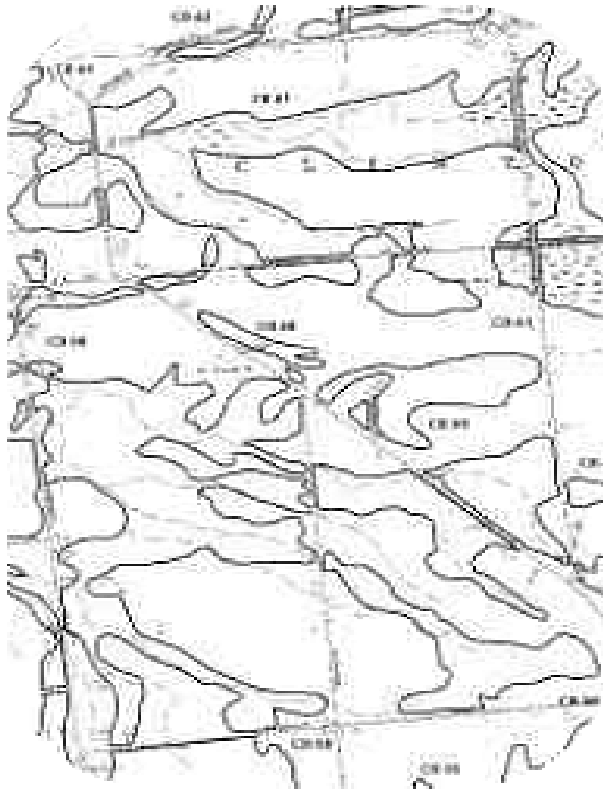


COMMON QUESTIONS:
**WETLAND
CLASSIFICATION**



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PREFACE

This guide is designed for state and local officials, federal agency staff, developers and others interested in classifying wetlands for regulatory, restoration, land acquisition, environmental impact analysis, or other purposes. It addresses frequently asked questions concerning classification. A selected bibliography and list of web sites provide the reader with more information concerning specific subjects.

The guide draws upon the results of an Association of State Wetland Managers' research project addressing wetland assessment for regulatory purposes. It also draws upon an Association of State Wetland Managers workshop dealing with wetland classification. This project was funded by the U.S. Environmental Protection Agency, USDA Natural Resources Conservation Service, U.S. Geological Survey, and Federal Highway Administration.

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<http://www.ci.eugene.or.us/parks/wetlands/plan.htm>.*

COMMON QUESTIONS: WETLAND CLASSIFICATION

What is classification of wetlands?

A. Wetland classification involves the grouping of wetlands by specified characteristics (vegetation, hydrology, soils, animal species present, function, value, etc.) to serve specific goals. Classification may be undertaken for mapping, planning, acquisition, regulatory and other purposes. An example of a scientific classification is the National Wetland Classification System which has been used to classify and map wetlands throughout much of the nation. An example of a regulatory classification is the A, B, C classification scheme proposed to suggest the development potential of wetlands for use in a Federal Section 404 regulatory context in legislation proposed but not adopted by Congress in the mid 1990's.

Is classification controversial?

A. Scientific classification of wetlands to help analyze and describe wetlands for wildlife management and other purposes is not highly controversial although scientists have varying opinions with regard to the most useful way to group wetlands for various scientific study and management purposes. However, efforts to group wetlands in simplified ways to determine whether they should be protected or destroyed have been controversial because such simplified classification efforts typically fail to take into account many relevant factors.

What are examples of scientific classification schemes?

A. Two of the better know scientific classification systems include "Circular 39" Wetland Classification System used for many years by the U.S. Fish and Wildlife Service and the National Wetland Classification System used for the National Wetland Inventory. A third is the "Rosgen" classification of streams and related wetlands for stream restoration.

Is it possible to classify wetlands "once and for all" for scientific or regulatory purposes?

A. No. Wetlands are dynamic systems and change over time as regional hydrology changes due to urbanization, rural land development, sea level rise, climate change, etc. Water levels and depths, bottom substrate, vegetation, and wildlife also change. Finally, values change as the needs of society change. Individual wetlands often have less value when wetlands are abundant and more value as numbers decrease.



The National Wetland Classification System groups wetlands based upon scientific characteristics

Is it practical to accurately determine all of the functions of all wetlands in a local government, state, or region as part of an advanced wetland identification effort?

A. No, although this has been attempted for some communities. Costs are prohibitively high to gather accurate information relevant to determination of functions and values including:

- Wetland boundaries
- Hydrology
- Soils
- Waterfowl, other birds, amphibians, reptiles, mammals
- Rare and endangered species (if any)
- Other species
- Ground water interactions
- Hydrologic interactions
- Fluctuations in water levels

Has any “rapid” wetland assessment method proven accurate and inexpensive for assessing and classifying wetlands based on functions or functions and values?

