

Water Conservation Workshop

February 24, 2009



**CITY OF SACRAMENTO
DEPARTMENT
OF UTILITIES**

Workshop Agenda

- Introduction
- State and Regional Outlook
- Water Conservation Efforts
 - Tools for Water Savings
- Proposed Changes
- Next Steps



Our Water Rights

- American River: 245,000 Acre Feet per Year
- Sacramento River: 81,800 Acre Feet per Year
- Groundwater: Approximately 20,000 Acre Feet per year
- Sacramento Avg. consumption:
 - 280 gal/capita/day
- Statewide Avg. Consumption (gal/capita/day):
192 gal/capita/day



2009 Drought

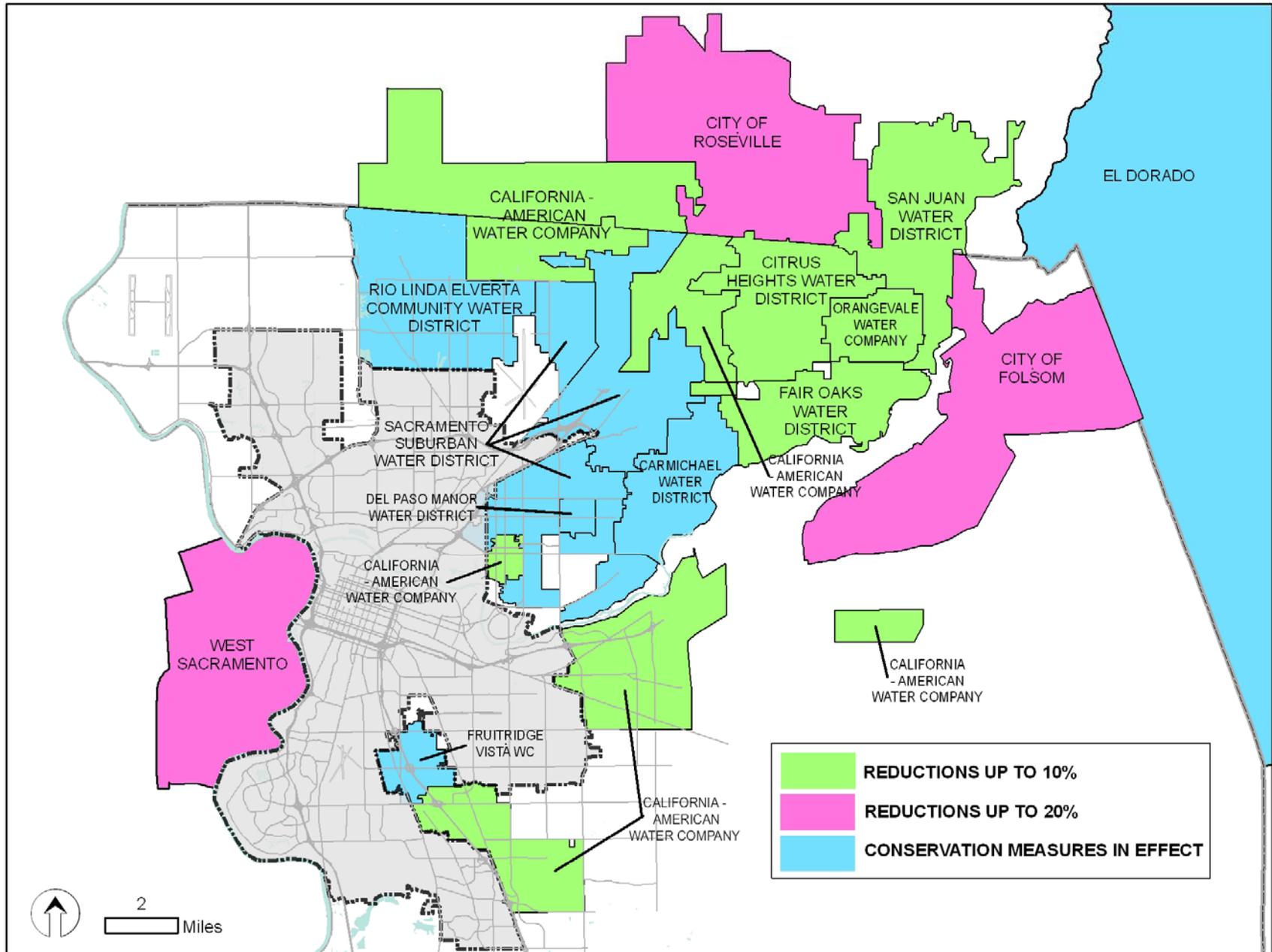
- This year's expected snowfall and rainfall would put California in a third year of a drought.
- Folsom Lake only 30% full
 - compared to 50% at the same time two years ago
- State has requested a voluntary reduction of water use of 20%



Stewardship

- Sustainability
 - Environmental Benefits
- Governor's Proposal for 20% reduction by 2020
- Resources





Reductions in Water Use

- The City of Sacramento has never mandated water use reductions.
- Our Water Shortage Contingency Plan calls for a 10-20% reduction when our water supply is not enough to meet demand.





Water Supply Conditions for 2009

Sacramento City Council
Water Conservation Workshop
February 24, 2009

John Woodling
Regional Water Authority





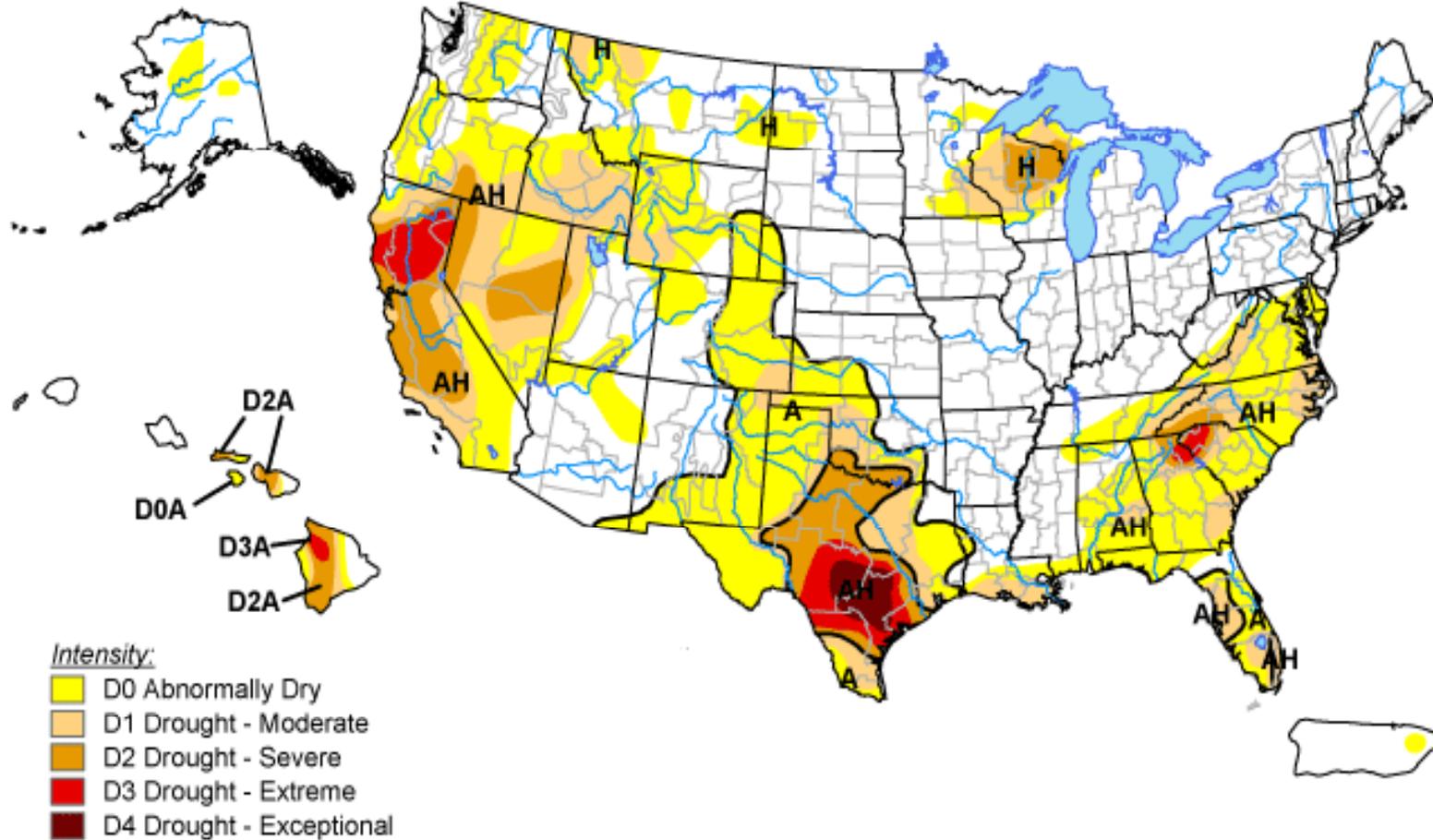
Overview

- Statewide Conditions
- Regional Conditions
- Regulatory Considerations
- How do we address this?

