BUSINESS PLAN
2023–2027
OUR VALUES

Cultivate Community
Promote Collaboration
Seek Different Perspectives
Foster Each Other’s Success
Embrace the Challenge
Strive for Excellence
Create Lasting Solutions
As we enter fiscal year 2023, uncertainty seems to be everywhere. Water supplies from the Sierra Nevada and Colorado River, key sources for California and for much of the western United States, are facing unprecedented challenges from hotter, drier climate conditions that many scientists say we haven’t experienced in more than a thousand years. The lingering effects of the COVID-19 pandemic and international conflicts have disrupted supply chains and raised questions about the resiliency of the economy, both locally and around the world. Even long-standing norms for how to create a strong workplace culture and attract and retain a skilled workforce are in flux following the widespread adoption of remote working since 2020.

The good news is the Water Authority is well-equipped to take on times like these. Thanks to a tradition of strong leadership from the Board, innovation and skilled work by all levels of staff, and effective collaboration with our 24 member agencies and other partners in the community, we have overcome all kinds of ambiguities to continuously provide the San Diego region with safe, reliable water supplies.

Sound planning is one of our most effective strategies to anticipate and adapt to whatever the future brings. One of our fundamental planning documents is the Business Plan, which provides a five-year roadmap for Water Authority staff to communicate, coordinate, and focus efforts to meet organizational goals. Since its inception in 2004, the Business Plan has evolved, reflecting the addition of new challenges and changes to Water Authority policy and programs. Over the years, this document has helped us reach numerous important milestones, including completion of the Emergency and Carryover Storage Projects, securing a new water source from the largest agricultural-to-urban water conservation transfer project in the country, development of the Claude “Bud” Lewis Carlsbad Desalination Plant, and countless other initiatives.

In recent months, staff has updated the Business Plan for 2023-2027 with new objectives and tactics in three areas: Water Supply, Water Facilities, and Business Services. The plan contains refined program and management strategies that reflect our emphasis on water system and energy management, system reliability and innovation, regulatory compliance, financial stability, outreach and legislation, workforce mobility and safety related to COVID-19, cybersecurity, and workforce management. Notably, this edition of the plan also reflects a new platform of staff-developed organizational values to guide us as we pursue our work, with a lens of equity, diversity and inclusion. It also emphasizes our efforts to address the needs of underrepresented and disadvantaged communities – as well as all ratepayers – by advancing water equity and affordability. Near-term and long-term objectives and tactics – clearly linked to the management strategies – are supported by key performance indicators to promote and track progress.

While the future is full of uncertainty, it also is full of opportunity. That includes the opportunity to think about and solve problems in new and different ways, to embrace changes that foster progress, and to achieve milestones previously thought to be unreachable. This Business Plan update will be our compass as we make this journey, keeping us on track as we head for exciting new horizons.

Sandra L. Kerl
General Manager
Table of Contents

INTRODUCTION
Overview 5
Business Plan Key Focus Areas and Programs 7
Related Planning Documents 8
Current Business Trends 9
Business Plan Performance Assessment 14

WATER SUPPLY
Overview 16
Imported Water 17
Local Water 26
Resource Planning 32

WATER FACILITIES
Overview 40
Infrastructure/Capital Improvement Program 41
Sustainability 48
Water System Management 54

BUSINESS SERVICES
Overview 62
Business Support 63
Communication and Messaging 70
Financial Management 77
Workforce Management 83

APPENDICES
Appendix 1 - Guiding Policies and Principles 92
Appendix 2 - Related Planning Documents 94
Appendix 3 - Glossary 96
The San Diego County Water Authority Business Plan describes the key focus areas, programs and program focus areas, management strategies, and objectives and tactics along with key performance indicators necessary to carry out the policies and strategic direction set forth by the Water Authority Board of Directors. Based on a five-year horizon, the plan is updated biennially in accordance with guiding principles and policies, related planning documents, and an analysis of current business trends.

The Water Authority’s member agencies are represented through a 36-member Board of Directors. The Water Authority was formed by the California State Legislature under the County Water Authority Act, which established the Board of Directors as the agency’s governing body. The County Water Authority Act authorizes the Water Authority to acquire water and water rights; construct, operate, and maintain facilities; tax; and incur bonded indebtedness.

The Board has adopted principles and policies that guide the Water Authority in its business practices. Among these are: the Debt Management Policy and Fiscal Sustainability Policy that ensure savings from refunded debt are maximized and financial stability for the agency, the Energy Management Policy that provides guidance on the development of energy related projects and programs, the Legislative Policy Guidelines that provide a framework for evaluation of potential impacts to the Water Authority from state and federal legislation, and Delta Policy Principles that guide staff in evaluating the Bay-Delta initiatives. A complete list of the Water Authority’s guiding principles and policies is provided in Appendix 1.
The San Diego County Water Authority Member Agencies & Service Area

1. Carlsbad MWD
2. City of Del Mar
3. City of Escondido
4. Fallbrook Public Utility District
5. Helix Water District
6. Lakeside Water District
7. City of National City*
8. City of Oceanside
9. Olivenhain MWD
10. Otay Water District
11. Padre Dam MWD
12. Camp Pendleton Marine Corps Base
13. City of Poway
14. Rainbow MWD
15. Ramona MWD
16. Rincon del Diablo MWD
17. City of San Diego
18. San Dieguito Water District
19. Santa Fe Irrigation District
20. South Bay Irrigation District*
21. Vallecitos Water District
22. Valley Center MWD
23. Vista Irrigation District
24. Yuima MWD

* The Sweetwater Authority is a service organization for the City of National City and the South Bay Irrigation District.
Business Plan programs are divided into three key focus areas: Water Supply, Water Facilities, and Business Services. Each key focus area is divided into programs that contain the management strategies, objectives and tactics, and key performance indicators necessary to achieve the Water Authority’s mission.

**Water Supply**
The Water Supply key focus area consists of three programs that support the Board of Directors’ adopted level of water supply diversification.

- Imported Water
- Local Water
- Resource Planning

**Water Facilities**
The Water Facilities key focus area consists of three programs that are designed to implement the Board of Directors’ cost-effective asset management strategy.

- Infrastructure/ Capital Improvement Program
- Sustainability
- Water System Management

**Business Services**
The Business Services key focus area consists of four programs that are essential, in that they include the majority of the Water Authority’s business operations required to execute the activities of the previous two key focus areas.

- Business Support
- Communication and Messaging
- Financial Management
- Workforce Management
Related Planning Documents

The Business Plan serves as an overarching planning tool to assist the Water Authority in accomplishing its mission of providing a safe, reliable water supply to the region. Below is a table of the supporting planning documents highlighting their impacts on the key focus areas of Water Supply, Water Facilities, and Business Services and their respective programs. A description of each plan is provided in Appendix 2.

### Planning Documents by Business Plan Programs

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- **Z** Primary planning document
- **Z** Secondary planning document
The water utility industry is similar to other factions of the American economy. The industry is subject to, and must be agile in adapting to, changing economic conditions, societal perceptions, governmental regulations, environmental issues and sustainability, and technological security. The Water Authority faces an increasingly challenging future, and as a result must continue to be pioneering and visionary in its approach to the management of water. Trends that are critical to the Water Authority’s business operations are organized into the following categories: economic/business, societal/political, technological, and environmental.

**Economic/ Business Trends**

**Fiscal Sustainability**

The Water Authority has a long history of prudent financial management and financial planning. Identifying fiscal challenges well in advance, the Water Authority has successfully maintained its fiscal health despite the Great Recession (2007-2009), multi-year drought events, and most recently economic effects related to the COVID-19 pandemic. One example of a proven success for crafting innovative solutions was the development of a Supply Reliability Charge, which further diversified the fixed/variable revenue mix and ensured equitable recovery of supply reliability investments. The Water Authority’s reconstituted Fiscal Sustainability Task Force (2020) continues to look forward as the Water Authority addresses the continued challenges facing water supply availability and development, providing affordable and reliable water to the region, providing smooth and predictable rates and charges, and funding the asset management program.

**Economic Conditions**

San Diego County has enjoyed economic stability in recent years, outpacing the State economy. Prior to the COVID-19 pandemic, unemployment levels in the County were at their lowest level in 18 years. Economic development and recovery will continue to modestly raise demands in the future for both residential and commercial users and increase the property tax related revenues the Water Authority receives. Growth related revenue from capacity charges, a highly volatile revenue stream, is also expected to remain stable over the next few years.
**Workforce Planning**

Organizations continue to adjust to the frantic speed of change to support their most valuable resource: people. Adjusting to changing labor markets, post-COVID-19 remote and hybrid work models, and ensuring the workforce is diverse, inclusive, and more reflective of the populations the Water Authority serves is critical to attract and retain a talented workforce of the future. The Water Authority developed fluid approaches to workforce objectives and tactics to remain agile, competitive, and effective. Excellence and innovation remain constant as the agency continually evaluates and shifts priorities to address the rapidly changing world.

*The Water Authority’s “Faces of the Water Industry” campaign was displayed at local educational institutions to recruit the workforce of the future.*

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**Societal/Political Trends**

**Water Equity and Affordability**

Water is a fundamental building block for the region, and how water supplies and facilities are planned and built can have a tremendous effect on economic growth, the environment, workforce development, and the very social fabric of communities. The consequences of a lack of water may result in lost economic opportunity, health issues, and other significant problems. The Water Authority is committed to pursuing its mission to provide safe, reliable water supplies in a manner that supports equitable access and social and economic prosperity. As costs to provide these supplies rise, water rate affordability is imperative to this goal.

The Water Authority supports the criteria laid out in the Human Right to Water (HR2W, California AB 685) and establishing affordability mechanisms at the state and local level to assist customers and to identify quickly which areas of the state are at risk of being unable to provide clean, affordable water to its residents. The Water Authority has also reviewed and refreshed its organizational values to help ensure its approaches to water policy, outreach, business practices, and workplace culture are collaborative, inclusive and value diversity. To help people recognize how this approach is embedded in this Business Plan, each program description will spotlight an objective that helps advance Water Equity and Affordability.
Intergovernmental Relations

The nexus between regional growth and water supplies is an ongoing and important discussion. While the San Diego region’s growth rate has slowed, the population is still increasing. Between 2000 and 2015, the region’s population increased approximately 15 percent. This equates to roughly 414,000 more people in the region. Reliable water supplies are also key to fueling economic growth and supporting the region’s key industries, including agriculture, manufacturing, tourism and the military. The Water Authority continues to work closely with local and regional land-use agencies and continues to focus on state and federal level coordination. A significant portion of the region’s water supply is integrated with large and complex water systems, such as the Colorado River. Taking an active role in the intergovernmental arena and advocating for the San Diego region is necessary to ensure supply reliability.

Integrated Public Policies

The Water Authority’s involvement with regional agencies and collaboration with partners throughout the state is key for the integration of public policies affecting energy, housing, local government finance, transportation, and water quality and supply. Advocating for policies that advance regional and local initiatives and protect ratepayers is in the public’s best interest to ensure public agencies work in a consistent direction for the benefit of the region.

Transparent and Open Disclosure

The Water Authority strives to make decisions that positively contribute to the well-being of ratepayers today and in the future. Organizations with transparent, open, ongoing disclosure of performance information strengthen the water industry and communities.

Public and Private Partnerships

The Water Authority has successfully engaged in partnerships with its member agencies, the private sector, community organizations, and ratepayers. These partnerships have resulted in the construction of the Twin Oaks Valley Water Treatment Plant, Helix Water Treatment Plant, San Vicente Dam Raise, Claude “Bud” Lewis Carlsbad Desalination Plant, and the creation of innovative water-use efficiency programs. When cost effective and feasible, the Water Authority and its member agencies will identify and evaluate opportunities for collaboration with each other and private enterprises to provide services and water supplies and conveyance of those supplies.

Renewal and Replacement of Aging Infrastructure

Each year the American Water Works Association (AWWA) releases a State of the Water Industry report based on responses to an annual survey of industry professionals. The survey provides an industry-wide self-assessment and gathers information to support the water community’s major challenges. The 2022 report identified that renewal and replacement of aging water infrastructure continues to be the number one issue.

Read the American Water Works Association (AWWA) state of the Water Industry report
The Water Authority has remained vigilant with managing its infrastructure starting with pipeline rehabilitation in the 1980s, monitoring for early signs of aging beginning in 1992, and establishing a formal, consolidated, management program in 2009. Overall, the agency continues to invest in its critical water conveyance infrastructure through the Asset Management Program. The overall goal of the program is to manage infrastructure assets by analyzing a broad spectrum of risks and optimizing the timing of infrastructure rehabilitation spending. In recent decades, the program has completed 47 miles of pipeline rehabilitation, the comprehensive assessment of more than 150 miles of pipelines using advanced technologies, and visually inspected all 310 miles of pipelines in the system.

**Technological Trends**

**Technology**

The Water Authority has been very successful at fostering innovation and the use of new technologies to help meet the changing needs of the water industry. Moving forward, the Water Authority will continue to leverage new technologies to support the areas of communication, planning and design, daily operations, and business services. The water industry, like many others, has seen an increase in cybersecurity threats, and the Water Authority continues to collaborate with other organizations to promote coordinated security responses and adopt mitigation methods to protect and secure its technical infrastructure. The Water Authority is also optimizing its maintenance activities by using new technology and in-house developed inspection technologies. The innovation program, a relatively advanced idea for a public agency, will help the Water Authority continue to be a technology pioneer that pursues cost efficient solutions to help safeguard critical water assets and increase the value to customers.

**Potable Reuse Water**

Reuse water is part of a natural cycle. The Earth’s water supply is a closed loop system, with all the water on the planet being used over and over again. Water can be reused safely, efficiently, and in a sustainable manner. The Water Authority supports our member agencies in developing potable reuse projects through legislative and regulatory advocacy, assisting with securing project funding, and system integration. Potable water reuse projects developed by the member agencies are a viable part of the Water Authority’s supply portfolio and an important tool to achieve the Water Authority’s mission of securing a safe and reliable water supply for the region.
Environmental Trends

Climate Change

The climate is becoming increasingly warmer and drier, and ocean levels are on the rise. Snowfall in the Sierras, a major source of water for California, is occurring later and melting earlier, reducing runoff and making its management tougher for water agencies. The Water Authority has been incorporating the effects of climate change into its long-term planning on both supplies and demands for the past two decades, most recently in its 2020 Urban Water Management Plan, to be more resilient. The Water Authority also adopted a Climate Action Plan to track and lower its greenhouse gas emissions to help mitigate its contributions to climate change. Lastly, the State of California now mandates that government agencies incorporate climate change into their planning efforts to address its impacts and reduce their carbon footprint.

Energy Demand

The Water Authority recognizes that energy is a significant cost in treating and delivering water to its member agencies. The Water Authority is pursuing opportunities to reduce these costs and energy demands through a variety of energy initiatives that include agency-wide planning, regulatory and legislative engagement, operations of existing energy facilities, and diversification of its energy supply portfolio. These initiatives will help the Water Authority stabilize water rates, reduce greenhouse gas emissions, and address economic and electrical system reliability risks.

Environmental Sustainability

The Water Authority is engaged in a variety of sustainability initiatives, such as the development of renewable energy sources, the reduction in fleet emissions, and a decrease in waste production. A commitment to support cost-effective sustainability programs that benefit the environment and promote thoughtful stewardship of natural resources is essential to decreasing the financial impact on ratepayers. These programs also help the Water Authority better anticipate and adapt to the impacts of climate change while reducing its greenhouse gas emissions, making a positive contribution to a more sustainable future for the region.

Decreased snowfall levels in the Sierra Nevada indicate an increasingly warmer and drier climate.
Natural Disasters

The Water Authority recognizes its responsibility to be prepared and to respond quickly, safely and effectively to emergency situations that arise within its jurisdiction. Building partnerships with other utilities and businesses for mutual aid, establishing clear public communication procedures, and having resources in place to effectively meet the needs at hand are evidence of the agency’s commitment to the well-being of the communities it serves.

Limited Local Water Supplies

Traditional sources of water supplies, such as local surface water and groundwater, are limited and becoming less reliable in the face of climate change and over-drafting, respectively. Historically these supplies represent the least-costly source of water, but climate change is making these resources more scarce. As a result, they will continue to comprise a smaller percentage of the region’s water supply portfolio and make the development of additional, more resilient water supply sources, paired with increased water-use efficiency, essential.

