Development of Wetland Water Quality Standards

Oklahoma Water Resources Board

Jason Childress & Rebecca Veiga Nascimento

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State of Oklahoma
OWRB
WATER RESOURCES BOARD
the water agency


Conservation Commission
Lead agency for wetland planning
Chair of Wetland Work Group
Wetland Work Group
Stakeholder group engaged in wetland topics
Wetlands Technical Work Group
Sub-group to address scientific and technical work
2013 - 2018 Wetland Program Plan
Developed by OCC and both work groups
Umbrella document that coordinates statewide wetland activities and programs
Organized around 5 core elements
Element 4 - Development of Wetland WQS
OWRB responsible for water quality standards
Collaboration with both work groups

Water Quality Standards Overview

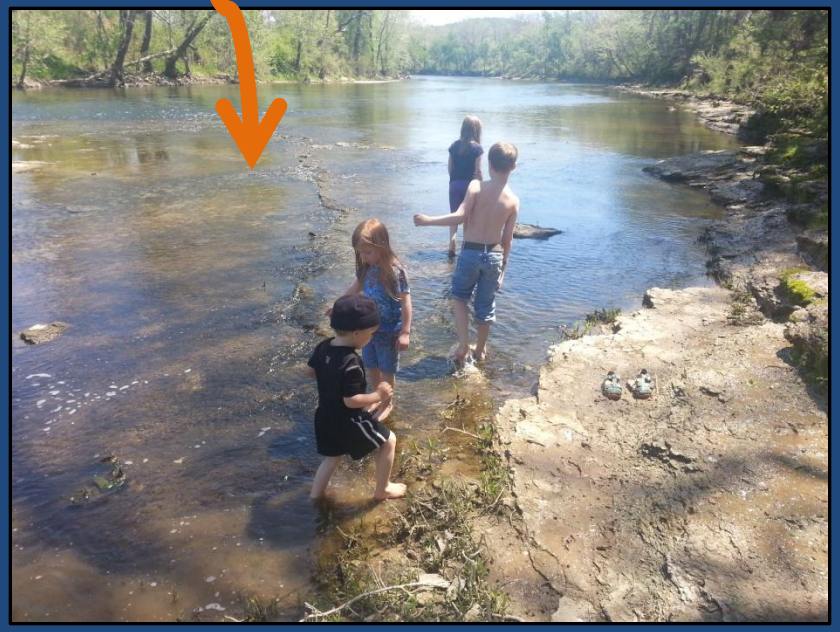
- Water Quality Standards protect the quality Oklahoma's waterbodies
- OWRB is responsible for promulgating standards
- Periodically revise & update standards

How Do WQS Work?

- WQS have three basic components
  - Beneficial uses
  - Criteria to protect beneficial uses
  - Antidegradation policy

Beneficial Uses

The Real Thing	The Descriptor
Recreation	*Primary Body Contact Recreation* – involves direct body contact with water where a possibility of ingestion exists.



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.

- Without waterbody goals there would be no progress or framework to maintain and protect water quality

Beneficial Use

- Appendix A of Chapter 45 of the Oklahoma WQS (OAC 785:45) has a list of waterbodies in Oklahoma and designated beneficial use

- If a lake, stream or wetland is not listed in Appendix A, it has default beneficial uses assigned

