

# Toward Sustainable Groundwater in Agriculture

UCD and WEF

San Francisco

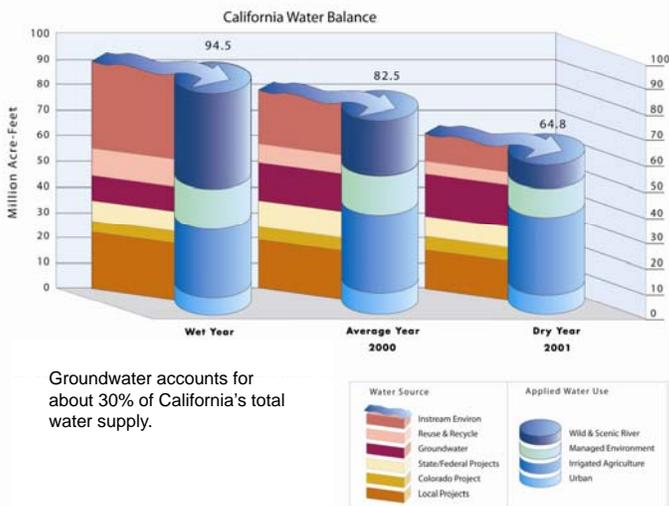
June 15, 2010

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## Key Issues

- ▶ California water balance
- ▶ Groundwater rights/regulation
- ▶ Nexus to agriculture
- ▶ Data: knowledge/gaps
- ▶ Management
- ▶ Groundwater legislation
- ▶ SBx7-6 Groundwater Elevation Monitoring



## Groundwater Rights/Regulations

- ▶ Unlike surface water use, California does not have a statewide management program or statutory permitting system for the use of groundwater.
  - 1914 surface water rights regulated through a permitting process, but groundwater has never been regulated by the State.
  - groundwater management has remained a local responsibility, not controlled by the State.



## Argument for Local Control

- ▶ diverse physical characteristics of groundwater basins
- ▶ availability of alternative supplies
- ▶ uses of water vary from region to region
- ▶ local management can best deal with the specific issues



## Nexus to Agriculture

- ▶ Any shortfall in surface water deliveries is made up by groundwater pumping.
  - Increased cost to farmers
  - Some times and some places no groundwater is available
  - Pumping causes subsidence
  - Cropping patterns
    - permanent crops vs. row crops
    - Requires dependable water supply to support investment
  - Often first to be transferred, exchanged or sold

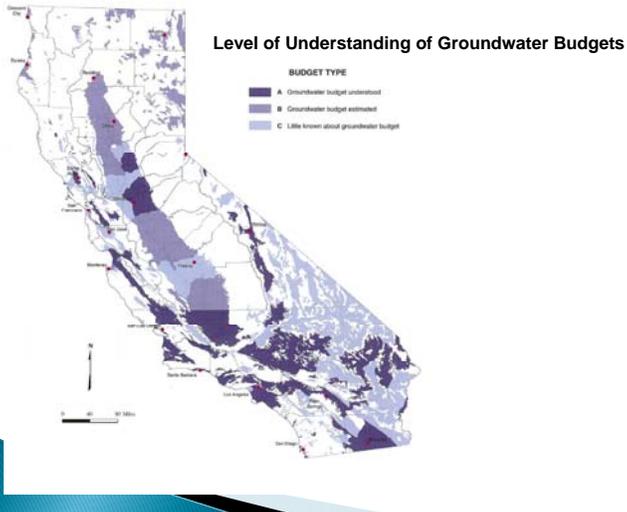


## Data

- ▶ Information gaps impair efficient management of groundwater in California.
  - No comprehensive monitoring network for evaluating quantity and quality of groundwater
- ▶ The severity of information gaps varies throughout the State.
- ▶ Additional resources, incentives, or statutory requirements will be necessary to address these data gaps.

## Understand of Groundwater Basins

- ▶ 515 distinct groundwater systems
- ▶ 116 basins, or about 20 percent, account for 95 percent of the public supply wells



## Management

- ▶ local agencies practiced an informal type of groundwater management.
- ▶ No law requires that any particular form of management be applied in a basin.
- ▶ Management is often instituted after local agencies or landowners recognize a specific groundwater problem.
- ▶ The level of groundwater management in any basin or subbasin is often dependent on water availability and demand.

## Methods Being Used for Managing Groundwater

- ▶ management by local agencies under authority granted in the California Water Code or other applicable State statutes,
- ▶ local government groundwater ordinances or joint powers agreements, and
- ▶ court adjudications

## Status of Groundwater Management in California



## State Role, if Any?

- ▶ The State should provide incentives and technical assistance when necessary to assist local agencies in regional coordination and development of integrated regional water management plans, including effective groundwater management plans. The State should also facilitate the sharing of data throughout the State to make groundwater management more efficient and effective.

## Groundwater Legislation

- ▶ 1992 - AB 3030 encouraged local agencies to manage their groundwater resources.
- ▶ 2002 - SB 1938, required adoption of groundwater management plans for local agencies to be eligible for public funds.
- ▶ 2004-2006 - Propositions 50 and 84, provided financial incentives and placed a new emphasis on integrated regional water planning.
- ▶ 2009 – SBx7-6 – Groundwater Elevation Monitoring

## SBx7-6: What it does

- ▶ Establishes, for the first time in California's history, groundwater monitoring requirements for local agencies
- ▶ Makes information available to the public



## SBx7-6: What it does

- ▶ Allows local entities to determine regionally how best to set up their groundwater monitoring program
- ▶ Provides landowners with protection from trespass by state or local entities

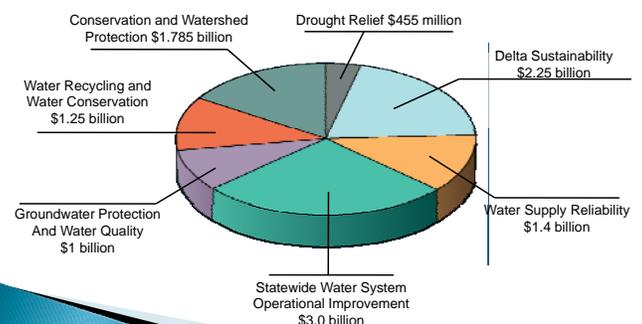


## SBx7-6: What it Does Not Do

- ▶ Does not change existing groundwater rights
- ▶ Does not give SWRCB jurisdiction to regulate groundwater
- ▶ Does not require monitoring of water quality or subsidence
- ▶ Does not give DWR the authority to charge fees for its services
- ▶ Does not provide funding for this work to be done

## Funding for Water Supply Reliability

Safe, Clean, and Reliable Drinking Water Supply Act of 2010



## **Contact Information**

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