

Appendix D

Wilson Pond wetland delineation

WETLAND DETERMINATION DATA FORM – NOVA SCOTIA

Project/Site: Wilson Pond East Municipality/County: Hants West Sampling Date: Nov. 8/2009
 Applicant/Owner: APWPS Sampling Point: 1
 Investigator(s): M. Smith / L. Charbonneau Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Flat slight downgrade 4% Local relief (concave, convex, none): (none)
 Slope (%): < 2% N 4986991 E 413360 Datum: NAD83
 Soil Map Unit Name: _____ Wetland Type: Shrub Swamp
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)
 Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes No _____
 Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____	If yes, optional Wetland Site ID: _____
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	
Remarks: (Explain alternative procedures here or in a separate report.)	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>5m</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Alnus rugosa</u>	<u>95</u>	<u>Yes</u>	<u>FACW</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)
2. <u>Abies balsamifera</u>	<u>3</u>		<u>FAC</u>	Total Number of Dominant Species Across All Strata: <u>3</u> (B)
3. <u>Picea mariana</u>	<u>2</u>		<u>FACW</u>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____				
5. _____				
<u>100</u> = Total Cover				Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size: <u>5m</u>)				Total % Cover of: _____ Multiply by: _____
1. <u>Acer rubra</u>	<u>17%</u>	<u>Yes</u>	<u>FAC</u>	OBL species <u>0</u> x 1 = <u>0</u>
2. _____				FACW species <u>4</u> x 2 = <u>8</u>
3. _____				FAC species <u>2</u> x 3 = <u>6</u>
4. _____				FACU species _____ x 4 = _____
5. _____				UPL species _____ x 5 = _____
<u>17%</u> = Total Cover				Column Totals: <u>6</u> (A) <u>14</u> (B)
Herb Stratum (Plot size: <u>5m</u>)				Prevalence Index = B/A = <u>2.3</u>
1. <u>Oxalis stricta</u>	<u>85%</u>	<u>Yes</u>	<u>FACW</u>	Hydrophytic Vegetation Indicators: _____ Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Cephus tribolus</u>	<u>3%</u>		<u>FACW</u>	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
Woody Vine Stratum (Plot size: <u>N/A</u>)				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____
1. _____				
2. _____				
<u>0</u> = Total Cover				
Remarks: (Include photo numbers here or on a separate sheet.)				
<u>See photos</u>				

SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)							
Depth (inches)	Matrix		Redox Features			Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹		
0-9							Fibrous-organic layer
A 0-33 12	7YR/3/1					Silty clay loam	Full of root fibres
B 12-28	7YR/2.5/1					silt loam	to >5% organic material
C 28-40	5YR/3/2			10%		clay loam	distinct material

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Depleted Dark Surface (F7)
- Sandy Redox (S5)

- Stripped Matrix (S6)
- Polyvalue Below Surface (S8)
- Thin Dark Surface (S9)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Redox Depressions (F8)
- Red Parent Material (TF2)

Indicators for Problematic Hydric Soils³:

- Sandy Gleyed Matrix (S4)
- Coast Prairie Redox (A16)
- 5 cm Mucky Peat or Peat (S3)
- Iron-Manganese Masses (F12)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes _____ No _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)

- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- Marl Deposits (B15)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Moss Trim Lines (B16)
- Dry-Season Water Table (C2)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- Microtopographic Relief (D4)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes No _____ Depth (inches): 10cm
 Water Table Present? Yes No _____ Depth (inches): 5cm
 Saturation Present? (includes capillary fringe) Yes No _____ Depth (inches): 5cm

Wetland Hydrology Present? Yes No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wilson Pond wetland – Note the connection between the areas

