



San Diego County Water Authority

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December 15, 2016

Mary D. Nichols, Chair
California Air Resources Board
1001 I Street
Sacramento, CA 95814

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County of San Diego

**Subject: San Diego County Water Authority Comments on December 2016
Discussion Draft of the 2030 Target Scoping Plan**

Dear Chair Nichols:

The San Diego County Water Authority (Water Authority) appreciates the opportunity to comment on the 2030 Target Scoping Plan discussion draft. The Water Authority supports the California Air Resources Board's efforts to address climate change by reducing Green House Gas (GHG) emissions in California. The purpose of this letter is to provide comments on the California Air Resources Board's discussion draft on the 2030 Target Scoping Plan released on December 2, 2016.

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 has made great strides in implementing Greenhouse Gas (GHG) mitigation programs and policies for its 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 the implementation of GHG reduction measures focused on energy efficiency and opportunities to develop renewable energy. The 2030 Target Scoping Plan discussion draft includes a focus area on water, and our comments are focused on the new potential measures, supporting actions and goals as they pertain to the water sector. We agree with recommended changes identified in the Association of California Water Agency's comment letter on the 2030 Target Scoping Plan Discussion Draft, and offer the following additional comments for your consideration.

Section II.F.1 Looking to the Future

Goal: Support more reliable water supplies and a more resilient, sustainably managed water resources system with a focus on actions that provide direct GHG reductions (Page 77)

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

The Water Authority supports the development of more reliable water supplies and a more resilient, sustainably managed water resource system. The Water Authority began aggressively pursuing actions to diversify the region's supply sources after a severe, protracted drought reduced imported water deliveries in the 1990s. Maximizing recycled water development is critical to diversifying the region's water supply portfolio. Additionally, several Water Authority member agencies are completing studies pertaining to potable reuse, the advanced treatment of recycled water for potable uses.

To further diversify regional supplies, the Water Authority identified seawater desalination as a potential supply for meeting future demands. The Claude "Bud" Lewis Carlsbad Desalination Plant began construction in 2012 and commercial operation began in December 2015. This facility is currently in commercial operation and is capable of producing up to 54 million gallons per day of locally controlled, drought-proof water supply.

The development of these reliable supplies becomes even more important as an adaptation to climate change. We would like to highlight that although advanced systems such as desalination and reuse provide an extremely reliable source of water, they may require greater energy inputs than conventional water sources. Ensuring water reliability now and into the future must be the priority and that means investing in new sources of water and projects that reduce the region's vulnerability to shortages coupled with continued gains in water use efficiency. The scoping plan should include a focus on supply reliability and should prioritize the development of the most reliable and drought-proof supplies as an adaptation to climate change conditions that will impact existing water supplies, even if those actions do not result in a direct GHG reduction. The increased energy efficiency requirements in the Renewables Portfolio Standard will help to reduce GHG emissions in the water sector by creating greater carbon neutrality and will minimize any GHG impacts from higher energy-using sources that provide greater reliability.

Goal: Make conservation a California way of life and use and reuse water more efficiently with greater water conservation, recycling, and reuse to help meet future water demands and adapt to climate change (Page 77)

The Water Authority and its member agencies have made conservation a way of life in the San Diego region. Water-use efficiency, or conservation, is an important ongoing component of the Water Authority's long-term strategy to increase the reliability of the San Diego region's water supply through diversifying its water supply portfolio. Since 1991, in partnership with its member agencies, our programs and initiatives cumulatively have conserved more than one million acre-feet of water. Per capita potable water use in the San Diego region decreased 39 percent between fiscal year 1990 and fiscal year 2015, and continues to fall. However, to foster broad sustainability, conservation needs to be

considered from an integrated perspective, that takes into account impacts to recycled water supplies, supply reliability, and the need to support urban forests.

Goal: Support programs and projects that increase water sector energy efficiency and reduce GHG emissions through reduced water and energy use (Page 77)

The Water Authority supports programs and projects that increase water sector energy efficiency and reduce GHG emissions through reduced water and energy use. A 2005 California Energy Commission report entitled, *California's Water-Energy Relationship*, found that end uses of water use more energy than any other part of the state's water use cycle. For more than 25 years, the Water Authority and San Diego Gas & Electric have partnered on a variety of programs and projects to generate significant water and embedded energy savings from end uses. Highlights of the partnership include: commercial pre-rinse spray valve installations, commercial water and energy audits, low-flow showerhead distributions, high-efficiency clothes washer incentives, water agency leak loss control, landscape efficiency, and detention facility retrofits. We recommend that the Discussion Draft prioritize energy savings from end users.

Furthermore, the Water Authority is actively participating in the California Public Utilities Commission's (CPUC) Water-Energy Nexus Embedded Energy Cost Calculator development. This will foster more meaningful collaboration between investor-owned energy utilities and water utilities and allow development of energy efficiency projects and programs that target the water system as well as share the cost of energy efficiency portfolio projects. The Water-Energy Calculator currently quantifies the energy saved by reducing water use. The CPUC is evaluating updating the Calculator to incorporate GHG emissions reductions for water-energy nexus energy efficiency measures, and to integrate it with the E3 Energy Efficiency Cost Calculator used in standard energy efficiency program development. We suggest that the CPUC efforts on the Water-Energy Nexus Calculator be described in the discussion draft (page 79) to highlight the cooperative endeavors of water agencies and the investor-owned utilities in the state.

Section II.F.3 Known Commitments and Potential New Measures to Reduce Greenhouse Gases

New Potential Measures or Supporting Actions: Local water and wastewater utilities should adopt a long-term goal to reduce GHGs by 80 percent below 1990 levels by 2050 (consistent with DWR's Climate Action Plan), and thereafter move toward low carbon or net-zero carbon water management systems where technically feasible and cost-effective (Page 80)

In the Water Authority's 2015 Climate Action Plan (CAP), the Water Authority has set a goal to reduce its emissions to 15 percent below 2009 by 2020. The Water Authority is not mandated to achieve the 2050 goals set forth by Executive Order S-3-05. Although

Executive Order S-3-05 identifies an emissions level of 80 percent below 1990 levels by 2050 for water and wastewater utilities, we are concerned that this long-term goal may not be achievable if the requirement to reduce GHGs by 80 percent is agency specific. The Water Authority's system operates primarily as a gravity flow system and has extremely low energy use. The Water Authority and some of our member agencies already capture excess energy from the system to generate electricity. These specific local circumstances will make it difficult for us to achieve an 80 percent GHG reduction. However, we have the ability to provide additional benefits to reduce GHGs such as using storage in local reservoirs as an energy pumped storage system to facilitate production and use of renewable energy. While the 80 percent reduction may be a good aspirational goal, it may not be technically feasible or cost effective to achieve as an enforceable goal.

The Water Authority appreciates the opportunity to comment and thanks ARB for its review and consideration of these comments. Please contact me with any questions at (858) 522-6743 or by email at troy@sdewa.org.

Sincerely,



Toby Roy, Water Resources Manager
Water Resources Department

Submitted electronically via:

[https://www.arb.ca.gov/lispub/comm2/bcsubform.php?listname=sp2030disc-dec16-
ws&comm_period=1](https://www.arb.ca.gov/lispub/comm2/bcsubform.php?listname=sp2030disc-dec16-ws&comm_period=1)