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
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)
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

Explanation
- San Joaquin County & Delta Area boundary
- Max. nitrate result per section, mg/L **
  - < 1/2 the MCL (22.5)
  - between 22.5 - 45
  - > the MCL (45)

** Due to confidentiality of well locations, randomized locations are provided to within a half mile of the actual well location. In some instances, this estimated well location may not be represented on the map within the accurate square mile section (i.e., the actual location may be within an adjacent section).
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).

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
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
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

2014 Large Farm
2015 Small Farm
2016
2017
2018
Order Tentative Time Line

2013

July
Admin. Draft
30-day public comment period

Aug
Workshop

Sep
Tentative Draft
30-day public comment period

Oct

Nov

Dec

Jan

Feb

Mar
Board Hearing

2014
Geographic Areas/Commodities Addressed by WDRs

Sac River – Mar 2014
Sac Valley Rice – Mar 2014
Delta – Mar 2014
East San Joaquin – Dec 2012

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 3\textsuperscript{rd} workshop right here
Questions?

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

Phone: 916-464-4642