

Integrated Regional Water Management & Climate Change

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Resources

Integrated Regional Water Management (IRWM) Overview

- An example of integrated resource planning
- A collaborative effort to manage all aspects of water resources in a region
- Differs from traditional approaches to water resource management by integrating multiple facets

IRWM Overview

- Crosses jurisdictional, watershed, and political boundaries;
- Involves multiple agencies, stakeholders, individuals, and groups.

Recent History

- Integrated Regional Water Management Act of 2002
- Proposition 50 (2002) provided \$500M
- California Water Plan Update 2005
 - Key initiative to ensure reliable water supply
- Proposition 84 (2006) provided \$1B
 - Prop 1E \$300M for related actions

Synopsis of State Funding

Proposition 50

- Jointly administered by DWR & State Water Resources Control Board
- Two grants programs
 - Planning
 - Implementation
- Climate change not addressed

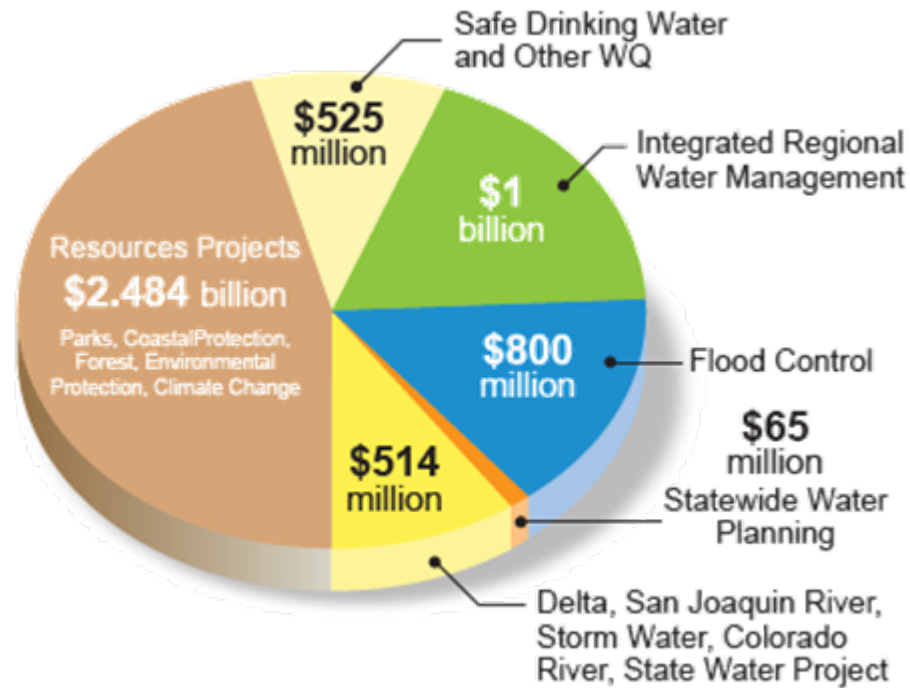
Proposition 50

- **Planning Grants**
 - DWR awarded \$12.6M to 28 agencies
 - SWRCB awarded \$2.1M to 5 agencies
 - Integrated Coastal Watershed Management
- **Approximately 50 IRWM Plans**
 - Either adopted or being developed

