

# MWELO update 2015

Julie Saare-Edmonds  
October 2015

---

# History of MWELO

- AB 325 1990 Water Conservation in Landscaping Act
  - Not well implemented
  - Largely ignored
  - Agencies could exempt themselves
- AB 1881 2006
  - Agencies could not exempt themselves
  - Cal Green 2010- landscapes in building codes

# Compliance by Local Agencies

- Adopt a WELO by Dec. 1, 2015 (MWELO or a local WELO)
- Report on local adoption by 12/31/15
- Regional Adoption 2/1/16
- Regional WELO reporting 3/1/16 (still need to report activity on 12/31/15)
  
- Annual reporting begins 1/31/17 (for 2016 development)

# Reporting by Local Agencies

- Local WELO details
- **Status of adoption**
- Number and types of applicable projects
- Housing starts, commercial development, retrofits
- Review procedures, Verification and Enforcement
- SEE DWR website for electronic form
- **Challenges**
- **Education and other needs**

Some agencies are asking applicants to complete online surveys for data collection

Green Building Survey

Green Building Data Survey - City of Palo Alto

**Directions:** Enter your project data using the following: Title 24 Energy Report, Indoor Water Use Calculations, Outdoor Water Use Calculations, Energy Star Portfolio Manager.

**1. Surveyor's Contact Information**

Name

Company

Email Address

**2. Permit Number:**  
*Leave blank if permit has not been issued.*

**\* 3. Street Number:**

**\* 4. Street Name:**

**\* 5. Valuation (\$):**

**\* 6. Project Square Feet (Gross):**

100% 2:26 PM 10/6/2015



2013



Signs brought drought  
to many Californians

SERIOUS DROUGHT  
HELP SAVE WATER





Folsom Lake  
October 2015



Lake Oroville  
October 2015

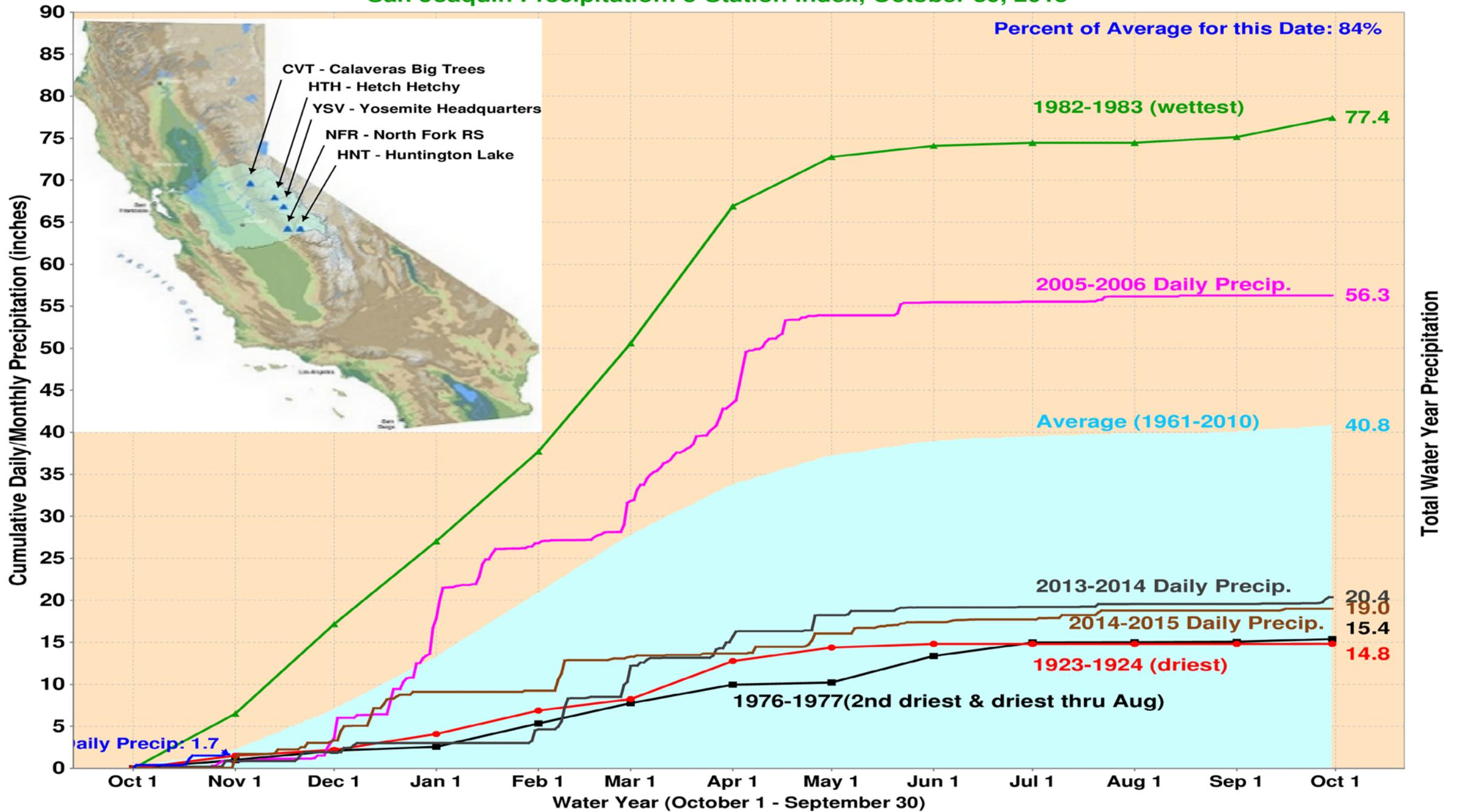
Oroville Dam and  
Spillway October  
2015





Lake Shasta

# San Joaquin Precipitation: 5-Station Index, October 30, 2015

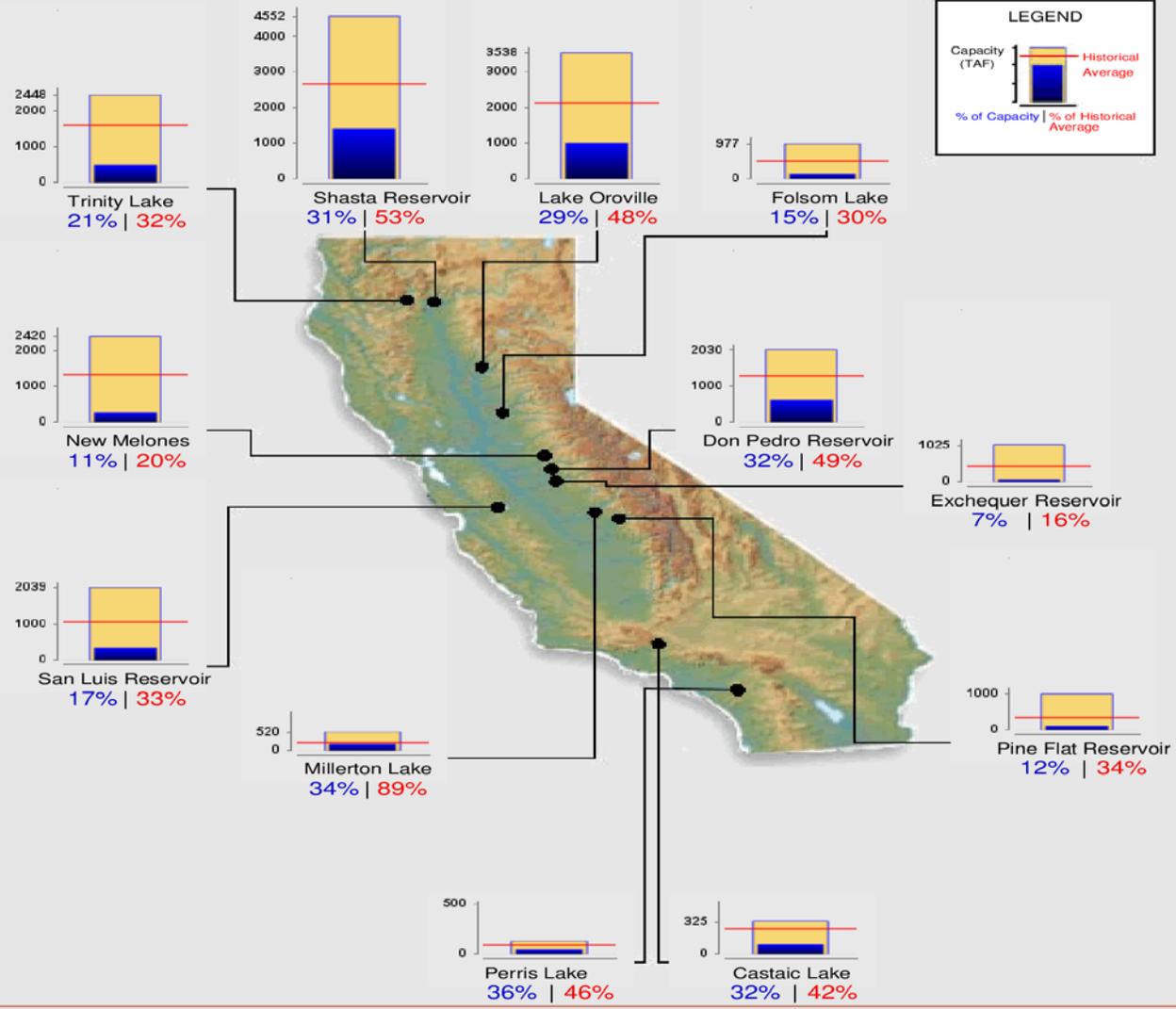




# Reservoir Conditions

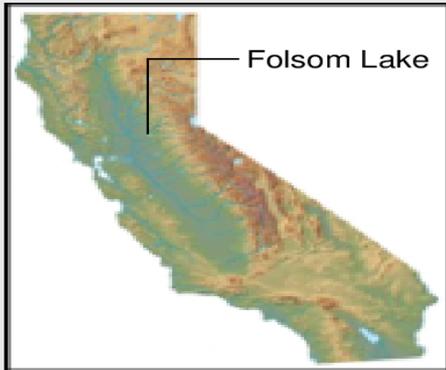
Ending At Midnight - October 29, 2015

## CURRENT RESERVOIR CONDITIONS



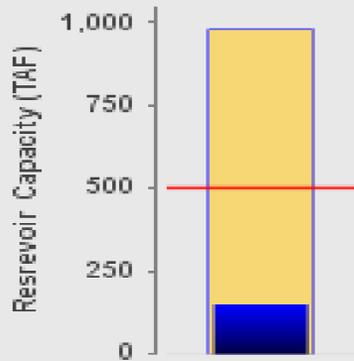


# Reservoir Conditions - Folsom Lake



## Folsom Lake Conditions

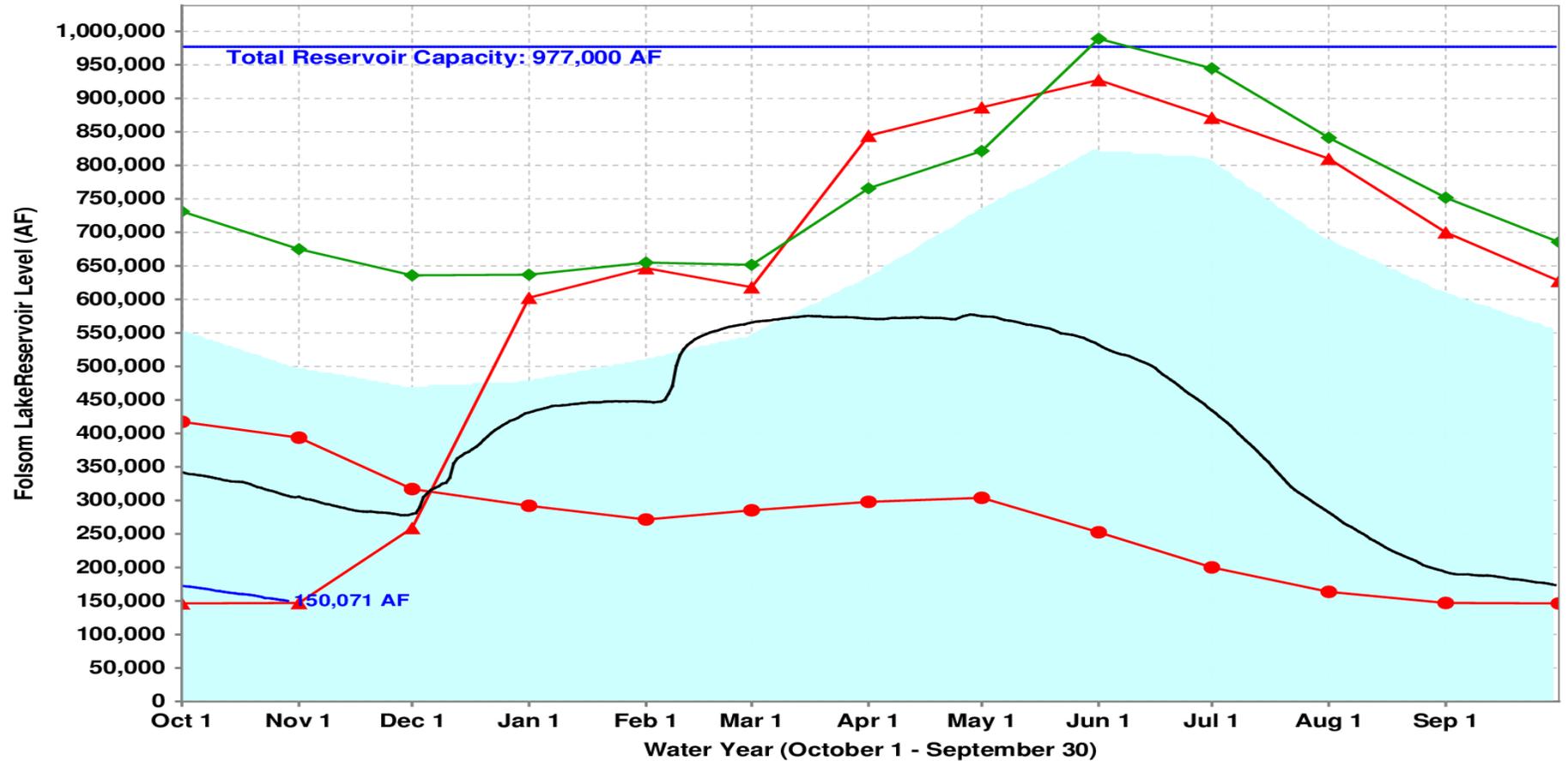
(as of Midnight - October 29, 2015)



Current Level: 150,071 AF

15% (Total Capacity) | 30% (Historical Avg.)

Folsom Lake Levels: Various Past Water Years and Current Water Year, Ending At Midnight October 29, 2015



■ Historical Average 
 — Total Reservoir Capacity 
 ● 1976-1977 (Driest) 
 ▲ 1977-1978 
 ◆ 1982-1983 (Wettest) 
 — 2014-2015 
 — Current: 2015-2016



January 2014 Snow Survey Echo Summit

The Governor orders actions to be taken by the State to respond to the continuing drought emergency



**April 1 2015- Snow Survey-No Snow**

# Executive Order B-29-15

## Directive # 11

### State Model Water Efficient Landscape Ordinance

The Department shall update the State Model Water Efficient Landscape Ordinance .....**more efficient irrigation systems, graywater usage, onsite storm water capture, and by limiting the portion of landscapes that can be covered in turf...**local agencies shall report .....

