



Setting Water Quality Standards

State of Oklahoma

OWRB

WATER RESOURCES BOARD
the water agency

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What are Water Quality Standards?

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

Statutes and Administrative Rules Affecting Water Quality Standards

- Federal Law
 - Clean Water Act (CWA)§ 303(a)
- Federal Regulation
 - CFR Title 40 Part 131
- State Law
 - Title 82
 - Title 27 (A)
- State Regulation
 - OAC 785:45 - water quality standards
 - OAC 785:46 - water quality standards implementation

How do WQS work?

WQS have three basic components:

- Beneficial uses
 - Beneficial uses are the kinds of activities a stream or lake can be used for
 - Streams and lakes can have many assigned beneficial uses
- Criteria to protect beneficial uses
- Anti-degradation policies

Beneficial Uses



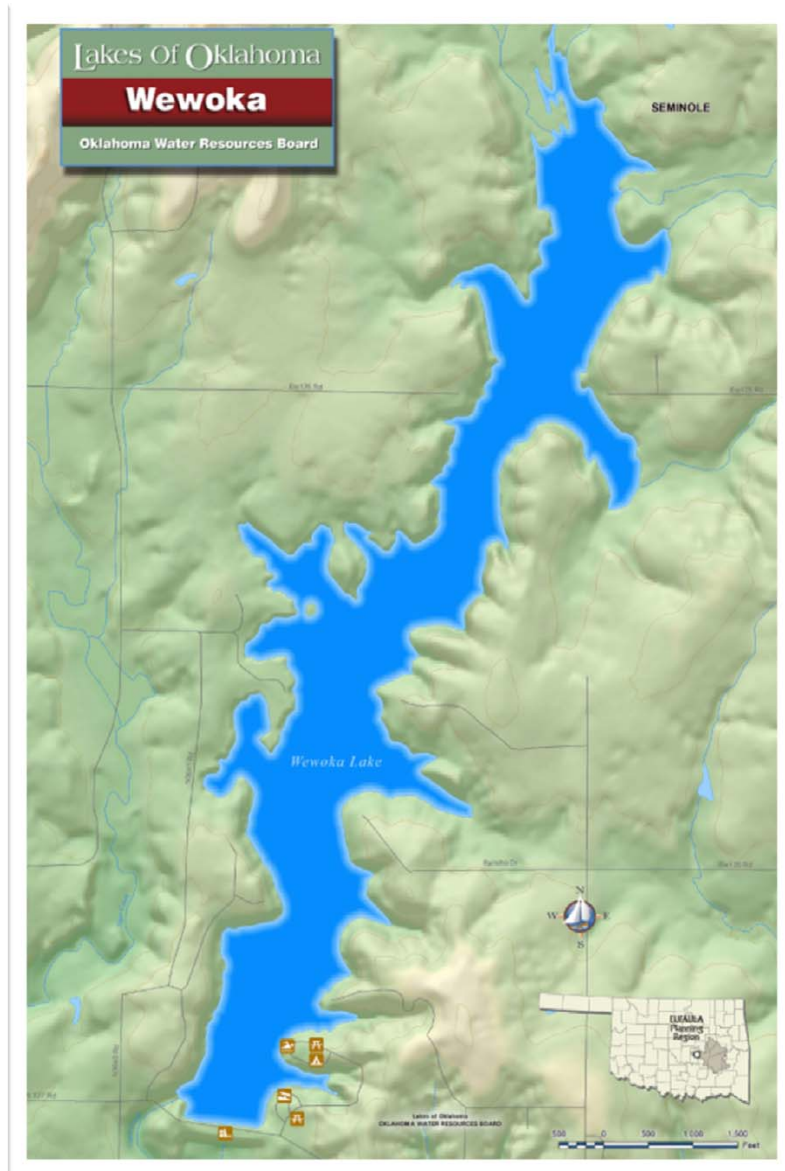
Beneficial Uses

- Beneficial Use descriptors characterize the resource, services, or qualities of a waterbody and expresses the *ultimate goals for protecting and achieving water quality*.
- *ultimate goals for protecting and achieving water quality*
- Without waterbody goals, there would be no progress toward the CWA goal to restore and maintain the Nation's water

Beneficial uses

- Beneficial uses are the kinds of activities a stream or lake can be used for
- Waterbodies can have many assigned beneficial uses





Beneficial Uses

-Public and Private Water Supply

- City of Wewoka
- Lake residents

-Fish and Wildlife Propagation

-Recreation – PBCR

- Swimming, water skiing, boating, etc.

-Agriculture

-Aesthetics

Beneficial Use Assignments

- Designated Beneficial Uses in Appendix A of Chapter 45
- If a lake, stream or wetland is not listed in Appendix A, it has default beneficial uses assigned

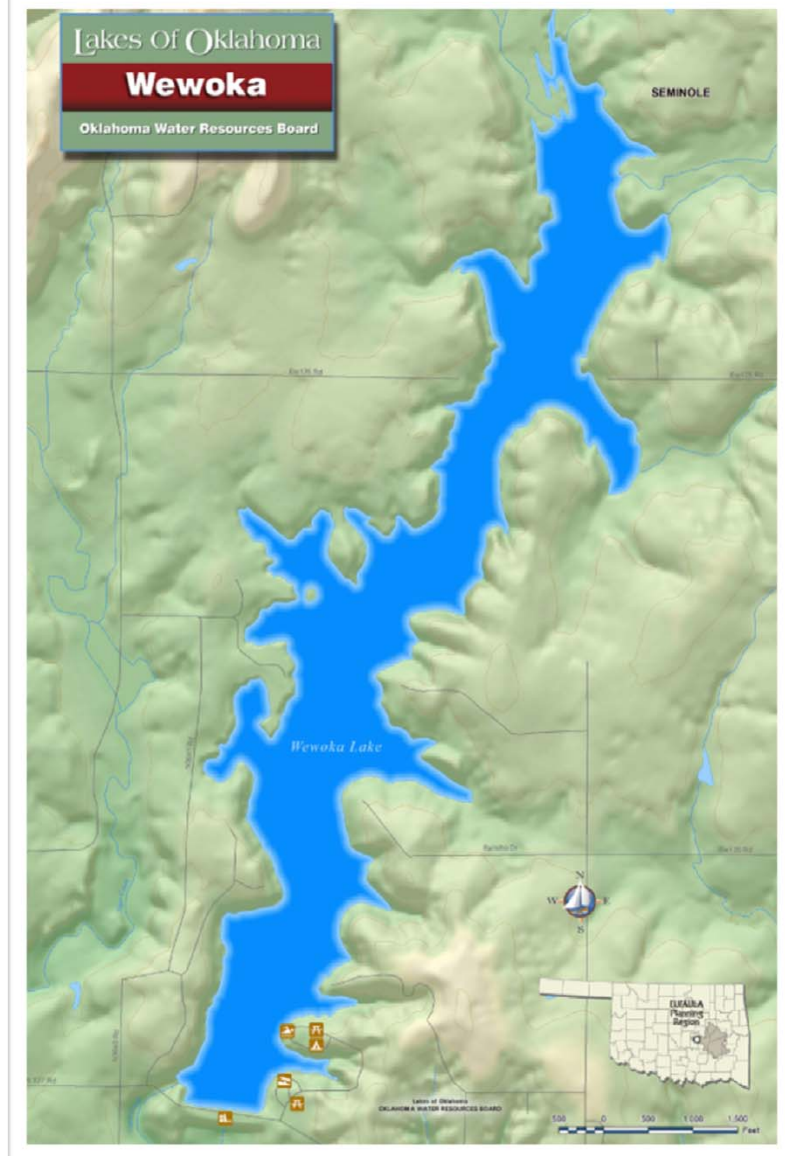
A landscape photograph showing a river flowing through a dry, hilly area. In the background, a long bridge with multiple wooden trestles spans the river. The foreground is a grassy bank with some rocks and sparse vegetation. Two people are visible in the river, likely fishing. The sky is clear and blue.

Criteria

To protect the Beneficial Uses

Criteria

- Limit on a particular pollutant or on the condition of a waterbody
- Intended to protect and support a beneficial use
- Numeric Criteria: Specify a precise measurable level of some parameter
- Narrative Criteria: Provide a qualitative benchmark to assess water quality



Criteria

-Public and Private Water Supply

Appendix G

Chlorophyll-a

-Fish and Wildlife Propagation

Dissolved Oxygen

pH

Turbidity

Toxic Substances

-Recreation – PBCR

Bacteria Levels

E. Coli, Enterococci

-Agriculture

Minerals

Chloride, Sulfates, TDS

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-Aesthetics

Free from...

A photograph of a river flowing through a forest. The water is clear and blue, splashing over several large, dark rocks. The surrounding trees are lush green, and the scene is brightly lit by sunlight. The text "Antidegradation" is overlaid in the center of the image.

