November 1, 2025 – MDWAM WETLAND SCORING FORM

Project/Site ID: _____ Assessment Dates: _____

Delineation Dates: _____ Project Type: ☐Linear ☐Non-Linear ☐Mitigation (☐Creation ☐Restoration ☐Enhancement)

Evaluators: _____ Wetland ID/Name: _____ NWI (mapping): _____

WAA #: _____ Size: _____(acres) Wetland Type (HGM Class): _____ MDWAM Regional Subclass: _____

Ecoregion: ☐CP ☐EMP Aerial Photo Date and Source: _____ Photos: _____

Notes:

LANDSCAPE CORE ELEMENT

Aquatic Context metric *– Confirm in office review. See figures in Section 2.3.1.1 for examples*

Describe barriers or alterations that prevent connection: _____ ☐No barriers.
Total # of aquatic resources within 1,000 feet of the WAA to which wetland connects (minimum size ≥ 0.02 acres): _____ streams _____ wetlands _____ ponds
_____ **Score:** _____

Buffer metric – Evaluate to 500 feet outward from WAA boundary. *A micro delineation of buffer types is unnecessary, users should delineate the major units to provide a qualitative estimate of the buffer community potential*. See figures in Section 2.3.1.2 for examples.

Buffer Type/Description	*Score (See Narratives)*	*Percentage*	*Subtotal*
1.			
2.			
3.			
4.			
5.			
		(Round to one decimal)	**Score:** _____

HYDROLOGY CORE ELEMENT

Water source metric – *Identify the dominant water sources and degree of natural or unnatural/artificial influence (Confirm in office review for watershed).*

Natural Source: ☐Precipitation ☐Groundwater ☐Overland flow ☐Overbank flow/stream discharge ☐Beaver activity ☐Other: _____
Unnatural/Manipulated Source/Controls: ☐Impoundment ☐Outfall ☐Irrigation/pumping ☐Fill ☐Ditching/Channelization ☐Other Artificial influence or control.
Watershed/Drainage Area controls: ☐Development ☐Irrigated agriculture ☐Wastewater treatment plant ☐Impoundment ☐Stormwater retention ☐Change to flow/circulation from roads/ditching ☐Other: _____
Degree of artificial influence/control: ☐Complete ☐High ☐Low ☐None. Wetland created/restored/enhanced: ☐Sustainable/replicates natural ☐Controlled
Comments: _____ **Score:** ____

Hydroperiod metric – *Determine the natural variability and/or recent alteration of the duration, frequency, and magnitude of inundation/saturation.*

Evaluate the hydroperiod including natural variation: Precipitation: ☐typical ☐atypical (☐deficit ☐surplus) Source: _____
☐High variation ☐Low variation Evidence: _____
Direct evidence of alteration: Natural: ☐Logjam ☐Channel migration ☐Other: _____
Human: ☐Diversions ☐Ditches/swales ☐Levees ☐Impoundments ☐Other: _____
Riverine (active floodplain only): ☐Recent channel in-stability/dis-equilibrium (☐Degradation or ☐Aggradation) ☐Stable Channel _____
Indirect evidence of alteration: ☐None ☐Wetland plant stress ☐Plant morphology ☐Upland species encroachment ☐Plant Community ☐Soil morphology
Change/Alteration of hydroperiod: ☐Due to natural events ☐Human influences (☐None ☐Slight or ☐High) _____
Degree hydroperiod of wetland created/restored/enhanced replicates natural patterns: _____
Lacustrine fringe on human impoundment: ☐High variability ☐Low variability ☐Recent changes to hydroperiod
Comments: _____ **Score:** ____

Hydrologic flow metric – *Movement of water to or from surrounding area and openness to water moving through the WAA (flow and circulation).*

