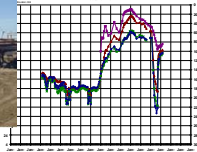


# California's Water Supply Situation

## Sustainable Groundwater Management Act & Executive Order B-29-15



## California's Water Supply Situation

- The past three years have been the driest three years in California's recorded history....

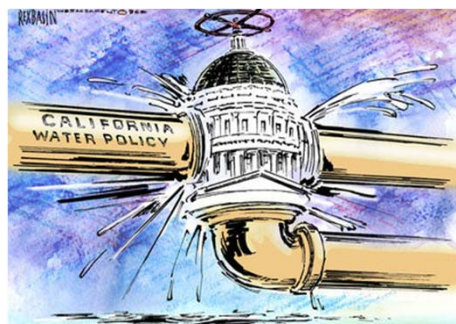
### Hydrologic Drought



## California's Water Supply Situation

– Environmental restrictions limit ability to move water

- Strategic Investments in infrastructure are needed
- Legal/Policy adjustments are needed to balance social, economic & environmental needs for water

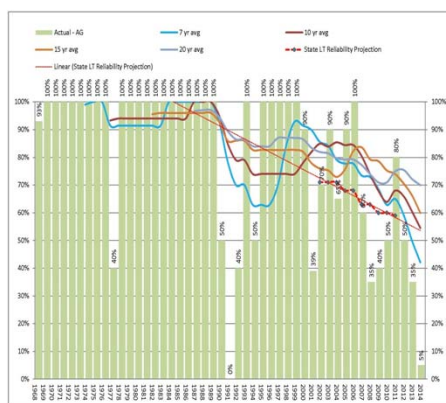


**Regulatory Drought**

## California's Water Supply Situation

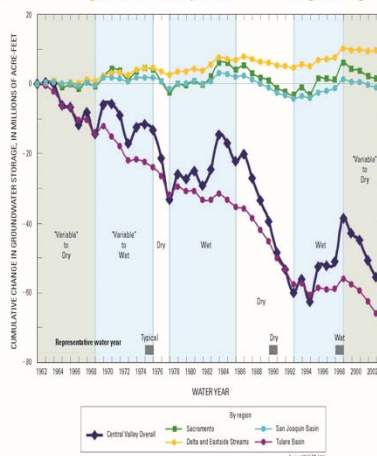
**CAUSE**

State Water Project – Imported Water Supply Trend



**EFFECT**

Cumulative Change in Central Valley Groundwater Storage Through 2002



**One acre-foot of water is**  
**equal to:**

326,000 gallons  
Enough to supply two families of  
four for one year

**California's Water Supply Situation**

***The Perfect Storm***

- Drought
- Litigation
- Increasing Local Impacts

**September 16, 2014**

Sustainable Groundwater Management Act

SB-1168 & SB-1319 (Pavley)

AB-1739 (Dickinson)

**April 1, 2015**

Executive Order B-29-15

- **First time in California Groundwater Supplies are Regulated**

- Many of Kern's incorporated/urban areas do not have any supply than groundwater
- Potential limits on pumping may impact property values
- Undeveloped lands overlying rights may be further restricted
- Priority for current levels of supply uncertain



Vs.



- **Executive Order B-29-15**

2 - "...shall impose restrictions to achieve a Statewide 25% reduction in potable urban water usage through February 28, 2016."

5 - "...immediately implement water efficiency measures to reduce potable water usage in an amount consistent with the reduction targets mandated by directive 2 of this Executive Order....."

7 - "The Water Board shall prohibit irrigation with potable water outside of newly constructed homes and buildings that is not delivered by drip or microspray"



OR



- So what options are available to meet the requirements of the Executive Order?



- **The Numbers:**

Table 3 - Annual Irrigation Factor -- Turfgrass (gal/sqft/year)

Climate Zone	City	State	cool season turf	warm season turf
Alpine	Bozeman	MT	8.92	4.61
Alpine	Laramie	WY	11.62	8.62
Alpine	Santa Fe	NM	12.67	7.77
Desert	Bakersfield	CA	30.76	22.28
Desert	Las Vegas	NV	44.13	31.85
Desert	Phoenix	AZ	44.96	32.16
Desert	Reno	NV	20.22	14.78



- **The Numbers:**
- 1-Acre = 43,560ft<sup>2</sup>
- 3.74 acres \* 43,560 = 162,914ft<sup>2</sup>
- 162,914ft<sup>2</sup> \* 30.76gal = **5,011,264** gallons/year



- **Compliance will be driven by ability to reduce turf areas:**

- Bakersfield Avg. Precip = 6.42"
- Palm Springs Avg. Precip = 5.53"



## **Final Thoughts:**

- **California's water supply situation** is DIRE.
  - Hydrologic drought magnified by regulatory drought
- **Groundwater legislation** will impact Kern County
  - Extent of impact yet to be determined & is influenced by regulatory drought.....
- **Low Hanging fruit for urban conservation is turf irrigation. Indoor reductions are meaningless.....**