

**Milk-Marias Wetland Assessment Form**

**ASSESSMENT AREA INFORMATION**

Site ID	Date
Site Name	Observer(s)
Level 4 Ecoregion	
Land Ownership	
HUC4/HUC5/HUC6	
GPS Coordinates at the assessment area center (UTMs)	Notes on movement of the AA center:
Waypoint ID	
Datum	
Easting (X)	
Northing (Y)	
Accuracy	

General AA description, including surrounding uplands

Directions to AA and Access Comments:

Soil Drainage (check one)		Topographic Position (check one)		Amount of AA Covered by Standing Water (check one)	
<input type="checkbox"/> Well-drained		<input type="checkbox"/> slope		<input type="checkbox"/> none	
<input type="checkbox"/> Mod well-drained		<input type="checkbox"/> depression		<input type="checkbox"/> 1-25%	
<input type="checkbox"/> Poorly drained		<input type="checkbox"/> floodplain		<input type="checkbox"/> 26-50%	
<input type="checkbox"/> Very poorly drained		<input type="checkbox"/> flat		<input type="checkbox"/> 51-75%	
				<input type="checkbox"/> 76-100%	

**Assessment Area Photos-Taken from the center of the AA in the four cardinal directions**

Photo #	Photo Card	Description
Photo #	N	
Photo #	E	
Photo #	S	
Photo #	W	
Additional Photos:		

**CLASSIFICATION**

<b>Ecological System (check one--use Key to Ecological Systems)</b>		<b>Confidence Level</b>
<input type="checkbox"/> RM Fen	<input type="checkbox"/> LM Riparian Woodland and Shrubland	<input type="checkbox"/> Very High
<input type="checkbox"/> RM Wet Meadow	<input type="checkbox"/> Other	<input type="checkbox"/> High
<input type="checkbox"/> W. N. Am. Emergent Marsh		<input type="checkbox"/> Medium
<input type="checkbox"/> RM Riparian Shrubland		<input type="checkbox"/> Low
<input type="checkbox"/> RM Riparian Woodland		
<input type="checkbox"/> NRM Wooded Vernal Pool		

