

# Groundwater Management Plans (AB3030 / SB1938) and Groundwater Quality Protection

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#### Presentation Outline

- History of Groundwater Legislation
- SB1938 / Integrated Regional Water
   Management Planning Coordination
- Examples of Implementation
- Opportunity to Coordinate Management and Regulatory Objectives



## History of Groundwater Legislation

- AB255 (1991)
- AB3030 (1993)
- SB1938 (2002)
- SB1672 (2002)
- SBx7 6 (2009)

 A strong and consistent emphasis on Local Management



#### **AB3030**

- It is the intent of the Legislature to encourage local agencies to work cooperatively to manage groundwater resources within their jurisdictions
- Provided criteria and guidance for elements of a Groundwater Management Plan
  - Monitoring, conjunctive use, well construction and destruction policies, recharge, storage, conservation, land use planning



#### SB 1938

• It is the intent of the Legislature to encourage local agencies to work cooperatively to management groundwater resources within their jurisdictions. The preparation of certain basin management objectives will assist local agencies in optimizing local resources while protecting groundwater and surface water resources..

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#### SB1938

- Establish Basin Management Objectives in an open, public process
  - Groundwater levels
  - Groundwater Quality
  - Subsidence
  - Surface / Groundwater relationships
- Implement Monitoring
- Implement certain management components (recharge, conjunctive use, wellhead protection, etc)
- Eligibility to funding connected to completion of an SB1938 compliant Plan



#### SB x7 6

- Department (DWR) shall work cooperatively with local Monitoring Entities to monitor elevations
- Department shall prioritize basins/subbasins in consideration of
  - Population, growth, number of wells, irrigated acreage, dependency on groundwater as primary source, overdraft, subsidence, saline intrusion and other <u>water</u> <u>quality degradation</u>



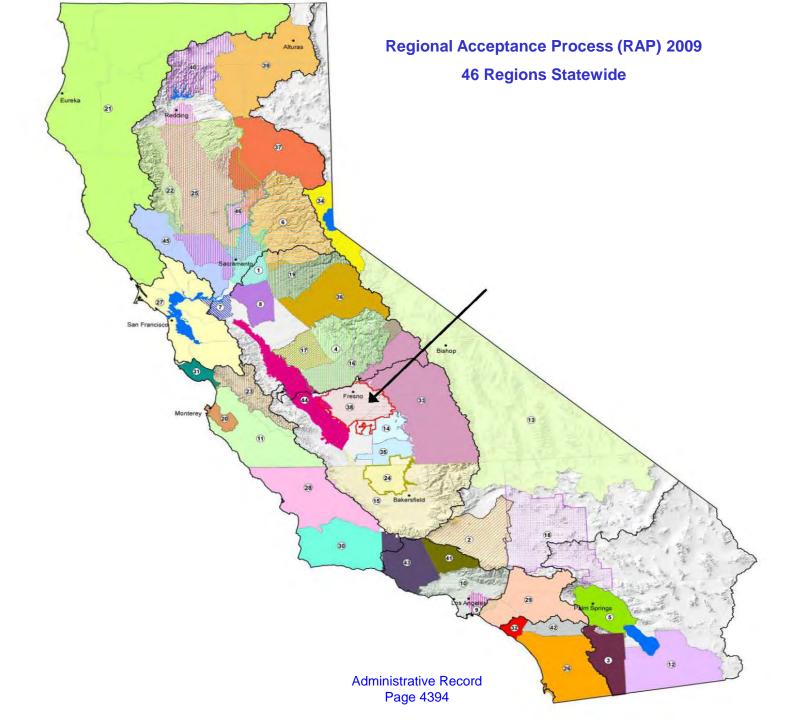
#### **SB1672 - IRWMP**

- To encourage local agencies to work cooperatively to manage local and imported water supplies for quality, quantity and reliability
- IRWM Plan required if seeking grant funds
- IRWM Plan must be incorporate SB1938
  Plan and Urban Water Management Planning



#### Local Management

- More than 200 local agencies have adopted AB3030 or SB1938 plans
- At least 20 coordinated plans involving nearly 120 agencies
- 27 county adopted groundwater ordinances (Source: DWR Bulletin 118 Update 2003)
- 46 Integrated Regional Water Management Plans (*Prop 50 Regional Acceptance Process* 2009)





