

<b>PWA ASSESSMENT</b> <b>Detailed On-Site Analysis by Specialist(s)</b>	Region/Area:
PWA Name:	Water Body:
City/Township:	County:
Category of water body (e.g. Natural Environment, Recreational Development, General Development)	
Ecological Region	
Watershed:	
Watershed Authority:	
Rural, Suburban, or Urban?	

Is this part of a Grant Application:
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**Materials to gather for site visit:**

Lake Finder website: <ul style="list-style-type: none"> <li>- Lake Level Info</li> <li>- Lake Map (assessing littoral slope, fetch distance to PWA, etc.)</li> <li>- Lake position of PWA site</li> </ul>
Site plan Scaled print-out for on-site mark-up ( 1" = 20' scale) GIS map is useful

**PWA Details:**

<b>Existing Gray Infrastructure:</b>	
Contributing Area (note areas and runoff flow-path direction on plan/aerial photo)	
On-site Impervious (asphalt and gravel)	square feet
<ul style="list-style-type: none"> <li>- Direct:</li> <li>- Indirect:</li> </ul>	
On-site Pervious	square feet

Off-site Impervious (from outside the access site, streets, etc.)	square feet
<ul style="list-style-type: none"> <li>- Direct:</li> <li>- Indirect:</li> </ul>	
Off-site Pervious	
Parking Lot Islands	
How many:	
curbed    fenced    mounded    treed	
Existing Storm Water Treatment and/or Conveyance	
Describe:	
Boat Ramp	
<ul style="list-style-type: none"> <li>- Width</li> <li>- Condition (eroding along edges?)</li> </ul>	
Describe:	
Ramp Width:	linear feet
Shore Fishing Access	
pier    rocks    undefined	
Comments:	
<b>Existing Nonshoreline Green Infrastructure:</b>	
Size of Vegetated Area	square feet
Mowed turf	square feet
Invasive species presence	
Describe:	
Potential Retrofit Space Available for Storm Water Capture and Treatment	square feet
<ul style="list-style-type: none"> <li>- Parking lot edge</li> <li>- Parking lot islands</li> <li>- Flow Diversions needed to redirect runoff for treatment</li> </ul>	
Describe:	
Do storm water best management treatment opportunities exist?	
Comments:	

**Existing Soils and Subsoils at Potential Retrofit Locations:**

How well would water soak in?

- Compaction Level  
(compaction meter, rebar, wire flag)
  
- Soil Moisture Indication:  
Shallow Groundwater  
Elevation Difference from Lake Level  
Vegetation Indicator
  
- Shallow Bedrock Visible:
  
- Geotechnical Assessment:  
Soil Boring Options: By Reviewer with soil auger and water settling test to determine soil compounds  
By Geotechnical Consultant soil-boring logs

Comments:

**Shoreline Assessment:**

**Lake information**

Biome: Coniferous Forest \_\_\_ Deciduous Forest \_\_\_ Prairie Grasslands \_\_\_

Slope or aspect faces: east \_\_\_ west \_\_\_ south \_\_\_ north \_\_\_

Steepness of Slope: Nearly vertical \_\_\_ >45%angle \_\_\_ <45% angle \_\_\_ Relatively flat \_\_\_

Wave action on Shoreline: Severe \_\_\_ Moderate \_\_\_ Infrequent \_\_\_ Minimal \_\_\_

Estimated wave energy: High \_\_\_ Medium \_\_\_ Low \_\_\_

Source of wave action: Wind \_\_\_ Boats \_\_\_ other \_\_\_

Water level fluctuation: Highly variable \_\_\_ Moderately variable \_\_\_ Relatively stable \_\_\_  
Difference between normal and high \_\_\_\_\_

Reasons for water level change: seasonal \_\_\_ control at outlet \_\_\_ change after most rains \_\_\_

Ice ridge present: No \_\_\_ Yes \_\_\_ If yes, how high? \_\_\_\_\_

Fetch distance and direction across lake to PWA site:

Water Quality: Observed turbidity or clarity \_\_\_ TMDL-listed \_\_\_

<p><b>Nearby comparable reference site:</b> (Stable slope, undisturbed vegetation, unique features etc.) Describe:</p>	
Total shoreline length:	linear feet
<p>Provide a cross-section of the 'typical' shore land slope, and label Normal Water Level (NWL), High Water Level (HWL), etc.</p>	
<p>Provide a plan-view of the shore land area, showing erosion, overland flow path, existing invasive species, native plants, etc.</p>	
<p><b>Aquatic Zone (NWL to 18" depth):</b></p> <p>Determine slope in shallow water (distance from shore to 18" depth)</p> <p>Determine depth and length of aquatic zone                      square feet: _____</p> <p>Lake bottom material (muck, sand, gravel, cobble, rock)</p> <p>Existing vegetation: none ___ mostly native ___ mostly invasive ___ mix of both _____</p> <p>Are emergent plant beds nearby? If yes, what species?:</p> <p>Potential for emergent plant establishment?</p> <p>Is there woody debris present?</p> <p>Evidence of muskrat and or geese activity?</p>	
<p><b>Transitional Zone (NWL to HWL):</b></p> <p>Determine elevation difference and slope between NWL &amp; HWL</p> <p>Determine depth and length of transitional zone                      square feet _____</p>	

Identify eroding/eroded areas: length \_\_\_\_ height \_\_\_\_ undercut depth \_\_\_\_ other \_\_\_\_

Likely cause of erosion:

Soil type: sandy \_\_\_\_ loam \_\_\_\_ clay \_\_\_\_

Existing vegetation: none \_\_\_\_ mostly native \_\_\_\_ mostly invasive \_\_\_\_ mix of both \_\_\_\_

Evidence of muskrat and or geese activity?

**Upland zone (area above HWL):**

Determine slope of bank

Determine depth and length of upland zone square feet \_\_\_\_

Potential to expand buffer:

Identify eroding/eroded areas: length \_\_\_\_ height \_\_\_\_

Likely cause of erosion:

Soil type: sandy \_\_\_\_ loam \_\_\_\_ clay \_\_\_\_

Existing vegetation: none \_\_\_\_ mostly native \_\_\_\_ mostly invasive \_\_\_\_ mix of both \_\_\_\_

Evidence of muskrat and or geese activity?

Informal pathways by people

Light availability: full sun \_\_\_\_ part shade \_\_\_\_ shady \_\_\_\_

**Riprap Shoreline:**

Determine coverage of riprap:

Note average size and depth of rock:

Is there soil and debris amongst the rock?

Are there plants growing amongst the rock?

Is there potential to introduce soil and plants without substantial washout?

Comments:

Photos:	
Reviewer(s):	Date: