OUR MISSION To provide a safe and reliable supply of water to our member agencies serving the San Diego region.
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The San Diego County Water Authority was created by a legislative act in 1944 and tasked with the mission of providing a safe and reliable water supply to our member agencies serving the San Diego region. From inception, the Water Authority has faced and overcome significant economic, environmental, and regulatory challenges and a major key to our success has been the organization’s ability to anticipate and adapt to these challenges. As a result, the Water Authority has achieved numerous important accomplishments, including the completion of the Claude “Bud” Lewis Carlsbad Desalination Plant, the 2015 Urban Water Management Plan, the San Vicente Dam Raise, and the updated Long-Range Financing Plan.

The Water Authority’s Business Plan – presented originally to the Board of Directors in 2004 – is a key planning document that provides the roadmap for Water Authority staff to communicate, coordinate, and focus efforts towards meeting organizational goals. Throughout the years, the Business Plan has evolved, reflecting the addition of new challenges and changes to Water Authority policy and programs.

The 2017-2021 Business Plan contains significant modifications from the previous plans to provide clarity and ease of use for the reader. The restructured Business Plan highlights three key focus areas: Water Supply, Water Facilities, and Business Services. The plan contains broadened programs and updated management strategies that reflect the organization’s continued emphasis on water system management, system reliability, regulatory compliance, and financial stability. New objectives have been added which reflect the organization’s new emphasis on cybersecurity, energy management, and workforce development. Near-term and long-term objectives and tactics, which are clearly linked to management strategies and key performance indicators to track continuous improvement, have been identified for each Business Plan program.

As a leader on water issues statewide, the Water Authority continues to be a forward looking agency, striving to identify future challenges, anticipate opportunities, and respond quickly to our changing environment.
A member of the San Diego County Board of Supervisors also serves as a representative to the Water Authority board of directors.

** The Sweetwater Authority is a service organization for the city of National City and the South Bay Irrigation District.
Introduction

Business Plan Overview

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.

As the governing body of the Water Authority, the Board of Directors meet to ensure a safe and reliable water supply for the San Diego region.
Business Plan Key Focus Areas & Programs

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.

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.

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.

FIGURE 1.2 Business Plan – Key Focus Areas and Programs

<table>
<thead>
<tr>
<th>Water Supply</th>
<th>Water Facilities</th>
<th>Business Services</th>
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<tbody>
<tr>
<td>Imported Water</td>
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<td>Resource Planning</td>
<td>Water System Management</td>
<td>Technology</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Workforce Management</td>
</tr>
</tbody>
</table>
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.

FIGURE 1.3  Planning Documents by Business Plan Focus Areas/Programs
Current Business Trends

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 develop pioneering strategies and execute a visionary 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 through the financial crisis and subsequent recession of 2008, and the multi-year drought we are currently facing. One example of a proven success for crafting innovative solutions is the new Supply Reliability Charge, which further diversifies the fixed/variable revenue mix and ensures equitable recovery of supply reliability investments. Looking forward, the Water Authority will be focused on addressing the challenges facing water supply availability, 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’s economic condition continues to improve as unemployment levels approach the pre-2008 recession levels and home construction and home prices continue to show improvement. While home affordability and availability may constrain economic gains in the future, the county of San Diego is expected to continue to attract new residents and continue to grow at a healthy rate. The economic development will drive water demands up 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 increase.
Workforce Planning
As the world continues to change at a rapid pace, many workplaces are struggling to keep up. The statistics make this clear. By 2020, more than half of the U.S. workforce will be under 32 years old. According to a recent study, 63 percent of the nation’s Boomer generation – most holding executive roles – will begin to retire in the next five years. In 2016, the average U.S. worker stays at his or her job for 2.5 years.

The Water Authority acknowledges the major trends shaping the future workforce and considers the implications of these trends as we develop our strategic goals over the next five years. Changing demographics and the rise of millennials; continued job growth in the San Diego economy creating competition for high performers; and need for key leadership skills in an environment of continuous change are some of the significant factors considered when developing a strategic business plan focused on driving future workforce success.

Societal/Political Trends
Intergovernmental Relations
The nexus between regional growth and water 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. 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 our water supply is integrated with large and complex water systems, such as the Colorado River and Bay-Delta. Taking an active role in the intergovernmental arena and advocating for our region will continue to be necessary to ensure supply reliability.

Integrated Public Policies
The Water Authority’s involvement with regional agencies is key for the integration of public policies affecting energy, housing, transportation, and water quality and supply. Advocating for the clarification of policies 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 citizens today and in the future. Organizations with transparent and open disclosure of performance information strengthen the water industry and communities. The Water Authority will continue to be transparent and demonstrate a willingness to be forthright with information. This willingness stresses accountability, supports continuous improvement, builds stakeholder trust, reinforces credibility, and educates and serves the public.

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.

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 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 adopt mitigation methods to protect and secure its technical infrastructure. The Water Authority is also optimizing its maintenance activities by using new sensors and software that can automate, track, and analyze detailed maintenance data. The recent adoption of a formal 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 our planet being used over and over again. Water can be reused safely, efficiently, and in a sustainable manner. For these reasons, it is a viable part of the Water Authority’s supply portfolio. To achieve the Water Authority’s mission to secure a safe and reliable water supply for the region, it is important to beneficially reuse our treated water supply.

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, therefore, reducing the supply of water. In addition, the State of California now mandates that government agencies address climate change 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 ensure the Water Authority’s success in helping to stabilize water rates, reduce greenhouse gas emissions, and address economic and electrical system reliability risks.

Environmental Sustainability
A commitment to support cost-effective sustainability programs that will benefit the environment and promote thoughtful stewardship of natural resources is essential to decreasing the impact to ratepayers, reducing the environmental impacts of Water Authority operations, conserving energy and water, and helping the Water Authority better anticipate and adapt to the impacts of climate change. 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. These
initiatives help to ensure the Water Authority is reducing its impact on the environment and making a positive contribution to a more sustainable future for the region.

**Natural Disasters**
The Water Authority recognizes its responsibility to be prepared and to respond quickly, safely, and effectively to emergency situations that arise within our 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 our commitment to the well-being of the communities we serve.

**Limited Local Water Supplies**
Traditional sources of water supplies, such as local surface water and groundwater, are limited and becoming less reliable. While historically these supplies represent the least-costly source of water, climate change may negatively impact these already scarce water resources. As a result, they will continue to comprise a smaller percentage of our water supply portfolio and make the development of additional supply sources and 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 performance report, as well as an electronic version of the Business Plan document, are available online at www.sdcwa.org/mission-vision-values-strategies.

Agency Dashboard of Key Performance Indicators

The online Water Authority Agency Dashboard displays agency-wide key performance indicators in the focus areas of water supply reliability, water distribution and facilities, and financial responsibility. Many of the key performance indicators are linked to Business Plan objectives and tactics, making it another useful tool for monitoring Water Authority activities towards achieving its mission of providing a safe, reliable water supply to the region. Detailed descriptions of the Water Authority Dashboard focus areas and key performance indicators are provided in Appendix 3.

The Water Authority Dashboard is available online at www.sdcwa.org/dashboard and is continuously updated to ensure the most current status is available on each of the key performance indicators.
FIGURE 2.1 Water Supply – Programs and Focus Areas

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

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

**RESOURCE PLANNING**
- Water Management Planning
- Water Shortage and Drought Response Management
- Water Use Efficiency
Overview

The Water Supply focus area consists of three programs: Imported Water, Local Water, and Resource Planning. Imported Water addresses the long-term viability, sustainability, and fiscal issues surrounding the Water Authority’s imported water supplies. Local Water supports the on-going execution of the Water Authority’s and member agencies’ water supply diversification strategy. 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. Key issues within this focus area include:

- Ensuring appropriate cost allocation and long-term viability of imported water supplies
- 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

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 our member agencies and the public. Engaging stakeholders and influencing 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 our water reliability objectives.
The Past, Present, and Future of San Diego’s Water Supply

**Figure 2.2**
1991 Water Supply Portfolio

- 95% Metropolitan Water District
- 5% Local Surface Water

**Figure 2.3**
2020 Water Supply Portfolio (estimated)

- 21% Metropolitan Water District
- 32% Imperial Irrigation District Transfer
- 14% Canal Lining Transfer
- 7% Recycled Water
- 10% Seawater Desalination
- 6% Groundwater
- 9% Local Surface Water
- 1% Potable Reuse

**Figure 2.4**
2035 Water Supply Portfolio (projected*)

- 13% Metropolitan Water District
- 29% Imperial Irrigation District Transfer
- 12% Canal Lining Transfer
- 8% Recycled Water
- 10% Seawater Desalination
- 5% Groundwater
- 7% Local Surface Water
- 16% Potable Reuse

*Includes verifiable and additional planned local supply projects from the 2015 Urban Water Management Plan.
Imported Water Overview

The Water Authority receives imported water as a member agency of the Metropolitan Water District of Southern California (MWD) and from our Quantification Settlement Agreement (QSA) water transfer and canal lining projects with the Imperial Irrigation District (IID). These imported supplies from the Sacramento Bay-Delta and Colorado River are vital to providing a diversified and sustainable water supply to the San Diego region.

The Water Authority’s government relations team pioneers our advocacy efforts through active engagement of various governmental decision-making levels on Bay-Delta issues to ensure the Water Authority is an integral part of the Delta solution and that San Diego’s ratepayers’ interests are protected. The team also works closely with the Governor’s office, state legislators, federal officials, state agencies, water agencies, and interested stakeholders to develop agile and visionary solutions to the Bay-Delta’s challenges that are supported by a broad spectrum of stakeholders and are funded by beneficiaries.

The Colorado River Program advocates the Water Authority’s position on developing state and federal issues associated with the seven Colorado River Basin States agreements and QSA, including environmental issues at the Salton Sea. Following a decade of litigation challenging the legality of the QSA contracts, the Water Authority successfully defended the QSA agreements, and all remaining appeals were dismissed in May 2015. Going forward, a vital component is the completion of upcoming QSA milestones to ensure timely creation and delivery of the scheduled volumes of IID water transfer and canal lining supplies. Our satellite public outreach office in the Imperial Valley drives our advocacy efforts on QSA and Salton Sea issues and quickly responds to stakeholder concerns.

The Metropolitan Water District Program promotes creative and sustainable ideas at MWD to ensure its long-term viability as Southern California’s imported water provider. Paramount to MWD’s longevity and relevancy is the need for it to follow the law and be nimble and adaptive to changing conditions. The MWD Program team works closely with MWD, its member agencies, the state, and other interested stakeholders to inform and advocate the Water Authority’s MWD policies and objectives. Ensuring MWD’s rate-setting practice is lawful is vital to the Water Authority’s ratepayers. The Water Authority’s rate litigation against MWD that started in 2010 was a bold step towards that objective. The resounding trial case decision in 2015 underscored how San Diego’s ratepayers are bearing disproportional share of MWD costs through its illegal rates. Sustaining the rate litigation victory through the appellate process is the next step toward achieving appropriate water rates.

Imported Water Focus Areas

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

The Water Authority is actively engaged in Bay-Delta activities as this is one of the important sources of San Diego’s imported water supply. Environmental conditions in the Delta are not sustainable, and the resultant water supply reliability uncertainties associated with Delta conditions impact the predictability of State Water Project water supply available to the San Diego region. The Water Authority supports the development of a Bay-Delta solution. To the extent San Diego ratepayers will help pay for the solution, the benefits to the San Diego region must be clearly identified and any costs borne by the San Diego ratepayers must be proportional to the benefits received. Staff will implement management strategies that ensure costs for fixing the Bay-Delta are equitably and fairly apportioned among water contractors, and commensurate with the water supply quantity

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**Colorado River**

The Water Authority’s independent Colorado River supplies from our conserved water transfer with the Imperial Irrigation District and canal lining projects are critical to our region’s imported water supply. The key management strategies and objectives of the Colorado River focus area include successfully implementing QSA milestones, developing innovative options for flexibility in QSA deliveries as annual transfer volumes ramp up through 2021, and protecting our Colorado River supplies from impacts of drought and decisions negotiated among the Colorado River Basin States. In 2017, a key recommendation will be presented to the Water Authority Board of Directors to align the timeframe of the Water Transfer Agreement and Exchange Agreement—currently the Water Transfer Agreement term is 45-years and the Exchange Agreement is 35-years. Also, at the end of 2017, mitigation water that has been delivered to the Salton Sea since 2003 will cease, driving the next phase of air quality mitigation and increasing stakeholder environmental and public health concerns. Water Authority staff will ensure all required environmental mitigation is implemented at the Salton Sea through the QSA Joint Powers Authority during this transition from mitigation water deliveries to air quality projects. Staff will also continue to advocate for meaningful

The Sacramento Bay-Delta is vital to the region’s water supply.
progress on Salton Sea restoration and management by the State of California. These actions drive many of the objectives and tactics developed for this focus area.

**Metropolitan Water District**

The Metropolitan Water District Program is responsible for developing and implementing strategies to achieve the Water Authority’s long-term reliability and sustainability goals at MWD, in accordance with the Water Authority Board of Directors’ strategic objectives. The Water Authority drives advancement of policies at MWD that embrace transparent governance, legal rate setting, fiscal responsibility, and predictable supplies; create equity and fairness among MWD member agencies; and facilitate water transfers and resources management. The MWD management strategies aim to promote the Water Authority’s positions on issues affecting MWD supply reliability, quality, and cost. Major tactics focus on gaining support and advocating for the Water Authority’s position on key MWD policy concerns, and obtaining a final positive outcome in the MWD rate litigation.
## Program Focus Areas  Management Strategies

<table>
<thead>
<tr>
<th>BAY-DELTA</th>
<th>COLORADO RIVER</th>
<th>METROPOLITAN WATER DISTRICT</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Advocate Board policies regarding Bay-Delta issues, funding initiatives, and the California WaterFix to federal, state, local, and other stakeholders.</td>
<td>D. Develop alternative Quantification Settlement Agreement implementation strategies.</td>
<td>I. Support MWD Delegates in identifying and maintaining Water Authority strategic goals at MWD.</td>
</tr>
<tr>
<td>B. Influence the selection of a right-sized Bay-Delta conveyance project based on firm financial commitments by water contractors.</td>
<td>E. Safeguard Water Authority investments from outside influences.</td>
<td>J. Influence policy decisions at MWD to ensure its long-term sustainability as an imported water supplier.</td>
</tr>
<tr>
<td>C. Ensure ratepayers are not burdened with California WaterFix costs without real, commensurate, and demonstrable water supply reliability benefits.</td>
<td>F. Ensure completion of Quantification Settlement Agreement environmental mitigation milestones and Salton Sea activities.</td>
<td>K. Ensure the Water Authority receives its fair share of investments at MWD.</td>
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<td></td>
<td>G. Analyze and recommend options related to reducing the duration of the IID water transfer or extending the duration of the MWD exchange agreement.</td>
<td>L. Advocate for equity and transparency in MWD’s decision making process.</td>
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<td></td>
<td>H. Advance Water Authority Quantification Settlement Agreement policy through continuing dialogue with governing bodies, elected officials, and the public.</td>
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## Objectives and Tactics

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Target date</th>
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<tbody>
<tr>
<td>1.</td>
<td>Develop demonstration projects, through coordination with Imperial Irrigation District and other stakeholders that provide enhanced flexibility of annual transfer volumes and efficiency-based conservation targets. (D, H)</td>
<td>Jun 2017</td>
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<tr>
<td>2.</td>
<td>Prepare a comprehensive financial analysis of the California WaterFix project cost allocation data to assess the project’s cost-benefit to Water Authority ratepayers as compared to other water supply alternatives. (A, B, C)</td>
<td>Dec 2017</td>
</tr>
<tr>
<td>3.</td>
<td>Perform a comprehensive, long-term analysis of the Exchange and Transfer Agreements to recommend extension or early termination options to the Water Authority Board. (G)</td>
<td>Dec 2017</td>
</tr>
<tr>
<td>4.</td>
<td>Communicate the Water Authority’s perspectives on developing responsible mitigation and restoration plans for the Salton Sea to secure the support of the QSA parties, the Governor’s Office, elected officials, and opinion leaders. (G, H, J)</td>
<td>Dec 2017</td>
</tr>
<tr>
<td>5.</td>
<td>Lead quarterly stakeholder briefings with the farming community and other Imperial Valley stakeholders to enhance relationships and exchange perspectives on efficiency-based water conservation and Salton Sea issues. (E, F, H)</td>
<td>Dec 2017</td>
</tr>
<tr>
<td>6.</td>
<td>Achieve final decision in MWD rate litigation through legal avenues and secure award of damages. (I, J, K, L)</td>
<td>Dec 2017</td>
</tr>
<tr>
<td>7.</td>
<td>Establish a Water Authority Intentionally Created Surplus account for temporary storage of Colorado River supplies in Lake Mead. (D, H)</td>
<td>Jun 2019</td>
</tr>
<tr>
<td>8.</td>
<td>Communicate the Water Authority’s perspectives on any project intended to serve as a Delta fix to secure the support of the San Diego business community, civic leaders, opinion leaders, and media for a Water Authority supported Bay-Delta solution. (A, B)</td>
<td>Dec 2019</td>
</tr>
<tr>
<td>9.</td>
<td>Obtain support from key stakeholders to encourage MWD to adopt a long-term finance plan. (I, J, L)</td>
<td>Dec 2019</td>
</tr>
<tr>
<td>10.</td>
<td>Obtain San Diego business community, civic leaders, opinion leaders, and media opposition to a Bay-Delta solution that would require urban water ratepayers to underwrite or subsidize a new conveyance facility, including costs shifted from agricultural to urban water users. (A, C)</td>
<td>Dec 2020</td>
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Key Performance Indicators

1. Ensure full amount of scheduled QSA water is delivered to the San Diego region each fiscal year.

![QSA Delivery Chart](chart1)

- **FY17**: 150,000
- **FY18**: 200,000
- **FY19**: 250,000
- **FY20**: 300,000
- **FY21**: Target

2. Perform three briefings per quarter (12 annually) with key stakeholders on emerging QSA issues to enhance legislative and community support for protection of Water Authority’s Colorado River supplies each fiscal year.

![QSA Quarterly Stakeholder Briefings Chart](chart2)

- **Target**: 12 briefings annually
- **FY17**: 12
- **FY18**: 12
- **FY19**: 12
- **FY20**: 12
- **FY21**: Target

3. Present 90 percent of key MWD policy issue memos within one month of MWD proposals through 2021 to increase awareness and understanding of key MWD policy issues.

![MWD Policy Issue Memos Chart](chart3)

- **Target**: 90% of key policy issues
- **FY17**: 85%
- **FY18**: 90%
- **FY19**: 95%
- **FY20**: 100%
- **FY21**: Target
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-proof 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 new water supplies that have been realized or initiated since the last Business Plan Update, 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 December 23, 2015 marks the onset of desalinated water deliveries to the San Diego region.
56,000 acre-feet of local, drought-proof supply. Since the start of operations, it has produced over eleven billion gallons of high-quality drinking water and won numerous awards ranging from Global Water Intelligence’s Desalination Plant of the Year to San Diego County Tax Payers Association’s Grand Golden Watchdog award. The Water Authority also successfully advocated for Ocean Plan Amendment language that supports the agency’s seawater desalination intake/discharge strategies, and initiated its own Intake Testing Program at Camp Pendleton to compare open-ocean and subsurface intake performance. 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 and recycled water programs, and managed local project incentive programs.

**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, groundwater, and surface water. Water Authority staff 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. Supporting objectives and tactics include coordinating recommendations for the proposed Statewide Mercury Plan, developing statewide beneficial use categories, and developing strategies for permitting treatment plant residual discharges; all in support of the various existing and proposed local supply facilities and projects.

**Potable Reuse**

The Water Authority’s member agencies are moving forward with research and planning for cutting edge and innovative projects that will set the standard for potable reuse in California. The Water Authority coordinates with member agencies on potable reuse to create a regional voice that will ensure a regulatory pathway for approval of a new drinking water supply that will support the region in a time of climate change and unprecedented drought. For example, the Potable Reuse Coordinating Committee, 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 over the next five fiscal years include regulatory and legislative support, and educating the public on the benefits of potable reuse and associated water quality improvements.
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 western hemisphere. 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. Other strategies consist of the application of an adaptive management approach for future desalination supplies through the Camp Pendleton Desalination Intake Testing Program, and support of Otay Water District’s engagement in the Rosarito desalination project.
### Program Focus Areas  Management Strategies

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<thead>
<tr>
<th>MEMBER AGENCY SUPPLY</th>
<th>POTABLE REUSE</th>
<th>SEAWATER DESALINATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Improve regulatory flexibility and streamlining for local supplies.</td>
<td>C. Engage in regulatory and legislative processes to ensure regulatory pathways are available for approval of local potable reuse projects.</td>
<td>F. Ensure compliance with Claude “Bud” Lewis Carlsbad Desalination Plant Water Purchase Agreement.</td>
</tr>
<tr>
<td>B. Protect and improve source water quality for water supply in the San Diego region.</td>
<td>D. Assess and recognize the benefits of water quality improvements associated with new local supplies.</td>
<td>G. Ensure continued operation of Claude “Bud” Lewis Carlsbad Desalination Plant and compliance with Ocean Plan Amendment.</td>
</tr>
<tr>
<td></td>
<td>E. Encourage public support, implement public outreach, and offer technical assistance to support reuse and recycled water projects.</td>
<td>H. Implement an adaptive management approach for future seawater desalination supplies.</td>
</tr>
</tbody>
</table>
Objectives and Tactics

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Target date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Facilitate a member agency workgroup to develop tailored outreach assistance in support of member agency potable reuse projects. (E)</td>
<td>Dec 2017</td>
</tr>
<tr>
<td>2.</td>
<td>Facilitate a member agency workgroup to engage with the State Water Resources Control Board to provide coordinated regional comments on the proposed statewide Mercury Plan and the proposed state beneficial use categories. (A, D)</td>
<td>Dec 2017</td>
</tr>
<tr>
<td>3.</td>
<td>Lead a member agency workgroup to develop a strategy for permitting treatment plant residual discharges. (A, B)</td>
<td>Dec 2017</td>
</tr>
<tr>
<td>4.</td>
<td>Lead the member agency supported Potable Reuse Coordination Committee to develop and provide comments on (1) the State Water Resources Control Board’s report to the legislature on the feasibility of adopting regulations for direct potable reuse and (2) proposed Surface Water Augmentation Regulations. (B, C, E)</td>
<td>Mar 2018</td>
</tr>
<tr>
<td>5.</td>
<td>Facilitate a member agency workgroup to provide coordinated regional comments on an update to the State Water Resources Control Board’s Recycled Water Policy. (A)</td>
<td>Jun 2018</td>
</tr>
<tr>
<td>6.</td>
<td>Develop technical data comparing subsurface and open-ocean intake facility performance through the Camp Pendleton Desalination Intake Testing Program, and share results with stakeholders. (D, H)</td>
<td>Sep 2018</td>
</tr>
<tr>
<td>7.</td>
<td>Support Otay Water District efforts to authorize the construction, connection, operation, and maintenance of a United States and Mexico cross-border pipeline facility to import desalinated water from the proposed Rosarito desalination facility. (A, H)</td>
<td>Oct 2018</td>
</tr>
<tr>
<td>8.</td>
<td>Complete all submittal reviews within the Water Purchase Agreement required timeframe during oversight of the design, construction, and commissioning of the Claude “Bud” Lewis Carlsbad Desalination Plant’s new intake and discharge facilities. (F, G)</td>
<td>Dec 2018</td>
</tr>
<tr>
<td>9.</td>
<td>Develop a Basin Plan amendment that supports potable reuse and reservoir operations in collaboration with member agencies and the San Diego Regional Water Quality Control Board. (A, B)</td>
<td>Jun 2021</td>
</tr>
</tbody>
</table>
Key Performance Indicator

1. Exceed the Claude "Bud" Lewis Carlsbad Desalination Plant Water Purchase Agreement Minimum Demand Commitment of 48,000 acre-feet annually.
Resource Planning Overview

The Resource Planning Program encompasses water shortage and drought response management that is both agile and pioneering in its response to the deep statewide drought. Much of this work involved the emergency water conservation regulation, adopted by the State Water Resources Control Board in May 2015. When state-mandated water use reduction targets were in effect, the region responded to strong drought response management and exceeded its target with a water use reduction of 21.8 percent. Due to improved supply conditions, the State Board amended the regulation in May 2016 to take a supply-based approach that allows regions to self-certify the sufficiency of available water supplies. This approach showed that Water Authority supplies, when combined with member agency local supplies and supplemented by Water Authority stored water supplies, are sufficient to meet water demands for fiscal years 2017 through 2019, resulting in a zero percent conservation standard through January 2017. The Water Authority and others sought the supply-based approach for more than a year to help support communities that invested in drought-resilient supplies.

Another 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 facilitating the efficient use of water. Recent accomplishments include launching and expanding popular water-efficient landscape makeover classes for homeowners, launching a new water-efficient training program for professional landscapers, and working with a number of partners to develop technical guidelines and classes for “sustainable landscapes” that achieve water efficiency and other environmental benefits. The Water Authority’s water use efficiency activities support a number of ongoing efforts identified as core needs by member agencies to help them meet their long-term water management goals, including water-use surveys and audits; incentives and other programs administered through the Metropolitan Water District of Southern California; and classes, calculators, and other “how to” tools designed to help homeowners and other water users improve their water efficiency. Many of the activities focus...
Regional Resource Planning at the Water Authority is accomplished with two major visionary plans – the San Diego Urban Water Management Plan and the San Diego Integrated Regional Water Management Plan. In collaboration with its 24 member agencies, the Water Authority completed the 2015 UWMP update, which was adopted by the Board in June 2016 and accepted by the State Department of Water Resources in September of the same year. As part of the San Diego Regional Water Management Group, the Water Authority Board adopted the 2013 IRWM Plan in September 2013. Both plans were prepared such that they comply with state requirements and maintain the region’s eligibility for state funding. From 2011 to 2016, the Water Authority worked with its RWMG partners to secure $65 million in IRWM funding from the Department of Water Resources’ Proposition 84 grant program to support 38 high-priority water projects. The Water Authority continues to fulfill an ongoing obligation to both DWR and its RWMG partners to administer the IRWM grant funding obtained by the San Diego IRWM Program. This is achieved through the IRWM Grant Administration Program, which administers the awarded grant funds for individual IRWM projects.

**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 Integrated Regional Water Management plan and a regional Urban Water Management Plan. 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 Urban Water Management Plan identifies a diverse mix of water resources projected for development 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. Both of 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 objectives and tactics to update the IRWM Plan to comply with state requirements, update 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.
WATER SUPPLY
Resource Planning

for this focus area ensure that progressive drought response actions are appropriate and reasonably implemented by member agencies, and that the Water Authority’s planning documents are consistent and relevant to properly manage supply shortages. Long-term objectives include an update of the WSDRP, a revision of the 2008 Model Drought Response Conservation Ordinance, and a revision to the Shortage Contingency Analysis contained in the 2015 UWMP to comply with updated state requirements and ensure consistency with the updated WSDRP.

Water Use Efficiency
While the Water Shortage and Drought Response Management Plan responds to specific conditions by reducing water use in the short term, the Water Use Efficiency Program is a core element of the Water Authority’s strategy to make the region’s water supply more reliable in the long term. The Water Use Efficiency focus area utilizes several management strategies, including continuing to pioneer the advancement of sustainable landscapes, and driving to enhance the level of customer service. Other strategies involve providing programs and resources that support the member agencies, 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 transforming nearly 670,000 square feet of turf yards into sustainable landscapes via grant-funded incentives, and conducting a market-based needs assessment to identify under-serviced water-use sectors that could benefit from additional efficiency programs or services.

Water Shortage and Drought Response Management
The Water Authority relies on its Water Shortage and Drought Response Management Plan to effectively manage reduced water supply during drought. The plan identifies potential actions for drought conditions, including the stages of water supply conditions and the steps necessary to manage water supplies at each stage. The management strategies

The “When in Drought” campaign was successfully launched in 2014 as part of the Water Authority’s drought response plan.

San Diego County Water Authority

Supported by the San Diego County Water Authority and its 24 member agencies. Partial funding for the “When in Drought” campaign was provided by a grant from the Department of Water Resources.

The Governor Has Ordered
Water Use CUTS
Your efforts to save add up!
• Water yards no more than 2 days a week
• Fix all leaks immediately
• Shorten showers

For conservation tips, programs and local restrictions go to
whenindrought.org
## Program Focus Areas  Management Strategies

### WATER MANAGEMENT PLANNING

<p>| | |</p>
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>A.</td>
<td>Implement an Integrated Regional Water Management Plan that reflects stakeholder consensus and complies with evolving state requirements.</td>
</tr>
<tr>
<td>B.</td>
<td>Pursue funding for implementation of projects that achieve San Diego Integrated Regional Water Management Program goals.</td>
</tr>
<tr>
<td>C.</td>
<td>Develop a regional Urban Water Management Plan that complies with evolving state requirements and ensures a reliable water supply for the San Diego region.</td>
</tr>
<tr>
<td>D.</td>
<td>Update water management plans to maintain eligibility for state funding.</td>
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### WATER SHORTAGE AND DROUGHT RESPONSE MANAGEMENT

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<table>
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<tbody>
<tr>
<td>E.</td>
<td>Ensure planning documents are consistent and relevant to properly manage and respond to supply shortages.</td>
</tr>
<tr>
<td>F.</td>
<td>Ensure that proposed drought response actions are appropriate, progressive, and may be reasonably implemented by the Water Authority and its member agencies.</td>
</tr>
</tbody>
</table>

### WATER USE EFFICIENCY

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<tbody>
<tr>
<td>G.</td>
<td>Implement best-practices to manage and deliver water-use efficiency programs and services in a timely, convenient, and courteous manner.</td>
</tr>
<tr>
<td>H.</td>
<td>Plan, develop, implement, or administer water efficiency programs and tools that meet the needs of member agencies and water users.</td>
</tr>
<tr>
<td>I.</td>
<td>Support policies and actions that advance long-term water-use efficiency best practices, behaviors, and market transformations.</td>
</tr>
<tr>
<td>J.</td>
<td>Leverage ratepayer investments by securing grants or other external funding sources and advocating for equitable benefits from MWD water-use efficiency programs.</td>
</tr>
<tr>
<td>K.</td>
<td>Advocate for long term water use efficiency policies that benefit the San Diego region.</td>
</tr>
</tbody>
</table>
## Objectives and Tactics

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Target date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Obtain Board approval for the updated Water Shortage and Drought Response Plan reflecting lessons learned from previous shortage periods. (E, F)</td>
<td>Apr 2017</td>
</tr>
<tr>
<td>2.</td>
<td>Obtain Board approval for the revised 2008 Model Drought Response Conservation Ordinance to achieve consistency with the Water Shortage and Drought Response Plan update. (E, F)</td>
<td>Apr 2017</td>
</tr>
<tr>
<td>3.</td>
<td>Amend the Shortage Contingency Analysis contained in the 2015 Urban Water Management Plan to comply with updated state requirements and ensure consistency with the Water Shortage and Drought Response Plan update. (E, D)</td>
<td>Dec 2018</td>
</tr>
<tr>
<td>4.</td>
<td>Develop a centralized database covering five water-use efficiency programs to improve data management and performance reporting. (G, J)</td>
<td>Dec 2018</td>
</tr>
<tr>
<td>5.</td>
<td>Obtain Board approval for the updated Integrated Regional Water Management Plan to comply with state requirements. (A, D)</td>
<td>Jun 2019</td>
</tr>
<tr>
<td>6.</td>
<td>Secure $2.5 million in external funding such as grant awards, utility funding, and in-kind contributions to support water-use efficiency programs. (G, H, I, J)</td>
<td>Jun 2021</td>
</tr>
<tr>
<td>7.</td>
<td>Update the Urban Water Management Plan to identify supplies necessary to meet future demands and comply with the planned revision of the Urban Water Management Plan Act. (C, D)</td>
<td>Jun 2021</td>
</tr>
<tr>
<td>8.</td>
<td>Secure the San Diego Region's allocated share of approximately $38 million in IRWM grant funding, from the Department of Water Resource's Proposition 1 program. (A, B, D)</td>
<td>Jun 2021</td>
</tr>
</tbody>
</table>
Key Performance Indicators

1. Expend $1.1 million in Proposition 84 grant awards to pilot Sustainable Landscapes upgrade rebates through December 2019.

2. Increase efficiency of awarding Proposition 1 IRWM grant funding by executing 90 percent of project sponsor contracts within 120 days of an agreement between the Water Authority and State Department of Water Resources.
Supporting the advancement of sustainable landscapes will ensure a more reliable water supply for the region in the future.
**FIGURE 3.1** Water Facilities – Programs and Focus Areas

<table>
<thead>
<tr>
<th>INFRASTRUCTURE/CAPITAL IMPROVEMENT PROGRAM</th>
<th>SUSTAINABILITY</th>
<th>WATER SYSTEM MANAGEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset Management</td>
<td>Climate Change</td>
<td>Energy Initiatives</td>
</tr>
<tr>
<td>Infrastructure Planning</td>
<td>Environmental Management</td>
<td>Facilities Security and Emergency Response</td>
</tr>
<tr>
<td>New Facilities</td>
<td></td>
<td>Operations and Maintenance</td>
</tr>
</tbody>
</table>
Water Facilities

Overview

The Water Facilities focus area consists of three programs: Infrastructure/Capital Improvement Program, Sustainability, and Water System Management. The most significant issues within this focus area include:

- Controlling facility capital and operating costs
- 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

Efforts are continually made to ensure the Water Authority’s complex network of water transportation, treatment, and storage facilities are operated and maintained efficiently to provide a safe, reliable water supply to support the region’s economy and the quality of life for its residents.

