

## **WETLAND CLASSIFICATION**

### **INTRODUCTION**

Wetlands can be classified according to structure, function and quality. Traditionally, wetland structure takes precedence and is defined by vegetation, soils and hydrology. In addition to federal and state classification schemes, some local classifications exist. It is proposed that Hillsborough County EPC rely on existing federal and Florida classification systems and not attempt to develop a county-specific system. We encourage close coordination among EPC, SWFWMD and the US Army Corps of Engineers regarding classification systems and especially training of agency and private sector practitioners on implementation of individual systems. Finally, it is recognized that individual wetland classification systems can be superseded in time and that EPC staff must diligently be aware of current developments in classification systems.

Con: Develop a classification of wetlands based on ecological values of the functions provided by the wetlands to be incorporated into the regulatory process as a guide in determining whether a wetland impact can be approved. In addition, the proposed rule may also consider net environmental benefits to allow enhanced mitigation proposals in determining whether a wetland impact can be approved. – Taken from Final Wetlands Hybrid Report approved by the EPC Board; "EPC Wetlands Protection: Improving the Process, Maintaining the Protection"

### **CLASSIFICATION OF WETLANDS BASED ON STRUCTURE**

One of the earliest national level classification of wetlands in the United States based on structure was that of Cowardin et al (1979). This led to development of the National Wetland Inventory (<http://www.fws.gov/nwi/>) of the U.S. Fish and Wildlife Service, which is intended as a comprehensive inventory of all wetlands and types in the nation. For Florida, access to local maps of wetland classification is through the Florida Department of Environmental Protection, Florida Department of Transportation and individual water management districts. Perhaps the most comprehensive assessment of wetlands and land use is the Florida Land Use, Cover and Forms Classification System (FLUCCS) of Florida Department of Transportation first published in 1999 (<http://www.dot.state.fl.us/surveyingandmapping/fluccmanual.pdf>).

### **CLASSIFICATION OF WETLANDS BASED ON FUNCTION**

While classification systems based on structure provide valuable information on the distribution of wetland types in a region and identification of rare and unique wetlands requiring a level of protection, there is a wide array of classification schemes based on ecosystem function. A comprehensive discussion of wetland functions within landscapes is provided by Mitsch and Gosselink (1993). Two comprehensive schemes to assess wetland function in Florida are the Wetland Rapid Assessment Procedure (WRAP) developed by the South Florida Water Management District (Miller and Gunsalus 1997) ([https://my.sfwmd.gov/pls/portal/docs/PAGE/PG\\_GRP\\_SFWMD\\_ENVIROREG/PORTLET\\_REGUIDA\\_NCE/TAB383509/WRAP99.PDF](https://my.sfwmd.gov/pls/portal/docs/PAGE/PG_GRP_SFWMD_ENVIROREG/PORTLET_REGUIDA_NCE/TAB383509/WRAP99.PDF)) and Florida Statute 62-340.100 the Unified Mitigation Assessment Method (UMAM) (<http://www.dep.state.fl.us/legal/rules/surfacewater/62-340/62-340.pdf>). Among federal agency contributions to wetland function are the USEPA (2002) methods for evaluating wetland condition and the U.S. Army Corps of Engineers Wetlands Regulatory Assistance Program (<http://el.erdc.usace.army.mil/wrap/tools.html>).

## **CLASSIFICATION OF WETLANDS BASED ON VALUES:**

We recognize the need for economic and aesthetic characterization of wetland functions. A value system is needed for assessing the importance of wetlands based on their position within the landscape.

Comment: Values are human interpretations of wetland functions. This needs to be stated.

## **WETLANDS OF REGIONAL CONCERN: ACCOUNTING FOR RARE WETLAND TYPES**

There is value in identifying unique and rare wetland types within Hillsborough County. It is recognized that this will include some wetland types that, while common elsewhere in the state, are rare within the Tampa Bay region and in particular Hillsborough County. Wetland position within the landscape should be considered when identifying such wetlands, and it is recommended that EPC list such wetlands by watershed. A list should be prepared of rare and unique wetland types in the county including, but not limited to, vernal pools, prairie ponds, bay swamps, fern marshes, headwater systems, seepage slope wetlands, freshwater tidal systems and cypress strands.

Pro: Wetlands and other surface waters classified as Rare and Unique and having high ecological and functional value should be avoided by development except in cases of overriding public interest and benefit to public health, safety, or welfare. The EPC is mandated to use Chapter 62-345, F.A.C. (Uniform Mitigation Assessment Method – UMAM), to determine the amount of mitigation needed to offset adverse impacts to wetlands and other surface waters. Therefore, a Rare and Unique wetland or surface water should be determined as having high ecological and functional value when the Delta for impacting the entire wetland area is 0.90 or greater.

Con: The list of unique and rare wetland/surface water types should include sloughs, bogs and freshwater springs and should clarify or eliminate freshwater tidal systems and cypress strands.

Comment: The values under consideration in "Wetlands of Regional Concern" are not identified. How about wildlife habitat for rare species, maintenance of downstream hydropattern, etc.

Comment: Many of the listed rare and unique types have not been defined in the literature eg "fern marshes".... or are not applicable to central Florida.... eg "prairie potholes" are in Nebraska. Unless you can cite that list, in "Wetlands of Regional Concern", the list of specific wetland types should be preceded with "that may be considered" instead than "including but not limited to".

## **VALUE OF CREATED WETLANDS**

Created wetlands, especially marshes, can develop the structure of “natural” wetlands, sometimes within two years of formation and full wetland function within five or six years, given conducive hydrology and maintenance of nuisance and invasive species (Kiefer and Crisman 1992, 1993, Noon 1996, Streever and Crisman 1993, Streever et al. 1996). Forested wetlands may take longer to reach stability of structure and function. The question should not be so much how the wetland was formed, rather the desired structure and function within the landscape. Thus, created wetlands should not be regarded ultimately as less valuable than natural wetlands, particularly if the created wetland served as mitigation for previous wetland impacts.

## **TIMING OF WETLAND CLASSIFICATION AS PART OF THE PERMIT PROCESS**

The applicant should conduct a preliminary evaluation of any constraints and opportunities for any wetland on the property in question prior to development of detailed site plans. It is recommended that relevant wetland classification information be considered part of this process. It is to the applicant's benefit to understand site conditions and potential limitations and opportunities that such conditions may pose long before submission of an application to EPC.

Con: The EPC is mandated to use Chapter 62-345, F.A.C. (Uniform Mitigation Assessment Method – UMAM), to determine the amount of mitigation needed to offset adverse impacts to wetlands and other surface waters. Therefore, a wetland or surface water should be determined as having low ecological and functional value and as being exempt from Section 1-11.08, EPC Rules when the Delta for impacting the entire wetland area is 0.20 or less.

Comment: Bob Stetler's comment at Tuesday's public hearing regarding the use of wetland classification as a factor considered in the Basis of Review needs to be included.

## REFERENCES:

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USEPA. 2002. Methods for Evaluating Wetland Condition #7 Wetlands Classification. EPA-822-R-02-017.