WETLAND WATER QUALITY STANDARDS FOR STATES

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http://www.aswm.org/~aswm/pdf_lib/wwq_standards_for_states.pdf

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Association of State Wetland Managers

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Goals for Preparing Report: Wetland and Water Quality Standards for States

Goals for a report pertaining to state wetland and water quality standards include the following:

- Build consensus concerning practical and scientifically sound provisions which states might include in their wetland and water quality standards;
- Provide the states with examples of draft standards including:
  - Draft standards for inclusion in broader water quality standards;
  - Draft "stand-alone" standards.

Restore and Maintain the Chemical, Physical, and Biological Integrity of Wetlands With Special Emphasis Upon Pollution. This Includes All Sources of Pollution, Not Just Pollutants:

- Drainage
- Fills
- Point Sources
- Nonpoint sources

Drainage

Fills

Point Sources of Pollution

NonPoint Sources

Nutrient Enrichment (Eutrophication)

Toxics

Sediment

Stormwater

Project Elements

- Wetland Water Quality Standards Workgroup
- Bibliography
- Web Page
- Multiple Conference Calls
- Webinars
- 3 Workshops/Seminars
- Project Report, Written Materials, Draft Regulations

Wetland Water Quality Standards for States

Why Should States Adopt Water Quality Standards for Wetlands?

Some reasons include:

- *Water quality standards can provide another layer of protection for wetlands in states which have adopted separate wetland regulatory statutes.*
- *Wetland water quality standards adopted as part of state pollution controls or water regulation can provide at least partial protection for wetlands in states which have not adopted independent wetland regulatory statutes.*
- *Wetland water quality standards can help coordinate wetland and broader state water quality and quantity programs.*

- *State water quality standards can aid a state in reviewing federal permits pursuant to Section 401 of the Clean Water Act.*

- *Wetland water quality standards can help states integrate wetland protection and restoration with broader water planning and regulation including nonpoint source pollution control, watershed management by establishing goals for such broader efforts and implementation mechanisms including TMDLs.*

- *Explicit wetland water quality standards can provide greater certainty to landowners in the use of their wetlands and regulators in processing regulatory permits.*

Basis for Draft Regulatory Standards

The Association of State Wetland Managers (ASWM) report including draft state water quality standards for wetlands are based upon:

- **A literature search; web search; and legal statutory and regulatory search;**

- **Examination of state and tribal water standards** adopted by the states and tribes;

- **Conference calls and Webinars** with the states conducted by ASWM in cooperation with many states in the fall of 2011;

- **Three one day seminars** with state staff concerning the role of wetland/water quality standards; and

- **Discussions** with individual **state staff concerning the content, strengths, and weaknesses of their wetland water quality standards**.

Target Audience

- The principal audience for the draft regulations were the states with Section 401 and 402 programs but without independent wetland specific protection regulations.

- A secondary audience was states with independent wetland regulations, coastal zone management, floodplain management, dredge and fill, or other regulations which a state may supplement from a water quality perspective by adopting water quality regulations for wetlands.

- The draft materials have with, minor exceptions, been derived from existing state wetland and water quality statutes and regulations. We have taken what seems most useful and practical and consistent with Clean Water Act goals and regulations.

Progress

States have made progress in adopting water quality standards for wetlands. We tried to build upon this progress:

- **Many states have amended their water quality statutes to include wetlands as regulated waters. This provides wetlands some measure of protection, primarily from toxics and bacteria,**

- **Fourteen states have adopted more specific water quality standards for wetlands,**

- **Many states have initiated efforts to develop biological criteria for wetlands to help evaluate wetland condition,**

- **Many states are cooperating with EPA to help design and implement the 2011 wetland ecological condition assessment. This may provide states with an opportunity to also develop wetland water quality standards.**

What Are State Water Quality Standards for Wetlands?

- Section 303(C)(2)(A) requires states to adopt water quality standards for waters to “protect the public health or welfare” and “enhance the quality of water”. No distinctions are made in the Act between wetlands and other waters. Water quality criteria may consist of both narrative and numeric standards.

EPA Guidance: State Water Quality Standards for Wetlands

In 1990 EPA developed overall guidance for the states in developing water quality standards for wetlands. EPA guidance suggested that States in adopting water quality standards for wetlands:

- "Include wetlands in the definition of "State waters.""
- Designate "uses" for all wetlands.
- Adopt aesthetic narrative criteria (the "free froms") and appropriate numeric criteria for wetlands.
- Adopt narrative biological criteria for wetlands.
- Apply the State's antidegradation policy and implementation methods to wetlands."

However, EPA guidelines are flexible and leave considerable discretion to the States.

Status of Wetland Specific Narrative and Numeric Criteria

- **Most states and tribes have only adopted narrative criteria**
- **A few states and tribes mix narrative and numeric criteria**
  - **Example: Hawaii—ph 4.5 to 7.00**
  - **Example: Iowa—"Side slopes of newly constructed channel will be no steeper than 2.1…**
  - **Example: Iowa—"For discharges of dredged or fill material resulting in permanent loss of more than 1/10 acre of waters of the U.S..a compensatory mitigation plan to offset those losses will be required."**
  - **Example: tribes with numerical criteria: Pueblo of Isleta, White Mountain Apache**

Shared Characteristics Between Wetlands and Other Waters Which Justify Wetland Specific Water Quality Standards

Wetlands share many features with other waters (lakes, ponds, rivers, streams, estuarine and coastal waters) including functions and values. Both wetlands and other waters:

- **Are saturated from precipitation, high ground water, or tides much of the time,**
- **Support a range of flora and fauna adapted to inundated or saturated conditions,**
- **Are characterized, in part, by saturated soils,**
- **Provide a broad range of services to society including but not limited to fisheries, habitat for rare and endangered species, water supply, recreation, aesthetics, etc.**
- **Are damaged or destroyed by many types of pollution.**

Differences Which Need to Be Reflected in Water Quality Standards for Wetlands Versus Other Waters

- **Differences in reversibility of impacts, restoration techniques, cost of restoration.** Stopping pollution will not restore many wetlands damaged by draining, filling, or flooding**.**

- **Differences in role of wetlands in protecting other waters from pollution versus role of wetlands as critical waters with many functions in their own right.** This leads to dilemmas and challenges concerning the implementation of an antidegradation policy.

- **Numbers of wetland water bodies number in the hundreds of thousands or millions versus thousands or tens of thousands for other waters.** This favors adoption of standards for classes of wetlands rather than individual wetlands.

- **Sensitivity to small changes in precipitation and water levels.** This makes establishment of biocriteria difficult. It also means that multiple field measurements may be needed over the course of a year or over several years in order to characterize wetland biota, hydrology, other characteristics.

Even small changes in water levels often damage or destroy wetlands.

Draft State Wetland/Water Quality Standards for Wetlands:

- Essential provisions to be integrated into broader regulations
- Essential provisions plus additional provisions to create stand alone state wetland/water quality standards for wetlands. Additional materials in this draft establish permitting procedures, more detailed criteria for permitting

Critical Elements of Draft Regulations

- Broad definition of waters to explicitly include wetlands
- Broad definition of wetlands
- Broad definition of regulated activities
- Broad antidegradation standard
- Broad definition of designated uses
- Broad criteria for protection of designated uses

What We Emphasize in the Draft Regulations

- Address what is unique about wetlands
- Explicitly address fills and drainage
- Meet or exceed EPA National Guidance: Water Quality Standards for Wetlands, 1990
- Error on the side of protection
- Help implement a no net loss goal
- Emphasize protection of biology, habitat
- Require sequencing
- Require mitigation (restoration/creation)

Establish a Goal of No Net Loss of Function/acreage Value/Condition

- Example: Ohio "The wetland designated use shall be maintained and protected such that degradation of surface waters through direct, indirect, or cumulative impacts **does not result in net loss of wetland acreage or functions**….

- Example: St. Regis Mohawk—"**Water quality in wetlands shall be maintained at naturally occurring levels,** within the natural range of variation for the individual wetland, unless otherwise specified and approved by the Environmental Division"

- Example: Assiniboine and Sioux Tribes of the Fort Peck Indian Reservation provide, in part, "**Existing water quality, functions and values of wetlands will be protected**."

Require "Sequencing"

Sequencing is to be applied to proposed activities impacting wetlands (Example: Minnesota):

A. "avoid the impact altogether by not taking a certain action or parts of an action;
B. minimize the impact by limiting the degree or magnitude of the action and its implementation, and by taking affirmative actions to rectify the impact and reduce or eliminate the impact over time; and
C. mitigate the unavoidable impact to the designated uses of a wetland by compensation. Compensatory mitigation shall be accomplished in the following descending order of priority of replacement:
    (1) restoration of a previously diminished wetland; and
    (2) creation of a wetland."

Require "Compensation" for Residual Impacts

- Example: Hoopa Valley Indian Reservation. "There shall be no net loss of wetlands on the Hoopa Valley Indian Reservation…If no feasible alternative exists, then a wetland of equal or greater size must be constructed or rehabilitated in another area (preferably within the same watershed) as mitigation."

- Example: Section 12 of the Wyoming Surface Water Quality Standards (ENV-WAT-1 § 12. Protection of Wetlands.) provides in part:
  - "Section 12. Protection of Wetlands. Point or nonpoint sources of pollution shall not cause the destruction, damage or impairment of naturally occurring wetlands except when mitigation through an authorized wetland mitigation process. When approving mitigation, the department may consider both the ecological functions and the wetland value of the disturbed wetland.

What Could EPA Do to Support State and Tribal Wetland Water Quality Programs?

- **Provide continued financial support for the states** EPA needs to continue to financially support development of state wetland regulatory programs including wetland/water quality programs. Funds need to be available for not only development but implementation of programs such as mapping wetlands.

- **Revise and update the wetland and water quality program guidance** (1990). Such an update could focus on a number of more specific types of needed guidance. See list below.

- **Work with states, federal agencies, local governments, not for profits and others to identify and prioritize wetland restoration sites.**

- **Support the states technically and financially in adopting protection measures for not only wetlands but for buffer and riparian areas.**

- **Bring local governments more fully into the picture.** Support local government watershed planning and comprehensive land use planning with water quality protection as one goal.