Flow: ☐Inlets: #_____ ☐Outlets: #_____ ☐Signs of water movement to or from WAA: _____
Restrictions: ☐None ☐Levee ☐Berm/dam ☐Diversion ☐Ditch-Side Cast ☐Road w/culverts ☐Other: _____
Magnitude of water movement into, through and out of the wetland (check indicators below): ☐High ☐ Moderate ☐ Low_____
High flow through: ☐Floodplain ☐Drift deposits ☐Drainage patterns ☐Sediment deposits ☐Partially buried debris/trunks ☐Scour ☐Other: _____
Low flow through: ☐High landscape position ☐Stagnant water ☐Closed contours ☐Debris dams ☐Constricted Outlet ☐ Surface Roughness ☐Other: _____
Comments: _____ **Score:** ____

Surface drainage feature metric: *Identify and describe all natural and man-made or man-altered surface drainage features* ***(SDF)*** *present within the WAA which potentially impact wetland hydrology and or wetland function and circle impact potential to the WAA (High-Moderate-Low). SDFs are defined as confined features with OHWM and or bed and banks. Indiscrete flow patterns are not considered (e.g., wetland drainage patterns, erosional features, etc.). Provide rational below or on separate report.*

SDF Types present: ☐None ☐Stream channel #_____ ☐Ditch/swale #_____ ☐Diversion #_____ ☐Other_____

SDF(s) exhibits (circle degree H-M-L): ☐channel instability/migration(H-M-L) ☐active incision/downcutting(H-M-L) ☐bank instability(H-M-L) ☐raw unvegetated or vertical banks(H-M-L) ☐highly erodible materials(H-M-L) ☐lacks vertical controls(H-M-L) ☐excessive deposition/bar development(H-M-L) ☐historic channel alteration(H-M-L) ☐proximity to WAA that presents potential impact to hydrology(H-M-L) ☐coarse textured soils(high hydraulic conductivity)

☐Restrictions associated with SDF cause backwater flooding within WAA: Type: ☐levee ☐fill/side cast ☐culvert/bridge ☐Other _____

Timing: ☐Recent (≤ 5 years) ☐Historic

Negative effect to: ☐flow and circulation within WAA ☐redirects or confines flows into/through WAA ☐reduced water table ☐level of inundation ☐No Impact

Rationale: _____

Score: _____

SOILS CORE ELEMENT

Soil organic carbon *(average multiple sample scores, round to one decimal). See Section 2.2.5.2, for additional guidance regarding multiple samples*	***Sample Score***		
	#1	***#2***	***#3***
Total thickness of organic soil and mucky modified layer(s) ≥2”	5	5	5
Total thickness of organic soil and mucky modified layer(s) <2”, OR Dark (matrix value ≤3 and chroma ≤2) mineral surface layer(s) ≥10” thick	4	4	4
Dark (matrix value ≤3 and chroma ≤2) mineral surface layer(s) only, ≥4” and <10” thick	3	3	3
Dark (matrix value ≤3 and chroma ≤2) mineral surface layer(s) only, ≥1” and <4” thick	2	2	2
Mineral surface layer(s) (any thickness) have matrix value and chroma combinations of 4/1, 4/2, 4/3, 4/4, 3/3, or 3/4. No organic soil and mucky modified layer(s) layers within 16”	1	1	1
Mineral surface layer(s) only (any thickness) with matrix values >4 OR chromas >4. No organic soil and mucky modified layer(s) layers within 16”	0	0	0
Average score of samples (if multiple samples within the WAA)			
Additional point added in any riverine subclasses			
Average of all samples/round to one decimal	**Score: ____**		

Biogeochemical cycling metric: *See Section 2.2.5.2, for additional guidance regarding multiple samples.*

	Sub-Metric Scores					
Sample#	**Redox Concentrations**	**Micro Topography**	**Soil Organic Matter**	**Herbaceous Cover**	***Use this formula for each sample and average the number of samples (round all scores to one decimal)***	
1					**[0.75 x (____ + ____ + ____ + ____)] – 2 = _____ Sample Score 1**	
2					**[0.75 x (____ + ____ + ____ + ____)] – 2 = _____ Sample Score 2**	
3					**[0.75 x (____ + ____ + ____ + ____)] – 2 = _____ Sample Score 3**	
					Average of all samples/round to one decimal	**Score: _____**

Sedimentation metric – *Physical changes excess sediment deposition due to human activities.*