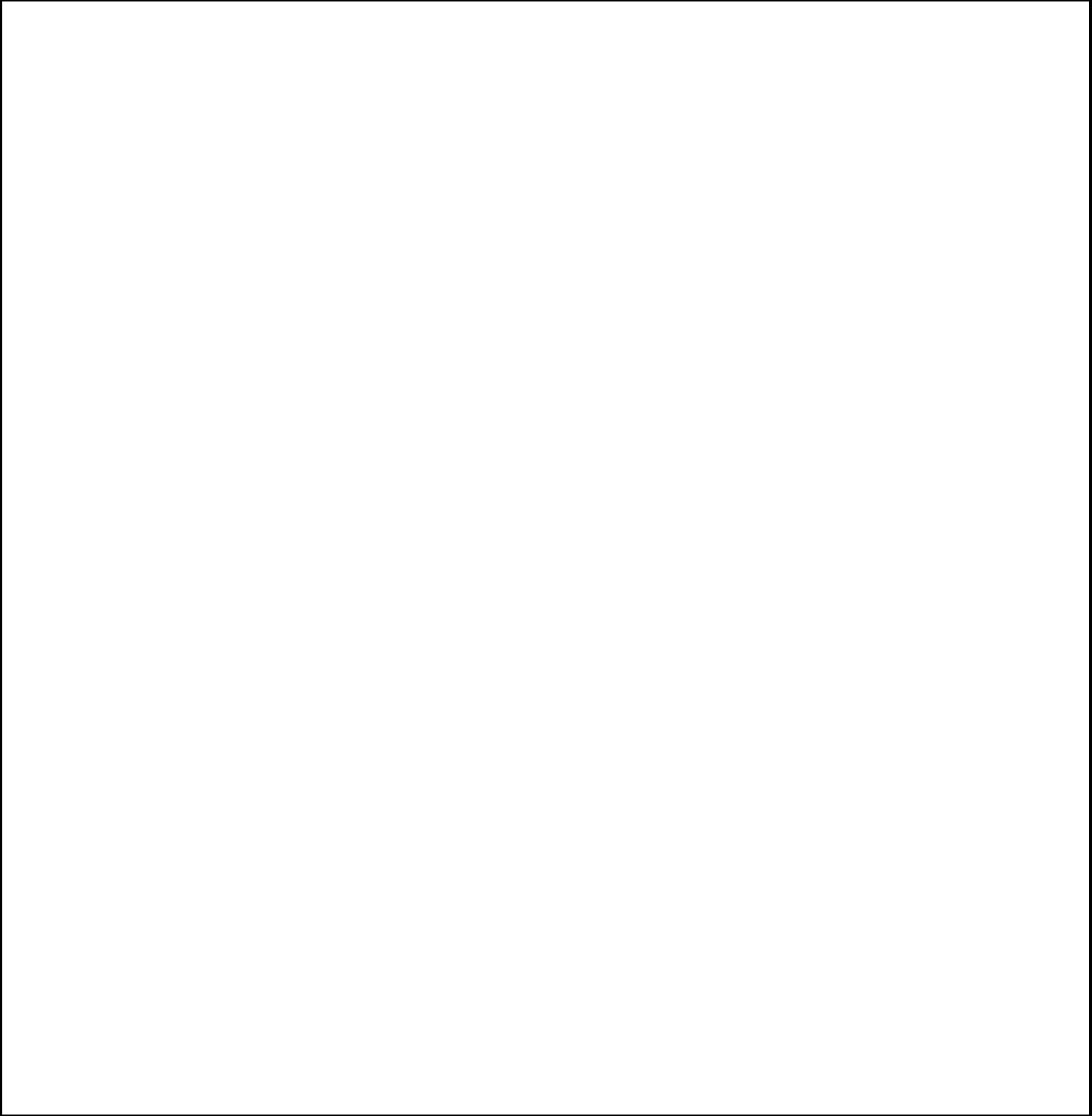
Dominant Vegetation Association(s)	Reason for selecting confidence level:
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<b>HGM Class (check one)</b>	<b>Confidence Level</b>	Reason for selecting confidence level:
<input type="checkbox"/> Riverine	<input type="checkbox"/> Very High	
<input type="checkbox"/> Depressional	<input type="checkbox"/> High	
<input type="checkbox"/> Flat	<input type="checkbox"/> Medium	
	<input type="checkbox"/> Low	

<b>Cowardin System</b>	<b>Cowardin Class</b>
<input type="checkbox"/> Palustrine (P)	<input type="checkbox"/> Aquatic Bed (AB)
<input type="checkbox"/> Lacustrine Littoral (L2)	<input type="checkbox"/> Moss Lichen (ML)
<input type="checkbox"/> Riverine Lower Perennial (R2)	<input type="checkbox"/> Emergent (EM)
<input type="checkbox"/> Riverine Upper Perennial (R3)	<input type="checkbox"/> Forested (FO)
	<input type="checkbox"/> Scrub-Shrub (SS)
	<input type="checkbox"/> Unconsolidated Bottom (UB)
	<input type="checkbox"/> Unconsolidated Shore (US)

<b>Cowardin Water Regime</b>	<b>Cowardin Special Modifiers</b>
<input type="checkbox"/> Permanently Flooded (H)	<input type="checkbox"/> Beaver (b)
<input type="checkbox"/> Intermittently Exposed (G)	<input type="checkbox"/> Excavated (x)
<input type="checkbox"/> Semi-permanently Flooded (F)	<input type="checkbox"/> Partially ditched/draind (d)
<input type="checkbox"/> Artificially Flooded (K)	<input type="checkbox"/> Diked/impounded (h)
<input type="checkbox"/> Seasonally Flooded (C)	<input type="checkbox"/> Farmed (f)
<input type="checkbox"/> Saturated (B)	
<input type="checkbox"/> Temporarily Flooded (A)	
<input type="checkbox"/> Intermittently Flooded (J)	

