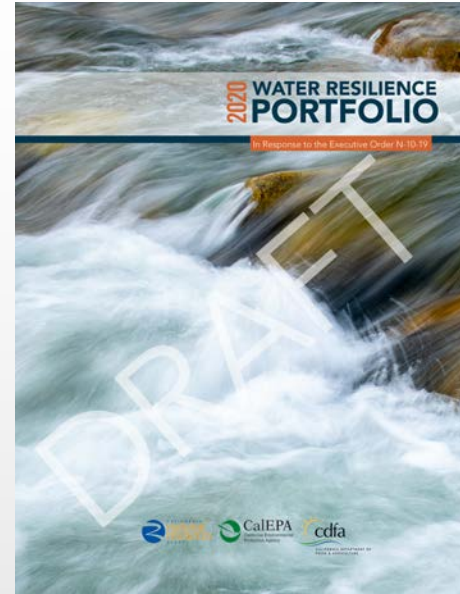


# Draft Water Resilience Portfolio

February 2020

[www.waterresilience.ca.gov](http://www.waterresilience.ca.gov)



# Overview



**Water  
Supply  
Uncertainty**

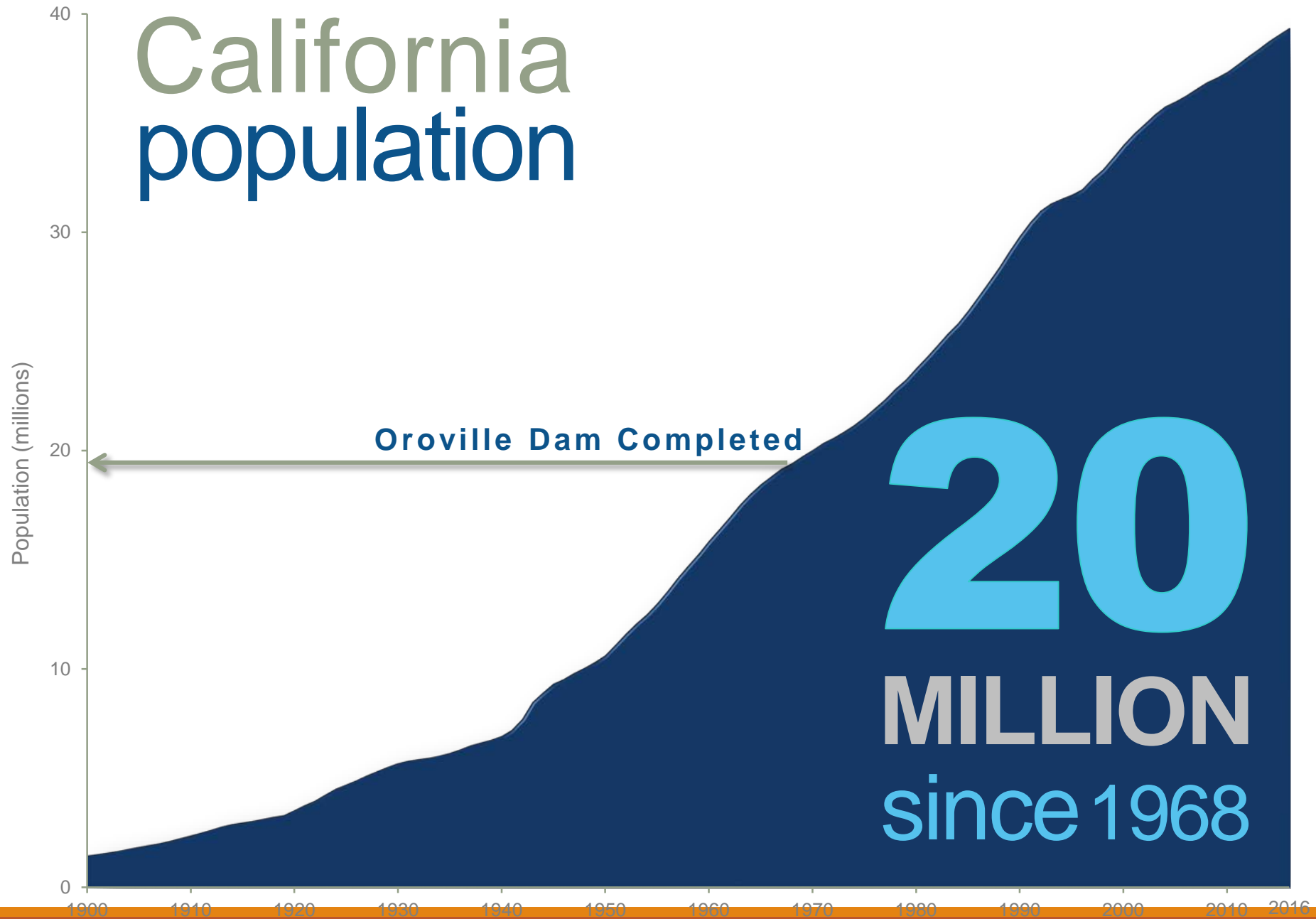


**Executive  
Order N-10-19  
Water  
Resilience  