Antidegradation

Ultimate Protection of Water Quality

Antidegradation Policies

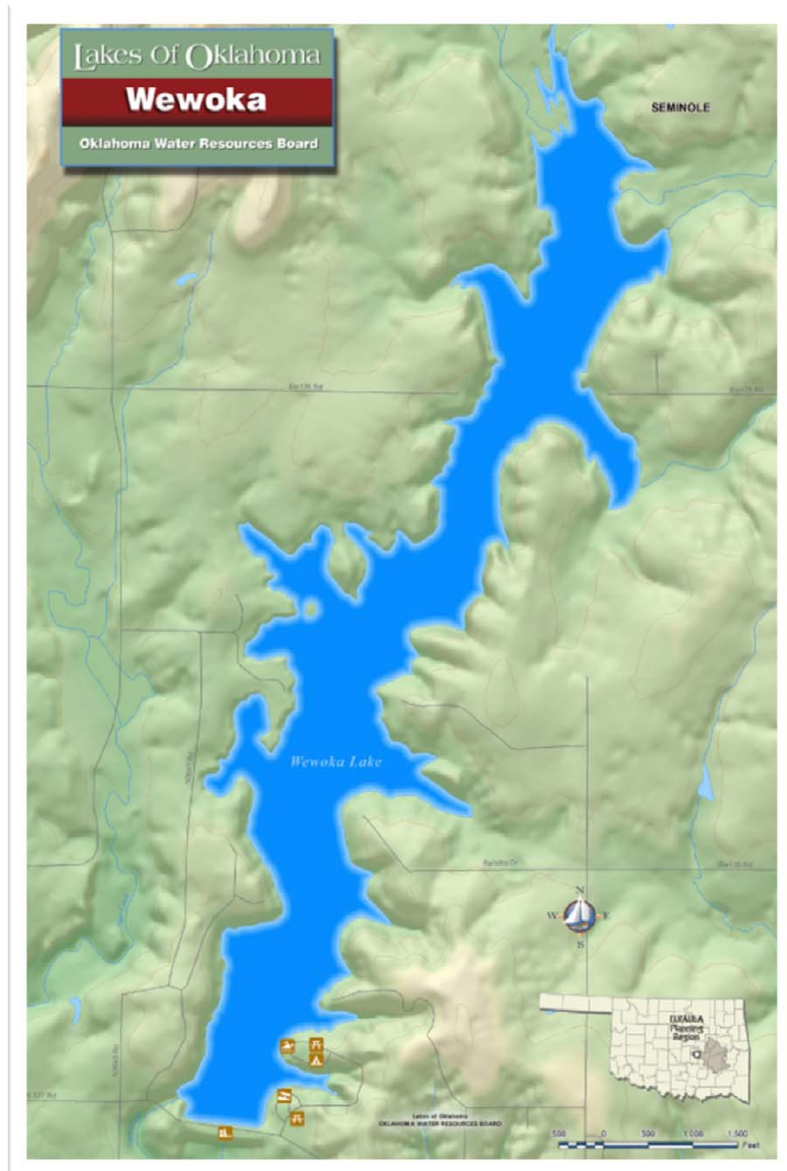
- Purpose – Waters of the state are a valuable resources and therefore shall be protected, maintained, and improved for the benefit of all citizens.
- Antidegradation policies provide certain waterbodies additional protection
- These policies are designed to keep water quality from declining

Antidegradation Classifications

- Outstanding Resource Waters
- Scenic Rivers
- Appendix B Waters
- High Quality Waters
- Sensitive Public and Private Water Supplies
- Culturally Significant Waters

Examples of Antidegradation Policy Implementation

- Sensitive Water Supply (SWS)
 - No new point source no additional loading without additional review
 - 77 water bodies
- Scenic Rivers
 - No new point source, no additional loading
 - BMPs shall be implemented



Antidegradation Policies

-Sensitive Water Supply (SWS)

No new point sources or additional loading.