Business Plan Performance Assessment

Water Authority Management will conduct periodic performance assessments of the Business Plan objectives and tactics, and key performance indicators. These assessments will be presented to the Board of Directors and the public annually.

The latest performance report will be posted at www.sdcwa.org under the About Us tab. The first performance report for this business plan will be posted in early 2023.
Chapter Overview

The Water Supply focus area consists of three programs: **Imported Water**, **Local Water**, and **Resource Planning**.

Ensuring a diverse water supply portfolio supported by the long-term sustainability of local and imported water supplies depends on close coordination and collaboration with Water Authority member agencies and the public. Engaging stakeholders and guiding regulatory and legislative policy will help the Water Authority and the region plan for the future, obtain necessary funding, develop the necessary infrastructure, and attain water reliability objectives.

**Key issues of the Water Supply Focus Area include:**
- Ensuring appropriate cost allocation and long-term viability of imported water supplies including transportation of those supplies to the San Diego region
- Maximizing storage opportunities to provide operational flexibility
- Supporting regulatory efforts for potable reuse as the “next increment” of water supply for the region
- Advancing long-term water use efficiency practices in the region in line with the new 2018 Water Conservation Legislation

**Water Supply - Programs and Focus Areas**

**SECTION 01**

**Imported Water**

Imported Water addresses the long-term viability, sustainability, and reliability and fiscal issues surrounding the Water Authority’s imported water supplies.

- **Bay-Delta**
- **Colorado River**
- **Metropolitan Water District**

**SECTION 02**

**Local Water**

Local Water supports the on-going execution of the Water Authority’s and member agencies’ water supply diversification strategy.

- **Member Agency Supply**
- **Potable Reuse**
- **Seawater Desalination**

**SECTION 03**

**Resource Planning**

Resources Planning guides the Water Authority as it strives to carry on its visionary planning and implementation of pioneering water resource management and water efficiency programs and strategies.

- **Water Management Planning**
- **Water Shortage and Drought Resource Management**
- **Water Use Efficiency**
The Past, Present, and Future of San Diego’s Water Supply Portfolio

**1991 Water Supply Sources**
- Total = 552 TAF/yr
- 95%
- 5%

**2021 Water Supply Sources**
- Total = 503 TAF/yr
- 11%
- 16%
- 4%
- 6%
- 10%
- 9%
- 5%

**2045 Water Supply Sources**
- Total = 631 TAF/yr
- 12%
- 18%
- 32%
- 7%
- 8%
- 9%
- 7%

**TAR:** Thousand Acre-Feet  |  **One acre-foot** = 325,851 gallons

**SOURCE:** 2020 Urban Water Management Plan
Imported Water

Overview

Imported water is a critical component of the San Diego region’s supply portfolio, as the region has minimal natural water resources. The Water Authority receives imported water through (1) conservation programs made possible by the Quantification Settlement Agreement (QSA) and specifically through the conserved water transfer agreement with the Imperial Irrigation District (IID) and canal lining projects, and (2) water purchases from the Metropolitan Water District of Southern California (MWD). These imported supplies, primarily from the Colorado River and to a much lesser extent the Sacramento-San Joaquin Bay-Delta (Bay-Delta), are vital to providing a diversified water supply portfolio on which the San Diego region can rely. Both the Colorado River Program (CRP) and Metropolitan Water District Program (MWDP) strive for excellence through innovative strategies to ensure these critical supplies continue to provide the San Diego County region with a cost-effective, resilient water supply into the future.

The Water Authority’s CRP safeguards the region’s highly reliable and cost-effective QSA supplies, consisting of water conserved through the Water Authority’s investments in the IID conserved water transfer agreement and the lining of the All-American and Coachella Canals. A key role of CRP is ensuring annual milestones are met for the timely delivery of these supplies at the lowest cost possible. CRP also works collaboratively with the Water Authority’s QSA partners, the Basin States, the Colorado River Board, the Bureau of Reclamation (Reclamation), tribes, Mexico and other stakeholders to address critical issues, in particular the long-term sustainability of the Colorado River and environmental matters, such as the Salton Sea. Additionally, CRP is working to develop new and innovative storage solutions to benefit the region by providing greater operational flexibility in managing its supplies and the entire river system by helping to support drought contingency planning efforts. The department’s Imperial Valley Outreach Program supports these efforts by engaging with a diverse group of stakeholders, ensuring the Water Authority’s perspective is represented and understood. Finally, the CRP team continues to pursue options for the long-term cost-effective conveyance of the Water Authority’s QSA supplies.

The Water Authority’s MWDP promotes collaborative and innovative solutions at MWD to ensure its long-term sustainability as Southern California’s supplemental imported water provider. The MWDP team advises and supports the Water Authority’s Board Officers and MWD Delegates to advance the Water Authority’s MWD policies and objectives, including cultivating alliances with MWD, its member agencies, the state, and other stakeholders. Building on the successes achieved in the rate litigation, the Water Authority is committed to resolving remaining issues in the litigation and working collaboratively with the MWD board and member agencies on issues important to MWD’s long-term reliability and ability to equitably fund and provide its services.
Imported Water Focus Areas

The focus areas of the Imported Water programs are Bay-Delta, Colorado River, and Metropolitan Water District. Within each focus area are management strategies to accomplish the major objectives and tactics over the next five fiscal years.

Bay-Delta

As the San Diego region continues to reduce its reliance on the Bay-Delta - consistent with state policy - the Water Authority remains engaged in activities to ensure its ratepayers' interests are protected. The Bay-Delta estuary faces many challenging environmental conditions, including those caused by operations of the State Water Project and which are exacerbated by a changing climate. To improve the reliability of the State Water Project in the face of sea level rise and seismic risk, the state is considering a single-tunnel Bay-Delta project intended to improve water supply reliability for State Water Project contractors.

On July 25, 2019, the Water Authority Board of Directors updated its policy principles to convey the Water Authority’s support for Governor Newsom’s Water Resilience Portfolio approach to water management that meets the needs of California’s communities, economy, and environment through the 21st century, including a single-tunnel project to move water through the Bay-Delta. The Water Authority’s support for the tunnel is conditioned on the project’s costs being properly allocated as supply charges. The Water Authority will pursue management strategies that ensure costs for fixing the Bay-Delta are equitably apportioned among water users and commensurate with the water supply and quality benefits received. Main objectives and tactics driving these management strategies include advocacy of programs and projects consistent with the Water Authority’s policy principles, including conditional support of the tunnel project. These approaches intend to ensure that the tunnel’s cost recovery does not disproportionately impact San Diego County ratepayers and support the need for an equitable, enduring solution in the Bay-Delta.

The Water Authority’s Bay-Delta Program advocates for projects consistent with the Water Authority’s policy principles.
The Water Authority’s investment in its Quantification Settlement Agreement (QSA) conserved water supplies provides the San Diego County region a safe, reliable, and cost-effective supply that represents more than half of the region’s water. These QSA supplies consist of 200,000 acre-feet annually of water received through the conserved water transfer agreement with IID and 77,700 acre-feet per of water conserved through the lining of the All-American and Coachella Canals, which the Water Authority funded with assistance from the state. The conserved water transfer runs through 2047 with the possibility to extend through 2077 by mutual consent, and the water conserved through the canal lining projects runs through 2112. Through the funding IID receives from the Water Authority’s supply purchases, IID implements both on-farm and system conservation projects. This funding is not only critical to supporting these conservation programs and ensuring the region receives its QSA supplies, but also to support the state in operating within its 4.4-million-acre-foot Colorado River annual apportionment. With these factors in mind, the management strategies and objectives of the Colorado River focus area continue to be the successful implementation of the QSA milestones and environmental mitigation requirements, development of innovative and flexible options for the storage, delivery, and future conveyance of QSA supplies, and maintaining strong relationships with key stakeholders. These strategies and objectives are all meant to create lasting solutions that serve the Water Authority and its member agencies today and benefit generations to come.

In 2021, the first ever Lower Basin shortage was declared, a step that did not impact California’s 2022 Colorado River supplies, including the Water Authority’s high priority QSA supplies. However, the 2021 shortage declaration led to implementation of the 2007 Colorado River Interim Guidelines for Lower Basin Shortages and the Coordinated Operations for Lake Powell and Lake Mead, 2019 Drought Contingency Plan, and Binational Water Scarcity Contingency Plan impacting Arizona, Nevada, and Mexico. Further, it underscored the importance for the Water Authority’s participation in the Lake Mead storage program to both serve the region’s needs and benefit the entire basin. To that end, the Water Authority will continue to engage in discussions with basin-wide stakeholders to promote collaborative solutions on the river that also protect San Diego County’s Colorado River supplies. Those discussions will also play a role in the development of the next set of operating guidelines for the Colorado River, planned to be adopted by Reclamation by 2026.

The white “bathtub ring” at Lake Mead, more than 10 stories high, indicates how far water levels have dropped at this key reservoir on the Colorado River.
The Water Authority also actively participates in environmental efforts associated with its QSA water supplies through the Lower Colorado River Multi-Species Conservation Program and the QSA Joint Powers Authority (QSA JPA) for mitigation at the Salton Sea. The Water Authority serves as the administrative arm of the QSA JPA and manages a QSA JPA website that launched in 2021 and enhanced stakeholder access to information. The funding provided by the QSA JPA, capped at $133 million in 2003 dollars, funds the implementation of an environmental mitigation program that centers around the Salton Sea. While separate from the state’s restoration program, the QSA JPA works cooperatively with the state so that the mitigation projects and restoration program complement one other.

Additionally, the canal lining supplies, which represent the lowest cost water for the San Diego region, require CRP’s active engagement with project partners to continue to implement post construction mitigation projects, and operation, maintenance, and repair (OMR) of the canals cost-effectively. With this in mind, CRP is collaborating with its partners to reduce the OMR cost through the construction of the Coachella Mid-Canal Storage Project. CRP will continue to explore measures to further reduce costs and benefit the region.

**Metropolitan Water District**

The Water Authority currently relies on MWD to transport its independent Colorado River supplies and purchases supplemental imported water from MWD. The Water Authority has a vested interest in ensuring MWD’s rates, charges, policies, and programs are equitable and its business model is sustainable. Metropolitan Water District Program, working in conjunction with Board leadership and the MWD Delegates, strives to foster collaboration and discourse of key MWD policy issues.

MWD is in a period of transition where its new General Manager is leading the agency, under the guidance of the board, in important resource and financial planning processes, a rate structure review, decisions about potential major infrastructure projects like the Bay-Delta tunnel, Sites Reservoir, and Pure Water Southern California, and a review of its current local resource program. Engagement in these key decisions, which will determine MWD’s future role in the region, through advocacy and coalitions is vital. Paramount to MWD’s longevity and relevancy is the need for it to be forward-thinking, nimble, and adaptive in response to changing conditions. The MWDP team strives to ensure positive outcomes by embracing the challenge of working in a dynamic environment that includes many different stakeholders to develop and implement strategies that achieve the Water Authority’s long-term reliability, fiscal sustainability, and affordability goals at MWD, in accordance with the Water Authority Board of Directors’ strategic objectives.

The Water Authority works to advance policies at MWD that promote transparent governance, legal rate setting, fiscal responsibility, and predictable supplies; create equity among MWD member agencies; and facilitate the efficient and optimal use of the region’s resources and investments. The Water Authority’s MWD management strategies aim to advance these types of policies at MWD to ensure the reliability, quality, and affordability of MWD’s water supply and services, and MWD’s long-term fiscal health.

*Canal-lining projects save tens of thousands of acre-feet of water every year that were previously lost to seepage.*
Major objectives and tactics focus on gaining support for and understanding of the Water Authority’s positions on key MWD policy concerns, including from those with other perspectives.

To protect affordability for its ratepayers, the Water Authority successfully challenged MWD’s rates.

**Through the rate litigation, MWD:**

- Corrected its calculation of the Water Authority’s preferential right to MWD water
- Stopped recovering demand management costs on the transportation of the Water Authority’s QSA supplies and instead properly allocated these costs to supply
- Awarded agreements valued at almost half a billion dollars to support water supply projects in the San Diego region
- Returned $80 million in overcharges and nearly $15 million in attorney fees, including interest

In her January 2021 order, Superior Court Judge Anne-Christine Massullo stated, “San Diego prevailed, and the judgment not only benefits its own ratepayers but all of the nearly 19 million people in Metropolitan’s service area because enforcing cost-of-service principles serves the interests of all ratepayers.” On the heels of these outcomes, the Water Authority is poised to continue productive dialogue with MWD and other stakeholders to advance equitable policy objectives for the benefit of the region. The Water Authority is equally committed to trying to eliminate pending and future litigation with MWD.

**Spotlight on Water Equity and Affordability**

Imported Water is focused on ensuring the water supplies upon which the San Diego County region relies are affordable and promote equity. Specifically, MWDP is working to ensure MWD’s water resources are accessible and lawfully funded. MWDP is focused on ensuring affordability as MWD updates and integrates its long-term resource and financial management plans and policies with its rate structure. These plans and policies should reflect the services member agencies are seeking from MWD and are willing to fund to best position MWD to implement equitable, cost-effective resource investments and management strategies.

MWDP will also advocate that the costs of MWD’s investments are recovered through rates based on cost of service principles.

CRP is focused on protecting the San Diego County region’s most cost effective supply source. The San Diego region’s conserved QSA supplies are a lower-cost base supply which helps support the region’s local water agencies’ incremental development of their own supply projects. Further, CRP is pursuing innovative strategies to enhance supply management and to control costs with the goal of ensuring continued access to these affordable water supplies for all water users in the region today and for generations to come.
## Management Strategies

### Bay-Delta

#### A
Advocate Board policies regarding Bay-Delta issues, funding initiatives, and sustainable Bay-Delta solutions to federal, state, local, and other stakeholders.

#### B
Protect ratepayers from paying an inequitable share of Bay-Delta fix costs by ensuring project costs are properly assigned to supply rates and charges and are consistent with DWR’s historic practice of assigning similar projects as “conservation” or supply charges.

### Colorado River

#### C

#### D

#### E

### Metropolitan Water District

#### F
Advise MWD Delegates in advocating and advancing Water Authority strategic goals at MWD.

#### G
ensure its long-term sustainability as

#### H
and collaboration in MWD’s decision making processes.
### Objectives and Tactics

<table>
<thead>
<tr>
<th>Objective</th>
<th>Tactic</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Develop new, flexible water storage/supply management opportunities for the Water Authority's Colorado River supplies, including Lake Mead, local, and binational storage solutions, to benefit both the region and the entire Basin.</td>
<td>(C, D)</td>
</tr>
<tr>
<td>2</td>
<td>Secure long-term cost-effective conveyance of the Water Authority's QSA conserved water supplies for the benefit of the region and the entire river system.</td>
<td>(C, D)</td>
</tr>
<tr>
<td>3</td>
<td>In coordination with the project partners, complete construction of the Coachella Mid-Canal Storage Project to help reduce the Water Authority's share of operation, maintenance, and repair costs.</td>
<td>(D, E)</td>
</tr>
<tr>
<td>4</td>
<td>Work in concert with the General Counsel's office to achieve resolution of all pending rate cases, including obtaining a final resolution for the 2014, 2016, and 2018 cases and a court decision on the offsetting benefits by 2025.</td>
<td>(F, G, H)</td>
</tr>
<tr>
<td>5</td>
<td>Engage in Basin States, interstate, and binational policy discussions, including as they relate to renegotiation of the 2007 Interim Guidelines and addressing the ongoing drought on the Colorado River, while promoting collaboration and innovative partnerships.</td>
<td>(C, D, E)</td>
</tr>
<tr>
<td>6</td>
<td>Advance policies, programs, and projects that are consistent with state policy to reduce reliance on the Bay-Delta and with the Water Authority Board’s Bay-Delta and Project Policy Principles, including the support of a single-tunnel Bay-Delta project, contingent on the proper allocation of project costs on MWD’s rates and charges.</td>
<td>June 2027</td>
</tr>
<tr>
<td>7</td>
<td>Work with SA PA parties and Lower Colorado River Multi-Species Conservation Program stakeholders to ensure all required environmental mitigation is implemented.</td>
<td>June 2027</td>
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<tr>
<td>8</td>
<td>Lead stakeholder outreach and engagement to enhance relationships as they relate to the conserved water the Water Authority receives through the SA.</td>
<td>June 2027</td>
</tr>
<tr>
<td>9</td>
<td>Collaborate with MWD and member agency board members, staff, and other stakeholders to improve MWD system flexibility and accessibility through the 2020 Integrated Water Resources Plan implementation, evaluation of the Pure Water Southern California, and other efforts.</td>
<td>June 2027</td>
</tr>
<tr>
<td>10</td>
<td>Work in concert with the Water Authority's Board Officers and MWD Delegates to ensure collaboration, equity, and transparency in MWD policies and processes, including the rate refinement, long-range financial planning, and Integrated Water Resources Plan processes.</td>
<td>June 2027</td>
</tr>
<tr>
<td>11</td>
<td>In tandem with the Water Authority's MWD Delegates, advocate securing adoption of a long-range finance plan, business model, and rate structure that will ensure MWD's long-term financial sustainability.</td>
<td>June 2027</td>
</tr>
</tbody>
</table>
**WATER SUPPLY > IMPORTED WATER**

**Key Performance Indicators**

**KPI - 01**

Ensure full amount of scheduled QSA conserved water, which accounts for more than half of the San Diego County region’s supply, is delivered annually as scheduled. Water deliveries are set at 277,700 acre-feet* annually and will continue at that level through the term of the respective agreements.

**KPI - 02**

Report 90 percent of key MWD policy issues within two months of them being discussed at MWD through 2027 to increase awareness and understanding of those issues.

---

* Water Authority QSA supplies are comprised of 200,000 acre-feet of conserved transfer water from IID, which runs through 2047 and can be extended through 2077 by mutual consent, and 77,700 acre-feet of water conserved through the canal lining projects, which runs through 2112.
Local Water
Overview

Local water resources developed and managed by the Water Authority and its member agencies are critical to the success of the region’s water supply diversification program. Local projects reduce the need for imported water and often provide agencies with a reliable, drought-resilient supply. Local resources include recycled water, groundwater, surface water, potable reuse, and seawater desalination. The San Diego region has a long history of capturing local stormwater in backcountry and urban reservoirs for use as a surface water supply. Potable reuse and seawater desalination are newer water supplies that have been realized or initiated and reflect ongoing pioneering efforts to diversify the region’s water supply portfolio.

As part of this program, the Water Authority is driven to work closely with its member agencies to foster and support development and optimization of local water supplies. This is accomplished by identifying, promoting, and obtaining outside funding opportunities to assist agencies in offsetting project costs; serving as a visionary leader and facilitator on various regulatory issues that affect the region; and providing technical assistance.

Commercial operation of the Claude “Bud” Lewis Carlsbad Desalination Plant in December 2015 represents a significant local water supply accomplishment. It is the result of a twelve-year collaborative effort by the region to secure up to 56,000 acre-feet of local, drought-proof supply. Since the start of operations, it has produced more than 90 billion gallons of high-quality drinking water and won numerous awards including Global Water Intelligence’s Desalination Plant of the Year, San Diego County Taxpayers Association’s Grand Golden Watchdog Award, and the Association of California Water Agencies Clair A. Hill Water Agency Award. In addition to the progress made in seawater desalination, the Water Authority has successfully supported member agencies on grant funding opportunities in the areas of potable reuse research and local supply development, the development of new regulations and regional planning efforts for potable reuse, recycled water and brackish water programs, and managed local project incentive programs.

Since it began operations, the Claude “Bud” Lewis Carlsbad Desalination Plant has produced more than 90 billion gallons of high-quality drinking water.
Local Water Focus Areas

The focus areas within the Local Water Program support the development and management of **Member Agency Supply**, **Potable Reuse**, and **Seawater Desalination**. Each focus area identifies key management strategies to drive the execution of priority objectives and tactics over the next five fiscal years.

Member Agency Supply

Member agencies take the lead in developing and managing local supplies such as recycled water, potable water reuse, groundwater, and surface water. The Water Authority coordinates regional efforts with member agencies to promote a common vision across the region when engaging in statewide and regional forums. Strategies in this focus area include improving and maintaining regulatory flexibility and source water quality for the San Diego region’s water supply and supporting member agency efforts to obtain outside funding. Supporting objectives and tactics include advocating for reasonable monitoring requirements and standards for constituents of emerging concern in potable and recycled water, participating in national efforts to evaluate permitting in support of local supply projects, and developing strategies for source water protection. These efforts are all in support of the various existing and proposed local supply facilities and projects.

Seawater Desalination

The Water Authority has taken a leadership role in the state by developing local seawater desalination through a public-private partnership for the largest desalination facility in the nation. Management strategies linked to seawater desalination over the next five years include the ongoing oversight of the Claude “Bud” Lewis Carlsbad Desalination Plant to ensure compliance with the Water Purchase Agreement and the Ocean Plan Amendment, which was adopted by the State Water Resources Control Board in May 2015 and addresses seawater desalination plant intake and discharge facility modifications.

Old Mission Dam, completed in the early 1800s, was the first major construction project designed to manage the San Diego region’s relatively scarce water supplies.
Potable Reuse

The Water Authority’s member agencies have advanced cutting-edge research and innovative projects that set the standard for potable reuse in California. The Water Authority coordinates with member agencies on potable reuse to create a regional voice for reasonable and flexible regulations for approval of a safe drinking water supply that will support the region in a time of climate change and unprecedented drought. For example, the Recycled Water Workgroup, comprised of Water Authority and member agency staff, provides a forum for regional collaboration on key potable reuse initiatives. Management strategies for this focus area include evaluating the benefits of water quality improvements associated with new local water supplies.

Spotlight on Water Equity and Affordability

Water affordability and equity are an important part of water supply planning and implementation efforts. Reasonable and equitable regulation of water supply, including desalination and water reuse, keep the cost of meeting those regulations lower and more affordable. Equitable regulations also remove unreasonable barriers and allow additional water suppliers to develop, and assist in implementing reliable water supply projects.

The Water Authority also supports and advocates for external funding opportunities for local supply projects. This allows the region as a whole to benefit from a lower cost of water supplies. Affordable and reliable water supply projects increases the availability and affordability of water throughout California, including areas with disadvantaged or underrepresented communities.

Pure Water Oceanside opened in March 2022, providing more than 30 percent of the city’s water supply.
### Local and Member Agency Supply

- **A** Improve regulatory flexibility and streamlining for local water supplies.
- **B** Support funding from outside the region for local water supply projects.
- **C** Improve statewide drought response to account for local conditions.

### Seawater Desalination

- **D** Assess and recognize the benefits of water quality improvements associated with new local water supplies.
- **E** Ensure compliance with Lewis Carlsbad Desalination Plant Water Purchase Agreement.
- **F** Ensure continued operation of Lewis Carlsbad Desalination Plant for standalone operation and compliance with Ocean Plan Amendment.
### Water Supply: Local Water Objectives and Tactics

<table>
<thead>
<tr>
<th>Objective</th>
<th>Tactic</th>
<th>Target</th>
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<tbody>
<tr>
<td>1</td>
<td>Complete Contract Administration Memoranda and any necessary Water Purchase Agreement contract amendments</td>
<td>(E, F)</td>
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<tr>
<td>2</td>
<td></td>
<td>(D)</td>
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<tr>
<td>3</td>
<td></td>
<td>(E, F)</td>
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<td>4</td>
<td></td>
<td>(B)</td>
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<tr>
<td>5</td>
<td></td>
<td>(A, C)</td>
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<tr>
<td>6</td>
<td></td>
<td>(B)</td>
</tr>
</tbody>
</table>
**KPI - 01**

Exceed the Claude “Bud” Lewis Carlsbad Desalination Plant Water Purchase Agreement Minimum Demand Commitment of 48,000 acre-feet annually.

**Carlsbad Desalination Plant Water Orders**

- FY23
- FY24
- FY25
- FY26
- FY27

- **Actual**
- **Target**

Acre-Feet: 0, 10,000, 20,000, 30,000, 40,000, 50,000, 60,000.
Resource Planning Overview

Resource planning is essential to ensuring a reliable water supply for the San Diego region and effectively managing potential supply shortages. Long-term supply planning at the Water Authority is accomplished with two major visionary plans – the San Diego regional Urban Water Management Plan (UWMP) and the San Diego Integrated Regional Water Management (IRWM) Plan. In collaboration with its 24 member agencies, the Water Authority completed the 2020 UWMP update, which was adopted by the Board in May 2021 and accepted by the State Department of Water Resources (DWR) in May 2022. In 2023, the Water Authority will begin initial efforts to develop its 2025 UWMP with the update of its long-range water demand forecast. Staff will seek Board approval of the 2025 UWMP in early 2026 and submit the plan to DWR by mid-2026. The 2019 IRWM Plan, adopted in July 2019 by the Water Authority Board as part of the San Diego Regional Water Management Group (RWMG), continues to be the IRWM Program’s guiding document for funding local projects. The Plans were prepared and updated, as required, to comply with state requirements and maintain the region’s eligibility for state funding. Going forward, implementation of the conservation laws created by the passage of SB 606 and AB 1668, “Making Water Conservation a California Way of Life,” signed in 2018 will impact water suppliers throughout the state. For the Water Authority, the laws require state reporting of water use in several areas, including activities related to strengthening local drought resilience.

Another important aspect of resource planning is water-use efficiency, which supports the Water Authority’s long-term strategy to improve the reliability of the region’s water supplies by promoting and facilitating the efficient use of water. As the new long-term water use efficiency targets from the 2018 laws go into place, they will require more technical assistance and specified savings. The Water Authority will work with its member agencies and associations to develop tools and programs to calculate and meet those targets.

From 2008 to 2022, the Water Authority worked with its RWMG partners, the City of San Diego and the County of San Diego, to secure approximately $117 million in IRWM funding from ten DWR grants to support 78 high-priority water projects that help achieve the goals of the San Diego IRWM Plan. This total includes $5 million in state funding awarded in early 2022 from the Urban and Multi-benefit Drought Relief Grant for four disadvantaged community projects.

Approximately $16 million from the second round of Proposition 1 bond funding is anticipated to be awarded by early 2023 to support an additional and diverse set of projects with local and regional benefits. The Water Authority continues to fulfill ongoing obligations to both its RWMG partners and DWR to administer the IRWM grant funding obtained by the San Diego IRWM Program. This is achieved through the IRWM Grant Administration Program (GAP), which administers the awarded grant funds for individual IRWM projects. The cost of the GAP, which is part of the Water Resources Department, is offset by a portion of the awarded grant funds. In the next few years, the Water Authority and its partners will continue to look for additional funding opportunities – even outside of the state IRWM funding – to support local projects, including those benefitting disadvantaged communities. The Water Authority will develop a plan to move forward with or without allocated funding to address regional water management and resources challenges and needs. The Resource Planning Program also encompasses water shortage and drought response management.
The Water Authority’s primary planning document that addresses water supply shortages is the Water Shortage Contingency Plan (WSCP). The WSCP includes a series of orderly, progressive steps for the Water Authority and its member agencies to take during water shortages to minimize impacts to the region’s economy and quality of life. The WSCP was approved by the Board in May 2021 and will be updated and included as part of the 2025 UMWP.

**Resource Planning Focus Areas**

The focus areas of the Resource Planning Program are **Water Management Planning**, **Water Shortage and Drought Response Management**, and **Water Use Efficiency**. Each focus area includes management strategies designed to accomplish significant objectives over the next five fiscal years.

**Water Management Planning**

The Water Management Planning focus area includes management strategies for maintaining an IRWM plan, preparing a regional UWMP, and engaging in the San Diego Local Area Formation Commission (LAFCO) process on a proposed detachment/reorganization by Fallbrook Public Utilities District (Fallbrook) and Rainbow Municipal Water District (Rainbow). The IRWM plan addresses resource management, water quality, and habitat in a region that includes the portion of San Diego County that is tributary to coastal waters. The plan builds on local and regional management plans within the San Diego region with input from an array of key stakeholders. It also provides the basis for acquiring grant funding from the state. The UWMP identifies a diverse mix of water resources projected over the next 25 years to ensure long-term water supply reliability for the region. It is prepared in accordance with the state Urban Water Management Planning Act and includes conservation measures, programs, and policies. Together, these plans ensure a reliable regional water supply, and comply with evolving state requirements to maintain the region’s eligibility to receive state funding and pursue other funding for projects that achieve San Diego IRWM Program goals. Strategies over the next five fiscal years include an update to the regional UWMP to identify supplies necessary to meet future demands and secure the region’s allocated share of IRWM grant funding from DWR’s Proposition 1 grant program. Strategies for the Fallbrook/Rainbow proposed detachment include continued full engagement in the San Diego LAFCO process to ensure that all conditions outlined in Board Resolution 2020-06 are fully addressed.

**Water Shortage and Drought Response Management**

The Water Authority relies on its WSCP to effectively manage and respond to water supply shortages during droughts to avoid or minimize impacts to the region. The plan identifies regional shortage response actions to be taken at specific shortage levels by the Water Authority and, where appropriate, its member agencies. A critically important element of the plan is the municipal and industrial supply allocation methodology, which provides the Water Authority a method to equitably allocate Water Authority supplies to its member agencies, if the region were to be cut back. The plan also includes the methodology to prepare an annual water supply and demand assessment to document the Water Authority’s anticipated demands during a dry year and the supplies available to meet those demands. The assessment must be submitted to the state by July 1 of each year.
Water Use Efficiency

The WSCP responds to specific conditions by reducing water use in the short term via policies and ordinances that enforce temporary water use restrictions. The plan and other related measures adopted by the Board of Directors may trigger the accelerated implementation of conservation programs administered by the Water Authority. The Water Use Efficiency focus area utilizes several management strategies, including continuing to pioneer the advancement of sustainable landscapes, increasing program administrative efficiencies, and enhancing customer service and support to member agencies and program participants. Other strategies involve providing leadership at the state and local level to advocate for long term water use efficiency policies that benefit the San Diego region and obtaining external funding for Water Use Efficiency Program efforts. Objectives and tactics in this area include implementing and closing out four distinct Proposition 84 grant awards (Rounds 1, 2, 3, and 4); Proposition 1 grant award; leveraging regional programs available through the Metropolitan Water District; and enhancing a long-standing Water-Energy Nexus partnership with SDG&E.

Spotlight on Water Equity and Affordability

The San Diego IRWM Program is a collaborative effort to support integrated water planning across multiple disciplines. The Water Authority and other RWMG members facilitated the involvement of and support for underrepresented and disadvantaged communities (DACs) over the years. The Program formed the Justice, Equity, Diversity, and Inclusion (JEDI) Workgroup to identify additional opportunities for diverse communities and strengthen regional DAC participation in the Program.

Over the next five years, the Water Authority, in collaboration with members of the RWMG, will continue to assess opportunities to advance water equity and support investments for accessible, safe, and secure water supplies to disadvantaged and tribal communities. As the Program evaluates its future priorities and funding sources, the RWMG will further evaluate options and strategies to incorporate DAC considerations in IRWM planning and decision-making processes and to strengthen existing partnerships and forge new relations.

Encouraging wider adoption of water-efficient landscapes is a key water-use efficiency strategy.
**Water Management Planning**

A  Work with IRWM partners and stakeholders to develop long-term IRWM Program strategies that address funding sources and secure grant funding to support and achieve the goals of the IRWM Plan.

B  Develop a regional UWMP that complies with state requirements and ensures a reliable water supply for the San Diego region.

C  Update water management plans to maintain eligibility for state funding.

D  Engage in the LAFCO process on Fallbrook/Rainbow detachment application.

**Water Shortage and Drought Response Management**

E  Ensure planning documents are consistent and relevant to properly manage and respond to supply shortages.

F  Ensure that state proposed drought response actions are appropriate, progressive, and may be reasonably implemented by the Water Authority and its member agencies.

**Water Use Efficiency**

G  Implement best practices to manage and deliver water-use efficiency programs and services in a timely, convenient, and courteous manner.

H  Plan, develop, implement, or administer water efficiency programs and tools that meet the needs of member agencies and water users.

I  Support policies and actions that advance long-term water-use efficiency best practices and market transformations.

J  Leverage ratepayer investments by securing grants or other external funding sources and advocating for equitable benefits from MWD water-use efficiency programs.
## Objectives and Tactics

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<tr>
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<th>Target</th>
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<tbody>
<tr>
<td>1</td>
<td>Engage in the San Diego LAFCO process on Fallbrook/Rainbow detachment application to ensure all conditions outlined in Board Resolution 2020-06 are fully addressed</td>
<td>Dec 2022</td>
</tr>
<tr>
<td>2</td>
<td>Advocate with member agencies the equitable and reasonable development of statewide water use efficiency targets and drought management actions by the DWR and State Water Resources Control Board</td>
<td>July 2023</td>
</tr>
<tr>
<td>3</td>
<td>Conduct a funding study that provides short and long-term IRWM Program sustainability strategies in coordination with the RWMG to help ensure the Program’s viability and capacity to support regional objectives and needs in the future years</td>
<td>Dec 2023</td>
</tr>
<tr>
<td>4</td>
<td>Secure 25 million in external funding such as grant awards, utility funding, and in-kind contributions to support</td>
<td>June 2024</td>
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<tr>
<td>5</td>
<td>In collaboration with the RWMG, evaluate potential opportunities to strengthen disadvantaged communities’ drought response</td>
<td>June 2024</td>
</tr>
<tr>
<td>6</td>
<td>Identify and implement studies that support the Water Authority’s position on water use efficiency, demand and drought response</td>
<td>July 2024</td>
</tr>
<tr>
<td>7</td>
<td>Using the results of the funding study and DAC communities’ engagement efforts, develop further plans which define the IRWM Program’s future roles and funding sources that align with local and regional priorities</td>
<td>June 2025</td>
</tr>
<tr>
<td>8</td>
<td>Work with member agencies to maximize water use efficiency funding from MWD for Member Agency Administered Programs (MAAP)</td>
<td>July 2025</td>
</tr>
<tr>
<td>9</td>
<td>Complete the 2025 UWMP update to identify supplies necessary to meet future demands and comply with the Urban Water Management Planning Act</td>
<td>July 2026</td>
</tr>
<tr>
<td>10</td>
<td>Update the WSCP to comply with state requirements and include the plan as part of the 2025 UWMP</td>
<td>July 2026</td>
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KPI - 01

Implement regional conservation programs demonstrated by expending 95 percent of grants and external funding portfolio in accordance with the terms of each award.

Conservation Program Outside Funding Execution

- Cumulative Grant Expenditures
- FY23, FY24, FY25, FY26, FY27
- Target and Actual expenditure levels
WaterSmart Checkup inspections provide suggestions to homeowners on how to save water. Educational workshops with partners such as the Water Conservation Garden teach residents from around the region how to be smart with their water use.
CHAPTER 02
WATER FACILITIES
Chapter Overview

The Water Facilities focus area consists of three programs: **Infrastructure/Capital Improvement Program**, **Sustainability**, and **Water System Management**.

The Water Facilities focus area ensures the Water Authority’s complex network of water transportation, treatment, and storage facilities are efficiently and sustainably operated and maintained, resulting in a safe, reliable water supply to support the region’s economy and a good quality of life for its residents.

**Key issues of the Water Facilities Focus Area include:**

- Prioritizing a long-term capital improvement program and identifying efficiencies and reductions in operating costs while ensuring a reliable and safe water supply
- Balancing facility growth with water demands
- Managing facility operations, maintenance, and security to consistently and efficiently deliver a reliable water supply and meet member agency water demands
- Implementing cost-effective sustainability strategies that reduce environmental impacts, and promote thoughtful stewardship of natural resources within the Water Authority’s aqueduct system

**Water Facilities – Programs and Focus Areas**

**SECTION 01**

**Infrastructure & Capital Improvement Program**

Infrastructure/Capital Improvement Program addresses the development of and execution of the Water Authority’s capital projects.

**SECTION 02**

**Sustainability**

Implementing cost-effective and productive sustainability strategies that reduce environmental impacts, promote thoughtful stewardship of natural resources and enhance facility and supply resiliency are the focus of the Sustainability program.

**SECTION 03**

**Water Systems Management**

Water Systems Management ensures the Water Authority’s infrastructure is reliable, complies with water quality standards, and meets member agency demands through optimized operations and cost-effective maintenance.
The Water Authority has built a reputation of being both pioneering and visionary in its execution of large and complex capital projects. Over the past two decades, the focus of the Capital Improvement Program (CIP) was to build new infrastructure to provide untreated and treated water to the region as well as implement the award-winning Emergency and Carryover Storage Project which was a cornerstone of the Water Authority’s strategy to provide a safe and reliable water supply to the region.

The $1.5 billion Emergency and Carryover Storage Project is a system of reservoirs, interconnected pipelines, and pump stations designed to make water available to the San Diego region if imported water deliveries are interrupted by an emergency event or periods of extended drought. Some of the key facilities of the Emergency and Carryover Storage Projects include the Olivenhain Dam, Reservoir, Pipeline, and Pump Station; Lake Hodges Pipeline and Pump Station; and the San Vicente Pipeline, Pump Station, and Dam Raise. With the completion of the San Vicente Dam Raise in 2014, the major components of the Emergency and Carryover Storage Project were completed.

The current CIP budget is just over $1.5 billion. In June 2022, the Board amended the FY2022/2023 appropriation to $177.6 million. The current CIP reflects the shift from construction of new facilities to asset management and the optimization of the existing aqueduct system. One of the key strategies moving forward is to use a risk-based approach to prioritize the long-term rehabilitation and/or replacement of infrastructure. This will ensure that the Water Authority builds the projects needed most to ensure safety and reliability of the water supply for the region.
Infrastructure/CIP Focus Areas

The focus areas for the Infrastructure/Capital Improvement Program are **Asset Management**, **Infrastructure Planning**, and **New Facilities**. Within each focus area are strategies that will drive the Water Authority to accomplish the major objectives and tactics set for the next five fiscal years.

**Asset Management**

In 2009, the Water Authority adopted an Asset Management Program for its infrastructure assets worth $3 billion. Effective management of these assets yields savings from improved system reliability, effective rehabilitation, and lower increases to water rates over time. Several industry groups identify the Water Authority’s Asset Management efforts as both visionary and pioneering, and recognize it as a leader in the field. Beyond established practices such as pipeline inspections, risk analysis, program monitoring, and long-term forecasting, the program continues to pioneer new technology to optimize maintenance, condition assessments, and prioritization of assets for rehabilitation or replacement.

Asset Management is comprised of two components: Infrastructure Rehabilitation that consists of pipeline and facility assessments, repairs, and replacements; and Relining and Pipe Replacement that includes rehabilitation efforts specifically related to pre-stressed concrete cylinder pipe. To date, 47 miles (57 percent) of the Water Authority’s 82 miles of pre-stressed concrete cylinder pipe have been rehabilitated under this program. The Asset Management Program recently completed condition assessments which helped prioritize the long-term CIP needs and assisted in determining the Long-Range Financing Plan for the agency.

Pipeline inspections and relinings are important components of the Water Authority's Asset Management Program.
Pipeline relining projects often require carrying out major construction activities very close to neighboring homes or businesses. Careful planning and thoughtful outreach efforts help keep community impacts to a minimum.

To date, 47 miles, or 57 percent, of the Water Authority’s 82 miles of pre-stressed concrete cylinder pipelines have been rehabilitated under the Asset Management Program.
**Infrastructure Planning**

The Water Authority is working on its 2023 Regional Water Facilities Master Plan that focuses on optimizing the Water Authority’s existing system while being agile enough to adapt to a range of future operating and member agency water demand scenarios. These projects will consider local supply development that has both direct and indirect impacts to the operation and resiliency of the Water Authority’s system as well as supply reliability and diversity. Future infrastructure planning will be focused on the projects specifically identified in the upcoming 2023 Master Plan in addition to other projects subsequently identified that help maintain a safe and reliable water supply for the region.

**New Facilities**

The focus for new facilities has shifted from major infrastructure projects to rehabilitating and or replacing existing infrastructure and the optimization of the existing aqueduct system. This new focus involves the implementation of smaller projects. As a result, the Water Authority must adapt by developing business policies, practices, and procedures that are conducive to completing efficient designs and the award and management of smaller contracts. Management strategies that employ pioneering technology, such as 3-D scanning, drones, and automated scheduling and controls can promote the most efficient and cost-effective delivery of projects. The Water Authority will continue to employ existing and new innovative best management practices such as performance metrics, quality control and quality assurance, value engineering, and comprehensive “Gate” reviews for all CIP projects, while continuing coordination efforts with both internal and external stakeholders and member agencies.

**Spotlight on Water Equity and Affordability**

Over the next couple of years, the Water Authority will complete the 2023 Water Facilities Master Plan. The scope of work includes evaluating facility needs based on various supply and demand uncertainties and looking at system strategies that consider existing and future regional water facilities, operational resiliency/reliability, and supply reliability. The theme of the 2023 Water Facilities Master Plan is the “Value of Water,” balancing various benefits with costs to maximize the community and economic benefits of water infrastructure investment and foster community resilience in the face of a changing climate.

Alternative projects will be evaluated based on costs, benefits, risks, implementation, energy, greenhouse gas emissions, environmental impacts, and reliability. Ultimately, various project portfolios that optimize the regional water system and identifies potential saving opportunities will be brought to the Board for consideration resulting in an implementation plan that combines water supply reliability, water equity, and water affordability to help the Water Authority’s member agencies ensure the region has access to safe, reliable, and affordable drinking water.
Asset Management

A Ensure prioritization, optimal maintenance, and rehabilitation of assets.

B Pioneer and utilize new and innovative technology to reduce risk and increase productivity and

Infrastructure Planning

C Coordinate and align project scope and schedules within the Master Plan and the Asset Management Program to achieve the optimal balance between regional water reliability, safety, and cost.

D Optimize use of existing treatment, storage, and conveyance facilities to meet projected member agency water demands.

New Facilities

E Employ pioneering technology, innovation, and best management practices for all Capital Improvement Program projects.

F Develop innovative business policies, practices, and procedures that are aligned with smaller contracts.

G Collaborate with member agencies and other external stakeholders on the Capital Improvement Program.

H Coordinate with internal functional groups and stakeholders to promote delivery of projects.
<table>
<thead>
<tr>
<th>Objective</th>
<th>Tactic</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Complete construction of the Mission Trails Flow Regulatory Storage II and Flow Control Facility project to mitigate existing operational risks and meet future untreated water demands for the central and south county service areas (C, D, E, G, H)</td>
<td>Nov 2022</td>
</tr>
<tr>
<td>2</td>
<td>Complete construction of the auck Mesa Storage Reservoir and Pipeline Surge Protection project to provide operational flexibility on the First Aqueduct and long-term surge protection for the Valley Center Pipeline. (C, D, E, F, G, H)</td>
<td>June 2023</td>
</tr>
<tr>
<td>3</td>
<td>Complete construction of the Dulin Hill Erosion Repair project to repair slope damage resulting from past wildfires and provide additional protection to the Second Aqueduct. (A, C, D, G, H)</td>
<td>June 2023</td>
</tr>
<tr>
<td>4</td>
<td>Complete construction of the Pipeline 5 Relining – Twin Oaks Valley Road to Crossover Pipeline Turnout project to provide an additional 1.0 miles of relined pre-stressed concrete cylinder pipe (A, D, E, G, H)</td>
<td>June 2023</td>
</tr>
<tr>
<td>5</td>
<td>Complete the 2023 Water Facilities Master Plan that evaluates facility needs based on various supply and demand uncertainties and system strategies that consider existing and future regional water facilities operational resiliency. (C, D, G, H)</td>
<td>June 2024</td>
</tr>
<tr>
<td>6</td>
<td>Complete construction of the Valley Center ESP Improvements project to provide treated water deliveries to Valley Center Municipal Water District and Yuima Municipal Water District during an emergency event. (C, D, E, G, H)</td>
<td>Dec 2024</td>
</tr>
<tr>
<td>7</td>
<td>Complete construction of the Poway 5 Flow Control Facility project to provide the City of Poway a new treated water connection. (E, F, G, H)</td>
<td>June 2025</td>
</tr>
<tr>
<td>8</td>
<td>Complete construction of the Southern First Aqueduct Structures Rehabilitation project to improve operations and the reliability of First Aqueduct untreated water deliveries. (A, C, D, E, F, G, H)</td>
<td>Dec 2025</td>
</tr>
<tr>
<td>9</td>
<td>Complete the design of the Pipeline 3, 4, and 5 at Moosa Canyon project to provide long-term pipeline protection for the Second Aqueduct crossing the canyon. (A, C, D, E, G, H)</td>
<td>June 2026</td>
</tr>
<tr>
<td>10</td>
<td>Complete the design of the Pipeline 3, 4, and 5 at Moosa Canyon project to provide long-term pipeline protection for the Second Aqueduct crossing the canyon. (A, C, D, E, G, H)</td>
<td>June 2026</td>
</tr>
<tr>
<td>11</td>
<td>Complete construction of the Crossover Pipeline I–15 Bypass project to replace the existing crossover pipeline under I–15, which is nearing the end of its service life. (A, E, G, H)</td>
<td>Dec 2026</td>
</tr>
<tr>
<td>12</td>
<td>Perform comprehensive condition assessments and prioritize water delivery assets for repair, rehabilitation, or replacement. Identify and routinely update project recommendations for supporting the development of biennial budgets, 5-year forecasts, and the Long-Range Financing Plan. (A, B, E, F, H)</td>
<td>June 2027</td>
</tr>
</tbody>
</table>
CHAPTER 02 - WATER FACILITIES

WATER FACILITIES > INFRASTRUCTURE/CIP

Key Performance Indicators

**KPI - 01**

Maintain an overall Construction Change Order Percentage equal to or less than 5 percent of the construction contract amount.

**KPI - 02**

Maintain 90 percent of all Capital improvement Program projects within four months of their baseline schedule.
Sustainability Overview

The Water Authority is committed to being a model agency for sustainability. This is demonstrated through its continued support of cost-effective sustainability strategies that reduce environmental impacts, promote thoughtful stewardship of natural resources, and enhance facility and supply resiliency. These strategies save ratepayers money, reduce and manage the environmental footprint of Water Authority facilities and operations, conserve energy and water, and help the Water Authority better anticipate and adapt to the impacts of climate change.

The Water Authority’s Environmental Management Program is designed to reduce short- and long-term environmental impacts and streamline the permitting processes. The Water Authority’s Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP), which became effective in 2011, provides a 55-year permit for future projects and includes goals, guidelines, and specifications that comprise the Water Authority’s conservation strategy for biological resources. The NCCP/HCP also provides a description of the Water Authority’s mitigation lands and preserve area management guidelines. In addition to the 50-year Clean Water Act Section 404 permit known as the Programmatic Master Plan Permit (PMPP 2015), the Water Authority obtained a Stream and Lakebed Alteration Agreement (SLAA) for the Programmatic Routine Operations and Maintenance Project in 2019.

The Water Authority recognizes the challenges that climate change poses to the San Diego region and is dedicated to proactively addressing these issues. Its regional climate change initiatives include both mitigation and adaptation strategies.

The Water Authority voluntarily developed and adopted the agency’s first Climate Action Plan (CAP) in March 2014 and completed the 2019 CAP Update in June 2020. The Water Authority updates the CAP every five years with the 2024 CAP Update to be completed during this Business Plan period. The CAP will serve as an interdisciplinary guide intended to promote, facilitate, and coordinate implementation of climate change mitigation strategies. The plan focuses on greenhouse gas (GHG) emission reduction measures to ensure the region’s water supplies, infrastructure, and services will accommodate projected impacts of climate change. It evaluates GHG emissions against targets for voluntary compliance with the State of California’s policies and goals to reduce emissions of GHGs including Assembly Bill 32, Senate Bill 32, and Executive Order B-55-18. The Water Authority has already made great strides in reducing its GHG emissions driven by Energy Conservation Opportunities (ECOs) implemented through the Water Authority’s Energy Management Program, with projected levels falling below its emissions goals. In addition, efforts to help the Water Authority adapt to future impacts of climate change were addressed in the Water Authority’s 2020 Urban Water Management Plan and will be addressed in the Water Authority’s 2023 Water Facilities Master Plan.

Read Water Authority Publications, Including the Climate Action Plan.
The Water Authority has pursued partnerships with researchers such as the Scripps Institution of Oceanography (SIO) and other climate change practitioners to advance actionable climate science focused on adaptation strategies. As one of the six founding members of the Water Affiliates Group (WAG), the Water Authority has expanded its partnerships with SIO’s Center for Western Weather and Water Extremes (CW3E) that connects water leaders to share best practices in forecast-informed water operations. Additionally, as a leader in the climate change arena, the Water Authority is also a founding member of the Water Utility Climate Alliance (WUCA) formed in 2007. WUCA is comprised of 12 of the nation’s largest water providers that supply drinking water to more than 50 million people throughout the United States and provides leadership in assessing and adapting to the potential effects of climate change. Projects funded through WUCA, such as the Leading Practices in Climate Adaptation project covers a suite of climate adaptation actions and are intended to broadly promote collaborative learning.

The Water Authority continues to make a positive contribution to a more sustainable future for the region by implementing cost-effective adaptation and mitigation strategies that support efficient resource management, decrease greenhouse-gas emissions, and promote actionable climate change research.

Sustainability Focus Areas

The focus areas of the Sustainability Program are **Climate Change** and **Environmental Management**. Within each focus area are specific management strategies that establish the Water Authority’s sustainability vision of maintaining a leadership role in advancing climate science research and collaborating on approaches to mainstream adaptation strategies into business practices.

**Climate Change**

The climate of the San Diego region is increasingly warmer and drier, with recent prolonged record-breaking temperatures - as demonstrated by 75 out of 82 months (between July 2015 and April 2022) having hotter than normal temperatures at Lindbergh Field. Heat wave frequency, intensity, and duration are anticipated to increase. Precipitation patterns are also anticipated to experience changes with more frequent and severe droughts punctuated by more intense individual precipitation events. The Water Authority’s key management strategies and objectives for the Climate Change focus area include implementing cost-effective measures to reduce GHG emissions including solar energy systems and other ECOs, updating the CAP in relation to the latest State of California goals, and collaborating on leading-edge climate science research to evaluate potential impacts of climate change on the quantity and quality of local water supplies and its effect on water demands. The Water Authority delivers sustainability and resiliency to respond to drought through the nation’s largest on-farm conservation program, the nation’s largest seawater desalination plant, and extensive management of surface reservoir storage. In addition, the Water Authority is a leader in developing pumped energy storage to increase grid reliability and avoid power outages during warming temperatures and in providing renewable energy through hydroelectric facilities.

*Solar panels cover much of the Twin Oaks Valley Water Treatment Plant.*
Environmental Management

The Environmental Management focus area is central to the sustainability of long-term facility planning and operations. It is driven by regulatory compliance with the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA), state and federal endangered species acts, Clean Water Act, and other natural resources regulations. Other environmental management activities include mitigation planning and implementation, land management, permitting support for Capital Improvement Program projects, and legislative review. Key management strategies and objectives of the Environmental Management Program include advanced planning, projecting mitigation needs, and proactively obtaining mitigation lands and/or credits at a mitigation bank. These strategies will give the Water Authority the ability to move projects forward as mitigation acreage (credits) are debited from already established mitigation properties. This includes utilizing proactive methods to ensure sustainable mitigation in advance of capital and operational project needs; developing a plan to manage mitigation land credit inventory; evaluating the potential to market excess mitigation land credits; reassessing NCCP/HCP covered species list to consider additions or reductions to the list, proactively participating in regulatory agency’s five-year review of PMP, evaluate the need and request an extension of the SLAA, and distributing the environmental awareness training program.

Spotlight on Water Equity and Affordability

As active members of Water Utility Climate Alliance, the Water Authority is working with other utilities to partner with the United States (U.S.) Water Alliance during a two-year project to promote the inclusion of affordability and equity while mitigating and adapting to climate change.

The project, which is a priority in the upcoming WUCA work plan, will identify challenges that arise in connecting climate and equity work within water utilities and identify how agencies can better intersect water, climate, and equity. Collaboration with U.S. Water Alliance will help navigate knowledge gaps and develop strategies for consideration in future planning and policy documents that respond to related issues pertaining to equity and affordability.
Climate Change

A. Implement cost-effective opportunities that mitigate greenhouse gas emissions in compliance with emission targets contained in the CAP.

B. Support climate science research and evaluate opportunities to mainstream adaptation strategies into business practices.

C. Ensure resiliency of infrastructure and supplies to adapt to climate change impacts.

D. Partner with agencies to identify how to incorporate climate equity and affordability into business practices.

Environmental Management

E. Incorporate advanced planning to ensure Water Authority compliance with environmental regulations.

F. Strengthen inter-departmental coordination of environmental compliance.

G. Ensure sustainable mitigation is obtained in advance of project needs.
# Objectives and Tactics

<table>
<thead>
<tr>
<th>Objective</th>
<th>Tactic</th>
<th>Target</th>
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<tbody>
<tr>
<td>1</td>
<td>Develop a minimum of three acres of wetland mitigation at the San Luis Rey Kendall site to mitigate impacts of near-term Capital Improvement Program projects</td>
<td>June 2025</td>
</tr>
<tr>
<td>2</td>
<td>Pursue partnerships on leading-edge climate science projects and evaluate opportunities to incorporate climate research into planning processes</td>
<td>June 2025</td>
</tr>
<tr>
<td>3</td>
<td>Complete the 2024 Climate Action Plan Update to track progress toward meeting the 2030 and 2050 greenhouse gas targets, which include the state’s adopted greenhouse gas target for carbon neutrality by 2050</td>
<td>June 2025</td>
</tr>
<tr>
<td>4</td>
<td>Develop and circulate all applicable documents required for the appropriate level of environmental review needed to obtain a Federal Energy Regulatory Commission license in support of the proposed San Vicente Energy Storage Facility Project</td>
<td>Dec 2026</td>
</tr>
<tr>
<td>5</td>
<td>Maintain ongoing compliance with the NCCP/CP, its implementing agreement, and state and federal incidental take permits through annual monitoring and reporting</td>
<td>Mar 2027</td>
</tr>
</tbody>
</table>
**KPI - 01**

Ensure compliance with 2020 and 2030 greenhouse gas emission targets identified in the Water Authority’s Climate Action Plan.

![Greenhouse Gas Emission Targets](chart.png)

**Climate Action Plan 2020 Target**: 4,961 MTCO2e

**Climate Action Plan 2030 Target**: 2,976 MTCO2e
Water System Management

Overview

The Water Authority operates and maintains a complex water system including large diameter pipelines, flow control facilities, flow regulatory structures, pump stations, a large dam, and hydroelectric facilities. The Water System Management program ensures this complex infrastructure is reliable, complies with water quality standards, and meets member agency demands through optimized operations and cost-effective maintenance. The program is engaged in several ongoing initiatives, including developing and maintaining a skilled workforce, monitoring hydroelectric performance, resolving right of way encroachments, enhancing physical security and the operations communication network, and improving the work management system.

Past accomplishments of this focus area include development of major maintenance plans for all major mechanical and electrical components of the Lake Hodges Hydroelectric Facility, Valley Center Pump Station, Twin Oaks Area 10 Pump Station, Miramar Pump Station, San Vicente Pump Station, Olivenhain Pump Station, and the Rancho Peñasquitos Pressure Control and Hydroelectric Facility. In addition, staff completed internal visual inspection of 22 miles of pipelines, including a comprehensive 3D scan of the treated tunnels on the First Aqueduct. Also, use of acoustic fiber optic monitoring recently detected wire break activity that indicated a need for an urgent repair to Pipeline 4. The urgent repair was completed safely and cost-effectively without incident, demonstrating the value of using technology to identify and prioritize critical repairs.
Water System Management Focus Areas

The focus areas of the Water System Management Program are **Energy Initiatives**, **Facilities Security and Emergency Response**, and **Operations and Maintenance**. Within each focus area are management strategies that will drive staff to accomplish major objectives and tactics over the next five fiscal years. Energy supplies, generation, and storage is amongst the initiatives identified in the Water Authority’s Energy Management Policy.

**Energy Initiatives**

The Water Authority’s Energy Program seeks opportunities to lower the Water Authority’s energy costs and use existing and new infrastructure to maximize energy revenue opportunities. The Board approved the 2021 Energy Management Policy that concentrates on four areas: Energy supplies, generation and storage; energy resilience; collaborative relationships; and government relations. The Energy Initiatives focus area aligns with the Energy Management Policy and the Water Authority’s Climate Action Plan.

**Facilities Security and Emergency Response**

The Water Authority operates critical infrastructure to ensure a safe and reliable water supply for the region. Security and emergency response efforts support the need for physical safety and cybersecurity, business continuity, and emergency preparedness. This focus area emphasizes the protection of critical facilities and the operations control system against risks and vulnerabilities from all potential threats, such as terrorism and cyber attacks.

Asset Management Specialists perform ultrasonic thickness testing at the Rancho Peñasquitos Hydroelectric Facility.
The Water Authority plays a critical dual role during emergencies, as a provider of water to the region and as a first responder. The ability to respond quickly during a security or emergency incident is crucial to ensure water supply availability to the region’s member agencies and to minimize potential injury, loss of life, and property damage.

**Operations and Maintenance**

The Operations and Maintenance area focuses on efficiently maintaining system reliability and continuing to develop staff who are driven to excellence in their fields of expertise. The Water Authority’s complex water system requires staff to continuously develop their knowledge, skills, and abilities. In addition, efficient operations and enhanced proactive maintenance sustain a reliable water system and increase the Water Authority’s ability to efficiently support and supply its member agencies.

**Spotlight on Water Equity and Affordability**

A key component of maintaining water equity and affordability is asset management. Asset management supports risk identification and strategic action to reduce costs by promoting predictive and preventive maintenance and reducing the likelihood of costly catastrophic failures. Additionally, information sharing and collaboration with member agency partners for leak detection and pipeline condition assessments promote water equity by building technical knowledge within the region.

Another way the agency seeks to build water equity and affordability is through incorporation of hydroelectric generation and solar energy use, where practical. The Rancho Peñasquitos Pressure Control Facility provides renewable energy credits, which offset some of the energy costs associated with desalination. The Hodges Pumped Storage facility also generates renewable energy and revenue that allows offsets of some of the energy needs and costs of water reliability investments such as desalination. The energy investments also support regional energy reliability with local, renewable sources of more than 47 megawatts.
Energy Initiatives

A. Leverage power market opportunities that maximize the value of new and existing energy facilities.

B. Pursue new energy initiatives that reduce energy costs.

C. Coordinate with local, regional, state and federal agencies to best position Water Authority energy exchanges.

D. Engaging in legislative and regulatory processes.

Facilities Security and Emergency Response

E. 

F. 

Operations and Maintenance

G. Maintain water system reliability

H. 

<table>
<thead>
<tr>
<th>Objective</th>
<th>Tactic</th>
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<tbody>
<tr>
<td>1</td>
<td>Evaluate the proposed Alvarado Hydroelectric Rehabilitation project for viability and affordability and provide recommendations to the Board accordingly&lt;sup&gt;B&lt;/sup&gt;</td>
</tr>
<tr>
<td>2</td>
<td>Implement phased recommendations from the Aqueduct Communication System Master Plan to enhance security and control of the Water Authority’s Aqueduct Control System&lt;sup&gt;G, H&lt;/sup&gt;</td>
</tr>
<tr>
<td>3</td>
<td>Evaluate electric system resiliency study recommended improvements at Water Authority facilities&lt;sup&gt;G&lt;/sup&gt;</td>
</tr>
<tr>
<td>4</td>
<td>&lt;sup&gt;E, F&lt;/sup&gt;</td>
</tr>
<tr>
<td>5</td>
<td>&lt;sup&gt;D, G&lt;/sup&gt;</td>
</tr>
<tr>
<td>6</td>
<td>Explore opportunities to strengthen the regional member agency collaboration on asset management and &lt;sup&gt;G, H&lt;/sup&gt;</td>
</tr>
<tr>
<td>7</td>
<td>Identify innovative opportunities for energy procurement to reduce energy costs and identify schedules for economically viable alternatives&lt;sup&gt;A, B, C&lt;/sup&gt;</td>
</tr>
<tr>
<td>8</td>
<td>California energy goals&lt;sup&gt;D&lt;/sup&gt;</td>
</tr>
<tr>
<td>9</td>
<td>&lt;sup&gt;G, H&lt;/sup&gt;</td>
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</tbody>
</table>

Target:
- June 2023
- Dec 2023
- June 2024
- Dec 2024
- June 2025
- June 2027
WATER FACILITIES > WATER SYSTEM MANAGEMENT

Key Performance Indicators

**KPI - 01**
Eliminate unplanned service interruptions to member agencies by maintaining 100 percent system uptime each fiscal year.

**KPI - 02**
Minimize non-revenue water by managing system water loss within established standards 100 percent each fiscal year.

---

**System Uptime**

- FY23: 100.0%
- FY24: 100.0%
- FY25: 100.0%
- FY26: 100.0%
- FY27: 100.0%

**Non-Revenue Water Compliance**

- FY23: 100.0%
- FY24: 100.0%
- FY25: 100.0%
- FY26: 100.0%
- FY27: 100.0%
KPI - 03

Meet all federal and state drinking water regulations by maintaining 100 percent compliance each fiscal year.
CHAPTER 03

BUSINESS SERVICES
Chapter Overview

The Business Services focus area consists of four programs: Business Support, Communication and Messaging, Financial Management, and Workforce Management.

Collectively, the programs within the Business Services focus area serve as the foundation for all aspects of the Water Authority’s business operations and is an essential component of the Business Plan.

Key issues of the Business Services Focus Area include:
- Adopting pioneering technology and protecting against cybersecurity threats
- Continuing effective communications with external stakeholders
- Implementing long-term financial plans to provide rate and charges stability and guidance
- Attracting, retaining, and developing a high-performing workforce

Business Services - Programs and Focus Areas

Business Support
The Business Support program encompasses the areas of cybersecurity, technology, records management, and facilities, and supports efficient and productive agency operations.

Communication and Messaging
Communication and Messaging supports and maintains strong relations with regulators, elected officials, and other stakeholders through effective outreach.

Financial Management
Financial Management focuses on near and long-term financial planning, management and reporting.

Workforce Management
Workforce Management bridges the workforce of today with the workforce of the future.
CHAPTER 03 - BUSINESS SERVICES 63

SECTION 01

Business Support

Overview

All aspects of the Water Authority’s operations, including short- and long-term planning, engineering, design, communication, and public engagement, depend on high-quality business support services. The Business Support Program helps the organization meet its business goals and objectives by providing excellent information technology systems, implementing cybersecurity best practices, and performing a range of critical administrative functions such as records management, facility management, risk management, and centralized procurement support.

Recent accomplishments for the Business Support Program include

• Supporting the agency’s shift toward hybrid working through upgrading the Kearny Mesa facility’s wi-fi network, implementing an updated computer replacement policy that’s significantly expanded the use of mobile computing devices, and implementing a new virtual private network solution that enhances security and connectivity for employees working remotely

• Securing crucial business systems through implementation of critical cyber and information security measures. Improvements to both wired and wireless security, account access, and 24/7 monitoring have further strengthened the Water Authority’s overall cybersecurity posture

• Ensuring a safe, secure, and functional office environment through completion of several vital maintenance, repair, security and sustainability projects at the Kearny Mesa headquarters, as well as procurement of cost-effective insurance coverage to mitigate risk from the addition of new water system facilities or new technical initiatives

• And, supporting the Water Authority’s evolving response to the COVID-19 pandemic. This includes planning and providing the information technology and facilities resources needed to support staff safely returning to the Kearny Mesa headquarters for hybrid work schedules and resuming in-person meetings; securing and providing supplies such as rapid test kits, face masks and disinfecting wipes and gels; and improving employee and visitor management (check-in/check-out) systems.

