California is in the third year of a severe drought. Our state’s climate is characterized by extreme variability alternating between prolonged droughts and major floods, a situation that is predicted to worsen as climate change progresses. Yet, we fail to manage our state’s finite water resources to prepare for increasing exposure to more severe and prolonged droughts. We can and must change that approach. The state has made some progress in the past year, but we have a very long way to go. There are many actions that can be taken to reduce the vulnerability of California’s water supplies, economy, and environment to future droughts. The above organizations offer the following recommendations for state, federal and local agencies and legislators, to help California respond to the current drought and improve our preparedness for future extended droughts.

The current drought is affecting different regions in different ways. Low flows have devastated salmon runs and worsened conditions for migratory birds and other native wildlife. Many cities, rural communities, and agricultural interests have suffered severe impacts. Some of the most vulnerable communities that are 100% reliant on groundwater have seen their only sources of water run dry. If the drought continues, the impacts on all sectors are likely to grow significantly.

Californians are ready for comprehensive action to tackle these threats. Governor Brown’s California Water Action Plan establishes a broad framework for action, and the State Legislature recently enacted historic legislation to manage California’s groundwater. Building on the Governor’s and the Legislature’s leadership, this document recommends specific, near-term actions at the state, federal, and local levels that are designed to implement the Water Action Plan’s broad direction. All of these recommendations respond to the drought. All would also set the stage for a more reliable long-term water supply, a more resilient economy, and a healthier environment. None of us know when the drought will end. The time to take action is now.

Potential New Water Supplies: Just three of the strategies addressed in this document – urban and agricultural efficiency, reuse, and stormwater capture – have the potential to produce up to 14 million acre-feet of new supply and reduced demand on the state’s rivers and groundwater,
according to the Pacific Institute, the Natural Resources Defense Council, and Professor Bob Wilkinson of UC Santa Barbara (see Figure 1, below). Together, the potential water supplies from these tools dwarf other potential water sources, including taking more water from the Bay-Delta.

**Summary of Drought Response Recommendations**

The following recommendations are organized by issue area, and include actions to be undertaken by state and federal agencies, Congress and the State Legislature, and by local water agencies.

### Efficiency, Reuse and Stormwater

**1. Water Use Efficiency – General**

1A. The SWRCB should apply the waste and unreasonable use doctrine and define minimum standards for acceptable water use by sector.

1B. The State should establish the next state water use efficiency targets for urban and agricultural water users.

1C. DWR should achieve more efficient use of water in revised State Water Project contracts.

**2. Water Use Efficiency – Urban**

2A. Develop a comprehensive statewide behavior change strategy to encourage water conservation.

2B. DWR should develop a statewide landscape conservation training program.

2C. DWR should develop a statewide rebate program for residential and commercial turf removal.

2D. The State should lead the way on landscape water efficiency by replacing non-functional lawns at all state buildings.

2E. State agencies should enforce plumbing replacement deadlines in current law.

2F. State legislation should require installation of water meters on all urban water service connections within five years, by December 31, 2019.

2G. State legislation should require the installation of multi-unit sub-metering in new construction.

2H. The State should strengthen building and plumbing codes to achieve greater efficiency.

2I. Expand energy benchmarking of commercial buildings to include water benchmarking.

2J. The CPUC should commission an independent evaluation of its Water Revenue Adjustment Mechanism to evaluate its effectiveness in advancing conservation and maintaining financial health.

2K. The CPUC and the State Board should provide financial and regulatory support to speed the transition to efficient home appliances, especially clothes washers.

2L. DWR should develop a uniform methodology to evaluate water use efficiency investments.

**3. Water Use Efficiency – Agriculture**

3A. Establish statewide programs to increase agricultural water use efficiency.

3B. State agencies should increase the adoption of critical agricultural water efficiency measures.

3C. Modernize irrigation water delivery systems to allow flexible delivery time and pressurized water service.

3D. State agencies should uphold statutory requirements for agricultural water management planning.
3E. The Bureau of Reclamation should encourage water use efficiency in CVP agricultural water contracts.