A. Over 40 assessment approaches have been developed but no rapid wetland assessment method has proven either accurate or inexpensive for identifying wetland functions or functions and values. The Hydrogeomorphic Assessment Method and its classification system can be used to suggest particular functions based on limited data but detailed analysis is needed to describe functions in depth.

What factors are relevant to the development potential of a wetland?

A. Factors relevant to development potential include but are not limited to:

- Functions (natural processes, goods and services)
- Values
- Opportunity a wetland has to serve functions to society
- Natural hazards
- Restoration potential
- Other factors



Natural hazards as well as functions are relevant to development potential

Does the National Wetland Classification System help indicate the development potential of wetlands?

A. The National Wetland Classification System was developed as a scientific classification system for mapping and management purposes. It was not developed to indicate development potential. However, the system and the National Wetland Inventory maps utilizing this system have proven useful in suggesting certain wetland functions and values. Ralph Tiner of the U.S. Fish and Wildlife Service has attempted to more specifically group wetlands according to functions and values utilizing additional criteria and concepts.

Do regulatory classification schemes reflect the broad range of factors relevant to development potential?

A. Typically no. The goals of regulatory classification schemes have been to help landowners and regulatory agencies determine, up front, where development may or may not occur and the mitigation requirements for various types of wetlands. Secondary goals include lending certainty to landowners and government agencies and reducing the amount and costs of data gathering which must occur on each permit.

However, regulatory classifications scheme have failed to achieve these goals because they have classified wetlands based upon “one shot” assessment of “functions”. Simplistic grouping of wetlands for these purposes without considering all relevant factors suggested above may result in both under regulation and over regulation, depending upon the circumstances See below.

Should flood, wave, erosion, and other natural hazards of wetlands be considered in determining development potential?

A. Yes. Many wetlands are subject to a number of types of hazards which are relevant to the development potential of the wetlands. These types of hazards include:

- Flooding.
- Wave action.
- Erosion.
- Organic soils with structural bearing capacity problems.
- Organic and saturated soils severely limited for onsite waste disposal.
- Liquefaction and sever damage during earthquakes.

Has any state “successfully” classified wetlands for regulatory purposes?

A. A number of states have tried. New York has undertaken the most extensive “up front” classification of its freshwater wetlands. This effort has not proven very useful in determining development potential because only functions were considered. Other states using wetland classification in regulatory efforts include Ohio, Vermont, and Indiana.



Roads and structures constructed in filled wetlands often suffer subsidence

Have the courts required agencies to distinguish wetlands based upon their functions and values?

A. No court has required an agency to determine the relative functions and values of wetlands.

Do the problems with classifying wetlands for regulatory purposes mean that wetlands should not be classified for regulatory purposes?

A. Classification should, of course, not take place if the results are misleading or wrong taking into account the full range of factors relevant to development, protection and restoration. Classification may be useful if used “presumptively” to suggest certain functions and values with supplementary information gathering at the time wetland alterations are proposed.

If rigid regulatory classification is subject to limitations, how can “up front” certainty with regulations be improved without rigid classification?

A. Certainty can be improved through a variety of measures such as:



West Eugene Wetland Plan

- The adoption of more detailed regulations setting forth clear goals and criteria for permits,
- Detailed mapping of wetlands,
- Mapping of wetland features limiting development potential such as:
 - Flooding and other hazards.
 - Deep organic soils.
 - Endangered species.
- Making maps and other information available through GIS systems and on the internet,
- The preparation of wetlands and watershed management plans and local comprehensive land use plans which reflect the full range of factors relevant to wetland development, protection and restoration.

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wetlands.fws.gov/Pubs_Reports/publi.htm
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Outstanding State Wetlands - Oregon. Division 86. Division of State Lands.

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Riparian Classification Summary. Classification of riparian and wetland systems in Colorado based upon plant associations.

www.dnr.state.mn.us/wetlands/types_technical.html
Technical Definition of Wetland Types in Minnesota. Classification of wetlands in Minnesota. State uses two different classification systems. Minnesota Department of Natural Resources.

<http://www.dec.state.ny.us/website/regs/part664.html>
Part 664 Freshwater Wetland Maps and Classification. New York State Department of Environmental Conservation, Rules and Regulations.

http://wetlands.fws.gov/Pubs_Reports/Md_Watershed/Md_watershed.htm
Watershed-based Wetland Characterization for Maryland's Nanticoke River and Coastal Bays Watershed: A Preliminary Assessment Report.



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http://aswm.org/pdf_lib/12_classification_6_26_06.pdf