**ASSESSMENT AREA DRAWING (add north arrow, document plant zones, indicate direction of drainage into or out of wetland, and include sketch of vegetation plot and soil pit placement). ALSO INDICATE ALL PLANT ZONES ON AERIAL PHOTO, IF POSSIBLE**



Notes:

**SOIL PROFILE DATA FORM**

SiteID \_\_\_\_\_

Soil Pit # \_\_\_\_\_ GPS Waypoint \_\_\_\_\_ (draw soil pit location on site drawing)  
 Easting \_\_\_\_\_ Northing \_\_\_\_\_ Accuracy \_\_\_\_\_

Depth (cm)	Layer	Texture	Matrix Color* (Hue/Value/Chroma)	Redox Concentrations (Hue/Value/Chroma)	Redox Depletions (Hue/Value/Chroma)	Redox Concentration Abundance (%)	Redox Depletion Abundance (%)	**Hydric Soil Indicators Present? (Yes/No)	Depth to Saturation (cm)	Depth to free water in pit (cm) (NP=not present)
TOTAL PIT DEPTH (cm)										

- \*\*Hydric Soil Indicators (check all that apply):**
- Histosol (Organic layer greater than 20 cm)
  - Histic Epipedon (Organic layer at least 20 cm from surface)
  - Sulfidic (rotten eggs) odor
  - Organic streaking (dark vertical streaks in the subsurface layers)
  - Gleyed or Low Chroma Colors
  - Redox depletions-areas in soil that have lost iron; gray or reddish-gray in color
  - Redox concentrations-oxidation of iron; in patches, along root channels and in pores

Note: Redoximorphic features cannot form in soils with parent materials that are low in iron and manganese

Remarks:

\*To determine the soil matrix color: if soils are dry, wet sample until it no longer changes color. Always have the sun at your back when comparing to color chart to find best match.



<b>Stratum #3 (indicate location on site drawing)</b>			
Stratum		Leaf Type (can check more than one)	
<input type="checkbox"/> Forest/Woodland (Trees/Shrubs > 5 m)	<input type="checkbox"/> Broad-leaved	<input type="checkbox"/> Needle-leaved	
<input type="checkbox"/> Shrubland (Shrubs >0.5-5 m)	<input type="checkbox"/> Broad-leaved	<input type="checkbox"/> Needle-leaved	<input type="checkbox"/> Microphyllous
<input type="checkbox"/> Dwarf Shrubland (<0.5 m)	<input type="checkbox"/> Broad-leaved	<input type="checkbox"/> Needle-leaved	<input type="checkbox"/> Microphyllous
<input type="checkbox"/> Herbaceous (e.g., Graminoids, Forbs, Ferns)	<input type="checkbox"/> Graminoid	<input type="checkbox"/> Forb	<input type="checkbox"/> Fern
<input type="checkbox"/> Nonvascular (Bryophytes, cryptogamic crusts)			
<input type="checkbox"/> Submerged/Floating (Rooted or floating-exclude emergent)			
<input type="checkbox"/> Sparsely Vegetated (including bare ground)			
Dominant Species	Height Class	Cover Class	Comments

<b>Stratum #4 (indicate location on site drawing)</b>			
Stratum		Leaf Type (can check more than one)	
<input type="checkbox"/> Forest/Woodland (Trees/Shrubs > 5 m)	<input type="checkbox"/> Broad-leaved	<input type="checkbox"/> Needle-leaved	
<input type="checkbox"/> Shrubland (Shrubs >0.5-5 m)	<input type="checkbox"/> Broad-leaved	<input type="checkbox"/> Needle-leaved	<input type="checkbox"/> Microphyllous
<input type="checkbox"/> Dwarf Shrubland (<0.5 m)	<input type="checkbox"/> Broad-leaved	<input type="checkbox"/> Needle-leaved	<input type="checkbox"/> Microphyllous
<input type="checkbox"/> Herbaceous (e.g., Graminoids, Forbs, Ferns)	<input type="checkbox"/> Graminoid	<input type="checkbox"/> Forb	<input type="checkbox"/> Fern
<input type="checkbox"/> Nonvascular (Bryophytes, cryptogamic crusts)			
<input type="checkbox"/> Submerged/Floating (Rooted or floating-exclude emergent)			
<input type="checkbox"/> Sparsely Vegetated (including bare ground)			
Dominant Species	Height Class	Cover Class	Comments

