



# San Diego County Water Authority

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June 23, 2017

John Laird, California Secretary for Natural Resources

California Natural Resources Agency

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County of San Diego

**Subject: San Diego County Water Authority Comments on Draft Safeguarding California Plan: 2017 Update**

Dear Secretary John Laird:

The San Diego County Water Authority (Water Authority) appreciates the opportunity to comment on the Safeguarding California Plan: 2017 Update (Plan Update). The Water Authority is a wholesale water agency with 24 retail member agencies in San Diego County. Our mission is to provide a safe and reliable water supply to our member agencies serving a population of 3.3 million and supporting a \$222 billion economy. The Water Authority supports the California Natural Resources Agency's efforts to update the holistic actions taken by state agencies to promote climate adaptation.

The Water Authority has made great strides in implementing Greenhouse Gas (GHG) mitigation programs and policies for our facilities and operations. In 2014, the Water Authority became one of the first water agencies in California to voluntarily adopt a Climate Action Plan (CAP) to address carbon footprint and GHG emissions. The goal of the CAP is to minimize Water Authority GHG emissions through adaptation measures to ensure the Water Authority's water supplies, infrastructure, and services will accommodate the projected impacts of climate change. By implementing the CAP, the Water Authority has addressed many of the Comprehensive State Adaptation Strategies originally established by the California Natural Resources Agency in 2009. We look forward to working with State agencies to achieve the new strategies updated to combine several key documents and include principles from Govern Brown's April 2015 Executive Order B-30-15. The purpose of this letter is to provide comments on the current and future actions State government should take to build climate change resiliency, and are focused on recommendations related to the water and energy sector.

**Include Next Step that promotes holistic water supply diversification through potable reuse and ocean desalination permit streamlining**  
(Recommendation W-3: Diversify local supplies and increase water use efficiency)

*A public agency providing a safe and reliable water supply to the San Diego region*

The Water Authority supports Recommendation W-3 as it is a long-term strategy of the Water Authority to increase the reliability of the region's water supply. The Plan Update should identify all viable local supply sources including ocean desalination and potable reuse as diversification strategies. Development of drought-resistant, local supplies such as recycled water, seawater desalination, and potable water reuse are critical to providing water supply reliability. The Water Authority has aggressively pursued supply diversification with a focus on locally controlled sources to enhance regional water supply reliability. The Water Authority and its member agencies have transformed the region with prudent investments in infrastructure and new water supplies that have made the region much more resilient to droughts or emergencies that can cause crippling water shortages. The Claude "Bud" Lewis Carlsbad Desalination Plant is nation's largest seawater desalination plant, producing approximately 50 million gallons of high-quality, drought resilient drinking water per day in San Diego which is currently 10 percent of the region's supply. The San Diego region's next major source of local water supply will come from potable reuse with an anticipated production of over 100,000 acre-feet by 2035. We support Next Steps to address knowledge gaps and additional research for potable reuse of recycled water. However, Next Steps fail to recognize ocean desalination as a part of a diversification strategy. Therefore, we suggest the following Next Step of efficient permitting to fulfill the state's objective of holistic water diversification planning.

- a) The State Water Resources Control Board (State Water Board) will provide efficient permitting of ocean desalination facilities under the California Ocean Plan (and potable reuse facilities).

**Include Next Steps that elevate, promote and sustain Integrated Regional Water Management (IRWM)**

(Recommendation W-3: Diversify local supplies and increase water use efficiency)

The diversification strategy fails to recognize ongoing actions in IRWM that have been vital in making regions across the state more resilient to changing climate. In the San Diego region, many local water supply development projects have been funded by the Department of Water Resources (DWR) through the Integrated Regional Water Management (IRWM) Program. IRWM has provided a very powerful process in San Diego for regional water managers and resource planners to collaborate on projects that improve water resources to meet regional needs. The benefits of IRWM are realized at the state and local level as improved local supply reliability reduces the burden on state water management. IRWM can address the state's water challenges by increasing regional self-reliance, diversifying supplies and improving water use efficiency. Therefore, we recommend that the Plan Update include the following Next Steps to elevate, promote and sustain IRWM:

- a) DWR will publish findings of the "Draft 2015 IRWM Strategic Plan" and implement recommendations included within.

b) DWR shall integrate the recommendation of the IRWM Strategic Plan and recommendations into the California Water Plan Update 2018 and the California Water Action Plan.

c) DWR, the State Water Resources Control Board, the legislature, and the governor should work together to address long-term funding support for IRWM.

**Recognize individual agencies' or regions' unique water supply conditions and differences**

(Recommendation W-3: Diversify local supplies and increase water use efficiency)

Water use targets developed by DWR, the State Water Resources Control Board or any other agency must include factors that consider differences between regions throughout the state. Establishing new water use targets for urban retail water suppliers for indoor, outdoor, and commercial, industrial, and institutional water uses will have significant ramifications not only on urban suppliers, but on residents and businesses within the communities those suppliers serve. The Water Authority urges state agencies to provide a mechanism for a thoughtful and deliberative process inclusive of broad stakeholders and regional experts to develop water use targets that account for differences in local conditions.

**Include Next Step to support research on the integration of renewables onto the electric grid**

(Recommendation E-1: Continue to support climate research for the energy sector to better inform climate adaptation and mitigation strategies)

The Water Authority supports Recommendation E-1 on climate research for the energy sector. Extreme weather events, due to climate change, have the potential to disrupt lifeline systems such as energy, transportation and telecommunications, which could impede the ability to produce drinking water. The Water Authority requests that Next Steps include supporting research on the integration of renewables onto the electric grid to better understand renewable energy storage issues and the ability for renewable energy sources to respond to future disruptions. We request the following addition:

a) Examine the feasibility of integrating renewable energy generation systems such as solar, wind or in-line hydro by utilizing potential energy storage options to support electric grid reliability.

The Water Authority is a strong supporter of renewable energy. The Water Authority's Rancho Peñasquitos in-line hydro generation facility provides 25,000 to 30,000 megawatt-hours of renewable energy annually, enough electricity for approximately 5,000 San Diego households. The Water Authority also entered a power purchase agreement for the installation of photovoltaic solar panels at its headquarters, and began operation of a pump storage system in 2012 that can generate up to 40-megawatts of peak hydroelectric energy, enough power to annually sustain nearly 26,000 homes. Lastly, the

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Water Authority and City of San Diego (City), one of its 24 retail member agencies, are exploring a potential closed-loop pumped storage project at the City's existing San Vicente Reservoir. The proposed San Vicente Energy Storage Facility (SVESF) could produce up to 500 MW of energy and 8 hours of storage capacity, and could support electrical transmission grid operations that are essential to integrating large new supplies of renewable electricity - notably solar but also wind - into the California and western power grids. During off-peak periods, such as in the mid-afternoon when solar power supplies could exceed demand, SVESF would act as a load that could relieve the grid of the excess power supply by pumping water from the existing San Vicente Reservoir to a new upper reservoir. The upper reservoir stored water would later be released to the lower reservoir by gravity to generate carbon-free energy during other periods of the day or other days when demand for electricity is high and renewable supplies are not able to meet this demand. Projects such as SVESF not only help with grid reliability and ensuring that our drinking water systems are reliable but also offer the added benefit of ensuring vulnerable populations, such as children and the elderly, are not impacted by flex alerts during extreme heat advisories. Understanding how water utilities can play a role in emergency planning, via renewable energy integration, will provide state and local reliability benefits.

Thank you for your consideration of these recommendations on the Plan Update. Please contact Toby Roy with any questions at (858) 522-6743.

Sincerely,



Sandra L. Kerl  
Deputy General Manager

Submitted electronically via: [climate@resources.ca.gov](mailto:climate@resources.ca.gov)