

# OKLAHOMA WATER QUALITY STANDARDS 2015-2016 TRIENNIAL RULEMAKING

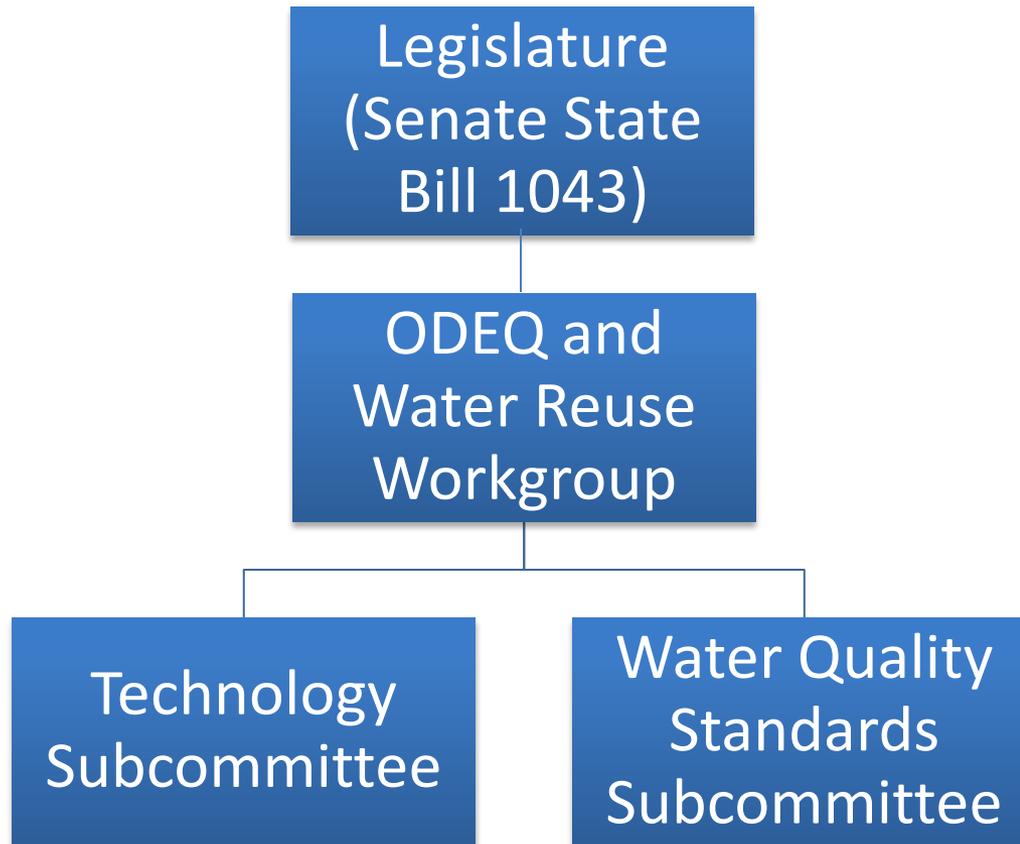
Oklahoma Water Resources Board  
2<sup>nd</sup> Informal Public Meeting  
October 1, 2015

# Today's Meeting

- Actions planned for the 2015-16 Triennial Rulemaking
  - Aquatic Life Criteria Updates (August 26)
  - Appendix B Updates (August 26)
  - Appendix A Updates (Today)
  - Sensitive Water Supply – Reuse (Today)
- Discuss Future Standards Work
- Opportunity for Public Solicitation of Revision Topics

# New Classification of Sensitive Water Supply – Reuse

# What Brought Us Here?



# What Brought Us Here?

## Water Quality Standards Subcommittee Comprised Of:

- Various Municipalities
- Consulting Engineers and Other Technical Experts from Several Engineering Firms, State Agencies, and the General Public
- Other Members of the General Public
- Total Membership of 21

# What Brought Us Here?

## Water Reuse Water Quality Standards Subcommittee

- **WQS Review**

- Current WQS don't allow new point source discharges, or increased loading from existing discharges, into a Sensitive Water Supply (SWS)
- Must demonstrate that discharge is “maintaining or improving” existing conditions of public water supply reservoir



# What Brought Us Here?

## Augmentation Must Demonstrate Agency Satisfaction

The discharger has an obligation to demonstrate *“to the satisfaction of the permitting authority that a new point source discharge or increased load from an existing point source discharge will result in maintaining or improving the water quality of both the direct receiving water and any downstream waterbodies designated SWS”*.

