

San Diego Integrated Regional Water Management 2022 IRWM Implementation Grant Proposal Climate Change

Attachment 6 consists of the following items:

- ✓ **Contact Person for Climate Change.** SDCWA's climate change contact.
- ✓ **Strategic Business Plan.** An overview of the San Diego County SDCWA's (SDCWA) *2019-2023 Business Plan* to assist SDCWA in providing a safe, reliable water supply to the region.
- ✓ **Policies and Public Statements.** An overview of SDCWA's adopted policies and formal public statements regarding climate change.
- ✓ **Climate Change Vulnerability Assessment.** An overview of the climate change vulnerability analysis completed as part of the *2013 San Diego Integrated Regional Water Management Plan*.
- ✓ **Adaptation Capacity.** An overview of SDCWA's capacity to adapt to the impacts of climate change.

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Contact Person for Climate Change

Does the organization have a primary point of contact for climate change?

Yes, SDCWA has a primary point of contact for climate change: Anjuli Corcovelos, Senior Water Resources Specialist, acorcovelos@sdewa.org, 858-522-6755.

Strategic Business Plan

Does the organization have a strategic business plan that considers climate change?

Yes, SDCWA's 2021-2025 Business Plan considers climate change and assists SDCWA in providing a safe, reliable water supply to the region (see **Appendix 6-1**). SDCWA is dedicated to proactively addressing the challenges that climate change poses to the San Diego region through regional initiatives that include mitigation and adaptation strategies. The Business Plan is divided into three key focus areas: Water Supply, Water Facilities, and Business Services. The Water Supply key focus area consists of programs that support the Board of Directors' adopted level of water supply diversification. The Water Facilities key focus area consists of programs that are designed to implement the Board of Directors' cost-effective asset management strategy. The Business Services key focus area consists of programs that include the majority of SDCWA's business operations required to execute the activities of the Water Supply and Water Facilities focus areas. The Water Facilities key focus area includes a Sustainability Program that provides Climate Change management strategies. These strategies are to implement cost-effective opportunities that mitigate greenhouse-gas emissions in compliance with emission targets contained in the Climate Action Plan (CAP); support climate science research and evaluate opportunities to mainstream adaptation strategies into business practices; and ensure resiliency of infrastructure and supplies to adapt to climate change impacts.

The Business Plan contains additional information on how SDCWA is working to address climate change in the region. SDCWA adopted its first CAP in March 2014 (revised in December 2015) and completed the 2019 CAP Update in June 2020. The SDCWA updates the CAP every five years with the 2024 CAP Update to be completed next. The CAP serves as an interdisciplinary guide intended to promote, facilitate, and coordinate implementation of climate change mitigation strategies, and focuses on greenhouse-gas emission reduction measures to ensure SDCWA's water supplies, infrastructure, and services will mitigate projected impacts of climate change. In addition, efforts to help the SDCWA adapt to future impacts of climate change were addressed in the SDCWA's 2020 Urban Water Management Plan and will be addressed in the SDCWA's 2023 Water Facilities Master Plan.

As described in the Business Plan, SDCWA has pursued partnerships with researchers and other climate change practitioners to advance actionable climate science focused on adaptation strategies. SDCWA is an active participant in Scripps Institution of Oceanography Water Extremes (CWE3) and is also a founding member of the Water Utility Climate Alliance (WUCA). Formed in 2007, WUCA includes 12 of the nation's largest water providers, who together supply drinking water to more than 50 million people throughout the United States. WUCA provides leadership in assessing and adapting to the potential effects of climate change.

Formal Policies and Public Statements

Has the organization adopted any policies or made any formal public statements about climate change?

Yes, SDCWA has adopted policies and made formal public statements about climate change (see **Appendix 6-2**). Some of the most notable recent examples include:

- Developing a Climate Action Plan to look comprehensively at current practices, operations, progress toward state aligned emissions targets, and identify feasible measures that could be implemented to reduce GHG emissions and climate change impacts; included in the Plan are measures currently underway by the SDCWA to reduce emissions, including installing solar panels at three locations to produce 2.5 million kWh of electricity per year, implementing strategies to reduce fuel consumption and vehicle miles traveled, and implementing energy conservation opportunities in its nine highest-energy-consuming facilities, resulting in savings of 197,000 kWh per year to date (June 2020).

- Participating in inter-agency events, such as a 'lunch and learn' session with Citizens Water Academy, Leaders 20/20, San Diego Green Drinks, and the National Oceanic and Atmospheric Administration to provide details on how weather and climate impacts water supplies, and how prepared the San Diego region is for drought impacts (August 2021).
- The Board approved the 2021 Energy Management Policy that concentrates on four areas: evaluating opportunities to procure or develop energy supplies, generation and storage; improving water system energy resilience; fostering collaborative relationships with compatible federal, state, and local agencies or private organizations; and supporting government relations energy goals. The Policy provides guidelines to implement a dynamic Energy Program that minimizes energy costs, integrates renewable energy generation and storage, and maintains an energy resilient water system. This policy supports the environmental benefits such as reducing greenhouse gas emissions associated with the energy usage tracked through the SDCWA's Climate Action Plan (October 2021).
- Encouraging seasonal adjustments to irrigation controllers to help reduce water waste and lead to healthier landscapes, especially during 2021, which was the driest year in California in more than a century (November 2021).
- Earning Climate Registered gold status from The Climate Registry for verifying and publicly reporting its greenhouse gas emissions; the effort fosters transparency for the agency's climate mitigation initiatives and will help SDCWA track and validate emissions reductions in the future (December 2021).
- Running the 'Do Your Part to be WaterSmart' campaign to encourage water conservation; the strategic approach has been chronicled widely and serves as a model for dealing with the impacts of climate change (May 2022).
- Remaining responsive to statewide calls for water conservation during drought, even when investments in a major desalination plant, planned water purification plant, and water deals have secured sufficient local supplies (May 2022).
- Reaffirming the agency's commitment to conservation by pledging to sustain water and protect the human right to water and work with other agencies to achieve water savings (June 2022).
- Creating and updating a variety of long-term plans by coordinating with other agencies to meet future water demand and address environmental goals; climate change is specifically addressed in the SDCWA's Climate Action Plan, Model Drought Ordinance, Water Facilities Master Plan, Urban Water Management Plan, and Water Shortage Contingency Plan.

Climate Change Vulnerability Assessment

Has the organization conducted a climate change vulnerability assessment?

Yes, SDCWA conducted a climate change vulnerability analysis in June 2021 ahead of beginning efforts for the 2024 Water Facilities Master Plan. Additional analysis will be conducted for climate change vulnerability assessments in the Water Facilities Master Plan which will lead to climate resilience projects.

The vulnerability assessment identified the SDCWA's areas of concern in terms of climate change issues, which was then used to begin examining the adaptability of its facilities to climate change by prioritizing the vulnerability issues. Once the vulnerability issues were prioritized, the assessment identified those climate threats that are of highest concern to the SDCWA in terms of the significance of the impact of climate change and therefore the level of adaptation that will be needed as seen in Table 6-1 below.

Table 6-1: Prioritized Climate Change Vulnerability Issues

Priority Level	Category and Potential Vulnerability Issue
Medium	<ul style="list-style-type: none"> Drought: low reservoir levels and changed water quality; increased frequency of Public Safety Power Shutoffs; diminished water quality Flooding: inundation, erosion, scour, and structural damage; contamination during and following floods Wildfire/Wind: fire, smoke, heat, loss of access, residual effect of burn areas
Low	<ul style="list-style-type: none"> Extreme Heat: electrical, mechanical, and chemical efficiency
Very Low	<ul style="list-style-type: none"> Sea Level Rise: the Carlsbad Desalination Plant is well over 30 feet above sea level, and is not expected to be affected by sea level rise or tsunamis by 2100

Source: SDCWA, 2021, *Climate Change Risk Assessment Final – June 30, 2021*

Adaptation Capacity

How would you describe your organization's capacity to adapt to the impacts of climate change?

SDCWA sustains a \$240 billion regional economy and the quality of life for 3.3 million residents through a multi-decade water supply diversification plan, major infrastructure investments and forward-thinking policies that promote fiscal and environmental responsibility. These strategies have created a diversified water supply portfolio and new water facilities that will enhance the reliability of the region's water supply for decades to come and prepare the region for the inevitable impacts of climate change. SDCWA supports cost-effective sustainability programs that benefit the environment and promote thoughtful stewardship of natural resources. These programs save ratepayers money, reduce the environmental impacts of operations, conserve energy and water, and help to better anticipate and adapt to the impacts of climate change.

Each one of the projects included in this Proposal increase the region's capacity to adapt to the impacts of climate change through water supply reliability and flood mitigation measures. The Ramona/Barona Recycled Water Pipeline, North San Diego Water Reuse Coalition Regional Recycled Water Program, and Oceanside Mesa Garrison Force Main River Crossing projects address the risk of climate change by recycling water for reuse, improving the Region's resiliency to changes in water supply availability and helping to maintain water affordability. The Integrated Multi-Benefit Solutions for Climate Resiliency in the San Diego Region project will help incentivize smart water usage and decrease potable water usage for outdoor irrigation. The Federal Blvd. De-channelization and Trail Construction project will improve the area's stormwater infrastructure resilience to increased flooding and restore a section of the Chollas Creek waterway with native vegetation, boosting carbon capture. The Acres Water Consolidation Project - Phase 1, Part 2 project will reduce dependence on groundwater and provide residents with a resilient water supply, as well as improve fire protection in the area.

All of these projects are addressing various climate change vulnerability issues that are addressed above and are improving the Region's resiliency to these climate change projections through various "no regret" strategies. Even if water supply reliability (imported and local), drought intensity, and flood frequency do not meet climate change projections, implementation of these projects will still improve the Region's water management and secure this resource's reliability for future use.