



Update on New Waste Discharge Requirements for Delta Area Growers

**Brett Stevens, Sr. Environmental Scientist
Central Valley Regional Water Quality Control Board**

Update Topics

- Background
- Why the new requirements?
- Review proposed requirements
- WDR schedule
- Opportunities for Comment



Irrigated Lands Program Background

- 1982 - Waiver of Waste Discharge Requirements; insufficient resources for oversight
- 1999 - Senate Bill 390; Waiver sunsets 2003
- 2003 - Conditional Waiver (renewed 2006)
- Conditional, Interim Waiver:
 - Created coalitions
 - Regulates surface water discharges
 - Board mandated Program EIR

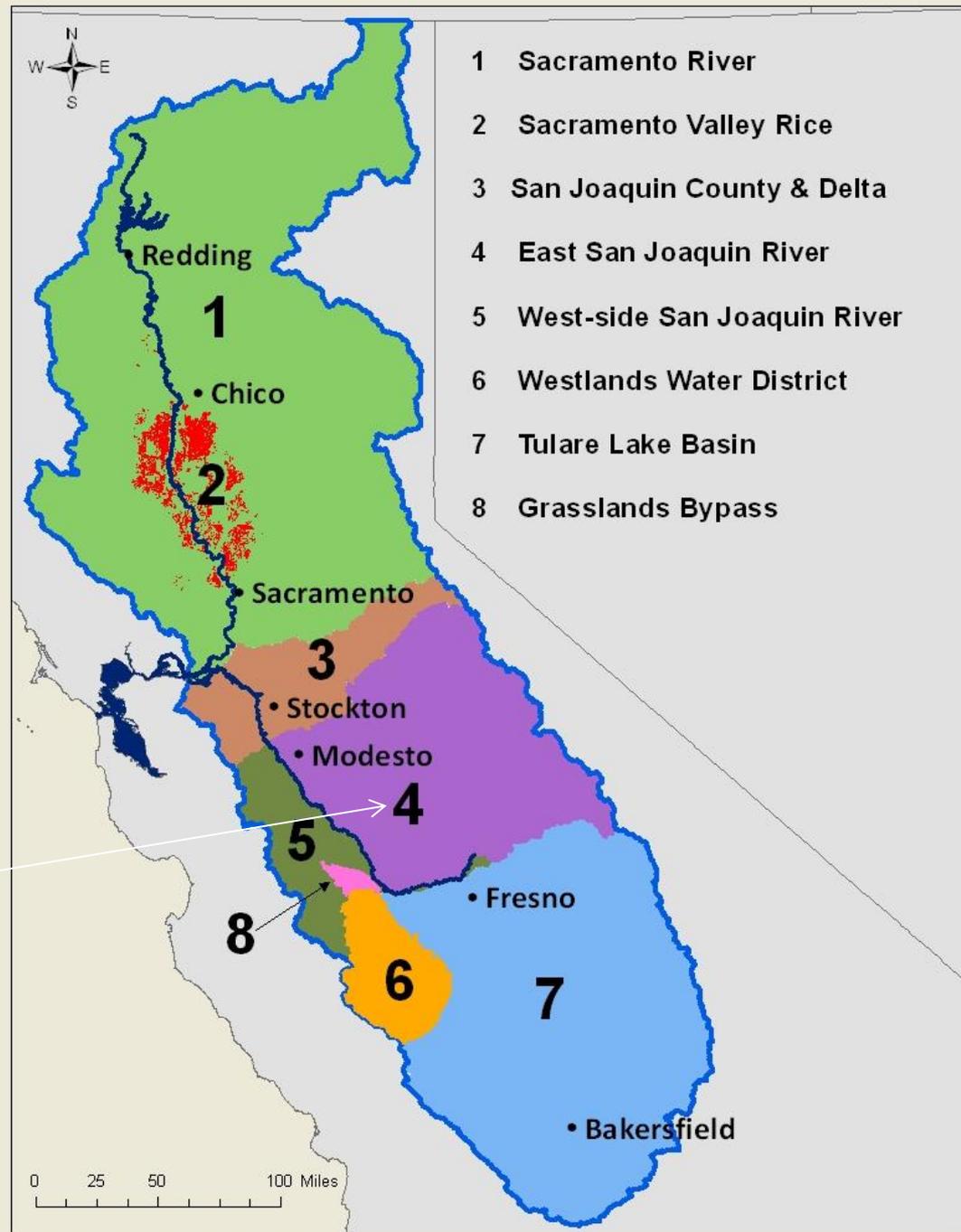
Irrigated Lands Program Background

- 2011 - Program EIR certified
- Now implementing Long-Term Program
- Seven regional and one commodity-based Order
- Two Orders adopted, five more in progress

