Southern California:
A region whose sustainability rests on embracing water conservation as a way of life

CALAFCO Conference
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Presentation by the Water Resources Institute
California State University, San Bernardino
Susan Lien Longville, Director
Peripheral canal, new levees urged for Delta

Sierra snow pack low, a dry winter looms

Nature Conservancy backs Delta canal, with conditions

Federal ruling helps fish, but water costs feared

L.A.’s water woes worsen

The cost of water may rise in L.A.

Delta fish hit record lows in 2008

Water rationing likely in SoCal this spring
Water Variability and Use

- 2/3 of precipitation in north
- 2/3 of use in south
Defining California’s Water Challenges

Aging infrastructure and growing population put more pressure on water systems.

California’s Bay-Delta ecosystem is declining with many fish populations at record lows, resulting in less reliable water supplies.

Multi-year drought has further stressed water supplies for all purposes. Reservoirs are low and groundwater levels are declining.

Climate change impacts, including less snowpack, higher flood peaks, and sea level rise, create new uncertainties.
In spite of what you read (even the Reports in the DWR Drought Archive), droughts are not the real problem…

3. The Continuing California Drought (1977)
8. CA's Continuing Drought, Jan 1991 (1991)
14. 2007-2009 Drought Timeline

The real problem in Southern California is historic per capita water use— it is simply too high.
2009 Comprehensive Water Package Passed by the Legislature

Includes:

• Statewide Water Conservation
  • Delta Governance
• Statewide Groundwater Monitoring
  • Water Rights Enforcement
• Funding for Water Supply Reliability

Statewide Water Conservation Component

Requires:

• Statewide goal of 20% per capita reduction in water use by 2020
  • Development of Agricultural Water Management Plans
Per capita water use has been reduced since the formation of the California Urban Water Conservation Council in 1991—particularly in Southern California.

The MISSION of the Council is to increase urban water use efficiency statewide by implementing comprehensive conservation Best Management Practices (BMPs) defined in a Memorandum of Understanding (MOU) signed in 1991 by a group of urban water suppliers, environmental interest groups, and other interested parties.

Since 1991, 408 wholesale and retail urban water suppliers across California have signed the MOU, representing more than 75% of the state’s urban water supply.
California Urban Water Conservation Council’s 14 Best Management Practices (BMP’s)

1. Water Survey Programs for Single and Multi Family Residential Customers
2. Residential Plumbing Retrofit
3. System Water Audits, Leak Detection and Repair
4. Metering with Commodity Rates for All New Connections and Retrofit of Existing Connections
5. Large Landscape Conservation Programs and Incentives
6. High-Efficiency Washing Machine Rebates
7. Public Information Programs
California Urban Water Conservation Council’s 14 Best Management Practices (BMP’s)

8. School Education Programs
9. Conservation Programs for Commercial, Industrial, and Institutional Accounts
10. Wholesale Agency Assistance Programs
11. Conservation Pricing
12. Conservation Coordinator at Water District
13. Water Waste Prohibition
14. Residential Ultra-Low-Flush Toilet Replacement Programs
Statewide Market Survey: Landscape Water Use Efficiency

Final Report
June 2007

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In fact, the Council estimates 1991-2008 water conservation savings:

- From residential water surveys programs 98,613 acre-feet
- From retrofitting Commercial, Industrial and Institutional (CII) accounts with dedicated irrigation meters 46,103 acre feet
- Low Flow Showerheads 76,966 acre feet
- From budgeted irrigation accounts 360,857 acre feet
- Clothes washer rebate programs 22,618 acre feet
- From CII incentives 359,806 acre feet
  
  CII sunset in 2004 14,690 acre feet

TOTAL WATER SAVINGS (AF) 1,999,291 acre feet
Southern California Leads the State with Programs Aimed at Changing Behaviors Embracing Water Conservation as a Way of Life:

1. Tiered Water Rates
2. Turf Reduction Rebate Programs (Cash for Grass)
3. Synthetic Turf Rebate Programs
4. Residential and Professional Landscape Classes
5. Landscape Audit Programs
6. Ultra-Low-Flow Toilet Rebates
7. High-Efficiency Clothes Washer Rebates
8. Swimming Pool Covers and Rain Barrel Rebates
Southern California Leads the State with Programs Aimed at Changing Behaviors Embracing Water Conservation as a Way of Life:

9. Industrial Water Use Reduction Audits and Incentive Programs
10. HOA Outreach and Training
11. Community Outreach Programs and Water Festivals
12. Public Awareness and Communications Campaigns
13. School Education Programs
14. Water Conservation Demonstration Gardens
15. Water-wise Landscape Contests
16. Gardening Guides in print, on websites, or distributed on compact discs (CDs)
16. School Fundraisers Selling Water-wise Plant Palettes
IN THE FUTURE:

Southern California must align and intensify both water conservation and recycling efforts to reduce our water demand on the San Francisco Bay Sacramento-San Joaquin Delta (Bay-Delta) ecosystem.

“The days of every community using water once and failing to recycle its public wastewater are over. Recycling must be embraced as a way of life integral to water conservation.”
Advice to LAFCO Board Members

- When considering an annexation, you should also consider the history of the water supplier for the annexed area.
  - Does this supplier have a history of reducing demand from water conservation measures?
  - Is the supplier a signatory to the CUWCC MOU who is implementing cost-effective BMP’s to reduce demand?
  - Does this supplier have the capacity to supply recycled water to the annexed area?
  - Can LAFCO stipulate that the supplier must implement water conservation and recycled water measures for approval?

- If a Water Supply Assessment has been submitted to LAFCO does legal counsel for LAFCO have concerns? If so, it is highly likely that a CEQA challenge may be filed.