Work crews install a section of 54-inch steel pipe connecting the Claude “Bud” Lewis Carlsbad Desalination Plant to the Water Authority’s aqueduct system.
The San Vicente Dam Raise is a major component of the Water Authority’s award winning Emergency and Carryover Storage Project.
Infrastructure/CIP Overview

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 decade, the focus of the Capital Improvement Program (CIP) was to build new infrastructure to implement the Emergency and Carryover Storage Project and fulfill the Water Authority’s mission to provide a safe and reliable water supply to the region. The Emergency and Carryover Storage Project is a system of reservoirs, interconnected pipelines, and pumping 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. With the completion of the San Vicente Dam Raise, the major components of the Emergency and Carryover Storage Project are complete. Some of the key facilities of the Emergency and Carryover Storage Projects included the Olivenhain Dam, Reservoir, Pipeline, and Pump Station; Lake Hodges Pipeline and Pump Station; and the San Vicente Pipeline, Pump Station, and Dam Raise.

The Water Authority’s $1.5 billion Emergency and Carryover Storage Project has been recognized by the United States Society on Dams and other industry organizations as one of the most significant water infrastructure projects in the nation and region. Additionally, it has recently received awards from several local and national organizations, including the Award of Excellence in the Constructed Project Category from the United States Society on Dams; the Project of the Year Award for Dams and Reservoirs from American Society of Civil Engineers, San Diego Chapter; the Project Achievement Award for Public Works Greater than $15 million from the Construction Management Association of America, San Diego Chapter; and the Project of the Year for Structures over $75 million from the American Public Works Association.

The current 30-year CIP budget of $2.8 billion, with an appropriation of $146.5 million for Fiscal Years 2016 and 2017, reflects the shift from major construction projects to asset management and the optimization of the existing aqueduct system.
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 primary components; the Infrastructure Rehabilitation Project, consisting of pipeline and facility assessments, repairs, and replacements; and the Relining and Pipe Replacement Program, including rehabilitation efforts specifically related to pre-stressed concrete cylinder pipe. To date, 40 miles, or nearly 50 percent of the Water Authority’s 82 miles of pre-stressed concrete cylinder pipe have been rehabilitated under this program.

**Infrastructure Planning**
The Water Authority completed the 2013 Regional Water Facilities Optimization and Master Plan Update with the primary focus of 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 scenarios include local supply development projects that have both direct and indirect impacts to the operation of the Water Authority’s system. Future infrastructure planning will be centered on those projects identified in the Master Plan Update and projects that ensure appropriate implementation of the remaining planning efforts in the current CIP.

**New Facilities**
The focus for new facilities has shifted from major construction projects to asset management and the optimization of the existing aqueduct system. This new focus involves projects that are on a smaller scale by comparison. The Water Authority must strive to adapt and develop business policies, practices, and procedures that are conducive to the award and management of smaller contracts. Management strategies that employ pioneering technology, such as 3-D scanning and automated scheduling and controls can promote the most efficient and cost-effective delivery of projects. The Water Authority will continue to be driven to employ 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.
Magnetic Flux Leakage Pipeline Inspection Technology is one example of the state-of-the-art tools used to monitor and protect Water Authority assets.
# Program Focus Areas  Management Strategies

## ASSET MANAGEMENT

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>A.</td>
<td>Ensure the prioritization, optimum maintenance, and rehabilitation of assets.</td>
</tr>
<tr>
<td>B.</td>
<td>Pioneer technology to reduce risk and increase productivity and efficiency.</td>
</tr>
</tbody>
</table>

## INFRASTRUCTURE PLANNING

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<table>
<thead>
<tr>
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<tbody>
<tr>
<td>C.</td>
<td>Coordinate and align project scope and schedules within the Master Plan Update and the Asset Management Program to achieve the optimum balance between regional water reliability and cost.</td>
</tr>
<tr>
<td>D.</td>
<td>Optimize use of existing treatment, storage, and conveyance facilities to meet projected member agency water demands.</td>
</tr>
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</table>

## NEW FACILITIES

<p>| | |</p>
<table>
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<tbody>
<tr>
<td>E.</td>
<td>Employ pioneering technology and best management practices for all CIP projects.</td>
</tr>
<tr>
<td>F.</td>
<td>Develop business policies, practices, and procedures that are aligned with smaller contracts.</td>
</tr>
<tr>
<td>G.</td>
<td>Collaborate with member agencies and other external stakeholders on the Capital Improvement Program.</td>
</tr>
<tr>
<td>H.</td>
<td>Coordinate with internal functional groups and stakeholders to promote the efficient and most cost-effective delivery of projects.</td>
</tr>
</tbody>
</table>
## Objectives and Tactics

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Target date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Complete the Nob Hill Improvements project to avoid excessive hydraulic transient pressures within Pipelines 3 and 4, under certain operational flow scenarios involving the Rancho Peñasquitos Pressure Control/ Hydroelectric Facility and San Vicente Pump Station. (E, G, H)</td>
<td>Apr 2017</td>
</tr>
<tr>
<td>2.</td>
<td>Complete the planning process and development of preliminary member agency agreements for the ESP – North County Pump Station project to allow treated water deliveries to portions of the North County service area during an emergency event. (C, D)</td>
<td>Jun 2017</td>
</tr>
<tr>
<td>3.</td>
<td>Complete the Miramar Pump Station Rehabilitation project to improve operations and reliability, and ensure the pump station remains fully operational after an emergency event. (E, F, G, H)</td>
<td>Jun 2017</td>
</tr>
<tr>
<td>4.</td>
<td>Obtain Board approval of contract amendments to the 2006 East County Regional Treated Water Improvement Program agreements, in cooperation with member agencies, which reflect the projected demand for treated water, provide water system flexibility and ensure full reimbursement of capital costs. (D, G)</td>
<td>Jun 2017</td>
</tr>
<tr>
<td>5.</td>
<td>Obtain Board approval for Administrative Code additions for decommissioning of Service Connections to reduce risk and maintenance costs. (A)</td>
<td>Dec 2017</td>
</tr>
<tr>
<td>6.</td>
<td>Develop a plan to evolve from standard preventative maintenance to agile predictive maintenance, using Asset Management data to revise maintenance schedules and practices in order to increase productivity and efficiency. (A)</td>
<td>Jun 2018</td>
</tr>
<tr>
<td>7.</td>
<td>Complete the San Diego 12 Flow Control Facility Rehabilitation project to improve operations and the reliable delivery of untreated water to the city of San Diego’s Alvarado Water Treatment Plant. (A, C, E, F, G, H)</td>
<td>Sep 2019</td>
</tr>
<tr>
<td>8.</td>
<td>Complete the Hauck 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>Dec 2019</td>
</tr>
<tr>
<td>9.</td>
<td>Complete the Carlsbad 5 Flow Control Facility project to allow desalinated water delivery directly from the Carlsbad Desalination Plant to the Carlsbad Municipal Water District. (E, F, G, H)</td>
<td>Dec 2019</td>
</tr>
<tr>
<td>10.</td>
<td>Evaluate and utilize tools and technology which can be used for robotic pipeline inspections to reduce water discharge, labor costs, and risk of pipeline failures. (B)</td>
<td>Jun 2020</td>
</tr>
<tr>
<td>11.</td>
<td>Complete the Mission Trails Flow Regulatory Storage II/Lake Murray Control Valve 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>Jun 2021</td>
</tr>
<tr>
<td>12.</td>
<td>Complete the ESP – North County Pump Station project to provide treated water deliveries to portions of the North County service area during an emergency event. (C, D, E, G, H)</td>
<td>Jun 2021</td>
</tr>
<tr>
<td>13.</td>
<td>Complete an additional 8 miles of priority pipeline relining, extending the service life of the identified segments of the aqueduct system. (A, E, G, H)</td>
<td>Jun 2021</td>
</tr>
</tbody>
</table>
**Key Performance Indicators**

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

   ![CIP Change Order Percentage](chart)

   **Target:** Less than or equal to 5% of construction contract amount

2. **Maintain 90 percent of all Capital Improvement Program projects within four months of their baseline schedule.**

   ![CIP Schedule Performance](chart)

   **Target:** 90% of CIP projects

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<thead>
<tr>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
<th>FY19</th>
<th>FY20</th>
<th>FY21</th>
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<tr>
<td>Actual:</td>
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</table>
Sustainability Overview

The Water Authority is committed to being a model agency for sustainability. This is demonstrated through our 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 process. The Water Authority’s Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP), which became effective in 2012, 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 its mitigation lands and existing preserve area management guidelines. In line with our innovative and visionary approach to environmental stewardship, in 2015 the Water Authority obtained a programmatic 50-year Clean Water Act Section 404 permit known as the Programmatic Master Plan Permit (PMPP). Other accomplishments include development of a database for tracking NCCP/HCP compliance; executing agreements for the purchase of credits at a wetland mitigation bank; completion of native habitat restoration at the San Vicente Reservoir site; and certification of the Carlsbad Desalination Plant Intake/Discharge Modifications Final Supplemental Environmental Impact Report.

The Water Authority recognizes the challenges that climate change poses to the San Diego region and is dedicated to proactively addressing these issues. Our 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). The CAP was initially adopted in March 2014 and revised in December 2015, and serves...
as an interdisciplinary guide intended to promote, facilitate, and coordinate implementation of climate change mitigation strategies. The plan focuses on greenhouse-gas emission reduction measures to ensure our water supplies, infrastructure, and services will accommodate projected impacts of climate change. It contains a methodology to compute baseline greenhouse-gas emissions, an approach to track and report on emissions reduction progress, and establishes targets for voluntary compliance with Assembly Bill 32—California Global Warming Solutions Act of 2006. The Water Authority has already made great strides in reducing emissions, with 2015 levels falling well below our 2020 emissions goal.

Additionally, the Water Authority has pursued partnerships with researchers and other climate change practitioners to advance actionable climate science focused on adaptation strategies. Through collaboration with agencies like the Water Research Foundation and Scripps Institution of Oceanography, the Water Authority has produced work products including local stream flow changes and water demand impacts associated with climate change. As a pioneering 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 10 of the nation’s largest water providers that supply drinking water to more than 43 million people throughout the United States. WUCA provides leadership in assessing and adapting to the potential effects of climate change. Projects funded through WUCA, such as the recently completed Pilot Utility Modeling Applications, enhance the usefulness of climate science and help utilities improve water management decision-making in the face of climate uncertainty.

The Water Authority can continue 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. Snowfall in the Sierras is occurring later, routinely below average, and melting earlier—negatively affecting California’s supply of water. Climate change also impacts seasonal timing and intensity of rainfall, which adversely impacts traditional sources of local water supply, such as surface water and groundwater. The pioneering and visionary strategies and tactics for the Climate Change focus area include implementing cost-effective measures to reduce greenhouse-gas emissions, updating the Climate Action Plan, 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.

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 and National Environmental Policy Acts; mitigation planning, implementation, monitoring, and land management; planning, design, construction, and operations support; technical studies; permitting support; 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; and creating an environmental awareness training program.
**Program Focus Areas**  Management Strategies

**CLIMATE CHANGE**

A. Implement cost-effective measures that reduce greenhouse-gas emissions to comply with emission targets contained in the Climate Action Plan.