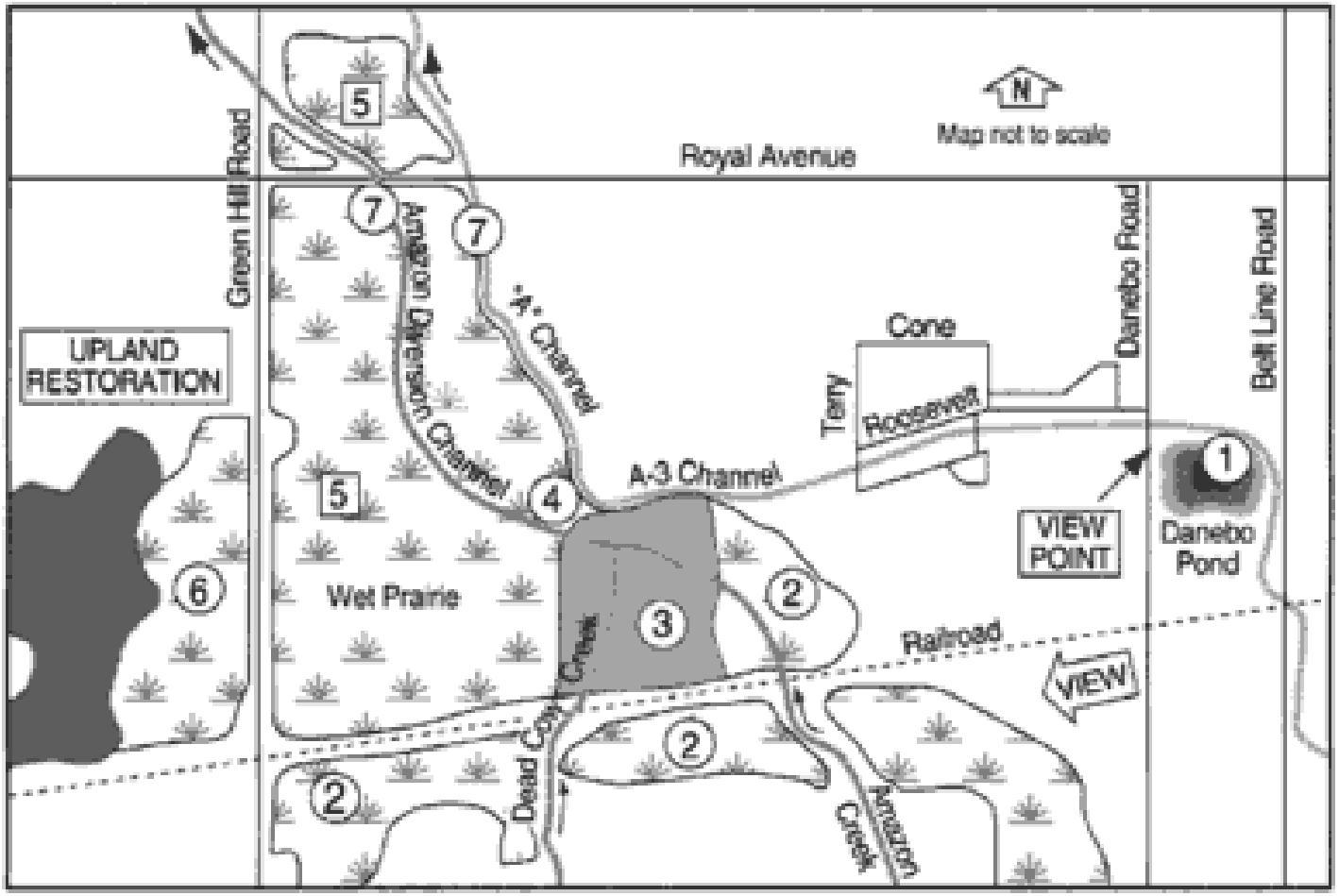
- **Include wetland water quality sessions in EPA-sponsored wetland workshops and conferences** (e.g. SWS, ASWM).

- Provide **additional guidance** for the states including:
- **Cooperatively undertake and fund with other federal, state and local agencies, not for profits, and academic institutions wetland- water quality related research.** Some priority research needs include:
  - **Develop water quality numeric criteria for various types of pollution, various types of wetlands, and various types of wetland flora and fauna.**
  - **Investigate with states the use of the 2011 National Wetland Assessment data and study conclusions in state wetland programs.**
  - **Continue to support the development of state wetland "reference" site systems of the sort developed in Washington state and Pennsylvania.**
  - **Continue to support state development of wetland Indices of Biological Integrity.**

