

Southern California:

**A region whose sustainability rests
on embracing water conservation
as a way of life**

CALAFCO Conference

October 6-8, 2010

Palm Springs, CA

**Presentation by the Water Resources Institute
California State University, San Bernardino**

Susan Lien Longville, Director



Headlines

San Francisco Chronicle

Read or e-mail pages | SATURDAY, JANUARY 3, 2009 | 1 page

Peripheral canal, new levees urged for Delta

By Kelly Zitz
Chronicle Staff Writer
An influential
without the approval
of the California
Legislature.
The canal harbored
million Californians.
That differed from
another government-
announced task force

CONTRA COSTA TIMES

WEDNESDAY, December 31, 2008

Sierra snow pack low, a dry winter looms

By Mike Taugher
Drought conditions
have shifted in a way
that probably means

The Sacramento Bee

WEDNESDAY, JANUARY 7, 2009

www.sacbee.com

31, 2008

Federal draft report: Delta system imperils fish

The agency is also studying whether better valves in the canal could be installed by the state. Canal better valves, that industry says.

The growing body of research that California's efforts to serve thirsty farms and cities with pumping facilities to increase efficiency get even better.

strategies in the Central
area to enhance by their
and regional resources

The Sacramento Bee

THURSDAY, January 15, 2009

www.sacbee.com

Nature Conservancy backs Delta canal, with conditions

By Matt Weiser
In a statement
water supplies.

The Sacramento Bee

WEDNESDAY, January 7, 2009

Federal ruling helps fish, but water costs feared

By Matt Weiser
dams, according
to sweeping new
Federal rules that
a bio
opini
in one

CONTRA COSTA TIMES

THURSDAY, January 15, 2009

www.contracostatimes.com

Delta fish hit record lows in 2008

By M

Los Angeles Times

Thursday, January 15, 2009

L.A.'s water woes worsen

By Shelly Gaud
Los Angeles has
been told it can expect
a big jump in the cost
of water — and that
has officials angry and
has raised the specter
of rationing, according
to the Daily Breeze.
Los Angeles could be facing a
21 percent increase
in the cost of water
as the continuing
drought potentially
leads to a tougher water
rationing plan limiting
residents to outdoor
watering only three
days a week.
The Metropolitan
Water District, which
provides the Los
Angeles Department
of Water and Power
with 16 percent of its
supply, unveiled the
higher costs at a recent
meeting, drawing anger

Press-Telegram

LONG BEACH, CA

WEDNESDAY, JANUARY 14, 2009

www.presstelegram.com

The cost of water may rise in L.A. DROUGHT: The hike of as 21 percent could be passed on by supplier.

By Rick Orlov
Los Angeles could
be facing a 21 percent
increase in the cost of
water as the continuing
drought potentially
leads to a tougher water
rationing plan limiting
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San Francisco Chronicle

