



CV-SALTS: So What?

Water Association of Kern County
Kern County Farm Bureau

*Bakersfield Museum of Art
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WHAT GOT US HERE?

- 150 years of significant changes to the landscape, land uses, and hydrologic conditions of the San Joaquin Valley
- Increased agriculture, population growth, and re-engineered water distribution conditions
- Tulare Lake basin is a closed basin with no current outlet.



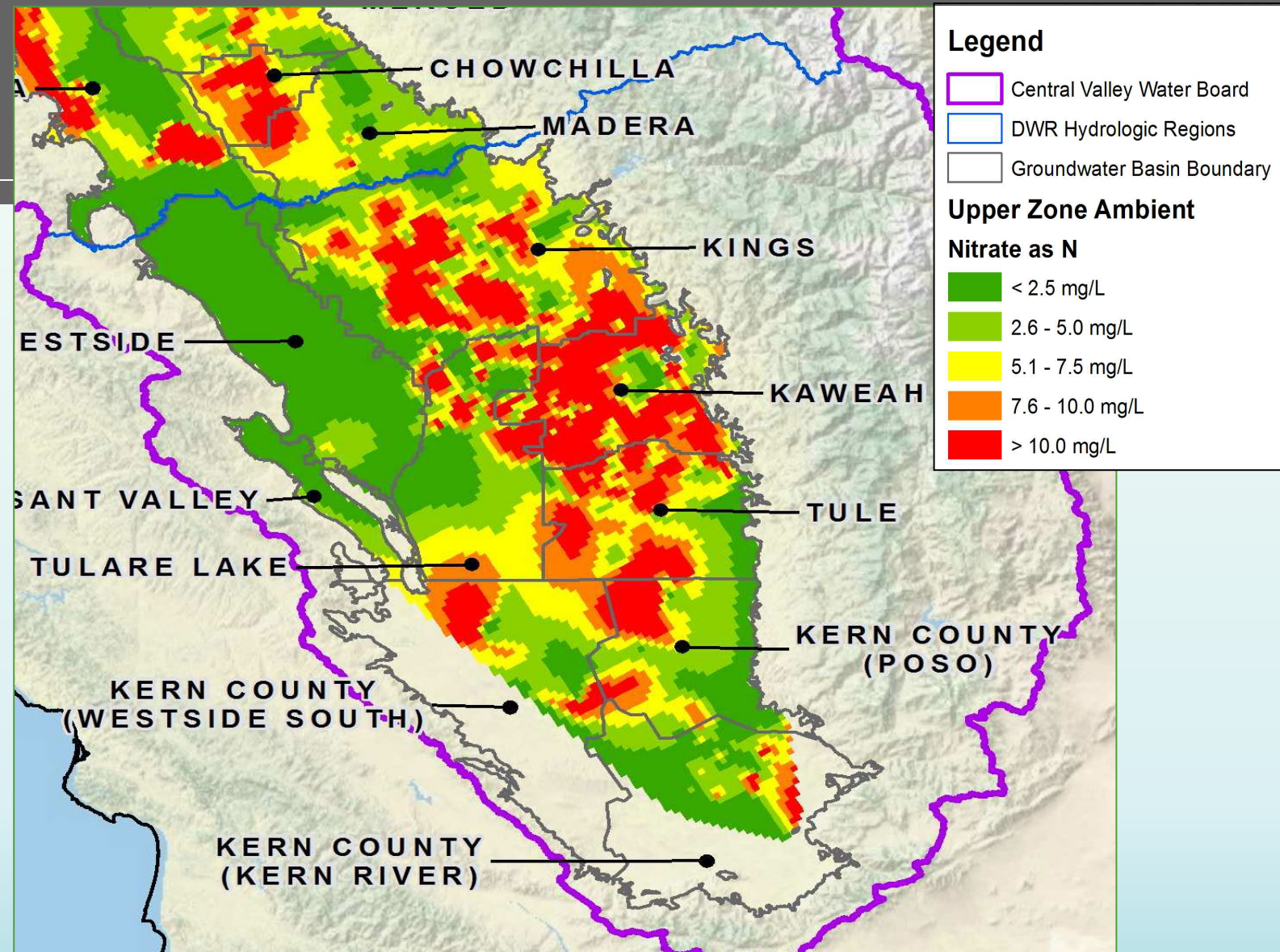
WHAT GOT US HERE?

