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 practioners on implementation of individual systems. Finally, it is recognized that individual wetland classification systems can be superceded in time and that EPC staff must diligently be aware of current developments in classification systems.

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_REGUIDANCE/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.

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.

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.

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