

# San Diego County Water Authority

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## BUSINESS PLAN

JULY 1, 2010 TO JUNE 30, 2015



*San Diego County  
Water Authority*

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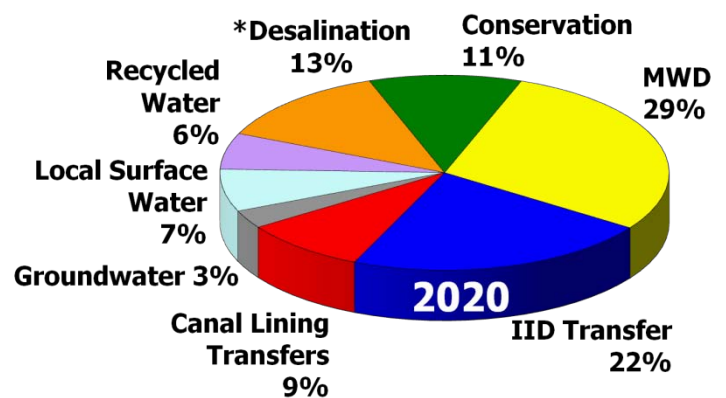
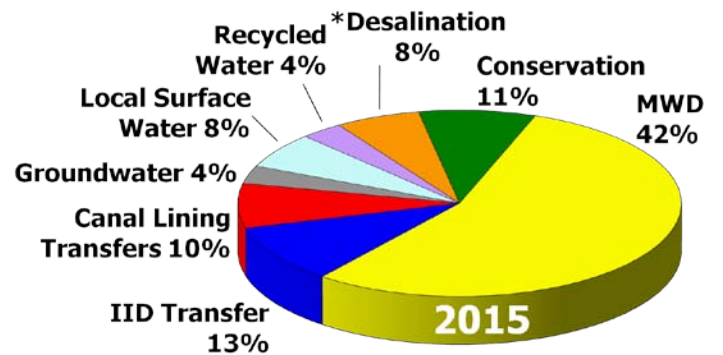
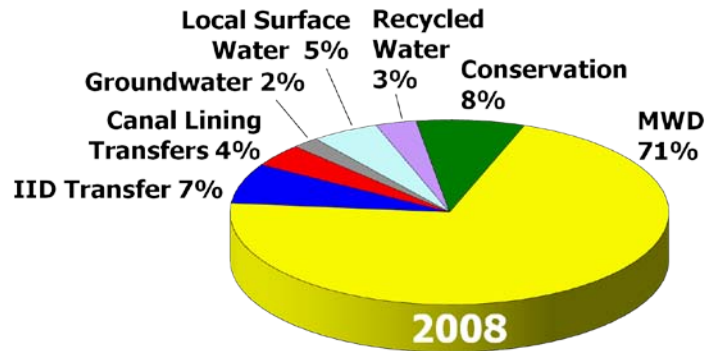
## Chapter 1 - Introduction

The Water Authority's 2015 Business Plan serves as a road map to accomplish the objectives of the Board of Directors and identifies the basis for the Water Authority's budgets and programs. The Business Plan highlights the key issues, strategies, dependencies, goals, and milestones necessary to carry out the programs. In addition, the Business Plan emphasizes and brings to life the vision of the Strategic Plan that was adopted by the Board in April 2008. Together, these documents will direct the key management strategies that guide the Water Authority's management and staff with clear policy and deliberate direction as we move into the next quarter of the century.

As emphasized in the 2008 Strategic Plan, the mission of the Water Authority is to provide a safe and reliable supply of water to its member agencies serving the San Diego region. The clear direction of the Board is to continue to increase the reliability of the water supply to meet the region's growing demands and to ensure the cost effective, environmentally sensitive and safe delivery of those supplies. The goals of the Business Plan will serve as an action plan that can be tracked to monitor performance and modified in a timely manner. The alignment of the Business Plan to the Strategic Plan strengthens the Water Authority's commitment to the mission and provides the Water Authority flexibility to adapt to new challenges.

Over the last several years, the Water Authority's Board of Directors has adopted policies and programs in the areas of supply reliability, system infrastructure, finance,

### Water Supplies Portfolio Programs



\* Includes Seawater and Brackish Groundwater supplies

and outreach to help accomplish this mission and to meet growing demands.

This long-term commitment by the Board to diversify the region's water supplies portfolio, reduce the region's reliance on imported water, and optimize facilities will provide the flexibility necessary to respond to the region's ever-changing needs.

The Business Plan was created using staff input from all levels within the Water Authority. It is intended to be a rolling five-year "look ahead" with periodic updates to assess whether milestones have been met, modify actions as necessary, update existing programs, and add new programs as approved. With important input from management and staff, this document highlights the Water Authority's ability to

adopt the Board's new strategies to meet its goals.

The Business Plan will be updated biennially, whereas an assessment of the associated plan's metrics and a review of the organizational goals' alignment will occur annually. The Water Authority will make information about Plan performance available online to stakeholders and the public.

The following vision statement serves as a compass to guide the Water Authority in the identification of key programs, their relationships to each other, and the selection of strategies and goals to provide reliable water supplies to the region.

## Strategic Direction

### Mission Statement

*The mission of the Water Authority is to provide a safe and reliable supply of water to its member agencies serving the San Diego region.*

### Vision of the Future

*In partnership with member agencies and stakeholders, meet the region's water supply needs by:*

- *providing a safe and reliable water supply,*
- *diversifying the region's water supply sources, and*
- *building, maintaining, and operating critical water facilities in a cost effective and environmentally sensitive manner.*

### Organizational Values

- *We will consider our partner agencies' and stakeholders' interests in our decisions.*
- *We will do our work in the most cost effective ways.*
- *We will have open communications with our partner agencies and the public.*
- *We will have an open and inclusive policy development process.*
- *We value diversity in the water supply.*
- *We value long-range planning.*

## Plan Strategies

The 2015 Business Plan responds to the business trends that will drive the Water Authority over the next 25 years. These trends are discussed in the Board's adopted 2008 Strategic Plan and serves as a guide for the Water Authority in the identification of key programs, their relationship to each other, and the selection of strategies and goals to provide reliable water supplies to the region. Reliability will be achieved by continuing to implement **three broad strategies**:

- The diversification of water supplies
- Strong asset management
- Influential leadership

The Business Plan is divided into three areas of focus which serve to implement these strategies. The goal of the diversification strategy is to adapt to business trends and continue to strive to reach the Board's adopted level of supply diversity as identified in Key Result Area 1 of the 2008 Strategic Plan. Chapter 2 Water Supplies Portfolio Focus Area features programs that support implementation of this strategy. These include the *Bay-Delta Program, Brackish and Seawater Desalination, Colorado River Water Supplies, Water Shortage and Drought Response Management, Metropolitan Water District Water Supplies, Recycled Water, and Water Conservation.*

Chapter 3 Water Facilities Focus Area demonstrates the Water Authority's cost effective asset management strategy by building, operating, and maintaining water facilities critical to meeting the growing regional demands. This area of focus includes *Asset Management, the Capital*

*Improvement Program, Facilities Security and Emergency Preparedness, and Operations and Maintenance.*

Essential to the execution of all three strategies, Chapter 4 Core Business Focus Area includes the majority of the Water Authority's day-to-day operations performed in accordance with our organizational values. As prescribed by Key Result Area 2 in the 2008 Strategic Plan, the goal to align all regional stakeholders in support of water supplies and facilities strategies, is supported by programs in this section. The need to create relationships and partnerships with member agencies, communities, government, and the media is integral to *Government Relations Outreach, Public Affairs Outreach, and Water Resources Planning.*



As stated in Key Result Area 3 of the Strategic Plan, it is important to the Board to be fiscally balanced between efficient debt financing and timely construction, maintenance, rehabilitation, and replacement of capital assets. *Financial Planning* and *Infrastructure Planning* support such efforts. In addition, the Water Authority recognizes the importance of environmental management including adapting to climate change and being a

leader in sustainability and stewardship. *Climate Change and Sustainability*, *Water Shortage and Drought Response Management* and *Environmental Management* are programs that address these concerns. Lastly, *Information Technology* and *Workforce Management* ensure a flexible and skilled workforce and provide state-of-the-art technology to support all of the Water Authority's programs.

## Water Authority Mission and Vision

### Strategic Plan

### Business Plan

#### Water Supplies Portfolio Focus Area

- *Bay-Delta Program*
- *Brackish and Seawater Desalination*
- *Colorado River Water Supplies*
- *Metropolitan Water District Water Supplies*
- *Recycled Water*
- *Water Conservation*
- *Water Shortage and Drought Response Management*

#### Water Facilities Focus Area

- *Asset Management*
- *Capital Improvement Program*
- *Facilities Security and Emergency Preparedness*
- *Operations and Maintenance*

#### Core Business Focus Area

- *Climate Change and Sustainability*
- *Environmental Management*
- *Financial Planning*
- *Government Relations Outreach*
- *Information Technology*
- *Infrastructure Planning*
- *Public Affairs Outreach*
- *Water Resources Planning*
- *Workforce Management*

## Chapter 2 - Water Supplies Portfolio Focus Area

### Focus Area Summary

Since 1947, water has been imported to the San Diego region to supplement existing local surface and groundwater supplies. However, these traditional sources of water supplies are limited and becoming less reliable. In the 2008 Strategic Plan, the Board of Directors reaffirmed that in order for the Water Authority to successfully meet its mission, it must diversify its water supply.

The Water Supplies Portfolio focus area has seven programs intended to help the Water Authority reduce its dependence on imported supplies. These include the *Bay-Delta, Brackish and Seawater Desalination, Colorado River Water Supplies, Water Shortage and Drought Response Management, Metropolitan Water District Water Supplies, Recycled Water, and Water Conservation*. The goal of this focus area is to protect traditional supplies while increasing the diversity of the Water Authority's supply portfolio to enhance reliability and meet the region's growing demands. Due to many of the programs highlighted in this section, the Water Authority will have reduced its reliance from Metropolitan Water District imported supplies from 95 to 42 percent by 2015.

The majority of the new supplies will come from the successful transfer of Colorado River water and the concrete lining of the

All-American and Coachella Canals. In addition, 28 percent of the region's future water demand is projected to be met through existing surface water supplies, groundwater conjunctive use programs, aggressive water recycling projects, and water conservation programs.

Included in the Water Authority's water supply portfolio is the development of local and regional seawater and brackish groundwater desalination projects. Advances in seawater desalination technology and design have made the costs more competitive with other new water supplies available to the region. It is expected that these new desalination projects will make up 8 percent of the region's water supply by 2015.

Developing each of these new water supplies requires close coordination and collaboration with our member agencies in order to plan, develop, obtain necessary funding, and engage stakeholders in the attainment of the region's water diversity goals. In addition, the potential of imported water shortages in the near-term is addressed in the Water Shortage and Drought Response Management program.

## Bay-Delta Program

The Bay-Delta is a critical component of the federally-managed Central Valley Project (CVP) and the State of California's State Water Project (SWP), which is among the world's largest water diversion projects. The Bay-Delta provides drinking water for 25 million Californians and irrigation for about five million acres of cropland, resulting in approximately \$400 billion dollars of the state's \$1.5 trillion economy. Seventy percent of the water used for agricultural and urban purposes in California moves via pumps from sources north of the Bay-Delta to farms and communities in central and southern California. The Bay-Delta also provides one of the largest, most important estuarine systems for fish and waterfowl production on the Pacific Coast. About 90 species of fish are found in the Bay-Delta.

In 2007, U. S. District Court Judge Oliver W. Wanger announced a series of severe restrictions on the operations of the massive pumps that supply water from the Sacramento-San Joaquin Delta to about two-thirds of all Californians, including three million residents of San Diego County, to protect threatened fish in the Bay-Delta. The cutbacks are anticipated to result in 10 to 35 percent losses from the SWP supplies; and pumping restrictions are expected to last for several years.

For San Diegans, supplies from the Bay-Delta in recent years have provided more than one-third of all water used in the region. Therefore, a significant and

prolonged reduction in supplies from the SWP will have serious impacts to the region's water supply reliability.

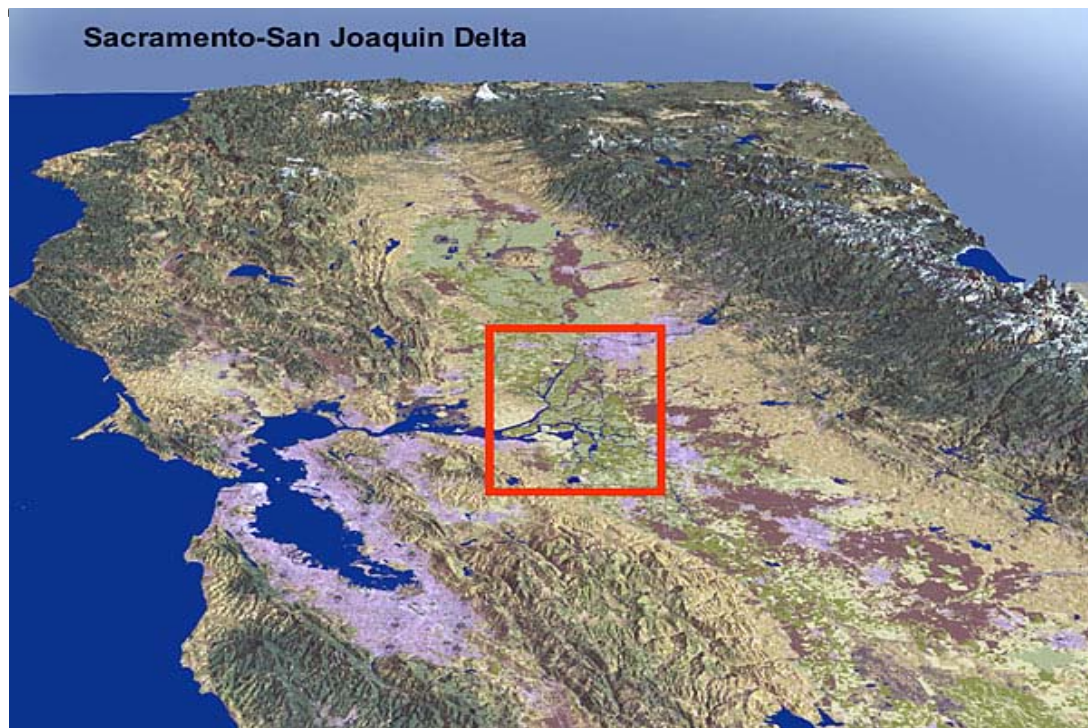
On November 4, 2009, the California Legislature passed a package of legislation to address the problems in the Delta and achieve the co-equal goals of improving water supply reliability and environmental restoration. The bill package creates new governance entities and new programs for the Delta.

The Water Authority's Bay-Delta Program seeks to be actively engaged at the various decision-making levels. To ensure the SWP will be able to safely and reliably convey water supplies to Southern California, the Water Authority will work with the Governor, state legislators, federal officials, and other water agencies to implement near-term and long-term solutions to the Bay-Delta's infrastructure, and associated legal and environmental constraints.

A number of key issues directly affecting the mission of the Water Authority and the focus areas of the Bay-Delta Program are:

- Water Supply Reliability;
- Governance and Finance;
- Ecosystem Restoration and Sustainability; and
- Flood Protection and Levee Improvements.

Key Issue	Management Strategy	Goal Number
<b>Reliability, affordability, and quality of Bay-Delta supplies.</b>	Advocate board-adopted positions regarding Bay-Delta policies and funding with stakeholder organizations, the Legislature, and the Administration.	2,3,4,6
	Monitor and support progress of the Bay-Delta Conservation Plan.	2,5
<b>Influence key policy decisions</b>	Influence proposals for near-term and permanent Delta fixes, including federal and state legislation for funding, improvement of water quality and supply.	4,5
	Analyze and influence proposals for long-term funding for the Bay-Delta Conservation Plan, improvement of water supply reliability and quality, and federal and state legislation affecting the Bay-Delta.	1,2,3,4,5,6
	Identify and advocate implementation of near-term actions by 2012.	1,2,3,4,6
	Increase regional public and business community knowledge regarding Bay-Delta conveyance issues.	1,2,3,4,5,6
	In cooperation with the Metropolitan Water District of Southern California and other Southern California interests, develop a comprehensive strategic plan to achieve needed approvals by the Legislature and the Governor’s Administration for near-term Bay-Delta fixes by 2012 and long-term fixes by 2018.	1,2,3,4,5,6

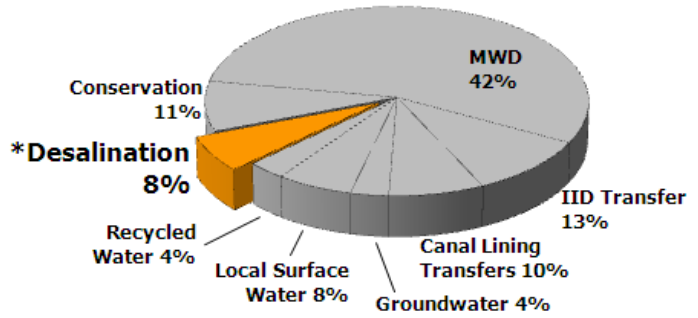


Number	Goal	Time Frame
1	Develop and adopt an updated work plan for 2011/2012.	Jun 2011
2	Participate in the Bay-Delta Conservation Plan process and advocate for the completion of the environmental documentation process.	Jan 2012
3	Support efforts to implement interim Bay-Delta fixes by 2012.	Jun 2012
4	Evaluate costs and cost effectiveness of a long-term Delta fix when compared to other supply alternatives.	Jun 2012
5	Support and monitor the Delta Governance process, including support for San Diego’s representation on the Delta Stewardship Council.	Jun 2014
6	Effectively communicate and advocate the Water Authority’s position with California Urban Water Agencies on Delta strategies.	Jul 2014

## Brackish and Seawater Desalination

Seawater and brackish groundwater desalination are two key components of the Water Authority’s future water supply portfolio. This program is focused on the development of local and regional projects encompassing both seawater and brackish groundwater desalination. With a desalination supply target of 8 percent of total supply by 2015, the Water Authority is undertaking a number of desalination development activities. These activities include the development and coordination of institutional agreements that will facilitate using the Water Authority’s aqueduct system to deliver desalinated water from the Carlsbad Desalination project, a private desalination project located at the Encina Power Station site.

### FY 2015 Supply Portfolio



\*Includes Seawater and Brackish Groundwater supplies

Other activities include continued planning efforts in support of a potential regional desalination project at Camp Pendleton. These efforts include hydrogeologic, geotechnical, oceanographic, and power supply studies that will provide additional



information as to the feasibility and cost of the project. Additionally, desalinated water conveyance and treated water integration studies are also planned. Results from these technical studies will be incorporated into the update of the Regional Water Facilities Master Plan (see Infrastructure Planning program). In addition, through the

Local Investigations and Studies Assistance (LISA) and Local Water Supply Development (LWSD) programs, the Water Authority continues to provide financial and technical support to member agencies developing local brackish groundwater and seawater desalination projects.

<b>Key Issue</b>	<b>Management Strategy</b>	<b>Goal Number</b>
<b>New local supplies</b>	Implement programs and strategies that support development of local desalination projects.	2,4,5
<b>New regional supplies</b>	Provide technical assistance to member agencies with planning, design, and construction of brackish groundwater and seawater desalination projects.	1,3
	Support permitting and implementation of the Carlsbad Desalination Project to achieve 56,000 acre feet per year.	

<b>Number</b>	<b>Goal</b>	<b>Time Frame</b>
1	Complete Desalinated Water Conveyance and Integration Study for the Camp Pendleton Seawater Desalination project as part of the update to the Regional Water Facilities Master Plan.	Jan 2012
2	Complete and execute all agreements that will allow the delivery of desalinated water from the Carlsbad Seawater Desalination project to the Water Authority Aqueduct for delivery to member agencies that have agreed to purchase water from the project.	Dec 2012
3	Complete hydrogeologic, geotechnical, and oceanographic studies for the Camp Pendleton Seawater Desalination project.	Dec 2012
4	Achieve annual production of 8,000 acre feet of water supplies from brackish groundwater desalination.	Dec 2012
5	Obtain Board approval of Environmental Documentation for CEQA/NEPA compliance for the Camp Pendleton Seawater Desalination project.	Jun 2015

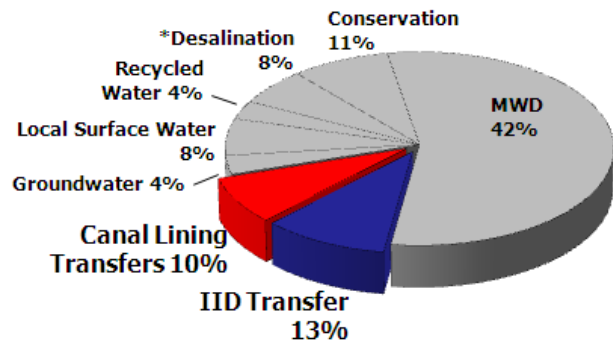
## Colorado River Water Supplies

The Quantification Settlement Agreement (QSA), executed in October 2003, outlines how California will reduce its overuse of Colorado River water over a 15 year period. By 2020, the Water Authority will receive about 30 percent of its water supply from the QSA program. The Colorado River Program manages the water transfer agreement with Imperial Irrigation District and the All-American and Coachella canal lining projects, and implements the Water Authority's agreements under the QSA.

Implementation of the water transfer began in 2003. The quantities of transferred water will increase according to an agreed-upon delivery schedule, ultimately providing 200,000 acre feet of water in 2021. This amount will continue to be transferred after 2021 and as late as 2077. The goal is to achieve the transfer schedule described in the agreement.



## FY 2015 Supply Portfolio



\*Includes Seawater and Brackish Groundwater supplies

The Water Authority receives 24,000 acre feet of water annually from the concrete lining of the Coachella Canal. This project began construction in November 2004 and was completed in spring 2007. The lining of the All-American Canal was completed in spring 2010 and provides 56,200 acre feet of water per year. Both projects have environmental mitigation work to be implemented over the next several years.

The water transfer and the canal lining projects are of concern to a variety of stakeholders both within and outside the region of San Diego and Imperial counties. A public outreach program is helping to address these issues and responding to concerns of affected parties.

In 2008, the Water Authority and other U.S. parties began formal discussions of potential binational water supply projects with Mexico. These discussions are held under a process led by the U.S. and Mexican sections of the International Boundary and Water Commission (IBWC). Potential binational projects include seawater desalination and water delivery

system improvements. These projects could ultimately lead to an additional source of water for the Water Authority that could be conveyed either directly, through a new binational facility, or by exchange under existing Colorado River apportionments. As part of this effort, the Water Authority and

three other Colorado River agencies are studying the feasibility of constructing a seawater desalination plant in Baja California, Mexico.

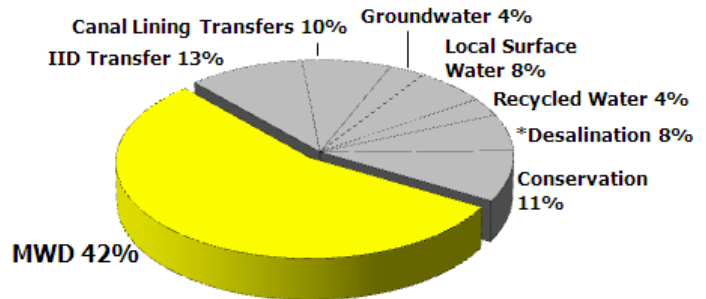
<b>Key Issue</b>	<b>Management Strategy</b>	<b>Goal Number</b>
<b>Cost and schedule control for canal lining projects and water transfer</b>	Represent the Water Authority's interests through committees that exercise oversight of design, construction, and operations and maintenance of projects.	1,2,3,5,10,11,12
	Respond to existing and potential litigation against canal lining or water transfer projects.	1,2,3,5,7,8,10,11,12
	Implement and update an outreach plan to effectively communicate canal lining issues, emphasizing local water resources programs, to build strong relationships and partnerships with Imperial Irrigation District, Coachella Valley Water District, and in the Imperial and Coachella Valleys.	1,2,3,5,8,10,11,12
<b>Environmental mitigation</b>	Administer the Quantification Settlement Agreement Joint Powers Authority to reimburse mitigation costs.	10
<b>Deliver scheduled amounts of transfer water</b>	Implement and update an outreach plan to effectively communicate water transfer issues, emphasizing local water resources programs, to build strong relationships and partnerships with Imperial Irrigation District, Coachella Valley Water District, and in the Imperial and Coachella Valleys.	8,10,12
	Defend the Quantification Settlement Agreement against potential litigation.	7,8,10,12
<b>Identify feasible water supply augmentation projects</b>	Chair the New Water Resources Binational Work Group and recommend binational projects to the Water Authority.	4,6
	Participate in work group meetings and lower basin studies.	9

<b>Number</b>	<b>Goal</b>	<b>Time Frame</b>
1	Obtain U.S. Bureau of Reclamation’s project acceptance for Reaches 2 and 3 of the All-American Canal Lining project.	Nov 2010
2	Obtain U.S. Bureau of Reclamation’s project acceptance for Reach 1 of the All-American Canal Lining project.	Nov 2010
3	Develop and implement the Cracked Panel Repair Procedure for the Coachella Canal Lining project.	Apr 2011
4	Obtain storage ability in Lake Mead through the establishment of an Intentionally Created Surplus (ICS) sub-account.	Jun 2011
5	Obtain U.S. Bureau of Reclamation’s project acceptance for the Coachella Canal Lining project.	Oct 2011
6	In cooperation with funding partner agencies and Mexico, complete Phase 2 of the Binational Desalination Plant project in Baja California, Mexico.	Dec 2011
7	Obtain resolution of judicial ruling related to the Quantification Settlement Agreement contracts.	Dec 2011
8	Transfer 150,000 acre feet of water as described in the Transfer Agreement Schedule for calendar years 2010 and 2011.	Dec 2011
9	Participate in continuing discussions with the Seven Basin States and the federal government regarding the feasibility of water supply augmentation projects, and make recommendations to the Water Authority for participation where appropriate.	Jun 2012
10	Administer the Quantification Settlement Agreement Joint Powers Authority and fund reasonable environmental mitigation costs to sustain environmental permits.	Jun 2012
11	Administer the Water Authority’s portion of operations, maintenance, and repair costs for All-American and Coachella Canal Lining projects and ensure costs are within contractual obligations for the next two fiscal years.	Jun 2012
12	Develop an action plan to evaluate the potential extension of the Metropolitan Water District-San Diego County Water Authority Exchange Agreement for decision by December 2017.	Jun 2012

# Metropolitan Water District Water Supplies

Water from Metropolitan Water District (MWD) was first imported to the San Diego region in 1947 to supplement existing local surface and groundwater supplies. MWD currently supplies approximately 53 percent of the region’s water and will remain a significant source of supply in the future. As of June 2009, the Water Authority has a preferential right to more than 17 percent of MWD’s supply, but purchases 26 percent of MWD’s water on average. Due to supply constraints, MWD activated Level 2 of its Water Supply Allocation Plan on July 1, 2009 to curtail deliveries. This level of delivery curtailment is in effect through June 30, 2011. It is highly probable that MWD will continue some level of delivery curtailment until the Bay-Delta issues are resolved. Although MWD is relying on the Water Supply Allocation plan, and has relied on other allocation methods in the past, it should be noted that the MWD Act only describes a preferential right formula under

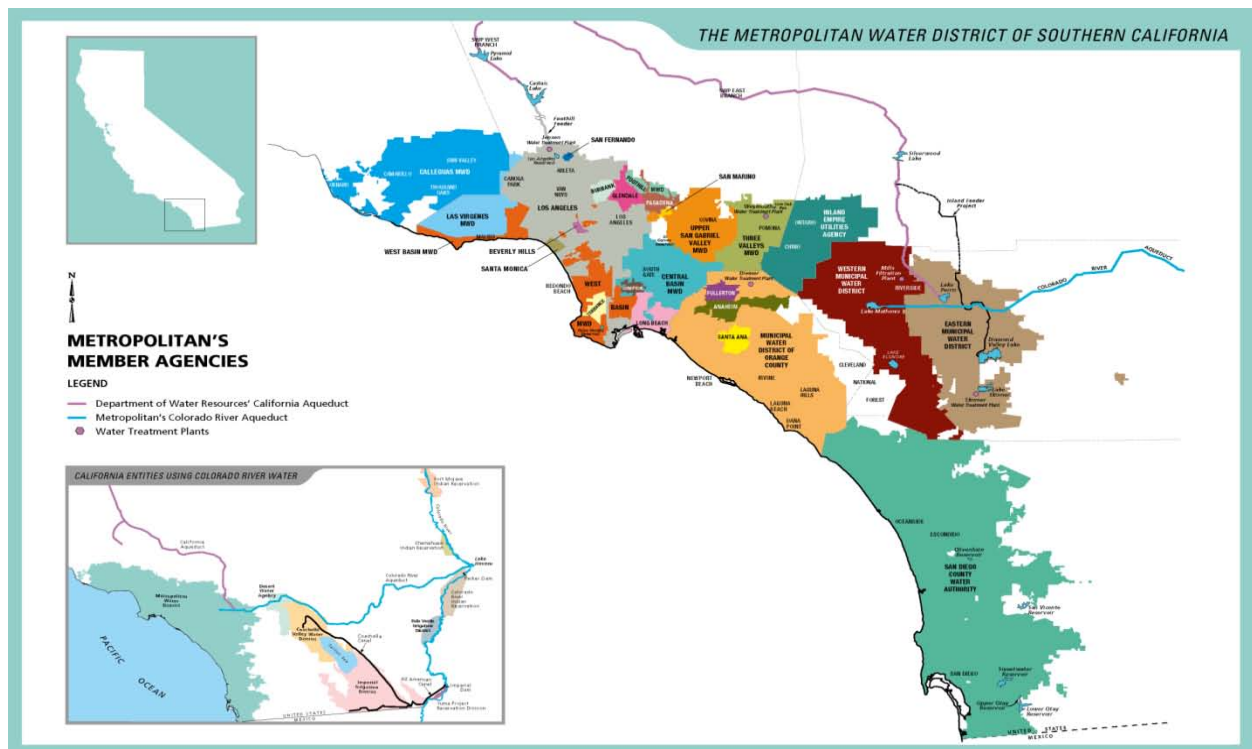
## FY 2015 Supply Portfolio



\* Includes Seawater and Brackish Groundwater supplies

which each member agency may have access to MWD supplies.

In 1991, the fifth year of drought throughout the West, the San Diego region relied on MWD for more than 95 percent of its total water supply. However, critically dry conditions on the State Water Project, one of MWD’s two sources of supply, caused water shortages throughout the entire MWD service area. MWD reduced the water it



provided to the Water Authority by 31 percent. The impact was particularly hard on San Diego County due to its high dependence on imported MWD supplies.

Following the 1991 reductions in MWD deliveries, the Water Authority Board began a process to reduce the high degree of reliance on a single water supply source. The most significant step resulted in the successful execution and implementation of the Quantification Settlement Agreement, which included the water conservation and transfer agreement with the Imperial Irrigation District and the canal-lining programs. The Water Authority is also aggressively increasing its conservation and local resources development efforts, including seawater desalination. As these programs are implemented, the San Diego region's water supply reliability is improved and its susceptibility to shortfalls in MWD's supplies will lessen.

Even with a diversified supply portfolio, MWD will continue as an imported source of supply to the San Diego region. As the Water Authority diversifies its supply portfolio, about 29 percent of the Water Authority's supply will still come from MWD in 2020. The Water Authority's considerable investment in MWD's water supplies and infrastructure must be vigorously protected to ensure reliability and control costs.

MWD is faced with many challenges over the next several years; chief among them is the need to ensure the Bay-Delta issues are addressed so its SWP deliveries are no longer under the cloud of environmental restrictions. As MWD's traditional supplies are under increasing threats, some are expressing a desire for MWD to expand its role and be a local supply developer; MWD must balance between the supply reliability

risks and the affordability of these supplies. How MWD deals with regulatory-imposed reductions on Bay-Delta supplies to address environmental problems, and how these mitigation measures would be paid for, are issues that have significant impacts to the Water Authority's supply future. As the MWD board addresses its options to provide supplies to the region, MWD's role in local projects development, including conservation, would also have significant impact on the Water Authority and its member agencies.

As such, the Water Authority actively participates in various MWD processes that govern its supply and financial planning, including the Integrated Resources Plan update, Strategic Policy review, Water Supply Allocation Plan review, Long-Term Finance Plan update, and cost of service review, to ensure the Water Authority's interests are protected.

Key Issue	Management Strategy	Goal Number
<b>Long-term MWD water supply</b>	Support the Water Authority’s efforts to ensure long-term regional water supply reliability from MWD, while minimizing costs and receiving equitable share of MWD supply and incentive programs funding.	3,6
	Advance mutual MWD and Water Authority outreach efforts to educate constituents.	1,7
	Support the Water Authority’s MWD Delegates in identifying and maintaining the Water Authority strategic goals at MWD.	3,6
<b>Water Authority and MWD positions</b>	Enhance imported water supply opportunities.	2,4,5

Number	Goal	Time Frame
1	Execute a comprehensive MWD Inspection Trip and Education Plan.	Sep 2010
2	Complete agreement with the Department of Water Resources and other State Water Contractor agencies, as needed, to deliver transfer water into the Water Authority’s Groundwater Bank Program in Kern County.	Mar 2011
3	Conduct biennial MWD Delegates and Water Authority planning session to identify water policy strategies and integrate into the MWD Program Work Plan for 2011/2012.	Apr 2012
4	Secure Northern and Central California water to ensure adequate supplies during dry-years and obtain requisite approvals to convey the water.	Jun 2012
5	Identify and make recommendations to the Water Authority on potential partners for joint groundwater storage opportunities to achieve water reliability and build alliances as appropriate.	Jun 2012
6	Identify, assess, and make recommendations to the Water Authority on key MWD issues that impact rates and charges, financial contributions, equitable distribution of water supply, supply reliability, and cost efficient opportunities (Integrated Resource Plan, supply programs, annual budget and rates, incentive programs, etc.).	Jun 2012
7	Implement a Water Authority Directors’ instructional plan on MWD issues. As part of the plan, accompany three Directors per year, at the minimum, to MWD Committee and/or Board meetings.	Jun 2012

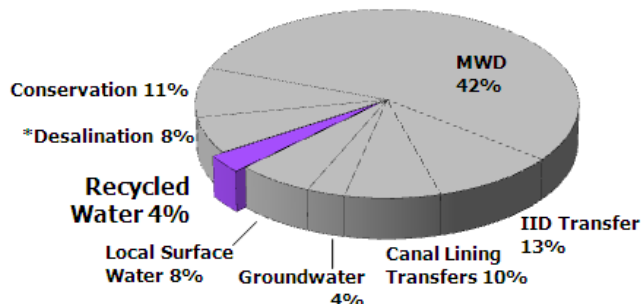
## Recycled Water

One of the elements identified in the Water Authority’s resource mix is the optimization of recycled water use. Recycled water is municipal wastewater that is treated and distributed for use in irrigation and other non-potable uses. Every gallon of recycled water used reduces the need to import or develop other water supplies. Current recycled water use for the San Diego region is over 27,000 acre feet. Based on current production and demand trends, it is anticipated that approximately 35,000 acre feet of recycled water will be beneficially reused within the Water Authority’s service area in 2015.

To encourage the use of recycled water, various funding programs have been implemented to help participating agencies offset some of their project planning, design, construction, and operating costs. These funding projects include the Water Authority’s Local Investigations and Studies Assistance (LISA) grant-funding program for local brackish groundwater recovery and treatment, seawater desalination, and water recycling project studies and investigations.



### FY 2015 Supply Portfolio



\*Includes Seawater and Brackish Groundwater supplies

In addition to LISA, the Water Authority administers the Local Water Supply Development (LWSD) program, which is designed to ensure the financial feasibility of local water recycling projects during their initial years of operation. The Water Authority’s LWSD program (formerly referred to as the Recycled Water Development Fund (RWDF) program initially adopted by the Board in April 1991), provides an incentive of up to \$200 per acre foot of recycled water beneficially reused, and targets recycled water projects that demonstrate a financial need. To date, over \$20 million in Water Authority incentive funding has been awarded to program participants. Assistance is provided to the member agencies in obtaining regional, state, and federal funding, influencing legislation, and advocating for regulations that maximize recycled water use. The regional goal is for recycled water to supply 4 percent of the San Diego region’s water demand by 2015.

<b>Key Issue</b>	<b>Management Strategy</b>	<b>Goal Number</b>
<b>Availability of funding</b>	Identify and seek regional water recycling grant opportunities and inform the member agencies of potential grant funding opportunities for their water recycling projects.	3
	Advocate for state and federal funding.	3
	Work with member agencies to ensure projects qualify for funding.	3
<b>Regulatory constraints</b>	Obtain acceptable and practicable regulatory standards that allow member agencies to maximize recycled water development by engaging in discussions with regulatory agency staff.	3
	Advocate at the local, state, and federal level for minimizing recycling regulatory constraints.	3
<b>Retail customer acceptance</b>	Implement economically feasible public information and customer outreach strategies, and offer technical assistance to increase recycled water use.	1
	Ensure that total dissolved solids levels do not preclude customers from using recycled water.	2
	Advocate for legislative and regulatory changes to advance Indirect Potable Reuse and participate in stakeholder outreach activities.	4

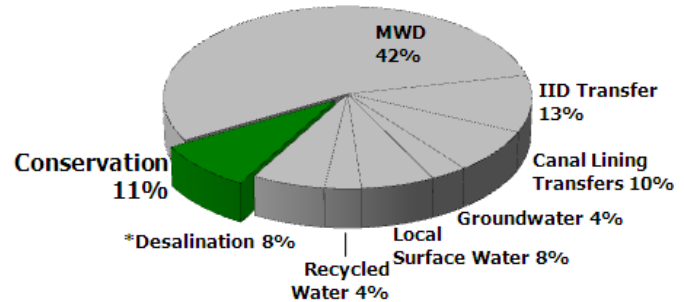
<b>Number</b>	<b>Goal</b>	<b>Time Frame</b>
1	Conduct and prepare a minimum of five Customer Site Inspections and Site Review Reports to encourage recycled water use in the commercial, industrial, and institutional sectors.	Jun 2011
2	In conjunction with the Regional Quality Control Board, the Southern California Salinity Coalition, and member agencies, develop standards and guidelines for the development of Salinity and Nutrient Management Plans.	Dec 2011
3	Achieve annual distribution and beneficial reuse of 30,000 acre feet of recycled water by the end of 2012.	Dec 2012
4	Develop and implement a stakeholder information plan to characterize and address market barriers to Potable Reuse.	Dec 2014

## Water Conservation

The Water Authority manages one of the most comprehensive water conservation programs in California. Through the combined efforts of the Water Authority's member agencies, Metropolitan Water District, United States Bureau of Reclamation, California Department of Water Resources, and San Diego Gas & Electric Company, the Water Authority is prepared to achieve the goal of 11 percent of the region's water supply from conservation by 2015.

The Water Conservation Program seeks to reduce the region's need for more expensive water supplies and compensate for the loss of imported water supplies by maximizing the efficient use of existing

## FY 2015 Supply Portfolio



\* Includes Seawater and Brackish Groundwater supplies

supplies. The sustained reduction in water use as mandated by state legislation will be met by a continued commitment to the Best Management Practices established by the California Urban Water Conservation Council, Agricultural Efficient Management



Practices, and Water Authority programs designed to positively impact individual long-term behavior regarding efficient water use.

It is expected that all municipal agencies with land use jurisdiction will adopt and enforce outdoor water conservation standards that meet or exceed the state or local standards. If the need arises, the Water Conservation Program will again employ short-term extraordinary measures identified in the Water Authority's Drought Management Plan; including the adoption and implementation of drought ordinances and conservation-based rate structures by member agencies, an aggressive outreach and education campaign, and individual programs that can achieve short-term conservation.

The current suite of water conservation programs has transitioned from those that offered incentives to purchase water saving devices, to those that require performance in advance of incentives and thereby take a holistic approach to water savings. This is not to say all device-based incentives have been abandoned, but rather the viability of such programs must demonstrate known and cost effective savings. Increased efforts in the landscape sector include refinement of a regional web-based water budget program, audits, and total retrofits that include hardware and plants that are consistent with landscape ordinances. This is combined with the ability to initiate a comprehensive marketing, education, and outreach program, which includes the combined efforts of the Water Authority, member agencies, and the Water Conservation Garden.

<b>Key Issue</b>	<b>Management Strategy</b>	<b>Goal Number</b>
<b>State mandated water use target</b>	Support the member agencies as they reduce their municipal and industrial water use and increase their use of recycled water to meet SB-7; a 20% reduction by 2020.	1,2,3,4
<b>Land use planning</b>	Support the adoption and implementation of the regional model landscape ordinances by land use agencies.	1
<b>Conservation funding</b>	Participate in Metropolitan Water District's regional programs where feasible, and coordinate on behalf of the member agencies.	3,4
	Obtain outside funding from state and federal agencies for programs consistent with the Board's Strategic Plan and this Business Plan.	
	Partner with SDG&E on water and energy programs.	

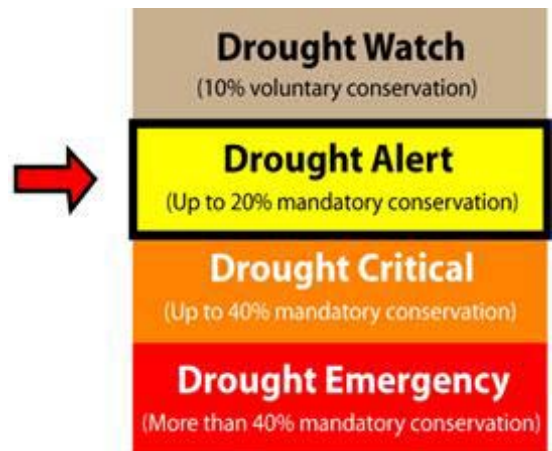
Key Issue	Management Strategy	Goal Number
<b>Landscape water use</b>	Refine and distribute the water budget program for use by the member agencies.	2,3
	Offer incentives to businesses and property owners based upon actual water savings.	
	Offer programs that encourage long-term behavior change towards measureable reductions in outdoor water use.	
	Implement a demonstration site project to provide property owners the opportunity to see and learn about landscaping that meets the local model landscape ordinance.	
<b>Commercial, institutional, industrial, and indoor water use</b>	Offer programs that encourage long-term behavior change towards measureable reductions in outdoor water use.	2,3
	Improve commercial, institutional, and industrial participation in conservation forums.	
<b>Outreach, education and marketing</b>	Support the Water Conservation Garden.	2, 3
	Increase the landscape industry’s basic knowledge regarding the interdependency between water efficient design, and irrigation design and maintenance.	
	Implement strategies for long-term market transformation to increase acceptance and use of water efficient design, products, and services.	
<b>Program effectiveness</b>	Advance the metrics and methods to monitor and track the effectiveness and savings of the conservation program.	2,3,4
<b>Program management</b>	Develop and implement financial and scheduling tools to assess and manage programs and funding sources.	2,4
<b>State and Federal conservation mandates</b>	Participate on statewide, national, and industry committees to advance behavior based conservation strategies.	1,3
	Ensure mandated conservation strategies can be implemented by the Water Authority, its member agencies, or local jurisdictions.	

Number	Goal	Time Frame
1	Ensure 100% of the local land use planning jurisdictions within the Water Authority's service area will adopt the regional model landscape ordinance.	Sep 2010
2	Implement 15 sites throughout the service area of water efficient landscaping that meet the regional landscape ordinance.	Jun 2011
3	Reduce per capita water use by 8.4 gallons per capita day by 2012 to stay on course to reach state mandated 2015 target of 161 gallons per capita day.	Jun 2012
4	As needed, plan and implement programs that will achieve short-term water savings to meet anticipated or mandated regional targets if the previous year's annual gallons per capita day target is exceeded by 5% or more.	Jun 2012

## Water Shortage and Drought Response Management

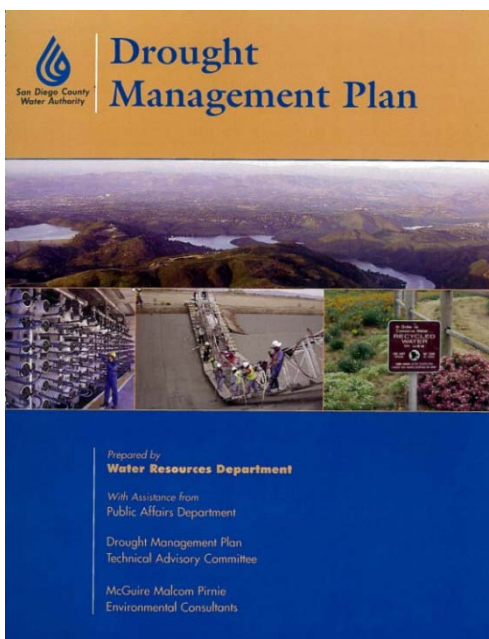
In 2007, historic dry conditions, coupled with judicial pumping restrictions on State Water Project (SWP) supplies, prompted the Water Authority to activate its Drought Management Plan (DMP), adopted by the Water Authority Board of Directors in March 2006. The DMP provides the Water Authority and its member agencies with staged actions to take when faced with imported water shortages.

Beginning with the 2006 adoption of the DMP, and well in advance of its activation, Water Authority staff developed “ahead of the need” programs, actions, and procedures necessary to minimize and manage anticipated imported water shortages. As such, the Water Authority was well-prepared when, in response to water shortages due to continuing dry conditions and regulatory restrictions to protect native fish species, Metropolitan



Water District and the Water Authority initiated water supply allocation beginning July 1, 2009. With the prospect of chronic water supply shortages and the continuation of allocation becoming increasingly likely, the management strategies and the four goals listed below have shifted from a focus on preparing for water shortages, to a focus on managing through continuing water shortages and allocation conditions. These management strategies center around three key issues:

- Continued imported water shortages;
- Improvements in drought management and response; and
- Equitable allocation of water supplies.



The goals listed below address the ongoing challenges posed by the likely prospect of multi-year water shortages, particularly in light of the practical experience gained through activation and implementation of the DMP since 2007.

<b>Key Issue</b>	<b>Management Strategy</b>	<b>Goal Number</b>
<b>Continued imported water shortages</b>	In coordination with member agencies and other parties, implement actions to avoid or minimize water shortages.	1,2,3,4
<b>Improvements in drought management and response</b>	Revise drought management tools based on implementation experience and changing conditions.	3,4
<b>Equitable allocation of water supplies to member agencies</b>	Update and refine allocation processes set forth in the current Drought Management Plan.	4

<b>Number</b>	<b>Goal</b>	<b>Time Frame</b>
1	Complete emergency local water supply implementation plan.	Dec 2011
2	Prepare a 3 year water supply outlook with dry-year supply estimates for short-term water transfers, groundwater banking, and carryover storage in 2011 and 2012.	May 2012
3	Identify shortage management actions based on water supply conditions in 2011 and 2012.	May 2012
4	Administer and update Metropolitan Water District and Water Authority water supply allocation programs in 2011 and 2012.	Jun 2012

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## Chapter 3 - Water Facilities Focus Area

### Focus Area Summary

The Water Facilities Focus Area contains four programs: *Asset Management*; the *Capital Improvement Program*; *Facilities Security and Emergency Preparedness*; and *Operations and Maintenance*. This focus area seeks to cost effectively build, operate, maintain, and secure water infrastructure to meet regional water demands.

The most significant issues in this focus area are:

- Controlling capital and operating costs of facilities;
- Balancing facility growth with water rate impacts;

- Managing facility operations, maintenance, and security to consistently and efficiently deliver a reliable water supply; and
- Managing the ability to meet member agency water demands.

The key near-term challenges are:

- Managing a wide variety of sophisticated water facilities as integrated systems; and
- Shifting from planning for various projects or programs described in the initial business plan, to successful implementation.



## Asset Management

The purpose of asset management is to maximize the value of an asset over its lifecycle; thereby ensuring that the Water Authority derives the most benefit from its assets. This includes constructing, operating, repairing, or replacing assets at the optimum time to ensure system reliability at the lowest cost and least impact to member agencies.

Asset management is an organization-wide responsibility requiring an alignment of customer expectations, business process, technology, and organizational culture.

The Water Authority has many of the pieces required to establish a formal Asset Management Program, including the core software programs (Peoplesoft, Maximo, Geographical Information Systems (GIS), Information Systems, Supervisory Control and Data Acquisition (SCADA) system, etc.), and a mature Operating and Capital Improvement Program with several asset replacement projects underway. This program combines these existing projects and programs to create a more complete asset management emphasis.

The benefits of an effective asset management program include: improved relationships with customers, investors, regulatory agencies, and policy makers; gradual and predictable rate increases, improved planning, risk-based decision making; and sustained improvement. An

effective asset management program is designed to ensure asset information is collected and made available within the organization so the organization acquires, constructs, maintains, repairs, replaces, and disposes of assets at the proper time.

The Water Authority faces many challenges in implementing an organization-wide Asset Management Program, including the collection and dissemination of asset information and history, development of new asset management policies and procedures, implementation and documentation of a formal risk-based decision process, and implementation of new performance measurement criteria. A comprehensive asset management program will aid staff in dealing with the demands of an increasingly complex system, an aging infrastructure, increasing costs, and competing demands for limited resources.



<b>Key Issue</b>	<b>Management Strategy</b>	<b>Goal Number</b>
<b>Information management</b>	Provide information technology to support asset management decisions.	1,3,4
	Ensure appropriate standards, conventions, and policies, for data management, dissemination, and security.	1,3,4
<b>Facilities planning</b>	Provide sufficient information to support the development of the Facilities Master Plan.	1,3,4
<b>Financial planning</b>	Ensure asset management program support from financial stakeholders.	2
<b>Process and change management</b>	Collect and manage appropriate level of information/data necessary to support the Asset Management program.	1,3,4
	Maintain appropriate staffing levels and skills to execute the Asset Management program.	2
	Monitor the Asset Management program's effectiveness in meeting program milestones and objectives, and revise as necessary.	2

<b>Number</b>	<b>Goal</b>	<b>Time Frame</b>
1	Complete condition assessment of 97 Flow Control Facilities and develop a rehabilitation/repair schedule.	Jun 2011
2	Develop comprehensive asset management budget and update the project portfolio as part of the fiscal year 2012/2013 budget process.	Jun 2011
3	Complete condition assessment of 400 pipeline appurtenances and develop a rehabilitation/repair schedule.	Aug 2011
4	Complete condition assessment of 35 major hydraulic control, pumping, and hydroelectric facilities and develop a rehabilitation/repair schedule.	Jul 2012

## Capital Improvement Program

The purpose of the Capital Improvement Program (CIP) is to build capital projects necessary to create a water system infrastructure to transport, treat, and store water needed to serve the member agencies. This program is critical to provide the facilities necessary to handle future demands and the growth of regional water supplies.

At the beginning of the current two-year budget cycle (fiscal year 2010 and fiscal year 2011), the Board of Directors approved a CIP budget of approximately \$3.8 billion. More than a third of that amount will be

spent on two programs: the San Vicente Dam Raise and Carryover Storage (\$550 million), and the Relining and Pipe Replacement Program (\$787 million).

These two programs, plus the Colorado River Canal Lining projects, are forecast to constitute the majority of expenditures over the next five years. A concentrated effort on this handful of projects increases the likelihood of successful program execution.

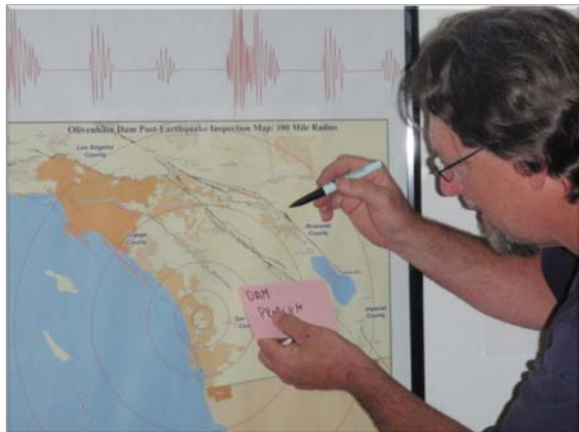
Key programmatic issues will be our ability to: control costs, build facilities to meet reliability needs, and maintain project momentum on a handful of large projects.



Key Issue	Management Strategy	Goal Number
<b>Ability to control costs</b>	Participate in the development of western regional Capital Improvement Program best management practices and apply them.	4
	Explore and adopt new innovative technologies to reduce life cycle costs.	4
	Pursue initiatives to become a preferred public agency for contracting within the Southern California region.	4
	Use contract terms to provide incentives to consultants and contractors to practice efficient and cost effective processes.	4
	Perform value engineering on Capital Improvement Program projects.	4,5,6,7
<b>Build facilities to meet reliability needs</b>	Utilize the Comprehensive Reliability and Cost Assessment (CRACA) process to strike the optimum balance between regional water reliability and cost.	4
<b>Maintain momentum on key projects</b>	Employ best Capital Improvement Program management practices to include automated scheduling and controls, the use of performance metrics, and comprehensive gate reviews between project phases.	1,2,3,4,5,6,7
	Improve coordination with member agencies and other external Capital Improvement Program stakeholders.	1,2,3,4,5,6,7
	Improve coordination with internal functional groups/ stakeholders.	1,2,3,4,5,6,7

Number	Goal	Time Frame
1	Complete the San Vicente Pumping Facilities projects within budget and prior to completion of the San Vicente Pipeline, to provide a means to pump emergency and carryover storage to the second aqueduct from the San Vicente Reservoir.	Oct 2010
2	Complete the San Vicente Pipeline on revised schedule and budget to provide a means to transport emergency and carryover storage to and from the second aqueduct and the San Vicente Reservoir.	Nov 2010
3	Complete the Lake Hodges facilities on revised schedule and budget to link Lake Hodges to the Water Authority's aqueduct system, ultimately providing 20,000 acre feet of emergency storage for regional use.	Jun 2011
4	Develop best management practices to execute a successful Capital Improvement Program.	Dec 2011
5	Complete the San Vicente Dam Raise and Carryover Storage project on schedule and within budget and initiate filling of the expanded reservoir, to ultimately provide 152,000 acre feet of emergency and carryover storage.	Apr 2013
6	Complete the San Vicente Marina Facilities project on schedule and within budget to replace the existing marina facilities removed as part of the San Vicente Dam Raise and Carryover Storage project.	Dec 2014
7	Complete the San Vicente Bypass Pipeline project on schedule and within budget to replace the existing bypass pipeline inundated as part of the San Vicente Dam Raise and Carryover Storage project.	Dec 2015

## Facilities Security and Emergency Preparedness



The Facilities Security and Emergency Preparedness program focuses on the security of Water Authority staff, customers, and the aqueduct system. The security of the Water Authority's staff and aqueduct system is critical to providing a safe and reliable water supply to our member agencies. The ability of Water Authority staff to quickly respond to an emergency is essential to minimizing potential injury, property damage, and restoring service to impacted member agencies.