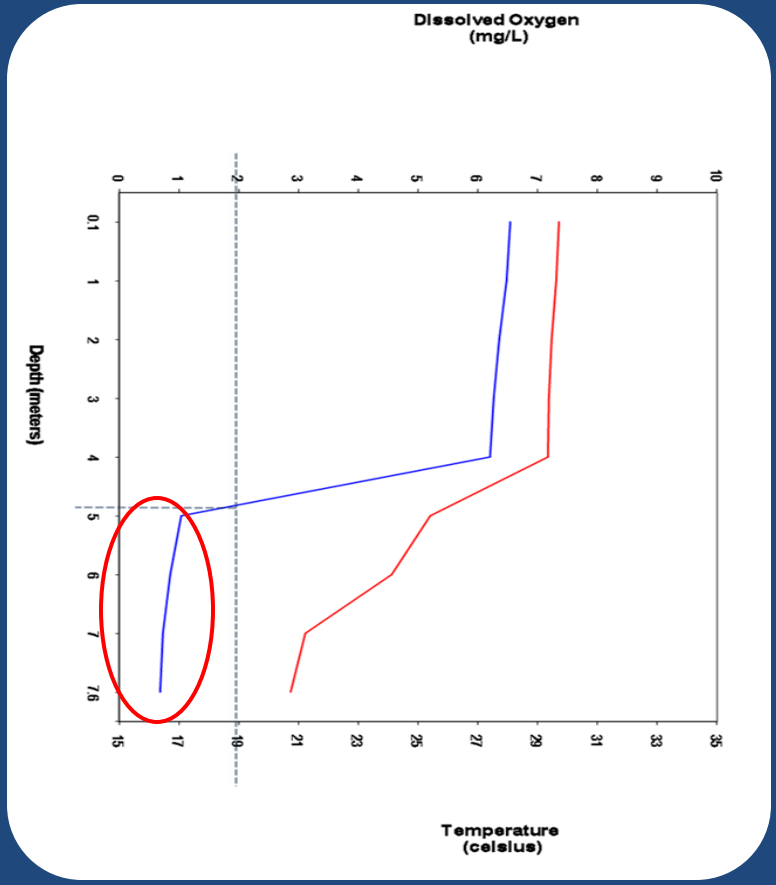
Criteria

- Criteria to protect beneficial uses required

- 2 types of criteria
  - Numeric
  - Narrative

Criteria - Numeric

- Specific numeric values
  - Values not to be exceeded address both short-term and long-term effects: example toxics
  - Values must be exceeded: example DO



Criteria - Narrative

- Statement prohibiting action or condition – *free from*
- Positive statement about expected condition – *natural status*
- Can address physical and biological aspects of water quality
- Need to be interpreted or translated

Antidegradation Policy

- Concept based on the spirit, intent and goals of Clean Water Act

  to restore and maintain the chemical, physical, and biological integrity of the Nation's waters

Antidegradation Policy

- Antidegradation Policy and implementation procedures are part of WQS

- 3 Tier System
  - Tier 1 – attainment & maintenance of existing or designated beneficial uses
  - Tier 2 – maintenance and protection of high quality waters & SWS
  - Tier 3 – prohibition against degradation of water quality in outstanding resource waters

Antidegradation Policy

- **Summary**
  - Antidegradation provides a decision-making process for determining how and how much to protect high quality waters, and a framework for protecting existing uses and outstanding resource waters

What about Wetlands?

- Where do wetlands fall in Oklahoma's water quality standards?

WQ Standards for Wetlands

- Wetlands are a water of the state, but not specifically addressed in standards
- Wetlands protected with default standards
  - Warm Water Aquatic Community
  - Primary Body Contact Recreation
  - Aesthetics
  - Irrigation Agriculture
- Default standards often not suitable for wetland waterbodies

WQ Standards for Wetlands

- Wetlands & the default standards
  - Default dissolved oxygen criteria 5 mg/L
  - Good condition wetlands may have DO concentration less than 5 mg/L
  - If current default criteria is applied may erroneously identify healthy wetlands as wetlands in poor condition

WQ Standards for Wetlands

- Need new standard to accurately protect wetland waterbodies

Development of Wetland Standards

Step 1 - Technical Work

- Establish scientific foundation for standards
  - Wetlands Technical Work Group
  - Kicked off project in 2012

Development of Wetland Standards

Step 1 - Technical Work

- Guiding Principles
  - Standard comprehensively rooted in wetland science
  - Develop meaningful & workable standard for wetland protection
  - Recognize wetlands as unique waterbody type
  - Standard compatible with existing/future assessment methods
  - Provide clarity to regulatory programs