<b>Stratum #5 (indicate location on site drawing)</b>			
Stratum		Leaf Type (can check more than one)	
<input type="checkbox"/> Forest/Woodland (Trees/Shrubs > 5 m)	<input type="checkbox"/> Broad-leaved	<input type="checkbox"/> Needle-leaved	
<input type="checkbox"/> Shrubland (Shrubs >0.5-5 m)	<input type="checkbox"/> Broad-leaved	<input type="checkbox"/> Needle-leaved	<input type="checkbox"/> Microphyllous
<input type="checkbox"/> Dwarf Shrubland (<0.5 m)	<input type="checkbox"/> Broad-leaved	<input type="checkbox"/> Needle-leaved	<input type="checkbox"/> Microphyllous
<input type="checkbox"/> Herbaceous (e.g., Graminoids, Forbs, Ferns)	<input type="checkbox"/> Graminoid	<input type="checkbox"/> Forb	<input type="checkbox"/> Fern
<input type="checkbox"/> Nonvascular (Bryophytes, cryptogamic crusts)			
<input type="checkbox"/> Submerged/Floating (Rooted or floating-exclude emergent)			
<input type="checkbox"/> Sparsely Vegetated (including bare ground)			
Dominant Species	Height Class	Cover Class	Comments

LANDSCAPE CONTEXT		
<b>Connectivity</b>		
<i>Non-riverine</i>	Select the statement that best describes the <b>landscape connectivity</b> within a 500 m buffer of the AA: <b>1.</b> Intact: AA embedded in 90-100% unfragmented, natural landscape. <b>2.</b> Variegated: AA embedded in 60-90% unfragmented, natural landscape. <b>3.</b> Fragmented: AA embedded in 20-60% unfragmented, natural landscape. <b>4.</b> Relictual: AA embedded in <20 % unfragmented, natural landscape.	
<i>Riverine</i>	Select the statement that best describes the <b>landscape connectivity</b> within 500 m upstream and downstream of the AA: <b>1.</b> Intact: AA embedded in 90-100% unfragmented, natural landscape. <b>2.</b> Variegated: AA embedded in 60-90% unfragmented, natural landscape. <b>3.</b> Fragmented: AA embedded in 20-60% unfragmented, natural landscape. <b>4.</b> Relictual: AA embedded in <20 % unfragmented, natural landscape.	
<b>Buffer</b>		
<i>Length</i>	Select the statement that best describes the <b>buffer length</b> of the AA: <b>1.</b> Buffer is 76-100% of the AA perimeter. <b>2.</b> Buffer is 51-75% of the AA perimeter. <b>3.</b> Buffer is 25-50% of the AA perimeter. <b>4.</b> Buffer is <25% of the AA perimeter, OR no buffer exists.	
<i>Width</i>	Select the statement that best describes the <b>buffer width</b> of the AA: <b>1.</b> Average buffer width between edge of the AA and the edge of the buffer is >200 m. <b>2.</b> Average buffer width between edge of AA and the edge of the buffer is >100-200 m. <b>3.</b> Average buffer width between edge of the AA and the edge of the buffer is 50-100 m. <b>4.</b> Average buffer width between edge of the AA and the edge of the buffer is <50 m, OR no buffer exists.	