U.S. Drought Monitor

February 17, 2009

Valid 8 a.m. EST



U.S. Drought Monitor

California

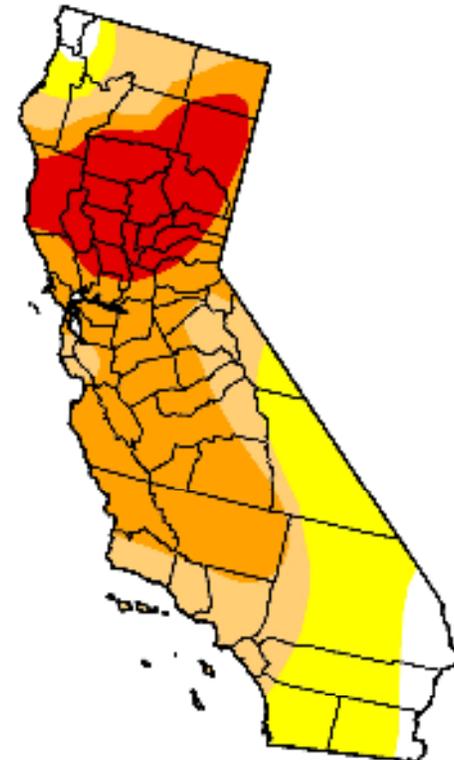
February 17, 2009
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	5.2	94.8	70.7	50.1	16.7	0.0
Last Week (02/10/2009 map)	0.9	99.1	78.8	54.7	19.0	0.0
3 Months Ago (11/25/2008 map)	4.7	95.3	86.0	41.3	0.0	0.0
Start of Calendar Year (01/06/2009 map)	1.7	98.3	88.2	41.3	2.8	0.0
Start of Water Year (10/07/2008 map)	0.0	100.0	95.9	55.0	0.0	0.0
One Year Ago (02/19/2008 map)	18.3	81.7	37.5	14.1	0.0	0.0

Intensity:

- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional



How Dry Is it?

“California is facing the most significant water crisis in its history.” – California DWR

- Sierra Snow pack – 70% of normal
- CVP Allocation – 50% M&I, 0% ag
- SWP Allocation – 15%
- Three consecutive dry years, six of last eight
- Governor’s Executive Order
- Drought Water Bank

