Form 1: MA Freshwater Wetland Assessment

Surveyors:	Date:	
Watershed:	Point ID:	GPS ID:
HGM Classification:	Cowardin Classification:	
Class	Class	
Subclass	Water Regimes	
	Modifiers	
Start Time:	Finish Time:	
Comments:		
Sketch the AA:		

MassCAPS Freshwater Wetland Assessment
Form 2a: Transect Data Sheet

Transect (circle): N E S W

1. Vegetation

For each transect in AA1 list all species that have >/=10% cover in each subplot (r=2m).

Major vegetation classes: Trees=T, Shrubs=S, Herbaceous=H, Aquatic Bed: Floating= ABF, Aquatic Bed: Submergent=ABS

Species	Major Vegetative Class	% Cover of Subplot *Range: 6-15%, 16-25%, 26-50%, 51-75%, 76-95%, 96-100%*		
		Plot 1	Plot 2	Plot 3

Comments/Photo ID:

Total % cover of each major vegetative class in each subplot. *(Use cover ranges from above)*

Subplot	T	S	H	ABF	ABS
1					
2					
3					

2. Buffer Zone Condition

Assess the 30.5m buffer zone of the AA. Start from the end of each transect and walk to the buffer (within 50m). Break the buffer into 3 zones: inner 7.6m, middle 7.6m, outer 15m.

Indicate if the following conditions are present (P) or absent (A). If present indicate the % of the zone that is in the following conditions.
(Use the following ranges: <10%, 10-50%, 50-90%, >90%)

Condition	Inner 7.6m		Middle 7.6m		Outer 15m	
	A or P	% Effected	A or P	% Effected	A or P	% Effected
a. Mowed turf						
b. Hay/pasture						
c. Row crop						
d. Impervious						
e. Subject to vegetation management						
f. Logging Road						
g. Natural						
Indicate if absent or present. If present indicate the % of the zone that is affected by the following.						
h. Trash/litter						
i. Garbage dumping circle: historic/ recent						
j. Leaf/brush dumping						

Comments/Photo ID:

Indicate the number of point source discharges in the buffer zones.

Zone	Inner 7.6m	Middle 7.6m	Outer 15m
# of point source discharges			

Comments/Photo ID:

Indicate if there is evidence of erosion & sedimentation in the buffer zones. If present indicate the extent of area impacted.

Inner 7.6m		Middle 7.6m		Outer 15m	
A or P	% Effected	A or P	% Effected	A or P	% Effected

Comments/Photo ID:

Indicate the number and type of structures if present within the buffer zone. (***Structure categories: Agricultural, Commercial, Industrial, or Residential***)

	Inner 7.6m	Middle 7.6m	Outer 15m
# of structures			
Type of structure			

Comments/Photo ID:

3. Invasive Species

For AA2 record all invasive species that intercept the transect line (50m), and record the % cover of the line (distance invasive species intercepts the line/total line length). In addition, record all invasives that are seen while walking the transect.

Species	% Cover of the line	Species	% Cover of the line

Record all other invasives. List species identified below.

Invasive plants within AA2			

Comments/Photo ID:

4. Topographic complexity

Walk the transect and record the number of changes in elevation per stride (4:1 slope, 0.3m change) and the number of hummocks that intercept each transect (30m) in AA1.

# of Hummocks	# of Transitions

Comments/Photo ID:

MassCAPS Freshwater Wetland Assessment
Form 2b: Transect Soil Profiles and Water Chemistry **1 of 2**

At the midpoint of the transect dig a 0.5m test pit and record depth to observed ground water and describe the soil profile. Record the pH, temperature, conductivity and turbidity of the water (test groundwater (GW) if surface water (SW) is not present.

