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Building the Road to the Future

San Jacinto River Watershed Council Meeting

February 3, 2005

2:00 p.m

EMWD Community Room

Perris, California

Presented by:



EASTERN MUNICIPAL
WATER DISTRICT

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Building the Road to the Future

Modern Era ☐ Milestones reached in paving the way for managing California's water resources in the Modern Era

Local Vision ☐ Conceptual plan to address the challenges of managing the water supply to meet the local needs

Local Strategy ☐ Strategy to implement conceptual plans

Funding ☐ Project funding opportunities

Projects ☐ Highlights of two current funding efforts



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California Water Plan (1957)

☐ Guide for the orderly and coordinated control, protection, conservation, development, management, and efficient utilization of the water resources of the state. Since 1991, updated every five years. Basis for Burns-Porter Act.

Burns-Porter Act (1959)

☐ Ratified by voters 1960. Programmed actions to meet water demands and solve problems as they arise.

- Authorized the long-range plan implementation and funded construction of works needed immediately.
- State Water Project
- Initial bond issue \$1.75 Billion. Of that, \$130 Million for loans and grants to local public agencies.
- Additional works to be planned, funded, and constructed under continuous program envisioned.

Shifts in water management

☐ Since the '80s...greater emphasis on environmental matters, conservation in use, and water reclamation.



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Water Supply

- ☐ Improve reliability of total supply for all users.
- ☐ Enhance and maximize use of local supplies
- ☐ Reduce dependence on imported water.

Groundwater Management

- ☐ Maintain and utilize the groundwater basins.
- ☐ Preserve the groundwater quality.

Salinity Management

- ☐ Protect higher quality groundwater basins from salinity intrusion.
- ☐ Utilize brackish groundwater.
- ☐ Develop plans for extensive recycling.



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Groundwater
Mgmt

Conjunctive
Use

Salinity
Mgmt

Water
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Comprehensive Groundwater Management

- ☐ West San Jacinto Groundwater Management Plan (AB 3030). Adopted 1995.
- ☐ Hemet/San Jacinto Groundwater Management Plan

Conjunctive Use

- ☐ Hemet/San Jacinto Conjunctive Use Program
 - Stores water in the wet years for use during long-term droughts.
 - Phased project to yield up to 25,000 AFY.

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Salinity Management

❑ Perris Basin Desalination Program (centerpiece of WSJGWMP), when complete will remove more than 50,000 t/yr of salt from the basin:

- Three desalters
- 9-12 brackish groundwater wells
- Network of feed water and high salinity waste disposal pipelines
- Will generate up to 12,000 AFY of potable water, and control groundwater hydraulic gradients

Water Recycling

❑ EMWD's Recycling Program

- More than 100 miles of recycled water pipeline
- More than 6,000 AF storage pond capacity
- About 25,000 AFY is sold to customers.
- Conceptual plans for system upgrade and expansion to meet the needs of the changing customer base.



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Recent Funding Opportunities

USBR PL984 (1990)

- ☐ Recycled Water Infrastructure
 - \$26 million low interest loan
 - \$7 million grant

Proposition 13 (March 2000)

- ☐ Perris Desalter \$15 million
- ☐ Conjunctive Use Phase 1 \$ 5 million

DHS/SRF (2004)

- ☐ Hemet Water Filtration Plant
 - \$42 million, low interest loan

Other Federal Sources

- ☐ 2000 Water Resources Development Act (WRDA)
 - Perris II Design and Construction \$5 million
 - Regional Brine Lines \$3 million
- ☐ 2002 Farm Bill - SJ Ag In-Lieu Water Supply

Proposition 50 (November 2002)

- ☐ Total Available Grants \$ 691,250,000
 - Total of Project Costs \$ 144,328,579
 - Grants Requested \$ 50,541,665



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Brine Reduction

More....

1. Desalination Recovery Enhancement and Concentrate Management Study

Funding Opportunity: Prop 50 Desalination Program, Chapter 6 (a), application submitted January 18, 2005

Total Project Costs: \$790,000

Grant Request: \$395,000

In-Lieu Water Supply

More....

2. San Jacinto Agricultural In-Lieu Water Supply Project

Funding Opportunity: 2002 Farm Bill, Conservation Innovation Grant Program, applications due March 28, 2005

Total Project Costs: \$2.84 million

Grant Request: Limited to producer EQIP eligibility



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Prop 50 Desalination Program

Chapter 6 (a) 1. Desalination Recovery Enhancement and Concentrate Management Study

Purpose: Conduct a pilot study to evaluate increased recovery and brine volume reduction from the three desalters.

Background:

- ✓ Brine disposal capacity in regional disposal system is limited and treatment and disposal costs rising dramatically.
- ✓ Brine reduction from the desalters will enable construction of the third plant identified in the PBDP.
- ✓ Need for increased water supply for the region.

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Prop 50 Desalination Program

Chapter 6 (a)

1. Desalination Recovery Enhancement and Concentrate Management Study

Objectives:

- ✓ Characterization of brine concentrate.
- ✓ Establish treatment methodology.
- ✓ Identify recovery levels and reduction volume.
- ✓ Develop estimates for capital and operating costs.
- ✓ Provide data for regional brine disposal planning efforts.

