

Erik Ekdahl

Division of Water Rights

State Water Resources Control Board

### Overview



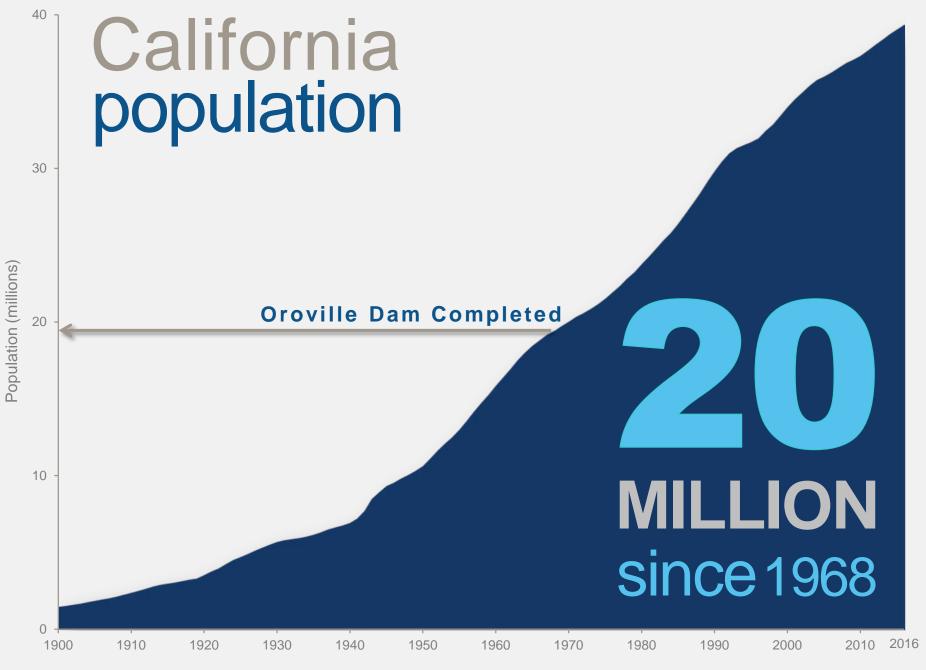
Water
Supply
Uncertainty



Water Rights & Groundwater



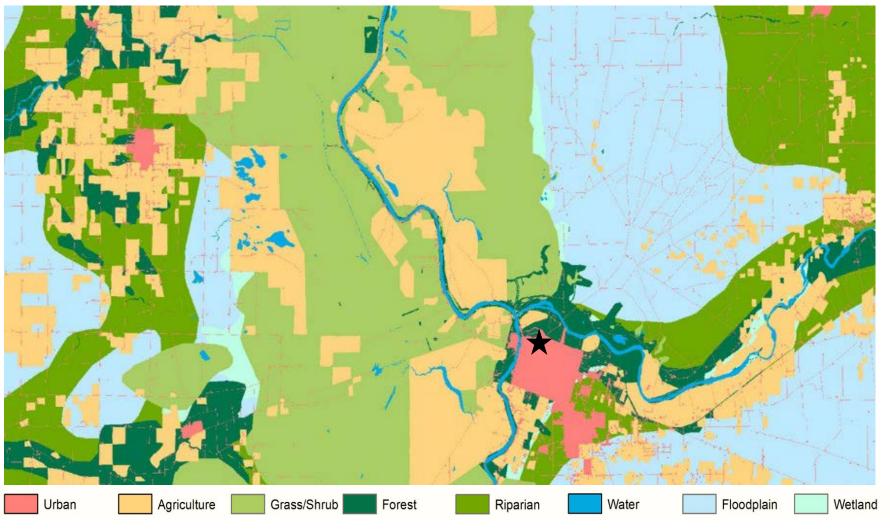
Value-Based Management Options



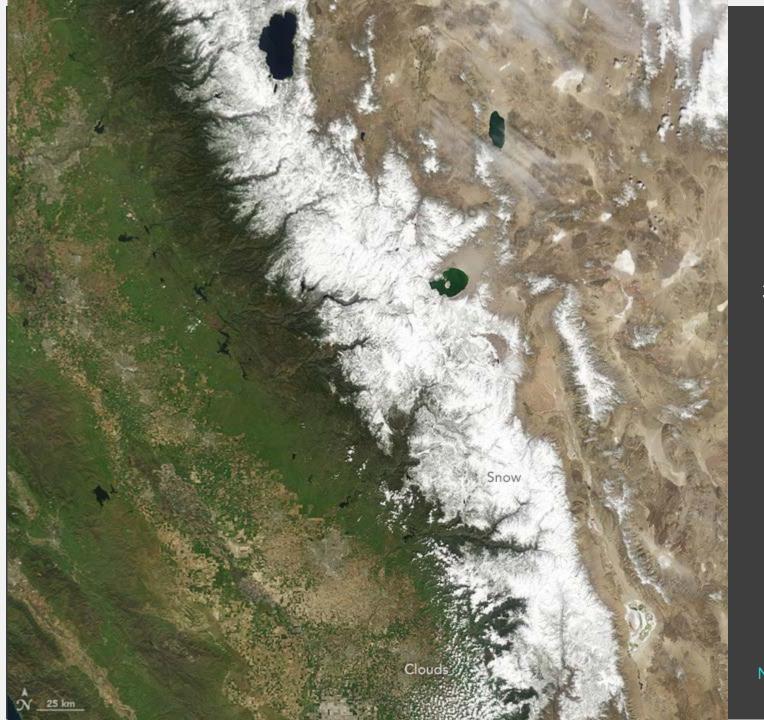
Source: California Department of Finance estimates

