

LAKE COUNTY WETLAND RESTORATION AND PRESERVATION PLAN (WRAPP)
 Draft Functional Assessment Criteria for Water Quality Working Group (SMC, updated Feb. 8, 2016)

These are example criteria used in other (referenced) studies. The TAG should evaluate each criteria based on its applicability to Lake County wetlands.

Nutrient Transformation

Functional Significance	Criteria	Comments/suggestions
High	<ul style="list-style-type: none"> • Vegetated Wetlands from NWI P_ (AB, EM, SS, FO, and mixes) with water regime C, E, F, H, G. No open water types (MDEQ) with SSURGO Flood Frequency of “Frequent” or “Occasional” (PG, TT) • >=5 ac AND [presence of a potential point or nonpoint source upstream & wetland is palustrine or riverine & located upstream of a lake or impoundment (>= 6 ac) & hydraulically connected] AND [(no outlet, constricted outlet, or impounded) or vegetated with woody, floating leaved, or persistent emergent vegetation in a low velocity environment] (ADID) 	
Moderate	<ul style="list-style-type: none"> • Seasonally Saturated and Temporarily Flooded Vegetated wetlands P_ (AB, EM, SS, FO, and mixes) with water regime A, B (MDEQ). • Vegetated wetlands P_ (AB, EM, SS, FO, and mixes) with water regime C, E, F, H, G. No open water types – with SSURGO Flood Frequency of “Rare”, “Very Rare”, or “none” (PG, TT) • Lacustrine vegetated wetlands (no open water) (MDEQ) with SSURGO Flood Frequency of “Frequent” or “Occasional” (PG, TT) 	
Low	<ul style="list-style-type: none"> • All remaining (PG, TT) 	

Sediment and Other Particulate Retention

Functional Significance	Criteria	Comments/suggestions
High	<ul style="list-style-type: none"> • Basin Wetlands associated with Lakes (PG, TT, MDEQ) • Fringe and Island wetlands associated with Lakes (PG, TT, MDEQ) • Floodplain wetlands (PG, TT, MDEQ) • Lotic Stream Basin, Flat, and Fringe wetlands that are Throughflow or Throughflow Intermittent (PG, TT, MDEQ) • Lotic River Floodplain or Fringe Throughflow wetlands (PG, TT, MDEQ) • Throughflow or Throughflow Intermittent Ponds (PG, TT, MDEQ) • Island wetlands (PG, TT, MDEQ) • Terrene Basin Isolated wetlands (MDEQ) • \geq 5 ac. AND presence of potential point or nonpoint sources upstream AND [no outlet, constricted outlet or impounded OR vegetated with erect, persistent vegetation in a depositional environment OR evidence of sediment accretion present] (ADID) 	
Moderate	<ul style="list-style-type: none"> • Terrene Basin wetlands that are Outflow, Outflow Intermittent, or Outflow Artificial (PG, TT, MDEQ) • Natural Ponds not already “High” (MDEQ)/not already rated water regime H (Permanently Flooded) (PG, TT) • All wetlands associated with a Pond (PG, TT, MDEQ) • Terrene Basin Isolated wetlands (PG, TT) 	
Low	<ul style="list-style-type: none"> • All remaining (PG, TT) 	

Shoreline Stabilization

Functional Significance	Criteria	Comments/suggestions
High	<ul style="list-style-type: none"> • Vegetated wetlands along water bodies (Rivers, Lakes, Streams), except Island wetlands (PG, TT, MDEQ) • [Presence of flowing water (perennial stream, >7 sq. mi. drainage) OR presence of >=100 ft of open water] AND [presence of >=20 ft of erect vegetation, forest of scrub-shrub, or good water and vegetation interspersion along lake OR presence of >=10 ft of erect vegetation, or forest of scrub-shrub, or good water and vegetation interspersion along stream] (ADID) 	
Moderate	<ul style="list-style-type: none"> • Terrene vegetated wetlands along Ponds (PG, TT, MDEQ) • Terrene Outflow, Outflow Intermittent, and Outflow Artificial wetlands that are Headwater (PG, TT, MDEQ) 	
Low	<ul style="list-style-type: none"> • All remaining (PG, TT) 	

Air Quality (Carbon Sequestration/Storage & Oxygen Production)

Functional Significance	Criteria	Comments/suggestions
High	<ul style="list-style-type: none"> • Vegetated wetlands that are seasonally flooded, semi-permanently flooded, intermittently exposed, or permanently saturated (Tiner 2011). • Vegetated wetlands with one or more of the following characteristics: Isolated, Inflow, Deep Organic Soils (limited to wetlands with >60" of much and/or peat), or saturated water regime (B), excluding Open waters (Lakes, Ponds, Rivers) and unvegetated wetlands (TNC) • 	
Moderate	<ul style="list-style-type: none"> • Vegetated wetlands that are temporarily flooded or seasonally saturated (Tiner 2011). • Nonvegetated/vegetated wetlands (Tiner 2011). • Ponds, excluding aquaculture, commercial, industrial, residential-stormwater, sewage treatment, and isolated impoundments (Tiner 2011) • All other vegetated wetlands, excluding Open waters (Lakes, Ponds, Rivers) and unvegetated wetlands (TNC) 	

NOTE: TNC used "Exceptional" and "High" as the significance categories for this function, which have been changed to "High" and "Moderate", respectively, for this comparison

REFERENCES

ADID: NIPC, USEPA, SMC. 1992. Advanced Identification Study, Lake County, Illinois: Final Report.

MDEQ: Michigan Dept. of Environmental Quality. 2011. Landscape Level Wetland Functional Assessment: Methodology Report.

TT: Tetra Tech. 2014. Final Methodology Memo for Wetland Management Opportunities (Lower Fox, WI, & Upper Des Plaines, IL).

PG: PG Consultants. 2014. Methods and Results for a Geographic Information System Landscape Model of Wetland Functions in the Sandusky Subbasin (OH).

Tiner2011: Tiner, Ralph W. 2011. Predicting Wetland Functions at the Landscape Level for Coastal Georgia Using NWIPlus Data. USFWS.

TNC: The Nature Conservancy. 2012. The Duck-Pensaukee Watershed Approach (WI).