



California Water Commission Reflections on Intelligent Infrastructure Under Co-equal Goals

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Association
of California
Water Agencies
Since 1910
Leadership
Advocacy
Information

Evolving Natural Resource Policy Then and Now



San Luis Reservoir
Dedication

Mid 20th Century



Judge Wanger's Courtroom

Late 20th Century



21st Century: Co-equal Goals

Elements of a Comprehensive Solution



Local Resource Investment



Delta Conveyance Solutions



Habitat and Watersheds



Additional Storage

Infrastructure Is Really Important for Co-equal Goals

Intake Facilities: Then and Now



City of Sacramento Intake
2005, \$33M
Capacity=160 MGD



City of Sacramento Intake
Intake Prior to 2005
Capacity=160 MGD

Co-equal Goals Are Really Expensive

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EBMUD Freeport Intake
Cost: \$120 million



GCID Intake
Cost: \$75 million



RD108
Cost: \$38 million



Co-equal Goals Are Really Expensive



Butte Creek
Cost: \$40 million

Co-equal Goals Are Really Expensive

Local and Regional Infrastructure



Desalination



Recycling

Co-equal Goals Are Really Expensive

BDCP Conveyance Alternatives



Cost = \$8 billion to \$12 billion

Co-equal Goals Are Really Expensive

Storage Infrastructure for Fish



Shasta Dam:
Temperature Control



Lake Oroville
X-2 Control



San Luis Reservoir:
Flow Control



Local Storage: Accommodating More and More Fish Protection

The Storage Paradigm is Changing

1950s Storage Strategy

- Reservoirs on North Coast Rivers
- Move water when it's dry

Recent Storage Projects

- Storage has moved off-stream
- Closer to the end-user
- Move water when it's wet

21st Century Storage

- Essential Element of proactive strategies for co-equal goals



Co-equal Goals Blur the Lines Connecting Projects and Beneficiaries

Then



Bold Lines Connecting Projects and Beneficiaries

Co-equal Goals Blur the Lines Connecting Projects: Beneficiaries

**But We Managed
Statewide Resource
in Silos**



Co-equal Goals Blur the Lines Connecting Projects: Beneficiaries

Now

Sites

Shasta

Oroville

- Project integration essential
- Projects operated for co-equal goals
- The bold lines are considerably faded

Los Vaqueros

Folsom

San Luis

Temperance
Flat

Groundwater
Bank

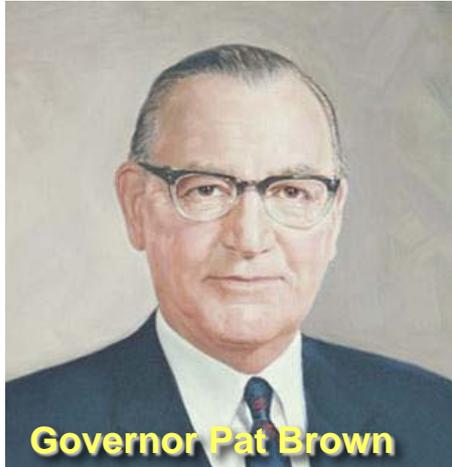


Facts of Life About the Co-equal Goals

- Infrastructure is more important, not less
- Co-equal infrastructure is more expensive
- Infrastructure must be more integrated
- Investments are more public, less private
- Lines between projects and beneficiaries are blurred

These Realities Challenge the Execution and Financing of 21st Century Water Solutions

Not Your Grandparents Storage Project



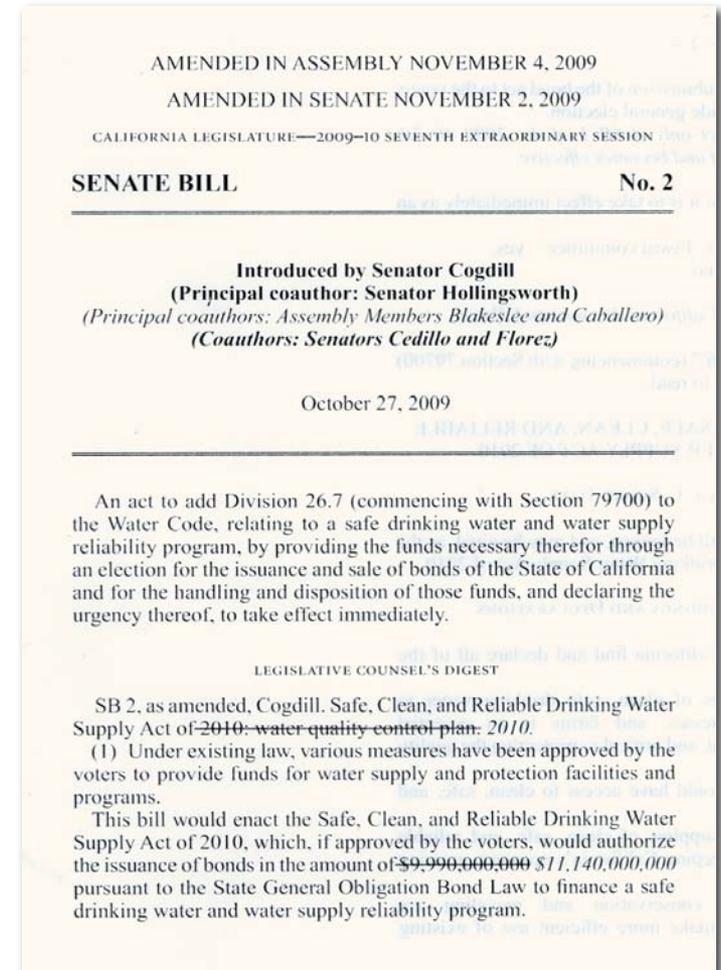
Finance: “Safe, Clean, and Reliable Drinking Water Supply Act of 2012” – \$11.14 Billion



Cogdill



Caballero



Water Storage Provisions

Chapter 8: State Wide System Operational Improvements

- \$3 billion continuously appropriated to the California Water Commission “for public benefits associated with water storage projects that improve the operation of the state water system, are cost-effective, and provide a net improvement in ecosystem and water quality conditions”
Section 79740(b)
- Funds awarded through a competitive process based on expected returns on public investment. Section 79740(C)

Eligible Projects

1. CALFED Surface Storage Projects (Sites, Delta Wetlands, Los Vaqueros Expansion, Temperance Flat)
2. Groundwater Projects
3. Conjunctive Use and Reservoir Reoperations
4. Local and Regional Storage Projects



Public Benefits

Public benefits associated with storage projects include:

1. Ecosystem improvements including timing, amount and temperature of flows for fisheries
2. Water quality improvements in the Delta/Tributaries
3. Flood Control
4. Emergency Response
5. Recreation



Strong Emphasis on Analysis & Quantification

The Bond:

- Requires "measurable improvements to the Delta ecosystem" and watershed. Section 79742
- Directs the CWC "to adopt, by regulation, methods for the quantification and management of public benefits." Section 79744
- Requires projects to be ranked on basis of "expectant return for public investment" as basis for award of funds Section 79740(c)
- Limits public cost share to 50%. Section 79746(a)
- Specifies that environmental benefits must be at least 50% of public benefits. Section 79746(b)

Key Storage Dates

By December 15, 2012:

- Commission must adopt by regulation methods to measure public benefits

By January 1, 2018:

Eligible Projects must have:

- Complete feasibility studies
- Draft EIR/EIS available for public review
- Finding by Commission that project is feasible
- Cost share commitments for 75% of nonpublic share

Deadline may be extended due to litigation or failure to complete regulations

The Challenge Continues



Stay Tuned...

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