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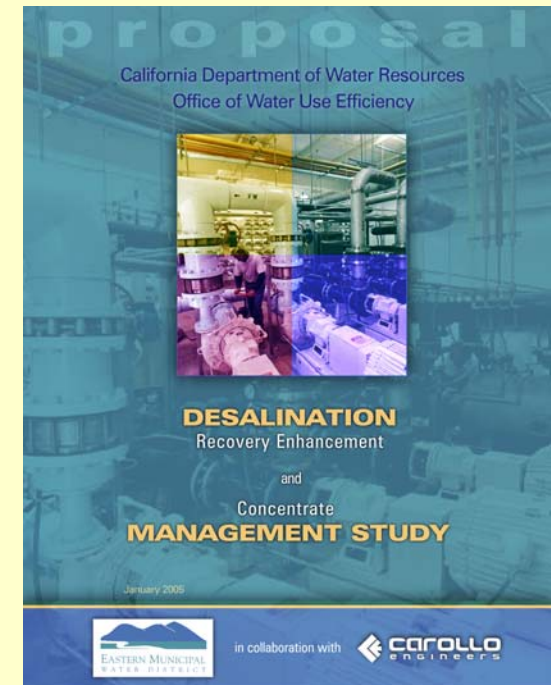
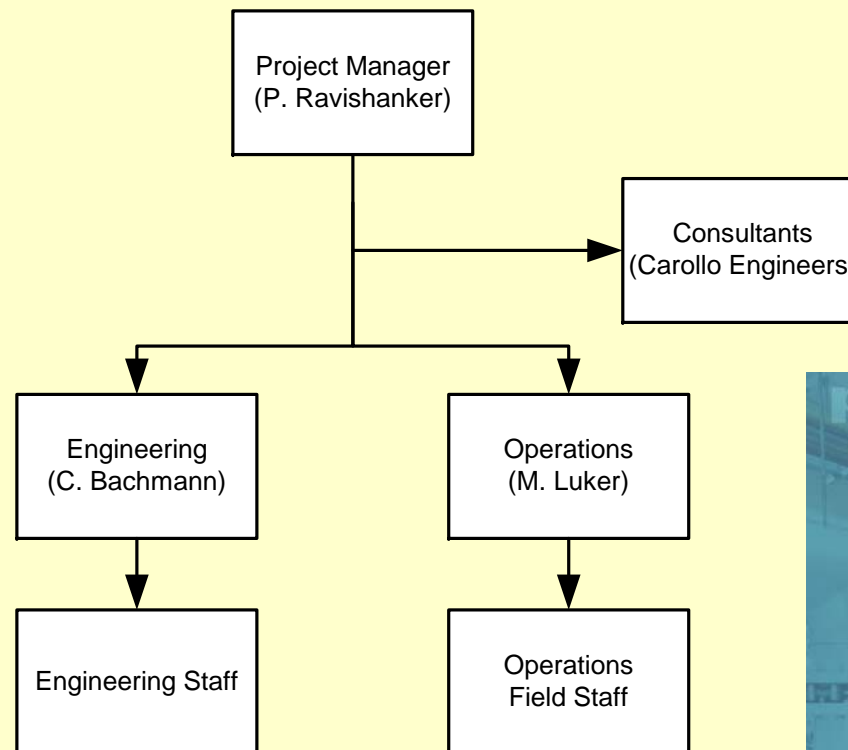
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Prop 50 Desalination Program

Chapter 6 (a) 1. Desalination Recovery Enhancement and Concentrate Management Study

Application submitted to DWR 1/18/05.

\$25 million available for '04-05, 43 applications received for \$71 million.

Good chance of receiving funding.

Letters of Support:

Benoit, John J--Assemblyman, 65th District

Bono, Mary--Member of Congress, 45th District

Heil, Theodore R--Member, Board of Directors, Moreno

Valley Chamber of Commerce

Feenstra, Bob--Executive Director, Milk Producers Council

Pastor, Steven A--Executive Director, Riverside County Farm Bureau, Inc.

Piester, Edward M--Operations Manager, Nuevo Water Company

Pulliam, Trent D--Public Works Director/City Engineer, City of Moreno Valley

Norton, Mark R--Water Resources and Planning Manager, Santa Ana Watershed Project Authority

Scott, Bruce--Partner, Scott Bros. Dairy Farms

Sybrandy, Sid--Chairman, Western Riverside County Ag Coalition

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2002 Farm Bill Funding Request

**Conservation
Innovation Grant**
*(Applications due
March 28, 2005)*

2. San Jacinto Agricultural In-Lieu Water Supply Project

Purpose: Implement innovative approach to maintaining and restoring the groundwater basins and enhancing available water supply by integrating an effective recycled water in-lieu program with a comprehensive groundwater management plan.

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2002 Farm Bill Funding Request

2. San Jacinto Agricultural In-Lieu Water Supply Project

Objectives:

- ✓ Stabilize the San Jacinto groundwater subbasin and reduce the overdraft
- ✓ Minimize subsidence thus protecting integrity of groundwater aquifer
- ✓ Provide cost efficient, reliable alternative water supply enabling long-term viability of agricultural production
- ✓ Expand recycle water use to establish it as a conservation practice in-lieu of pumping groundwater while protecting ag water rights
- ✓ Increase groundwater supplies through effective regional reuse strategy
- ✓ Assist transformation of public's perception of recycled water (disposal vs building block for future water supply)

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2. San Jacinto Agricultural In-Lieu Water Supply Project

Project description:

- ✓ Construct pipeline from existing recycled water pipeline to two adjacent farms (Rancho Casa Loma and Scott Brothers Dairy Farms)
- ✓ Preliminary Design study completed December 2004
- ✓ Estimated project costs - \$2.8 million
- ✓ Schedule - estimate 13 months from start of final design and environmental compliance and permitting.
- ✓ If selected, funding limited to producer eligibility under NRCS EQIP program.
- ✓ Will need to seek additional funding sources.

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Community Support:

- ✓ Requesting support letters from basin stakeholders, legislators, and interested parties.