Folsom Lake

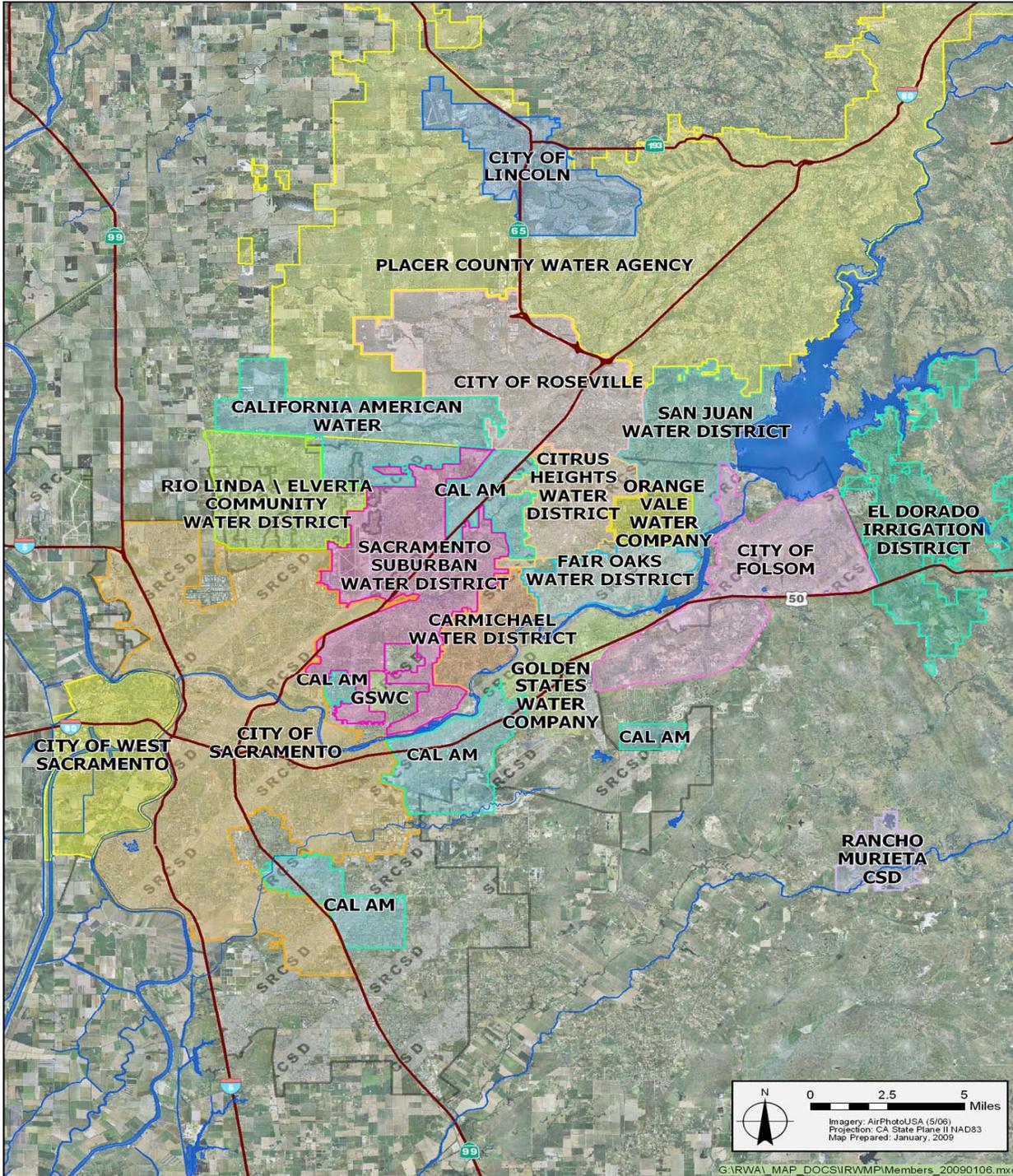


What Does it Mean for the Region?

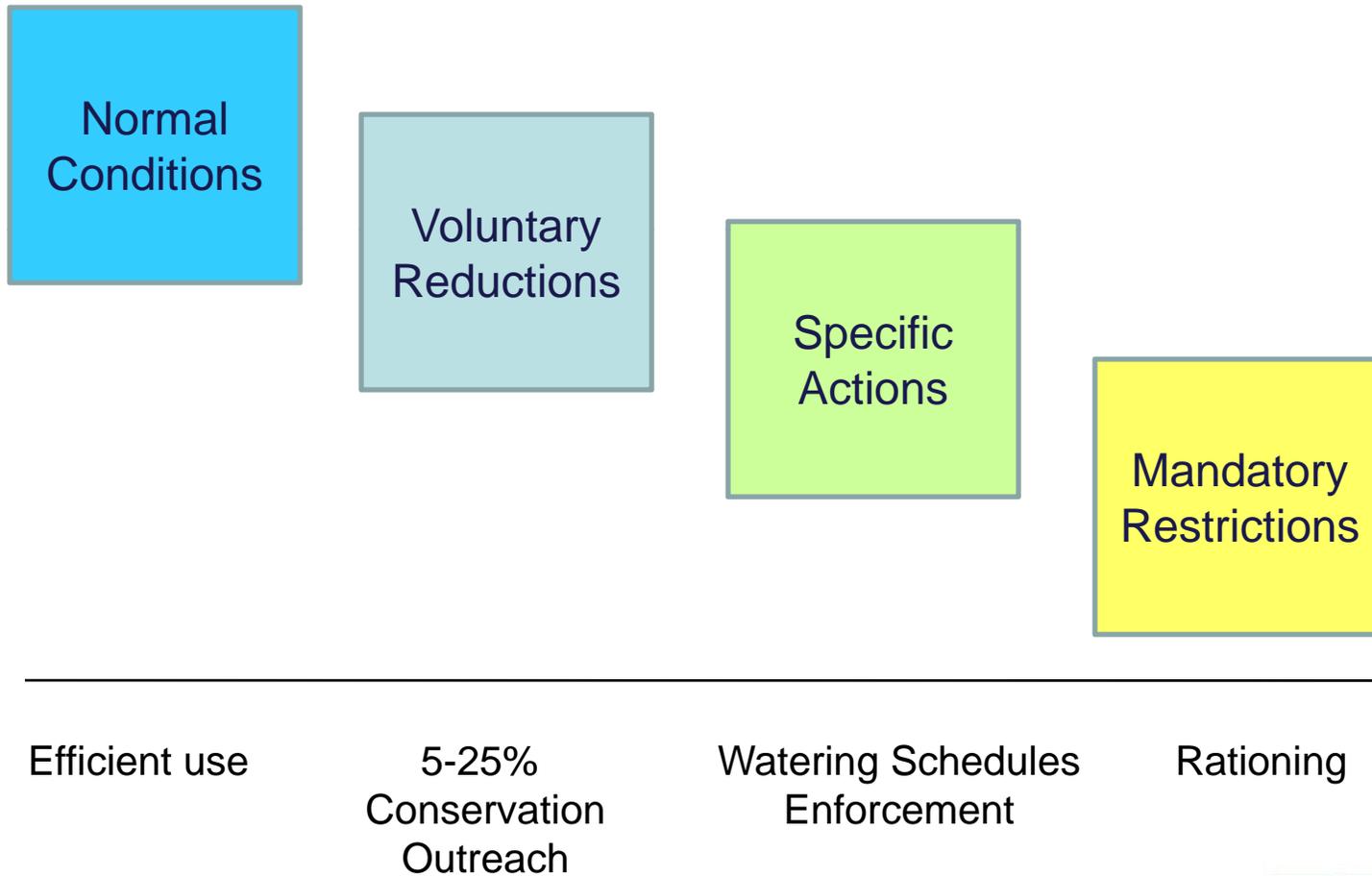
That depends...