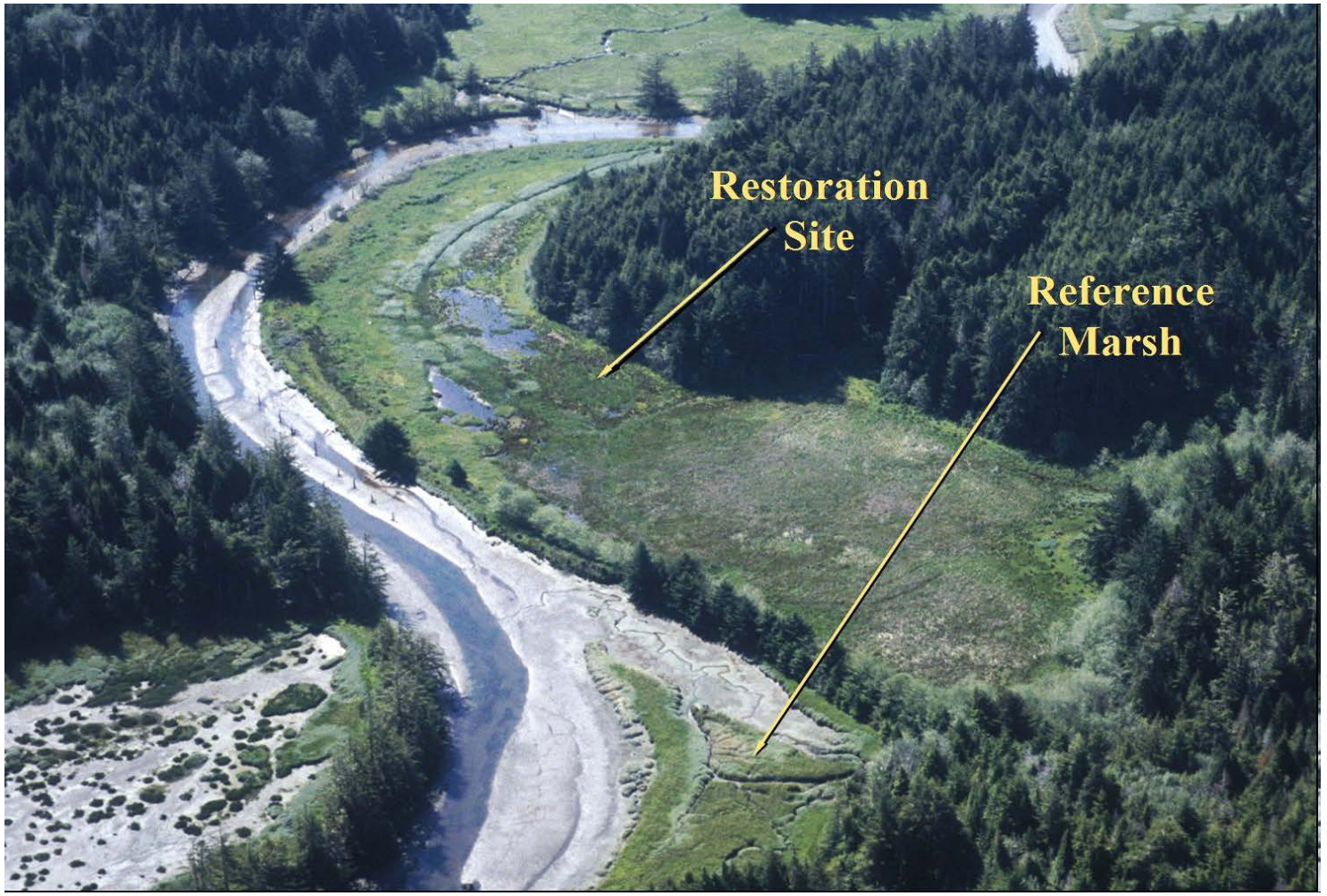
Cooperative Restoration

Wetland Maps

Local Government Regulations



Reference Site



Your Review of The Report

We look forward to your review of this report and hope you find it useful. We are open to suggestions:

- Is any portion of the report inaccurate? If so, what corrections are needed?
- Does the report fail to address critical issues? If so, what additional materials are needed?
- Are you or your state or tribe drafting water quality regulations for wetlands? If so, we want to hear about your efforts. We plan to post additional material to the ASWM website and to Wetland Breaking News.

Thanks Much!