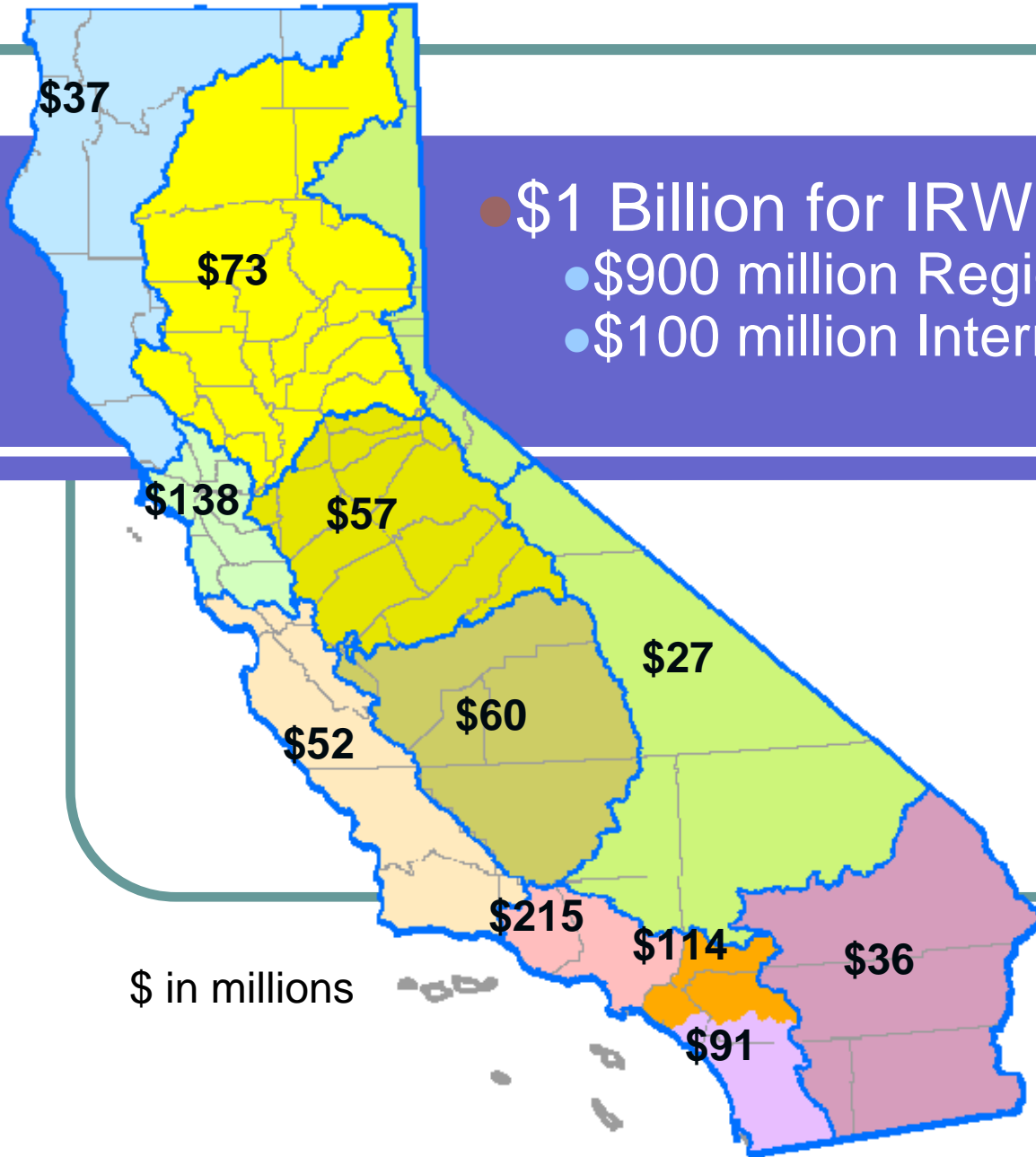
Proposition 50

- Implementation Grants
 - Round 1 awarded in 2007
 - \$307M to 16 proposals
 - Round 2 awarded in 2008
 - \$58M to 4 proposals
- Each proposal includes multiple projects
- Broad spectrum of project types

Proposition 84



- \$1 Billion for IRWM
 - \$900 million Regional allocations
 - \$100 million Interregional



\$ in millions

Status of Prop 84

- FY08-09 funding pending – SBxx1
- \$100M for Implementation Grants
 - \$20M for urban & ag water conservation
 - 10% to assist disadvantaged communities
- \$39M for Planning Activities
 - \$30M for IRWM Planning Grants
 - 10% to assist disadvantaged communities
- Plus other actions

IRWM & Climate Change

IRWM Plan Relationship to Climate Change

- Primary objective to meet regional water management objectives
 - Adaptation
- Secondary uses include reduced energy use & greenhouse gas emissions
 - Mitigation

Tool to Address Climate Change

- Multidiscipline/stakeholder view of water management
- Collaborative relationships between agencies & stakeholders
- Builds resiliency into water management system through diversified strategies
- Multi-benefit projects
 - Mandated for Prop 84 funding

Tool to Address Climate Change

- Must consider multiple Water Management strategies
 - Including many strategies that are needed to address climate change
 - Floodplain management
 - Water Conservation
 - System re-operation
 - Environmental Preservation/Restoration

Directly Address Climate Change

- SBxx1 direction on climate change
 - Proposed CWC §10541.(e)(9 & 10)
- IRWM Plan shall include:
 - “Consideration of greenhouse gas emission of identified programs and projects”
 - “Evaluation of the adaptability to climate change of water management systems in the region”

Directly address climate change

- Affects multiple parts of IRWM plans
 - Part of various plan components:
 - Regional Description – 20 year planning horizon
 - Objectives – Water related issues & conflicts
 - Water Management Strategies
 - Project Review & Selection Process
 - Relationship to Local Water Planning
 - Relationship to Local Land Use Planning

IRWM, Climate Change, and Project Selection

Comparison of Example Projects

- Support projects designed to address impacts from climate change
- Encourage projects that are less energy intensive
- Projects designed to solely reduce energy consumption probably not eligible

Comparison of Example Projects

- **Project 1 – GW Production Well**
 - Includes solar panel because no nearby power lines and alternative energy source would be diesel generator
- **Project 2 – Water Treatment Plant Upgrade**
 - Install solar panels to reduce electrical energy consumption

Concluding thoughts

- Funding an incentive for improved water management planning to adapt to climate change
- IRWM Plans need to:
 - Address possible effects
 - Consider water management alternatives necessary to adapt

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Grant information at:
www.ca.gov/Grants.html
www.grantsloans.water.ca.gov
www.grantsloans.water.ca.gov/grants/irwm/integregio.cfm