- Conditions are unique for each water supplier
- Water source, water rights and contracts, diversion location, access to groundwater, facilities all vary
- Drought stages not fully coordinated or consistent

The Greater Sacramento Region



Water Shortage Contingency Plans





Regulatory Considerations

- 20x2020
- Delta Vision
- AB 49
- AB 32
- Model Landscape Ordinance

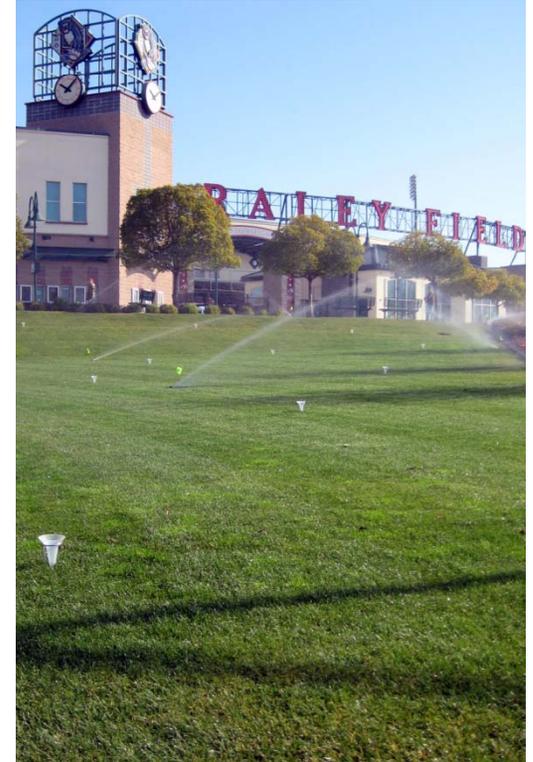


How do we address the long term?

- Integrated Water Management
 - Efficient water use
 - Conjunctive use
 - Recycled water
 - Groundwater cleanup
 - Transfers
 - Environmental stewardship
 - Regional collaboration

Regional Water Efficiency Program

- Education and Training
 - homeowners, contractors
- Outreach
 - Regional media messages
- Services
 - household and business audits
- Incentives
 - Rebates, partnerships
- Funding
 - Regional grants



Questions?