[785:45-5-25(c)(4)(B)]

# Why do we need a new SWS-Reuse Classification?

- SWS is a Tier 2 type classification within Oklahoma's Antidegradation rules
  - No new point sources or increased loads and maintain existing water quality and uses
  - Developed 30 years ago
- Wastewater treatment has advanced tremendously in 30 years
- Wastewater reuse (water supply augmentation) is a component of Oklahoma's Comprehensive Water Plan
- Statewide demographics and supply needs have changed considerably over the last 30 years

# Goals of the new SWS-Reuse Classification

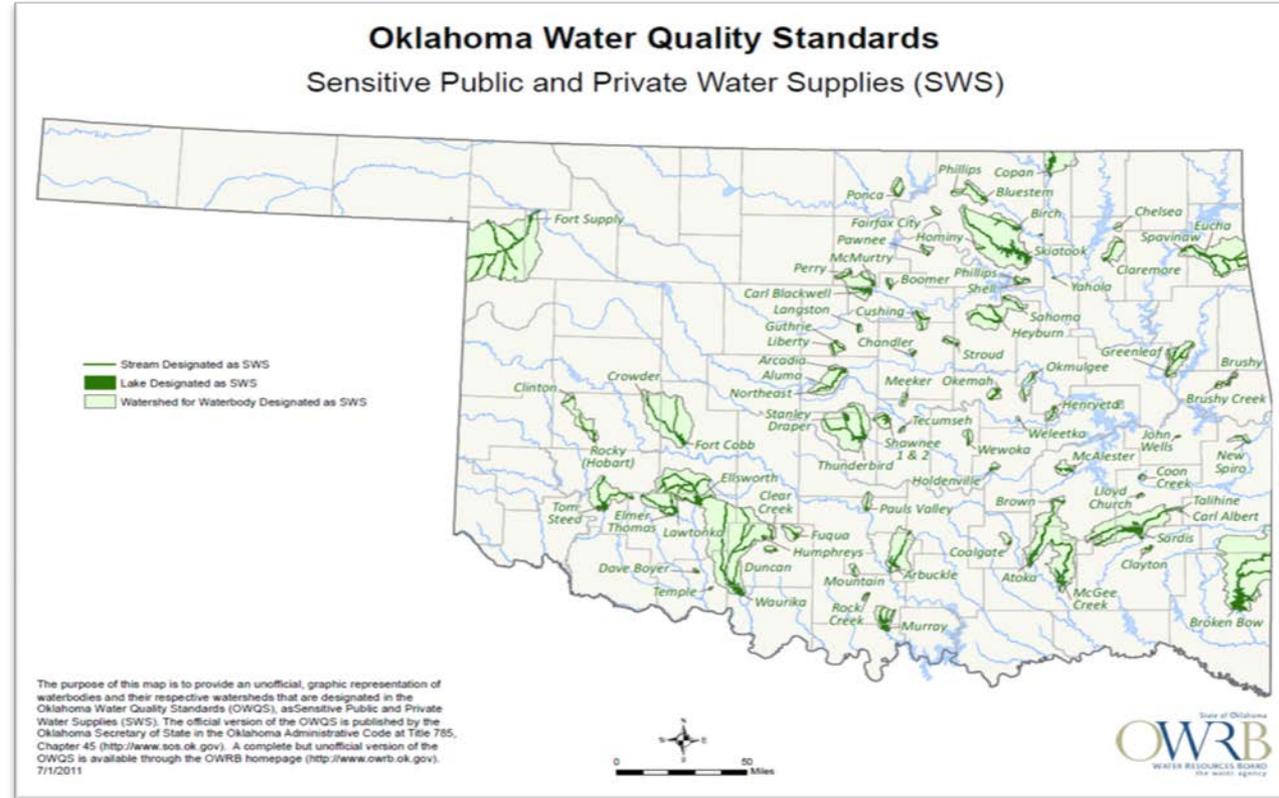
- Protect Water Quality
  - Protect public health and aquatic ecosystems
  - Protect all lake existing and designated beneficial uses
- Create a deliberative, consistent approach for Antidegradation Review
- Create pathway for discharge of treated municipal wastewater into SWS lakes for augmentation
- Does not reclassify SWS waterbodies
  - Reclassification of a particular waterbody must occur through rulemaking

