

# OKLAHOMA WATER QUALITY STANDARDS 2015-2016 TRIENNIAL RULEMAKING

Oklahoma Water Resources Board  
1<sup>st</sup> Informal Public Meeting  
August 26, 2015

# Today's Meeting

- Provide brief overview of Water Quality Standards (WQS)
- Provide briefing on several actions planned for the 2015-16 Rulemaking
  - Aquatic Life Criteria Updates (today)
  - Appendix B Updates (today)
  - Appendix A Updates (October 1)
  - Sensitive Water Supply – Reuse (October 1)
- Opportunity for Public Solicitation of Revision Topics

# Aquatic Life Criteria Updates

# Aquatic Life Criteria Updates

- What are Aquatic Life Criteria (ALC)
  - Ambient numeric water quality criteria for toxic pollutants
  - Established to protect the Fish & Wildlife Propagation beneficial use
  - Located in Appendix G of Oklahoma WQS

# Aquatic Life Criteria Updates

- Numeric criteria are values not to be exceeded
- Estimates of concentrations of pollutants expected to protect aquatic life from both short and long-term adverse effects
  - Acute (mortality)
  - Chronic (reduced reproduction or growth)

# Criteria Format - Magnitude, Duration, Frequency

- Criteria are expressed with 3 components
  - Magnitude - maximum concentration
  - Duration - averaging period
  - Frequency - average frequency of allowed excursions
- This approach allows criteria to be protective without being overprotective

# Aquatic Life Criteria Updates

- Why update ALC
  - Current criteria adopted in 1988
  - Updated toxicological information directs need to update criteria
  - Updates are necessary to fully protect the Fish & Wildlife Propagation beneficial use

# Aquatic Life Criteria Updates

- Criteria based solely on data & scientific determinations about the relationship between concentrations of a pollutant & its effects on aquatic life
- 1985 Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms & Their Uses
- Revised Deletion Process for the Site-Specific Recalculation Procedure for ALC

# Recalculation Procedure

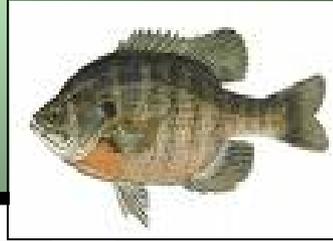
- Edit (i.e. delete) species from original toxicity data set to better reflect the taxonomy of species that reside in the state
- Taxonomy has value in predicting sensitivity to a given toxic pollutant
- Deletion of nonresident tested species allowed only if they are not an appropriate surrogate for resident untested species

# Toxicity Data Requirements

**SALMONID**



**2<sup>ND</sup> FISH  
FAMILY**



**3<sup>RD</sup> CHORDATE  
FAMILY  
(Fish or  
Amphibian)**



**PLANKTONIC  
CRUSTACEAN**



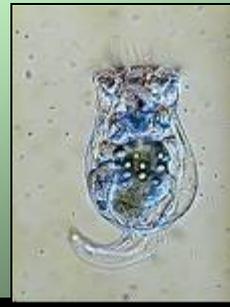
**BENTHIC  
CRUSTACEAN**



**AQUATIC INSECT**



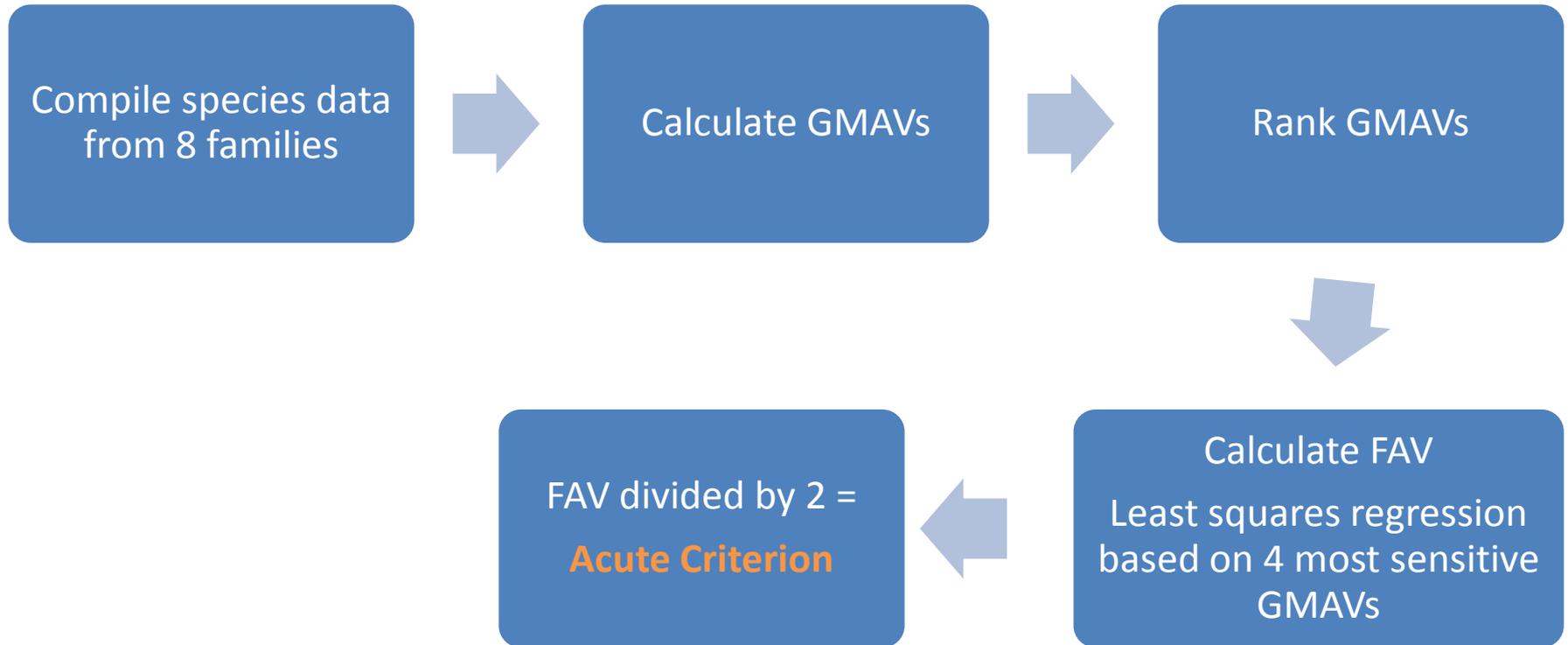
**3<sup>RD</sup> PHYLUM  
(e.g., Rotifera,  
Annelida,  
Mollusca)**



