

Water Resilience Portfolio

Mandated by the Governor's April 29 Executive Order

Executive Order N-10-19

EXECUTIVE DEPARTMENT STATE OF CALIFORNIA

Executive Order N-10-19

WHEREAS, water is a human right, and is central to California's strength and vitality; and

WHEREAS, we face a range of existing water challenges, including unsafe drinking water across the state, major flood risks that threaten public safety, severely depleted groundwater aquifers, agricultural communities coping with uncertain water supplies, and native fish populations threatened with extinction; and

WHEREAS, climate change is having a profound impact on water and other resources, making the climate warmer and more variable, which reduces mountain snowpack, intensifies drought and wildfires, and drives shorter, more intense wet seasons that worsen flooding; and

WHEREAS, California continues to grow, with our population projected to grow to 50 million over the next several decades and our economic activities expanding as the world's fifth largest economy; and

WHEREAS, the future prosperity of our communities and the health of our environment depend on tackling pressing current water challenges while positioning California to meet broad water needs through the 21st century; and

WHEREAS, many state programs, policies and investments are being implemented, such as the Sustainable Groundwater Management Act and new urban water efficiency standards, that can be built upon to meet these evolving challenges; and

WHEREAS, providing clean, dependable water supplies to communities, agriculture, and industry while restoring and maintaining the health of our watersheds is both necessary and possible; and

WHEREAS, achieving this goal requires a broad portfolio of collaborative strategies between government, sovereign tribes, local communities, water agencies, irrigation districts, environmental conservationists, academia, business and labor leaders, and other stakeholders.

NOW, THEREFORE, I, GAVIN NEWSOM, Governor of the State of California, by virtue of the power and authority vested in me by the Constitution and the statutes of the State of California, do hereby issue this Order to become effectively immediately.

IT IS HEREBY ORDERED THAT:

1. The California Natural Resources Agency, the California Environmental Protection Agency, the California Department of Food and Agriculture, in consultation with the Department of Finance, shall together prepare a water resilience portfolio that meets the needs of California's communities, economy, and environment through the 21st century.

These agencies will reassess priorities contained within the 2014 California Water Action Plan, update projected climate change impacts to our water systems, identify key priorities for the administration's water portfolio moving forward, and identify how to improve integration across state agencies to implement these priorities.

2. These agencies shall first inventory and assess:

- a. Existing demand for water on a statewide and regional basis and available water supply to address this demand.
- b. Existing water quality of our aquifers, rivers, lakes and beaches.
- c. Projected water needs in coming decades for communities, economy and environment.
- d. Anticipated impacts of climate change to our water systems, including growing drought and flood risks, and other challenges to water supply reliability.
- e. Work underway to complete voluntary agreements for the Sacramento and San Joaquin river systems regarding flows and habitat.
- f. Current planning to modernize conveyance through the Bay Delta with a new single tunnel project.
- g. Expansion of the state's drinking water program to ensure all communities have access to clean, safe and affordable drinking water.
- h. Existing water policies, programs, and investments within state government.

3. This water resilience portfolio established by these agencies shall embody the following principles:

- a. Prioritize multi-benefit approaches that meet multiple needs at once.
- b. Utilize natural infrastructure such as forests and floodplains.
- c. Embrace innovation and new technologies.
- d. Encourage regional approaches among water users sharing watersheds.
- e. Incorporate successful approaches from other parts of the world.
- f. Integrate investments, policies and programs across state government.
- g. Strengthen partnerships with local, federal and tribal governments, water agencies and irrigation districts, and other stakeholders.

4. These agencies shall conduct extensive outreach to inform this process, including to other state agencies, sovereign tribes, federal and local government, local water agencies, agricultural groups, environmental justice and environmental conservation organizations, local and statewide business leaders, academic experts and other stakeholders.

IT IS FURTHER ORDERED that as soon as hereafter possible, this Order shall be filed with the Office of the Secretary of State and that widespread publicity and notice shall be given to this Order.

This Order is not intended to, and does not, create any rights or benefits, substantive or procedural, enforceable at law or in equity, against the State of California, its departments, agencies, or other entities, its officers or employees, or any other person.

IN WITNESS WHEREOF I have hereunto set my hand and caused the Great Seal of the State of California to be affixed this 29th day of April 2019.




GAVIN NEWSOM
Governor of California

ATTEST:

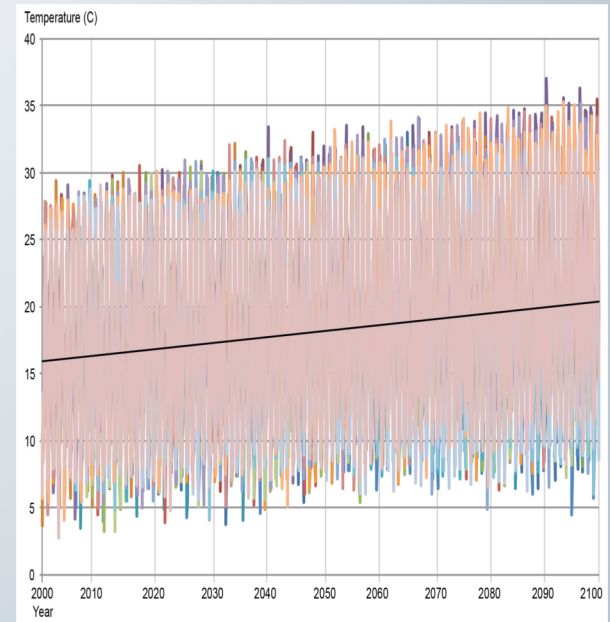
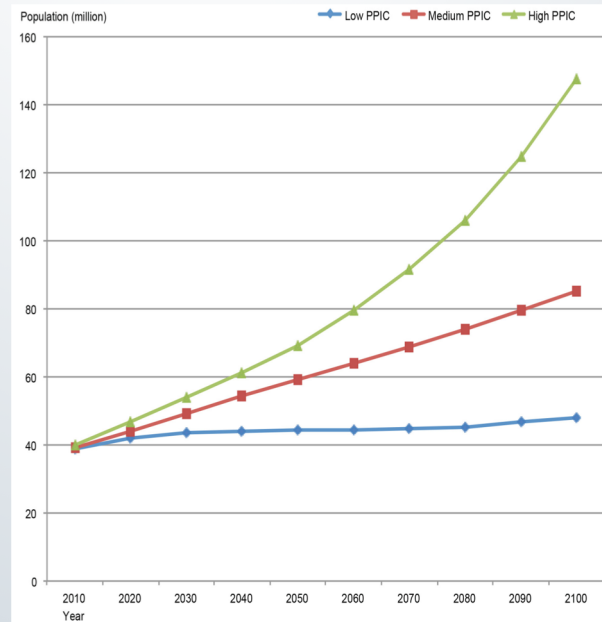

ALEX PADILLA
Secretary of State

... prepare a water resilience portfolio that meets the needs of California's communities, economy, and environment.



Planning for the year 2050

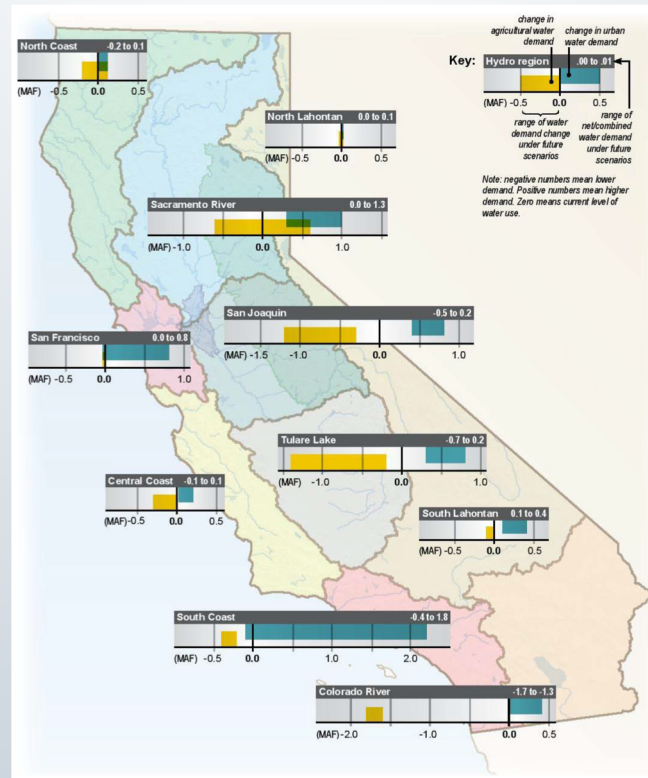
- Population expected to reach 50 million people – another 10 million people.
- Average temperatures up to 5° F warmer.



Source: *Draft Assumptions and Estimates for California Water Plan Update 2018*, April 2017, California Department of Water Resources; Figure 4, Figure 5

- Inventory and assess existing and projected water supply and demand, by region and statewide.
- Also consider water quality, climate effects, existing state water programs, and voluntary flow agreements on Sacramento and San Joaquin rivers and new single tunnel for Delta diversions.

These agencies shall first inventory and assess ...



Source: *Scenarios of Future California Water Demand Through 2050*, August 2014, California Water Plan Update 2013, Volume 4 Reference Guide, California Department of Water Resources

From California Water Plan Update 2018

Figure 1-1 California Water: How It Was Used and Where It Came From, 2011-2015

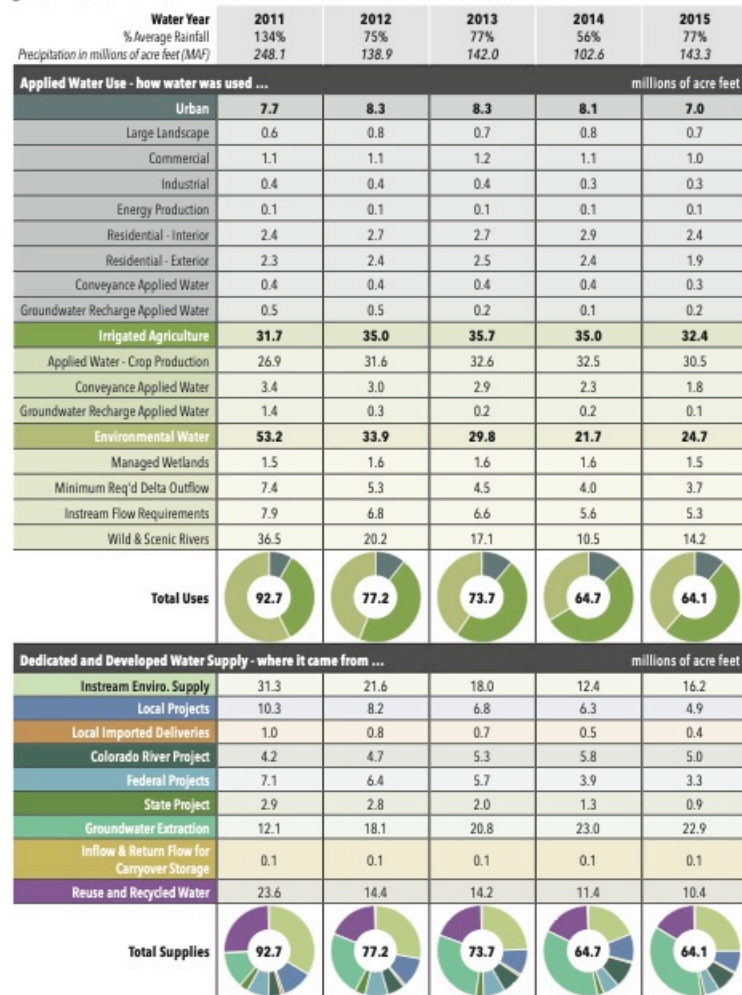


Figure 1-3 Regional Water Uses and Supplies in Water Year 2014 (Critically Dry Year)

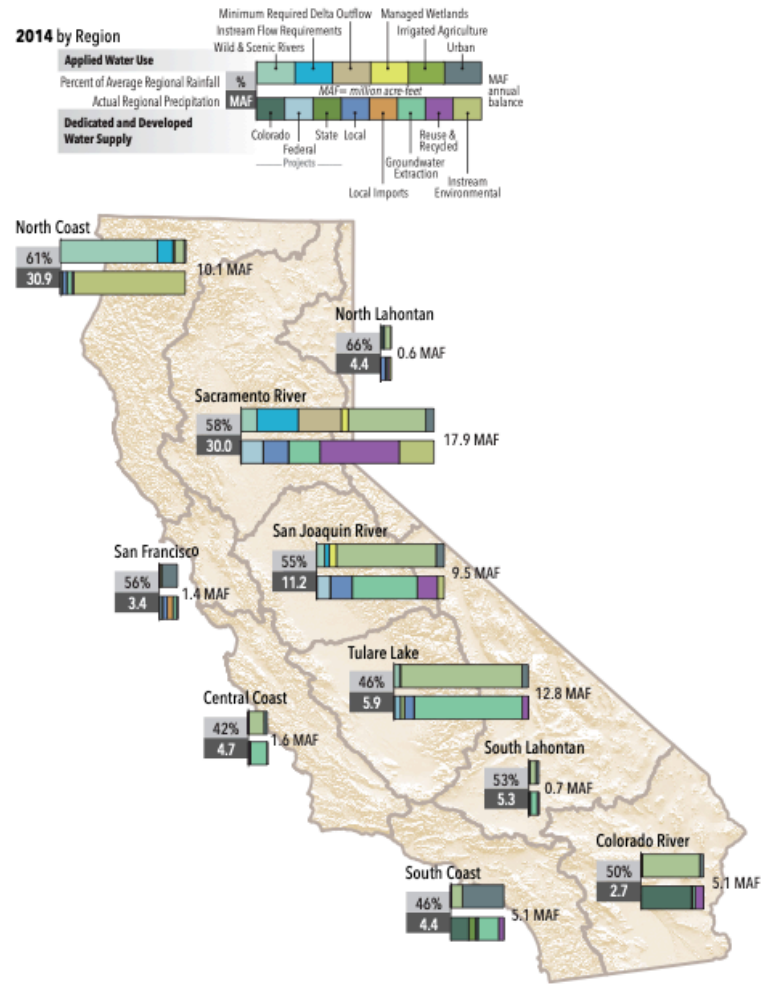
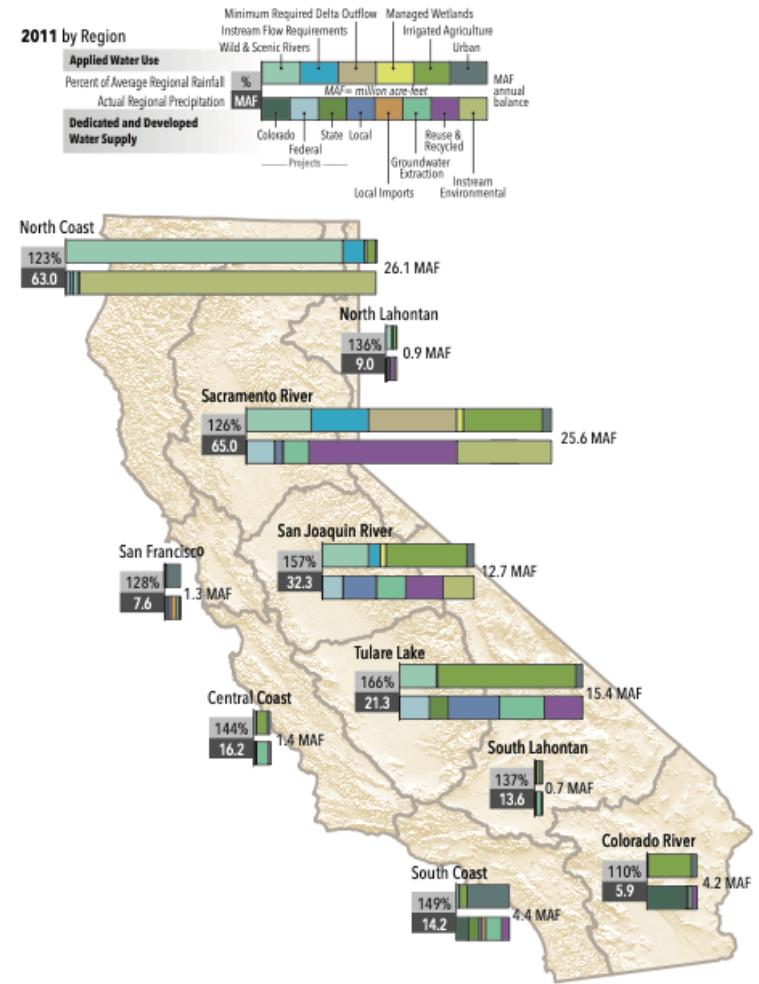
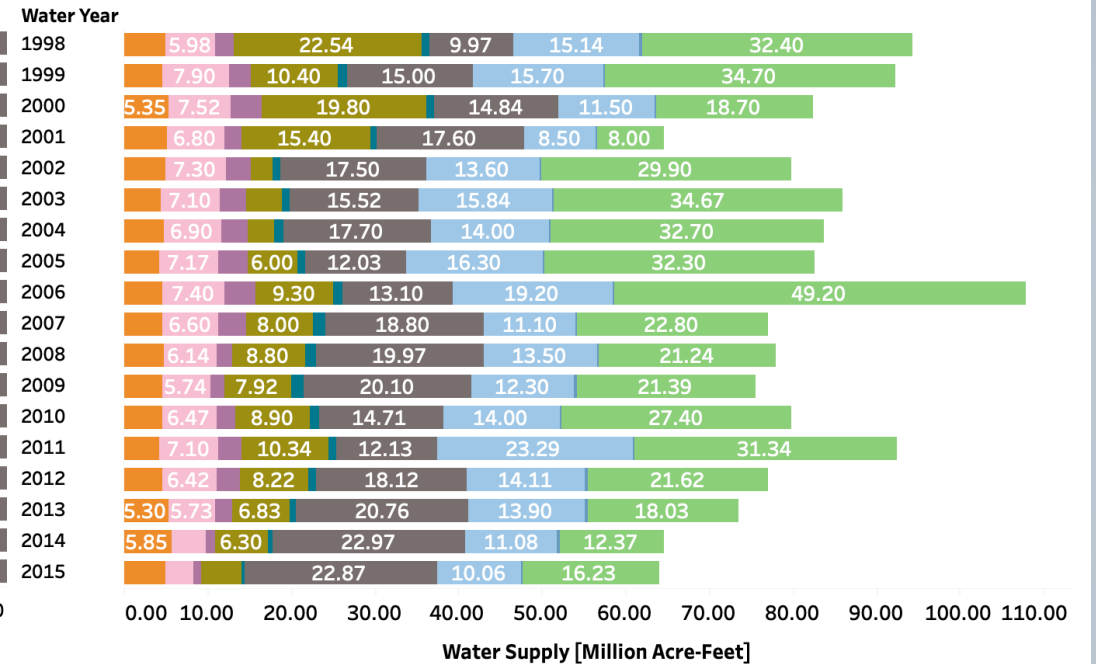
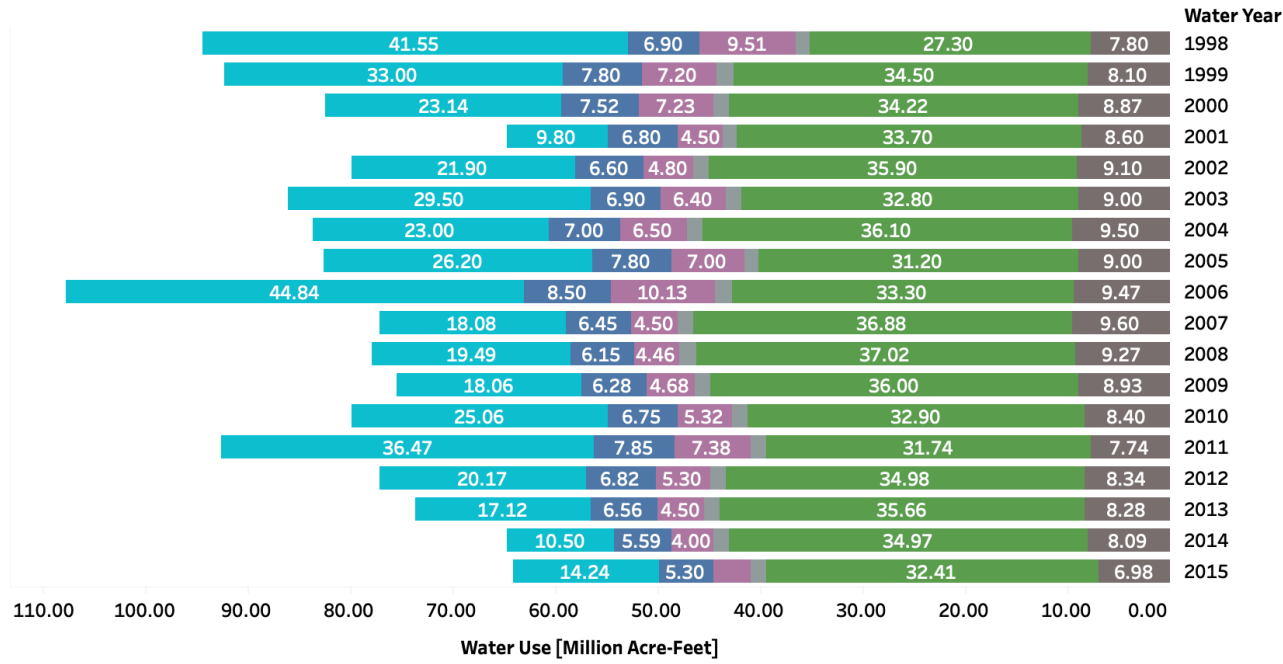