#### Example

• Upper Kings Basin Integrated Regional Water Management Plan



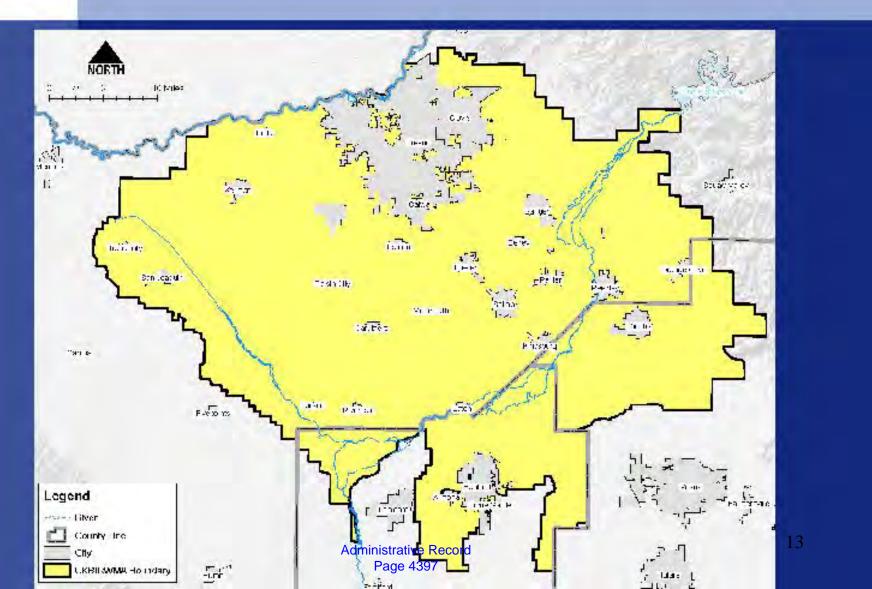
## Kings Basin Characteristics

- Kings Groundwater Basin
  - 976,000 acres
  - 93 MAF of storage to 1,000 ft (2003 Bulletin 118)

- Part of the Tulare Lake Hydrologic Region
  - 10.9 million acres
  - 12 distinct Basins/7 sub-basins



#### Upper Kings Basin IRWM Boundary





#### Diversity of Participation

#### MEMBERS (17)

**Alta Irrigation District** 

**City of Clovis** 

**City of Dinuba** 

**City of Fresno** 

City of Kerman

**City of Kingsburg** 

**City of Parlier** 

City of Reedley

**City of Sanger** 

City of Selma

**County of Fresno** 

**County of Tulare** 

**Consolidated Irrigation District** 

**Fresno Irrigation District** 

**Kings County Water District** 

**Kings River Conservation District** 

**Raisin City Water District** 

#### **INTERESTED PARTIES (32)**

**Bakman Water Company Biola Community Services District** California Native Plant Society, Sequoia Chapter City of San Joaquin **Community Water Center County of Kings Crescent Canal Company Cutler Public Utilities District East Orosi Community Services District El Rio Reyes Conservation Trust Hardwick Water Company James Irrigation District Kings River Conservancy Kings River Water Association Laguna Irrigation District Laton Community Service District Liberty Canal Company Liberty Water District London Community Services District Mid-Valley Water District Orange Cove Irrigation District** 

Orosi Public Utilities District
Reed Ditch Company
Riverdale Irrigation District
Riverdale Public Utility District
Self-Help Enterprises
Sierra Club, Tehipite Chapter
Sierra Resource Conservation District
Sultana Community Services District
Terranova Ranch, Inc.
Tulare Basin Wildlife Partners

#### OTHER PARTICIPATION

CA Department of Fish & Game
CA Department of Water Resources
California Water Institute (CSUF)
Center for Collaborative Policy
Fresno Audubon Society
Fresno Met. Flood Control District
Kings River Fisheries Program
Regional Water Quality Control Board
Sierra Nevada Research Institute (UCM)
State Water Resources Control Board



#### IRWM Plan Priorities

- Projects to increase water supply reliability & preserve quality
  - Groundwater recharge, conveyance
  - Recycling
  - Metering
- Protect and enhance aquatic ecosystems and wildlife habitat, and riparian recreation areas
- Public Awareness
- Coordinated Monitoring