Geographic Areas/Commodities Addressed by WDRs

East San Joaquin – Dec 2012

Individual Order – June 2012



Why the New Requirements?

- Delta has a lot of cropland: about 618,000 acres
- Delta has substantial surface water resources: about 5,000 linear miles of surface water courses
- Substantial groundwater resources: portions of three basins
- 128,000 acres in DPR GWPA's (pesticide detections or permeable soils)

303(d)-Listed Water Bodies

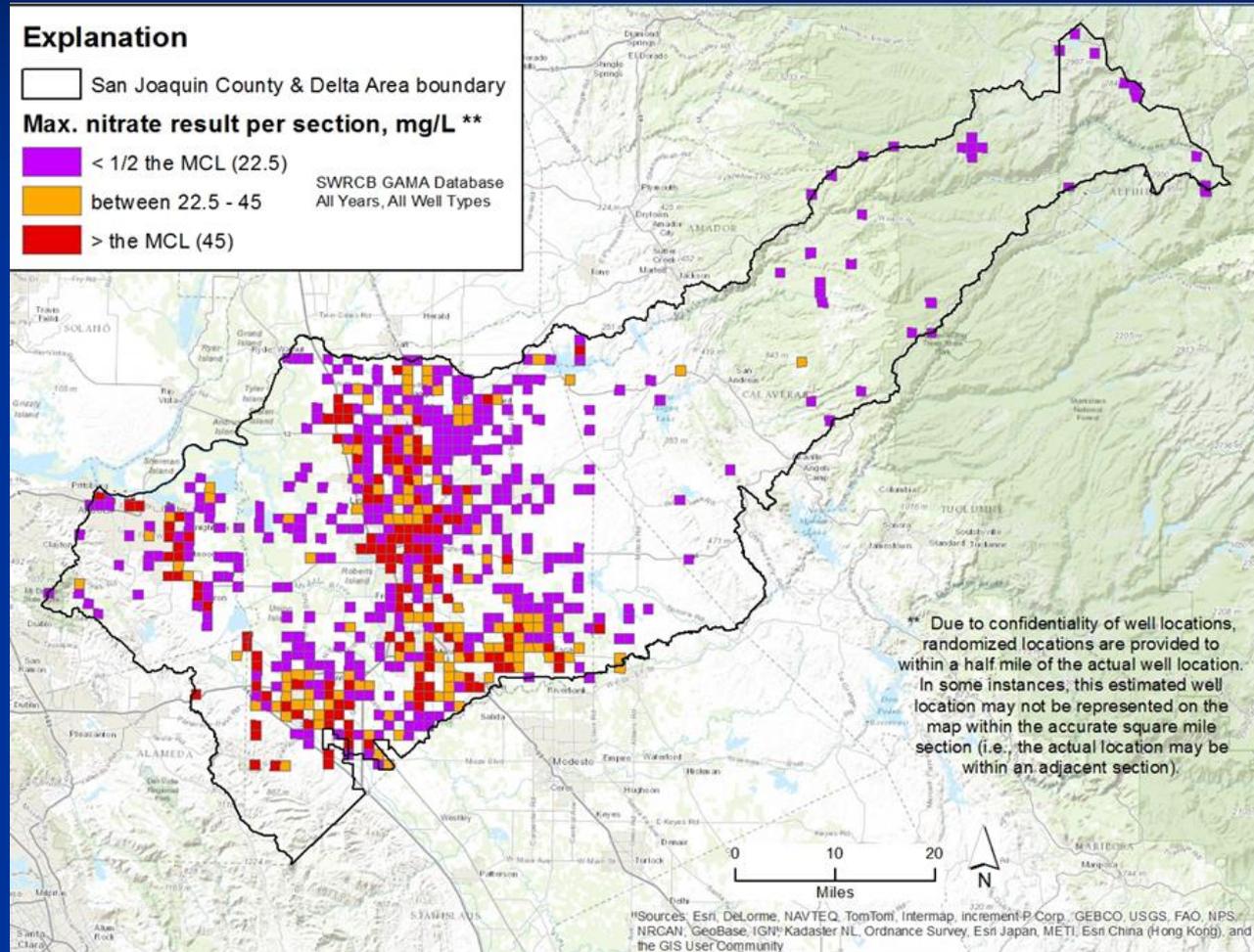
- Federal Clean Water Act requires states to submit list of impaired water bodies
- Stretches of the following listed for chlorpyrifos and sometimes unknown toxicity (8 examples): Duck Creek, Duck Slough, French Camp Slough, Lone Tree Creek, Lower Mokelumne River, Mormon Slough, Pixley Slough, and Sand Creek
- 303(d) list identifies agriculture as the potential source of impairment