B. Advance climate science research and mainstreaming adaptation strategies into business practices.

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

**ENVIRONMENTAL MANAGEMENT**

D. Incorporate advance planning to ensure Water Authority compliance with environmental regulations.

E. Strengthen inter-departmental coordination of environmental compliance.

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

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Target date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Develop a database and management plan to proactively track mitigation credit inventory at Water Authority sites in support of anticipated Water Authority needs, and allow for potential marketing of excess credits. (D, F)</td>
<td>Jun 2017</td>
</tr>
<tr>
<td>2.</td>
<td>Facilitate development of the Water Utility Climate Alliance 2017-2021 Strategic Plan and participate in resulting work plan initiatives to evaluate where climate change information is being used in member utility business decisions. (B, C)</td>
<td>Dec 2017</td>
</tr>
<tr>
<td>3.</td>
<td>Develop an environmental awareness training program on current California Environmental Quality Act and permitting requirements, in collaboration with regulatory agency staff, and present it to 90 percent of targeted Engineering and Operations &amp; Maintenance staff. (E)</td>
<td>Mar 2018</td>
</tr>
<tr>
<td>5.</td>
<td>Obtain Board approval for the updated Climate Action Plan to ensure conformity of greenhouse-gas inventory calculation with the Climate Registry’s current General Reporting Protocol. (B, C)</td>
<td>Dec 2019</td>
</tr>
<tr>
<td>6.</td>
<td>Obtain partnerships on leading-edge climate science projects on adaptation, sustainability, and resiliency strategies, and evaluate opportunities to incorporate research findings into facility and supply planning processes. (B, C)</td>
<td>Jun 2021</td>
</tr>
<tr>
<td>7.</td>
<td>Develop a minimum of three acres of wetland mitigation at the San Luis Rey Kendall site for ability to mitigate impacts of near-term Capital Improvement Program projects. (D, F)</td>
<td>Jun 2021</td>
</tr>
</tbody>
</table>
Key Performance Indicators

1. Increase environmental awareness amongst targeted employees by developing and implementing an environmental awareness training program with at least 90 percent participation by June 2018.

   ![Environmental Awareness Training Participation](image)

2. Increase success rate of meeting baseline CEQA and environmental permitting schedules for CIP projects by completing at least 90 percent of original baseline.

   ![Environmental Permitting Schedule Performance](image)
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 the operations communication network, and streamlining work tracking. Accomplishments for the program include completion of all scheduled maintenance tasks and sustaining over 99.5 percent communications uptime during Fiscal Year 2015.

The Heilbron Operations Center in Escondido, California
Solar panels installed on the Twin Oaks Valley Water Treatment Plant support the Water Authority’s energy supply diversification efforts.
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 the major objectives and tactics over the next five fiscal years.

Energy Initiatives
Energy initiatives support maximizing existing power generation facilities, advancing new energy initiatives, fostering strategic partnerships, and remaining active in the legislative and regulatory setting. Over the past several decades, the Water Authority has successfully pursued diversification of its water supply portfolio to reduce potential supply shortages. Similarly, this focus area strives to diversify the Water Authority’s energy supply portfolio to address economic and electrical system reliability risks. The Energy Management policy, adopted by the Board, provides direction for implementing and administering energy efficiency projects and programs where economies of scale, geographic considerations, or other member agency circumstances make a regional program more efficient or cost-effective.

Facilities Security and Emergency Response
The Water Authority operates critical infrastructure for the safety and reliability of the region. Facilities security and emergency response efforts support the need for physical security, cybersecurity, business continuity, emergency preparedness, and effective emergency response. This focus area emphasizes protecting critical facilities and the control system against risks and vulnerabilities from potential threats, such as terrorist and cyber-threats. The Water Authority plays a critical role during emergencies by providing water to the region and being a first responder. The ability to respond quickly and help ensure water supply availability can minimize potential injury, property damage, and member agency downtime.

Operations and Maintenance
The Operations and Maintenance area focuses on maintaining system reliability and continuing to develop staff that are driven to excellence in their fields of expertise. The Water Authority’s complex water system requires staff to continue to grow their knowledge and skills to efficiently operate and maintain it. In addition, there are several objectives and tactics that will help continue efficient operations and enhance proactive maintenance. These activities will help sustain a reliable water system and increase the ability to efficiently serve the Water Authority’s member agencies.
### Program Focus Areas   Management Strategies

<table>
<thead>
<tr>
<th>ENERGY INITIATIVES</th>
<th>FACILITIES SECURITY AND EMERGENCY RESPONSE</th>
<th>OPERATIONS AND MAINTENANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Leverage power market opportunities that maximize the value of existing energy facilities.</td>
<td>E. Provide necessary facilities, staffing, and funding to support security and emergency response requirements.</td>
<td>H. Continue development of well-trained and highly skilled staff.</td>
</tr>
<tr>
<td>B. Pursue new energy initiatives that reduce energy costs.</td>
<td>F. Comply with applicable state and federal regulations regarding security.</td>
<td>I. Maintain water system reliability and efficient operations through staff development and facility improvements.</td>
</tr>
<tr>
<td>C. Develop energy policies that support member agency needs.</td>
<td>G. Engage in water related security and emergency response issues at the local and national levels.</td>
<td>J. Enhance proactive maintenance practices.</td>
</tr>
<tr>
<td>D. Influence energy rule-making by engaging in legislative and regulatory processes.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Objectives and Tactics

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Target date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Secure a business arrangement for the Rancho Peñasquitos Hydroelectric Facility to maximize the value of the energy generated at the facility. (A, B)</td>
<td>Jan 2017</td>
</tr>
<tr>
<td>2.</td>
<td>Perform physical security assessments and develop improvement plans for critical facilities for continued water system protection against potential treats. (E, F, G)</td>
<td>Jun 2017</td>
</tr>
<tr>
<td>3.</td>
<td>Complete installation of battery systems at Kearny Mesa Headquarters (30 kilowatt) and Twin Oaks Valley Water Treatment Plant to reduce energy demand charges (1 megawatt). (B)</td>
<td>Jun 2017</td>
</tr>
<tr>
<td>4.</td>
<td>Implement the most effective option for future operations and maintenance of the Hodges Pump Storage facility. (I)</td>
<td>Oct 2017</td>
</tr>
<tr>
<td>5.</td>
<td>Acquire a distribution tariff from local electrical utility to allow delivery of wholesale energy to the Water Authority and member agency facilities. (A, B, C, D)</td>
<td>Oct 2017</td>
</tr>
<tr>
<td>6.</td>
<td>Obtain Board approval and finalize a partnership agreement with the City of San Diego for the San Vicente Energy Storage Facility, Phase 3 work. (B)</td>
<td>Dec 2017</td>
</tr>
<tr>
<td>7.</td>
<td>Develop a new hire and refresher training program for emergency response staff to support emergency response requirements. (E, F)</td>
<td>Dec 2017</td>
</tr>
<tr>
<td>8.</td>
<td>Obtain Board approval of an energy policy that addresses both procuring wholesale renewable energy and supplying self-generated energy to member agencies. (A, B, C)</td>
<td>Jun 2018</td>
</tr>
<tr>
<td>9.</td>
<td>Complete installation of 6 megawatts of floating solar at Olivenhain Reservoir to generate renewable energy and reduce energy costs. (B)</td>
<td>Dec 2018</td>
</tr>
<tr>
<td>10.</td>
<td>Perform an Escondido Facility Needs Assessment to determine if any changes to existing facilities are required for efficient function and operations. (I)</td>
<td>Dec 2018</td>
</tr>
<tr>
<td>11.</td>
<td>Formalize a field employee training program designed for new hires including training for common procedures. (H, I, J)</td>
<td>Dec 2018</td>
</tr>
<tr>
<td>12.</td>
<td>Complete replacement of the instrumentation communication network at Rancho Peñasquitos and San Vicente Pump Station to increase operational reliability of these facilities. (I)</td>
<td>Dec 2019</td>
</tr>
</tbody>
</table>
Key Performance Indicators

1. Eliminate unplanned service interruptions to member agencies by maintaining 100 percent system uptime each fiscal year.

2. Reduce unaccounted water loss rate to plus or minus 2 percent each fiscal year per the Water Authority Administrative Code.

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

4. Increase green power resources and energy diversification to 14 percent of total power consumption for Fiscal Year 19.
A systems operator from the Operations and Maintenance department collects samples to ensure water quality.
### FIGURE 4.1 Business Services – Programs and Focus Areas

<table>
<thead>
<tr>
<th>COMMUNICATION AND MESSAGING</th>
<th>FINANCIAL MANAGEMENT</th>
<th>TECHNOLOGY</th>
<th>WORKFORCE MANAGEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Governmental Relations Outreach</td>
<td>Accounting</td>
<td>Cybersecurity</td>
<td>Injury and Illness Prevention</td>
</tr>
<tr>
<td>Public Outreach</td>
<td>Debt and Investment Management</td>
<td>IT Infrastructure and Operations</td>
<td>Internal Communication</td>
</tr>
<tr>
<td>Regulatory Policy Support</td>
<td>Financial Planning</td>
<td>IT Services and Applications</td>
<td>Recruitment and Retention</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Training and Development</td>
</tr>
</tbody>
</table>
Business Services

Overview

The Business Services focus area consists of four programs: Communication and Messaging, Financial Management, Technology, and Workforce Management. Communication and Messaging supports and maintains strong relations with regulators, elected officials, and other stakeholders through effective communication. Financial Management focuses on near- and long-term financial planning and reporting. Technology addresses the ongoing and rapidly changing technological needs of the Water Authority. Workforce Management addresses any gaps between the workforce of today and the needs of the future. Key issues within this focus area include:

- Continuing effective communications with external stakeholders
- Implementing long-term financial plans to provide rate and charges guidance
- Adopting pioneering technology and protecting against cybersecurity threats
- Attracting, retaining, and developing a high-performing workforce

Business Services is an essential component of the Water Authority that encompasses effective communication with internal and external stakeholders, ensures fiscal sustainability, and continues the use of evolving technology for staff and facility operations.

The San Diego County Water Authority Headquarters in Kearny Mesa, San Diego.
Communication and Messaging Overview

The Communication and Messaging Program supports the organization’s vision in multiple ways. Effective communication with regulators, elected officials, media, community leaders, and the general public is imperative for meeting critical Water Authority goals. Regulatory or legislative requirements can have a significant impact on the Water Authority’s and its member agencies’ ability to maintain flexibility and cost sustainability of their systems. Meanwhile, 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 strategies. Engaging in these areas has become increasingly challenging in recent years as statewide drought and other complex water issues have dominated headlines and heightened public and regulatory interest in how water is secured, used, and paid for.

Recent accomplishments in the Communication and Messaging Program include the State Water Resources Control Board’s adoption of drought response requirements that take into consideration local supply development; collaboration with the member agencies, the San Diego Regional Water Quality Control Board, and State Water Resources Control Board for approval of recycled water fill stations during the drought; and engagement with the State Water Resources Control Board to obtain reasonable statewide standards for drinking water discharges.