<i>Condition</i>	Select the statement that best describes the <b>buffer condition</b> of the AA: <b>1.</b> Abundant (>95%) native vegetation cover, little or no (<5%) cover of non-native plants, intact soils, AND little or no trash. <b>2.</b> Substantial (>75-95%) native vegetation cover, low (5-25%) cover of non-native plants, intact or moderately disturbed soils, moderate or lesser amounts of trash, OR evidence of minor human visitation or recreation. <b>3.</b> Moderate (50-75%) native vegetation cover, moderate or extensive soil disturbance, moderate or greater amounts of trash, OR evidence of moderate human visitation or recreation. <b>4.</b> Low (<50%) cover of native vegetation, barren ground and highly disturbed soils, moderate or greater amounts of trash, evidence of high intensity human visitation or recreation, OR no buffer exists.	
<i>Buffer Condition Comments</i>	Describe elements that are NOT considered part of the buffer (e.g., roads, agriculture, etc.)	
<b>SIZE</b>		
<b>Relative Patch Size</b>	Select the statement that best describes the <b>relative patch size</b> of the entire wetland (current size of the wetland divided by the historic size of the wetland): <b>1.</b> Wetland is >95% of original size. <b>2.</b> Wetland is >80-95% of original size. <b>3.</b> Wetland is >50-80% of original size. <b>4.</b> Wetland is <50% of original size.	
<b>Absolute Patch Size</b>	Estimate the size of the entire wetland (from the aerial photo OR from the GIS). IF YOU ARE UNABLE TO ESTIMATE SIZE, PLEASE INDICATE ON THE FORM THAT THE SIZE SHOULD BE ESTIMATED IN THE OFFICE.	
<b>VEGETATION STRUCTURE (BIOTA)</b>		
<b>Relative Cover of Native Plant Species</b>	Select the statement that best describes the <b>relative cover of native plant species</b> within the AA: <b>1.</b> >99% of the vegetation cover within the AA is comprised of native vegetation. <b>2.</b> 95-99% of the vegetation cover within the AA is comprised of native vegetation. <b>3.</b> 80-94% of the vegetation cover within the AA is comprised of native vegetation. <b>4.</b> <80% of the vegetation cover within the AA is comprised of native vegetation. <b>5.</b> <50% of the vegetation cover within the AA is comprised of native vegetation.	
<b>Invasive exotic species</b>	Select the statement that best describes <b>invasive exotic species</b> within the AA: <b>1.</b> <1% of the vegetation cover within the AA is comprised of invasive exotic species. <b>2.</b> 1-3% of the vegetation cover within the AA is comprised of invasive exotic species. <b>3.</b> >3-5% of the vegetation cover within the AA is comprised of invasive exotic species. <b>4.</b> >5% of the vegetation cover within the AA is comprised of invasive exotic species.	
<b>Invasive or highly tolerant natives</b>	Select the statement that best describes the <b>invasive or highly tolerant natives</b> within the AA: <b>1.</b> <5% of the vegetation cover within the AA is comprised of invasive or tolerant native plant species. <b>2.</b> 5-10% of the vegetation cover within the AA is comprised of invasive or tolerant native plant species. <b>3.</b> >10-25% of the vegetation cover within the AA is comprised of invasive or tolerant native plant species. <b>4.</b> >25% of the vegetation cover within the AA is comprised of invasive or tolerant native plant species.	

