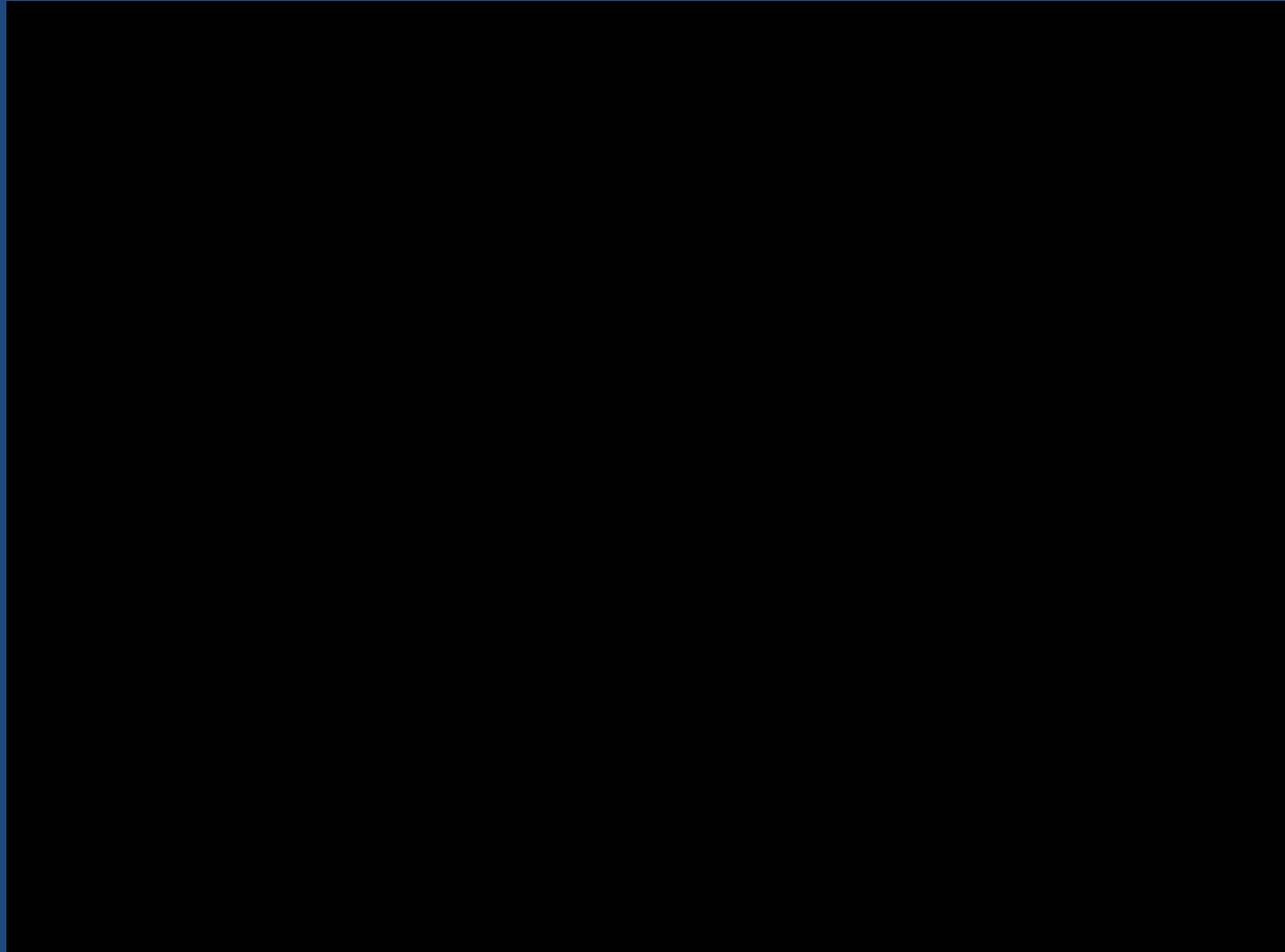


DEVELOPMENT of WETLAND WATER QUALITY STANDARDS

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Training Video



What are Water Quality Standards?

- WQS are a set of rules (or laws) adopted by states in accordance with the Clean Water Act and other federal regulations
- § 303(a) of the CWA grants states (or federally recognized tribes) the authority to set water quality standards for contaminants in surface waters

How Do WQS Work?