The Business Support Program is driven to remain adaptable to new and evolving circumstances and to continue providing solutions to the agency’s business needs. Information Systems hardware and software will continue to transition to a cloud-based environment; Information Systems help desk staff will continue to support the workforce by providing high-level technical services, web/GIS staff will continue to develop applications for customer departments to suit specific operational needs, and business systems staff will continue to install enterprise software updates. The program will also continue to implement cost-effective measures at the Water Authority’s headquarters to protect employees, Board members and visitors in the wake of the COVID-19 pandemic, and continue to pursue administrative initiatives, such as improving file management systems designed to bolster staff efficiency and productivity.
Business Support Focus Areas

The focus areas of the Business Support Program are Cybersecurity, IT Services and Operations, Facilities, and Administrative Support. The focus areas support the vision of the program to protect, enable and improve the ability of the organization and its employees to perform their duties effectively and efficiently.

Cybersecurity

Comprehensive network security remains a high priority for the agency and is critical to providing stable business operations. Best practice technical and administrative controls were enhanced as part of an overarching program to ensure the organization is well-protected against cyber threats. The multi-layered security model is consistently updated to reflect current trends and respond to emerging threats. In fiscal year 2020, staff coalesced these efforts with the creation of a comprehensive Information Security Program. The Program specifies strategies and policies to guide the Water Authority’s ongoing coordination and implementation of information security measures for the business information system. Over the next five fiscal years, staff will continue to follow the implementation and maintenance of internationally recognized best practices for securing business systems and data.

IT Services and Operations

The Water Authority continually updates its technology infrastructure and tools to support enhanced business operations, such as providing specialized software and robust databases that deliver essential financial reporting and budgeting tools. It also maintains a specific suite of software applications to help meet agency-wide business needs and manages critical network infrastructure, allowing Water Authority employees to operate effectively and to deliver high-quality service to member agencies and stakeholders. This focus area will continue to support customer departments with improved databases, dashboards, websites and other applications, by making timely upgrades and enhancements to financial management, human resource and asset management enterprise software, and by ensuring equipment and technical tools are available to employees when and where needed.

Information Systems helped ensure reliable connections and public access for virtual Board meetings during the COVID-19 pandemic.
Facilities

The Facilities focus area covers the operation and maintenance of the Kearny Mesa headquarters building and associated facilities. It works to enhance the efficiency of these facilities and ensure employees, Board members and visitors have a safe, secure and comfortable environment for their official business. In recent years, the Water Authority has implemented many improvements, such as energy-saving lighting and window tinting, a major roof relining project, COVID-19 protection measures such as upgraded HVAC filters and no-touch door openers, automatic lobby doors to enhance Americans with Disabilities Act (ADA) access, and enhanced physical security measures. Now that the headquarters facility is passing 20 years of operation, many building components are approaching the end of their service life. In addition, the potential post-pandemic transition toward “hybrid” work, where many office-based staff and Board members meet and work from remote locations on an ongoing basis, provides an opportunity to review and rethink how the Water Authority’s office spaces and resources can be optimized to meet the agency’s needs. Over the next five fiscal years staff will focus on strategizing and carrying out any facility changes needed to support hybrid workplace practices and culture, as well as prioritizing and implementing appropriate replacements of building components to maintain a safe and productive working environment and to minimize the risk of encountering costly repairs. Staff also will continue to carry out proper maintenance while pursuing cost-effective opportunities to enhance the sustainability and security of the headquarters facility.

Administrative Support

The Administrative Support focus area provides a variety of services crucial for carrying out the agency’s business affairs, from records management to risk management to purchasing and other processes that support employee productivity and agency objectives.

Implementing appropriate facility changes supports an increasingly hybrid workplace and provides a safe and secure environment for official business.
The Water Authority maintains a comprehensive records management program that effectively manages agency records from creation to ultimate disposition so the Water Authority can reliably access documents when necessary to meet its legal, operational or other obligations as a public agency. Over the next five fiscal years, staff aims to implement enhancements to its records management software platform and support transitioning the agency to an improved file classification system in the cloud to make successful records management easier and more efficient.

Historically, the Water Authority has employed innovative and cost-effective solutions to manage risk and reduce exposure to liability. Recently, new lines of insurance have needed to be secured to cover areas such as drone use and cybersecurity. Given constantly changing laws and regulations, new facilities and technologies, as well as recent market-based challenges, staff will continue to remain agile and ready to adapt the Water Authority’s insurance portfolio over the next five fiscal years to control costs and maintain appropriate coverage.

**Spotlight on Water Equity and Affordability**

In January 2022 the Water Authority Board directed staff to negotiate a Project Labor Agreement (PLA) with local building trades to govern labor practices on Capital Improvement Program construction projects with budgets of $1 million or greater.

The goals of this new agreement, which is scheduled for Board review and approval in Fall 2022, will likely include community-based benefits such as ensuring the region’s investments in critical water projects are built with significant participation by local workers and disadvantaged workers.
Cybersecurity

A. Provide back-up and recovery capability to protect data and critical information systems for business continuity.

B. Implement cybersecurity measures to provide a safe and secure computing environment.

C. Educate employees to be technically skilled, well informed, alert, and vigilant.

IT Services and Operations

D. Maintain and upgrade critical software and business applications and hardware to meet business needs.

E. Continually improve business processes by increasing automation, mobility.

Facilities

F. Implement measures that maintain or enhance a safe, secure and productive working environment.

G. Improve the efficiency of water and energy use at the Kearny Mesa headquarters to reduce long-term costs and conserve resources.

Administrative Support

H. Obtain cost-effective business insurance policies that appropriately manage risk and support evolving business needs.

I. Maintain and upgrade records management practices and electronic document management systems.

J. Support and improve tools and processes that enhance business productivity.

K. Effectively implement and monitor labor agreements for applicable construction projects to
### Objectives and Tactics

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<tr>
<td>1</td>
<td>Complete Project Labor Agreement implementation pending Board approval of PLA in Fall 2022</td>
<td>May 2023</td>
</tr>
<tr>
<td>2</td>
<td>Transition Water Authority onto Maximo Asset Management for Service Requests and Work Orders for Information Systems staff</td>
<td>June 2023</td>
</tr>
<tr>
<td>3</td>
<td>Establish Teams file management environments for all departments that comply with agency file management and retention policies</td>
<td>June 2024</td>
</tr>
<tr>
<td>4</td>
<td>Conduct independent assessment of how to optimize KM facility to foster equity and productivity during ongoing remote working</td>
<td>June 2024</td>
</tr>
<tr>
<td>5</td>
<td>Complete analysis of KM Facility video surveillance needs and implement recommended solution</td>
<td>June 2024</td>
</tr>
<tr>
<td>6</td>
<td>Implement at least three new security improvements as referenced in the Center for Internet Security, NIST and insurance publications annually Evaluate electric system resiliency study recommended improvements at Water Authority facilities</td>
<td>June 2027</td>
</tr>
<tr>
<td>7</td>
<td>Provide 99.999% uptime (user access) to internal business information systems annually via secure private network connection (outside of scheduled maintenance or other planned outages)</td>
<td>June 2027</td>
</tr>
</tbody>
</table>
KPI - 01

Provide 99.999% uptime (user access) to internal business information systems annually via secure private network connection (outside of scheduled maintenance or other planned outages).
Communication and Messaging

Overview

The Communications and Messaging Program supports the organization’s vision in multiple ways. Effective relationships with regulators, elected officials, media, community leaders, and the general public are imperative for meeting critical Water Authority goals. Regulatory and legislative requirements can have a significant impact on the Water Authority’s and its member agencies’ ability to maintain operational flexibility and fiscal sustainability. Public trust and support are also necessary to ensure the successful implementation of endeavors ranging from short-term maintenance projects to long-term supply reliability investments. Engaging in these areas has become increasingly challenging in recent years as rapidly changing hydrologic conditions, climate change effects, and other complex water issues have dominated headlines and heightened public and regulatory interest in how water is secured, used, and funded.

The affordability of water as well as the impact of cost on diverse communities is a growing concern and area for future enhanced outreach efforts.

Recent accomplishments in the Communication and Messaging Program include the continued expansion of the Water News Network, a reliable source of water agency information across the region; the rapid growth of social media followers and engagement over the past several years as a way to amplify the Water Authority’s public voice; and advancement of legislative and administrative action, in collaboration with the City of San Diego, to support opportunities to secure an off-take procurement agreement for energy storage services from the proposed San Vicente Energy Storage Facility project.

Government relations outreach efforts have resulted in the successful passage of Water Authority-sponsored and co-sponsored bills that significantly advance the San Diego region’s strong water conservation ethic into statewide policy and practice, and improved opportunities for individuals leaving military service and transitioning into civilian water and wastewater treatment occupations. Recent strong and effective advocacy work also has resulted in securing significant financial assistance for the region, including $25 million to help mitigate ratepayers’ arrearages/water debts, and $18 million from the California state budget for the San Vicente Pumped Energy Storage Project. Additionally, the Water Authority has played an instrumental role in administrative and legislative efforts to secure robust funding for implementation of the Salton Sea Management Program.

Public outreach efforts, programs and rebates have helped the San Diego region maintain a strong regional water efficiency ethic that is evidenced by a hardening of lower water use demands since the last drought.
During the COVID-19 pandemic, the Water Authority deployed strategic outreach and community partnerships to calm public concerns over water safety and quality. Outreach efforts have also helped maintain high levels of public support for the Water Authority’s supply diversification strategy, water-use efficiency, and the value of public water services. In particular, in 2021 and 2022, the Water Authority received significant media coverage locally, statewide and nationally as a model for building supply reliability. Outreach has also bolstered engagement of community leaders on important water issues through initiatives such as the Citizens Water Academy and through active participation in business and community organizations. Finally, the Water Authority has also stepped up the sophistication of its outreach to diverse and underserved communities via a Spanish-language outreach program and the engagement of community influencers.

Communication and Messaging Focus Areas

The focus areas of the Communication and Messaging Program are, Government Relations, Public Outreach, and Regulatory Policy Support. These focus areas support the Water Authority’s goal of maintaining a statewide leadership position in numerous areas. Staff will remain driven to build and maintain strong relations with regulators, elected officials, and other stakeholders.

Government Relations Outreach

The Government Relations focus area increases the Water Authority’s political influence in Washington, D.C., Sacramento, and local entities to secure favorable legislation, funding, or other outcomes that help ensure continued safe and reliable water supplies for the region. Objectives include delivering legislative outcomes that protect the interests of the San Diego region’s water agencies and their ratepayers, including the identification of opportunities to partner with one or more Water Authority member agencies each year on a legislative, administrative, or regulatory initiative that would provide mutually beneficial outcomes.

Public Outreach

The Public Outreach focus area builds community understanding and support for the Water Authority’s strategies, programs, and projects through building and maintaining relationships with key audiences such as business, community, labor, civic organizations, the media, school-age children, and the general public. Outreach activities include media relations; online and social media communications, publications and other printed materials; tours and events; school education programs; community presentations, and more. This focus area also oversees efforts to help small businesses be aware of Water Authority procurements. An enhanced area of emphasis is the coming years will be increasing engagement with underserved and diverse communities.

The Water Authority’s current water conservation outreach campaign includes ads in multiple languages to connect with the region’s diverse population.
**Regulatory Policy Support**

The Regulatory Policy Support focus area enables the Water Authority to engage and collaborate with state and national organizations, groups, and other agencies to maximize its impact on various regulatory policies related to water supply and quality, energy, and the environment. The Water Authority actively partners with various entities, such as WaterReuse, Association of California Water Agencies, the California Municipal Utilities Association, American Water Works Association, Water Utility Climate Alliance, Western Urban Water Coalition, Cal Desal, Southern California Salinity Coalition and California Urban Water Agencies, to gain support on regulatory policy issues. In addition, the Water Authority fosters relationships with state and federal agencies, such as regional and state Water Boards, Division of Drinking Water, California Air Resources Board, California Department of Water Resources, and the U.S. Environmental Protection Agency. Objectives include working to support reasonable potable reuse requirements in California and collaborating with urban water interests throughout the state to achieve a fair, equitable and reasonable implementation of long-term water use efficiency statutes and requirements.

**Spotlight on Water Equity and Affordability**

In 2022, an internal staff working group was formed to provide thought leadership and a coordinated approach to addressing growing community concerns over equity and affordability, particularly around water rates. From an outreach perspective, the Water Authority has the opportunity to be a convener on these issues by bringing together its member agencies, legislators, community and business leaders and non-profit organizations for important discussions and policy input.

Over the next five years, the Water Authority can use its traditional legislative roundtables to highlight and facilitate discussions. A larger gathering including member agency leaders, Water Authority board members and community members is also envisioned to gain clarity and consensus around the local issues surrounding affordability and steps necessary to address impacts on disadvantaged and underserved communities. Enhanced and inclusive outreach is also planned to ensure that communities are engaged and are being communicated with in their preferred language.

A few examples of The Water Authority’s valued collaborative partners.
Government Relations Outreach

A Strengthen relationships with the San Diego local, state, and federal legislative delegations, other key legislators, legislative staff, and the state and federal administrations.

B Engage and influence relevant legislation, regulatory matters, and funding requests in the Legislature, Congress, and state and federal administrations.

C Sponsor, co-sponsor, and promote legislation that positively impacts the region and conveys San Diego’s role as a statewide water community leader.

Public Outreach

D Enhance public understanding and support for Water Authority and member agency strategies, policies, and programs.

E Implement innovative and effective public outreach programs and tools that deliver Water Authority messages to key stakeholders.

F Promote greater public awareness of local water issues and efficient water use by building relationships and partnerships with compatible organizations and institutions.

G Support member agencies with shared outreach development, training and resources.

Regulatory Policy Support

H

I

J

K
### Objectives and Tactics

<table>
<thead>
<tr>
<th>Objective</th>
<th>Tactic</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Conduct communications and outreach activities that result in at least 80 percent of poll respondents agreeing that a reliable water supply is essential for a healthy economy and quality of life. (D, E, F)</td>
<td>June 2023</td>
</tr>
<tr>
<td>2</td>
<td>Partner with at least three organizations including media outlets serving underserved communities to inform about water issues, including the drought, water quality and safety. (G, F)</td>
<td>June 2023</td>
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<td>3</td>
<td>Relaunch the Citizens Water Academy in a new and enhanced format(s).</td>
<td>June 2023</td>
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<td>4</td>
<td>Convene the Potable Reuse Coordinating Committee to advocate for direct potable reuse criteria that supports potable reuse in the San Diego region. (H, I, J, K)</td>
<td>June 2023</td>
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<tr>
<td>5</td>
<td>Commemorate the 20th anniversary of the SA through outreach in coordination with the Colorado River team. (C, D, E)</td>
<td>Oct 2023</td>
</tr>
<tr>
<td>6</td>
<td>Provide comments on the California Air Resources Board’s proposed Advanced Clean Fleets Rule in coordination with member agencies. (H, J, K)</td>
<td>Dec 2022</td>
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<tr>
<td>7</td>
<td>Identify opportunities to partner with at least one or more Water Authority member agencies annually to co-sponsor legislation, collaborate on an administrative or regulatory request, or pursue a funding initiative. (A, B, C)</td>
<td>June 2025</td>
</tr>
<tr>
<td>8</td>
<td>Increase awareness and understanding of the Water Authority’s interests and strengthen relationships by providing briefings to each member of the San Diego congressional and state delegation in Washington, D.C., Sacramento, and the San Diego district office. (A, B)</td>
<td>June 2025</td>
</tr>
<tr>
<td>9</td>
<td>Engage with the Administration, Congressional Delegation, and House and Senate Appropriations Committees to pursue federal funding for the Safety of Dams programs.</td>
<td>June 2025</td>
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<tr>
<td>10</td>
<td>Sponsor or support legislation and engage with working groups and regulators on water rate affordability for low-income ratepayers.</td>
<td>June 2025</td>
</tr>
<tr>
<td>11</td>
<td>Participate in a consumer messaging workgroup on microplastics in drinking water as part of a Water Research Foundation project. (F, G, J, K)</td>
<td>June 2025</td>
</tr>
<tr>
<td>12</td>
<td>Engage in annual outreach activities that support the region’s initiatives to provide a safe, reliable and affordable water supply, including positioning the Water Authority as a collaborator and convener on addressing affordability issues.</td>
<td>June 2025</td>
</tr>
</tbody>
</table>
BUSINESS SERVICES > COMMUNICATIONS AND MESSAGING

Key Performance Indicators

KPI - 01

Provide comments on at least 90 percent of the proposed State or Regional Water Board regulations and policies that directly impact the Water Authority or its member agencies.

KPI - 02

Grow total social media audience (followers) 10 percent annually through FY2025 across core platforms (Twitter, Facebook, Instagram, YouTube and LinkedIn).

State and Regional Water Board Comments

Social Media Audience
KPI - 03
Grow Water News Network page views 10 percent annually through FY2025.

KPI - 04
Provide the Joint Public Information Council (JPIC) with at least two stakeholder information outreach toolkits per year through FY2025.
Financial Management

Overview

The Water Authority maintains a comprehensive financial management plan that focuses on both near-term and long-term planning to provide smooth and predictable rates and charges. A key ongoing component of near-term planning and reporting is the Water Authority’s Multi-Year Budget. The last Multi-Year Budget, adopted in June 2021, successfully executed the financial policies and objectives as determined by the Board of Directors. The Multi-Year Budget document conforms to the highest standards and has received awards for Distinguished Budget Presentation from the Government Finance Officers Association (GFOA) every year since 1995. The Multi-Year Budget will be presented for adoption every other June during the five-year planning period of the 2023-2027 Business Plan.

An additional and equally key component of the agency’s near-term planning and reporting is the preparation of the Annual Comprehensive Financial Report (ACFR). The ACFR is produced to report the results of the financial operations each fiscal year. The report for the prior fiscal year, ending on June 30, is presented to the Audit Committee and Board of Directors during the last meeting of each calendar year. The ACFR preparation has received the prestigious GFOA Certificate of Achievement award for the past 21 years.

Central to long-term planning is the development of the Long-Range Financing Plan, which was most recently updated and adopted by the Board of Directors in September 2021.

The Long-Range Financing Plan is a 10-year guiding document that incorporates the Water Authority’s financial policies and goals. It includes an optimized funding and Capital Improvement Program strategy, water sales and rate projections, and sensitivity analyses of selected variables. With the adoption of the 2021 Long-Range Financing Plan, the Board directed staff to conduct a five-year financial forecast during the mid-term budget cycle to serve as a framework for the following year’s budget development and rate setting process.

Financial Management Key Focus Areas

The key focus areas of the Financial Management Program are Accounting, Debt and Investment Management, and Financial Planning. Within each focus area, management strategies are identified to determine the vision for accomplishment of significant objectives and tactics over the next five fiscal years.

Accounting

The Accounting focus area centers on delivering accurate, meaningful, and timely information to all of the Water Authority’s customers. This group has the important responsibility of recording the financial activities of the Water Authority using various accounting platforms and summarizing the financial activities into levels of information important to internal and external users. Management strategies for Accounting include providing financial data and other key information, monitoring revenue and expense trends, and assessing industry best practices to apply to Water Authority financial operations.
Debt and Investment Management

Effective debt and investment management help to minimize costs. By optimizing the debt portfolio, the Water Authority’s cost of funds can be reduced. Effective management of the investment portfolio maximizes the revenues generated from the Water Authority’s cash balances and offsets other costs. Management strategies under Debt and Investment Management include maintaining solid credit fundamentals and optimizing the capital financing mix.

Financial Planning

The Water Authority’s prudent financial planning and sound financial policies are aligned to achieve long-term fiscal sustainability. Financial planning involves accurately projecting both near- and long-term operating and capital costs so rates and charges can be set to achieve the financial policy goals (i.e. the Board of Directors’ Senior Lien Coverage Ratio target of 1.5 times). Financial planning strategies include ensuring financial policies support affordability and are aligned with the long-term fiscal sustainability of the Water Authority.

Spotlight on Water Equity and Affordability

The Financial Strategy Workgroup, comprised of Board members, Member Agency staff and Water Authority staff, has been tasked to define the Water Authority’s role and potential opportunities to address water rate affordability. To further this effort, the General Manager created an internal affordability workgroup that includes representatives from several departments including Finance, Engineering, Government Relations, and Public Affairs.

The objective of these efforts is to (1) advance efforts and initiatives to promote water affordability across the region; (2) showcase Water Authority actions to enhance the role of affordability in long-range financial and resources planning; and, (3) communicate the Water Authority’s commitment to water affordability. As part of the internal affordability workgroup and its charge leading the Financial Strategy Workgroup, Finance is spearheading research and development of affordability analytics that can be deployed across the region.

The Water Authority recognizes pressure on water rates is challenging for many member agencies, and their ratepayers, and is committed to working collaboratively with the community to identify, advocate for, and implement affordability strategies. Everything at the Water Authority is designed to seek the lowest possible rates while maintaining a safe and reliable water system.
ACCOUNTING

A. Provide relevant, accessible, and usable financial data and other key information.

B. Analyze revenue and expense trends proactively to anticipate early budget variances and formulate actions to ensure fiscal sustainability.

C. Assess and recommend as appropriate industry best practices and new accounting standards for applicability to Water Authority financial operations for enhanced financial reporting.

DEBT AND INVESTMENT MANAGEMENT

D. Ensure strong Water Authority credit ratings through sound financial management.

E. Ensure strong financial industry presence for the Water Authority.

F. Strategically optimize the resources of the debt and investment portfolio to execute future bond and investment transactions successfully.

G. Optimize the capital financing mix to achieve the lowest cost of funds and minimize interest rate risk.

FINANCIAL PLANNING

H. Develop detailed cost projections for Capital Improvement Program projects and operations to develop long-term rate projections.

I. Maintain a rate model resulting

J. Provide high level of service to member agencies while ensuring equitable rates and charges.

K. Ensure financial policies are aligned with the long-term fiscal sustainability of the Water Authority.
### BUSINESS SERVICES > FINANCIAL MANAGEMENT

#### Objectives and Tactics

<table>
<thead>
<tr>
<th>Objective</th>
<th>Tactic</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Implement a five-year financial forecast for budget and rates in support of long-term planning and fiscal sustainability.</td>
<td>(A, H, K)</td>
</tr>
<tr>
<td>2</td>
<td>Strengthen vendor master database processes including the addition, deletion, and updating of vendor records to avoid payment fraud, duplicate payments, compliance fines, and bad vendor data. In conjunction, develop an electronic solution in OnBase to store vendor supporting records safely and securely.</td>
<td>(A)</td>
</tr>
<tr>
<td>3</td>
<td>Leverage PeopleSoft reporting to develop the Budget Status Report of the Controller's Report within the software thereby reducing dependence on manual steps.</td>
<td>(A, B, C)</td>
</tr>
<tr>
<td>4</td>
<td>Maintain and improve rate model to identify efficiencies, to ensure consistency with budget and to support smooth and predictable rates and charges and long-term planning.</td>
<td>(A, I, J, K)</td>
</tr>
<tr>
<td>5</td>
<td>Advocate Water Authority position through participation in two industry conferences per year via speaking engagements and achieve membership in industry committees and boards, such as California Society of Municipal Finance Officers, Government Finance Officers Association, Bond Buyer, and the California Municipal Treasurer's Association.</td>
<td>(E, K)</td>
</tr>
<tr>
<td>6</td>
<td>Evaluate and implement new budget and financial planning software for improved transparency and efficiency in reporting the budget and five-year financial forecast.</td>
<td>(A, B)</td>
</tr>
<tr>
<td>7</td>
<td>Proactively manage the debt portfolio to achieve level debt services payments and minimize debt payment spikes.</td>
<td>(D, E, F, G)</td>
</tr>
<tr>
<td>8</td>
<td>Implement improvements, including connected PowerBI reports for water sales and uses, and maintain Data Archival and Invoicing System (DAIS) to ensure timely updates, cybersecurity and smooth water billing processes.</td>
<td>(A, B, J)</td>
</tr>
<tr>
<td>9</td>
<td>Invest the Water Authority's portfolio to meet the objectives of safety, liquidity, and yield while striving to equal or exceed the market yield index performance benchmark for the consolidated investment portfolio.</td>
<td>(D, F)</td>
</tr>
<tr>
<td>10</td>
<td>Work with the Member Agency Rate Workgroup (MARW), Financial Strategy Work Group (FSWG), the Board, and Rate Consultant(s) to evaluate potential changes to the Water Authority's existing rates &amp; charges and implement a new rate design to address revenue volatility (risk) and impacts of forecasted local supply projects.</td>
<td>(A, I, J, K)</td>
</tr>
</tbody>
</table>
KPI - 01

Monitor the Water Authority’s investment portfolio performance using the ICE Bank of America 1-3 Year US Treasury & Agency Index market yield and total return as a performance benchmark.
**KPI - 02**

Pension Funded Ratio: Per Board policy, achieve a target funded range 75% - 85%; however, best practice is to achieve 100%.
(Source: October 25, 2018 Board Memorandum)

**KPI - 03**

OPEB (Other Post-Employment Benefits) Funded Ratio: Per Board policy, achieve a target funded range of 90% - 110%. (Source: January 23, 2020 Board Memorandum)
In recent years, what a modern workforce and work environment look like have changed dramatically. With the increasing use of technology to facilitate remote meetings, teleworking, and daily work, employees are able to accomplish their work as a physical presence is not required. Many employers find themselves faced with a push to implement short- and long-term changes to manage and support the new hybrid workforce. The Water Authority continues to explore a “hybrid” workplace, where eligible employees are offered the ability to work remotely part of the time but maintain a physical presence at the workplace. The goal remains to maintain a connected, inclusive, and engaged workplace.

The focus areas of Workforce Management include Leadership, Safety, Culture, Talent Management, and Technology. Within each focus area are broad strategies to accomplish the overall objectives and tactics planned for the next five fiscal years.
Leadership

The Water Authority emphasizes organization-wide knowledge of its mission, vision, values, and leadership priorities to prepare for and manage the “workforce of tomorrow.” Effective workforce management requires targeted leadership approach to employee development to ensure the workforce can keep pace with changing competencies and leadership skills necessary for the immediate and long-term success of the agency. In the hybrid work environment, organizations also need a different approach and strategy for the complexities of managing performance when managers and their teams aren’t working in the same location. Traditional leaders (supervisors, managers, department directors) must think differently to keep remote workers engaged and connected when they’re not in the same location as their manager. 

Safety

The primary aim for workplace safety is to protect the agency’s most valuable assets – its employees. Workplace safety is achieved through a variety of methods, including policies, procedures, training assessment of the safety program, its policies, and procedures, as well as how the safety program interacts with other departments, is planned within the business plan cycle. Changes will be incorporated to ensure the Water Authority’s safety procedures and policies include accountability requirements to ensure that prescribed practices are effective and understood by staff.

Culture

The Water Authority continues to advance the culture work that has been an agency-wide effort for the past few years. Organizational culture captures the “daily norms” of an organization - how it functions positive organizational culture focus on developing policies, programs, and practices that support the of the workforce, support an environment of trust and transparency, and allow employees to bring their best selves and their diverse voices to their roles in the organization. A healthy organizational culture facilitates professional development, career agility, and knowledge transfer to ensure the Water Authority’s succession planning needs are being met through collaboration, creativity, continuous process improvement, and an agile organizational structure. As the agency continues to support the transition from an initial assessment of culture to the implementation of cultural drivers and the establishment of new and shared norms, it is important to ensure inclusive methods are employed, including a commitment to open dialogue and consideration of innovative solutions and diverse points of view.
Talent Management

The pace of change is accelerating. Public agencies are facing an increasing challenge to attracting talent and must employ innovative methods to secure and retain the talent of tomorrow. Employees now more than ever also expect a total rewards program that is relevant and effective in recognizing their performance and personal priorities.

Employers must constantly assess their recruiting efforts, the development of existing employees, succession planning, and must continually identify areas of opportunity for future development and agency’s evolving needs and those of its workforce.

The Water Authority will continue to develop and promote innovative practices for attracting and retaining employees who possess the desired skillset and aptitude necessary to deliver water to the region.

To address the hiring gaps of entry level water/wastewater positions among member agencies, the Water Authority has facilitated the Regional Water/Wastewater internship program for over ten years and continually revisits the program structure and goals to ensure it addresses the needs of stakeholders, including local community colleges and member agencies.

Additionally, the Water Authority is addressing a critical regional need to replace skilled employees retiring from the water industry by supporting a taskforce of member agency general managers who oversee San Diego Water Works, a regional consortium of 24 water and wastewater member agencies working together with local educational institutions with the mission to coordinate education and training programs and improve outreach in water industry careers. Its focus includes the transitioning military and veteran workforce as an underutilized talent pool for the water industry. The website has UHVXOWHGLQFUHDFKVXRRLMQRESVWLRQDVQG internship programs, including the Department of Defense’s SkillBridge Program, a partnership VSHFLHFDVHGRUWUDQVWLRQJHUULFHPPEHUV in the last six months of their military service.

SkillBridge interns have successfully contributed to the work of several departments at the Water Authority.
Technology

According to the McKinsey Global Institute, at least 30 percent of activities associated with knowledge tasks previously believed to be immune to automation. Lifelong learning and use of changing technology must become a norm for employees and employers.

Technology continues to play a critical role in workforce management, not only for automating processes for efficiency and appealing to potential applicants as a modern agency, but also for the analytics that can be derived from such tools. Evaluating and developing new tools for employee engagement, training and performance will ensure in streamlining standardized human resources practices to improve accuracy, speed, data collection, transparency and relevance to the overall workforce management strategies.

Spotlight on Water Equity and Affordability

The COVID-19 pandemic and the national unrest related to ongoing social and racial injustice have led many leaders to reassess their relationships with employees and take action to ensure equity in the workplace. Multiple business studies support efforts for workforces to better represent the broader communities in which they operate. The Water Authority is no exception, and it continues to take action to ensure all employees are treated equitably and that the workplace provides an environment where everyone feels welcome and included.

In addition to the culture work the organization has engaged in over the past several years, the development of the Water Authority’s first-ever Diversity, Equity, Inclusion, and Belonging (DEIB) report is underway to track leading and lagging indicators to help identify opportunities for improvement in this area going forward.
### The Workforce in 2025
Projected size of U.S. labor force (in millions) by age, for the year 2025

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Generation Z</th>
<th>Millennials</th>
<th>Generation X</th>
<th>Boomers</th>
<th>60-64</th>
<th>65-69</th>
<th>70-74</th>
<th>75-79</th>
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Source: Department of Labor | WSJ.com
Leadership

A Targeted leadership development, skill-based training, and a flexible approach to employee development to ensure the workforce can demonstrate the competencies and leadership skills necessary for the immediate and long-term success of the agency.

Safety

B Protect the agency and its employees by a variety of methods, including effective policies, procedures, training, and hazard mitigation, elimination, and control.

Culture

C Foster a healthy organizational culture to facilitate improved professional development, career agility, and knowledge transfer through a commitment to open dialogue and consideration of innovative solutions and diverse points of view.

Talent

D Continue to adopt and promote innovative practices for attracting and retaining employees who possess the desired skillset and needs of the agency and its workforce.

Technology

E Evaluate and facilitate tools that will streamline processes and provide more relevant and effective information.
## Business Services > Workforce Management

### Objectives and Tactics

<table>
<thead>
<tr>
<th>Objective</th>
<th>Tactic</th>
<th>Target</th>
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<tbody>
<tr>
<td>1. Gain agreement to future Memorandums of Understanding with bargaining groups in accordance with Board direction</td>
<td>(A, C)</td>
<td>June 2023</td>
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<tr>
<td>2. Conduct outreach and implement changes to the employee recognition program that reflects the new values platform</td>
<td>(A, C, D)</td>
<td>June 2023</td>
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<td>3. Conduct a follow-up employment engagement survey to continue General Manager’s culture change efforts</td>
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<td>4. Complete independent safety program analysis and develop recommendations to improve effectiveness</td>
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<tr>
<td>5. Ensure 100% compliance with required safety training</td>
<td>(B)</td>
<td>June 2027</td>
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<tr>
<td>6. Develop training resources to provide support, guidance, and training to managers to assist in building and maintaining effective working relationships with labor groups</td>
<td>(A, C)</td>
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<td>7. Evaluate and recommend technology to streamline standardized human resources practices</td>
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<td>June 2027</td>
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<tr>
<td>8. Promote San Diego Water Works and SkillBridge resources to member agencies and potential candidate pools</td>
<td>(D)</td>
<td>June 2027</td>
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<td>9. Survey member agencies regarding the Regional Water/Wastewater Internship program and implement any changes to ensure it continues to meet the needs of stakeholders, including local community colleges and member agencies</td>
<td>(D)</td>
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<tr>
<td>10. Evaluate new training initiatives that meet the needs of the employee and organization</td>
<td>(A, D, E)</td>
<td>June 2027</td>
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<tr>
<td>11. Track key data to identify areas of opportunity to build a diverse, equitable, and inclusive workplace</td>
<td>(A, C)</td>
<td>June 2027</td>
</tr>
<tr>
<td>12. Provide relevant, effective wellness initiatives to support the health and wellness of employees</td>
<td>(C)</td>
<td>June 2027</td>
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KPI - 01

Maintain an annual agency-wide voluntary separation rate of less than 10 percent, excluding retirements.
The Water Authority’s headquarters in Kearny Mesa features a water-efficient demonstration garden.

