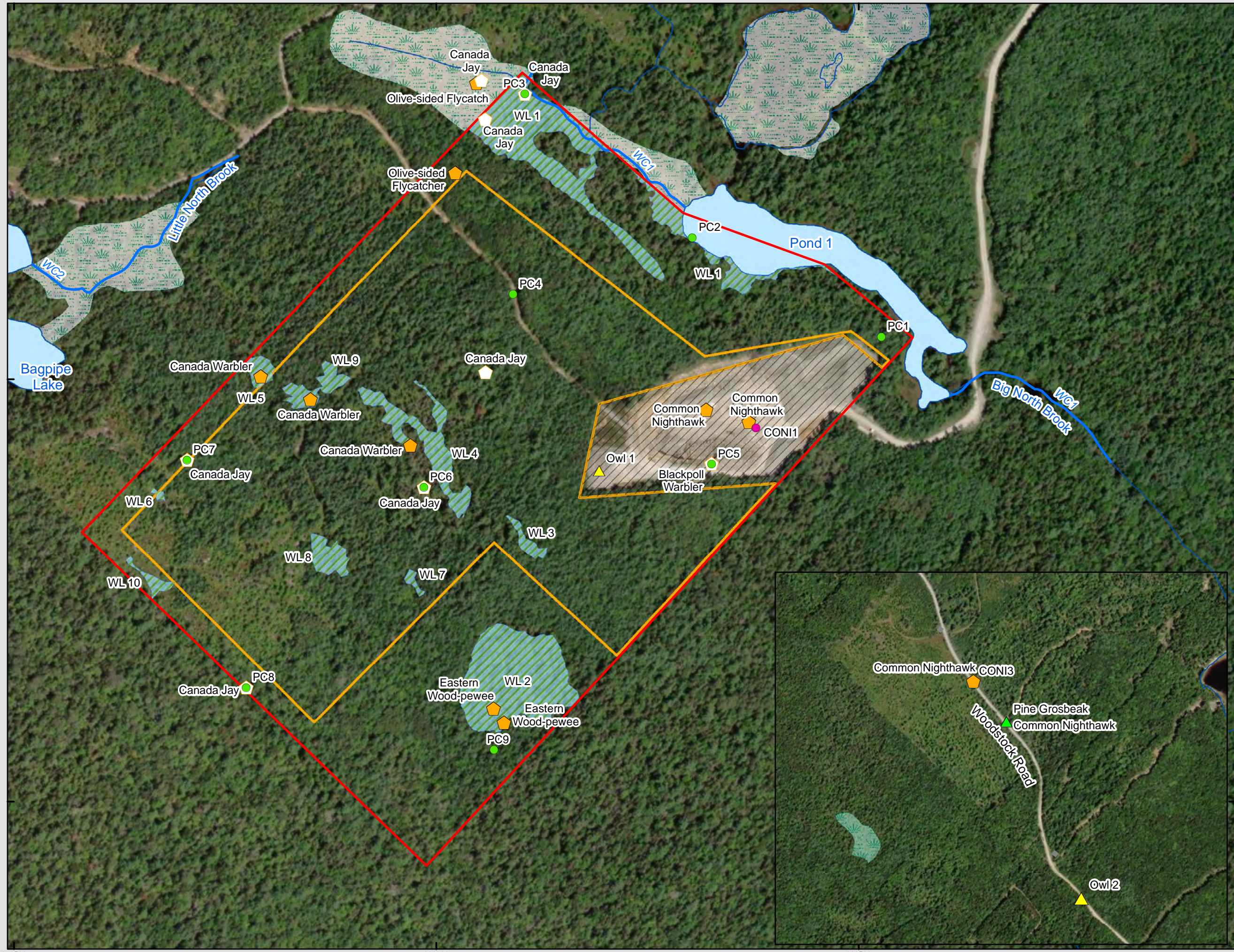
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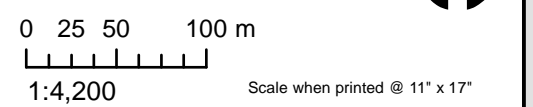
FIGURE 16

Avian Survey Results
Walden Quarry Expansion
Walden, NS

- ▲ Observed Bird (ACCDC)
- Avifauna Survey Point Count
- Common Nighthawk Survey Point Count
- ▲ Owl Survey Point Count
- ◆ SAR Observation
- SOCI Observation
- Mapped Watercourse (NSTDB)
- Field Verified Watercourse
- Field Verified Open Water
- NSECC Wetland Inventory
- Field Delineated Wetland
- IA Permit Area - Existing Quarry Footprint
- Proposed Quarry Expansion Area
- Study Area



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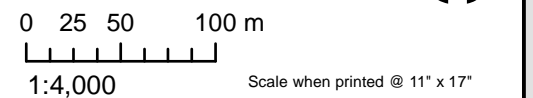
FIGURE 17

Wetland and Watercourse
Field Results
Walden Quarry Expansion
Walden, NS

- Mapped Watercourse (NSTDB)
- Field Verified Watercourse
- Field Verified Open Water
- NSECC Wetland Inventory
- Field Delineated Wetland
- Potential Wetland of Special Significance
- Direct Impacts
- IA Permit Area - Existing Quarry Footprint
- Proposed Quarry Expansion Area
- Study Area



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