Location	Sample taken from SW or GW		pH	Temp.	Conductivity	Turbidity	
Central	□ SW	□ GW					
	Depth to observed water (cm)	Indicate weeping=W or standing=S water	Horizon	Depth	Matrix Color	Redoximorphic Features	
						Color	%

Comments/Photo ID:

N	Sample taken from SW or GW		pH	Temp.	Conductivity	Turbidity	
	□ SW	□ GW					
	Depth to observed water (cm)	Indicate weeping=W or standing=S water	Horizon	Depth	Matrix Color	Redoximorphic Features	
						Color	%

Comments/Photo ID:

E	Sample taken from SW or GW		pH	Temp.	Conductivity	Turbidity	
	□ SW	□ GW					
	Depth to observed water (cm).	Indicate weeping=W or standing=S water	Horizon	Depth	Matrix Color	Redoximorphic Features	
						Color	%

Comments/Photo ID:

Form 2b: Transect Soil Profiles and Water Chemistry **2 of 2**

Location	Sample taken from SW or GW			pH	Temp.	Conductivity	Turbidity	
S	□ SW	□ GW						
	Depth to observed water (cm).	Indicate weeping=W or standing=S water		Horizon	Depth	Matrix Color	Redoxymorphic Features	
							Color	%
Comments/Photo ID:								
W	Sample taken from SW or GW			pH	Temp.	Conductivity	Turbidity	
	□ SW	□ GW						
	Depth to observed water (cm).	Indicate weeping=W or standing=S water		Horizon	Depth	Matrix Color	Redoxymorphic Features	
							Color	%
Comments/Photo ID:								

MassCAPS Freshwater Wetland Assessment
Form 3: Hydrology

1. Describe the hydrologic state at the time of assessment (AA1)		
□ Ponded or inundated	□ Surface water	□ Dry

2. Estimate % of AA1 that was inundated during the most recent high water period (Based on field indicators of surface water such as water marks on trees, etc.)			
□ <10%	□ 10-50%	□ 50-90%	□ >90%

3. Estimate average depth of the inundated portion of AA 1 during the most recent high water period (Based on field indicators of surface water)		
□ >0.7m	□ 0.4-0.7m	□ <0.4m

4. Indicate if there is evidence that surface water moves through the wetland (drift lines, surface scour, sediment deposits, etc.) as surface sheet flow or single/multiple channels in AA1.			
□ No evidence of surface water movement	□ Surface sheet flow	□ Single channel	□ Multiple channels

5. Indicate if there are water control structures present in AA2. Check all that apply.				
□ Culvert	□ Storm water inputs	□ Channelization	□ Dam	□ Fill (road/railroad)
□ Beaver dam	□ Weir	□ Ditching	□ Other	□ None
Comments/ Photo ID:				

6. Up and down gradient from AA2 are water control structures present? Check all that apply (*Walk minimum of 100m up and downstream from plot center. Follow any stream channel that has the greatest impact to the wetland*) If present proceed to question 7 and 8.				
□ Culvert	□ Storm water inputs	□ Channelization	□ Dam	□ Fill (road/railroad)
□ Beaver dam	□ Weir	□ Ditching	□ Other	□ None
Comments/ Photo ID:				

7. Indicate the net affect of any control structures present on the hydrology of the AA.	Unlikely	Some-what likely	Likely	Definite
Wetter				
Drier				
8. If Definite, Some-what likely or Likely, indicate the degree of impact (% of AA) the structure has on the AA?	<10%	10-50%	50-90%	>90%
Comments/Photo ID:				

MassCAPS Freshwater Wetland Assessment
Form 4: Human Disturbance

1. Evidence of motorized or non-motorized vehicle use in AA2. ***Determine after walking all transects***						
Check all that are present:	Walking Trail	Horse Trail	Logging Road	ATV trail	Old cart path	Roads
Linear m of trail						
Photo ID number						
Comments/Photo ID:						
2. Trash/litter. Check if absent/present. If present indicate the % of AA2 that is affected.	Absent	Present	<10%	10-50%	50-90%	>90%
3. Garbage dumping. Check if absent/present. If present indicate the % of AA2 that is affected. Indicate recent or historic.	Absent	Present	<10%	10-50%	50-90%	>90%
4. Evidence of mowing. Check if absent/present. If present indicate % of AA2 that is affected.	Absent	Present	<10%	10-50%	50-90%	>90%
5. Evidence of burning (excluding prescribed burning). Check if absent/present. If present indicate the % of AA2 that is affected.	Absent	Present	<10%	10-50%	50-90%	>90%
Comments/Photo ID:						