Portfolio**



**Input,  
Recommendations,  
Timeline**

# California population



# California Housing & Water Use



Population = 50 million by 2050 (+10 million)

**4 million new housing units just to keep up**



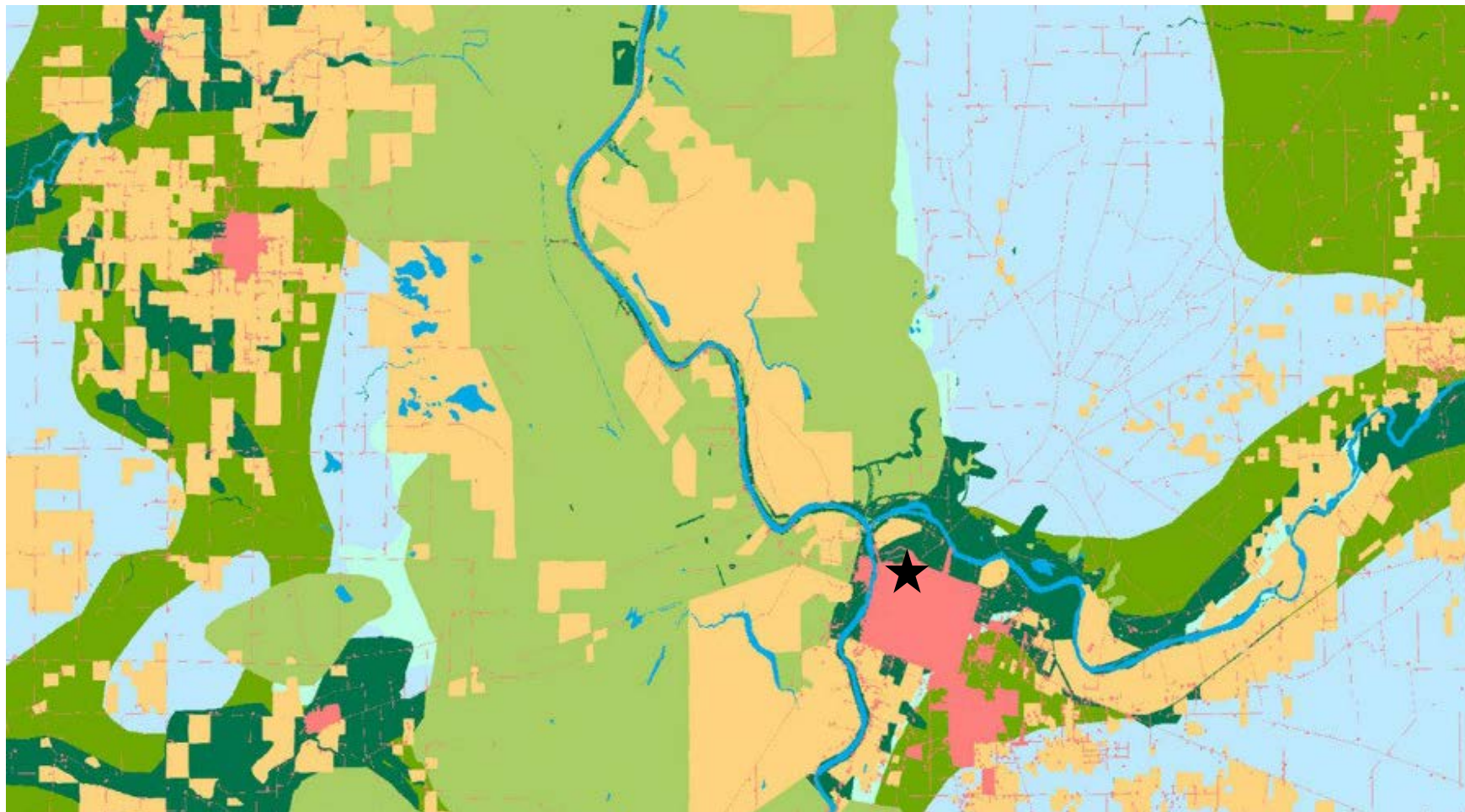
Current Water Use: About 2 houses per acre-foot