10 $\mu\text{g/L}$ Chlorophyll-a criteria

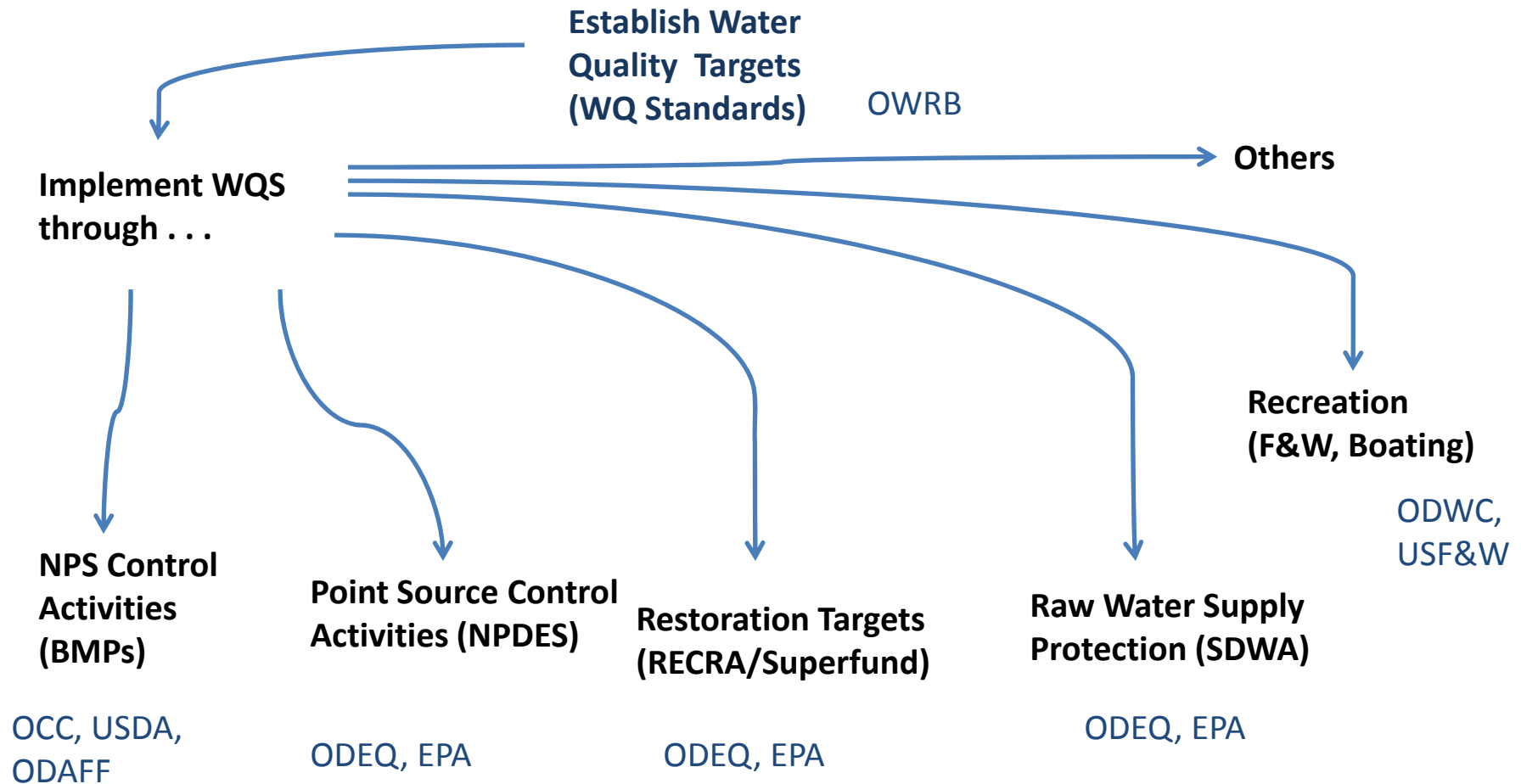
Implementation

A photograph of a small concrete dam or weir structure with a small building on top, situated on a grassy bank next to a body of water. The word 'Implementation' is overlaid in large white text. The dam is made of concrete and has a small building on top. The building is light-colored and has a single window. The dam is surrounded by green grass and some trees. In the background, there is a fence and some utility poles. The water is calm and reflects the sky.

Implementation

- A bridge between WQS and water quality regulatory programs
- For example, implementation rules describe how to translate criteria into permit limits

WQ Management Cycle



Public Process

- Informal Meeting(s)
- Formal Rulemaking
 - Notice of Rule Making Published
 - Draft Proposed Rules for Public Inspection
 - Comment Period
 - Hearing
- Board Adoption
- Legislative Review and Gubernatorial Review
- Submittal to EPA
 - EPA Approval (30-90 days)
- **WQS MAILING LIST**

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www.owrb.ok.gov/standards

Water Quality Standards; Oklahoma Water Resources Board - Mozilla Firefox

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Water Quality Standards

[Complete Standards Document](#)

Standards Currents

2013 Interim Revision of WQS and Implementation.

2012 Triennial Revision timeline and supporting documents

Scenic River Criteria Review: The Oklahoma Water Resources Board unanimously accepted these reports at the April 10th, 2012 board meeting ([Full story](#)).

About the Program

Oklahoma's Water Quality Standards (WQS) are a [set of rules](#) adopted by Oklahoma in accordance with the federal Clean Water Act, applicable federal regulations, and state pollution control and administrative procedure statutes. WQS serve a dual role:

- Establish WQ benchmarks
- Basis for the development of WQ based pollution control programs, including discharge permits, which dictate specific treatment levels required of municipal and industrial wastewater dischargers.

Three Joint Protection Methods

The WQS consist of three main components: (1) designation of beneficial uses, (2) water quality criteria to protect the designated uses, and (3) antidegradation policies.

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graph TD; A((Beneficial Uses)) --- B((Criteria)); A --- C((Anti-Degradation)); B --- C; A --- B --- C; D((Water Quality Standards))
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RULES

- Water Quality Standards Revisions
- Oklahoma's Water Quality Standards (ch. 45)
- Implementation of Oklahoma's Water Quality Standards (ch. 46)
- OWRB Rules

QUICK LINKS

- Standards Fact Sheet
- EPA Water Quality Standards
- Studies
- Beneficial Uses detail
- Scenic Rivers Criteria

Questions?

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