Landscape with stress that could lead to excess sedimentation: ☐Yes ☐No

Landscape position: ☐High ☐Low

Magnitude of recent runoff/flooding events: ☐High ☐Low ☐No evidence

Percent of WAA with excess sediment deposition: _____

☐Sand deposits: ___% of area _____ average thickness

☐Silt/clay deposits: ___% of area _____ average thickness

Observation of deposits: ☐Frequent ☐Common ☐Occasional ☐ Infrequent ☐Rare ☐None

**Lacustrine fringe only:* ☐ Upper end of impoundment ☐ Degrades wetland ☐ Contributes to wetland processes

Score: _____

Soil modification metric – Physical changes from alterations. Confirm in office review for past alterations.

☐Level of modification(H-M-L) ☐Level of recovery (H-M-L) ☐No detectable modifications _____

Type: ☐Agricultural use (☐Plowing ☐Discing ☐Harrowing) ☐Logging ☐Mining ☐Filling ☐Grading ☐Dredging ☐Off-road vehicles ☐Other: _____

_____

Percent of WAA with soil modification: ☐Recent _____% ☐Historic _____% Describe: _____

Indicators of past modification: ☐None ☐Low organic matter ☐Lack of soil structure ☐Removal of horizons ☐Compaction (platy structure) ☐ Ap horizon

☐Dramatic change in texture/color ☐Heterogeneous mixture ☐Recent Alluvium (e.g., legacy sediments) ☐Stratified layers ☐Soil subsidence ☐Fill

☐Other _____

Comments: _____

_____ **Score:** _____

Project/Site ID/No. _____**WAA** _____ **Assessment Date:** _____

PHYSICAL STRUCTURE CORE ELEMENT

Topographic complexity metric – See figures in Section 2.3.4.1. *Record % micro topography and % of the WAA for each elevation gradient. For multiple gradients, multiply the % topography by the % of the WAA for each gradient and sum the results to find the overall % of micro-topography*

Of Elevation gradients present: ____ Evidence of gradients: ☐Plant assemblages ☐Level of saturation/inundation ☐Path of water flow ☐Slope

Micro-topography (surface roughness) of WAA: *Gradient 1*: ☐ >50% ☐ 30-49% ☐ 10-29% ☐ <10%, *Gradient 2*: ☐ >50% ☐ 30-49% ☐ 10-29% ☐ <10%
Gradient 3: ☐ >50% ☐ 30-49% ☐ 10-29% ☐ <10%

Types: ☐Depression ☐Pools ☐Burrows ☐Swales ☐Wind-thrown tree holes ☐Mounds ☐Islands ☐Variable shorelines ☐Partially buried debris ☐Debris jams ☐Plant hummocks/roots ☐Other: _____ **Score:** _____

Edge complexity metric – Initiate in office review and adjust based on field observations/delineation. *See example figures in Section 2.3.4.2 to evaluate the irregularity of the wetland boundary and variability in vertical structure. Abutting habitats must border 30% or more of the WAA boundary.*

WAA is: ☐Surrounded by uplands ☐In seasonal floodplain ☐Abutting other wetland class/subclasses ☐Has edge vertical structure variation (H-M-L)
Horizontal variability: ☐High ☐Moderate ☐Low ☐None _____ **Score:** _____

Physical habitat richness metric – See definitions and the table in Section 2.3.4.3 for physical habitat types applicable to each wetland type. *These must be in the WAA or within 25 feet of the WAA boundary.*

☐Concentric high water marks ☐Secondary channels ☐Seasonally inundated swales ☐Un-vegetated pools ☐Un-vegetated flats ☐Vegetated islands ☐Slope with undercut, slump, or overhang ☐Rock piles with voids ☐Plant hummocks/vegetated mounds ☐Submerged/floating vegetation ☐Dense herbaceous cover ☐Brambles/thickets ☐Mature/late-successional stage of plant community (>24" DBH) ☐Drift deposits/organic debris ☐ Brush piles ☐ Fallen logs ☐Stumps/ Standing snags (≥6"DBH) ☐Wind-thrown trees ☐Tree root cavities ☐Nesting cavities/dens ☐Other _____
Total number of Physical habitat types present (wetland type sensitive - see narrative table): ____ **Score:** _____

BIOTIC STRUCTURE CORE ELEMENT

Plant strata metric – Use the applicable regional supplement and wetland determination data form(s). Use the 4 strata approach

Number of plant strata: ☐≥ 4 ☐3 ☐2 ☐1 ☐0 Strata present: ☐herbaceous ☐shrub/sapling ☐tree ☐ woody vines **Score:** _____

Species richness metric – Use the data from wetland delineation form(s) to count all species comprising 5% or more relative cover in each stratum. Species should be counted only once for all observations within the WAA.