John Woodling
Regional Water Authority
jwoodling@rwah2o.org
(916) 967-7692



Water Conservation Program



CITY OF SACRAMENTO
DEPARTMENT
OF UTILITIES

History of Water Conservation

- 1991- Signed the CUWCC Agreement and BMPs.
- 1999- City of Sacramento Department of Utilities Water Conservation Office established
- 2000- Signed the Water Forum Agreement
- 2001- Joined Regional Water Authority



What do these commitments mean

- Better stewards of our water supply
- Implement additional tools
 - Meters
 - Education/Outreach
 - Ordinances
- Potential Financial Impacts



Best Management Practices

BMP 1: Residential Water Audits

BMP 2: Residential Plumbing Retrofits

BMP 3: System Water Audits

BMP 4: Meter Retrofits

BMP 5: Large Landscape Audits

BMP 6: High-Efficiency Clothes Washers

BMP 7: Public Education

BMP 8: School Education

BMP 9: Commer., Indust. & Inst. Audits

BMP 10: Wholesaler Incentives

BMP 11: Water Conservation Pricing

BMP 12: Water Conservation Coordinator

BMP 13: Water Waste Prohibitions

BMP 14: Toilet Replace Program

Meters and Conservation

- Achieves equity amongst user classes
- Provides customer water usage data on monthly Utility Bills
- Serves as a tool to encourage customers to do water audits, replace inefficient plumbing fixtures, install drip irrigation and monitor outdoor irrigation controllers – year round
- Allows customers to control costs
- Encourages customers to appreciate the “value” of our water



Progress to Date: Meter Implementation

- Unfunded State Mandated Program
- 2005: 107,000 meters needed to installed and 952,458 feet of pipe need to be replaced (est. cost= \$350 million)
- Total number of meters installed since 2005: 4700
- Construction costs to date: \$18.4 million



Outreach and Education Efforts

- Increase education during summer months
- Advertising reminding water conservation
- Participating in neighborhood discussions and newsletters with information about conservation
- Continued participation in regional outreach efforts, such as RWA



Water Wise Gardening

- Limited sprinkler use doesn't mean a brown lawn.
- Xeriscape and native/drought tolerant plants offer smart, beautiful alternatives
- Working with Neighborhood Services/Parks and Recreation on workshops and demonstration garden



Water Conservation Seminar

- Free seminars offered by staff monthly during summer months
- Water Conservation Seminars could be used to:
 - Educate interested public regarding water conservation
 - Waive fines for violating the City's Water Conservation Ordinance



Spare the Water Day

- Day would recommend limitation of water use on a Spare the Water Day
 - These days would go into effect with long periods of hot weather that put a drain on water supply and treatment plants.
 - Ex. Three days or more of anticipated 100+ degree temps might trigger Spare the Water Days.



Current Water Conservation Ordinance

- Substandard Fixture: customers cannot waste water due to substandard fixtures or water devices.
- No excessive run-off.
- Landscaping regulations
- Limited washing sidewalks or driveways
- Violations are provided written notifications, fines after third or more violation in a season.



Proposed Changes to Conservation Ordinances

- Limit residential and commercial irrigation
- Enforce watering days
- Implement fines



Proposal: Limiting Irrigation

- Current Ordinance allows irrigation to occur any time of the day or night, except noon- 6 p.m., not exceed 30 minutes per station with automated sprinklers or 2.5 hours with a hose in a calendar day.
- Proposed: No irrigation between 10 a.m. and 6 p.m.
- Proposed: Seasonal Watering Schedules, limit watering to 1 day per week based on address in the winter months.



Proposal: Enforcement of Watering Days

- Current ordinance: No watering Monday. Addresses ending in 1,3,5,7,or 9 may water Tues., Thurs, or Sat. and addresses ending in 2,4,6,8 or 0 may water Wed, Fri, and Sun.
- Proposal: During declared water shortages, irrigation would be further limited.



Proposal: Require Water Conservation Retrofits

- As a condition of sale of properties within the City of Sacramento, require that water efficient tools be installed on the property.
- These tools would include:
 - Ultra Low Flush or High Efficiency Toilets
 - Low-flow Showerheads
 - Sprinkler timers



Proposed Water Conservation Efforts

- Expediting Meter Installation Program
- Increasing Water Conservation Commitments
- Increased Education to Customers
- Proposed Ordinance Changes



Next Steps

- Gather Feedback on Proposals
- Draft new ordinances
 - L&L, Council approval necessary
- Actively work to educate public as to new conservation efforts
- Continue to work regionally on outreach and education efforts