- Concentrations of salts and nitrogen compounds at elevated concentrations that exceed water quality objectives in many areas
- Communities, industry, and agriculture rely on surface and groundwater to support beneficial uses such as drinking water, agricultural supply, and industrial use
- Continued sources of nitrates to groundwater and salt to surface and groundwater are urgent short and long-term regional problems



CENTRAL VALLEY NITRATE ISSUES

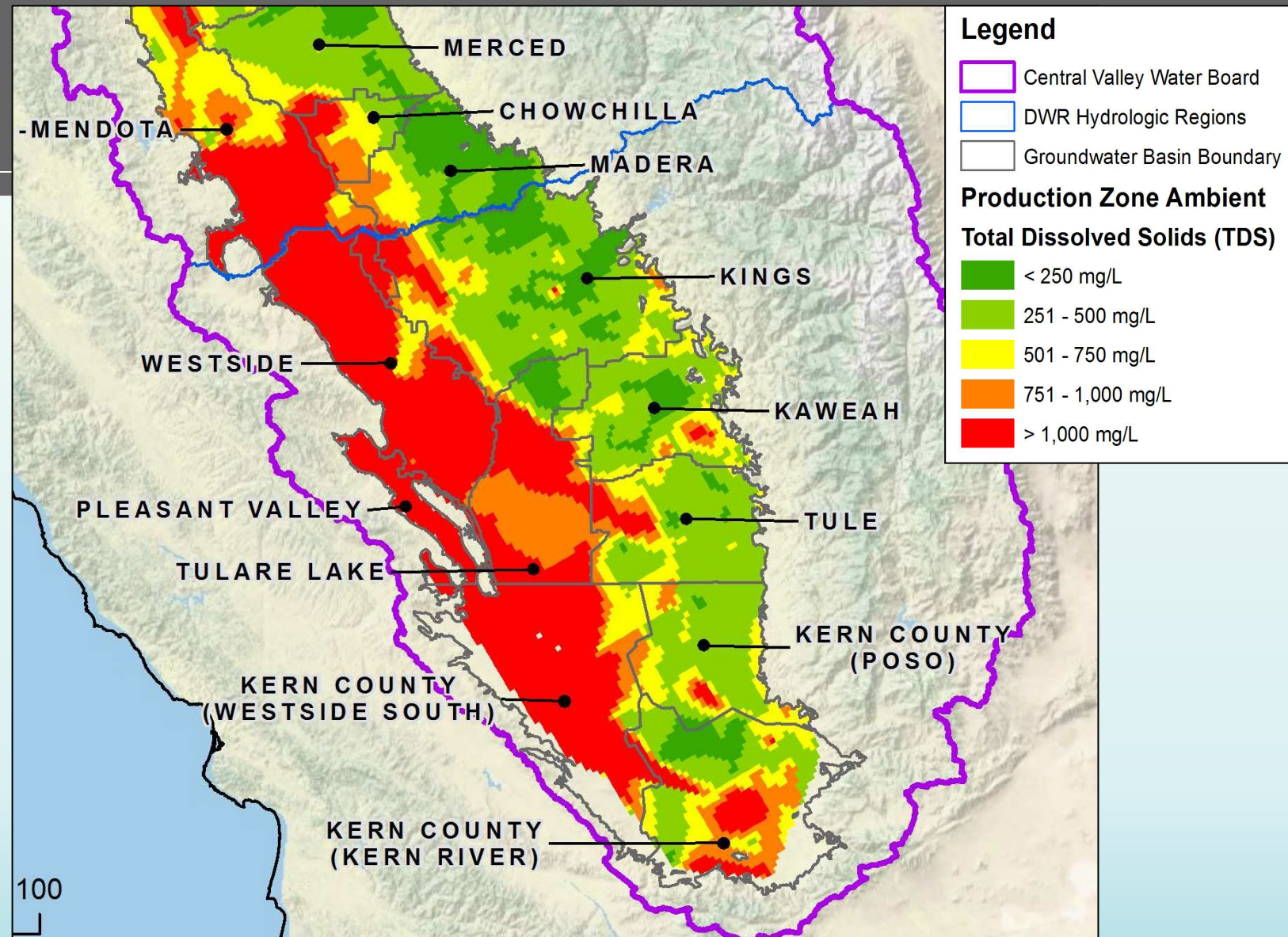
- Legacy and existing conditions
- Direct impacts to drinking water supplies
- Significant economic costs
 - *Treatment*
 - *Alternate supply*
- Diverse sources of nitrate to be managed



Ambient Nitrate (as N) Concentrations in the Upper Zone of Groundwater (Note: The Upper Zone is where most domestic wells draw water)