**4<sup>TH</sup> PHYLUM  
OR ANOTHER  
AQUATIC  
INSECT  
ORDER**



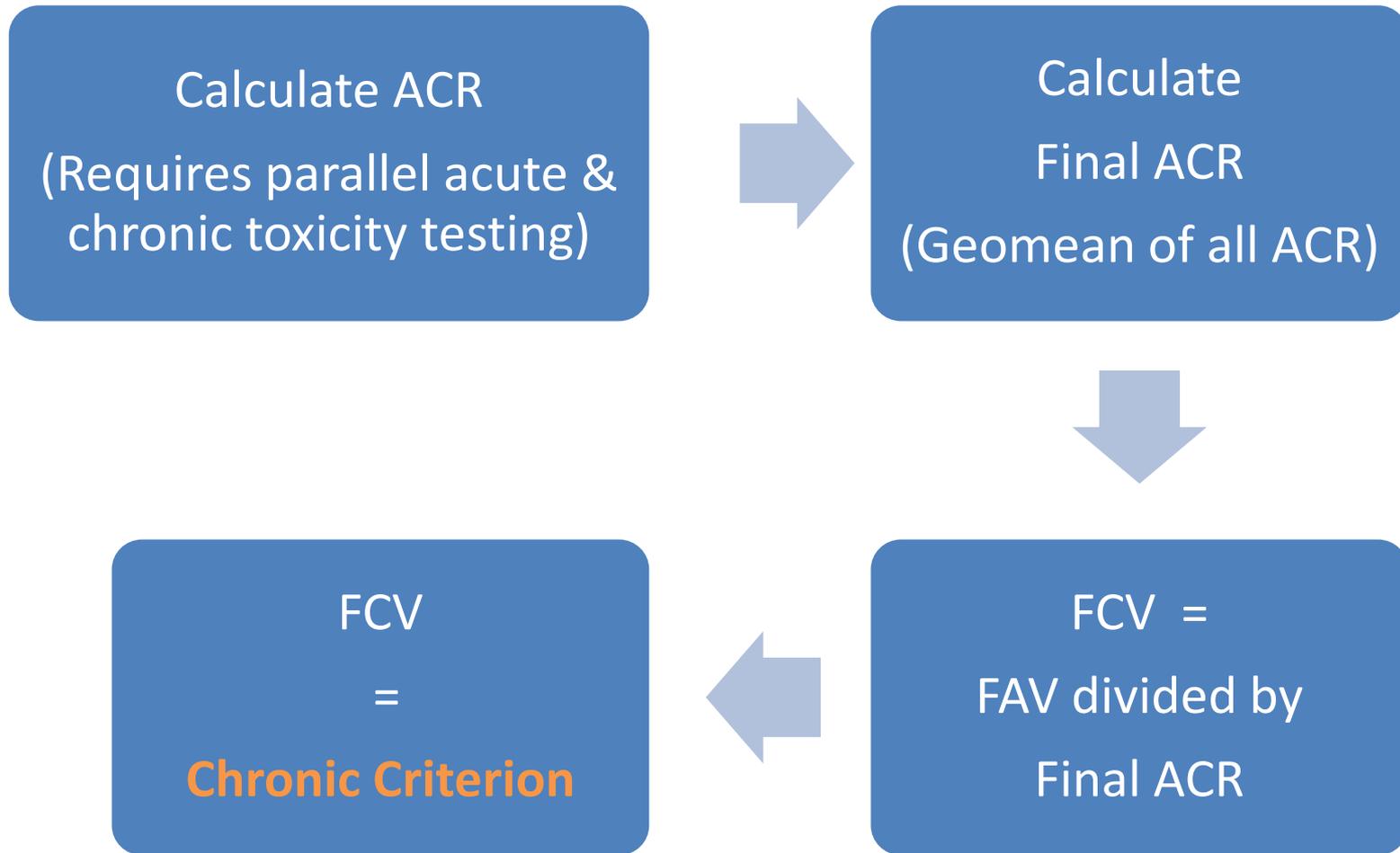
# Acute ALC Calculations



GMAV (Genus Mean Acute Value )

FAV (Final Acute Value)

# Chronic ALC Calculations



ACR (Acute to Chronic Ratio)

FCV (Final Chronic Value)

# Aquatic Life Criteria Updates

- Recommend updates for 15 criteria
  - 9 metals
  - 4 organic chemicals
  - 2 corrections

# 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

Preparatory Activities for Standards Revisions	Dates
→ 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
→ EPA Review & Approval: 60-90 days	<b>November 2016 – January 2017</b>

# IF YOU HAVE ANY QUESTIONS OR WOULD JUST LIKE TO DISCUSS WQS...

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