

Central Valley Regional Water Quality Control Board



Presentation to the CA State Board of Food and Ag

September 11, 2012

“California farmers are at the forefront in developing on-farm solutions to improve water quality and ground water management. How we work together to improve the already strong strides agriculture has taken in this area, while recognizing the significant financial constraints that farmers operate under, is where our water discussions need to focus.”

C DFA Secretary Karen Ross

What Are WE Trying to Accomplish?

WE = Water Board Members, Board Staff,
Agriculture, Stakeholders

- Protect water quality for current and future generations
- Ensure any new requirements are consistent with sustaining agriculture in the Central Valley
- Learn and adapt as we move forward

Nine Regional Water Boards



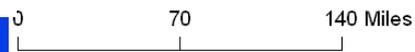
- Each composed of 7 board members
- Implement State and federal water quality laws based on region specific conditions
- Regulate discharges of waste
- Discharge permits must be approved by majority of board members

Region 5

CENTRAL VALLEY WATER BOARD BOUNDARIES

Water Quality Coalition Group Boundaries:

- 1 Goose Lake
- 2 Sacramento Valley
- 3 California Rice Commission
- 4 San Joaquin County & Delta
- 5 East San Joaquin
- 6 Westside San Joaquin River
- 7 Westlands Water District
- 8 Southern San Joaquin Valley



What are the Issues?

- Nutrients
- Salts
- Pesticides
- Toxicity
- Pathogens
- Metals

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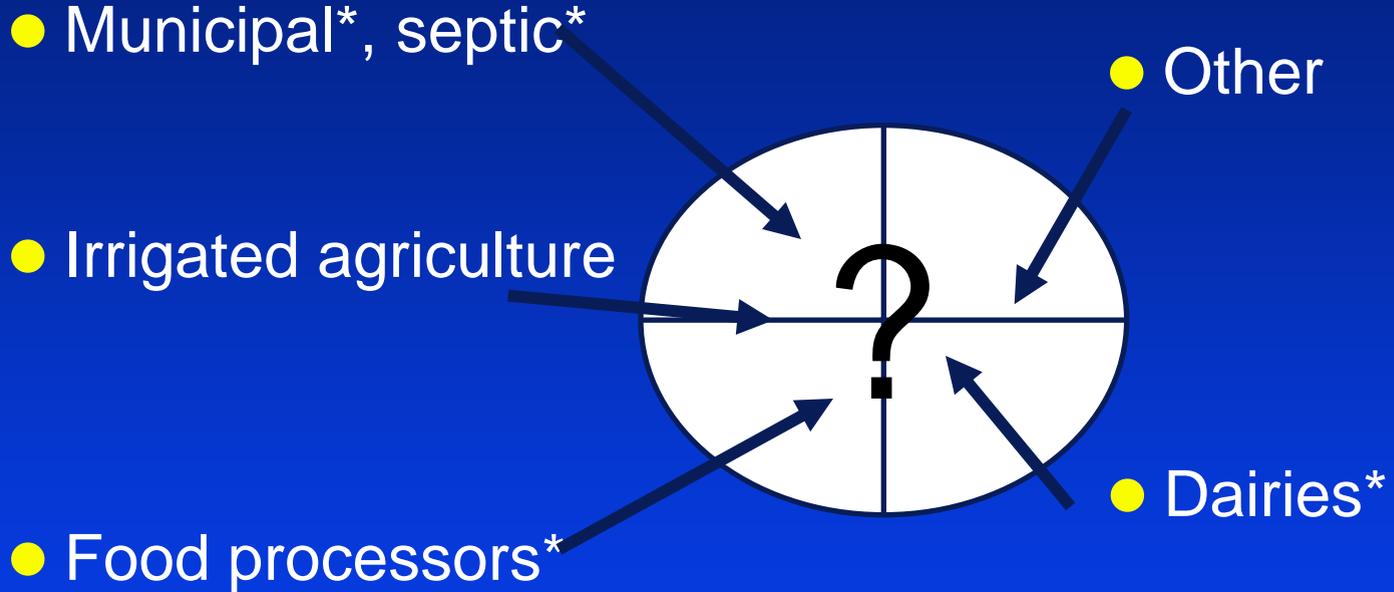
“Nitrate is one of the state’s most widespread groundwater contaminants.”

*UC Davis Report for the SWRCB SBX2 1
Report to the Legislature*

Nitrates and Groundwater

- Pollution pathways for nitrates and pesticides are similar
- Nitrates/water soluble pesticides leach through soil to groundwater
- Pathway for nitrates/pesticides
 - ◆ Surface runoff
 - ◆ Unprotected / improperly sealed wells
 - ◆ Over application of nitrogen fertilizer
 - ◆ Other conduits to groundwater (e.g., backflow)

Known Nitrate Sources (Regional)



Growers are Working to Improve Water Quality

Best Management Practices (BMPs) to Improve Surface Water Runoff Under Existing Program:

- Pesticide Application BMPs
- Sediment Basins
- Cover Crop
- Field Perimeter “Filter Strips” and/or hedgerows
- Tailwater Return Systems
- Vegetative Ditches
- Irrigation Practices BMPs

Photo credit:
CURES



Irrigation Practice Changes

Percentage of Low Volume Irrigation in the San Joaquin River Basin

| Commodity | 2001 | 2010 |
|-------------------|-------|-------|
| Almond /Pistachio | 69.3% | 68.7% |
| Process Tomatoes | 0% | 79.1% |
| Other Truck Crops | 23.4% | 51.2% |
| Vineyards | 57.0% | 67.8% |

Low volume irrigation includes micro- or mini-sprinklers and surface and buried drip irrigation. Data from Department of Water Resources surveys.

But There Are A Lot of Unknowns

- How do different management practices impact water quality (both surface runoff and groundwater)?
- What are the sources of nitrates in groundwater and what can we do to lessen the impact to our water supply?

Proposed New Requirements for Irrigated Agriculture

- New effort to protect groundwater quality
- Focus on areas vulnerable to nitrate contamination
- Additional grower responsibilities to take proactive water quality protection steps
 - ◆ Nitrogen Budgets
 - ◆ Farm Evaluation
 - ◆ Implementation of Management Practices

Why the Reporting Requirements?

The Water Board needs information to determine compliance - *Is water quality being protected?*

- ◆ Traditional reliance primarily on monitoring is EXPENSIVE
- ◆ Reporting on what growers are doing to protect water quality will be much CHEAPER

What Does Everyone Want?

Clean Water!

- Agricultural coalition approach can help meet that goal – Growers have been and **MUST** be actively engaged!
- Water Board recognizes critical importance of agriculture in the Central Valley
- Working together the progress that has been made in surface water will occur in groundwater

Stakeholder Involvement is Key

- Staff has been meeting regularly with stakeholders on the Irrigated Lands Order for over 4 years
- Stakeholders have led the CV SALTS process
- With everyone at the table, we can make great strides – just look to the the Grasslands Project



Source: California Farm Bureau Federation

Questions?

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“Good farmers, who take seriously their duties as stewards of...their land's inheritors, contribute to the welfare of society in more ways than society usually acknowledges, or even knows. These farmers produce valuable goods, of course; but they also conserve soil, they conserve water, they conserve wildlife, they conserve open space, they conserve scenery.”

Wendell Berry, Bringing it to the Table: Writings on Farming and Food