



## LEADING ON WATER: PROMISING OPPORTUNITIES FOR CALIFORNIA'S NEXT GOVERNOR

Water is a complicated topic in California, but one where the next governor must lead. It fuels our economy, grows our food, protects our health, and sustains our natural places. Effectively stewarding water resources is essential to our state's future.

Californians have made strong progress in recent years to better manage our water. We have authorized billions in state funding to update infrastructure, passed historic groundwater management legislation and new water efficiency standards, expanded water recycling and stormwater capture, and expanded environmental restoration across the state. Governor Brown and the Legislature have generated strong momentum for further progress.

Nonetheless, California's next governor will face major water challenges. He will very likely preside over major drought and flood emergencies. Drinking water is contaminated in communities across the state, many fish and wildlife are in decline, and water supplies for farming are increasingly uncertain. Sharp conflicts persist about the Sacramento and San Joaquin rivers systems and the Bay Delta. These challenges are compounded by climate change, which intensifies droughts, floods, and wildfires.

Despite challenges, opportunities abound for the next governor to improve our state's water future. Seizing these opportunities will require clear leadership and a thoughtful approach by the new governor and his team. We suggest six basic principles that can shape the next governor's approach on water.

Also, given the complexity of water management and policy, the next governor will benefit from establishing a water agenda with clear, understandable priorities. Identifying these priorities will help to focus efforts across the administration to solve the state's most pressing water challenges. We suggest six priorities for the next governor's water agenda.

### Six Principles to Guide the New Governor's Water Management

1. Prioritize balancing the broad range of California's water needs.
2. Build a water team that reflects the diversity of the state and works together to advance a shared agenda.
3. Collaborate with federal, local and tribal partners wherever possible. And defend state interests whenever necessary.
4. Strategically deploy new state funding to maximize water system improvements.
5. Embrace multi-benefit approaches that can meet several needs at once.
6. Anticipate and prepare for crisis.

### Six Priorities for the New Governor's Water Agenda

1. Ensure safe and affordable water for all Californians.
2. Eliminate water waste by improving conservation, efficiency, and water reuse wherever possible.
3. Balance California's groundwater and surface water supplies among our farms, cities, and environment and manage these supplies in an integrated way.
4. Restore and sustain the natural health of our river systems.
5. Help rural communities sustain their economies amidst water constraints.
6. Encourage innovative use of data and technology to improve water decisions.

## **Six Basic Principles to Guide the New Governor's Water Management**

### **1. Prioritize balancing the broad range of water needs in California.**

California water issues are often framed in ways that pit water needs against each other: “fish vs. farms,” “urban vs. rural,” or “north vs. south.” This is wrong. Our continued growth and prosperity depends on working together to address water needs of all users, including agriculture, the environment, and cities. California’s governor is singularly positioned to champion a vision of “One California, One Water Future.”

### **2. Build a water team that reflects the diversity of the state and works together to advance a shared agenda.**

No silver-bullet solution will solve California’s water challenges. A portfolio of policies, programs, and investments are needed. The Governor should set a broad agenda that publicly identifies the administration’s priorities and planned actions, builds public support for bold action and funding, and strengthens cohesion across state agencies.

The governor’s key appointees should lead development of this agenda. The governor has an opportunity to appoint a diverse group of team-oriented leaders, direct these leaders to institutionalize collaboration across institutions, and bring in outside experts to foster innovative thinking.

### **3. Collaborate with federal, local, and tribal partners wherever possible and defend state interests whenever necessary.**

The federal government built and operates the Central Valley Project, has flood management responsibilities including levee and reservoir operations, protects dozens of threatened and endangered species, and manages more than 45 million acres of federal land in California. It is a critical partner for the state. Wherever possible, state water leaders should work closely with their federal counterparts. However, where federal actions threaten California’s economy, environment, public health and safety, the new governor’s administration should vigorously defend state interests.

At the same time, water remains a highly localized resource. Water supplies vary across California, and thousands of local agencies, water agencies and irrigation districts exist to meet local needs. These local entities raise and spend the lion’s share of water funding, directly communicate with water users, and implement on-the-ground improvements to water systems. Coordinating with local agencies and empowering these local entities to improve their water systems is critical.

Finally, as sovereign governments, California’s tribes are an important partner in water management. State and tribal collaboration should be substantial and consistent.

#### **4. Strategically deploy existing state funding to maximize water system improvements.**

Billions of dollars in state funding is now available thanks to recent statewide bonds, as well as annual budget allocations that support state water agencies and projects. Some areas of the water management system are chronically underfunded. These “fiscal orphans” include pollution treatment in disadvantaged communities, environmental restoration and management, stormwater and flood management, and regional coordination.

The new governor’s water team should take a cohesive approach to state water funding. This means coming together and directing disparate funding programs in a coordinated, strategic way to advance administration goals. One such strategic approach is providing funding incentives for coordinated, regional approaches that improve collaboration among local agencies sharing watersheds.

