DRAFT LIST OF POTENTIAL WETLAND FUNCTIONS—WRAPP TAG MEETING #2; NOV. 18, 2015

Yellow Highlight = SMC Staff & TAG Recommended Function; Green Shading = Further discussion from Mtg. #1

Wetland Function	Assessment Method Reference	Comments
1. Flood Protection/Flood water storage/"Surface Water Detention"	MDEQ; Tiner 2003; Tiner 2011;Tetra Tech 2015 (IL/WI); ADID 1992 (as "stormwater storage"); TNC 2012; PG 2014	Perhaps include desynchronization (storm peak management)
2. Streamflow maintenance	MDEQ; Tiner 2003; Tiner 2011;Tetra Tech 2015 (IL/WI); TNC 2012 (as "surface water supply"); PG 2014	Groundwater discharge focus
3. Nutrient retention/ transformation	MDEQ; Tiner 2003; Tiner 2011; Tetra Tech 2015 (IL/WI); ADID 1992 (as "Nutrient Removal/Transformation"); PG 2014	
4. Sediment & other particulate retention	MDEQ; Tiner 2003; Tiner 2011; Tetra Tech 2015 (IL/WI); ADID 1992 (as Sediment/Toxicant retention"); PG 2014	
5. Shoreline stabilization	MDEQ; Tiner 2003; Tiner 2011; Tetra Tech 2015 (IL/WI); ADID 1992; PG 2014; Findley 2002	Could be changed to "Riparian Function" (TAG comment)
6. Fish habitat (& Shellfish)	MDEQ; Tiner 2003 (as "Fish & Shellfish"); Tiner 2011; Tetra Tech 2015 (IL/WI); PG 2014	
7. Waterfowl & waterbird habitat	MDEQ; Tiner 2003; Tiner 2011; Tetra Tech 2015 (IL/WI); PG 2014	
8. Shorebird habitat	MDEQ; Tiner 2003; Tiner 2011; Tetra Tech 2015 (IL/WI); TNC 2012; PG 2014	
9. Amphibian habitat	MDEQ; Tetra Tech 2015 (IL/WI); PG 2014	
10. Carbon Sequestration/ Storage	Tiner 2011; TNC 2012	
11. Unique Wetland Resources	MDEQ; Tiner 2003 (as "Conservation of biodiversity"); Tiner 2011	HQAR, ADID, includes unique vegetative communities (could include Great Lakes Coastal Wetlands?)

12. Great Lakes Coastal Wetlands		Is this category a classification rather than a function? How to evaluate?
13. Coastal storm surge protection	Tiner 2003; Tiner 2011;	Include under shoreline stabilization?
14. Open wetlands and waters habitat	TNC 2012	Habitat for selected waterfowl species
15. Stream shading	MDEQ; Tiner 2003; Tiner 2011; Tetra Tech 2015 (IL/WI); PG 2014	Riparian Habitat function? (SMC comment)
16. Riparian habitat	TNC 2012	Identified by TNC as potential habitat for Wood Turtle; TAG comment: could replace stream shading
17. Influence of groundwater on stream recharge	MDEQ; Tiner 2003; Tiner 2011; Tetra Tech 2015 (IL/WI)	Include this under streamflow maintenance?
18. Beach habitat	TNC 2012	Lake Michigan only? TNC used to identify habitat for 2 tern spp.
19. Invertebrate species habitat	Smith et al. 1995, Novitsky et al 1996	How to define/measure Countywide based on available GIS?

References

MDEQ 2012: Michigan Statewide Assessment

Tiner 2003: Correlating NWI with LLWW

Tiner 2011: Predicting Wetland Functions Coastal Georgia

Tetra Tech 2015: Functional Assessment of DPR (IL) & Lower Fox (WI) Wetlands

ADID 1992: Advanced Identification Study Lake County, IL

TNC 2012: Duck-Pensaukee (WI) functional assessment

PG 2014: Sandusky Watershed (OH) Wetland functions

Novitski, Smith, and Fretwell. 1996. Wetlands Functions, Values, and Assessment; in National Water Summary on Wetlands Resources.

Smith, Ammann, Bartoldus, and Brinson. 1995. An Approach for Assessing Wetland Functions using Hydrogeomorphic Classification, Reference Wetlands, and Functional Indices.