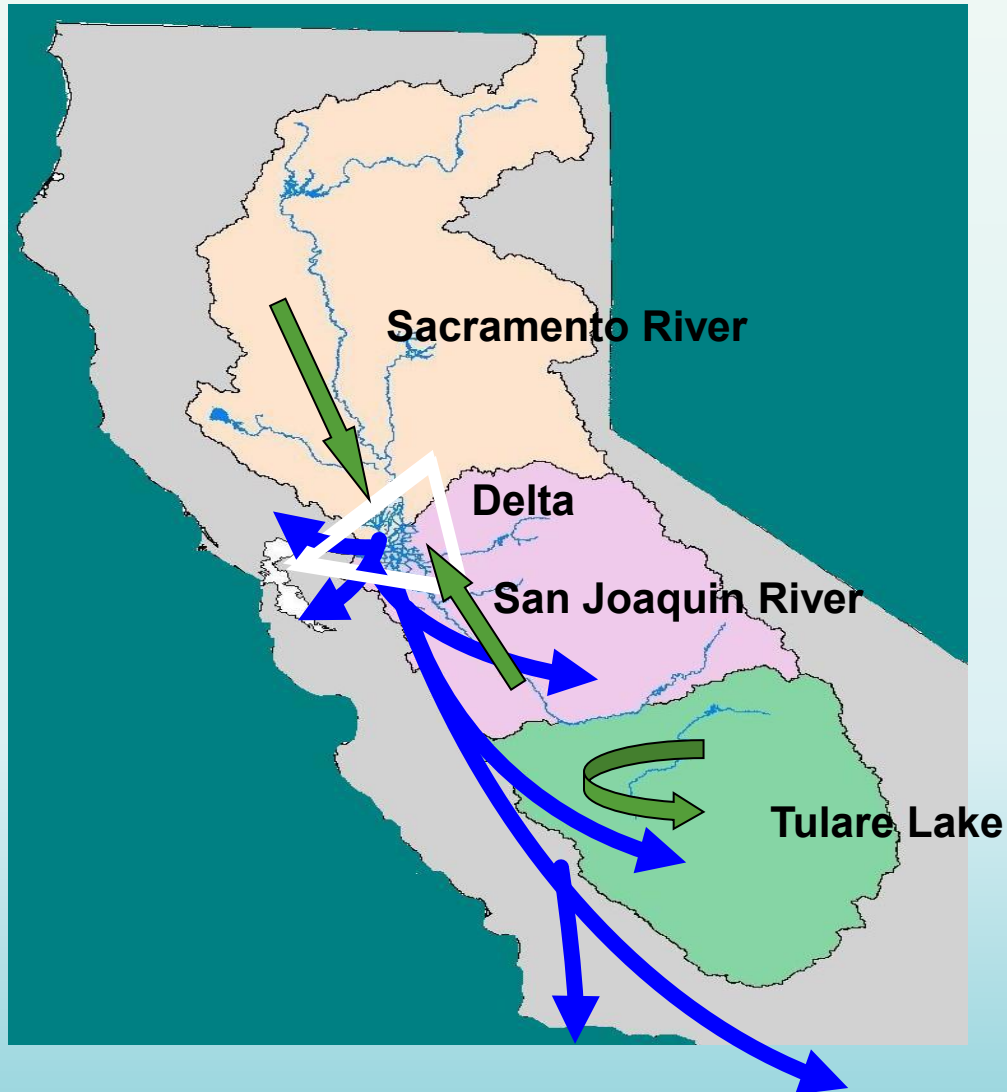
CENTRAL VALLEY SALT ISSUES

- Basin-Wide
- Threatens Long-term Economic Sustainability



Ambient Total Dissolved Solids (TDS) Concentrations in the Production Zone of Groundwater (Note: The Production Zone is the portion of the basin from which most of the groundwater is being pumped)

CENTRAL VALLEY SALT ISSUES



More salt enters the Central Valley Region than leaves

- Impacts (current/legacy)
 - *Agricultural Production*
 - *Drinking Water Supplies*
- Economic Cost
 - *Direct Annual: \$1.5 Billion*
 - *Statewide Annual Income Impact: \$3.0 Billion*
- Diverse Sources

LIMITED EXISTING REGULATORY OPTIONS TO ADDRESS SALT & NITRATES

Challenges with Traditional Regulatory Options

- Discharges must meet water quality objectives
- Agricultural and other discharges may not be able to meet water quality objectives
- Regulatory options are limited, if water quality objectives cannot be met
- *Fails to assure safe drinking water*



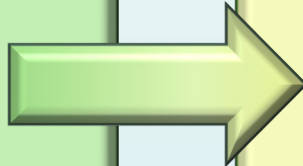
CV-SALTS IS FOCUSED ON ADDRESSING TWO PRIMARY GOALS

Assure Safe Drinking Water
and
Economic Sustainability



SALT & NITRATE CONTROL PROGRAM: MEASURES OF SUCCESS

*Ensure Safe Drinking Water
and
Sustain the Economy*



Basin Plan Amendments will:

- ✓ Ensure replacement drinking water
- ✓ Provide alternatives to how the Board regulates nitrates and salts
- ✓ Limit and manage degradation
- ✓ Restore groundwater where feasible and practicable
- ✓ Recognize diverse conditions

SALT & NITRATE CONTROL PROGRAM - OVERVIEW

