

***Appendix D***

***Modified Minnesota Routine Assessment Method for Evaluating  
Wetland Functions (MNRAM) Version 2.0***

## Modified Routine Assessment Methodology for Evaluating Wetland Functions and Values

Wetland Number: \_\_\_\_\_ Name of Wetland: \_\_\_\_\_

Location: \_\_\_\_\_

Watershed: \_\_\_\_\_ Ownership: \_\_\_\_\_

Date: \_\_\_\_\_ Evaluator(s): \_\_\_\_\_

Cowardin Classification: \_\_\_\_\_

Circular 39 Classification: \_\_\_\_\_

Is field inspection significantly different to aerial photo? Y or N

Estimated Size in acres: \_\_\_\_\_

Connected waters and wetlands: \_\_\_\_\_

### Summary of Function and Value Assessment:

Function	Value	Reason
Hydrology		
Vegetation Diversity		
Wildlife Habitat		
Fishery Habitat		
Flood/Stormwater Attenuation		
Water Quality Protection		
Shoreline Protection		
Aesthetics/Recreation/Education		

Hydrology								
Vegetation Diversity								
Wildlife Habitat								
Fishery Habitat								
Flood/Stormwater Attenuation								
Water Quality Protection								
Shoreline Protection								
Aesthetics/Recreation/Education								
Hydromorphology								

**Key:** 0 = N/A      P = Palustrine  
 1 = Low      L = Lacustrine  
 2 = Medium      R = Riverine  
 3 = High      F = Floodplain  
 4 = Exceptional      C = Constructed

Function/Value Classification Code: \_\_\_\_\_

### Hydrology and Surrounding Land Use

1. Hydrogeomorphology: (riverine, lacustrine, palustrine, floodplain, constructed)

2. Hydrology source: (groundwater, storm sewer, flow through wetland, unknown)
3. Has hydrology been substantially altered: Y or N If yes please explain:
  
4. Does wetland have discernable inlets and outlets? Y or N If yes please describe:
  
5. Standing water: Y or N If yes, maximum depth: \_\_\_\_\_
6. Percent inundated: \_\_\_\_\_%
7. Wetland's watershed in acres: \_\_\_\_\_ Describe the surrounding land uses:

### Vegetation

1. Record the percent of the site occupied by vegetation communities for each stratum and record the dominant species present.

% open water
% floating leafed community dominated by:
% emergent community dominated by:
% herbaceous community dominated by:
% shrub community dominated by:
% tree community dominated by:

2. Invasive and Exotic species:

	percent of area
	percent of area
	percent of area

3. Plant community types and quality:

Plant community #1:	Quality level:
Plant community #2:	Quality level:
Plant community #3:	Quality level:

4. Is the wetland plant community scarce or rare within the local matrix? Y or N

### Wildlife Habitat

1.

Y	N	Is the wetland used by locally rare species or listed species of U.S. or Minnesota?
Y	N	Is the area surrounding the wetland undeveloped and uncultivated?
Y	N	Does wildlife have uninhibited access to the wetland?
Y	N	Is wetland part of a corridor or corridor system?
Y	N	Compared to the matrix, is this wetland type rare or declining significantly?
Y	N	Is the wetland a provider for seasonal or intermittent habitat?

2. Observed wildlife at visit:

### Fish Habitat

1. Y or N Is the wetland contiguous with a permanent waterbody or watercourse such that it provides spawning/nursery habitat for gamefish?

### Flood and Stormwater Storage/Attenuation

1. H M L Functional level of the outlet in providing flood and stormwater storage/attenuation. (H - No outlet. M - Constricted or managed outlet. L - Excavated or enlarged outlet.)

2. **H M L** Functional level of retarding rate of flow through the wetland. (H – No channels present. M – Channels present, but not connected. L – Channels connecting inlet to outlet.)
3. **H M L** What is the flood/stormwater management level of the wetland. (H – Receives directed stormwater and water level managed to maximize flood/stormwater retention. M – Receives directed stormwater and water level unmanaged for flood/stormwater retention. L – Receives no directed stormwater and water level unmanaged for flood/stormwater retention.)
4. Describe the location of the wetland within the watershed. Upper Mid Lower

### Water Quality Protection

1.

Y	N	Does the wetland receive direct discharge of managed water?
Y	N	Does the surrounding area potentially deliver significant nutrient and/or sediment loads to the wetland?
Y	N	Does the wetland configuration allow adequate residence time so that sediments are able to settle?
Y	N	N/A For non-isolated wetlands, does the wetland have significant vegetative density to decrease water energy and allow settling of suspended material?
Y	N	Does the wetland have significant vegetative material to potentially increase uptake of dissolved nutrients?
Y	N	Are there signs of excess nutrient loading to the wetland? Algae bloom, reed canary grass, hybrid cattails

2. **Y or N** Does the wetland have a upland vegetative buffer area on upland adjacent to its boundary which slows and filters overland flow? If yes, note buffer characteristics within 100 ft. of wetlands edge.

3. Note average percent slope within 200 ft. of wetlands edge: \_\_\_\_\_

4. **Y or N** Are there problems with eroding shorelines, or at structures within wetland? If yes, please explain:

### Shoreline Protection

Y	N	Is the wetland a fringe area of a lake or watercourse? If no, skip to next section.
Y	N	If yes, is the shoreline exposed to frequent wave action?
Y	N	Is the shoreline wetland vegetated with submerged or emergent vegetation or perennial wetland species in the wash zone?
Y	N	Is the stream/lake bank prone to erosion?

### Aesthetics/Recreation/Education and Science

1. Note recreational, educational, and aesthetic values at this wetland and note possibilities: