



CLIMATE CHANGE

ACWA POLICY PRINCIPLES

Introduction

Climate change impacts in California are occurring, with substantial further effects likely to emerge through this century. Climate change impacts – which include aridification, reduced snowpack, shorter and more intense precipitation events, more severe drought periods, and sea level rise – will fundamentally change water management. In response to these impacts, ACWA's Board of Directors adopted the following policy principles that call for flexible solutions and additional investments that support water managers' ability to implement the actions necessary to ensure a high quality and reliable water supply. The principles cover topics that include infrastructure, water affordability, water rights, adaptive management, energy resources, and state and federal investments. They position ACWA and its members to advocate on solutions and strategies to meet the water needs of California's communities, economy and the environment through the 21st Century.

Planning & Decision Making

ACWA will collaborate with policy makers, technical experts, and other partners to identify and develop priorities, actions, and investments across the spectrum of water management challenges California must address to secure its water future in response to a warmer and dryer climate. As climate change intensifies hydrologic extremes and aridification, solutions must fit a range of impacts anticipated throughout the State to ensure a high quality and reliable water supply.

1. **Accelerate Climate Resilient Infrastructure:**

Adapting to climate change requires significant rehabilitation and modification of existing water facilities, improved operational flexibility, as well as generational investments in new water infrastructure. Significantly increased above- and below-ground storage capacity must be developed to mitigate for the disappearing snowpack. In addition, new and enhanced conveyance facilities are essential for moving collected and stored water, connecting suppliers with different supply sources, transferring water among water users, recharging groundwater, and storing water for multiple purposes, including environmental purposes.

2. **Streamline and Expedite Regulatory Processes:**

In order to deliver the pace and scale of projects necessary to meet climate change, state and federal agencies should improve regulatory structures to streamline and expedite processes for completing environmental reviews and permitting, and proceedings for critical water infrastructure projects in a manner that is environmentally appropriate.

3. **Increase State and Federal Funding Assistance:**

Preparing for extreme climate change events will require significant additional State and federal funding assistance for climate adaptation planning and implementation of projects through appropriations, bond measures, grants, and expanded low interest loan programs. State and federal investments in State water infrastructure projects are also needed.

4. Utilize Best Available Science to Inform

Decision Making: Actionable climate change policies and adaptation strategies must be based on the best available science and technical expertise. ACWA will continue to utilize the extensive climate, weather and hydrologic research conducted by California's many universities, colleges, and scientific institutions to make recommendations on actionable climate change actions and adaptation.

5. Include Flexibility in Support of Unique Local

Solutions: Climate change policies should provide for flexible approaches that enable local water managers to achieve goals by responding and adapting in a manner best suited to their agency's location and unique circumstances.

6. Increase Regulatory Certainty and Consistency:

State and federal climate change policies and practices should complement each other, encourage innovation and experimentation, embrace forward thinking investments, and allow for adaptation to improve effectiveness and limit stranding of prior investments.

7. Prioritize Water Affordability: Climate change adaptation actions will further stress local agency budgets, which already are asked to do more with less while trying to maintain affordability for customers. As public agencies, there are constraints on generating and spending ratepayer revenue, particularly contained in the State Constitution (as added by the approval of Propositions 218 and 26). The State should recognize these constraints and promote effective programs to ensure access to water for all without burdening agencies with additional administrative complexity and overhead costs.

8. Advance Ecosystem Protection by Implementing Holistic, Adaptive and Multi-Benefit Approaches:

State and federal agencies should employ a holistic, adaptive, and multi-benefit approach to managing water for environmental purposes that is ecosystem-based to benefit multiple species, rather than a species-by-species approach that characterizes current Endangered Species Act implementation. Continued collaboration is needed to build sound and shared science that fosters evolving water management approaches to increasing water supply reliability and improving ecosystems given the magnitude of habitat, ecosystem, hydrologic, and temperature change expected to result from climate change.

9. Improve Administration of the Water Rights

Priority System: The State should modernize administration of the water rights priority system with improved data, efficiency, and transparency, while maintaining the existing priority system as its legal and operational foundation.

10. Provide Technical Assistance:

The State should provide climate change technical assistance, models, and data to small water suppliers, wastewater systems, and regional planning groups, where needed, to help estimate the impacts of changed snowpack conditions and related changes to hydrology and sea level rise.

Implementing Climate Resilience Strategies

Water managers should be enabled to continue to implement the actions necessary to ensure a high quality and reliable water supply in an environmentally and fiscally responsible manner throughout California as they adapt to a changing climate.

11. Support Adaptive Management: State and federal agencies should support adaptive management approaches that provide flexibility at the local level to respond to increasing weather variability and volatility and the uncertainty of climate change effects on ecosystems and species. State and federal agencies, and the regulations they promulgate, should better consider cost implications on water suppliers and provide water managers the flexibility and discretion to respond to mandates in a manner that is achievable and practical, given hydrologic and ecosystem changes resulting from climate change.

12. Increase Funding for Safe Drinking Water: The State and federal governments should continue to increase funding for water supply, water quality treatment, and operational solutions that ensure safe drinking water for all. The effects of climate change disproportionately impact disadvantaged communities. Increased support for these communities is a critical component to climate adaptation.

13. Increase Public Education: The State should partner with public water agencies, and other stakeholders to increase public awareness of the need, importance, and urgency for making long-term investments in water infrastructure and water use efficiency to respond to climate change.

Deploying Clean Energy Strategies

ACWA recognizes the importance of a reliable, clean energy supply to combat climate change. As California leads in reducing greenhouse gas (GHG) emissions, its implementation of clean energy goals should not impair water and wastewater agencies' ability to treat and deliver water, as well as safely and reliably conduct routine and emergency operations.

14. Invest in Diverse Energy Resources: ACWA supports policies, programs, tariffs, and incentives that promote sound investments in diverse and cost-effective energy generation, reliability improvements and grid infrastructure. Diverse clean energy generation sources, including hydropower projects, should be recognized in the State's zero carbon energy portfolio and the State's goals and associated policies should be consistent with the fact that diverse energy resources are critical for treating and delivering water.

15. Provide Incentives: State and federal policy should incentivize and provide financial assistance for local resource investment in water use efficiency, renewable energy sources (including biomass), carbon sequestration, energy storage and other local water management practices that cost effectively reduce energy use or reduce GHG emissions, while ensuring local agency flexibility in the means chosen to achieve GHG reduction goals.

Modeling and Data

ACWA will collaborate with policy makers and stakeholders on developing and disseminating the best information available to water managers and decision makers to assess climate impacts and risks to effectively plan for and implement climate change adaptation actions related to managing California water resources.

16. Improve Data and Analysis through

Technology: The State and federal governments should continue to invest in the development of sophisticated, accurate and reliable data (e.g., Forecast Informed Reservoir Operations, aerial snow observation, and satellite groundwater monitoring, etc.) that can provide more accurate and timely assessments of changing hydrologic and environmental conditions to inform policy and water managers' response strategies.

17. Develop State and Regional Watershed Models:

The State and federal governments should invest in additional applied research to improve State and regional climate and hydrologic models at the individual watershed scale to assist local decision makers in planning for and adapting to climate change and to tailor policies to match local conditions.

18. Plan for Different Climate Scenarios: Scenario planning should reflect a range of potential climate change futures, including realistic worst-case scenarios, to develop the best physical and operational approaches to meet the State's water needs, and to provide policy and decision makers with an understanding of the full potential scope of impacts that must be addressed through adaptation and investment choices in relation to risk reduction/management and available resources. Modeling should inform funding for existing and new infrastructure and adaptation actions.