Figure 1-2 Regional Water Uses and Supplies in Water Year 2011 (Wet Year)

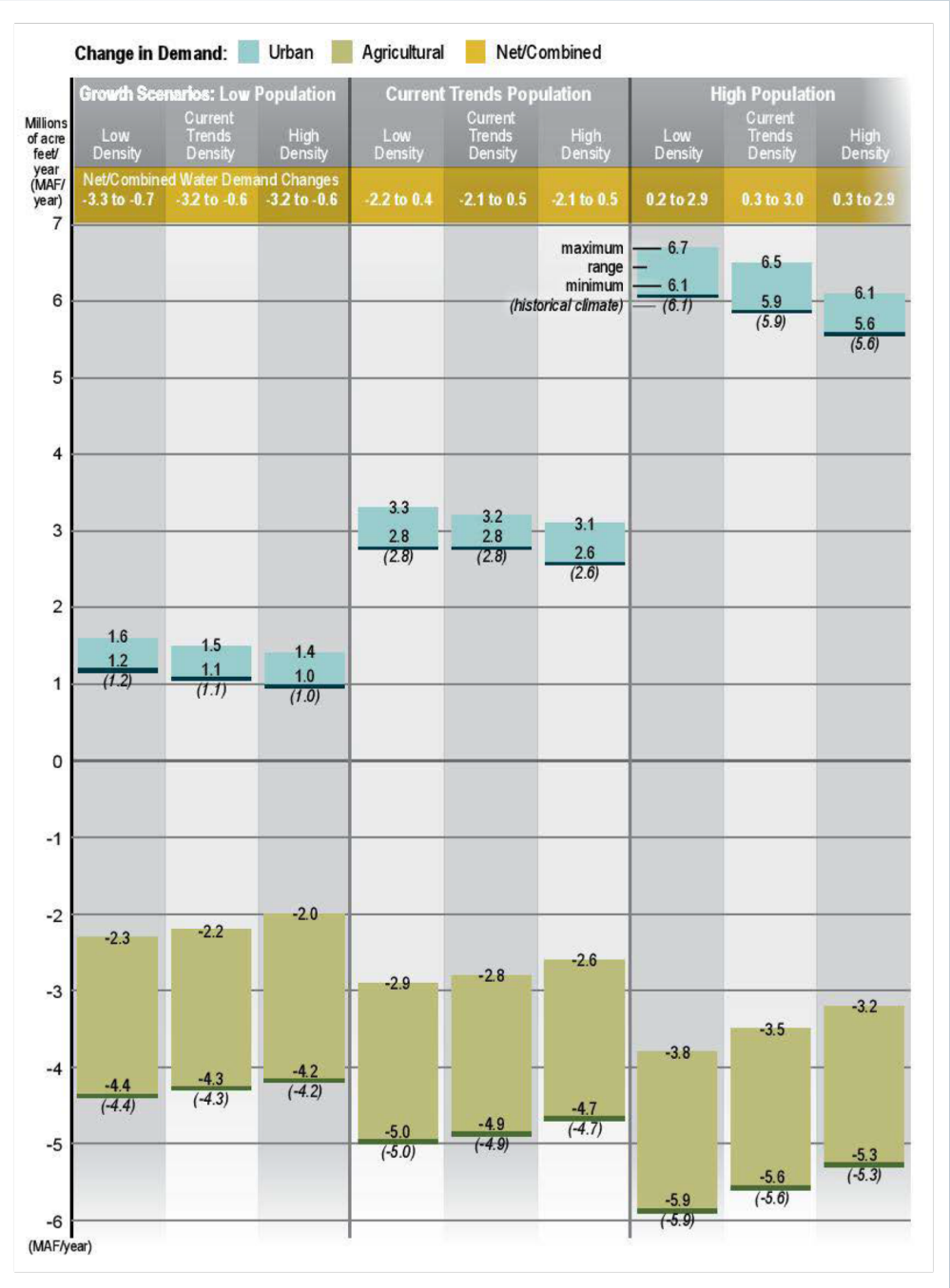




- Use**
- Wild & Scenic River
 - Instream Flow
 - Req. Delta Outflow
 - Managed Wetlands
 - Irrigated Agriculture
 - Urban

- Supply**
- Instream Environmentals
 - Recycled Water
 - Reuse Water
 - Ground Water
 - Local Imports
 - Local Projects
 - State Project
 - Federal Projects
 - Colorado Project

From California Water Plan Update 2013



This water resilience portfolio ... shall embody these ... principles:

Prioritize:

- **Multi-benefit approaches**
- **Natural infrastructure (upper watersheds, floodplains, aquifers)**
- **Innovation and new technologies**
- **Regional approaches**
- **Integration across state government**
- **Partnerships across governments**

Drivers of Change

- Warmer climate = reduced Sierra snowpack, drier seasonal conditions, changes in runoff
- Implementation of groundwater laws = need for recharge supplies
- Increased population = need for greater efficiency
- Current actions insufficient for native fish and wildlife

Goal of Water Resilience Portfolio

- **Regional resilience:** The capacity of communities and ecosystems to withstand and respond to stresses and disturbances.
- What can the state do to foster water resilience?
- How can we measure and track it?

Further Work Ahead

Some key concerns:

- What barriers keep people in a watershed from working together?
- What new gray and green infrastructure would help build regional resilience?
- What investments, data, and incentives would enhance groundwater recharge?
- How do we better provide for fish and wildlife under a range of conditions?
- What barriers hinder water transfers to ease scarcity in drought?
- How can we improve the administration of water rights?
- Are there better ways to consistently fund flood and stormwater projects?

... conduct extensive outreach to inform this process ...

We want to hear from you. Share your ideas.

- Email us at input@waterresilience.ca.gov
- More information at waterresilience.ca.gov