# What are Sensitive Water Supplies?

- As defined in statute
  - Currently a public water supply reservoirs
  - Generally watershed < 100 square miles
  - “Or, as otherwise designated by the Board”
- Carry Tier 2 antidegradation protection
  - No new point sources or loading
  - Protection of existing water quality

# What are Sensitive Water Supplies?

- Geographically diverse
- Waterbody capacity and size are variable
  - ~75% < 23,000 acre ft storage
  - Nearly half < 500 surface acres
- Variable watershed sizes



# Proposed Creation of SWS-R

“SWS-R are waterbodies classified as sensitive public and private water supplies that may be augmented with reclaimed municipal water for the purpose of indirect potable reuse” [OAC 785:45-5-25(c)(8)(A)]

- With the concurrence of the Water Quality Standards Subcommittee of the Water Reuse Workgroup
- Rule revisions provide an optional antidegradation classification for SWS lakes, aka SWS-R
- Same characteristics as SWS reservoirs [785:45-5-25(c)(8)(A)]
- Continues to provide additional protection [785:45-5-25(c)(8)(B)]
  - Except as outline in (8)(C)
- Creates the framework for new municipal discharges [785:45-5-25(c)(8)(C)]

# Proposed Creation of SWS-R

OAC 785:45-5-25(c)(8)(C)

“New point source municipal wastewater discharges or increased loading from existing point source municipal wastewater discharges to a SWS-R waterbody or watershed shall achieve a minimum level of effluent quality that is attainable using demonstrated treatment technologies or other alternatives. Approaches for required technology-based limitations and or other alternatives are outlined in 785:46-13-4(e).”

- Requires a minimum level of effluent quality
- Ties technology limits to implementation rules

