LONG-TERM WATER CONSERVATION

APRIL 27, 2016
WHO WE ARE:

- NRDC is the nation's most effective environmental action group, combining the grassroots power of more than 2 million members & online activists with the courtroom clout and expertise of over 500 lawyers, scientists and other professionals.
- Our dedicated staff work with businesses, elected leaders, and community groups on the biggest issues we face today.
- The NRDC Water Program envisions and is working towards a safe and sufficient supply of fresh water for people and the environment.
Why do we need a long-term water conservation strategy?
California’s Crazy Climate

Projected Growth in California’s Population 2010-2060

<table>
<thead>
<tr>
<th>Year</th>
<th>Millions</th>
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<tbody>
<tr>
<td>2010</td>
<td>35</td>
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<td>2015</td>
<td>37</td>
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<td>2020</td>
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<td>2055</td>
<td>46</td>
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<td>2060</td>
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Emergency Regulations

Goal
1.24 million acre-feet

25% Statewide Water Conservation

What is California’s Conservation Potential?

Every year, California uses 6 MILLION ACRE-FEET more water than our rivers and aquifers can sustainably provide.

Every year, California could save up to 14 MILLION ACRE-FEET of water to close this gap.

Untapped Savings

21st Century Solutions for a Sustainable Water Supply for California

Agricultural Efficiency: 5.6-6.6 MILLION ACRE-FEET
- Use smart irrigation scheduling to ensure crops are watered when they most need it
- Use deficit irrigation to limit water use at drought-tolerant growth stages
- Expand efficient drip and sprinkler irrigation technology

Stormwater Capture: 0.4-0.5 MILLION ACRE-FEET
- Install rainwater barrels and cisterns at homes and businesses
- Recharge groundwater with stormwater runoff

Water Reuse: 1.2-1.8 MILLION ACRE-FEET
- Use recycled water to irrigate landscapes and crops
- Install graywater systems to water lawns and flush toilets in homes and businesses
- Recharge groundwater with recycled water

Urban Efficiency: 2.8-3.2 MILLION ACRE-FEET
- Replace dormant turf grass with native and drought-tolerant plants
- Accelerate replacement of inefficient plumbing fixtures and appliances
- Fix and fix water leakage in buildings and under streets
- Operate cooling towers more efficiently in factories and office buildings

Get the Drought Series Fact Sheets at:
www.nrdc.org/water/ca-water-supply-solutions
www.sacinst.org/publication/ca-water-supply-solutions

* 1 Million Acre-Feet is enough to supply 2 million families for 1 year (until we all become more efficient!!)
Urban Efficiency (continued)

Potential Urban Water Savings by Hydrologic Region, in thousand acre-feet per year (tafy)

Household Savings

- Indoor: 33–40 gpcd
- Outdoor/Landscapes: 20–50 gpcd

Savings Inside the Home

- Dishwashers: 0.3 gpcd
- Faucets: 4.0 gpcd
- Showers: 4.1 gpcd
- Clothes Washers: 6.8 gpcd
- Toilets: 7.3 gpcd
- Leak Repair: 11 gpcd

Note: The white line for household savings represents the low end of the range.
Stormwater Capture

[Southern California region map showing imperviousness percentages.]

Percent Imperviousness:
- < 20%
- 20 - 40%
- 40 - 60%
- 60 - 80%
- 80 - 100%

Public / Protected Open Space
Study Area Boundary

Percent imperviousness based on USGS National Land Cover Data 2011 Percent Developed Imperviousness. Map created May 2014.
Ideas for Long-Term, Non-Emergency Regulations

• Strategies to Address Wasteful Practices Implemented by Water Suppliers

• Permanent Reporting Requirements

• Clarify & Expand Eligibility Requirements for Funding and Permit Applicants

• Establish a New Statewide Water Use Target
Our New Normal...