3F. Encourage healthy soil with cost-shares, education and outreach.

4. Water Recycling and Graywater

4A. The State Board should adopt regulations for indirect potable reuse through the augmentation of surface storage. The State Legislature and Congress should provide funds to complete scientific investigations to assist in developing regulations regarding direct potable reuse.

4B. Accelerate water recycling in California by prohibiting ocean discharge of wastewater.

4C. The SWRCB, DWR, and other state agencies should develop a roadmap to identify and resolve key regulatory, governance, funding, and other obstacles to large-scale recycling projects.

4D. DWR, in cooperation with the Department of Public Health, the Building Standards Commission, the State Board, and others, should draft a set of model local graywater ordinances.

5. Stormwater

5A. The State Board should establish requirements for municipal stormwater retention for water quality and water supply benefits.

5B. Exercise EPA’s authority to advance stormwater capture in regions with water quality and supply problems.

6. Cross-Cutting Recommendations

6A. The State should create a water technology office in the Office of Planning and Research.

6B. DWR should improve the Integrated Regional Water Management Program, particularly regarding the need to deliver greater benefits to disadvantaged communities.

Expanding System Capacity

7. Groundwater Clean Up and Management

7A. DWR should move rapidly to address key issues in implementing the new groundwater management legislation.

7B. EPA should collaborate with LADWP to accelerate San Fernando Valley groundwater clean-up.

8. Natural Infrastructure

8A. Expand floodplain restoration as part of the Central Valley Flood Protection Plan update and other processes.

8B. State and federal agencies should prioritize funding to complete seepage and flood management projects along the San Joaquin River below Friant Dam, to facilitate river restoration.

9. Smart Water Storage

9A. The Corps of Engineers should develop new technology pilot projects to improve weather forecasting and improve the operation of federal flood control facilities.

9B. The state, particularly the California Water Commission, should manage storage funds with cost-effective environmental and drought benefits in mind.
9C. State and federal watershed restoration efforts, including forest, wetland and meadow restoration, should be strengthened and funded at more robust levels.

**Planning for Drought**

10A. The State Board should adopt and enforce drought standards for the Delta and its tributaries.
10B. The Department of Fish and Wildlife should implement drought actions to protect salmon and the fishing industry.
10C. Develop and implement drought actions to protect wetland-dependent species.
10D. Plan for dry year water transfers to achieve water supply, agricultural and habitat benefits.
10E. DWR and other state and local agencies should plan for a decade-long drought.
10F. Update the State Board’s system for water rights accounting and enforcement.
10G. The State should create a standardized emergency response for communities without water.
10H. The State and Congress should leverage State academic institutions to advance the development of sustainable regional water supplies.

**Financing Sustainable Water Supply Investments**

**11. State Funding**

11A. The State should establish green infrastructure, water efficiency and community drinking water needs as higher priorities in the Clean Water and Safe Drinking Water State Revolving Funds.
11B. Create a statewide water diversion fee to make ecosystems more drought-resilient.

**12. Federal Funding**

12A. The Administration and Congress should increase federal Title XVI water recycling funding.
12B. The Administration and Congress should increase funding for the Bureau of Reclamation’s WaterSMART program.
12C. The Department of Energy should fund water and energy conservation pilot projects.
12D. Congress should appropriate and target State Clean Water Revolving Funds.
12E. Congress should prioritize Corps funding for floodplain restoration in California.

**13. Local Funding**

13A. Urban water utilities should adopt budgets and supporting rate structures sufficient to ensure stable funding for new investments in sustainable water sources.
13B. Local agencies should provide resources for residential and commercial landowners to implement green infrastructure projects.
13C. The State Board, regional boards, and DWR should encourage water agencies and municipalities (e.g. public works departments) to take maximum advantage of the simpler Prop. 218 “protest process” for the approval of water-related fees.
13D. EPA should develop recommendations for the Governmental Accounting Standards Board to facilitate stable, long-term public water agency investments in water use efficiency, including the potential to include financing for efficiency in agency capital budgets.