<b>Organic Matter Accumulation</b>	Select the statement that best describes the <b>organic matter accumulation</b> of the site: <b>1.</b> Site has moderate amount of fine organic matter. New growth is more prevalent than previous years' growth. Layers of litter in pools or areas of topographic lows are thin. <b>2.</b> Site is characterized by small amounts of coarse organic debris, with little plant recruitment, OR debris is somewhat excessive. <b>3.</b> Site has little coarse debris and/or only scant fine debris OR debris is excessive.	
<b>Physical Patch Types</b>	How many <b>physical patch types</b> occur within the site (refer to physical patch type table)?	
<b>Patch Interspersion</b>	Select the statement that best describes the <b>patch interspersion</b> of the site: <b>1.</b> Horizontal structure consists of a very complex array of nested or interspersed irregular biotic/abiotic patches with no single dominant type. <b>2.</b> Horizontal structure consists of a moderately complex array of nested or interspersed irregular biotic/abiotic patches with no single dominant type. <b>3.</b> Horizontal structure consists of a simple array of nested or interspersed irregular biotic/abiotic patches with no single dominant type. <b>4.</b> Horizontal structure consists of one dominant patch type with no interspersion.	
<b>PHYSICOCHEMICAL</b>		
<b>Soil Surface Integrity</b>	Select the statement that describes the <b>soil surface integrity</b> of the site: <b>1.</b> Bare soil is limited to naturally caused disturbances such as flood deposition or game trails. <b>2.</b> Some bare soil due to human causes (including livestock) is present but the extent and impact is minimal. The depth of disturbance is limited to only a few inches and does not show evidence of ponding or channeling water. Any disturbance is likely to recover within a few years after the disturbance is removed. <b>3.</b> Bare soil due to human causes is common and will be slow to recover. There may be pugging due to livestock resulting in several inches of soil disturbance. ORVs or other machinery may have left some shallow ruts. Damage is not excessive and the site will recover with the removal of degrading human influences and moderate recovery times. <b>4.</b> Bare soil substantially degrades the site due to altered hydrology or other long-lasting impacts. Deep ruts from ORVs or machinery may be present, or livestock pugging and/or trails are widespread. Water, if present, would be channeled or ponded. The site will not recover without restoration and/or long recovery times.	
<b>Water Quality</b>	Select the statement that best describes the <b>water quality</b> of the site: <b>1.</b> No visual evidence of degraded water quality. Wetland species that respond to high nutrient levels are minimally present, if at all. Water is clear with no strong green tint or sheen. <b>2.</b> Some negative water quality indicators are present, but limited to small and localized areas within the wetland. Wetland species that respond to high nutrient levels may be present but are not dominant. Water may have a minimal greenish tint, cloudiness, or sheen. <b>3.</b> Negative water quality indicators or wetland species that respond to high nutrient levels are common. Sources of water quality degradation are apparent. Water may have a moderate greenish tint, sheen or other turbidity with algae common. <b>4.</b> Wetland is dominated by vegetation species that respond to high nutrient levels or there is widespread evidence of other negative water quality indicators. Algal mats may be extensive, blocking light to the bottom. Sources of water quality degradation are typically apparent. Water has strong greenish tint, sheen, or turbidity. The bottom difficult to see during the growing season.	
<b>HYDROLOGY</b>		
<b>Water Source</b>	Select the statement that best describes the <b>water source under dry season conditions of the AA</b> : <b>1.</b> Sources are precipitation, groundwater, and/or natural runoff, or natural flow from an adjacent freshwater body, or the AA naturally lacks water in the dry season. <b>2.</b> Sources are mostly natural but can include occasional or small effects of modified hydrology (e.g., developed land or irrigated agricultural land comprising less than 20% of the drainage basin within 2 km of the AA, presence of a few small stormdrains or scattered homes with septic systems). No large point sources or dams control the overall hydrology. <b>3.</b> Sources or withdrawals are primarily from anthropogenic sources (e.g., urban runoff, direct irrigation, diversions, pumped water, impoundments, regulated releases through a dam, developed or irrigated agricultural land comprising more than 20% of the drainage basin within 2 km of the AA, presence of major drainage point source discharges that obviously control the hydrology of the AA). <b>4.</b> Natural sources have been eliminated based on the following indicators: impoundment of all wet season inflows, diversions of all dry-season inflows, predominance of xeric vegetation, etc.	
<b>Hydroperiod (for depression, lacustrine, and slope wetlands--NOT fens)</b>	Which of the following statements best describes the <b>hydroperiod</b> of the site: <b>1.</b> Hydroperiod of the AA is characterized by natural patterns of filling or inundation and drying or drawdowns. <b>2.</b> The filling or inundation patterns in the AA are of greater magnitude or duration than would be expected under natural conditions, but thereafter the AA is subject to natural drawdown or drying. <b>3.</b> Hydroperiod of the AA is characterized by natural patterns of filling or inundation, but thereafter, is subject to more rapid or extreme drawdown or drying, as compared to more natural wetlands. OR The filling or inundation patterns in the AA are of substantially lower magnitude or duration than would be expected under natural conditions, but thereafter, the AA is subject to natural drawdown or drying. <b>4.</b> Both the inundation and drawdown of the AA deviate from natural conditions (either increased or decreased in magnitude and/or duration).	