Management Plan Summary

- Management plans triggered by pollution detections in surface waters
- Since 2008, 172 management plans for various water bodies and pollutants
- Common pollutants/conditions: low DO, copper, chlorpyrifos, legacy pesticides, and toxicity
- Management plans indicate substantial, ongoing pollution related to agriculture



Nitrate Pollution in Groundwater



Known Nitrate Sources (Regional)

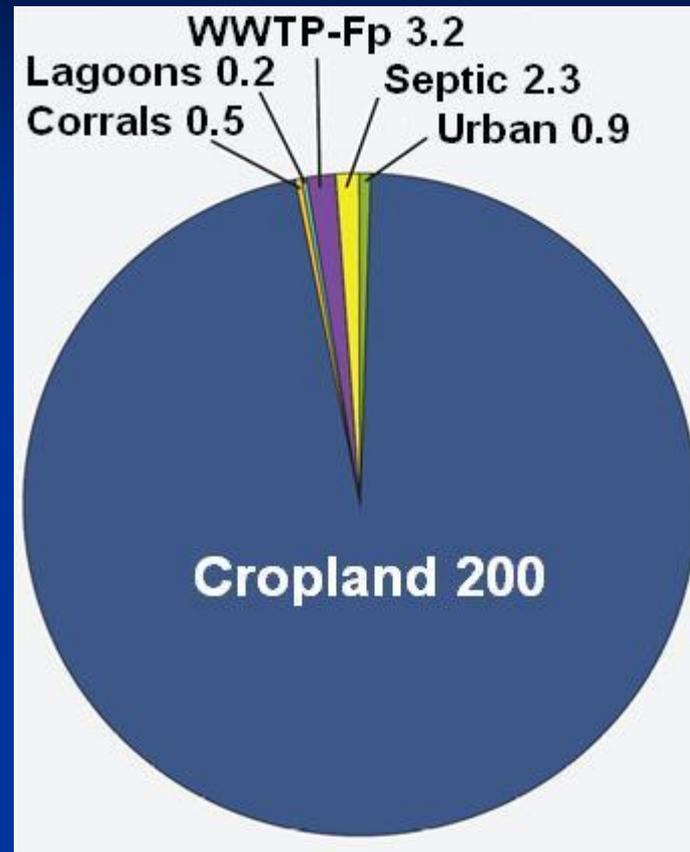


Figure 1. Estimated groundwater nitrate loading from major sources within the Tulare Lake Basin and Salinas Valley, in Gg nitrogen per year (1 Gg = 1,100 t).

<http://groundwaternitrate.ucdavis.edu/files/139110.pdf> ; Viers, J.H., et al (2012). Nitrogen Sources and Loading to Groundwater

What are the Proposed Requirements?