# 1920

## Sacramento LAND USE



Source: The Grinnell Resurvey Project, Museum of Vertebrate Zoology, UC Berkeley



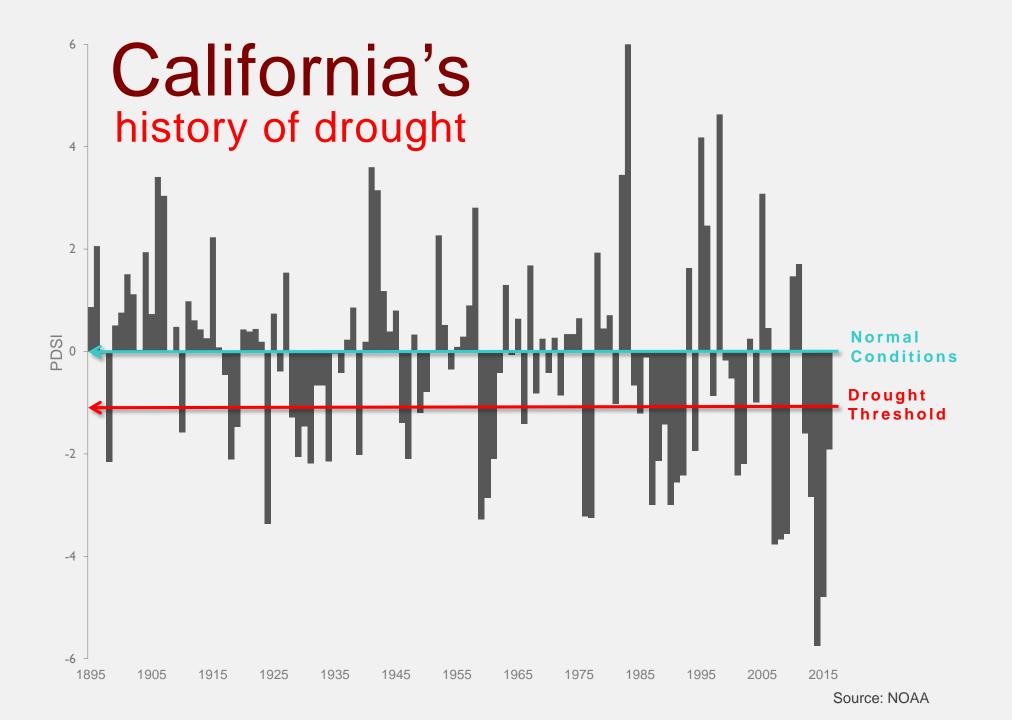
Sierra Nevada Snow Pack

**Spring 2010**Average year

Spring 2014 34% of average

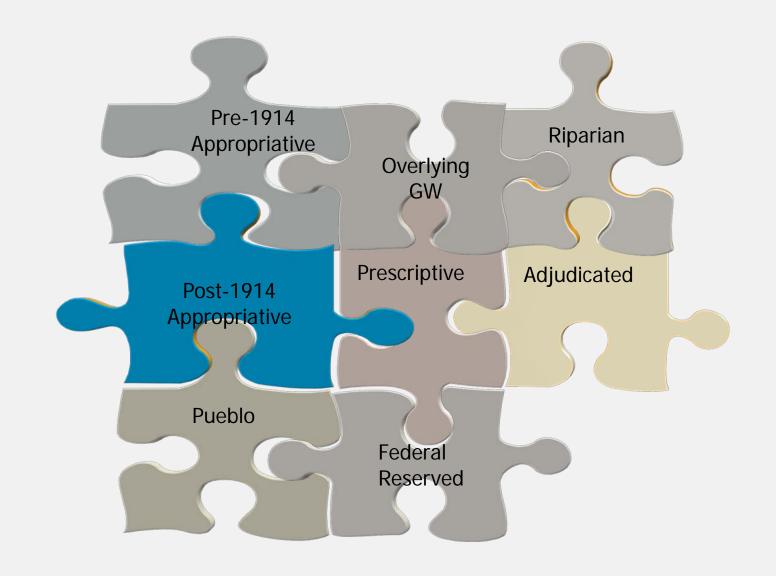
Spring 2015 5% of average

Source: NASA Earth Observatory

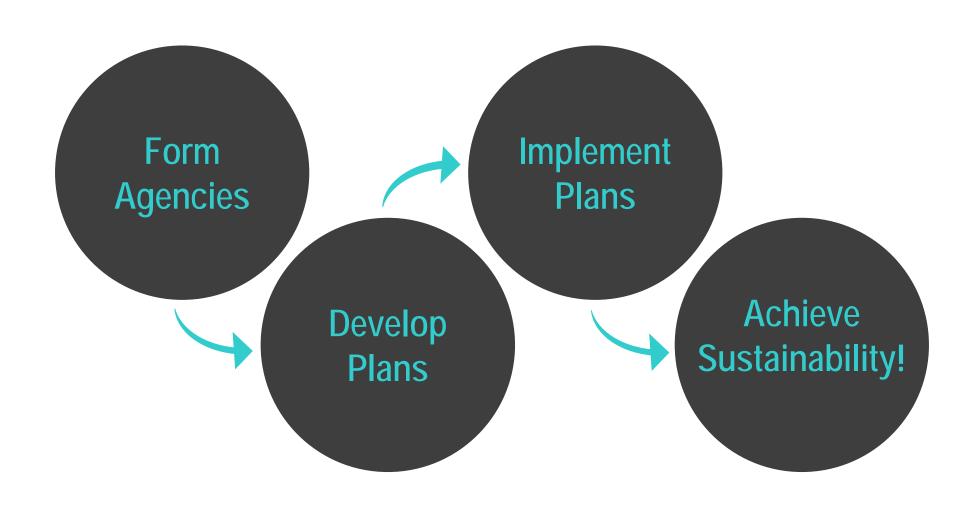


#### WATER RIGHTS LAW 101

- Water belongs to the people of the State
- A water right is a "usufruct"
- Beneficial use of water shall be maximized
- Water shall be conserved
- Water use must be reasonable



## SGMA



### SGMA & The Public Trust

Depletions of interconnected surface water that have significant and unreasonable adverse impacts on beneficial uses of the surface water.



**Develop GSP** 



**Evaluate GSP** 



**State Intervention** 

### Solutions



- \$ Project Funding
- Land Use Changes
- T Pumping Restrictions
- Better Data
- New Water

### **Balancing the Basin**