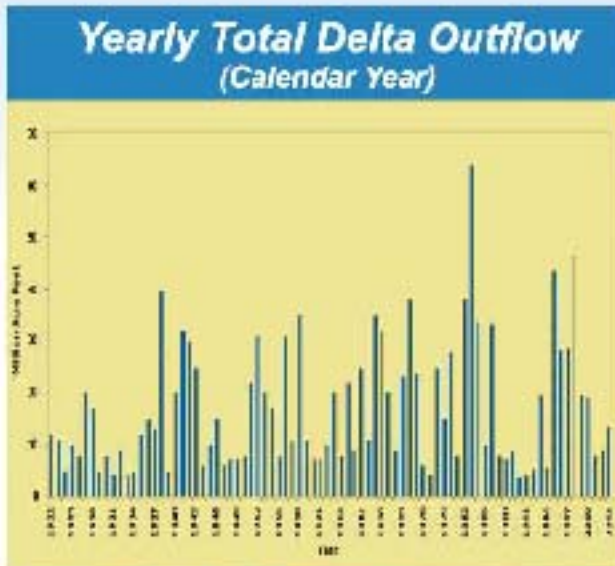
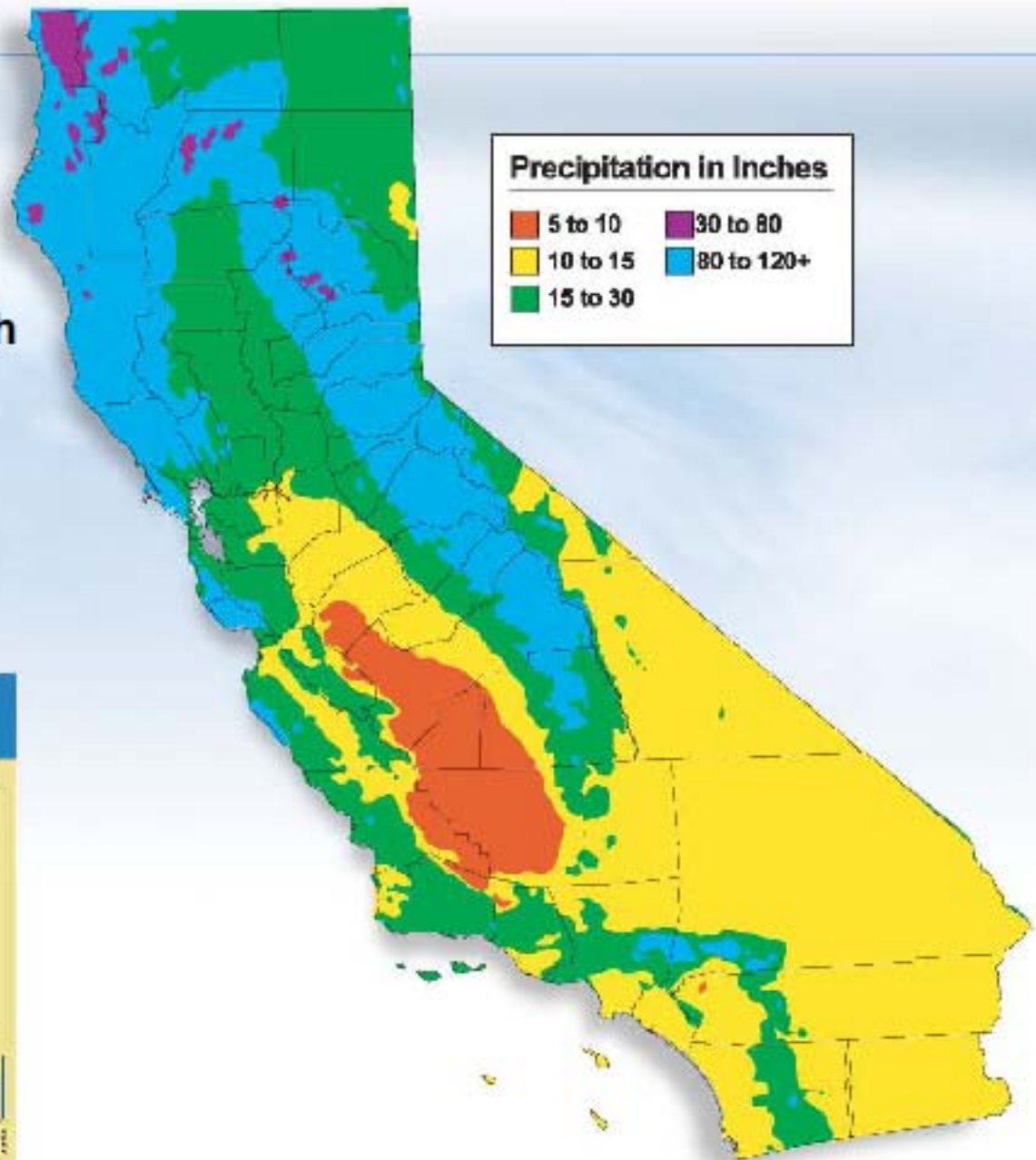
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Water rationing likely in SoCal this spring

By Associated Press
The great water
shortage, involving
18 million Southern
Californians, may
have a an increased
likelihood water will
be rationed this spring.
The Metropolitan
Water District,
which supplies cities
and water agencies
throughout the region,
had said earlier there
was a 50 percent
chance of rationing.
In a report Tuesday,
the district raised
the possibility to 80
percent.
The U.S. Fish and
Wildlife Service has
warned, Sacramento-
San Joaquin river delta
water deliveries to
Southern California

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...

1. *The California Drought-1976 (1976)*
2. *The California Drought 1977 (1977)*
3. *The Continuing California Drought (1977)*
4. *The 1976-77 CA Drought - A Review (1978)*
5. *Drought Contingency Planning Guidelines for 1989 (1989)*
6. *Drought Financial Assistance Programs 1989 (1989)*
7. *Drought Conditions in California (1990)*
8. *CA's Continuing Drought, Jan 1991 (1991)*
9. *The 1991 Drought Water Bank (1991)*
10. *The Hydrology of the 1987-1992 California Drought (1992)*
11. *California's 1987-92 Drought (1993)*
12. *Agriculture, Water and CA's Drought of 1987-92 (1994)*
13. *Preparing for California's Next Drought- Changes Since 1987-92 (2000)*
14. *2007-2009 Drought Timeline*
15. *2009 Drought Actions (2008)*
16. *California Drought 2007-2009*

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





CALIFORNIA URBAN WATER AGENCIES




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.