- Surface and Groundwater Regulation
- Coalition Requirements
 - Mainly to report to Board on behalf of members
- Member Requirements
 - Mainly to report to Coalition

Coalition Requirements in WDR

- Enroll members, submit member lists
- Implement MRP, management plans
- Prepare Reports and Plans:
 - Groundwater Quality Assessment Report
 - Management Practices Evaluation Plan
 - Groundwater Quality Trend Monitoring Plan
- GAR's high/low vulnerability areas affect growers

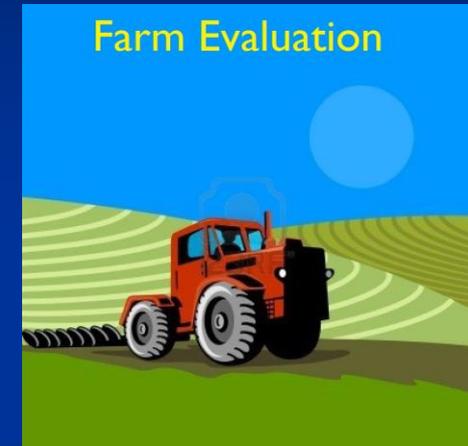
Member Requirements in WDR

- Implement management practices
 - Best practicable treatment or control
- Prepare: farm evaluation, nitrogen management plan, and sediment and erosion control plan
- Relief for small farms and low vulnerability areas