# Stakeholder webinar/listening sessions

- IA/ASIC Irrigation experts
- CLCA landscape contractors
- ASLA landscape architects
- APLD landscape designers
- BIA building industry
- CANGC Nursery growers/ retailers
- CUWCC Landscape Committee
- City, County, Water Suppliers
- Manufacturer representatives

- Stakeholders on irrigation efficiency:
  - Limit application rate, know infiltration rate of soil
  - Run times (drip) and multiple runtimes,
  - Use Sensors and SMART controllers
  - Master valves, Flow Sensors, **Pressure Regulation**
  - Hydrometers, Lower ETAF (water allowance)
  - **More emphasis on soils**
-

## Increase stormwater capture and retention

- Stormwater:
  - Drywells, dry Streambeds, Bioswales, Bio-retention, rain Gardens
  - **Living soils, compost and mulch**
-

- Stakeholders comments on turf
- Use warm season only (Bermuda, Buffalo and others)
- Backyards, sports fields only
- Avoid invasive plants in shrubs beds
- Some supply issues for short term, contract growing for long term for replacement plants
- Turf growers are hard hit by drought
- Need to recognize lower water varieties
- Choose Turf areas more carefully, not just the default groundcover

# Overview of new changes

- Purpose and sustainability
- Applicability
- Landscape design plan
- Irrigation design plan
- Grading Plan
- Water budget
- reporting

# Sustainability and the new purpose

- MWELO goes beyond water conservation
  - Addressing other resource issues solves water issues too
  - Acknowledging California's climate (dry summer)
  - Drought survival, protect the investment of landscapes
-

# Applicability

- Residential
- Non-residential
- Appendix D

# Landscape Design Plan

- Add compost (till in or leave on surface to protect tree roots)
  - Friable (workable soil deep enough for plant growth)
  - 3" mulch
  - Show any rainwater capture features
  - Show any gray water system components
-

# Irrigation Design Plan

- Pressure regulation-both decreasing and increasing
  - Master valves & Flow Sensors
  - Equipment must meet national standard
  - Sub-metering for better water management
-

# Grading Plan

- No changes
- Simple grading may be done by landscape contractor
- See Permitted Practice chart from the Dept. of Consumer Affairs

# Graywater

- Ch. 16 CA Plumbing Code
  - Laundry to landscape-no permit needed if certain conditions are met
  - Talk to building dept. first
  - Carefully choose detergents, etc.
-

# Water Budget

- Maximum Water Allowance
  - **Local Climate** x square foot area x ETAF = MAWA
- Estimated Total Water Use
  - Area (sq. ft.) x **Plant Factor** (hydrozone) = ETWU

# MWELO update

- ETAF 0.45 Non-residential + SLA ETAF 1.0
- ETAF 0.55 Residential (includes turf)
- IE Drip 0.81 IE overhead and other technology 0.75

# Reporting Section 495

- Excel form posted on DWR page:
- <http://www.water.ca.gov/wateruseefficiency/landscapeordinance/>
- Sent to all cities and counties planning directors
- Email submission to [WELO@water.ca.gov](mailto:WELO@water.ca.gov)

# DWR Reporting

- DWR will compile information from local agencies
- Report to the State Water Resources Control Board

# Value of Reporting by local Agencies

- Never quantified landscape area before on statewide basis
  - No idea of changing demand
  - Data for long term planning
  - Data for Urban Water Management Planning
  - Quantification of Outdoor vs. Indoor water use (%)
  - Changing Trends
  - Marketing information?
-

- Emergency Update of Cal Green Outdoor Water Use Standards
    - Building Standards Commission-non-residential
    - Housing and Community Development-residential
    - Division State Architect- schools, state colleges
    - OSHPD-hospitals
  - Building Code-Building officials
-

# Next steps

- Stakeholder committee 2016—
    - Examine long standing complicated issues
      - Existing landscapes
    - Find solutions by collaboration: government, industry, non-profits
  - Workshops for landscape professionals – January 2016
-



Julie Saare-Edmonds

California Department of Water Resources  
Landscape Program

[Julie.saare-edmonds@water.ca.gov](mailto:Julie.saare-edmonds@water.ca.gov)