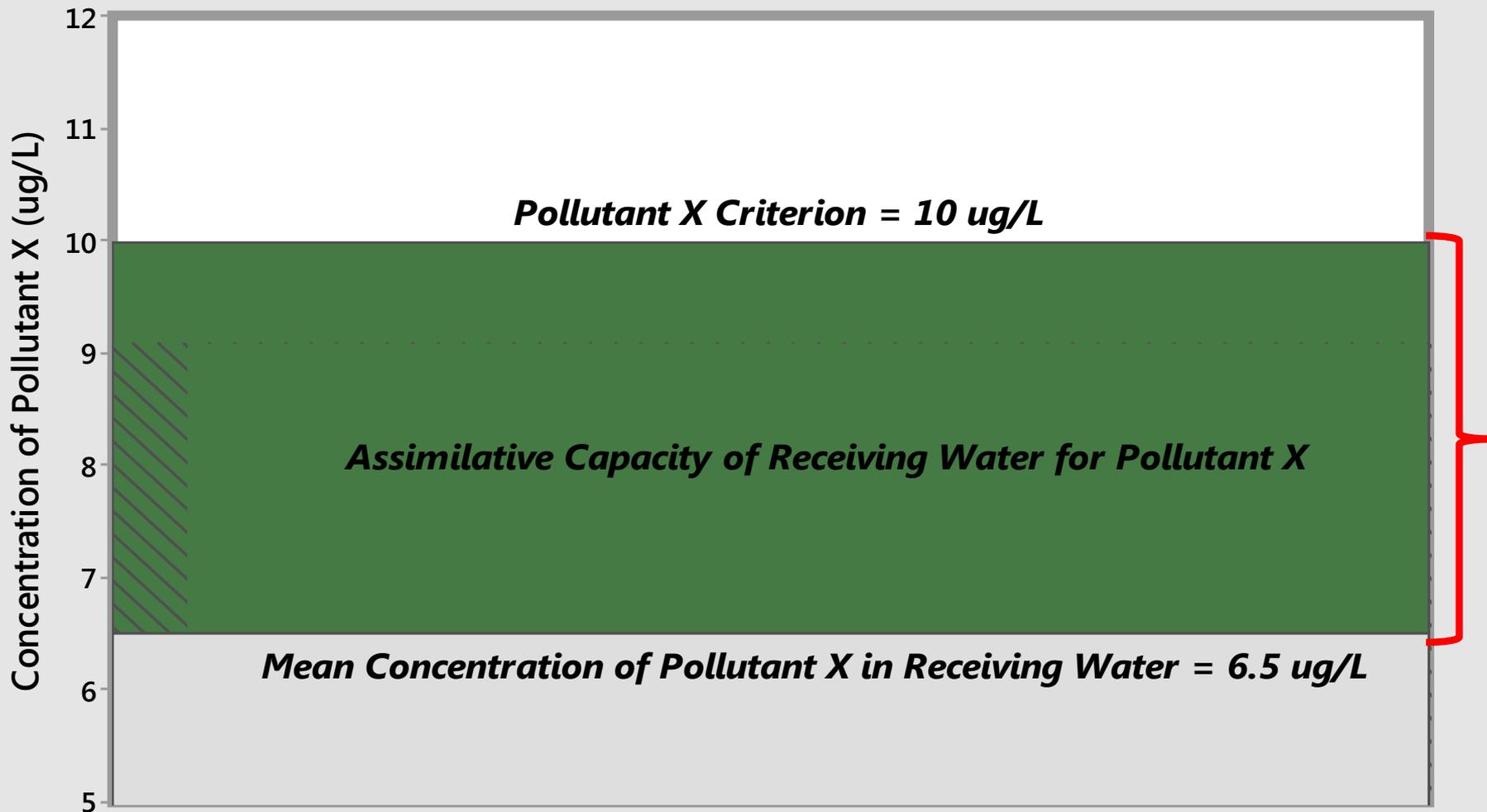
# Proposed Creation of SWS-R

OAC 785:45-5-25(c)(8)(C)(i)

“The waterbody’s **assimilative capacity** for all applicable narrative and numeric criteria shall be determined. If assimilative capacity exists for any applicable narrative or numeric criteria, the discharger shall document what portion, if any, of the assimilative capacity is reasonable to maintain. If proposed that it is not reasonable to maintain any, or a portion, of the assimilative capacity, a report consistent with all 40 CFR 131.12(a)(2) requirements describing the available assimilative capacity and providing justification for consuming all or a portion of the assimilative capacity shall be submitted by the discharger to the State for review. The State may approve the proposed consumption of any, or all, of the assimilative capacity only if it is found to be necessary based on the aforementioned report and consistent with the requirements described in 40 CFR 131.12(a)(2).”

Creates a deliberative, consistent approach to antidegradation review

# Theoretical Model of Assimilative Capacity in Receiving Waters



# Proposed Creation of SWS-R

OAC 785:45-5-25(c)(8)(C)(i)

“The waterbody’s assimilative capacity for all applicable narrative and numeric criteria shall be determined. If assimilative capacity exists for any applicable narrative or numeric criteria, the discharger shall document what portion, if any, of the assimilative capacity is reasonable to maintain. If proposed that it is not reasonable to maintain any, or a portion, of the assimilative capacity, a report consistent with all 40 CFR 131.12(a)(2) requirements describing the available assimilative capacity and providing justification for consuming all or a portion of the assimilative capacity shall be submitted by the discharger to the State for review. The State may approve the proposed consumption of any, or all, of the assimilative capacity only if it is found to be necessary based on the aforementioned report and consistent with the requirements described in 40 CFR 131.12(a)(2).”

- Creates a deliberative, consistent approach to antidegradation review
  - An important social or economic development needs accommodation
  - Assimilative capacity is documented
  - After an analysis of alternatives, the consumption of a portion or all of the assimilative capacity may be determined necessary and permitted by a regulatory authority
  - Intergovernmental coordination and public participation occur consistent with Oklahoma’s Continuing Planning Process

# Proposed Creation of SWS-R

OAC 785:45-5-25(c)(8)(C)(ii)

“All existing and designated beneficial uses of the receiving waterbody and downstream waterbodies shall be maintained.”