<b>Hydroperiod (for fens)</b>	Select the statement that best describes the <b>hydroperiod</b> of the site: <b>1.</b> Hydroperiod of the site is characterized by stable, saturated hydrology, or by naturally damped cycles of saturation and partial drying. <b>2.</b> Hydroperiod of the site experiences minor altered inflows or drawdown/drying, as compared to more natural wetlands (e.g., ditching). <b>3.</b> Hydroperiod of the site is somewhat altered by greater increased inflow from runoff, or experiences moderate drawdown or drying, as compared to more natural wetlands (e.g., ditching). <b>4.</b> Hydroperiod of the site is greatly altered by increased inflow from runoff or experiences large drawdown or drying, as compared to more natural wetlands (e.g., ditching).	
<b>Hydroperiod (for riverine sites)</b>	Select the statement that best describes the <b>hydroperiod</b> of the site (based on field indicators in the worksheet): <b>1.</b> Most of the channel through the AA is characterized by equilibrium conditions, with little evidence of aggradation or degradation. <b>2.</b> Most of the channel through the AA is characterized by some aggradation or degradation, none of which is severe, and the channel seems to be approaching an equilibrium form. <b>3.</b> There is evidence of severe aggradation or degradation of most of the channel through the AA, or the channel is artificially hardened through less than half of the AA. <b>4.</b> The channel is concrete or otherwise artificially hardened through most of the AA.	
<b>Groundwater Connectivity</b>	Are there areas within the assessment area buffer that indicate groundwater connectivity (e.g., visually confirmed, temporary surface water connection to an upslope wetland; areas of vigorous growth of upland vegetation relative to the surrounding uplands).	
<b>Hydrologic Connectivity (for depressional, lacustrine, and slope wetlands--NOT isolated fens)</b>	Select the statement that best describes the <b>hydrologic connectivity</b> of the site: <b>1.</b> Rising water in the AA has unrestricted access to adjacent areas without levees or other obstructions to the lateral movement of flood waters. <b>2.</b> Unnatural features such as levees or road grades limit the amount of adjacent transition zone or the lateral movement of floodwaters, relative to what is expected for the setting, but the limitations exist for less than 50% of the AA perimeter. Restrictions may be intermittent along the margins of the AA, or they may occur only along one bank or shore. <b>3.</b> The amount of adjacent transition zone or the lateral movement of flood waters to and from the AA is limited, relative to what is expected for the setting, by unnatural features such as levees or road grades, for 50–90% of the AA perimeter. Flood flows may exceed the obstructions, but drainage out of the AA is probably obstructed. <b>4.</b> The amount of adjacent transition zone or the lateral movement of flood waters is limited, relative to what is expected for the setting, by unnatural features such as levees or road grades, for more than 90% of the AA perimeter.	
<b>Hydrologic Connectivity (for naturally isolated fens)</b>	Select the statement that best describes the <b>hydrologic connectivity</b> of the site: <b>1.</b> No natural connectivity with the surrounding water bodies. <b>2.</b> Partial connectivity (e.g., ditching or draining to dry the fen). <b>3.</b> Substantial to full connectivity that has obvious effects of drying the peat body.	
<b>Hydrologic Connectivity (for confined riverine wetlands)</b>	Select the statement that best describes the <b>hydrologic connectivity</b> of the site based on the entrenchment ratio calculation: <b>1.</b> Entrenchment ratio >2.0. <b>2.</b> Entrenchment ratio 1.6-2.0. <b>3.</b> Entrenchment ratio 1.2-1.5. <b>4.</b> Entrenchment ratio <1.2.	
<b>Hydrologic Connectivity (for unconfined riverine wetlands)</b>	Select the statement that best describes the <b>hydrologic connectivity</b> of the site based on the entrenchment ratio calculation: <b>1.</b> Entrenchment ratio >2.2. <b>2.</b> Entrenchment ratio 1.9-2.2. <b>3.</b> Entrenchment ratio 1.5-1.8. <b>4.</b> Entrenchment ratio <1.5.	