**2 million ac-ft/year of new water for population growth**

# 1920

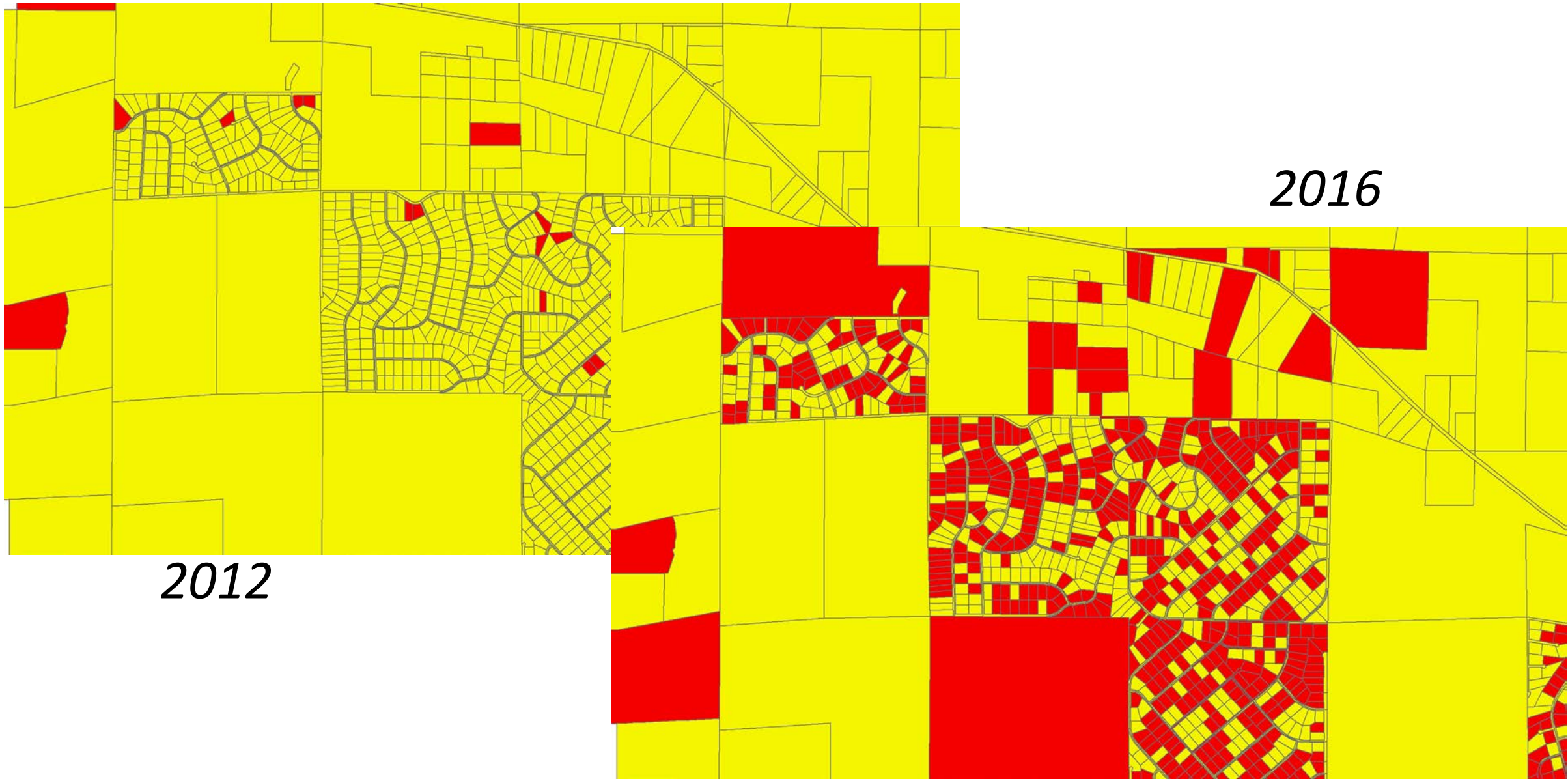