The accomplishments of government relations outreach efforts have resulted in the successful passage of Water Authority-sponsored bills to significantly advance the San Diego region’s strong water conservation ethic to become statewide policy and practice, and improve the opportunities for small non-profit and disadvantaged community organizations to meaningfully participate in Integrated Regional Water Management activities and projects. Another recent achievement was the passing of legislation requiring the state to give more consideration to the energy benefits of large-scale pumped hydroelectric storage projects.

Public Relations Outreach efforts have helped the San Diego region meet steep state-mandated water use reduction targets without incurring any penalties. They 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. Outreach efforts have also bolstered engagement of community leaders on important water issues through new initiatives such as the Citizens Water Academy and Business Alliance for Water.

Communication and Messaging Focus Areas

The focus areas of the Communications and Messaging Program are Government Relations Outreach, Public Outreach, and Regulatory Policy Support. The focus areas support the vision of the program to maintain the Water Authority’s leadership position in these areas into the future. Staff will remain driven to build and maintain strong relations with regulators, elected officials, and other stakeholders.
Government Relations Outreach
The Government Relations Outreach focus area increases the Water Authority’s political influence with Washington, D.C., Sacramento, and local entities to secure favorable legislation, funding, or other outcomes that will help ensure continued safe and reliable water supplies for the region. Objectives include being driven to support legislative outcomes that protect the interests of the San Diego region’s water agencies and their rate payers, including passing at least one Water Authority-sponsored bill every year.

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, education, environmental, industry leaders and organizations, the media, school-age children, and the general public. Outreach activities include media relations, online and social media communications, developing publications and other printed materials, hosting tours and events, offering school education programs, community presentations, and more. The focus area also oversees efforts to help small businesses participate in Water Authority procurements. Objectives include pioneering enhanced stakeholder engagement in water issues through the Citizens Water Academy, and advancing the agility of communications by completing a social media marketing assessment and optimization plan.

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, energy, and the environment. The Water Authority actively partners with various entities, such as WateReuse, Association of California Water Agencies, American Water Works Association, Water Utility Climate Alliance, Western Urban Water Coalition, Cal Desal, and California Urban Water Agencies, to gain support on regulatory policy issues. In addition, it fosters relationships with state and federal agencies, such as the regional and state Water Boards, California Public Utilities Commission, California Department of Public Health, California Department of Water Resources, and the U.S. Environmental Protection Agency. Other objectives include working with other supporters to develop a visionary, long-term strategy to support direct potable reuse in California.
Program Focus Areas  Management Strategies

<table>
<thead>
<tr>
<th>GOVERNMENT RELATIONS OUTREACH</th>
<th>PUBLIC OUTREACH</th>
<th>REGULATORY POLICY SUPPORT</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Strengthen relationships with the San Diego local, state, and federal legislative delegations, other key legislators, legislative staff, and the state and federal administrations.</td>
<td>D. Enhance public understanding and support for Water Authority and member agency strategies, policies, and programs.</td>
<td>G. Maximize flexibility and sustainability in water supply development and management, water-use efficiency, and water quality protection.</td>
</tr>
<tr>
<td>B. Engage and influence relevant legislation, regulatory matters, and funding requests in the Legislature, Congress, and state and federal administrations.</td>
<td>E. Implement innovative and effective public outreach programs and tools that deliver Water Authority messages to key stakeholders.</td>
<td>H. Foster collaborative relationships with regulatory agencies.</td>
</tr>
<tr>
<td>C. Sponsor and promote legislation that positively impacts the region and conveys San Diego’s role as a statewide water community leader.</td>
<td>F. Promote greater public awareness of local water issues and wise water use by building relationships and partnerships with compatible organizations and institutions.</td>
<td>I. Engage in policy and regulatory development under state and federal water, energy, and environmental laws.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>J. Inform and obtain feedback from Water Authority departments and member agencies on regulatory and permitting issues.</td>
</tr>
</tbody>
</table>
Objectives and Tactics

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Target date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Complete a social media marketing assessment and optimization plan to enhance outreach efforts. (D, E)</td>
<td>Dec 2017</td>
</tr>
<tr>
<td>2.</td>
<td>Develop a long-term strategy, in conjunction with statewide stakeholders through the Association of California Water Agencies and WateReuse, for advancing a flexible approach to approving direct potable reuse projects in California. (H, I, J)</td>
<td>Jun 2018</td>
</tr>
<tr>
<td>3.</td>
<td>Conduct communications and outreach activities that result in at least 70 percent of the public viewing municipal water service as a “good” or “excellent” value through the public opinion poll. (D, E, F)</td>
<td>Jun 2019</td>
</tr>
<tr>
<td>4.</td>
<td>Execute communications and outreach that result in 3,000 customers participating in the WaterSmart Landscape Makeover Program via classes, workshops, and videos. (A, D, E)</td>
<td>Jun 2019</td>
</tr>
<tr>
<td>5.</td>
<td>Create a new Water Authority branding platform. (D, E)</td>
<td>Jun 2019</td>
</tr>
<tr>
<td>6.</td>
<td>Execute a minimum of three significant programs or events to commemorate the Water Authority’s 75th Anniversary. (A, D, E, F)</td>
<td>Dec 2019</td>
</tr>
<tr>
<td>7.</td>
<td>Execute effective advocacy strategies to defeat all legislation that the Water Authority Board opposes each year. (B, K)</td>
<td>Jun 2020</td>
</tr>
<tr>
<td>8.</td>
<td>Achieve passage of one or more Water Authority sponsored bills annually. (A, B)</td>
<td>Jun 2021</td>
</tr>
<tr>
<td>9.</td>
<td>Participate with water supply stakeholders to support development of an amicus brief on the court proceedings for Waters of the United States. (H, J)</td>
<td>Jun 2021</td>
</tr>
<tr>
<td>10.</td>
<td>Provide at least one briefing annually to each member of the San Diego state legislative delegation to enhance support for advancing and protecting the Water Authority’s legislative interests. (A, B)</td>
<td>Jun 2021</td>
</tr>
<tr>
<td>11.</td>
<td>Increase awareness and understanding of the Water Authority’s interests by providing at least one briefing annually to each member of the San Diego congressional delegation in Washington, D.C. and the San Diego district office. (A, B)</td>
<td>Jun 2021</td>
</tr>
<tr>
<td>12.</td>
<td>Strengthen relationships with state and federal legislators by conducting at least two legislative roundtable events at the Water Authority headquarters during each calendar year. (A, B)</td>
<td>Jun 2021</td>
</tr>
<tr>
<td>13.</td>
<td>Engage in outreach efforts that result in at least 50 percent of Citizens Water Academy alumni engaging in at least one alumni activity through Fiscal Year 2021. (E, F)</td>
<td>Jun 2021</td>
</tr>
</tbody>
</table>
Key Performance Indicators

1. Engage in outreach efforts that result in at least 50 percent of Citizens Water Academy alumni participating in at least one alumni activity through June 2021.

2. Provide written 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.

3. Conduct communications and outreach activities that result in at least 70 percent of the public viewing municipal water service as a “good” or “excellent” value through the public opinion poll.
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 2016, 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 2017-2021 Business Plan.

An additional and equally key component of our near-term planning and reporting is the preparation of the Comprehensive Annual Financial Report (CAFR). The CAFR 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 CAFR preparation has received the prestigious Governmental Finance Officers Association Certificate of Achievement award for the last fourteen years.

Central to long-term planning is the development of the Long-Range Financing Plan, which was successfully updated and adopted by the Board in January 2016. 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.
The Financial Management Program carries out the fiscal sustainability policies established by the Water Authority Board of Directors.
Financial Management 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 its customers. This group has the important distinction of recording the financial activities of the Water Authority using various accounting platforms and summarizing the financial activities into levels of information important to our internal and external users. Management strategies for Accounting includes 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’s Senior Lien Coverage Ratio target of 1.5 times). Financial planning strategies include ensuring financial policies are aligned with the long-term fiscal sustainability of the Water Authority.
# Program Focus Areas  
**Management Strategies**

<table>
<thead>
<tr>
<th>ACCOUNTING</th>
<th>DEBT AND INVESTMENT MANAGEMENT</th>
<th>FINANCIAL PLANNING</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A.</strong> Provide relevant, accessible, and useable financial data and other key information.</td>
<td><strong>D.</strong> Ensure Water Authority credit ratings through sound financial management.</td>
<td><strong>H.</strong> Develop detailed cost projections for Capital Improvement Program projects and operations to develop long-term rate projections.</td>
</tr>
<tr>
<td><strong>B.</strong> Analyze revenue and expense trends proactively to anticipate early budget variances and formulate actions to ensure fiscal sustainability.</td>
<td><strong>E.</strong> Ensure strong financial industry presence for the Water Authority.</td>
<td><strong>I.</strong> Analyze and recommend, as appropriate, the rate and charge goals of cost efficiency, predictable rates, and intergenerational equity.</td>
</tr>
<tr>
<td><strong>C.</strong> Assess industry best practices and new accounting standards for applicability to Water Authority financial operations.</td>
<td><strong>F.</strong> Strategically optimize the resources of the full bond team to execute future bond transactions successfully – resulting in good pricing, new investors including retail, and maintenance of strong ratings.</td>
<td><strong>J.</strong> Provide high level of service to member agencies while ensuring equitable rates and charges.</td>
</tr>
<tr>
<td></td>
<td><strong>G.</strong> Optimize the capital financing mix to achieve the lowest cost of funds and minimize interest rate risk.</td>
<td><strong>K.</strong> Ensure financial policies are aligned with the long-term fiscal sustainability of the Water Authority.</td>
</tr>
</tbody>
</table>
## Objectives and Tactics

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Target date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Develop a long-term strategic plan for the execution of anticipated bond transactions, including pipeline and the Claude “Bud” Lewis Carlsbad Desalination Plant bonds. (D, F, K)</td>
<td>Jan 2017</td>
</tr>
<tr>
<td>3.</td>
<td>Complete a Cost of Service Study and obtain Board approval of updated annexation fees and capacity charges. (I, J, K)</td>
<td>Jun 2017</td>
</tr>
<tr>
<td>4.</td>
<td>Compile a comprehensive listing of all Water Authority capital assets and establish procedures for year-end reconciliation. (A)</td>
<td>Jun 2017</td>
</tr>
<tr>
<td>5.</td>
<td>Develop a training program for the Financial Rate Model Program to increase staff knowledge of the rate and charge model. (A, J, K)</td>
<td>Dec 2017</td>
</tr>
<tr>
<td>6.</td>
<td>Implement a new or upgraded Water Billing software module that syncs with historical data. (A, C)</td>
<td>Dec 2017</td>
</tr>
<tr>
<td>7.</td>
<td>Update budgeting processes to ensure efficiency and continued best practices in accordance with Government Finance Officers Association standards. (A, C, H)</td>
<td>Jan 2018</td>
</tr>
<tr>
<td>8.</td>
<td>Implement Other Post-Employment Benefits (OPEB), Government Accounting Standards Board (GASB) 74 and GASB 75 pronouncements, and develop a funding policy to ensure adequate resources exist to pay current and future retiree health benefits. (C)</td>
<td>Jun 2018</td>
</tr>
<tr>
<td>9.</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, and Bond Buyer. (E, K)</td>
<td>Jun 2021</td>
</tr>
</tbody>
</table>
Key Performance Indicators

1. Meet and maintain Board policy on reserves for all funds. (45 days of annual operating expenses, Rate Stabilization Fund 2.5 years target and 3.5 years maximum.)

2. Maintain debt service coverage ratio of 1.5 times on senior lien debt in accordance with the Water Authority's Board policy target. (Source: Water Authority Board and Long-Range Financing Plan)

3. Monitor and compare the Water Authority's investment portfolio performance using the Bank of America Merrill Lynch 0-3 Year US Treasury & Agency Index as a performance benchmark.
Technology Overview

In today’s world, success in almost every function of an organization depends on a well-functioning, robust, efficient, and versatile Technology Program. The Water Authority’s day-to-day operations, long-term planning, outreach, engineering, design, communication, and public engagement all depend on technology systems and processes, as well as software and hardware. The Technology Program supports the ongoing and rapidly changing needs of the organization by developing excellent infrastructure and operations, maintaining high-quality services and applications, and enhancing cybersecurity.

The Water Authority has been a pioneer in the area of technology over the years. The organization was quick to implement advances in technologies such as virtualization, cloud processing, open source development, and business analytics. The adoption of each new technology undergoes a thorough assessment process to ensure it addresses the business needs of the agency, are cost-effective, and avoid risk.

The Technology Program must remain driven to act nimbly and provide solutions to new and evolving initiatives. Some examples include the program’s significant role in meeting new Affordable Care Act reporting requirements, implementing protective measures to address new security threats, and facilitating the implementation of the “When in Drought” campaign website. These initiatives are achieved concurrent with the program’s ongoing efforts, which include resolving daily help desk requests from customer departments, upgrading and patching software, monitoring and securing the agency’s critical data and network, and replacing obsolete hardware.

Recent accomplishments include expanding data storage, backup processing, and network bandwidth to manage increasing data needs and continued growth expected over the next five years. Operational improvements in managing the technology service desk, processing digital records, and tracking projects helped to increase staff productivity and efficiency. The Water Authority will continue to strengthen the strong foundation of technology and operations, enabling its ability to remain agile and effective.

Technology Focus Areas

The focus areas of the Technology Program are Cybersecurity, IT Infrastructure and Operations, and IT Services and Applications. The focus areas support the vision of the program to provide technology solutions to the agency as a whole, as well as its stakeholders and member agencies over the next five fiscal years.
The Information Systems division ensures the security of the Water Authority’s critical data.
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.

IT Infrastructure and Operations
The Water Authority continually updates its technology infrastructure to support enhanced business operations, such as providing specialized software and robust databases that deliver essential financial reporting and budgeting tools. This focus area will continue to support public outreach efforts that demand well-designed websites and reliable communication systems to convey the Water Authority’s messaging. Many advancements will be made to ensure equipment and technical tools are available to employees when and where needed.

IT Services and Applications
The IT Services and Applications focus area provides business services to the agency and maintains a specific suite of software applications to help meet its business needs. This allows Water Authority employees to operate effectively and to deliver high-quality service to its member agencies and stakeholders. Critical software applications are continually updated, including Maximo computerized maintenance management system
### Program Focus Areas  Management Strategies

<table>
<thead>
<tr>
<th>CYBERSECURITY</th>
<th>IT INFRASTRUCTURE AND OPERATIONS</th>
<th>IT SERVICES AND APPLICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A.</strong> Provide backup and recovery capability to protect critical records for business continuity.</td>
<td><strong>D.</strong> Engage in comprehensive strategic planning and governance to align with business needs.</td>
<td><strong>H.</strong> Coordinate and prioritize projects to balance resources and manage interdependencies.</td>
</tr>
<tr>
<td><strong>B.</strong> Provide a safe and secure computing environment.</td>
<td><strong>E.</strong> Maintain and replace critical hardware and network infrastructure to meet changing computing requirements.</td>
<td><strong>I.</strong> Upgrade, enhance, and support critical software applications to leverage new functionality, maintain compliance and compatibility, and improve productivity.</td>
</tr>
<tr>
<td><strong>C.</strong> Educate employees to be technically skilled, well informed, alert, and vigilant.</td>
<td><strong>F.</strong> Continually improve business processes by increasing automation, flexibility, ease of use, and mobility.</td>
<td><strong>J.</strong> Provide a high level of customer service to increase day-to-day efficiency.</td>
</tr>
<tr>
<td></td>
<td><strong>G.</strong> Promote a culture of innovation and continuous improvement and professional development.</td>
<td><strong>K.</strong> Promote timely and informed decision making through analytic, knowledge based technology.</td>
</tr>
</tbody>
</table>
## Objectives and Tactics

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Target date</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>Develop an Operational IT Resource Deployment Plan based on stakeholder input that provides a comprehensive view of long-term IT objectives. (D, G, H)</td>
<td>Oct 2017</td>
</tr>
<tr>
<td>3.</td>
<td>Automate three organization-wide business processes to increase ease of use and staff productivity. (B, G, H, I, J)</td>
<td>Nov 2018</td>
</tr>
<tr>
<td>4.</td>
<td>Implement Microsoft SharePoint content management system to provide next-generation intranet solution that enhances information sharing across the organization. (A, B, C, E, F, G, I, J, K)</td>
<td>Mar 2019</td>
</tr>
<tr>
<td>5.</td>
<td>Complete major upgrades to PeopleSoft Enterprise Resource Planning software, the Prima water billing system, and Asset Management applications to ensure future compatibility with changing regulations and requirements. (B, C, D, E, F, H, I, K)</td>
<td>Oct 2019</td>
</tr>
<tr>
<td>6.</td>
<td>Conduct an organization-wide cybersecurity review and complete the recommended technical enhancements to optimize the cybersecurity defense model (organizational team, strategies, policies, and funding). (A, B, C, D, E, H, I, K)</td>
<td>Oct 2019</td>
</tr>
<tr>
<td>7.</td>
<td>Implement wireless communication in the Escondido office, enhance the Maximo computer maintenance management system for use in the field, and implement a “unified communication” system (combined messaging, presence, phone, video conferencing, voicemail, and email) to expand organization-wide mobile computing capabilities. (C, E, F, G, H, I, J, K)</td>
<td>Sep 2020</td>
</tr>
<tr>
<td>8.</td>
<td>Develop comprehensive dashboard reporting systems for the Capital Improvement Program and the Business Plan, and Technology Initiatives to enhance transparency of organization-wide efforts. (C, D, F, G, J, K)</td>
<td>Dec 2020</td>
</tr>
</tbody>
</table>
Key Performance Indicators

1. Maintain 99.9 percent or above uptime of critical information services (Internet, sdcwa.org, PeopleSoft, Maximo, and OnBase) for each fiscal year, excluding planned downtime.

2. Ensure 90 percent of service desk incidents meet or exceed customer service level expectations for each fiscal year.
Workforce Management Overview

Workforce Management has likely become one of the greatest challenges facing the public sector today. Changing demographics, external forces, and increasing workload are just some of the issues the Water Authority faces in attracting, retaining, and developing a capable workforce. This program identifies and addresses gaps between the workforce of today and the needs of the future.

Central to the Workforce Management Program is planning for the critical skill sets needed for the present and future. Recent development of a Recruitment and Selection Standards Guide ensures candidates have qualifications consistent with our organizational objectives. A revision and implementation of the comprehensive New Employee Orientation Program ensures new employees receive consistent information through a standardized process; feel valued and welcome as new employees; and ultimately sets the stage for higher job satisfaction, better job performance, and greater organizational commitment.

The Workforce Management Program identified competencies that align with the Water Authority’s mission and vision, and developed targeted leadership and skill-based training programs for any gaps that exist. Leadership training combined with succession planning enables the Water Authority to create a long-term, flexible system focused on development. Creating visionary leaders encourages staff to develop a pioneering spirit, embarking on what has not been done before. This pioneering spirit develops new leaders who are driven to play an important role in the future of the Water Authority.

Remaining agile to external factors is paramount in workforce management. The Water Authority has facilitated the Regional Water/Wastewater program for over ten years in response to member agencies’ demand for a pipeline of qualified staff. With the recent drought and member agencies’ need for additional staff to help educate, conserve water, and enforce state mandates, the Water Authority quickly developed the Drought Internship Program. Nine agencies participated, and the Water Authority facilitated the recruitment and placement of eleven drought interns.

Another external factor that affects workforce management is compliance with new federal and state legislation. Numerous labor and employment laws required extensive changes to existing policies, procedures, and training for applicable staff. State legislation impacting paid sick leave laws, mandatory training on abusive conduct, and when public agencies can ask job applicants about criminal convictions, are just some of the legislation that required significant changes to existing procedures. The Federal Affordable Care Act (ACA) continues to be one of the most comprehensive laws impacting employee benefits. With phased implementation of the ACA, the Water Authority has made a significant investment in understanding the reporting requirements and subsequent revisions, as well as updating several areas of the Water Authority’s human capital management software (PeopleSoft).
Workforce Management Focus Areas

The focus areas of the Workforce Management Program include Injury and Illness Prevention, Internal Communication, Recruitment and Retention, and Training and Development. Within each focus area are strategies to accomplish the objectives and tactics planned for the next five fiscal years.

Injury and Illness Prevention
Every employee has the right to a safe and healthy workplace. The Water Authority makes every effort in the areas of accident prevention, fire protection, and health preservation. This focus area provides the actions necessary to preserve employee safety and reduce work-related injuries through worker participation, hazard identification and remediation, training, and program evaluation.

The Water Authority facilitates a Drought Internship Program training session.
**Internal Communication**
Regardless of the size of an organization, internal communication is central to building and maintaining credibility. It is important for communication to occur effectively at all levels. One objective in this focus area is to conduct employee surveys to measure engagement and improve upon various programs, such as training and health and wellness programs. Also included is developing a program for former (Alumni) employees and meeting annually to ensure their institutional knowledge of the organization is not lost. In addition, an objective to improve communication involves providing video updates to staff to ensure every employee is aware of current projects, staff initiatives, and important organizational updates.

**Recruitment and Retention**
The Water Authority’s efforts in the areas of recruitment and retention are designed to attract, develop, and sustain a workforce that is in alignment with the vision of the Water Authority. Staff will develop quality-of-hire metrics for new employees to ensure the effectiveness of the recruitment and hiring process. Success in this area depends on recruiting high performing new employees and retaining existing talented employees, all within a competitive labor market. Included in the strategies for retention are leadership development, employee engagement, and advancement opportunities for qualified employees.

**Training and Development**
Training and development of executives, managers, supervisors, and employees is a critical component to the success of an organization and is connected to the success of the other focus areas. Developing leadership capabilities and the capacity to develop strategic leaders for the current and future needs of the organization are key to the Water Authority’s training and development efforts. The business plan incorporates training and development objectives that have a material impact on current work as well as employee development into the future.
## Program Focus Areas  Management Strategies

<table>
<thead>
<tr>
<th>INJURY AND ILLNESS PREVENTION</th>
<th>INTERNAL COMMUNICATION</th>
<th>RECRUITMENT AND RETENTION</th>
<th>TRAINING AND DEVELOPMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Preserve employee safety and reduce work-related injuries through employee participation, hazard identification and remediation, training, and program evaluation.</td>
<td>C. Foster a workplace culture in which employee engagement and efficiency is optimized.</td>
<td>E. Implement a comprehensive approach to workforce recruitment, hiring, retention, and planning, resulting in an effective workforce to meet the Water Authority's current and future needs.</td>
<td>G. Strengthen leadership capability and capacity to encourage performance excellence and productivity.</td>
</tr>
<tr>
<td>B. Improve employee health and wellness through wellness initiatives.</td>
<td>D. Maintain open and effective communication with current and former employees.</td>
<td>F. Provide member agencies with support for recruitment and selection to address industry needs (e.g. Water/Wastewater and Drought Internship).</td>
<td>H. Provide staff training and development to increase knowledge and expertise.</td>
</tr>
</tbody>
</table>
**Objectives and Tactics**

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Target date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Achieve and maintain an employee turnover rate of 6 percent or less annually (factoring out retirements) for employees meeting or exceeding overall performance standards. (E, G, H)</td>
<td>Jun 2017</td>
</tr>
<tr>
<td>2.</td>
<td>Develop organization-wide mentoring program designed to empower early and mid-career professionals, increase diversity, attract high performing employees, and foster a culture of continuous learning and knowledge transfer. (E, H)</td>
<td>Jun 2017</td>
</tr>
<tr>
<td>3.</td>
<td>Reduce the number of days lost due to workplace injury to 10 percent below industry standards by achieving 100 percent hazard identification and remediation. (A, B)</td>
<td>Jun 2017</td>
</tr>
<tr>
<td>4.</td>
<td>Achieve 90 percent “meets expectations” or better rating from participating member agencies and other stakeholders of the San Diego Regional Water/Wastewater and Drought Internship Programs. (F)</td>
<td>Aug 2017</td>
</tr>
<tr>
<td>5.</td>
<td>Complete Water Authority training needs analysis model including a training and development web portal for employees. (E, H)</td>
<td>Sep 2017</td>
</tr>
<tr>
<td>6.</td>
<td>Develop comprehensive quality-of-hire metrics such as new hire attrition, job performance, and employee engagement to ensure alignment with the Water Authority’s mission and values. (E)</td>
<td>Dec 2017</td>
</tr>
<tr>
<td>7.</td>
<td>Develop metrics evaluating employee engagement to ensure employees are connected to the Water Authority’s mission, vision and values. (D)</td>
<td>Jun 2018</td>
</tr>
<tr>
<td>8.</td>
<td>Produce a minimum of 15 communication videos per year providing updates on current projects, staff initiatives, and Water Authority updates. (C, D)</td>
<td>Jun 2018</td>
</tr>
<tr>
<td>9.</td>
<td>Achieve 56 percent internal promotions for qualified vacant positions meeting the Water Region American Water Works Association standard. (C, E, G)</td>
<td>Sep 2018</td>
</tr>
<tr>
<td>10.</td>
<td>Develop and implement Wellness Initiatives to improve health and wellness of employees; develop employee satisfaction survey regarding wellness; and achieve 20 percent increase in satisfaction from baseline results. (B)</td>
<td>Jun 2019</td>
</tr>
<tr>
<td>11.</td>
<td>Enroll over 150 Water Authority employees each fiscal year in the supervisory training provided by the Liebert Cassidy Whitmore Employee Relations Consortium. (G, H)</td>
<td>Jun 2019</td>
</tr>
<tr>
<td>12.</td>
<td>Ensure proper administration and documentation of the Affordable Care Act’s excise tax on certain employer-sponsored health plans. (E)</td>
<td>Jan 2020</td>
</tr>
<tr>
<td>13.</td>
<td>Develop a Water Authority Alumni Network and hold annual meetings with the Alumni group. (D)</td>
<td>Jun 2021</td>
</tr>
</tbody>
</table>
Key Performance Indicators

1. Achieve 14.5 formal training hours per full time equivalent employee.

2. Achieve 56 percent internal promotions for qualified vacancies by providing staff training and development, mentoring program, and leadership development.

3. Reduce the number of workplace injury/illness incidents by achieving 100 percent hazard identification and remediation each calendar year. (Employee Health and Safety severity rate reported on OSHA 300 = 2000/# hours worked)
Appendix 1
Guiding Policies and Principles

The Water Authority’s 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 principles and policies 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, to construct and maintain facilities, and to tax and incur bonded indebtedness.

**Debt Management Policy** – Ensures the Water Authority’s debt portfolio is optimized to minimize cost of funds and ensure savings from refunded debt are maximized.

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

**Energy Management Policy** – Provides guidance to the Board when it is considering energy related issues, and provides guidance to staff in the development of projects and programs. Areas of focus include inter-agency cooperation; the design, construction, maintenance, and operation of facilities; and public education.

**Fiscal Sustainability Guiding Principles** – Provides guidance to the Board when it is considering changes or additions to the Water Authority’s rates and charges structure or financial policies with the objective of ensuring long-term fiscal sustainability.

**Legislative Policy Guidelines** – Leads staff and the legislative advocates on issues of critical importance to the Water Authority and its service area. Provides a framework for evaluation of potential impacts to the Water Authority from state and federal legislation.

**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 water supply reliability through a diversified water supply portfolio.

**Water Use Efficiency Policy Principles** – Provides Water Authority staff with long-term strategic direction for planning and implementing regional water use efficiency initiatives and programs.
Appendix 2  
Related Planning Documents

1. **Aqueduct Operating Plan** – Reflects on-going 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.

2. **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.

3. **Climate Action Plan** – An inter-disciplinary effort that promotes, facilitates, and coordinates implementation of climate change strategies and related activities within the Water Authority. Prepared by the Water Resources Department.

4. **Comprehensive Annual 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.

5. **General Manager’s Adopted Multi-Year Budget** – Based on the Board of Directors’ financial and operational policies, and provides the resources necessary to achieve the Water Authority’s Business Plan management strategies, objectives, and tactics. Prepared by the Finance Department.

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 to 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** – Identifies a diverse mix of water resources projected for development over the next 25 years to ensure long-term water supply reliability for the region. Prepared by the Water Resources Department.

11. **Water Shortage and Drought Response 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 of California due to drought conditions. Prepared by the Water Resources Department.
Appendix 3
Agency Dashboard of Key Performance Indicators


Water Supply Reliability
Key Performance Indicators

- **Diversification**
  Water supply diversification pie charts are used to track the Water Authority’s progress towards our supply portfolio goals. The Diversification indicator tracks the Water Authority’s progress towards its desired level of water supply diversification.

- **Storage**
  Reservoir storage is an important indicator of current supply reliability. The Storage indicator tracks member agency, Water Authority, and Metropolitan Water District water storage volumes and reservoir levels with comparisons to previous time periods.

- **Availability**
  Hydrologic conditions and storage levels for the State Water Project and Colorado River provide implications for water availability for the Water Authority and throughout California. The Availability indicator tracks precipitation, snowpack, major reservoir levels, and other indicators for the State Water Project and Colorado River systems.

Water Distribution and Facilities
Key Performance Indicators

- **System Operation Water Deliveries**
  The System Operation indicator tracks untreated and treated water deliveries and aqueduct flows. Monthly and annual water deliveries reveal trends in water demand.

- **Water Quality Performance**
  Maintaining water quality standards is a vital component of the Water Authority distribution system. The Water Quality Performance indicator tracks compliance with water quality regulations and guidelines.

- **Operating System Reliability**
  The Water Authority’s operating system consists of the communications network, aqueduct and facilities, and hundreds of miles of pipeline. The Operating System Reliability indicator tracks the communications and facilities systems uptime and outages compared to goals. Pipeline asset management is expressed through length of pipeline rehabilitated (relined, replaced, or repaired) and the impact of system improvements on the long-term reliability of the pipeline network.
Environmental Stewardship

Key Performance Indicators

- **Habitat Conservation**
  The Water Authority’s Habitat Conservation Plan and Natural Communities Conservation Plan describe the types of habitat, target species, and conservation areas within San Diego County preserved to offset environmental impacts from water supply and delivery projects. The Habitat Conservation indicator tracks preserved habitat associated with environmental programs related to the Quantification Settlement Agreement.

- **Energy Budget**
  Transporting and delivering water throughout the Water Authority service area can be an energy-intensive process. The Water Authority has developed alternative energy sources through solar and hydroelectric projects to help offset energy use. The Energy Budget indicator monitors energy production and use, and associated financial information.

- **Per Capita Water Use**
  Per capita water use relates directly to progress towards reaching the California Senate Bill X7-7 requirement to reduce urban water use 20 percent statewide by 2020. The Per Capita Water Use indicator tracks progress toward achieving the 2020 mandate.

Financial Responsibility

Key Performance Indicators

- **Revenue**
  The Water Authority’s two-year budget contains the expected revenue sources and amounts necessary to achieve the Water Authority’s programs and initiatives. The Revenue indicator tracks actual revenues compared to budgeted amounts for the Water Authority on a quarterly basis.

- **Expenditures**
  Expenditure projections and source categories are shown in the Water Authority’s two-year budget. The Expenditures indicator tracks the Water Authority’s actual expenditures compared to budgeted amounts on a quarterly basis.

- **Credit Rating**
  The Water Authority’s credit rating is an indicator of our ability to repay debt and the likelihood of default. The Credit Rating indicator includes annual updates to financial metrics, bond ratings, and debt service coverage ratios, which track the Water Authority’s financial responsibility.
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 – An artificial man-made pipeline constructed to convey water from one location to another.

Asset Management – The combination of management, financial, economic, engineering, and other practices applied to physical assets with the objective of providing the required level of service 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.

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 and reflects the regional differences in existing water quality, beneficial uses of ground and surface waters, 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 confluence of California’s two largest rivers: the Sacramento and San Joaquin. Joined by the Mokelumne 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 the state, while the remainder flows to farms and 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 practical means in achieving an objective while 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. WaterFix covers five main areas: water security; environmental protection; reduced risk from earthquakes and climate change; system upgrades and new technology; and increased efficiency.

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 10 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.

**E**

**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 projects. The ESP is a system of reservoirs, 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 a project. Impacts can be classified in four general categories: 1) beneficial impact; 2) less than significant impact; 3) less than significant impact with incorporation of mitigation measures; or 4) significant and unavoidable impact.
**F**

**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.

**First Aqueduct** – The eastern-most of two San Diego County Water Authority pipeline aqueducts which conveys water from Metropolitan Water District’s system throughout San Diego County. The First Aqueduct contains Pipeline 1 and 2.

**G**

**Gate** – A hold point in a project schedule where the project team certifies to a select committee of senior managers that predetermined work deliverables have been completed for specific project milestones.

**Groundwater** – Water that is found below the Earth’s surface within aquifers and extracted for potable use, either for demineralization treatment or directly through residential wells.

**H**

**Hydraulic Transient** – A pressure surge that is created when sudden changes in flow rate occurs 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.

**I**

**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 (IRR)** – 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 an area where rainfall is insufficient.

**L**

**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.

**M**

**Member Agency** – An agency that is a direct purchaser of water from the Water Authority. The Water Authority has 24 member agencies.

**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 a project, to ensure that mitigation measures, or other project revisions identified in the certified final 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 has been purified to meet or exceed federal and state 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.

Pump 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 transient pressures created by a sudden change in flow rate within a pipeline.

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

U
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.

V
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.

W
Wastewater – Water containing waste material.

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

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, local supply development, and water use efficiency.

Waters of the United States – A document that defines the waters that fall within the jurisdiction of the Environmental Protection Agency and the Army Corp 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.
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Visionary.
Agile.
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That’s what we do.