OAC 785:45-5-25(c)(8)(C)(iii)

“The discharge shall not impair human health even during drought of record conditions.”

# Proposed Creation of SWS-R

OAC 785:45-5-25(c)(8)(C)(iv)

“SWS-R waterbodies, with permitted discharge, shall be technically evaluated by permitted parties at least once every five years to determine the attainment or nonattainment of beneficial uses. Technical evaluation reports, including all data and information necessary to allow independent analysis, shall be submitted to the permitting authority for review. If the report documents nonattainment of a beneficial use(s) resulting from the discharge, the permitting authority shall consider actions including, but not limited to, additional permit requirements, cessation of the discharge, and or a recommendation to OWRB to revoke the SWS-R waterbody classification.”

- Provides for a mandated, periodic evaluation and assessment of the SWS-R waterbody
- Ensures the regulatory process is protecting water quality
- Provides remedies for correction

# Proposed Creation of SWS-R

OAC 785:45-5-10. Public and Private Water Supply Beneficial Use

(7)Chlorophyll-a numerical criterion for certain waters.

“The long term average concentration of chlorophyll-a at a depth of 0.5 meters below the surface shall not exceed 0.010 milligrams per liter in Wister Lake, Tenkiller Ferry Reservoir, nor any waterbody designated SWS or SWS-R in Appendix A of this Chapter. Wherever such criterion is exceeded, numerical phosphorus or nitrogen criteria or both may be promulgated”

- Public and Private Water Supply beneficial use applies a chlorophyll-a criterion to SWS lakes
- Revision extends this additional protection to SWS-R lakes

# What's Next for SWS-R?

- What is not in this revision?
  - Reclassification of any SWS reservoir to SWS-R
  - Specific implementation and technology rules
- Implementation Revisions
  - OAC 785:46-13-4(e) is reserved for new rules
  - These new rules will be developed in coordination with the ODEQ's rules for indirect potable reuse
  - Planning for 2016-2017 Interim Rulemaking

# Public Solicitation

- Part of the triennial revision is to more fully engage the public in the revision process
- Staff actively solicit public concerns with and needed revisions to the WQS through mail, meetings, and at each informal stakeholder meeting
- Topics may or may not be fully reviewed and added for the 2015 revision but will be considered for future interim revisions

# REVISION TIMELINE

<b>Preparatory Activities for Standards Revisions</b>	<b>Dates</b>
Stakeholder meetings	August 26 & October 1, 2015
→ Informal public meeting	October 27, 2015
Notice of Rulemaking Intent (NRI) submitted to Office of Administrative Rules	November 25, 2015
NRI & proposed text submitted to Governor & Cabinet Secretary	November 25, 2015
NRI published in the Oklahoma Register & draft text available for review	December 15, 2015
Rule Impact Statement (RIS) published on web page	December 15, 2015
→ <b>Draft Proposed Rules for Public Inspection</b>	<b>December 15, 2015</b>
Notice distribution to stakeholders	"On or around " December 15, 2015
→ Comment period – minimum 45 days	December 15, 2015–January 31, 2016
→ Formal Hearing at OWRB Board meeting to receive public comments	January 19 or February 16, 2016
Comment Responsiveness Summary prepared for Board	February – March, 2016
→ <b>Final Proposed Rules Prepared for Board Vote</b>	<b>February – March 2016</b>
Board Action to Adopt revised OWQS	February or March 2016
Agency Rule Report submitted to Legislature and Governor	February or March 2016
Legislative review & approval	Spring 2016
Gubernatorial review	Spring 2016
→ <b>Final State Rule Promulgated &amp; Published</b>	<b>September 2016</b>
Attorney General Certification	September – November 2016
→ Submittal to EPA Region 6 (within 30 days of Attorney General Certification)	September – November 2016
→ <b>EPA Review &amp; Approval: 60-90 days</b>	<b>November 2016 – January 2017</b>

# Questions / Open Discussion

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