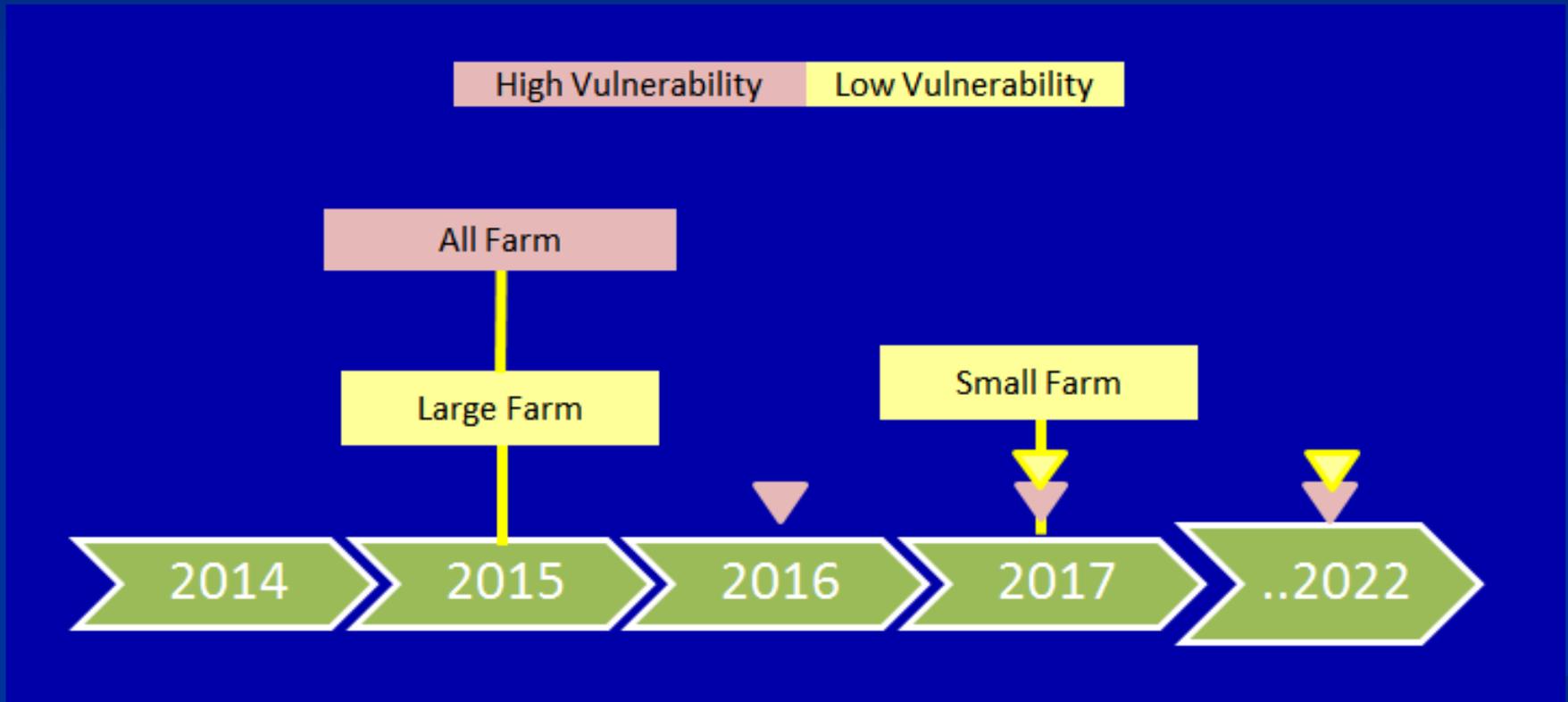
Member Requirements in WDR

■ Farm Evaluation

- Identify crops and acreage
- Location of farm
- Identify management practices
- Identify tailwater runoff areas
- Determine whether or not there is sediment runoff
- Identify locations of wellheads



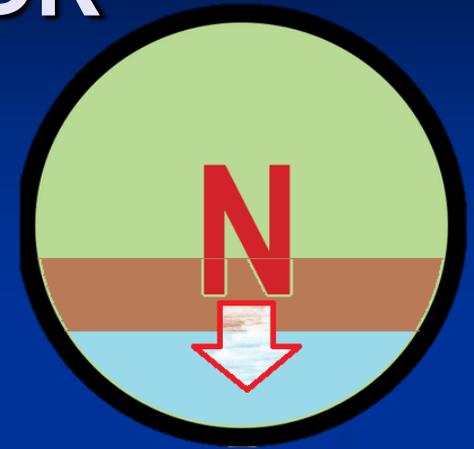
Farm Evaluation Time Line



Member Requirements in WDR

■ Nitrogen Management Plan

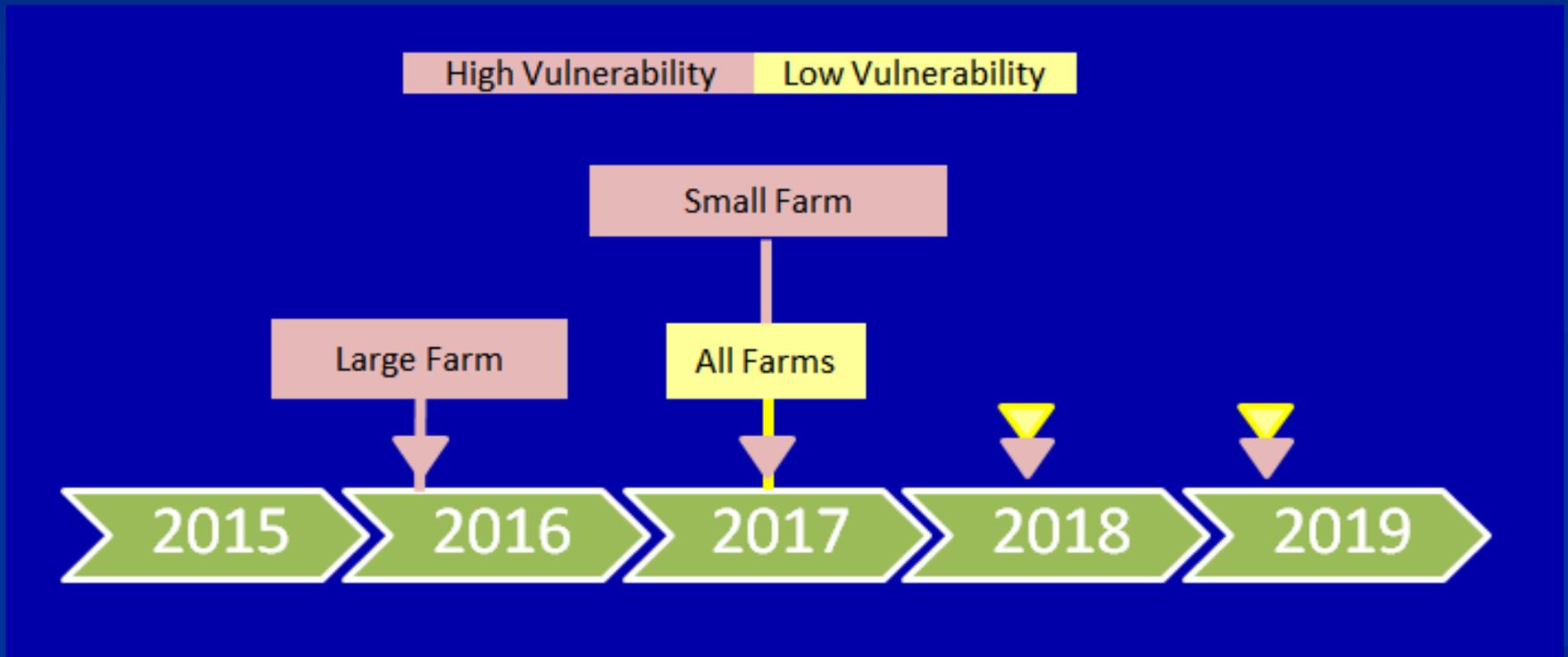
- Prepared annually kept on farm
 - Not submitted to Coalition
- Certification for High Vulnerability