## Sacramento LAND USE



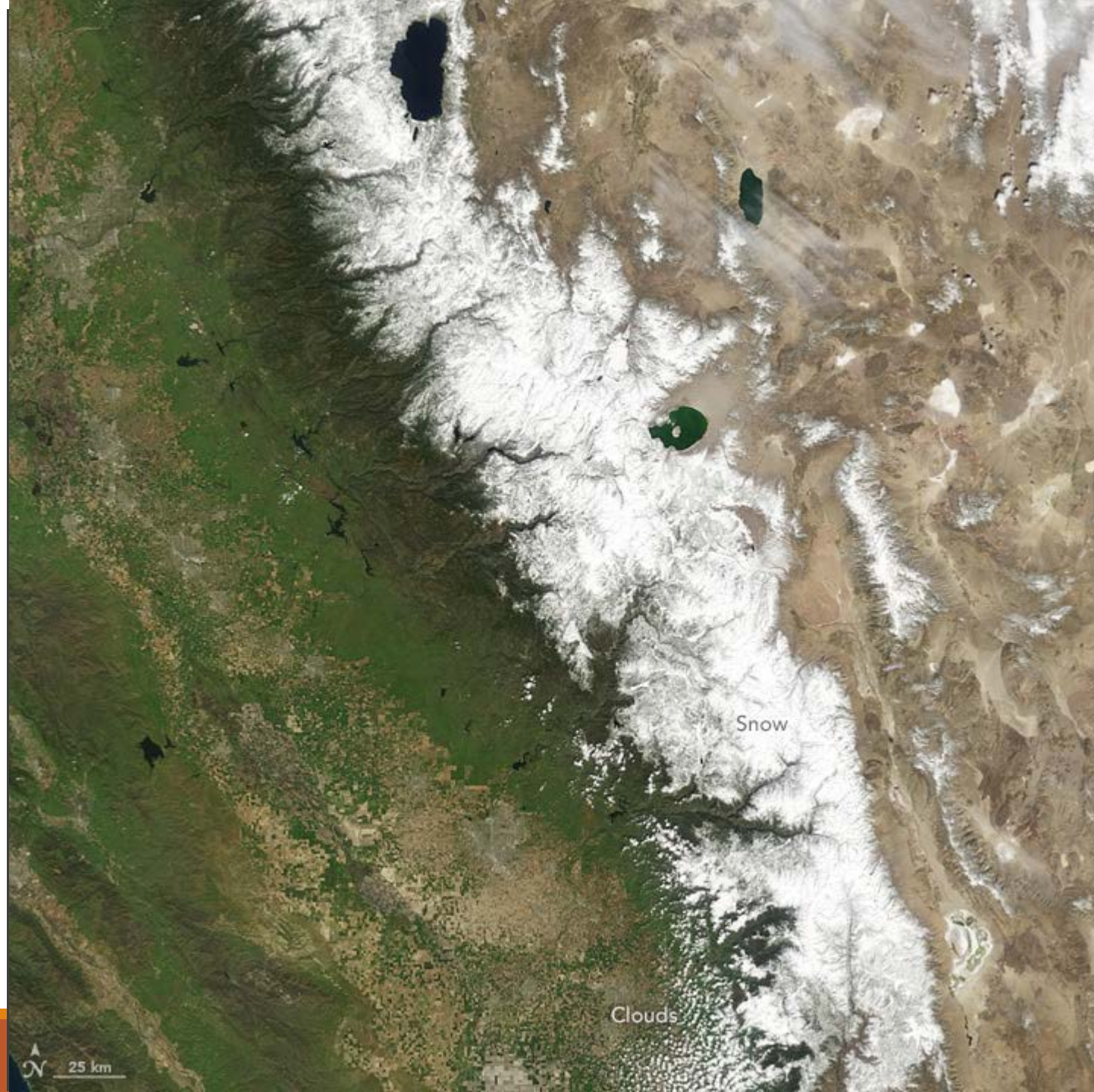
Urban Agriculture Grass/Shrub Forest Riparian Water Floodplain Wetland