# Water Quality Related Basin Management Objectives

- Identification of regional and multi-party water conservation and water supply enhancement projects;
- Preservation of existing groundwater quality through well-head protection, well retirement, support of rural community wastewater intertie projects, and regional outreach and education;
- Aggregation and mapping of existing sources of groundwater quality data to identify and classify known contamination plumes, to locate data gaps and to help identify groundwater monitoring and remediation project opportunities;
- Enhance regional land use planning in an effort to identify and protect land which has high recharge potential;
- Enhancement of operational flexibility, and reduction of system constraints;
- Negotiation and development of institutional arrangements and cost sharing for water banking, water exchange, water reclamation, and water treatment

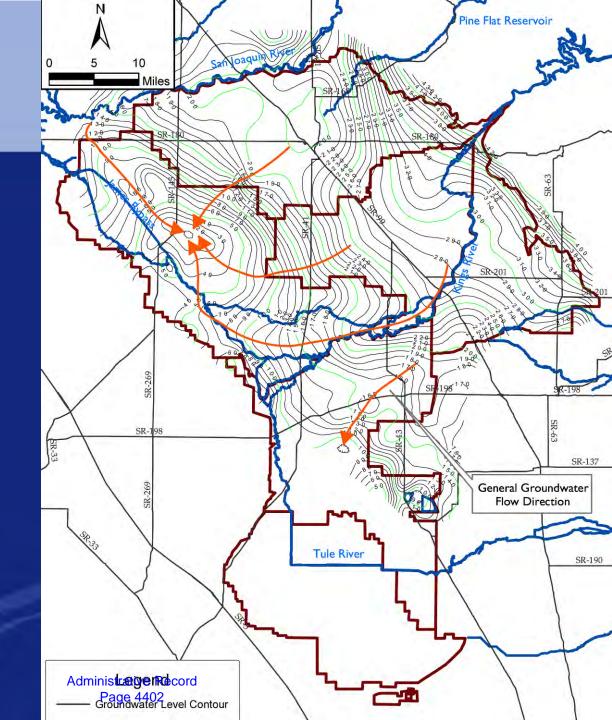


#### Planning Area Successes

- Regional Awareness & Collaboration
- Unconditional Approval under State agency Regional Acceptance Process (2009 RAP)
- Coordinated Monitoring
  - Elevation, Quality, Subsidence
  - CASGEM Monitoring Entity
- Interactive Groundwater Surface-water Model (Kings IGSM)
- Project Funding and Development
  - Groundwater Recharge Facilities
  - Residential Water Metering
  - Disadvantaged Community Outreach and Assessment Pilot
  - IRWMP Update



Kings Basin
Groundwater
Elevation & Flow
Patterns





#### Water Quality

- Developing online data management system for Kings Basin similar to that recently developed for Tulare County
- CDPH, GAMA, DPR, ILRP, Water Agencies, etc.
- Move quickly beyond data management into specific actions
- Coordination with RWQCB staff is a MUST!



# Recent Project Successes

Project Title	Program	Administering Agency	Grant Amount
UKBWF IRWMP	Prop 50 IRWM Planning	DWR	\$500,000
Kings IGSM	Prop 50 IRWM Services Contract	DWR	\$500,000
FID Waldron Pond Groundwater Banking Facility	Prop 13 IRWM	DWR	\$4,615,072
AID/City of Dinuba Coordinated GW Storage Project	Prop 13 IRWM	DWR	\$2,974,651
UKBWF IRWMP Implementation 1 (FID, City of Fresno, AID)	Prop 50 Round 2 IRWM Implementation	SWRCB	\$6,064,375
UKBIRWMA IRWMP Implementation 2 (FID & City of Fresno)	Prop 50 Supplemental Round (Mini 50)	DWR	\$2,099,868
KRC Kings Ribbon of Gems Implementation North Riverside Park	Prop 84 Round 1 River Parkways	Resources Agency	\$284,674
UKBIRWMA DAC Outreach and Planning Project	Prop 84 IRWM Services Contract	DWR	\$500,000
UKBIRWMA IRWMP Update	Prop 84 IRWM Round 1 Planning	DWR	\$236,890

Cumulative Grant Funding = \$17,775,530

Administrative Record Cumulative Cost of Projects = ~\$30,220,000



#### Conclusion

- Management of Groundwater, including Quality, is vested in local agencies
- IRWMPs can play a key role in water quality protection governance, funding, commitment

 Regional Board should continue to look to IRWMPs and local agencies to assist with Regulation and Protection of Water Quality