

Addressing Drought with Recycled Water



Incentivizing Near-term projects to Expand California's Water Supply

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WESTERN RECYCLED WATER COALITION

A Collaborative Approach to Developing Sustainable Water Supplies

Key Messages

- Over 225,000 af of new, forever supply may remain untapped
- Locals are willing/able to invest with 50% outside funding
- Lower SRF interest rates and longer duration loans meet the 50% target
- A commitment to increase CWA SRF for drought relief

Drought?

December 2013 reservoir levels in Oroville and Shasta





How much is available in California?

- **3.5 Million Acre feet** of wastewater in California are discharged to the ocean each year.

“... represents the most immediately available and reliable source of new water in California.”

(source: WaterReuse Association)

October 2013 Nationwide Recycled Water Survey Results



Western Recycled Water Coalition



- **65 Agencies with Projects in California**
- **Project costs \$5.6 billion**
- **554 thousand acre feet annual yield**

California Project Types

- 13 Advanced treatment facilities (UV/MF/RO); 9 tertiary treatment facilities; 5 scalping plants;
 - ~5 groundwater recharge and 4 indirect potable reuse projects
- Over 560 miles of pipeline, 36 storage facilities and 58 pump stations;
- ~23 misc. projects to expand treatment, distribution, or related facilities.

Project Funding Needs

- \$2.66 Billion = Financial Support Needed
- 29 of 65 (**45%**) California agencies are “unlikely” or “definitely not” going to move forward without financial assistance
- Represents over 225,000 AFY of recycled water that may not be developed



California Follow-up Survey (Feb. 2014)

- Joint effort of original surveying agencies and CWA SRF Program Staff
- 57 California Agencies Participated
 - 45 agencies with projects to construct in 1-3 years:
 - Financing need \$1.1 billion
 - Produce/distribute 200,000 acre feet annually

Challenge: Project Funding Needs

- Agencies report needing ~50% State and/or Federal partnership to build recycled water projects.
 - Past funding programs not available (25% Title XVI, 25% Propositions 13, 50 & 84)
 - With no outside funding, new RW systems can take ~40 years to break-even
 - It's very challenging for local governing bodies to invest in infrastructure with break-even periods >20 years

Example of Funding Importance: Antioch Urban Landscape Project

6 miles of pipeline and 1.1 MG storage reservoir (total project cost ~\$12 M)

Funding Scenarios	Payback
1. No Federal/State partnerships, City pays all	43 years
2. Federal Title XVI (25% project costs) and State grants (25% project costs)	22 years
3. Title XVI (25%), State grants (25%) and 50% ARRA Loan (0.077% interest)	<1 year

- 💧 **\$638/AF** = No-project water supply cost (combination Delta water rights & blended raw & treated from local water district)
- 💧 **\$306/AF** = Post-project recycled water cost

Grant Equivalency Increases as Interest Rates Decline and Loan Duration Lengthens

Interest Rate	30-Year Loan Grant Equiv.	40-Year Loan Grant Equiv.
2.1%	26%	32%
1.0%	37%	44%
0.5%	41%	49%
0.25%	44%	52%
0.0%	46%	54%

*Using a 4.5% Discount Rate representative of traditional tax-exempt bond financing rate



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Funding Commitment

- Speaking as “one voice”
- Four Federal drought relief bills
 - 40-year financing
 - Awareness of California funds
 - Commit all funds
 - Create a backlog



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Requested SWRCB Actions

- 1) Approve 0% to 0.25%, 30-year loans
- 2) Support efforts to seek approval from EPA for 40-year loans for “new water” projects – benefit of RW “forever”
- 3) Don’t limit new loans to new RW projects and support efforts to allow private utilities access to CWA SRF
- 4) Extend or eliminate 8.5 month window – 1 year program, \$400 million and revisit
- 5) Provide direction to staff on: Senior Lien loans; repayment schedules; refinancing some existing