■ Nitrogen Summary Report

- Low vulnerability area – kept on farm
- High vulnerability area – submit to Coalition
- Collect nitrogen application data by crop type

Nitrogen Mgt. Plan Time Line



Member Requirements in WDR

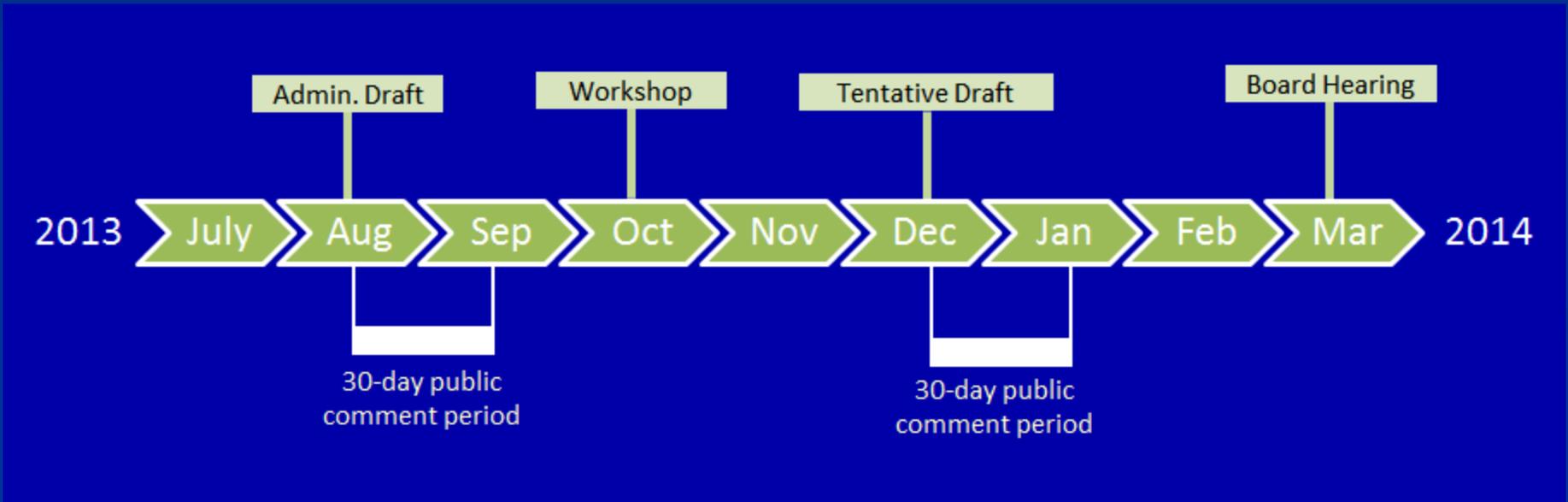
- **Sediment and Erosion Control Plan**
 - Once prepared, updated as conditions change
 - Identify locations w/ erosion potential
 - Ensure management practices implemented
 - Plan must be certified



