

Maintenance of the National Wetland Classification Standard: *Classification of Wetlands and Deepwater Habitats of the United States* FGDC –STD–4–1996

Produced by the
Wetlands Subcommittee, Federal Geographic Data Committee

Proposal Objective:

The proposal objective is to produce a newly edited and updated version of the FGDC-approved wetlands classification standard, *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin et al.). The standard will be formatted to be consistent with recently endorsed standards with the text edited, refined, clarified, and rewritten as necessary. There have been advances in our scientific understanding. For example, the concept of what should be considered to be soil has been expanded. Areas that were considered to be nonsoil or hydric substrates now fall under the definition of soil. This doesn't change the concept of wetlands but it does change examples and wording of the existing text. The National Wetlands Inventory staff has tested the standard and has operationally refined it through extensive mapping. Changes, which support the classification standard, were identified during the development of the *Wetlands Mapping Standard* FGDC-STD-015 -2009, endorsed by the Federal Geographic Data Committee in July 2009. All the refinements that were endorsed as part of the mapping standard development and supported by the National Wetlands Inventory's *Data Collection Requirements and Procedures for Mapping Wetland, Deepwater, and Related Habitats of the United States* will be incorporated into the revised classification standard.

This revised standard will be used by the U.S. Fish and Wildlife Service's (Service) National Wetlands Inventory (NWI) to complement the *Wetland Mapping Standard* for entering federally-funded and outside contributed standards-compliant wetlands geospatial data into the Wetlands Layer of the National Spatial Data Infrastructure (NSDI).

Scope:

Topics for Review and Revisions:

A preliminary document has been developed by the workgroup chairs to identify those parts of the Classification Standard that are expected to be revised. This document will serve as the roadmap for the standard review discussions.

Definition: There will be no changes to the definition of wetlands or regulatory jurisdiction.

The definition of wetlands that is included in the classification standard defines the biological limit of wetlands. Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than the wetlands defined in the classification standard and described in the mapping standard. There is no attempt to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Hierarchical System: The structure of this classification is hierarchical, progressing from Systems and Subsystems, at the most general levels, to Classes, Subclasses, and Dominance Types. Modifiers for water regime, water chemistry, and soils are applied to Classes, Subclasses, and Dominance Types. Special modifiers describe wetlands and deepwater habitats that have been either created or highly modified by man or beavers.

There will not be any changes in the hierarchical structure of the classification system nor changes to the top three levels of the hierarchy including System, Subsystem, and Class. These levels have proven to be resilient through thirty years of mapping. This means that there will not be any changes in the categories of wetlands that have been used to produce in the **four** reports to Congress of the status and trends in the conterminous United States. These reports cover the status and trends of wetlands from the mid-1950s. The fifth report is due by the end of calendar year 2010. This **continuity** will also provide EPA's National Wetland Condition Assessment wetlands categories that have been monitored for 60 years.

Subclasses: Each Class is further subdivided into Subclasses; vegetated subclasses are described in terms of life form and substrate subclasses in terms of composition. The Forested Wetland Class is divided into the Subclasses Broad-leaved Deciduous, Needle-leaved Deciduous, Broad-leaved Evergreen, Needle-leaved Evergreen, and Dead. The Unconsolidated Bottom Class is divided into the subclasses Cobble-Gravel, Sand, Mud, and Organic. It was anticipated that as the wetlands and deepwater habitats classification system was used the need for additional Subclasses would become apparent. We expect that Subclasses will be added during this maintenance cycle.

Dominance Types: Subclasses can be further defined by Dominance Types. Dominance Types are determined on the basis of dominant plant species, dominant sedentary or sessile animal species, or dominant plant and animal species. A dominant plant species has traditionally meant one that has control over the community, and this plant is also usually the predominant species. The Dominance Type is most important to users interested in detailed regional studies. The wetlands classification standard only provides examples for the vast number of Dominance Types that occur. Over the years, it has been assumed that Dominance Types could be extracted from other datasets through the use of GIS. This topic is open for discussion and modification or expansion.