#### **5. Embrace multi-benefit approaches that meet several goals at once.**

Water decision-making has traditionally taken place in silos. Water quality and water quantity are typically managed separately, environmental needs are managed outside of infrastructure decisions, and resources are deployed to address narrow goals. Today, opportunities exist to embrace solutions that integrate the needs of people and nature, utilize new technology and innovation, and prioritize collaborative decision-making.

These multi-benefit solutions include complementing traditional infrastructure with proven nature-based solutions, including floodplains, headwater forest management, and urban capture and infiltration of stormwater. These new solutions can also include better utilize information and data, build flexible, equitable markets to move water to where it is most needed, and finance mechanisms that incentivize environmental benefits or “ecosystem services.”

#### **6. Anticipate and prepare for crisis.**

California’s next governor will almost certainly preside over new drought, flood, and wildfire emergencies. These natural phenomena are intensifying amidst climate change, threatening people, property, and California’s natural places. Given the size and severity of recent crises, upcoming crises have the potential to destroy whole communities, result in major loss of lives, disrupt our economic growth, and wreak havoc on our natural environment. While the state’s emergency response to these crises has been impressive, its planning for these disasters and recovery can and should be improved.

State agencies need to strengthen existing drought, flood, and fire preparedness plans with bolder resilience strategies that include concrete actions to reduce the impacts of coming extreme events. These plans should anticipate the scale and scope of these events, map improvements to build resilience of communities and natural systems to these events, and develop funding plans for these actions. The new governor’s administration must continue to build understanding of these climate threats, help improve local governments’ planning, and monitor the status of crisis-vulnerable public water systems.

## **Six Key Priorities for the New Governor's Water Agenda**

### **1. Ensure safe and affordable water for all Californians.**

Upwards of one million Californians currently lack access to clean and safe drinking water in their homes. A broad range of harmful elements—including nitrates, lead, and arsenic— contaminates their water. Many small communities' wells went dry during the last drought and are still receiving emergency services like tanked water. And across the state, millions struggle to pay their water bills. In 2012, California enacted a state law declaring access to clean, safe, and affordable water to be a human right. Six years later, this crisis remains unresolved.

Important Actions:

- Secure ongoing, sustainable funding for operations and maintenance of water treatment within disadvantaged communities.
- Provide state assistance to improve underperforming water systems and consolidate these systems where appropriate.
- Establish financing programs for replacement of lead plumbing fixtures and expand lead testing programs beyond schools and child care centers.
- Adequately fund enforcement of the state's clean water laws and regulations.
- Ensure that affordability programs exist for low-income households across the state, similar to programs that ensure affordable electricity for all Californians.

### **2. Eliminate water waste by improving conservation, efficiency, and water reuse wherever possible.**

Using water efficiently and reusing it whenever possible stretches our precious water supplies. Great opportunities exist to improve water efficiency and stewardship in cities and on farms, and many communities are investing in water recycling to build their local self-sufficiency. California can become an international model on these practices, akin to its leadership on energy efficiency and renewable energy.

Important Actions:

- Ensure state agencies develop meaningful water efficiency standards and reporting requirements for urban and agricultural water agencies as required by recent law changes.
- Enable greater local and state funding for water recycling and stormwater capture projects, and ensure bond funding for these projects is distributed efficiently. Determine the feasibility of direct potable reuse, which holds potential to treat and recycle water more quickly than current technologies.
- Support local governments and agencies to develop strong drought contingency plans to ensure that communities have sufficient water during periods of shortage.

### **3. Balance California's groundwater and surface water supplies among our farms, cities, and environment and manage these supplies in an integrated way.**

Water pumped from underground aquifers provides over one-third of the state's water supply each year, and many communities fully rely on groundwater. Intensified groundwater pumping in recent decades has severely depleted many groundwater basins across the state, causing a range of problems. State leaders passed the Sustainable Groundwater Management Act (SGMA) in 2014 to balance groundwater use and this act is now being implemented.

Surface waters, particularly river systems, also must be managed in a more balanced and integrated way. Three major river systems convey a large portion of California's water supply—the Sacramento, San Joaquin and Colorado rivers. Each of these natural river systems is heavily depended upon for water supplies, supports fish and wildlife, and faces challenges of overallocation.

The Sacramento and San Joaquin river systems convey water through the Delta to tens of millions of people, generate billions in economic activity, and provide vital habitat to fish and wildlife. Infrastructure used to move water from these two rivers through the Delta is outdated, disrupts ecosystems, and is vulnerable to levee failure and sea level rise. The Colorado River is one of the most heavily used rivers in the world, with seven states and two countries sharing its water supplies. It currently faces shortages amidst a sustained 20-year drought.

#### **Important Actions:**

- Ensure the full, fair, and timely implementation of SGMA by supporting local planning efforts and providing firm state oversight of Groundwater Sustainability Plans to ensure that they provide a pathway toward balancing groundwater supplies.
- Lead an organized, statewide effort to maximize recharge of groundwater basins. Streamline permitting of recharge projects, invest in water conveyance to move surplus water to where it can be infiltrated, and evaluate and monitor water recharge potential across the state.
- Establish an agreement for use of water supplies from the Sacramento and San Joaquin rivers that improves water quality, begins to recover populations of endangered fish and wildlife, builds predictability of water supplies to farms and cities, and complies with state and federal regulations.
- Embrace a program to update water conveyance that more efficiently moves water south of the Delta during wet years, protects water supplies from earthquake risks and sea level rise, and improves environmental conditions in the Delta while avoiding new impacts.
- Support water users of the Colorado River in their efforts to establish a Drought Contingency Plan for the Lower Colorado River that will help manage expected future water shortages due to climate change.
- Manage surface and groundwater storage in a more integrated way, by moving water stored in reservoirs to underground aquifers. Operate this integrated water storage across the state more flexibly to adapt to intensified wet and dry periods driven by climate change.

#### **4. Restore and sustain the natural health of our river systems.**

California's rivers, wetlands and lakes support rich and diverse environmental habitat. Several native fish, birds, and other wildlife depend on these waters for their survival. Population growth and economic development have impacted these natural systems, with infrastructure that was not designed around the environment and by increasing diversions from these rivers. Finding new ways to protect these ecosystems is essential; doing so represents a core California value and is required by state and federal law.

Continued focus is needed to restore several specific natural places in California. The Salton Sea continues to recede due to reduced inflows and evaporation, expanding a public health crisis and worsening environmental decline. The state must now implement a 10-year management plan for the Sea. California's north coast is home to rivers with many of the most diverse salmon fisheries on the West Coast and holds significant potential for environmental restoration and economic development. The country's largest dam removal project is currently underway on the Klamath River and sovereign tribes, farmers, and conservation groups are coming together in an impressive model of collaborative conservation.

Important Actions:

- Institutionalize an ongoing, centralized science program— beginning in the Delta— that moves away from “combat science” that hardens disputes to collaboratively-focused science that shapes adaptive, ecosystem-scale management of rivers and wetlands.
- Enable new funding to provide effective environmental flows and manage these flows in new, coordinated ways that are nimble, adaptive, and aligned with habitat restoration projects.
- Support the implementation of the Central Valley Flood Plan and its prioritization of multi-benefit floodplain projects that reduce floods safety risks, expand fish and bird habitat and expand groundwater recharge.
- Streamline permitting for environmental restoration projects through the establishment of program-wide permits issued by all state agencies.
- Avert crisis in the Salton Sea region by moving quickly to implement the state's Salton Sea 10-Year Plan and establishing a dedicated, integrated team to oversee these projects.
- Continue to support the agreements to remove the four dams on the Klamath River by assisting with state and federal permitting and ensuring sufficient funds are available.
- Bring illegal marijuana cultivation into compliance, strictly enforce against illegal grows on public land, and partner with willing growers to protect local ecosystems.

#### **5. Help rural communities sustain their economies amidst water constraints.**

California's farms and ranches help to feed the world while anchoring our state's rural economy. Available, reliable water makes this possible. Rural communities across the state face an uncertain future amidst more frequent droughts, the need to balance groundwater supplies, and evolving regulation of water diversions to protect the natural environment for the public trust. To implement SGMA and achieve balanced, sustainable groundwater use, agricultural producers in some parts of the

state will have to decrease their pumping, which likely means taking some lands out of agricultural production.

Important Actions:

- Develop a multi-faceted rural economic development initiative to help local communities grow and diversify their economies. This could include actions such as expanding high-speed internet access into rural portions of the state, supporting expansion of value-added agricultural industries such as food and beverage processing, and—for forested rural communities—building markets for forest products.
- Support local governments and landowners to apply innovative land use strategies to any land retirements that need to take place to minimize economic impacts and achieve multi-benefit outcomes including groundwater recharge, flood protection and habitat improvements.

**6. Encourage innovative use of data and technology to improve water decisions.**

Reliable, accessible water data and information supports good choices in water management. Current water data is often difficult to find and use and lacks clear and consistent standards that allow data to be easily shared. Resolving these data challenges can save water managers money and time and helps manage water resources for multiple benefits. Recognizing this, state agencies are working to establish water data portals that provide easy access to water and ecological data collected by state and federal agencies.

Important Actions:

- Set a high bar for the state to deliver a cutting-edge data management system that helps in concrete ways to improve water management. To enable development of a useful water data system, eliminate hurdles to working with the private sector, bringing in outside consulting assistance, as well as non-governmental organizations and philanthropy.
- Embrace and utilize remote sensing technology to monitor, measure, and evaluate water use, efficiency, and ecosystem conditions.
- Create a new technology clearinghouse to vet and promote new water technology and data tools, similar and perhaps integrated with, a similar entity focus on energy within the California Energy Commission.
- Direct state agencies to modernize the state’s water rights database and improve measurement and reporting of stream flows and water diversions.

**CONCLUSION**

The choices that California’s next governor makes will shape the state’s water future. By advancing a thoughtful, balanced, and forward-looking water agenda with clear priorities, the next governor will help our state thrive. Water leaders across California can and should be called upon to partner with our next governor in these efforts.