Sediment & Erosion Control Plan Time Line



Order Tentative Time Line



Sac River – Mar 2014

Sac Valley Rice – Mar 2014

Delta – Mar 2014

East San Joaquin – Dec 2012

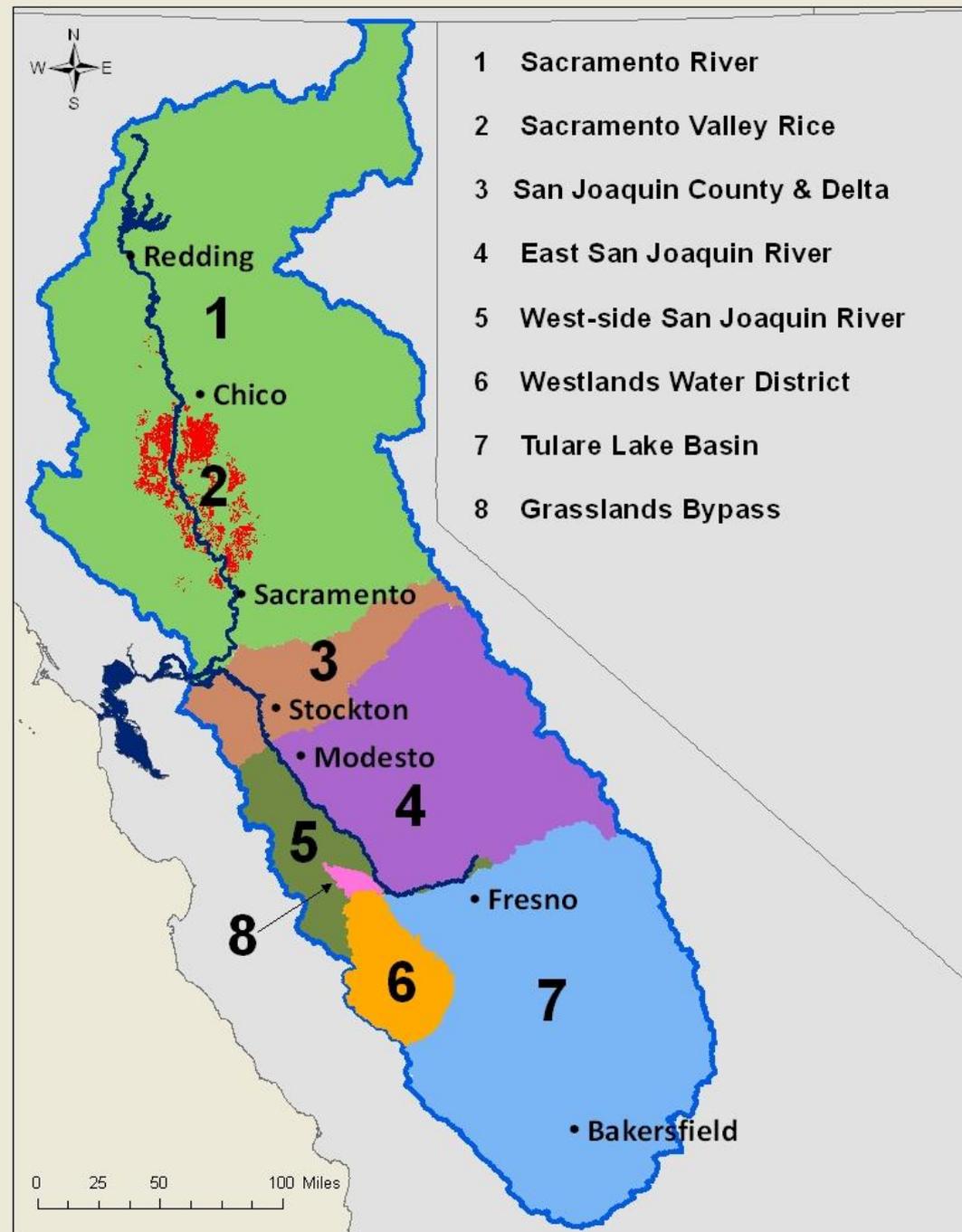
Geographic Areas/Commodities Addressed by WDRs

Westside – Jan 2014

Westlands – Jan 2014

Tulare Lake – Sept 2013

Individual – June 2013



Recap

- Proposed Delta WDRs regulate groundwater
- Delta Coalition will develop regional, representative GW monitoring program
- New grower requirements: farm evaluation, nitrogen management plan, sediment & erosion control plan
- October 3rd workshop right here

Questions?

Brett Stevens – Sr. Scientist
bstevens@waterboards.ca.gov

Phone: 916-464-4642