<b>PHYSICAL PATCH TYPE</b>	<b>CHECK ONE</b>
Open water-pond or lake	
Open water -pools	
Open water-river/stream	
Open water-oxbow/backwater channel	
Open water-tributary/secondary channel	
Open water-beaver pond	
Deep emergent plants (> 0.5 m water depth)	
Shallow emergent plants (< 0.5 m water depth)	
Submerged/floating vegetation	
Active beaver dam	
Adjacent or onsite springs/seeps	
Shrubs/Trees	
Transitional meadow	
Saline meadow	
Debris jams/woody debris	
Pool/riffle complex	
Point bars	
Mudflats	
Wet meadow patches	
Plant hummocks/sediment mounds	
Water tracks/hollows	
Tall herbaceous vegetation (> 0.5 m tall)	
Low herbaceous vegetation (< 0.5 m tall)	
Floating mat	
Vegetation cover dominated by sedges/moss	
<b>Number of observed patches</b>	

Land Use Observed Within 500 m of the AA	Check all that apply
Paved roads / parking lots	
Domestic or commercially developed buildings	
Gravel pit operation, open pit mining, strip mining	
Unpaved Roads (e.g., driveway, tractor trail, 4-wheel drive roads)	
Mining (other than gravel, open pit, and strip mining), abandoned mines	
Resource extraction (oil and gas development)	
Agriculture - dryland farming	
Intensively managed golf courses, sports fields	
Vegetation conversion (chaining, cabling, rotochopping, clearcut)	
Heavy grazing by livestock	
Intense recreation (ATV use / camping / popular fishing spot, etc.)	
Logging or tree removal with 50-75% of trees >50 cm dbh removed	
Agriculture – irrigated cropland	
Agriculture – permanent tree plantation	
Dam sites and flood disturbed shorelines around water storage reservoirs	
Recent old fields and other disturbed fallow lands dominated by exotic species	
Moderate grazing on rangeland	
Moderate recreation (high-use trail)	
Selective logging or tree removal with <50% of trees >50 cm dbh removed	
Light grazing on rangeland	
Light recreation (low-use trail)	
Haying of native grassland	
Fallow with no history of grazing or other human use in past 10 yrs	
Natural area / land managed for native vegetation	
Land Use Observed Within the AA	
Vegetation conversion (chaining, cabling, rotochopping, clearcut)	
Heavy grazing by livestock	
Intense recreation (ATV use / camping / popular fishing spot, etc.)	
Logging or tree removal with 50-75% of trees >50 cm dbh removed	
Dam sites and flood disturbed shorelines around water storage reservoirs	
Recent old fields and other disturbed fallow lands dominated by exotic species	
Moderate grazing	
Moderate recreation (high-use trail)	
Selective logging or tree removal with <50% of trees >50 cm dbh removed	
Light grazing	
Light recreation (low-use trail)	
Natural area / land managed for native vegetation	
Hydrology Within 500 m of the AA	
Upstream spring boxes	
Impoundment	
Pumps, diversions, or ditches that move water out of the wetland	
Evidence of aquatic life mortality	
Encroachment of terrestrial vegetation	
Stress or mortality of hydrophytes	
Compressed or reduced plant zonation	
Berm	
Dike	
Pumps, diversions, or ditches that move water into the wetland	
Recently drowned riparian vegetation	
Extensive fine-grained deposits	

**Site ID** \_\_\_\_\_

**0 m**  
 GPS Waypoint \_\_\_\_\_ (draw vegetation plot location on site drawing)  
 Easting \_\_\_\_\_ Northing \_\_\_\_\_ Accuracy \_\_\_\_\_

**50 m**  
 GPS Waypoint \_\_\_\_\_ (draw vegetation plot location on site drawing)  
 Easting \_\_\_\_\_ Northing \_\_\_\_\_ Accuracy \_\_\_\_\_

Vegetation Plot Photos	Module	Bearing/Description
Photo #		
Photo #		
Photo #		
Photo #		
Photo #		

Vegetation Plot Layout (circle the location of the intensive modules and note any changes to the plot layout)

0 m							50 m	Notes:

Plot Representativeness (discuss decisions for placement and/or whether the plot is representative of the assessment area)