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



*Image courtesy Dr. Van Butsic, UC Berkeley Cannabis Research Center*

# Climate



Sierra Nevada  
Snow Pack

**Spring 2010**  
Average year

**Spring 2014**  
34% of average

**Spring 2015**  
5% of average

Source:  
NASA Earth Observatory



2011

2012

2013

2014

2015



# PLANNING FOR 2050



**50 million  
Californians  
(+10 Million)**



**Water  
Supply  
Certainty**



**5 degrees  
warmer on  
average from  
2050-2100**

# WATER RESILIENCE PORTFOLIO



- Executive Order signed April 29, 2019
- Directs California Natural Resources Agency (CNRA), California Environmental Protection Agency (CalEPA), and California Department of Food and Agriculture (CDFA) to
- “ . . . prepare a water resilience portfolio that meets the needs of California’s communities, economy, and environment.”



Draft document, released January 3, 2020, is an integrated set of actions designed to help communities:

- ▶ Prepare for disruptions
- ▶ Withstand and recover from shocks
- ▶ Adapt and grow from these experiences

# The Governor asked that the portfolio encourage:

- Projects that offer multiple benefits
- Use of natural infrastructure such as forests and floodplains
- Innovation and new technologies
- Regional approaches among water users
- Examination of successful models from outside California
- Integration of investments, policies, and programs across state government
- Partnerships with local, federal and tribal governments, water agencies and irrigation districts, and other stakeholders

# The draft portfolio includes 133 actions toward these goals:

- Maintain and diversify water supplies
- Protect and enhance natural systems
- Build connections
- Be prepared



Some actions highlight critical water management efforts already underway. For example:

- Implement the Sustainable Groundwater Management Act of 2014.
- Implement the “conservation as a way of life” laws of 2018.
- Implement the Safe and Affordable Drinking Water Act of 2019.
- Work to eradicate nutria.

## Some actions aim for greater state government efficiency. For example:

- Coordinate grant and loan programs across state agencies to fund multi-benefit projects.
- Evaluate state water-related plans and consider modifying, consolidating, or discontinuing.
- Integrate state and federal surface and groundwater models.
- Develop expedited and cost-effective permitting mechanisms for restoration projects.

Some actions highlight the role of science and data in water management. For example:

- Develop methodologies to rapidly quantify the timing, quality, and volume of flows fish and wildlife need.
- Phase requirements for telemetered diversion data to diversions of 500 acre-feet or more per year (down from 10,000 acre-feet a year).
- Perform regional watershed-scale climate vulnerability and adaptation assessments.



## Taken together, actions in the draft portfolio recognize that:

- Water management responsibilities are largely local.
- State agencies play important roles as policymaker, regulator, funder, collector and keeper of information, manager of inter-regional infrastructure.
- Progress underway should be sustained.
- State agencies should better integrate how they collect data, conduct modeling, distribute grants, and plan for flood and drought.

## Next steps

- ▶ Gather written feedback by February 7
- ▶ Revise document accordingly
- ▶ Submit final version to Governor

Draft available at  
<http://waterresilience.ca.gov/>

Submit comments to  
[input@waterresilience.ca.gov](mailto:input@waterresilience.ca.gov)

**QUESTIONS?**