Modifiers: To fully describe wetlands and deepwater habitats modifiers for water regime, salinity, pH, soil, and special modifiers were specifically developed or adapted from existing classifications systems. Changes that were endorsed as part of the mapping standard and supported by the data collection procedures and techniques will be added. Clarifications, editorial and technical changes will be made as necessary.

Regionalizations: In the classification standard, a given taxon has no particular regional alliance; its representatives may be found in one or many parts of the United States. The classification standard will continue to use Bailey Ecoregions for inland areas but we will look at modifying the Marine and Estuarine provinces to coincide with those endorsed as a FGDC standard through the Coastal and Marine Ecological Classification system.

Other: Sections on use of the Classifications System, Relationship to Other Wetland Classifications, etc. will be rewritten based on thirty years of mapping and data use. Appendices will be modified, refined, added or dropped as necessary.

Need for Maintenance:

FGDC Directive # 9 Maintenance and Support directs the maintenance authority of an endorsed standard to evaluate the standard at least every five years by initiating the process to reissue, revise, change, or withdraw the standard. This maintenance cycle was delayed until after the wetland mapping standard was endorsed.

The Service understands the need for extensive mapping before an organization can be assured that a classification system can be applied nationally. The best management practice is to develop data collection procedures (mapping conventions) that can be quickly modified as necessary. These data collection procedures feed into the mapping standard that feeds into the classification standard. The Service's *Data Collection Requirements and Procedures for Mapping Wetland, Deepwater and Related Habitats of the United States* and the *Wetlands Mapping Standard* FGDC-STD-015 -2009 were completed in July of 2009 in support of the classification standard. All the refinements that were endorsed as part of the mapping standard and supported by the data collection requirements need to be incorporated into the revised classification standard.

Development Approach:

Although we are simply going to perform maintenance on an existing standard we will use FGDC Directive 1, the FGDC Standards Approval process. Because of its legislative mandates and authorities, the Fish and Wildlife Service will lead this effort for maintenance of *Classification of Wetlands and Deepwater Habitats of the United States* FGDC – STD- 1996 through its Chair of the Wetland Subcommittee of the FGDC. Every Federal agency and other stakeholder groups with interest in wetlands classification and mapping are represented on this Subcommittee.

Related Standards:

The related standards are NOAA's proposed *Coastal and Marine Ecological Classification Standard*, the FGDC endorsed the *National Vegetation Classification Standard* (Version 2). FGDC-STD-005-2008, and the *National Hydrography Database* (NHD). Additional standards include the 2009 FGDC *Wetlands Mapping Standard*; plus the 2009 FWS bureau standard *Data Collection Requirements and Procedures for Mapping Wetland, Deepwater and Related Habitats of the United States*. Other standards that apply to the dataset include: *Content Standard for Digital Geospatial Metadata* (version 2.0); *Geospatial Positioning Accuracy Standards Part 3*; *National Standard for Spatial Data Accuracy*; and *Geographic Information Framework Data Content Standard, Part 5: Governmental unit and other geographic area boundaries*. This maintenance action will coordinate and integrate with several of the existing or draft standards as mentioned elsewhere in this proposal.

Standard Project Time Line and Resources

<u>Proposal Stage</u>	<u>Time Frame</u>	<u>Custodian</u>
Step 1 Develop Proposal	January 2010	Wetlands Subcommittee
Step 2 Review Proposal	February 2010	Standards Working Group
Project Stage		
Step 3 Set Up Project	March 2010	Wetlands Subcommittee
Draft Stage		
Step 4 Produce Working Draft	March – October 2010	Wetlands Subcommittee
Step 5 Review Working Draft	November 2010	Standards Working Group
Review Stage		
Step 6 Review and Evaluate	December 2010	Standards Working Group
Step 7 Act on Recommendation	January 2010	FGDC Coordination Group
Step 8 Coordinate Public Review Hold 3 Regional meetings	January – April 2011	FGDC Secretariat
Step 9 Respond to Public Comments	April – May 2011	Wetlands Subcommittee, Development Group
Step 10 Evaluate Responsiveness to Public Comments	May – June 2011	Standards Working Group
Step 11 Act on Recommendation	June 2011	FGDC Coordination Group
Final Stage		
Step 12 FGDC Steering Committee	July – September 2011	FGDC Steering Committee Endorsement Review