Development of Wetland Standards

Step 1 - Technical Work

- Progress to date
  - Monthly meetings since December 2013
  - Definition
  - Preliminary draft beneficial use & criteria language

Development of Wetland Standards

Step 2 – Program & Policy Work

- Consider application of draft standard in various water quality programs
  - Need input from stakeholders
  - Wetlands Work Group
    - Additional meetings over next 8 weeks
      - Mid September
      - Early October
      - Late October

Development of Wetland Standards

- Next Steps
  - Continued work by technical group
  - Meetings of Wetland Work Group & additional participation over next months
  - Expect to publish notice of rulemaking December 2014
  - Expect Board hearing January 2015
  - Expect Board consideration March 2015

Questions

Nymphaea odorata
American white water lily

Lemna minor L.
Common duckweed

Wetland Definition

- Federal definition
- Used by EPA, USDA, & Army Corps in wetland programs
- Technical work group found value in being consistent with federal definition

Wetland Definition

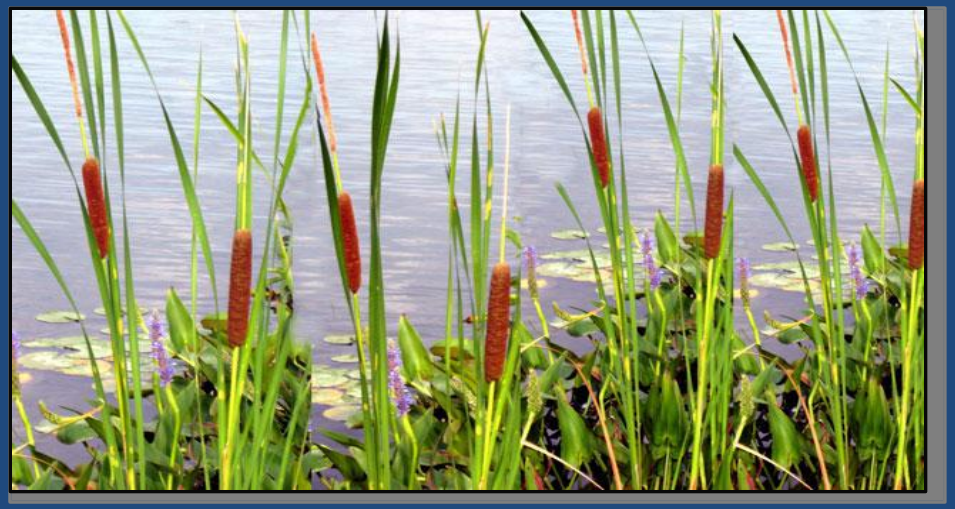
- *Wetland* means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

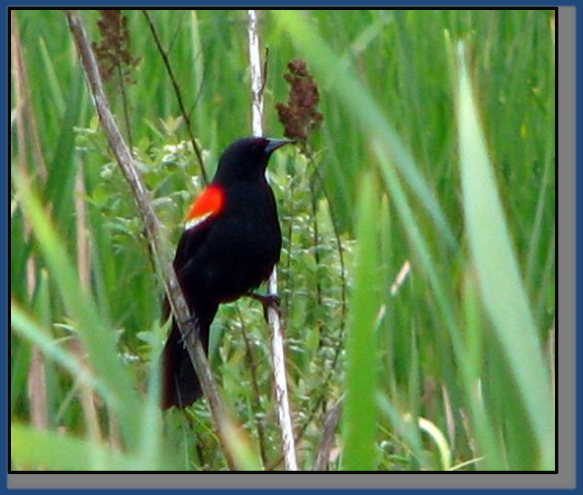
40 CFR 230.3

Next Meeting

- Potential Date
  - September 15th or 18th
- Topic
  - Preliminary Draft Beneficial Uses

Questions & Contact Information





Rebecca Veiga Nascimento

Phone: 405-530-8800

Email: rebecca.veiga@owrb.ok.gov

Jason Childress

Phone: 405-530-8800

Email: jason.childress@owrb.ok.gov