Workplace safety is a top priority and is achieved through policies, procedures, training and specific hazard control techniques.
Appendix 1 - Guiding Policies and Principles

The Water Authority’s 24 member agencies are represented through a 36-member Board of Directors. The Water Authority was formed by an Act of the California State Legislature establishing the Board of Directors as the agency’s governing body. Below are highlights of the Board’s adopted policies and principles that guide the Water Authority in its business practices.

**County Water Authority Act** - Sets forth the organization, incorporation, and government of the Water Authority, including authorizing the agency to acquire and own water rights, construct and maintain facilities, tax, and incur bonded indebtedness.

**Debt Management and Disclosure Policy** - Ensures the Water Authority’s debt portfolio is optimized to minimize cost of funds and maximize savings from refunded debt.

**Delta Policy Principles** - Guides staff in evaluating Bay-Delta initiatives and the Water Authority’s advocacy to ensure a successful implementation of a Bay-Delta solution.

**Energy Management Policy** - Provides guidance to the Board when it is considering energy related issues, and provides guidance to staff in the evaluation of 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.
Fiscal Sustainability Guiding Principles - Provides guidance to the Board when it is considering changes or additions to the Water Authority’s rates.

Legislative Policy Guidelines – Provides policy guidance to Water Authority staff and its government relations team for advocacy on issues of critical importance to the Water Authority, its member agencies, and the San Diego region. Provides a policy framework for evaluation of potential impacts and agencies from state legislative and regulatory Legislative Priorities, provides a framework to engage on federal legislative and regulatory initiatives.

Water Shortage and Drought Response Plan Allocation Methodology - Establishes policies and procedures for administering the Municipal and Industrial (M&I) water supply allocation methodology to member agencies during times of water shortage or drought.

Water Supply Diversification Strategy - Guides Water Authority staff to enhance regional supply portfolio.

Continued on next page...
Appendix 2 – Related Planning Documents

1. **Annual Comprehensive Financial Report** – Details the results of operations each fiscal year and includes the Continuing Disclosure, which is a required communication to investors. Prepared by the Finance Department.

2. **Aqueduct Operating Plan** – Reflects ongoing efforts to optimize the delivery, treatment, and storage of water in the San Diego region through coordination between the Water Authority, its member agencies, and the Metropolitan Water District of Southern California. Prepared by the Operations and Maintenance Department.

3. **Asset Management Plan** – Documents the actions necessary to derive the most value from each Water Authority asset through its life cycle. Prepared by the Operations and Maintenance Department.

4. **Climate Action Plan** – A interdisciplinary effort that promotes, facilitates, and coordinates implementation of climate change strategies and related activities within the Water Authority. Prepared by the Water Resources Department.

5. **General Manager’s Adopted Multi-Year Budget** – Based on the Board of Directors’ resources necessary to achieve the Water Authority’s Business Plan management strategies, the resources necessary to achieve the Water Authority’s Business Plan management strategies, the resources necessary to achieve the Water Authority’s Business Plan management strategies.

6. **Integrated Regional Water Management Plan** – Addresses resource management, water quality, and habitat in a region that includes the portion of San Diego County that is tributary to coastal waters. Prepared under the direction of the Regional Water Management Group.

7. **Long-Range Financing Plan** – Calculates the cost of service and projects the Water Authority’s financial position. It provides a solid financial foundation on which to build and operate the Water Authority’s infrastructure. Prepared by the Finance Department.

8. **Quantification Settlement Agreement** – Provides California the means to implement water transfers and supply programs that allow California to live within the state’s 4.4 million acre-foot basic annual apportionment of Colorado River water. Prepared by various parties.

9. **Regional Water Facilities Optimization and Master Plan** – Provides a comprehensive evaluation of the infrastructure required for meeting the Water Authority’s mission to provide a safe and reliable water supply to its member agencies. Prepared by the Water Resources Department.

10. **Urban Water Management Plan** – Based on the Board of Directors’ the resources necessary to achieve the Water Authority’s Business Plan management strategies, the resources necessary to achieve the Water Authority’s Business Plan management strategies.

11. **Water Shortage Contingency Plan** – Provides the Water Authority and its member agencies with a series of potential actions to take when faced with a shortage of imported water supplies from Metropolitan Water District due to drought conditions. Prepared by the Water Resources Department.
Appendix 3 – Glossary

A

**Acre-foot** – The measurement by which large amounts of water are measured. One acre-foot is about 326,000 gallons, or enough water to cover one acre to a depth of one foot. An acre-foot can supply the household needs of two four-person families for one year.

**Adaptive Management** – A management approach whereby strategies are adapted to changing circumstances.

**Agricultural Water** – Water used mostly for irrigating groves and crops.

**Aqueduct** – \( \text{SDUWL} \text{FDOPDPQDPGDHSLSHOLQH} \) constructed to convey water from one location to another.

**Asset Management** – The combination of \( \text{PDQDJHPHQWSDQFLDOHFRQRLFHQJLQHULQJDQG} \) other practices applied to physical assets with the \( \text{REMHWLYHRISURYGLQJWKHUHTXLUHGOHYORIVHUYLFH} \) in the most cost-effective manner. It includes the management of the entire lifecycle including design, construction, commissioning, operating, maintaining, repairing, modifying, replacing, and decommissioning/disposal of infrastructure assets.

B

**Basin Plan** – Water Quality Control Plan for the San Diego Region - A planning document prepared and managed by the California Regional Water Quality Control Board, San Diego Region that recognizes \( \text{DQGUDHWFVWKhUHJLQRQDG} \)\( \text{LIHHQFHVLQH} \)\( \text{LVWLQJZDWHU} \)\( \text{TXDOLW\EKHQH\LDORXHVRI} \)\( \text{URQGDQGVXUIDFHZDWHUV} \) and local water conditions.

**Battery Systems** – One or more batteries that store energy during off-peak periods where energy costs are lower, and discharge energy for use during peak demand periods when energy costs are higher.

**Bay-Delta** – The Bay-Delta is formed by the \( \text{FRQ}\text{XWHQFHRI} \) \( \text{DOLIRUQLD\VWZRODUJHVWULYHUWVKH} \) Sacramento and San Joaquin. \( \text{JOINED by the MOKELUMNE} \) \( \text{AND COSUMNES RIVERS, they comprise the Bay-Delta's watershed, which drains nearly 50 percent of the state's water runoff. Pumping stations move a portion of Bay-Delta water throughout WKHVWDWHZKLOHWKHUHPDLQGHUSVWRIDUPVQG} \) \( \text{communities within the Bay-Delta itself and then out to sea through a series of bays.} \)

**Best Management Practices** – Practices, methods, or techniques agreed upon by industry professionals found to be the most effective and \( \text{SDFWLFDOHPDQVLQDFKLHYLQ} \)\( \text{IDQREMHWLYHZKLOH} \) making the optimum use of resources.

**Brackish Groundwater** – Somewhat salty water, often found in groundwater aquifers. The water has a mineral content between freshwater and seawater.
California WaterFix – WaterFix is a science-driven upgrade to the aging water system. It will provide clean, reliable water while protecting the environment; regional security; environmental protection; reduced risk from earthquakes and climate change; system upgrades and QHZWHFKQRORJ\sqDQGLQFUHDVHGHJ\sqLHQL/F

Capital Improvement Program (CIP) – A major building program initiated in 1989 to plan and implement projects required to meet the region’s current and future water demands. Projects in the CIP include: constructing new facilities to improve operational flexibility and capacity to deliver water, particularly during times of peak usage; rehabilitating existing facilities; and replacing or relining aging pipelines.

Carryover Storage – A volume of storage dedicated to water storage during a wet year for future use in a dry year.

Claude “Bud” Lewis Carlsbad Desalination Plant (CDP) – This seawater desalination plant meets approximately 30 percent of the region’s water demand by producing an average of 50 million gallons per day of locally controlled water for the region as part of a Water Purchase Agreement (WPA) between Poseidon, the owner/operator of the plant, and the Water Authority.

Colorado Lower Basin States – The three states that are fed from the lower basin of the Colorado River: California, Arizona, and Nevada.

Conservation – The preservation of a physical quantity of water, or the deferral of use of that same amount of water.

Conveyance – The movement of bulk commodities such as water.

DDW – The Division of Drinking Water of the State Water Resources Control Board.

Direct Potable Reuse Water – Water that is distributed directly into a potable water supply distribution system downstream of a water treatment plant or in the source water supply immediately upstream of the water treatment plant.

Distribution Tariff – The rate charged by an electrical utility to customers wishing to use the infrastructure owned by the electrical utility to deliver wholesale power to itself or others.

Drought – A prolonged period of below-average precipitation.

Dry-year – A year in which rainfall is less than the long-term average.

Emergency Storage – Additional water that is stored during a water year, for emergency use, should an emergency occur.

Emergency Storage Project (ESP) – A set of Water Authority Capital Improvement Program SURM HFWV 7KH(63LVDV\\WHPRIUHVHYUJLUV interconnected pipelines, and pumping stations designed to make water available to all communities in the San Diego region in the event of a disaster that interrupts imported water deliveries.
**Energy Facilities** – As it pertains to the Water Authority, any systems or facilities that generate or store energy.

**Environmental Impact** – The direct and indirect physical changes to the environment that are caused by damage or damage to the environment. The pressures created may be high enough to damage or even cause catastrophic failure of pipelines. Specialized hydraulic transient analysis provides the basis for designing surge control measures to protect important infrastructure.

**Hydraulic Transient** – A pressure surge that is caused when sudden changes in flow rate occur in pumping and pipeline systems. The pressures created may be high enough to damage or even cause catastrophic failure of pipelines. Specialized hydraulic transient analysis provides the basis for designing surge control measures to protect important infrastructure.

**Hydroelectric Facilities** – A power plant that produces electricity from the power of rushing water turning turbine-generators.

**Imported Water Supply** – A water supply that lies outside the region of San Diego County and requires transport into San Diego County.

**Indirect Potable Reuse (IPR)** – Water that is blended with other environmental systems such as a river, reservoir, or groundwater basin, before the water is reused.

**Irrigation** – A water supply used for agriculture by artificial means, such as pumping water onto crops, in areas where rainfall is insufficient.

**Local Water Supply** – A water supply that is not imported from outside of San Diego County. Local resources for the San Diego region are recycled water, groundwater, local surface water, and conservation.
**Member Agency** – An agency that is a direct purchaser of water from the Water Authority. The Water Authority has 24 member agencies. The Water Authority’s member agencies are comprised of 6 cities, 5 water districts, 3 irrigation districts, 8 municipal water districts, 1 public utility, and 1 federal agency (military base).

**MGD** – Million gallons per day

**Mitigation** – A way in which an agency may offset negative environmental impacts from a project, or make the impacts less serious.

**Mitigation Monitoring Plan** – A written document, adopted when the lead agency approves environmental impact report, to reduce or avoid impacts are implemented. Inspectors/monitors may be placed on-site during construction to record proper implementation of mitigation measures. The plan remains active until all mitigation measures have been satisfactorily completed.

**Municipal and Industrial (M&I) Water** – Water for residential and commercial uses, accounting for approximately 80 to 85 percent of Water Authority demand. Does not include agricultural water, which makes up the remaining 15 to 20 percent.

**Non-potable Water** – Water not treated to a level for drinking water purposes.

**Ocean Plan Amendment** – The May 6, 2015 amendment to the State Water Resources Control Board’s Water Quality Control Plan for Ocean Waters of California regarding construction and operation of seawater desalination facilities.

**Potable Reuse Water** – Recycled water that meets drinking water standards and is safe for human consumption.

**Potable Water** – Water suitable for drinking.

**Pre-stressed Concrete Cylinder Pipe** – A type of pipe that consists of a concrete core, a thin steel cylinder, high tensile pre-stressing wires, and a mortar coating. The pre-stressing wires are prone to early failure, which can cause a pipe segment to break. There are 82 miles of this type of pipe within the Water Authority’s aqueduct system.

**Preferential Rights** – An antiquated formula used by Metropolitan Water District of Southern California to calculate the amount of water to which each of its member agencies is legally entitled.

**Pumped Storage** – A hydroelectric technology that stores and generates energy by moving water between two reservoirs at different elevations.
Quantification Settlement Agreement (QSA) – An agreement between the San Diego County Water Authority, Coachella Valley Water District, Imperial Irrigation District, and the Metropolitan Water District of Southern California signed in 2003. The QSA provides California a transition period to implement water transfers and supply programs that will reduce California’s over-dependence on the Colorado River, and reduces the state’s draw to its 4.4 million acre-foot annual apportionment.

Recycled Water – Municipal wastewater that is treated and disinfected to a level suitable for non-drinking purposes. The beneficial reuse of recycled water reduces the need to import or develop other water supplies.

Reservoir – A pond or lake where water is collected and stored until it is needed.

Runoff – Water that travels over the surface of the earth, moving downward due to the law of gravity. Runoff is one way in which water that falls as precipitation returns to the ocean.

Seawater Desalination – A reverse osmosis membrane technology employed to separate fresh water from seawater.

Second Aqueduct – The western-most of two San Diego County Water Authority pipelines which convey water from Metropolitan Water District’s system throughout San Diego County. The Second Aqueduct contains Pipelines 3, 4, and 5.

State Water Project – A water supply and delivery system of reservoirs, aqueducts, power plants, and pumping plants which extends over two-thirds of California.

Surface Water – All water, fresh and salty, on the earth’s surface.

Surge Protection – A facility designed and constructed for the purpose of controlling hydraulic rate within a pipeline.

Treated/Filtered Water – Water that meets the Department of Health Services standards for potable drinking water use.

Untreated/Raw Water – Water that has not yet been treated to meet the Department of Health Services standards for potable drinking water use.

Urban Water Use – Same as Municipal and Industrial (M&I) Water. Water for residential and commercial uses, accounting for approximately 80 to 85 percent of Water Authority demand. Does not include agricultural water, which makes up the remaining 15 to 20 percent.
**Value Engineering** – A systematic and structured approach used to analyze and improve design and construction of projects. It helps to achieve an optimum balance between function, performance, quality, safety, and costs. The proper balance results in the maximum value for the project and the reliable performance of functions to meet customer needs at the lowest overall cost.

**Wastewater** – Water containing waste material.

**Water Demand** – The amount of water, at present, that is required to meet the needs of a population.

**Water Facilities** – As it pertains to the Water Authority, any pipelines, pump stations, flow control facilities, reservoirs, or dams that enable the transport of water throughout San Diego County.

**Water Purchase Agreement (WPA)** – Agreement that governs the purchase of between 48,000 and 56,000 acre-feet of desalinated seawater per year from the Claude “Bud” Lewis Carlsbad Desalination Plant (CDP).

**Water Recycling** – The treatment and disinfection of municipal wastewater to provide a water supply suitable for non-potable reuse.

**Water Supply Diversification** – A strategy to meet regional water demands with a diverse range of water supplies and tactics including imported water, desalinated seawater, and recycled water.

**Waters of the United States** – A document that defines the waters that fall within the jurisdiction of the Environmental Protection Agency and the Army Corps of Engineers.

**Watershed** – A region or area of land bounded peripherally by a water parting and draining ultimately to a specific watercourse or body of water.