

**Wetland Mapping Standard
Implementation, Outreach and
Training Materials
(Technical Guidance on Unique Identifiers)**

**Kick-off Meeting
April 20, 2011**

Conservation Management Institute (CMI)

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Project Description

Wetland Mapping Standard Implementation, Outreach and Training Materials

Award Number G11AC20060, Category 2: FGDC-endorsed Standards Implementation Training and Outreach

The purpose of this project is to facilitate implementation of an FGDC-endorsed standard in user communities by 1) developing technical guidance for carrying out key recommendations included within the FGDC Wetland Mapping Standard for handling and tracking wetland unique identifiers, and in the Implementation Plan to track polygon lineage and change, and 2) producing implementation recommendations and resulting training materials. Virginia Tech's Conservation Management Institute (CMI) team will work with the FGDC Wetlands Subcommittee, the National Wetlands Monitoring and Assessment Working Group (NWMAWG), the Association of State Wetland Managers (ASWM), the Wetlands Mapping Consortium (WMC), Ducks Unlimited, and other members of the affected wetlands science community to develop and vet technical guidance for creating wetland site names and other stable unique identifiers applicable to national-scale wetland tracking and monitoring needs, to present this information at relevant national and/or regional professional meetings and webinars, and to provide a final report with implementation recommendations. The technical guidance and implementation recommendations resulting from this project will be used to update the implementation plan, training materials, and outreach materials for the Wetlands Mapping Standard, and made available through the WMC and the ASWM web pages.

Virginia Tech's Conservation Management Institute (CMI)

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Partner Organizations

- FGDC Wetlands Subcommittee including:
 - U.S. Fish and Wildlife Service
 - U.S. Environmental Protection Agency
 - U.S. Army Corps of Engineers
 - U.S. Geological Survey
- National Wetlands Monitoring and Assessment Working Group (NWMAWG)
- Association of State Wetland Managers (ASWM)
- Wetlands Mapping Consortium (WMC)
- Ducks Unlimited
- Kentucky Division of Water

Wetland Mapping Standard Background

- Adopted July of 2009
- Provides alignment/coordination with other pertinent standards: NHD, CMECS, etc.
- Enables development and revision of wetland maps by many partners

Wetland Mapping Standard

Important Documents

- **Wetland Mapping Standard** (FGDC-STD-015-2009) was endorsed by FGDC in 2009
<http://www.fgdc.gov/standards/projects/FGDC-standards-projects/wetlands-mapping>
- **Wetland Classification Standard** (FGDC-STD-004) was endorsed by FGDC in 1996
<http://www.fgdc.gov/standards/projects/FGDC-standards-projects/wetlands/index.html>
- **Implementation Plan** for the Wetlands Mapping Standard was published in 2010 by the FGDC Wetlands Subcommittee
<http://www.fws.gov/wetlands/documents/gNSDI/DRAFTImplementationPlanFGDCWetlandsMappingStandard.pdf>
- ***Data Collection Requirements and Procedures for Mapping Wetland, Deepwater and Related Habitats of the United States*** published by the U.S. Fish and Wildlife Service in 2009
<http://www.fws.gov/wetlands/documents/gNSDI/DataCollectionRequirementsProcedures.pdf>

Purpose

The purpose of this project is to carry out key recommendations included in the Implementation Plan for the FGDC Wetland Mapping Standard adopted in July of 2009.

There are two objectives:

- 1) Develop technical guidance for handling and tracking wetland unique identifiers (*language from FGDC Wetland Mapping Standard*) to support tracking polygon lineage and change, and to enhance system interoperability between federal agencies, states, tribes, and contracted partners, to facilitate data sharing at a national scale (*language from Implementation Plan*).
- 2) Develop implementation recommendations.

What are Unique Identifiers?

“With reference to a given (possibly implicit) set of objects, a **unique identifier (UID)** is any identifier which is guaranteed to be unique among all identifiers used for those objects and for a specific purpose” (from Wikipedia 04-20-2011). Identifiers generally include numbers, codes and names.

Problem to be Addressed

Currently there are no nationally-accepted standards, conventions, protocols, or tools for creating wetland site names and other stable (not likely to change within a defined set) unique identifiers to allow individual wetland sites and corresponding geographic features (e.g., points, polygons) to be effectively tracked, monitored and reported on over time, and to enhance system interoperability between federal agencies, states, tribes, and contracted partners, to facilitate data sharing at a national scale.

Methods

- CMI will work with members of the affected wetlands science community to develop and vet technical guidance for creating wetland site names and other stable unique identifiers applicable to national-scale wetland tracking and monitoring needs.
- CMI will present this information at relevant national and/or regional professional meetings and webinars.
- CMI will provide a final report (Technical Report) on the technical guidance with implementation recommendations.
- The technical guidance and implementation recommendations resulting from this project may be used to update the implementation plan, training materials, and/or outreach materials for the Wetlands Mapping Standard, and will be made available through the WMC and /or the ASWM web sites.

Milestones

(Deliverables and Schedule)

- Request for Information disseminated to affected wetland science community (Spring -Summer 2011)
- Outreach (via presentation, webinar, and/or publication) on the Request for Information (Summer-Fall 2011)
- Options for Wetland Site Names and Other Unique Identifiers disseminated to affected wetland science community for comment (Winter 2011-Spring 2012)
- Interim Progress Report (October 2011)
- Outreach (via presentation, webinar, and/or publication) on the Options for Wetland Site Names and Other Unique Identifiers (Fall 2011- Winter 2012)
- Final Technical Report with guidance and implementation recommendations (Late Spring 2012)
- Outreach and/or Training (via presentation, webinar, and/or publication) on Technical Report (Spring-Summer 2012)

Outcomes

- A significant technical challenge documented in the current version of the Wetlands Mapping Standard will be addressed prior to the next five year maintenance review cycle for the Wetlands Mapping Standard (so the results can be considered when updating the Mapping Standard), and in coordination with the ongoing maintenance review of the Wetlands Classification Standard.
- Resolving this issue can help to improve and modernize the NSDI Wetlands Layer.
- System interoperability can be enhanced between federal agencies, states, tribes, and contracted partners, to facilitate data sharing at a national scale (per Implementation Plan).
- Database capabilities to track polygon lineage and polygon change over time can be improved (per Implementation Plan).
- Capabilities for associating wetland geographic data with other data sets (such as water quality and monitoring data) can be enhanced, expanding the possibilities for analysis (per Public Review document).
- Individual wetland sites and corresponding geographic features (e.g., points, polygons) can be more effectively tracked, monitored and reported on over time.
- The affected wetland science community will benefit from the increased availability of wetland information for analyzing and identifying solutions to wetlands and water resources management, conservation and protection issues.

CMI Technical Guidance on Unique Identifiers for Wetlands

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