- WQS have three basic components:
 - Beneficial uses
 - Criteria to protect beneficial uses
 - Anti-degradation policies

And

- Implementation

Beneficial Uses

- Beneficial uses are the kinds of activities a stream or lake can be used for
 - Goals for the waterbody
 - Whether or not they are being attained
- Waterbodies can have many assigned beneficial uses

Types of Beneficial Uses

- Fish and Wildlife Propagation
 - ▣ Warm Water Aquatic Community*
 - ▣ Cool Water Aquatic Community
 - ▣ Habitat Limited Aquatic Community
 - ▣ Trout Fishery

- Recreation
 - ▣ Primary Body Contact Recreation*
 - ▣ Secondary Body Contact Recreation

Types of Beneficial Uses

- Agriculture
- Aesthetics
- Public and Private Water Supply
- Navigation
- Emergency Water Supply

Beneficial Use Assignments

- Appendix A of Chapter 45 of the Oklahoma WQS (OAC 785:45) has a list of waterbodies in Oklahoma and their beneficial use assignments
- If a lake, stream or wetland is not listed in Appendix A, it has default beneficial uses assigned

State 1 – Wetland Ben. Use

- (a) General. The water quality standards for all wetlands are designed to protect, preserve, restore and enhance the quality and uses of wetlands and other waters of the state influenced by wetlands. The following are wetland uses:
- (1) Storm and flood water storage and retention and the moderation of extreme water level fluctuations;
 - (2) Hydrologic functions including groundwater discharge that contributes to maintain dry weather streamflow and, at other locations or times, groundwater recharge that replenishes the groundwater system;
 - (3) Filtration or storage of sediments, nutrients, toxic substances, or other pollutants that would otherwise adversely impact the quality of other waters of the state;
 - (4) Shoreline protection against erosion through the dissipation of wave energy and water velocity and stabilization of sediments;
 - (5) Habitat for the propagation of resident wetland-dependent aquatic organisms including, but not limited to fish, crustaceans, mollusks, insects, annelids, planktonic organisms and the plants and animals upon which these aquatic organisms feed and depend upon for their needs in all life stages; and
 - (6) Habitat for the propagation of resident wetland-dependent wildlife species, including mammals, birds, reptiles and amphibians for breeding, nesting, cover, travel corridors and food.

State 2 – Wetland Ben. Use

□ Aquatic Life

Wetlands assigned this beneficial use provide, or could provide, habitat capable of supporting aquatic biota on a regular or periodic basis. Aquatic biota are life forms which require water to fulfill basic life functions such as reproduction, growth, and development. Examples of aquatic biota include, but are not limited to, fish, macroinvertebrates, amphibians, and hydrophytic vegetation.

State 2 – Wetland Ben. Use

□ Wildlife

Wetlands assigned this beneficial use provide, or could provide, habitat capable of supporting wildlife on a regular or periodic basis. Wildlife are undomesticated terrestrial or avian life forms which may utilize wetlands to support life functions such as watering, feeding, loafing, predator protection, and nesting. Examples of wildlife include, but are not limited to, furbearers, waterfowl, shorebirds, migratory birds, and reptiles.

State 2 – Wetland Ben. Use

□ Agriculture Water Supply

Wetlands assigned this beneficial use are used or have the potential to be used for general agricultural purposes (e.g., irrigation and livestock watering) without treatment. In some cases, however, natural background water quality may limit their use for agricultural purposes.

State 2 – Wetland Ben. Use

□ Aesthetics

This use applies to all wetlands of the state. To be aesthetically acceptable, wetlands shall be free from human-induced pollution which causes: 1) noxious odors; 2) floating, suspended, colloidal, or settleable materials that produce objectionable films, colors, turbidity, or deposits; and 3) the occurrence of undesirable or nuisance aquatic life (e.g., algal blooms). Wetlands shall also be free of junk, refuse, and discarded dead animals.

State 3 – Wetland Ben. Use

□ Wetland Habitat

Uses of water that support wetland ecosystems, including, but not limited to, preservation or enhancement of wetland habitats, vegetation, fish, shellfish, or wildlife, and other unique wetland functions which enhance water quality, such as providing flood and erosion control, stream bank stabilization, and filtration and purification of naturally occurring contaminants

Critical Questions

1. What are differences and similarities between states?
2. How does example beneficial use language align with group identified priorities?



Questions & Wrap-up



<u>Category</u>	<u>Category Characteristic</u>	<u>Number of Votes</u>
Use	Recreation	7
	Agriculture	2
	Water Treatment (constructed)	1
	Restoration	2
Category total votes		12
Functions	Water treatment/enhancement (natural)	9
	Filtration	2
	Flood attenuation	7
	Habitat	7
	Stream flow maintenance	1
Category total votes		26
Hydrology	Wet/Dry Hydroperiod	8
	Hydrodynamics	1
Category total votes		9
Habitat	Biota (vegetation & animals)	12
	Birds	1
	Community	1
	Threatened & Endangered Species	1
	Diversity	1
	Wildlife	1
Category total votes		17
Characteristics	Hydric Soils	5
	Obligate plants/animals vs. opportunistic (wetland dependent flora/fauna)	2
	Water/Hydrology	5
	Biota	1
	Variable	1
	Ecosystem	2
Category total votes		16