In 2003, the Environmental Protection Agency (EPA) mandated completion of risk assessments through the Public Health Security and Bioterrorism Act of 2002. Analysis of these risks, or vulnerabilities, has resulted in a phased approach to implementation of security improvements at critical facilities, including installation of security cameras, additional lighting, fencing, locks, real-time water quality sampling, and other security devices. Water Authority staff have also incorporated lessons learned from the risk assessments in the design of new capital projects.

As new facilities are constructed, the aqueduct and its components evolve into a more complex and demanding system to operate. The combination of increased security concerns and system complexity has highlighted the need for an increased emphasis on business continuity and emergency preparedness.

Establishing and maintaining positive relationships with key stakeholders such as member agencies, law enforcement, and local political leaders is critical to program success.

Water Authority staff will employ several strategies to deal with these issues, including integrating emergency preparedness and security plans, undertaking additional physical and cyber security improvements, expanding operations center security and customer service support, monitoring real-time water quality, and developing communication and outreach programs.



Key Issue	Management Strategy	Goal Number
<b>Aqueduct and facilities security</b>	Define physical, cyber, information, and personnel security roles and responsibilities.	1,2,3
	Provide necessary facilities, staffing, and funding to support security and emergency preparedness requirements.	1,2,3
	Conduct periodic tests of system security, and employee and law enforcement response procedures.	1,2,3,4,5
<b>Business continuity and emergency preparedness</b>	Perform coordinated emergency response drills with member agency and emergency response organizations.	1,2
	Comply with applicable state and federal laws and regulations regarding emergency preparedness, security, and safety.	1,2,3
<b>Communication with stakeholders</b>	Educate staff regarding security and emergency response roles and responsibilities, policies, and procedures.	1,2,3
	Coordinate security and emergency preparedness, and response activities with applicable local and regional emergency response, water agencies, and law enforcement personnel.	1,2,3
	Monitor water related security issues at local and national level.	1,2,3

Number	Goal	Time Frame
1	Complete Golden Guardian 2011 Catastrophic Flood multi-jurisdictional emergency response exercise.	Jun 2011
2	Complete Golden Guardian 2012 Catastrophic Earthquake multi-jurisdictional emergency response exercise.	Jun 2012
3	Develop the Water Annex segment of the San Diego County Operational Area Plan for emergency response.	Aug 2011
4	Update existing vulnerability assessment of critical facilities, in accordance with the Department of Homeland Security Protected Critical Infrastructure Information (PCII) program.	Dec 2013
5	Update existing Supervisory Control and Data Acquisition (SCADA) system vulnerability assessment using the Department of Homeland Security’s Control System Cyber Security Self-Assessment Tool, comparing results with past SCADA assessments.	Dec 2012

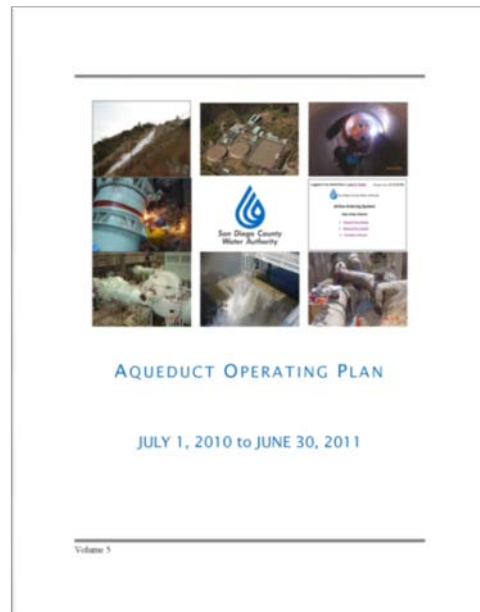
## Operations and Maintenance

The Operations and Maintenance program ensures that the Water Authority has a reliable water system infrastructure and consistently meets water quality standards, and member agency water demands.

The Water Authority operates and maintains a regional water delivery system that delivered more than 550,000 acre feet of water in fiscal year 2009.

This system consists of 300 miles of large diameter pipeline in two aqueducts, over 1,500 appurtenant structures, and over 100 flow control facilities, occupying 1,400 acres of right-of-way. Other major facilities include a 100 million gallons per day water treatment plant, hydroelectric facilities, pump stations, flow regulatory and diversion structures, a dam, and a 24,000 acre foot reservoir.

As Capital Improvement Program projects are completed and moved into operation, the system grows larger and becomes more complex. Water Authority management must ensure staff is prepared with new skill sets as water treatment and energy management are added to the portfolio. The demand for water quality experience and technical knowledge is increasing in order to meet state and federal regulations related to distribution system and reservoir management. Another challenge is to ensure programs are in place to transfer aqueduct system knowledge as the workforce reaches retirement age.



The Operations and Maintenance program has incorporated a more active role in aqueduct system operational and rehabilitation planning. Tasks within this expanded role include an assessment of the current condition and estimated service life of delivery system components, the most effective use of regional assets and programs through interagency coordination, and continued evaluation of facilities operation and maintenance efficiencies.

The strategies to manage these key issues include: active participation in all aspects of planning and design of future facilities; timely development of operating and staffing plans for new facilities; ensuring the proper maintenance, repair, rehabilitation and replacement of facilities; and regular communication with key stakeholders to promote operations and maintenance issues.

Key Issue	Management Strategy	Goal Number
<b>Integration of new facilities into system operations</b>	Develop resource plans including cost and revenue projections for all new facilities.	2,3,5
	Identify new skills and training required to manage integrated systems.	2,3,5
	Develop and maintain comprehensive operating plans for all major facilities.	2,5
<b>Aqueduct system reliability and flexibility</b>	Participate in all aspects of future Water Authority project planning, design, construction, and post-construction.	1,2,5,6
	Ensure operation and maintenance of equipment and facilities are conducted in accordance with established industry standards.	2,3,5
	Reduce the inventory of unauthorized encroachments that adversely affect Water Authority facilities.	4
<b>Internal and external customer satisfaction</b>	Provide accurate and timely information to internal and external customers.	1,6
	Promote operation and maintenance issues to all stakeholders.	1,2,3,4,5,6
	Participate in regulatory processes to promote operation and maintenance issues.	2,3,5

<b>Number</b>	<b>Goal</b>	<b>Time Frame</b>
1	Complete the implementation of the online water ordering project.	Jul 2010
2	Integrate the Hodges Pumped Storage project into aqueduct operations.	Dec 2010
3	Complete construction and integration of the Communication Facilities Capital project with existing data communication system.	Sep 2011
4	Resolve six right-of-way encroachment cases.	Jun 2012
5	Integrate the San Vicente projects into Aqueduct Operations.	Dec 2012
6	Develop online reporting system that allows member agencies to access water quality information.	Dec 2012

## Chapter 4 – Core Business Focus Area

### Focus Area Summary

The Core Business Focus Area is essential to management and staff's performance in meeting the water supply challenges that the region faces over the next 25 year planning horizon. Without strong support for these programs, the Water Authority would not be able to accomplish the goals identified by the 2008 Strategic Plan.

The Core Business programs are grouped into nine essential programs. These programs include *Climate Change and Sustainability, Environmental Management, Financial Planning, Government Relations Outreach, Information Technology, Infrastructure Planning, Public Affairs Outreach, Water Resources Planning, and Workforce Management.*

The 2008 Strategic Plan's analysis of business trends included the importance of being prepared to adequately address and adapt to climate change. The Climate Change and Sustainability program addresses these significant impacts.

The Environmental Management program provides timely environmental regulatory compliance that is critical to facilities construction and repair.

As the nexus between growth and water builds, it is vital to collaborate with local and regional planning agencies, including state and federal governments. The Government Relations Outreach and Public Affairs Outreach programs recognize the need to build relationship as the Water Authority enters into a new realm of integration of policies. Strong regional support and

cooperative member agency relationships are also important in solving these complex regional issues. Lastly, in order to ensure the success of the Water Authority's goals, robust community and media relations will be critical to public outreach and education.

The Infrastructure and Water Resources Planning programs are multifaceted and focused on long-term resources planning. The Water Authority's short-term and long-term planning tools include the Urban Water Management Plan, the Water Facilities Master Plan, the Annual Water Supply Report, and the Integrated Regional Water Management Plan. These documents assist the Water Authority and its member agencies in prioritizing and planning regional and local projects in a cost effective manner.

The Financial Planning program ensures funding is available to purchase and protect water supplies, and to pay for the construction of infrastructure.

The Information Technology program focuses on acquiring and maintaining the software and hardware necessary for staff to do their jobs. The emphasis continues to be on promoting the optimal use and integration of existing applications within our technology base.

The Workforce Management program ensures the Water Authority recruits, develops, and retains skilled employees. This is particularly critical as the potential retirement of a large portion of staff, and resulting loss of specialized skill sets and organizational knowledge, becomes a reality.

## Climate Change and Sustainability

Climate change has become an increasingly important issue in both the state and federal legislatures. Research clearly identifies the resulting risks to our water resources: rising sea level, reduced snowpack, higher temperatures, and more extreme weather. Although historical climate models fail to adequately predict future precipitation, climate change is expected to have a significant impact on already challenged water supplies in Southern California and throughout the nation.

California is at the forefront of climate change adaptation and mitigation. In June 2005, Governor Schwarzenegger issued Executive Order S-3-05 which calls for assessments of climate change impacts and development of adaptation plans and/or mitigation measures. In 2006, the state passed The Global Warming Solutions Act AB32 which mandates California's greenhouse gas emissions (GHG) be reduced to 1990 levels by 2020 (a 25 percent reduction compared to business as usual); and reduced to 80 percent below 1990 levels by 2050. In 2009, California released the California Climate Adaptation Strategy. The state now mandates that government agencies address climate change impacts and reduce their carbon footprint.

The California Air Resources Board (ARB) is responsible for achieving the mandates of AB32 and is in the process of developing regulations, including both market mechanisms and alternative compliance mechanisms, to achieve these reductions. The AB32 Scoping Plan, including a Local

Government Reporting Protocol, was adopted by the ARB in December 2008. By January 1, 2011, the ARB is required to adopt GHG reduction regulations. Although not fully known at this time, these regulations take effect and become legally enforceable January 1, 2012.

At the Federal Level, in June 2009, the House of Representatives passed HR 2454, the American Clean Energy and Security Act (ACES). ACES is a comprehensive energy and greenhouse gas reduction bill. Later this year the Senate anticipates discussion on the Senate Climate Bill (S1733 – the Clean Energy Jobs and American Power Act). Both bills regulate GHGs through a cap and trade system, as well as include provisions for climate adaptation programs. The outcome of the legislation and the effects on energy and efforts to adapt to climate change are as yet unknown.

Sustainability encourages organizations to reduce their harmful impacts on the environment. However, with increased focus on improving efficiencies and reduction of waste, organizations can become more economically sustainable. The implementation of cost effective business



practices can lead to reduced energy to heat and cool buildings, reduced fuel to operate the fleets, and reduced waste from daily operations.

Dealing with the issues of climate change and sustainability is a long-term commitment that will require continuing support of adaptation and mitigation measures, focused scientific research regarding water supply impacts, and actions at the local, state, and national levels.

A number of key issues directly affecting the mission of the Water Authority and the focus areas of the Climate Change and Sustainability program are:

- Encouraging research, particularly in the area of regional precipitation;

- Developing adaptation strategies through collaboration with other water utilities; and
- Evaluating approaches to reduce greenhouse gas emissions.



Key Issue	Management Strategy	Goal Number
<b>Enhanced data for water supply planning and decision support tools</b>	Advocate for improvement in modeling to provide precipitation data on a local and regional scale.	4,7
	Encourage focused scientific research on climate change to identify the impacts of the region’s water supply.	7
	Partner with other water utilities to incorporate the impact of change on water supply planning and development of decision support tools.	4,7
<b>Climate change as an area of major legislative focus</b>	Monitor proposed climate change, GHG emission and cap, and trade legislation at the federal and state levels.	4,7
	Recommend support of climate change legislation that positively impacts the water industry, either individually or through partnerships with other water utilities or professional organizations.	4,5,7
	Identify and/or implement GHG reduction measure in preparation of AB32 implementation.	2,3,4,6,8
	Monitor AB32 Scoping Plan to determine actions and timelines affecting the Water Authority, including on-road and off-road diesel regulations and local government reporting protocols.	2,3,8
	Identify and implement methods to ensure complete data capture to comply with Climate Registry reporting protocols.	1,2,5,6
<b>Sustainable and cost effective business practices</b>	Prepare a Water Authority sustainability Plan to identify and prioritize the development of cost effective strategies to reduce the Water Authority’s impact on the environment including: <ul style="list-style-type: none"> <li>• Fleet impacts from vehicle miles traveled and greenhouse gas emissions</li> <li>• Facilities (both office and field) impacts from energy consumption and waste generation</li> </ul>	1,2,3,5,6,8
	Develop solar photovoltaic projects at Water Authority facilities.	1,2,5,6
	Pursue partnership opportunities with local energy providers to further energy efficiency goals for the Water Authority and member agencies.	8
	Participate with SANDAG, universities, and other organizations to maintain inter-governmental coordination and information sharing among groups and agencies engaged in climate change planning and implementation of cost effective and sustainable business practices.	2,3,5,7

Number	Goal	Time Frame
1	Obtain new Federal Energy Regulatory Commission permit for the San Vicente Pumped Storage project.	Jul 2010
2	Calculate greenhouse gas baseline inventory, including direct and indirect emissions.	Dec 2010
3	Conduct first energy audit, in participation with SDG&E and member agencies, to maximize energy efficiencies.	Apr 2011
4	Evaluate and recommend changes to water supply planning and design standards to incorporate impacts of climate change.	Jun 2011
5	Reduce waste from facilities by 5% through recycling efforts.	Dec 2011
6	Complete San Vicente Pumped Storage Feasibility Study.	Dec 2011
7	Determine a range of climate change impacts to water supplies through improved modeling and regional downscaling techniques, to meet the needs for the long-term water resource planning.	Jun 2012
8	Provide 20% of facility electrical needs via photovoltaic solar technology.	Dec 2013

## Environmental Management

The Environmental Management program ensures compliance with environmental regulations to allow timely construction and ongoing operation of Water Authority capital projects and facilities. The goal is to develop reasonable and cost effective environmental protection and mitigation programs to support our mission.

The supply and infrastructure projects identified to meet future demands cannot be developed and operated without first satisfying all applicable local, state, and federal environmental regulations. The Water Authority's Environmental Management program encompasses regulatory compliance, construction, and operations support, mitigation planning and monitoring, mitigation land/bank management, technical studies, permitting support, and legislative review.

A number of key issues directly affect efficient execution of our mission. A major challenge is the continuing state and federal budget deficits that create pressure on regulatory agencies to operate with reduced staffing and resource levels. This reduction can lead to delays in obtaining necessary approvals to build and operate facilities. To help address this issue, the Water Authority has executed funding agreements with key regulatory agencies to assure consistent and expedited processing of Water Authority applications. Maintaining these agreements is essential to meet priority project schedules. In addition, we are continuing to nurture our well-established relationships with the regulatory agencies so that the permit process will be as smooth and efficient as possible.

Another key issue is the ever-changing nature of the regulatory and legislative arenas. A number of environmental issues, e.g., greenhouse gas emissions, periodically emerge that need to be addressed quickly in documents and permits. To address these emerging issues, we will convene ad-hoc multi-disciplinary teams as necessary, to investigate and formulate options for compliance. This work is a prerequisite for developing strategic policies and measures to comply with any new laws or regulations.



Finally, the number of capital projects slated for construction, and operations and maintenance activities over the next several years, to achieve the targeted level of water supply reliability, is substantial. The forecasting, scheduling, coordination, and execution of environmental management will be continually refined as the number of active capital project and facility maintenance requirements change. To address these expected variable support needs, we have engaged a consultant environmental program manager to provide project management and “on-call” extensions of staff to handle peak workloads.

Key Issues	Management Strategy	Goal Number
<b>Timely receipt of regulatory agency approvals/permits</b>	Continue to build trust-based relationships with environmental regulatory agencies.	2,3,4
	Maintain existing agency staffing agreements and continue to identify compliance issues, develop priority approval lists, and secure regulatory agency commitments.	2,3,4
	Pursue general, regional, and programmatic permits for Water Authority activities.	2,3,4
<b>Efficient execution of long-term mitigation commitments</b>	Ensure consistency in mitigation approach and timely reporting to regulatory agencies as required by permits and approvals.	2,3,4
	Maintain an electronic reference library of approved environmental documents.	2,3,4
<b>Uncertainty in future mitigation requirements</b>	Pursue mitigation banking agreements independently and/or with member agencies, public agencies, or utilities.	2,3,4
	Develop mitigation and compliance options to address emerging environmental issues.	1
<b>Maintain program schedules and budgets</b>	Ensure timely identification of environmental issues and lead times.	1,2,3,4
	Ensure effective use of project scheduling and controls resources.	
	Ensure close coordination through active participation on project teams.	

Number	Goal	Time Frame
1	Develop and recommend strategy to integrate AB32 greenhouse gas reduction requirements into CEQA environmental compliance activities.	Jun 2011
2	Complete Natural Communities Conservation Plan/Habitat Conservation Plan and obtain long-term Endangered Species Act permits for construction and operation of facilities.	Jun 2011
3	Complete wetland mitigation banking agreements for construction and operation of facilities.	Dec 2011
4	Obtain long-term Clean Water Act and Fish and Game wetland permits for construction and operation of facilities.	Jun 2012

## Financial Planning

The Water Authority's Financial Planning program is focused on achieving three key objectives:

- Minimizing the net cost of funds;
- Achieving financial management goals and objectives; and
- Providing smooth and predictable rate and charge adjustments.

As part of Financial Planning program, the Water Authority maintains an up-to-date Long-Range Financing Plan (the LRFP) and an active Investor Relations Marketing Plan (the IRMP). Together, these plans provide the foundation upon which the Water Authority's prudent financial management and planning is based.

The LRFP balances the Water Authority's financial policies and goals against its funding needs to develop an optimized funding strategy. The LRFP is comprehensive and includes projections for water sales, CIP, revenues and expenditures, funds and reserves, capital financing strategy, and includes sensitivity analysis of selected variables.

The LRFP communicates the Water Authority's plan to fund its CIP and operations expenditures over a 10-year planning period. The development of the LRFP includes input from the member agencies and the Board of Directors.

The LRFP is supported by a Financial Rate Modeling Program (FRMP), which

calculates the cost of service and projects the Water Authority's financial position. The FRMP enables the development of rate and charge projections as well as project and other financial performance metrics, e.g. debt service coverage ratios.

The IRMP focuses on communications with credit rating agencies and investors and diversifying the Water Authority's investor base. The IRMP strives to lower the cost of debt through the effective marketing of the Water Authority's credit-worthiness.

By broadening and diversifying the investor base through focused outreach and communication, the IRMP maximizes investor demand for the Water Authority's debt and minimizes the net cost of funds. The IRMP uses both indirect and direct channels to reach Water Authority investors.

- Indirect — effectively manage and enhance relationships with financial market participants who indirectly influence investor behavior, such as credit rating agencies and credit enhancement providers
- Direct — establish and enhance relationships directly with investors who buy Water Authority debt

As the Water Authority moves forward with its CIP, the Financial Planning program will be critical to maintaining the low net cost of funds the Water Authority currently enjoys.

Key Issues	Management Strategy	Goal Number
<b>Minimizing the net cost of capital to fund the CIP</b>	Optimize the capital financing mix to achieve the lowest cost of funds and minimize interest rate risk.	2,4,6,12
	Use credit enhancements and financial instruments, as appropriate, to achieve the lowest cost of funds.	4,6,8
	Update the Long-Range Financing Plan to coincide with the planned issuance of long-term debt.	7
	Analyze outstanding debt to identify refunding opportunities that offer cost savings.	2
<b>Achieving financial management goals and objectives</b>	Develop detailed cost projections for CIP projects and operations to develop long-term rate projections.	1,7
	Upgrade, as appropriate, the Financial Rate Modeling Program including data storage and rate modeling capabilities.	1
	Review financial policies; for example, include capacity charge revenues in debt service calculations, to ensure they are still relevant and appropriate.	1,5
	Monitor and update, as appropriate, the rate and charge goals (cost efficiency, predictable rates, and intergenerational equity).	1,5
	Monitor level of service provided to member agencies to ensure equitable rates and charges.	1,3
<b>Maintaining stakeholder involvement and support</b>	Hold regular meetings with member agency finance officers to solicit their input and maintain financial transparency.	3
<b>Managing and enhancing relationships directly with investors, credit rating agencies, and credit enhancement providers</b>	Maintain solid credit fundamentals through the Financial Planning program.	5,8
	Maintain good personal relationships with individual rating agencies and financial market participants.	8
	Provide relevant, accessible and usable financial data, and other key information.	7
	Monitor Water Authority investors on an ongoing basis.	9,10,11
	Establish and update a list of target investors.	9,10,11
	Develop efficient programs to communicate, and contact investors at the appropriate time.	9,10,11
	Maximize use of underwriters in negotiated bond sales to access the investor community.	9,10,11

Number	Goal	Time Frame
1	Complete the Comprehensive Reliability and Cost Assessment process to confirm the level and cost of service elements of the Water Authority's rates and charges.	Mar 2011
2	Achieve an annual average interest rate on long-term fixed debt that is lower than the adjusted 30-year average Municipal Market Data (5.73%) for fiscal years 2010 and 2011.	Jul 2011
3	Achieve an 80% customer satisfaction score on the annual Member Agency Finance Officer Customer Service Survey for calendar years 2010 and 2011.	Jan 2012
4	Address expiring liquidity facilities for the Water Authority's Series 2 and 3 Commercial Paper (e.g. renegotiate, replace, etc.).	Dec 2012
5	Achieve the Rate Stabilization Fund target fund balance.	Jun 2013
6	Address expiring liquidity facility for the Water Authority's Series 1 Commercial Paper (e.g. renegotiate, replace, etc.).	Jul 2013
7	Obtain Board approval of the updated Long-Range Financing Plan.	Dec 2013
8	Secure a "one notch" credit rating upgrade by one of the three credit rating agencies.	Jun 2014
9	Achieve and maintain 50% of the top 20 municipal bond investors in our investor base.	Jun 2014
10	Achieve 1-½ times investor subscription on negotiated long-term debt issues.	Jun 2014
11	Expand investor base by a minimum of 5 new investors for each new long-term debt issue.	Jun 2014
12	Issue debt as necessary to fund the Capital Improvement Program.	Jun 2015

## Government Relations Outreach

The aim of the Government Relations Outreach program is to increase the Water Authority's political influence in Washington, D.C., Sacramento, and locally. Under this program, the Water Authority retains strategic consultants and legislative advocates. The Water Authority also maintains a Government Relations office in Sacramento.

Principal management strategies include structuring the Government Relations

Outreach program to increase political influence in Washington, D.C. and Sacramento; pursuit of external public funding and legislative support; raising awareness among the Legislature and Congress of the Water Authority's programs and projects in the region; working with public officials; creating and strengthening relationships with regulatory agencies; and developing regional coalitions.



Key Issues	Management Strategy	Goal Number
<b>Government funding for regional supply and infrastructure projects</b>	Aggressively seek state and federal funding for Water Authority projects and programs.	5,6,7,8
	Participate in briefings in Sacramento and Washington, D.C. to provide information on the need for state and federal funding for critical projects; including near-term and long-term Bay-Delta fixes, canal lining, seawater desalination, Carryover Storage Project and Emergency Storage Project, and other projects.	3,4
	Closely monitor proposals by the Legislature and the Governor for infrastructure funding.	5,6,7,8
	Strengthen relations with state officials and agencies, provide information on funding objectives, and garner support to secure state funding for regional projects and programs.	3,4
<b>Understanding and support of Water Authority vision</b>	Provide information to support public officials' understanding of the purpose of our Capital Improvement Program projects, efforts to ensure water supply reliability, and need to diversify the region's water supply portfolio.	3,4
	Schedule periodic briefings, roundtables, and project tours for public officials and legislative staff, to provide information on Water Authority projects and programs, and discuss water policy issues.	3,4
<b>Water industry related legislation</b>	Support and/or sponsor legislation that positively impacts the region's water supply and Water Authority projects and programs.	1
	Identify impacts of key legislation on the region's water supply and Water Authority projects, and bring to the Board for formal positions.	1,2
	Update and use Legislative Policy Guidelines to act on key legislation impacting the region's water supply and Water Authority projects and programs.	2
<b>Regulatory agencies' approval for key projects</b>	Maintain and strengthen relationships with regulatory agencies' decision-makers.	3,4
	Cultivate support from public officials, key groups, and organizations to aid in the pursuit of project permits and other regulatory requirements.	3
<b>Increase political influence</b>	Conduct informational presentations for agency boards and other interested local officials to provide a comprehensive overview of Water Authority issues and the region's water supply.	3

Number	Goal	Time Frame
1	Work for the passage of three Water Authority sponsored bills in the 2010 legislative session.	Sep 2010
2	Obtain board approval for updated Legislative Policy Guidelines for 2011.	Dec 2010
3	Provide speakers to at least 75% of the region's local government policy makers to ensure they understand the importance of connecting development with good water policy, support the Water Authority's long-term direction, and endorse water conservation.	Jan 2011
4	Provide at least one briefing for each San Diego, state, and federal legislators on the Water Authority Capital Improvement Program projects, its efforts to ensure water supply reliability and deal with drought conditions and regulatory restrictions, and the need to diversify the region's water supply portfolio.	Jan 2011
5	Pursue and secure a federal appropriation of \$1.5 million for a desalination facility at Camp Pendleton, \$5 million per year for member agency recycling projects under Title XVI, and appropriations for other Water Authority projects.	Oct 2011
6	Secure \$100 million in water bond funding for San Vicente Dam Raise that is made available by the Safe, Clean and Reliable Water Supply Act of 2010 upon its passage by the voters.	Dec 2011
7	Pursue and secure \$115 million in state funding, including water bond funding, to support regional and local projects and programs; including water recycling, conservation, and seawater desalination.	Jan 2015
8	Pursue and secure federal Water Resources Development Act authorizations for Water Authority and member agency projects.	Jun 2015

## Information Technology



The Information Technology program provides timely, cost effective, and high quality information systems and services in support of organizational priorities and internal customer requirements. The main objectives of the IT program are to:

- Ensure investments in new technology are sound;
- Optimize existing technology investments;
- Protect our technology infrastructure; and
- Improve the efficiency and productivity of Water Authority staff.

An IT governance structure is in place to help ensure that investments in new technology align with our business goals. Additionally, strategic planning for IT is an ongoing process that involves looking ahead, researching, and planning for new technologies to meet our future needs.

Optimizing existing IT investments includes maintaining, upgrading, and enhancing our current software and hardware. This cost effective approach allows us to keep pace

with changing technology and take advantage of new functionality.

The reliability of the IT infrastructure depends on maintaining a secure system that is easily recoverable in the event of a disaster. Critical data is protected and procedures are in place to ensure the continued operation of our business functions.

Information Technology increases the efficiency and productivity of staff by streamlining business processes and improving decision making. Staff saves time, and more tasks can be accomplished on a daily basis.

Our current technology base includes software applications such as Peoplesoft, Maximo, Geographic Information Systems (GIS), Supervisory Control and Data Acquisition (SCADA), Primavera, Microsoft Office, HelpStar, and other specialized applications.

Significant challenges of the IT program are:

- Implementation of major strategic initiatives including the Peoplesoft Enterprise Resource Planning Software upgrade;
- Integration and optimal utilization of organization wide software applications;
- Maintenance of a high level of user support and system reliability; and
- Balance of growing needs in technology with the internal capacity to support and manage those needs.

Key Issues	Management Strategy	Goal Number
<b>Make sound decisions on future IT investments</b>	Provide executive oversight of technology investments, through the Information Technology Policy Group, to achieve business objectives.	1,2
	Coordinate and prioritize projects to balance resources and manage project interdependencies.	1,2,3
	Engage in comprehensive Information Technology strategic planning to align with business goals.	1,2,3
<b>Optimize value of existing investments</b>	Plan, resource, and manage projects to successfully implement individual Information Technology projects.	4,5
	Maintain and replace critical hardware and network infrastructure to meet changing computing requirements and achieve energy efficiency.	2,4,5
	Upgrade, support, and enhance critical software applications to leverage new functionality, maintain compatibility with existing architecture, and stay current on vendor support.	2,4,5
<b>Protect IT Investments</b>	Provide backup and recovery capability to protect the Water Authority's critical data.	4,5
	Provide a safe and secure computing environment to achieve system reliability.	3,4,5
	Design, build, and test recovery procedures to minimize business impact in the event of a disaster related event.	4,5
<b>Improve the efficiency and productivity of Water Authority staff</b>	Provide a high level of customer service to increase the day-to-day efficiency of Water Authority staff.	1,3
	Keep pace with advances in technology to be able to respond to the needs of our customers.	1,3
	Proactively support the Capital Improvement Program to ensure the water supply reliability for the region.	3
	Continually improve business processes to eliminate redundant or time-consuming tasks.	1,3,4
	Create actionable information from Water Authority data systems to enable staff to make quick and sound decisions.	3

Number	Goal	Time Frame
1	Implement Recovery Time Objectives better than industry standards for major applications.	Dec 2010
2	Go live on the upgraded Peoplesoft Enterprise Resource Planning software.	Dec 2010
3	Go live on an upgraded Electronic Document Management System.	Jun 2011
4	Achieve an Information Technology Risk rating of “low,” according to industry standard vulnerability assessment methodology.	Nov 2012
5	Go live on an upgraded Maximo Computerized Maintenance Management System.	Jul 2013

## Infrastructure Planning

The Infrastructure Planning program evaluates both near-term and long-term facility needs to assure new regional facilities are placed in service in a coordinated, cost effective, and timely manner. The Infrastructure Planning program will identify and substantiate new facility needs to be appropriately incorporated into the Water Authority's Capital Improvement Program (CIP), to meet projected water demands and supply scenarios addressed in the Urban Water Management Plan. This planning effort assures a seamless integration of new CIP projects with existing aqueduct operations.

Under the near-term view, Infrastructure Planning takes a collaborative approach to identifying new facilities that are requested by member agencies, are needed to alleviate existing system bottlenecks or operational restrictions, and allow for the future integration of planned system improvements. This program also considers how to alleviate delivery interruptions while existing conveyance and storage facilities are temporarily taken out of service or are operating under reduced capacity during construction of new improvements.

The long-term view takes a balanced approach to match the capacity of the existing aqueduct system with new infrastructure needs and planned facility replacements, with an eye towards meeting projected water delivery needs and system reliability goals. The tool that will guide the long-term facility planning effort and provide a comprehensive approach to the region's needs is the 2012 Regional Water Facilities Master Plan. The Master Plan will prioritize regional and local projects in a cost effective manner based on information from Metropolitan Water District's Integrated Water Area Study, member agency input, and the Water Authority's infrastructure and asset management needs.

Another important element of Infrastructure Planning is to support programs that manage the Water Authority's surface and groundwater water storage projects. These programs allow for more efficient use of available local and contracted storage, and provide a proven cost effective means to manage seasonal and carryover storage pools while new local supplies and increased conveyance capacity are implemented.

<b>Key Issues</b>	<b>Management Strategy</b>	<b>Goal Number</b>
<b>Reliable water service to member agencies</b>	Make efficient use of existing facilities and plan and prioritize new facilities, to effectively meet existing and projected member agency delivery requirements.	1,2
	Work with member agencies to coordinate and prioritize regional infrastructure needs.	1,2
<b>Effective management of surface water resources</b>	Implement programs with member agencies to optimize untreated water conveyance and regional reservoir storage.	3

<b>Number</b>	<b>Goal</b>	<b>Time Frame</b>
1	Complete an untreated water availability assessment and a treated water service area enhancement study as part of the Regional Water Facilities Master Plan.	Jun 2011
2	Complete the updated Regional Water Facilities Master Plan.	Jun 2012
3	Complete an operating plan to manage the Water Authority's combined 170,000 acre feet of surface and groundwater carryover storage pools.	Dec 2012

## Public Affairs Outreach

The Public Affairs Outreach program seeks to build community understanding of, and support for, the Water Authority's strategies for securing a safe and reliable water supply. This is accomplished by building and maintaining relationships with key audiences including business, community, education and industry leaders, media, and the general public.

The Public Affairs Outreach program employs a range of outreach strategies and tactics to communicate Water Authority priorities and messages. These activities include media relations; online communications; speakers' bureau presentations; community partnerships; participation in community events and forums; tours; social media; education programs; employee communications; and by producing annual reports, fact sheets,

and other informational materials.

Given the long-term water supply challenges facing the region over the next two years, the Public Affairs Outreach program will emphasize promoting regional support for Water Conservation programs and building broad acceptance of a water-efficient lifestyle as the social norm. As needed, the Public Affairs Outreach program will also deploy mass-market advertising or other outreach tactics to ensure the region remains within its annual water supply allocations.

In addition, the Public Affairs Outreach program will also focus on building business and public support for water supply diversification projects and policies, and for the rates, charges, and other investments necessary for providing water supply reliability.



Research (surveys, focus groups) will be used to periodically track progress in building or maintaining public support on these key issues.

Another vital aspect of the Public Affairs Outreach program focuses on the Capital Improvement Program. The CIP outreach program works with leaders and members of communities potentially affected by the construction, operation, or maintenance of Water Authority facilities. The CIP outreach program anticipates and addresses community concerns, while representing the best interests of the Water Authority. Keeping communities updated on these activities contributes to the timely completion of projects and repairs within project budgets.

Key CIP outreach activities through 2012 will include supporting construction of the Mission Trails, San Vicente, and Lake Hodges projects; early planning for a seawater desalination project; and

supporting the Aqueduct Protection Program.

Other important components of Public Affairs Outreach are education programs and the Small Contractor Outreach and Opportunities Program (SCOOP).

Education programs and partnerships support regional public outreach through school programs, theater presentations, and educational exhibits in museums, libraries, and other locations. These programs will carry critical messages about conservation and water quality to children, parents, and other audiences. SCOOP seeks to maximize the participation of small businesses on Water Authority projects and procurements. SCOOP also provides business skills training to help small businesses improve their ability to bid on Water Authority projects.

Key Issues	Management Strategy	Goal Number
<b>Awareness and support among the public, business and community leaders for the Water Authority’s reliability vision, programs, and capital facilities</b>	Use regional media and public outreach strategies and tactics to communicate and promote programs and policies related to conservation, drought management, non-potable reuse, indirect potable reuse, water transfers, and capital facilities.	7,9,12
	Conduct research at regular intervals to measure levels of public awareness and support for Water Authority policies and programs.	12
	Support the Drought Management Plan and Drought Management Ordinance through appropriate media and public outreach plans and messages.	1,2,3
	Provide opportunities for students, teachers, and the public to enhance their knowledge of key water issues and conservation methods through curriculum, classroom presentations, assembly programs, and educational displays.	4,8
	Partner with various organizations and educational institutions to develop programs that promote greater public understanding of local water issues and wise water use.	8,11
<b>Timely completion of construction and maintenance projects by educating residents and minimizing concerns</b>	Conduct project-specific public outreach plans to educate and address concerns of local stakeholders, prevent or minimize opposition, and gain support.	6,10
<b>Small business participation in Water Authority procurements</b>	Increase awareness of contract opportunities for small businesses.	5
	Enhance the skill sets small businesses need to become viable bidders on Water Authority projects.	5

Number	Goal	Time Frame
1	Complete upgraded website development project for sdcwa.org and launch redeveloped site with improved navigation, design, functionality, and content management system.	Nov 2010
2	Complete 2010 evaluation and internal communications tactics and launch an internal communications plan that strengthens staff alignment with Strategic Plan and Business Plan goals.	Dec 2010
3	Plan and launch an outreach campaign in support of Water Conservation's water efficient landscape demonstration site project.	Jun 2011
4	Mobilize local business leaders and groups to provide advocacy or other support to at least two key Water Authority goals, projects, or milestones. (Water Authority goals to be identified annually.)	Dec 2011
5	Achieve or exceed small business participation percentage, based on total procurement dollars as established by the Board of Directors for two-year budget periods.	Dec 2011
6	Conduct public outreach that achieves or sustains more than 80% support for the water supply diversification strategies contained in the Strategic Plan.	Jun 2012
7	Support Water Resources conservation programs and policies with communications and community relations initiatives that help sustain 90% or greater public acceptance of water conservation as an important civic duty.	Jun 2012
8	Obtain \$1 million in grants, sponsorships, in-kind, or other contributions to advance conservation and water supply awareness.	Jun 2012
9	Conduct outreach activities that build 50% or greater support among business, community leaders, and other key audiences that support Board actions to adopt the necessary water rates and charges.	Dec 2012
10	Support achievement of Strategic Plan conservation goals by conducting conservation-themed education programs that reach 1,500 teachers and 50,000 students in the San Diego County region.	Dec 2012

Number	Goal	Time Frame
11	Plan and execute public outreach strategies, plans, and tactics that achieve or sustain a 67% or greater awareness among residents that indirect potable reuse is a safe and acceptable part of the region’s drinking water supply.	Jun 2014
12	As needed, plan and execute drought management marketing and advertising campaigns if Water Resources determines that water use projects may exceed regional allocation targets.	Jun 2014

## Water Resources Planning

The Water Resources Planning program is focused on long-term water resources planning. Through this program, necessary supplies are identified to provide a diverse, reliable water supply for the region.

To assist in accomplishing this program, the Water Authority prepares an Urban Water Management Plan (Plan) every five years that identifies the projected resource mix. Preparation of the Plan involves updating the regional water demand forecast and conservation savings projections, documenting our supplies, and coordinating with member agencies on local supply projections.

The Water Authority's Annual Water Supply Report serves as a critical tool in documenting the region's progress on local supply development, as well as the reliability of our existing resources.

One of the key uncertainties in long-term resources planning is the influence of climate change on demands within the region. To more accurately forecast water demands, an additional element of this program is to refine the methodology used by incorporating the long-term effects of climate change.

Another important element of water resources planning is ongoing coordination with other partners involved in the areas of water management, water quality, and natural resources to ensure a comprehensive, regional, and integrated approach to water management within San Diego. Essential to accomplishing this effort is working with the Integrated Regional Water Management (IRWM) partners and Regional Advisory Committee to update the region's IRWM Plan, and to secure and manage outside funds.



<b>Key Issues</b>	<b>Management Strategy</b>	<b>Goal Number</b>
<b>Documentation of supply availability and meeting mandated reporting requirements</b>	Work with member agencies to develop a regional plan that documents reliable supplies over the next 25 years.	1,2
	Work with member agencies to reconcile existing supply and demand data.	1,2
	Meet mandated reporting requirements, taking into account other priority activities, such as managing potential supply shortages.	1,5
<b>Collaboration between stakeholders involved in water management planning</b>	Work with member agencies and other water management stakeholders in the areas of water supply, water quality, and natural resources to maintain a long-term integrated regional water management planning effort.	3,4
<b>Assess impacts of climate change on long-range water demands</b>	Work with researchers and scientists to refine methodology used to quantify weather/demand correlation.	1
<b>Management of core data sets used in tracking and reporting on supply and demand</b>	Form an agency-wide workgroup that would identify Water Authority data requirements and a long-term warehousing strategy for water supply and demand data.	6

Number	Goal	Time Frame
1	Complete water demand forecast model update, taking into account potential climate change impacts.	Dec 2010
2	Complete the 2010 Urban Water Management Plan to comply with California Water Code Sections 10610 – 10656.	Dec 2010
3	Secure the San Diego Planning region’s allocated share of Integrated Regional Water Management grant funding from Proposition 84.	Jun 2011
4	Update the San Diego Integrated Regional Water Management Plan in accordance with state requirements.	Dec 2011
5	Complete Annual Water Supply Reports in 2011 and 2012, as required by Water Authority Administrative Code Section 8.00.050 (except during Urban Water Management Plan year).	Dec 2012
6	Implement a long-term water demand and supply database to replace the PRIMA software currently used.	Jun 2013

## Workforce Management

The Workforce Management program forecasts future talent needs, assesses current workforce competencies, helps control the costs associated with meeting future needs, and ensures the Water Authority has the right people, with the right competencies, in the right place at the right time by:

- Maintaining a culture that fosters positive employee engagement and constructive employee relations;
- Advancing the Water Authority's ability to recruit a diverse, qualified workforce with the competencies needed to meet its current and longer-term needs;
- Supporting the current well-trained and committed workforce in its transition to meet future Water Authority needs;
- Actively managing employee performance;
- Providing timely and accurate human capital data for decision making; and
- Incorporating changing resource requirements into staffing needs assessments.

The core elements of the program will continue to be leadership, management, supervisory and individual development, and knowledge transfer. Other supplementary programs will integrate water industry and other specific development initiatives. With each progression of the implementation of the Strategic Plan, the program content will be adapted to meet the needs of the current and future workforce – with the continuing goal of providing the human capital underpinnings to facilitate achievement of the Water Authority's business initiatives.



<b>Key Issues</b>	<b>Management Strategy</b>	<b>Goal Number</b>
<b>Employee engagement</b>	Cultivate an environment that encourages the development and retention of skilled staff.	3,4,7
<b>Employee relations</b>	Ensure open and timely communication with all employee groups.	1
	Ensure the performance evaluation systems are productive communication and coaching mechanisms for managers and employees.	5,6
<b>Succession planning</b>	Adopt an integrated Workforce Succession Plan.	6
	Promote team and individual development and encourage knowledge transfer.	5
<b>Resource planning and technology</b>	Use appropriate technology to implement a systematic approach to identifying competency availability and business needs.	2

Number	Goal	Time Frame
1	Gain agreement to memoranda of understanding with bargaining groups in accordance with Board direction.	Jul 2010
2	Evaluate and deploy competency management e-solution and implement associated management reporting.	Sep 2010
3	Achieve employee turnover less than 6% after factoring out retirements for calendar years 2010 and 2011.	Dec 2011
4	Achieve 50% of vacancies for which internal candidates successfully compete for calendar years 2011 and 2012.	Dec 2011
5	Integrate a mentoring program into Water Authority business practices.	Dec 2011
6	Complete cross-departmental workforce forecast for fiscal years 2011 and 2012.	Jun 2012
7	Graduate five employees from the Certified Public Management Program.	Aug 2013

## Chapter 5 – Strategic Plan and Business Plan Linkage

The 2008 Strategic Plan sets forth the Water Authority's long-term strategic policies as determined by the Board of Directors. The Plan was adopted by the Board in April 2008, and is structured around three Key Result Areas (KRAs) – Water Supply Diversification, Leadership, and Asset Management. Each KRA contains an issues statement, strategies surrounding the issues, and one or more

measurable objectives. The 2015 Business Plan is the General Manager's tool for staff's implementation of the Board's strategic policies. To ensure linkage and consistency between the two plans, every Strategic Plan objective is supported by one or more corresponding Business Plan goal. The chart on the following pages provides a cross reference of Business Plan goals to Strategic Plan objectives.

No.	SP KRA	Strategy	Target	Strategic Plan Objective	BP Program and Goal #
1	Water Supply Diversification	Strategy 1 Conservation	Sep 1, 2010	All municipal water agencies within the Water Authority service area will approve, implement, and enforce uniform outdoor water conservation standards within their statutory authority.	Water Conservation #1
2			Jan 1, 2015	The average regional per capita water consumption will be reduced by 10% from the current 10-year regional average.	Water Conservation #3
3				Seventy-five percent of the region's residents can identify water conservation as one of their most important civic obligations.	Public Affairs Outreach #7
4		Strategy 2 Desalination	Jan 1, 2020	The Water Authority will have facilitated and/or developed local seawater and brackish groundwater desalination facilities that represent 10% of the region's total water supply requirements.	Brackish and Seawater Desalination #1,2,3,4,5

No.	SP KRA	Strategy	Target	Strategic Plan Objective	BP Program and Goal #
5	Supply Diversification	Strategy 3 Non-Potable Reuse	Jan 1, 2025	Member agencies, with the assistance of the Water Authority, will supply at least 6% of the region's total water supply through non-potable reuse.	Recycled Water #1,2,3,4
6		Strategy 4 Water Transfers	Jan 1, 2011	Obtain 30,000 acre feet per year of short-term water transfers and groundwater banking to meet dry year supply needs.	Water Shortage and Drought Response Management #1 MWD #2,4
7	Leadership	Strategy 1 Political Influence	Jun 30, 2011	Adopt and implement a biennial water policy agenda directed toward MWD, the state, the seven basin states, and various federal agencies.	Bay Delta #1 MWD #3,6 Government Relations #2 Colorado River Programs #9
8			Jan 1, 2012 and every two years thereafter	The Board and staff will conduct a series of workshops for agency boards and other interested local officials, to provide a comprehensive overview of Water Authority issues and the region's water supply.	Government Relations #3,4
9			Jan 1, 2012	At least 75% of the region's local government policy makers understand the importance of connecting development with good water policy, support the Water Authority's long-term direction, and endorse water conservation.	Government Relations #3,4 Public Affairs Outreach #1,6
10			Strategy 2 Regional Growth & Development	Sep 1, 2010	Approve regional landscape model ordinance for local land-use agencies to apply to new residential and commercial construction projects and to major improvements to existing developments.

No.	SP KRA	Strategy	Target	Strategic Plan Objective	BP Program and Goal #
11	Leadership	Strategy 2 Regional Growth & Development	Sep 1, 2010	Encourage local land-use agencies to enforce the model outdoor water program	Water Conservation #1
12			Jan 1, 2015	Encourage local land-use agencies to adopt development standards and programs that reduce the average per capita water consumption for that jurisdiction.	Water Conservation #3
13		Strategy 3 Public Awareness		Periodic public surveys show continuing increases in public support for Water Authority programs.	Public Affairs Outreach #6,7
14			Jan 1, 2012	A majority of residents will know, understand and believe that indirect potable reuse is already part of the existing water supply, and is a safe and acceptable part of the region's water supply.	Public Affairs Outreach #11
15			Jan 1, 2015	Create broad public support for and awareness of issues surrounding water, water resources, and water infrastructure.	Public Affairs Outreach #3,4,6,7,9,10,11, 12
16		Strategy 4 Workforce Planning	Jun 30, 2011	The Water Authority will revisit the work force management issues identified in the Water Authority Business Plan.	Workforce Management #1,2,3,4,5,6,7

No.	SP KRA	Strategy	Target	Strategic Plan Objective	BP Program and Goal #
17	Asset Management	Strategy 1 Facilities Planning	Jan 1, 2012	Update the Water Facilities Master Plan in conjunction with the 2015 Urban Water Management Plan.	Infrastructure Planning #2
18		Strategy 2 Capital Financing	Dec 30, 2013	Prepare a Long-Range Financing Plan to determine the best fit and structure of an upcoming debt issue. Take into account such things as reserve, bond ratings, coverage ratios, insurance, and political climate to position the Water Authority to achieve the minimum net cost of funds when debt financing capital improvements.	Financial Planning #2,7
19			Jun 30, 2014	Conduct outreach programs to investors and credit rating agencies to assure them of our financial stability and ability to pay our obligations.	Financial Planning #8,9,10,11
20		Strategy 3 Facilities Operation & Maintenance	Jan 1, 2009	Adopt an integrated asset management plan that will be used to support all budget proposals related to water assets for the next two-year budget.	Complete
21			Jan 1, 2010	Water Authority Board will adopt a policy regarding funding of asset replacement.	Complete

## Glossary

In order to provide further clarification pertaining to strategy implementation and achievement of goals, this section contains definitions of certain terms found in the 2015 Business Plan.

Term	Definition
AB32 – Global Warming Solutions Act	<ul style="list-style-type: none"> <li>California bill signed by Governor Schwarzenegger in 2006</li> <li>Establishes comprehensive program of regulatory and market mechanisms to achieve quantifiable, cost effective reductions of greenhouse gases (GHG).</li> <li>Requires GHG to 1990 levels by 2020</li> </ul>
ARB	<ul style="list-style-type: none"> <li>The State of California Air Resources Board</li> <li>Responsible for implementation of AB32</li> </ul>
Best Management Practices	<ul style="list-style-type: none"> <li>From the California Urban Water Conservation Council, 1991: “A policy, program, practice, rule, regulation or ordinance or the use of devices, equipment or facilities which meets either of the following criteria: (a) an established and generally accepted practice among water suppliers that results in more efficient use or conservation of water; (b) a practice for which sufficient data are available from existing water conservation projects to indicate that significant conservation or conservation related benefits can be achieved; that the practice is technically and economically reasonable and not environmentally or socially unacceptable; and that the practice is not otherwise unreasonable for most water suppliers to carry out.”</li> </ul>
Brackish Groundwater	<ul style="list-style-type: none"> <li>Groundwater containing salt requiring treatment to be suitable for potable uses.</li> </ul>
California Bay-Delta Authority	<ul style="list-style-type: none"> <li>The state agency responsible for carrying out the CALFED Bay-Delta Program’s long-term plan to restore the Bay-Delta’s ecological health and improve water management for beneficial uses.</li> </ul>
California Environmental Quality Act	<ul style="list-style-type: none"> <li>State environmental legislation that is intended to ensure that the environmental consequences of a proposed public agency action are considered by decision makers before project approval.</li> <li>Requires public agencies to identify the significant environmental impacts of their actions and to avoid or mitigate those impacts, if feasible.</li> </ul>
CRACA	<ul style="list-style-type: none"> <li>The comprehensive reliability and cost assessment process that models the integrated effects of various revenue and expenditure inputs, to determine what policies the Water Authority should pursue to obtain the best combination of regional water reliability and affordability.</li> </ul>
Fitch	<ul style="list-style-type: none"> <li>One of three major financial rating agencies that provide credit ratings on organizations that issue debt and equity securities.</li> </ul>
GIS	<ul style="list-style-type: none"> <li>Geographic Information System</li> <li>An arrangement of computer hardware, software, and geographic data used to integrate, analyze, and visualize data; identify relationships, patterns, and trends; and identify solutions to problems</li> </ul>

Term	Definition
Greenhouse Gases	<ul style="list-style-type: none"> <li>• GHG</li> <li>• Gases that contribute to warming of the Earth’s atmosphere by reflecting radiation from Earth’s surface</li> <li>• Examples: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, and perfluorocarbons</li> </ul>
Goals	<ul style="list-style-type: none"> <li>• These are the accomplishments that must occur to address key issues</li> <li>• Example: If a key issue is the need for money to fund a program, the goal may be to raise \$5 million by June 2012</li> </ul>
Joint Powers Authority	<ul style="list-style-type: none"> <li>• A separate corporate entity established to pay for environmental mitigation requirements and environmental costs related to the San Diego – Imperial Irrigation District water transfer.</li> </ul>
Key Issue	<ul style="list-style-type: none"> <li>• Each business plan program has one or more board-level key issue that should be addressed over the next five years, with particular emphasis on the immediate next two years, to ensure a successful program.</li> <li>• Represents 20 percent of activities that account for 80 percent of the program</li> </ul>
Local Entity	<ul style="list-style-type: none"> <li>• Organization established in the Imperial Valley to administer payments by the Water Authority for socio-economic impacts resulting from the San Diego – Imperial Irrigation District water transfer.</li> </ul>
Maximo	<ul style="list-style-type: none"> <li>• A computerized maintenance management system that provides asset, work, and materials management and purchasing capabilities to help organizations maximize productivity.</li> </ul>
Moody	<ul style="list-style-type: none"> <li>• One of three major financial treating agencies that provide credit ratings on organizations that issue debt and equity securities.</li> </ul>
Non-commodity charges	<ul style="list-style-type: none"> <li>• Source of revenue to the Water Authority from a variety of charges, including interest earnings, that are not based on the sale of water.</li> </ul>
Peoplesoft	<ul style="list-style-type: none"> <li>• The commercial financial accounting and human resources software system used by the Water Authority.</li> </ul>
Perchlorate	<ul style="list-style-type: none"> <li>• A contaminate from ammonium perchlorate manufacturing facilities in Nevada that is found in water from the Colorado River.</li> </ul>
Photovoltaic	<ul style="list-style-type: none"> <li>• The process of converting sunlight into electricity</li> <li>• Solar electric power systems that use panels, batteries, inverters, etc. to convert direct current generated by the system into an alternating current required to run most appliances and electronic devices.</li> </ul>
Preferential Rights	<ul style="list-style-type: none"> <li>• A Metropolitan Water District member agency’s right to receive an allocation of water during times of shortage.</li> <li>• Set for in the Metropolitan Water District Act</li> </ul>

Term	Definition
Proposition 50	<ul style="list-style-type: none"> <li>• An initiative on the November 2002 ballot</li> <li>• Authorized the state to allocate \$3.44 billion for projects and programs related to freshwater and coastal resources.</li> <li>• Up to \$2.4 billion is earmarked for programs of interest to the Water Authority in such areas as safe drinking water, the Colorado River, desalination, conservation, recycling, and groundwater.</li> </ul>
PRIMA	<ul style="list-style-type: none"> <li>• Customized software system to track water supply and demand</li> </ul>
Primavera	<ul style="list-style-type: none"> <li>• The name of a corporate project management software used to schedule resources and control complex projects.</li> </ul>
SCADA	<ul style="list-style-type: none"> <li>• Supervisory Control and Data Acquisition System</li> <li>• Computerized system used in industrial process control applications, such as water distribution systems and electrical distribution systems.</li> </ul>
Strategies	<ul style="list-style-type: none"> <li>• The methods and approaches to achieve the goal</li> <li>• Example: If our strategy is to raise \$5 million in grant funding by 2012, the strategy may be to employ a Washington lobbyist to obtain a grant.</li> </ul>
Sustainability	<ul style="list-style-type: none"> <li>• The long-term viability of an activity or system</li> </ul>
U.S. Desalination Coalition	<ul style="list-style-type: none"> <li>• A coalition of agencies that is seeking federal assistance to encourage the development of seawater and brackish water desalination facilities</li> </ul>
Value Engineering	<ul style="list-style-type: none"> <li>• A process to review and challenge project design elements and their underlying assumptions and methodologies in order to increase the value of the project.</li> </ul>