Number of species across all strata and determination data forms (count species once) plus additional significant species (provide rationale for additional species outside plots). Plot Species _____ + Additional species (outside sample plots) _____ = Total species richness _____
Rationale for adding additional species: _____ **Score:** _____

Non-native/Invasive Infestation metric – Use the data from the wetland delineation form(s) and additional observations. **See tables in Section 2.3.5.3.2 for examples.**

Average total relative cover of non-native/invasive species across all strata and determination data forms: _____ %
☐ 4 = <1% ☐ 3 = 1-10% ☐ 2 = 11-25% ☐1 = 26-50% ☐ 0 = 51-100%
☐Additional species cover outside plots are included (must be growing in the wetland) Rationale: _____
_____ **Score:** _____

Interspersion metric – Estimate in the office review and confirm in the field. Use figure in Section 2.3.5.4.2 to determine the degree of interspersion of plant zones (≥5% of the WAA)

Degree of horizontal/plan view interspersion: ☐High ☐Moderate ☐Low ☐None **Score:** _____

Herbaceous cover metric – Estimate only herbaceous plant species cover for the entire WAA.

Total cover of herbaceous, emergent and submergent plants: ☐> 75% ☐51–75% ☐26–50% ☐≤ 25% **Score:** _____

Vegetation alterations metric – Unnatural (human caused) stressors. Confirm in office review for past alterations.

Type (Check those applicable and circle R for recent or P for past): ☐cropping ☐Disking-plowing R/P ☐Land clearing/leveling R/P ☐Mowing/shredding R/P ☐ Silviculture R/P ☐Logging R/P ☐Cutting R/P ☐Trampling R/P ☐Herbicide treatment R/P ☐Herbivory R/P ☐Disease R/P ☐Chemical spill R/P ☐Pollution R/P ☐Grazing R/P ☐Woody debris removal R/P ☐Fire R/P ☐Other R/P: _____
Percent of WAA with recent vegetation alteration: _____% Severity of alteration: ☐High ☐Moderate ☐Low
Percent of WAA with past vegetation alteration: _____ % Degree of recovery: ☐Complete ☐High ☐Moderate ☐Low
☐Alteration to improve wetland (degree of natural community recovery): _____
Rationale: _____
_____ **Score:** _____

Plant life forms metric – Life forms must be present in ≥ 5% of the WAA

☐Bryophytes (mosses, liverworts, hornworts) ☐Coniferous Trees ☐Deciduous Broadleaf Trees ☐Evergreen Broadleaf Trees ☐Ferns ☐Grasses ☐Herbs ☐Lichens or Fungi ☐Sedges/Rushes ☐Shrubs ☐Woody Vines ☐Floating/SAV

Total Number of Plant Life Forms: ☐ ≥ 6 = 4 ☐ 4 or 5 = 3 ☐ 3 = 2 ☐ 1 or 2 = 1 ☐0=0 **Score** _____

November 1, 2025 – MDWAM WETLAND FINAL SCORING FORM

Project/Site ID: _____ Assessment /Delineation Date: _____

Project Type: ☐Linear ☐Non-Linear ☐Mitigation (☐Creation ☐Restoration ☐Enhancement) ☐Other _____

Evaluators: _____ Wetland ID/Name: _____ NWI (mapping): _____

WAA #: _____ Size: _____(acres) Wetland Class (HGM): _____ Regional Subclass: _____

Ecoregion: ☐CP ☐EMP Aerial Photo Date and Source: _____ Photos: _____

Notes:

Core Element	*Metric*	*Metric score*	*Calculate Core Element Score*	*Core Element Score*
Landscape	Aquatic context		Sum of metric scores (___ / 8) x 15	
	Buffer			
Hydrology	Water source		Sum of metric scores (___ / 16) x 30	
	Hydroperiod			
	Hydrologic flow			
	Surface drainage features			
Soils	Soil organic carbon		Sum of metric scores (___ / 23) x 15	
	Biogeochemical cycling			
	Sedimentation			
	Soil modification			
Physical Structure	Topographic complexity		Sum of metric scores (___ / 12) x 20	
	Edge complexity			
	Physical habitat richness			
Biotic Structure	Plant strata		Sum of metric scores (___ / 28) x 20	
	Species richness			
	Non-native/invasive infestation			
	Interspersion			
	Herbaceous cover			
	Vegetation alterations			
	Plant life forms			
			Sum of core element scores = Base MDWAM wetland score	

Additional points for unique resources = overall MDWAM wetland score x 0.10 if:

- ☐ Non-tidal wetlands of special state concern Rationale: _____
- ☐ Areas with populations (>20%) of the following species: Bald cypress, Atlantic white cedar, red spruce, balsam fir, or American larch
- ☐ Delmarva Bay wetlands
- ☐ Peatlands (histic epipedon or histosol present)

Additional points for limited habitats = overall MDWAM wetland score x 0.05 if:

- ☐ Dominated (>50%) by native trees greater than 24-inch diameter at breast height
- ☐ Dominated (>50%) by hard mast (i.e., acorns and nuts) producing native species in the tree strata
- ☐ Large unfragmented wetland tracts and continuous riparian wetland corridors > 20 acres

Sum of overall wetland scores plus additional points = total overall MDWAM wetland score
(round to whole number)

Attach representative site photographs:

November 1, 2025 – MDWAM WETLAND FINAL SCORING SHEET FOR EVALUATING PROPOSED MITIGATION/IMPACT ACTIVITIES

Project/Site ID: _____ **Assessment /Delineation Date:** _____

Project Type: ☐Linear ☐Non-Linear ☐Mitigation (☐Creation ☐Restoration ☐Enhancement)

☐Other _____ **Evaluators:** _____

Wetland ID/Name: _____ **WAA #:** _____ **Size:** _____ **Wetland Class (HGM):** _____

Regional Subclass: _____ **Ecoregion:** ☐CP ☐EMP

Aerial Photo Date and Source: _____ **Photos:** _____

Notes:

Wetland ID/Name:_____**WAA No.:** _____

Notes:

Date _____

Wetland ID/Name:_____**WAA No.:** _____

Notes:

Date _____

Wetland ID/Name:_____**WAA No.:** _____

Notes:

Date _____

Core Element	*Metric*	*Existing Metric score*	*Core Element Score Calculation*	*Existing Core Element Score*	*Proposed Metric Score*	*Proposed Core Element Score*	*Proposed Metric Score*	*Proposed Core Element Score*	*Proposed Metric Score*	*Proposed Core Element Score*
Landscape	Aquatic context		Sum of metric scores (___ / 8) x 15							
	Buffer									
Hydrology	Water source		Sum of metric scores (___ / 16) x 30							
	Hydroperiod									
	Hydrologic flow									
	Surface drainage features									
Soils	Soil organic carbon		Sum of metric scores (___ / 23) x 15							
	Biogeochemical cycling									
	Sedimentation									
	Soil modification									
Physical Structure	Topographic complexity		Sum of metric scores (___ / 12) x 20							
	Edge complexity									
	Physical habitat richness									
Biotic Structure	Plant strata		Sum of metric scores (___ / 28) x 20							
	Species richness									
	Non-native/invasive infestation									
	Interspersion									
	Herbaceous cover									
	Vegetation alterations									
	Plant life forms									
Sum of core element scores = Base MDWAM wetland score										
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Sum of overall wetland scores plus additional points = Total Overall MDWAM Wetland Score (round to whole number)										

Attach Representative Site Photographs / Plans / Figures / Notes on Proposed Mitigation/Impact Activities Other Information: