



# 2013 San Diego Integrated Regional Water Management Plan

An Update of the 2007 IRWM Plan

## Highlights



Prepared by the Regional Water Management Group  
in collaboration with the Regional Advisory Committee



City of San Diego



County of San Diego



San Diego County  
Water Authority

October 2013

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*"If you wish to go quickly, go alone.  
If you wish to go far, go together."*  
**African proverb**

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**Download the complete 2013 San Diego IRWM Plan at:  
[www.sdirwmp.org](http://www.sdirwmp.org)**

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## Complexity of Water Management in San Diego Region



## Integrated Regional Water Management in the San Diego Region

Integrated Regional Water Management (IRWM) planning is a collaborative way to develop water supply reliability, improve water quality, and protect natural resources. The San Diego IRWM Program began in 2005, and since then has achieved remarkable success. San Diego published its first IRWM Plan in 2007 and has received, thus far, \$34 million in state grant funding. IRWM stakeholders, working in an inclusive, transparent process, have updated the 2007 IRWM Plan to incorporate changes in regional water management needs and adhere to new state requirements. The 2013 IRWM Plan highlights are presented in this document.

The San Diego IRWM Region extends east from the Pacific Ocean, through one of the most populous areas in the nation, to the ridgeline of a forested mountain range.

San Diego is an immensely complex border region consisting of 11 watersheds that jointly provide water sufficient to meet only about 15% of the Region's current water demands. The Region's diverse habitats range from coastal to mountainous, and support more threatened and endangered species than any comparable land area in the nation (County of San Diego, 2009). Most of the 3.1 million people within the Region inhabit the urbanized coastal areas, and the population of these areas is expected to increase by 30% by 2035, to over 4.0 million, according to the San Diego Association of Governments (SANDAG) forecast (SANDAG, 2010). The 2013 IRWM Plan presents an overarching assessment of the San Diego Region's water supply, water quality and ecosystem challenges and provides recommendations for sustainable answers.

Seeking and implementing integrated water management solutions is not new to the San Diego Region. With average precipitation levels of only 10 inches per year at the coast, collaboration has been instrumental to overcoming the challenges of water scarcity.

A look into the future of integrated water management in San Diego suggests that new levels of collaboration are forthcoming. For example:

- The San Diego Region is a leader in the development of potable reuse as a water supply. **How will water and wastewater agencies collaborate to ensure effective partnering?**



- New stormwater runoff regulations align well with water conservation best management practices for large landscapes. **How might stormwater and water agencies work together to efficiently partner on conservation programs?**
- Many surface waters face water quality impairment from non-point source pollution, bacteria, sediment, nutrients, salinity, metals, and toxic organic compounds. **How can water agencies, stormwater agencies, land-use authorities, regulators and others join forces to effect real water quality improvements?**
- The Region encompasses urban and rural disadvantaged communities (DACs) with water management issues in need of being addressed. **How can DACs most effectively participate in water management projects benefitting their communities?**
- The Region includes 18 federally recognized tribes, each with water management challenges. **How can tribal water management issues be effectively integrated into San Diego's regional water management planning?**

These are but a few of the questions that the San Diego Region must begin to answer. Inherent in these opportunities are the cost drivers associated with water supply diversification, wastewater treatment, regulatory compliance, and maintenance of existing infrastructure. Integration is not an



*The San Diego Region includes eleven coastal watersheds.*

end-game, but rather an iterative process. Responsibilities for managing water resources span a multitude of agencies and entities. Natural water demarcations such as river systems do not correspond to political jurisdictions and each of the Region's watersheds span multiple cities and agencies. This creates jurisdictional complexity for water management. IRWM offers a forum to bring together the diversity of stakeholders into a collaborative approach to water management with reduced overall costs and improved effectiveness and efficiency. The IRWM model, while still evolving, offers the San Diego Region an enhanced approach for sustainable water management.

*"The San Diego IRWM Program has taken the initial steps of bringing together organizations and individuals from diverse backgrounds, interests, and perspectives to work toward achieving a shared vision needed to guide the protection, management, and use of the Region's water resources for the mutual benefit of people, wildlife, and habitats."*

**Kirk Ammerman**

**RAC Member Representing City of Chula Vista, 2006 - 2013**

# Innovative Approach to Water Management for San Diego Region



## Planning Studies

During the 2013 IRWM Plan development process, four planning studies were conducted by workgroups. These studies (Regulatory, Land Use Planning, Climate Change Planning, and Integrated Flood Management) developed recommendations to address the challenges and issues identified in the table on page 12. Each of the studies produced its own set of recommendations, but a single recommendation was common to all: increased and improved coordination and communication between water managers and other stakeholders.

From these recommendations, the Regional Advisory Committee (RAC) and the Regional Water Management Group (RWMG) identified a revised list of action items to achieve during the life of the 2013 Plan. Stakeholders have made commitments to implement the selected actions. Each action item is expected to be implemented within three years of adoption of the 2013 IRWM Plan, with stakeholders reporting progress to the RAC.

### Regulatory Planning Study

- Improve communication between IRWM Program and Regional Board
- Ensure consistency and provide support between IRWM Plan and Regional Board plans
- Provide science-based water quality recommendations to support regulatory decisions
- Coordinate efforts and opportunities for habitat restoration and recovery



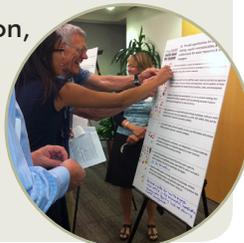
### Climate Change Planning Study

- Address climate change through adaptation and mitigation in water management
- Develop cost-effective carbon-efficient strategies
- Incorporate adaptation to climate change effects in water planning
- Reduce or neutralize GHG emissions in water management
- Recognize that water is one of the primary delivery systems of climate change



### Land Use Planning Study

- Collaborative water resources and land use planning efforts
- Include supportive and complementary objectives and actions in land use and water planning and regulatory documents
- Provide opportunities for cooperation, communication, and information sharing between water and land use managers
- Improve understanding of relationship between land use and water resources



### Flood Management Planning Study

- Increase flood manager and agency collaboration
- Improve understanding of regional flood risks and integrated flood management
- Develop watershed database to assist in flood management and identify common issues and constraints
- Define watershed flood management goals and applicable IFM strategies



## IRWM Program Accomplishments

The San Diego IRWM Program continues to evolve to adapt to changing conditions and meet regional needs. Following is a brief timeline and an outline of the major accomplishments that the Program has achieved during its eight-year tenure.

**2005** | Completed a **Memorandum of Understanding (MOU)** between the City of San Diego, County of San Diego, and San Diego County Water Authority, who collectively comprise the RWMG. The MOU formalized the agencies' commitment to fund, guide, and manage development and implementation of the IRWM Program.

**2006** | Established the **Regional Advisory Committee (RAC)**, which is a collection of diverse professionals with a stake in water management in the Region. The RAC has met regularly since its inception and is responsible for providing input and feedback to the RWMG with regards to regional planning and funding activities.

**2007** | Wrote and adopted the **2007 San Diego IRWM Plan**. The 2007 Plan laid the groundwork for enhanced collaborative, multi-benefit water resources projects by facilitating cooperation between public agencies and non-profit organizations.

**2008** | Received a **\$25 million grant** from DWR, through Proposition 50, to support 19 high-priority local projects.

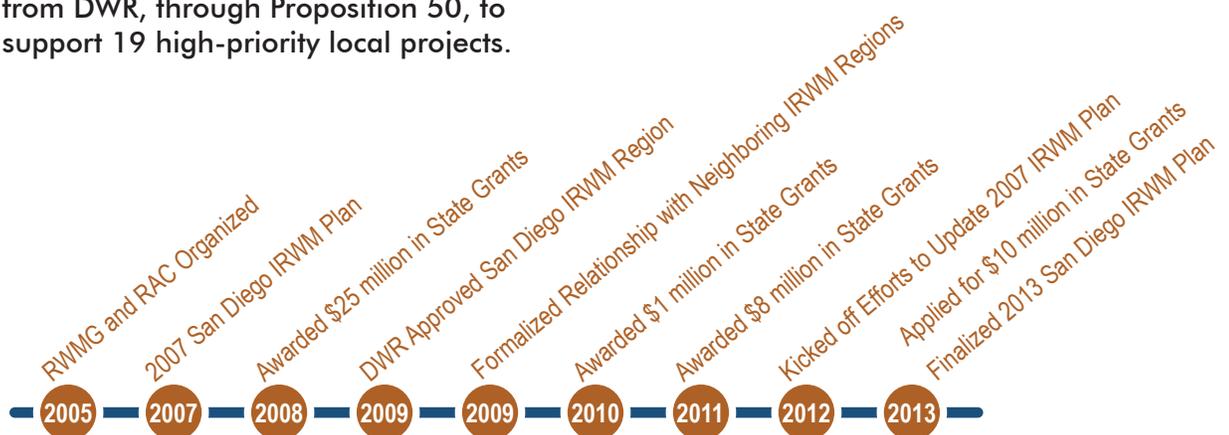
**2010** | Received a **\$1 million grant** from DWR, under Proposition 84, to conduct stakeholder outreach, complete planning studies, and prepare the 2013 IRWM Plan.

**2011** | Received an **\$8 million grant** from DWR, under Proposition 84-Round 1, to implement 11 high-priority local projects.

**2012** | Initiated planning efforts to update the 2007 IRWM Plan. Initial outreach efforts included an **IRWM Summit** to raise awareness among the public and stakeholders about development of the 2013 IRWM Plan.

**2013** | Submitted a \$10.3 million grant application to implement 7 high-priority local projects using potential grant funding from Proposition 84-Round 2.

**2013** | Completed the **2013 IRWM Plan**.



## Integrated, Balanced & Consensus-based Approach to Water Sustainability



### 2013 IRWM Vision, Mission, Goals and Objectives

The RWMG, with support of the RAC and IRWM stakeholders, has established the 2013 IRWM Plan Vision, Missions, Goals and Objectives, incorporating several changes from the 2007 version. The Plan includes two new objectives, in addition to the original nine in the 2007 IRWM Plan. Another change includes a new requirement that projects must contribute to both Objective A and Objective B and at least one other objective to be eligible for inclusion in IRWM grant applications.

#### IRWM Plan Vision:

An integrated, balanced, and consensus-based approach to ensuring the long-term sustainability of the Region's water supply, water quality, and natural resources.

#### IRWM Plan Mission:

To develop and implement an integrated strategy to guide the Region toward protecting, managing, and developing reliable and sustainable water resources.

Through a stakeholder-driven and adaptive process, the Region can develop solutions to water-related issues and conflicts that

are economically and environmentally preferable, and that provide equitable resource protection for the entire Region.

#### IRWM Plan Goals:

- 1 | Improve the reliability and sustainability of regional water supplies.
- 2 | Protect and enhance water quality.
- 3 | Protect and enhance our watersheds and natural resources.
- 4 | Promote and support sustainable integrated water resource management.

#### IRWM Plan Objectives:

##### Required Objectives for IRWM Funding

**Objective A (new):** Encourage the development of integrated solutions to address water management issues and conflicts. Implement projects and programs that effectively address local water management issues and conflicts through six types of integration: (1) Partnerships, (2) Resource Management, (3) Beneficial Uses, (4) Geography, (5) Hydrology, and (6) Sustainability.

**Objective B:** Maximize stakeholder/community involvement and stewardship of water resources, emphasizing education and outreach. Implement efforts to engage and educate the public on the IRWM Program and the interconnectedness of water supply, water quality, and natural resources. Build stewardship throughout the Region by providing opportunities to participate in water management and promote individual and community ownership of water resource problems and solutions.

**Objective C:** Effectively obtain, manage, and assess water resource data and information. Increase and expand sharing, integration, and comprehensive analysis

of water resource and water quality data to provide a basis for improved water resources management.

**Objective D:** Further the scientific and technical foundation of water management.

Promote actions, programs, and projects that increase scientific knowledge and understanding of water management issues and support science-based regulations and requirements. Coordinate with regulatory agencies to assess and resolve ambiguous or conflicting regulatory standards or requirements.

**Objective E:** Develop and maintain a diverse mix of water resources, encouraging their efficient use and development of local water supplies.

Continue to develop diverse water resources to meet local supply and conservation goals, reduce dependence on imported water supplies, and increase water supply reliability. A diverse mix of water resources includes imported water, water transfers, recycled water, water conservation, desalination, local surface water, and groundwater.

**Objective F:** Construct, operate, and maintain a reliable water management infrastructure system. Construct, operate, and maintain water conveyance, treatment, storage, and distribution facilities that comprise a reliable water infrastructure system consistent with the future planned mix of water resources, and provide flexibility in system operations.

**Objective G:** Enhance natural hydrologic processes to reduce the effects of hydromodification and encourage integrated flood management. Restore and enhance natural hydrologic processes, and promote best management practices that reduce negative effects on natural stream systems and local water supply reservoirs. Reduce runoff from impervious surfaces, erosion, sedimentation, and flooding. Use integrated flood management to holistically address flood issues, water quality, natural resources, and other water management concerns.

**Objective H:** Effectively reduce sources of pollutants and environmental stressors to protect and enhance human health, safety, and the environment. Reduce pollutants and environmental stressors to maintain or improve water quality through the application of point and non-point source control, stormwater best management practices, management measures such as land use planning and conservation, and reservoir management. Reduce pollutant loads to protect the health and safety of humans and the environment.

**Objective I:** Protect, restore, and maintain habitat and open space. Manage and acquire land to preserve open space and protect sensitive habitat for endangered, threatened, and locally-important plant and wildlife species. Invasive species management, habitat conservation, and water pollution prevention activities will help to maintain and enhance biological diversity.

**Objective J:** Optimize water-based recreational opportunities. Protect and provide access to water-based recreational activities such as swimming, fishing, boating, as well as picnicking and hiking along waterways, while ensuring that the recreational activities do not adversely affect other beneficial uses of water. Improve public safety in water-based recreational areas so that members of the Region can use them freely.

**Objective K (new):** Effectively address climate change through greenhouse gas reduction, adaptation, or mitigation in water resource management. Adapt to the potential effects of climate change, such as sea-level rise, temperature changes, and rainfall variability, by implementing 'climate-proof' water management projects and programs. Incorporate greenhouse gas emissions reduction and energy efficiency in planning and management efforts.

## Diverse Region with Significant Water Management Opportunities and Challenges

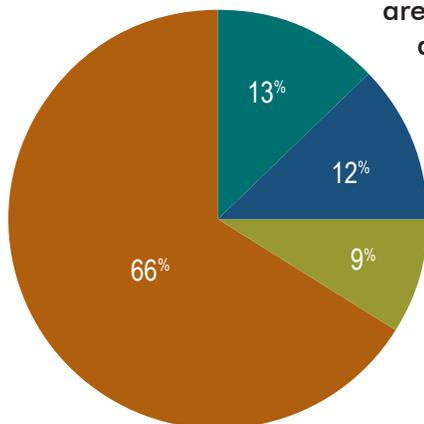


### Water Supports the Economy, Environment, and Social Well-being of the Region

Inland surface waters, groundwater, and coastal waters of the Region support a variety of water supply needs, recreational uses, and important ecosystems and habitats. Like many urbanized areas in California and throughout the nation, the Region faces challenges to ensuring the long-term sustainability of its water supply, water quality, and watershed resources. This will become more critical as the population of the Region increases by a projected 30% by 2035.

San Diego County's Gross Regional Product exceeded \$186 billion during 2011. Water demand in the Region is divided into several broad categories of use: residential, commercial and industrial, agriculture and public and other (see graph, below).

Agriculture in the County, which is almost entirely dependent on irrigation, produces \$1.68 billion in crops. The highest value crops include nursery plants (\$1 billion) and avocados (\$208 million). About 300,000 acres in the County are dedicated to agricultural production. Top commercial and industrial operations are manufacturing, tourism, defense, and telecommunications.



FY 2012 Water Demand by Customer Sector Use

- Residential
- Commercial & Industrial
- Public & Other
- Agriculture

Source: Water Authority FY 2012 Annual Report

### Water Supplies

Due to the inconsistency of precipitation and limited local water supplies, the Region depends largely on imported water.

The San Diego County Water Authority (Water Authority) is the sole imported water wholesale agency within the Region; its member water agencies serve 98% of the county's population. Water supplies delivered by the Water Authority to its member agencies comprise up to 80% of the Region's water supply.



Lower Otay Reservoir stores both imported and local surface water.

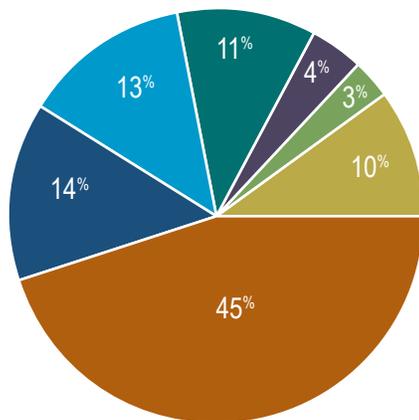
The Region has 25 water supply reservoirs. While they provide only about 10% of the Region’s water, they serve to store imported water supplies to ensure water supply reliability.

Development of new local water supplies is an important step in reducing the Region’s reliance on imported water and increasing water supply reliability. Two of the most significant local water sources are seawater desalination and water reuse.

One of these local sources, seawater desalination will soon provide about 7 percent of the Region’s total water supply. By 2016, the Water Authority will purchase

between 48,000 AF and 56,000 AF per year from the Carlsbad Desalination Project. Several other seawater desalination projects also are under study.

Water reuse has been identified as an important local water source. Currently, 28,000 AFY of tertiary treated recycled water is distributed for irrigation and industrial uses. Water reuse can increase substantially from current levels through potable reuse, and the potential of this water supply diversification is promising. The RWMG, the RAC, and IRWM stakeholders have paid close attention to water reuse opportunities in the Region.



FY 2012 Water Supply Sources

**Imported Water**

- Metropolitan
- Imperial Irrigation District Transfer
- All American & Coachella Canal Lining

**Local Water**

- Recycled Water
- Conservation
- Groundwater
- Surface Water

Source: Water Authority FY 2012 Annual Report

## Water Quality

The San Diego Regional Water Quality Control Board (Regional Board) has listed over 65 inland surface waters and 45 coastal waters or beach segments in the Region as having impaired water quality because they do not comply with applicable water quality standards. The Regional Board has adopted 8 Total Maximum Daily Loads (TMDLs) for water quality impaired surface waters, and has initiated TMDLs for a number of others.



San Marcos Creek water quality is being addressed through a collaborative stakeholder effort.

## Promoting Integrated Solutions to Resolve Water Resource Conflicts



IRWM stakeholders have identified key challenges associated with strengthening the scientific basis for water quality standards established for local water bodies. This will increase overall understanding of beneficial uses of the Region's waters and the impact of human activities on water quality and better enable the Regional Board to make decisions. The 2013 IRWM Plan offers suggestions for addressing these challenges.

### Flood and Storm Waters

There is risk of flooding in many areas of the Region, from both rainfall and urban runoff. The greatest flood risk is in coastal river valleys where there is development in the floodway. The central and eastern portions of San Diego County, where mountain canyons and seasonal creeks are the prevailing terrain, are susceptible to flash floods.

High quality storm runoff is captured in reservoirs in the upper reaches of local watersheds for use as a domestic water supply. Stormwater in the Region's lower watersheds is diverted to each agency's municipal separate storm sewer system (MS4). Because MS4s are not required to provide treatment prior to discharging collected stormwater, they can present a water quality challenge, as stormwater may have high levels of pollutants collected during runoff. The MS4s in the Region collect runoff from residential, commercial, and industrial areas, which can carry pesticides, fertilizers, and anything that is dumped into storm drains, such as oil or trash. As the Region continues to grow, managing pollution from stormwater and urban runoff into the MS4 will be imperative.

### Disadvantaged Communities

Disadvantaged communities (DACs) are communities with a Median Household Income (MHI) of 80% or less of the statewide MHI. Thirty-six areas within the San Diego IRWM Region qualify as DACs. The majority are urban DACs served by large water and wastewater agencies. The remaining eleven are rural DACs served by small water systems or private wells. Many Rural DACs lack the financial and technical resources to design, build, operate, and maintain reliable water projects.

The IRWM Program works with organizations representing disadvantaged communities to identify and address their water-related issues. The RAC includes one urban and one rural DAC representative.

#### Urban DACs

Because the urban DACs in the San Diego Region are located within the service areas of large public agencies, their domestic water supply is of high quality, meeting all drinking water standards, and wastewater is disposed through a municipal sewer system. The water management problems within urban communities include flooding, illegal dumping, habitat degradation, and surface water quality.

The San Diego IRWM Program has been able to fund four DAC projects including regional pollution prevention, urban runoff management, flood reduction and habitat remediation along an urban creek. These projects also support community involvement and public outreach.

### Rural DACs

The primary water management concern of rural DACs is securing and maintaining a safe, reliable source of drinking water. The San Diego IRWM Program has acquired DWR grant funding for a project that will provide technical expertise and funds for system improvements for several local rural water systems. The IRWM funding can be extended by partnering with the State Department of Public Health's State Revolving Fund program.

### Tribal Nations

San Diego County encompasses 18 federally recognized Tribal Nation Reservations and 17 Tribal Governments – more than any other county in the United States. These Reservation lands total 198 square miles. Approximately 17,000 Native Americans live in the San Diego IRWM Region; of these, 6,300 are members of Tribal Nations in the Region.

Tribal Governments are sovereign nations. As such, state agencies and local governments lack authority over Tribal Lands. The IRWM Program has reached out to the Tribes in an effort to address water and habitat issues. A position on the RAC is reserved for a Tribal representative.

Excerpt from *Tribal Water Stories of Coastal Southern California*, a collection of stories, myths, and songs from Tribes in San Diego County, collected to entertain and educate readers, while honoring and celebrating the people and cultures from which these stories come. To download the entire collection, visit: [www.sdirwmp.org](http://www.sdirwmp.org)

#### AH-HA' WI-AH-AH' WATER COLDER WATER

The cold spring, located on the high peak of the Cuyamacas, is well known to all lovers of these mountains, and the Indians, who must ever have a reason for the existence of things, tell how it was created and named by one of their mythical creatures long ago.



Volunteers restoring habitat along Chollas Creek.



An aging storage tank in need of replacement in a Rural DAC.

## IRWM Planning Can Help Address Challenges and Conflicts



### Role of IRWM Plan

Numerous water management plans have been developed by individual or multiple agencies or groups within the Region to address water supply, water quality, ecosystem and habitat protection and enhancement, watershed protection, recreation, and land use controls. Each of the local plans addresses portions of the Region, but many of the plans overlap in geography, scope, or agency jurisdiction.

IRWM planning provides a cost-effective and efficient way for planning across jurisdictional boundaries. IRWM planning additionally provides an important first step in positioning the Region to secure state funding for critical regional water management projects and programs (see section on Funding on page 15 for more details).

### IRWM Challenges

Key challenges in addressing water management issues on a regional scale include: potential for competing plans, jurisdictional overlaps, conflicts among agencies and other organizations, constraining or conflicting regulations, environmental concerns, public acceptance, and funding.

The IRWM Plan can help to address or resolve these issues and challenges by improving communication between stakeholders, proceeding through a public process, consolidating regional information, and identifying common goals, objectives, and opportunities. The table on the following page describes different types of water management challenges and potential IRWM Program solutions.



*The San Diego IRWM Planning Region encompasses all or part of the 11 watersheds within San Diego County that discharge to coastal waters. Numerous public agencies and non-profit organizations have developed water management plans for portions of the Region. IRWM planning is an efficient, cost-effective way to plan across jurisdictional boundaries.*

## Current Challenges to Water Management and How the IRWM Program Can Help Address Challenges

Challenges and Conflicts in Water Management	How the IRWM Program Can Address Challenges
<b>Regulatory Processes/Administration:</b> Regulations may be infeasible to implement, lack comprehensive data, and implementation requirements may not yield desired benefits.	Provides a unified regional approach for identifying and assessing regulatory compliance issues.
<b>Water Quality Objectives and Beneficial Uses:</b> Widespread concern that beneficial uses are not properly defined, which can impact the Region's ability to effectively and affordably manage water.	Provides a forum for collaboration between water managers and the regulatory agencies that establish water quality standards.
<b>Integrated Planning:</b> Numerous entities are involved in water management in the Region. Conflicts between entities or beneficial uses are unavoidable.	Provides a forum to bring different entities together to potentially resolve or avoid conflicts resulting from overlapping jurisdiction.
<b>Stakeholder Involvement:</b> Barriers to stakeholder participation may include regulatory restrictions or lack of funding.	Outreach efforts have attempted to resolve participation barriers. RAC meetings provide an ongoing opportunity for stakeholder involvement.
<b>Funding:</b> Limited funding through DWR, and increasing resource limitations for public agencies. There is a need for affordable solutions to water-related issues.	Brings entities together to prioritize projects through a process that considers cost-effectiveness, and multiple benefits.
<b>Public Awareness and Education:</b> Regional awareness of water management issues is a concern.	Sets a high priority for public outreach that may result in greater public understanding and acceptance of water management issues and solutions.
<b>IRWM Grant Administration:</b> Substantial concerns with IRWM grant funding delays by the State.	Has attempted to resolve grant funding issues through improved communications with DWR and holding DWR accountable.
<b>Affordability:</b> Region is pressed to find solutions that meet regulatory, outreach, IRWM Program, and other needs.	Funding can be used to offset project-related costs in the Region. Multi-benefit projects can improve affordability.
<b>Political Coordination:</b> Regulatory, public awareness, conflicts, and other issues present challenges to political coordination.	Coordination efforts with other regulatory agencies and political bodies are important to the IRWM Program.
<b>Managing Water Rights and Compliance:</b> Need to reconcile water rights and water quality management for a variety of beneficial uses	Provides a mechanism to bring different entities together to potentially resolve or avoid water rights conflicts.
<b>Sustainability of Water Resources:</b> Solutions must be economically and environmentally preferable, that also provide equitable resource protection for Region.	Has incorporated sustainability throughout Plan. Project selection prioritizes cost-effective projects that provide multiple benefits.

## Stakeholder Engagement is a Critical Component of IRWM Planning



### Stakeholder Involvement

The RWMG has led the effort to update the IRWM Plan, but could not be successful without stakeholder participation. Development of the 2013 IRWM Plan relied on active support and involvement from many stakeholders engaged in water resources planning and management throughout the Region.

The San Diego IRWM Program has a stakeholder email distribution list of over 450 individuals or organizations. Stakeholders are alerted about upcoming IRWM activities such as public workshops, workgroup meetings and RAC meetings. Participation by these stakeholders is critical as they bring a wealth of knowledge from many water management disciplines specific to various areas of the Region.

### Regional Water Management Group (RWMG)

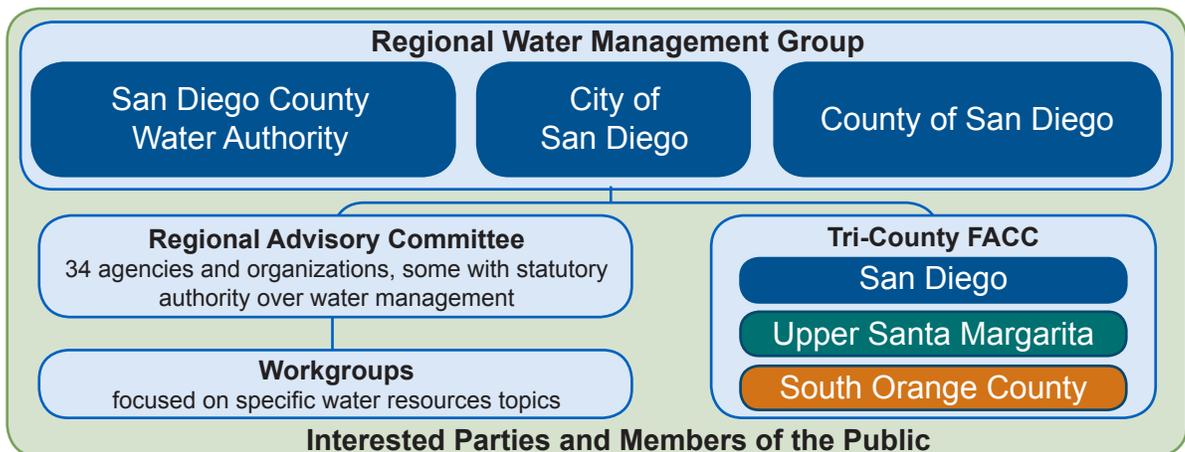
The **County of San Diego** has approximately 3.1 million residents and covers 4,281 square miles. The County maintains a number of water - and watershed-related program responsibilities within unincorporated portions of the Region.

The **San Diego County Water Authority** is the regional water wholesale agency within the County, and provides water to 24 member agencies that serve 98% of the county's population. The Water Authority's member agencies serve a combined population of 3.1 million and support an annual economy of over \$186 billion. The Water Authority's boundaries comprise 1,468 square miles in the western third of San Diego County. The Water Authority serves as lead agency for the IRWM Program.

The **City of San Diego** is the second largest city in California, with a population of 1.3 million. It operates an extensive water system that provides drinking water to approximately 40% of San Diego County's population. It treats and delivers approximately 200,000 acre-feet of water per year to customers within a 342-square-mile service area. The City also provides wastewater service to approximately 69% of the County's population.



San Diego County Water Authority



San Diego IRWM Governance Structure

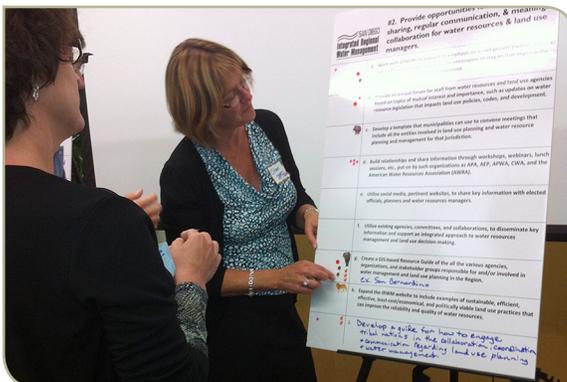
The Regional Advisory Committee (RAC), formed in 2006, is a group of exceptionally engaged stakeholders. The original RAC served seven years and put in countless hours helping to develop the San Diego IRWM Program. The RAC membership was recently updated and a schedule established for replacing members. The RAC adopted a charter to establish formal procedures for the group and define its membership so that it reflects the IRWM Program’s goals. The RAC charter is included as an attachment in the 2013 IRWM Plan.

Bimonthly RAC meetings provide opportunities for the public to engage with the IRWM Program. Workgroups, comprised mainly of RAC members, help guide the San Diego IRWM Program by conducting technical reviews and studies. On the previous page is a diagram of the IRWM Program structure and a list of current participating RAC organizations is provided below.

In concert with the Upper Santa Margarita IRWM Region and the South Orange County IRWM Region, the San Diego IRWM Program has created the Tri-County Funding Area Coordinating Committee (FACC), a cooperative effort between the three IRWM programs within the state-defined San Diego IRWM Funding Area. The Tri-County FACC seeks to identify opportunities for collaboration between IRWM regions and works to coordinate water resources management at the boundaries of the three IRWM regions.

### Regional Advisory Committee (RAC) Member Organizations

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>• County of San Diego</li> <li>• City of San Diego</li> <li>• San Diego County Water Authority</li> <li>• Santa Fe Irrigation District</li> <li>• City of Oceanside</li> <li>• Helix Water District</li> <li>• Sweetwater Authority</li> <li>• Olivenhain Municipal Water District</li> <li>• San Elijo Joint Powers Authority</li> <li>• City of Chula Vista</li> <li>• City of Encinitas</li> <li>• Otay Water District / Metro Joint Powers Authority</li> <li>• San Diego Coastkeeper</li> <li>• University of California Cooperative Extension</li> <li>• San Diego River Park Foundation</li> <li>• Buena Vista Lagoon Foundation</li> <li>• California Landscape Contractors Association</li> </ul> | <ul style="list-style-type: none"> <li>• UCSD Clean Water Utility</li> <li>• Padre Dam Municipal Water District</li> <li>• Groundwork San Diego-Chollas Creek</li> <li>• Rural Community Assistance Corporation</li> <li>• Floodplain Management Association</li> <li>• Industrial Environment Association</li> <li>• SDSU Center for Regional Sustainability</li> <li>• Farm Bureau of San Diego County</li> <li>• San Diego Association of Governments</li> <li>• Zoological Society of San Diego</li> <li>• San Diego Regional Water Quality Control Board</li> <li>• U.S. Bureau of Reclamation</li> <li>• County of Orange</li> <li>• Rancho California Water District</li> <li>• USMC Camp Pendleton</li> <li>• California Coastal Conservancy</li> </ul> |
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## IRWM Planning Positions the Region to Secure Funding

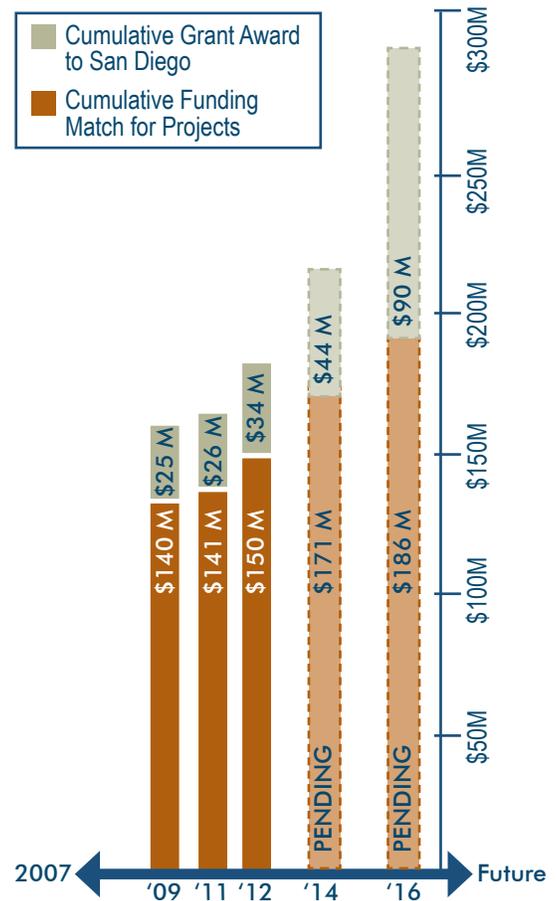


### Funding

The statewide IRWM Grant Program, managed by the California Department of Water Resources (DWR) is supported by funds approved by the voters through Proposition 50 (2002) and Proposition 84 (2006). Both propositions provide bond funding for competitive grants for projects that improve water resources management. To be eligible for grant funding, IRWM regions must adopt an IRWM Plan that is approved by DWR. To be eligible for future funding, IRWM Plans must be updated to conform to recent DWR requirements - the 2013 IRWM Plan fulfills these requirements.

The San Diego IRWM Region has received \$25 million in grant funding to support implementation projects under Proposition 50, \$8 million under Proposition 84 Round 1, and is positioned for an additional \$10.3 million from Proposition 84 Round 2. The Region also received a \$1 million Proposition 84 planning grant to help pay for the update of the 2007 Plan. A final round of grant funding from Proposition 84 will make another \$46 million available for the San Diego Region. The Water Authority, acting on behalf of the RWMG, administers the Region's grants.

Cumulative IRWM Grant Award Totals



*San Diego IRWM Program has leveraged millions in state grant funds to implement local and regional projects.*

## Types of Projects Funded

Projects funded through inclusion in the IRWM Plan range from pilot studies for innovative water treatment technology, recycled water systems, water quality and water supply improvements for DACs, flood control and stormwater management projects, source water protection, and water reliability projects. Examples of water quality and local supply projects are described in the text boxes to the right.

Beyond Propositions 50 and 84, the Region anticipates a variety of state and federal grant funding for water-related projects. The San Diego IRWM Program and Plan are a vehicle to pursue those funding opportunities.



*An interregional effort is ongoing to assess water quality objectives that protect beneficial uses in the Santa Margarita River.*



*The Water Purification Demonstration Project is evaluating the feasibility of indirect potable reuse/reservoir augmentation.*

### Examples of Local Supply IRWM Projects

Pipeline for the largest desalination plant in the nation – expected to meet up to 7% of regional demand

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Pilot projects to investigate feasibility and safety of potable reuse – adding advanced treated recycled water into potable supplies

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Expansion and interconnection of recycled water systems throughout the northern coastal areas

### Examples of Water Quality IRWM Projects

Santa Margarita River nutrient assessments – interregional, collaborative effort to assess appropriate water quality objectives protective of beneficial uses

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Programs to improve surface and drinking water quality in disadvantaged communities

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Projects to improve the quality of water in Hodges Reservoir, both within the reservoir and upstream



*The Carlsbad Desalination Project is projected to provide about 7 percent of the Region's water supply.*

## Plan Priorities will help to address Regional challenges



### Project Selection

The 2013 IRWM Plan includes criteria for projects to be included in the IRWM Plan's database of projects. Project criteria were vetted by the RWMG, the RAC, and other stakeholders to ensure alignment with regional mission and objectives.

Proposed projects are first uploaded onto the IRWM Program online database.

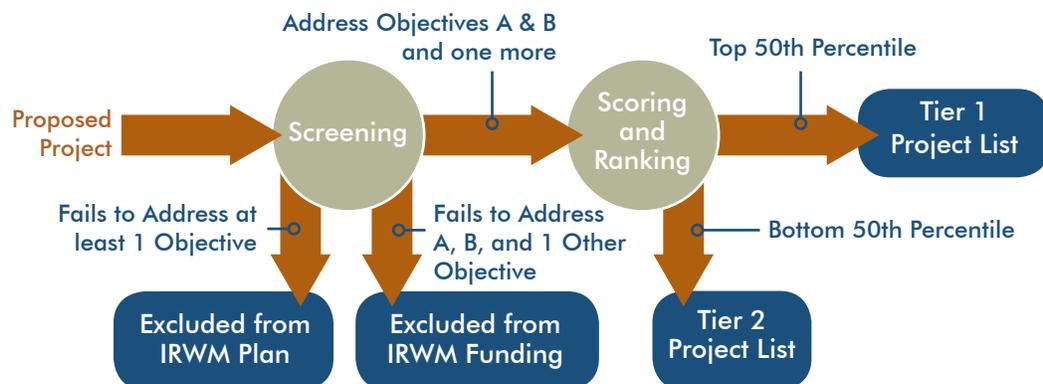
A project must meet at least one objective to be included in the database (see Objectives, page 5 and 6). To be considered for grant funding, a project must achieve Objective A and B and at least one other IRWM Plan objective. Once projects pass this initial screening, a Project Selection Workgroup comprised of RAC members reviews and ranks projects to identify a suite of projects that best meets the Region's water management needs.

Through this project prioritization and selection process, the Project Selection Workgroup compiles a package of projects that comprehensively addresses regional needs, issues, and objectives, reflects the IRWM Program goals, and matches up to the specific criteria of the grant program at hand. The Workgroup recommendation goes to the RAC for review. The RAC then recommends a project package to the RWMG governing bodies.



*Turf replacement programs have been selected for IRWM grant funding.*

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## The Past, Present and Future of IRWM Planning



### Future of IRWM

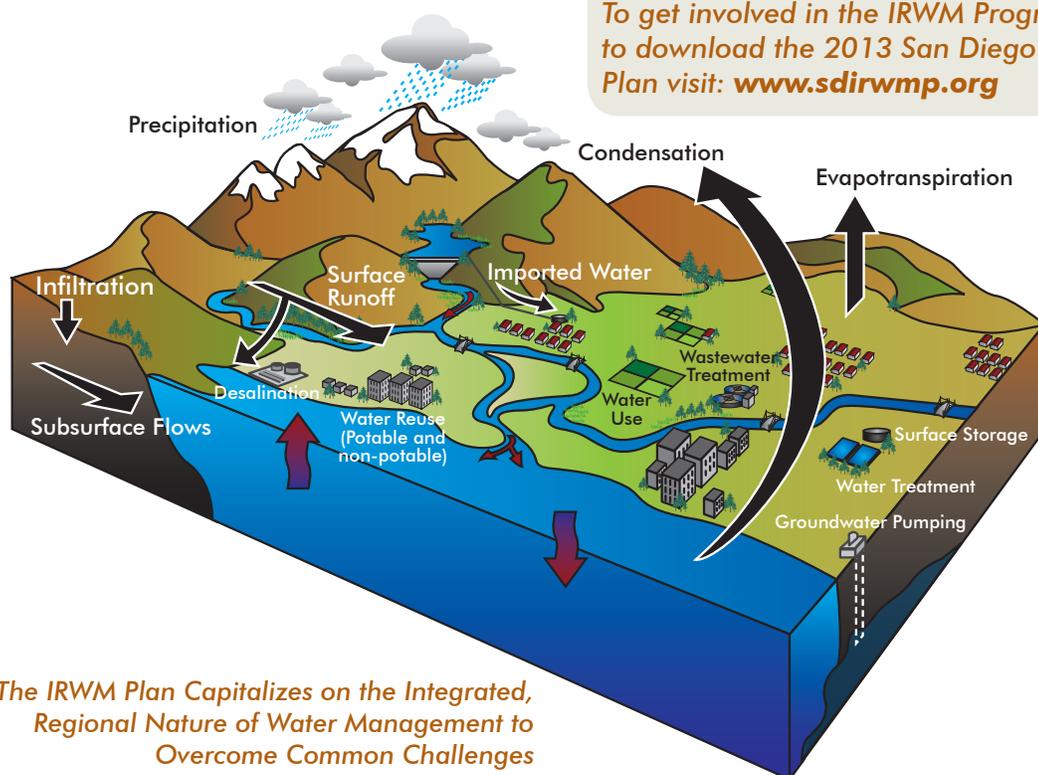
In addition to establishing short-term priorities and facilitating the pursuit of outside funding, the 2007 IRWM Plan represented the first step in a long-term planning process. As this long-term process unfolds, stakeholder groups have been expanded, governance structures refined, coordination with watershed groups enhanced, new emerging issues identified, and new priorities established. The 2013 IRWM Plan reflects these changes, refines the IRWM process, and builds on the success of the 2007 IRWM Plan.

The San Diego IRWM Program aims to:

- Support ongoing dialogue on water and watershed management throughout the Region
- Encourage strategic, sustainable, and integrated approaches to resolve water management challenges
- Provide a forum for voluntary collaboration on water management issues

The San Diego IRWM Plan is a living document; the 2013 Plan marks the second generation of IRWM planning in the Region, and will continue to evolve over time in response to the changing needs of the Region. Through this stakeholder-driven, cooperative process, the San Diego Region has established itself as a leader in active water management planning.

To get involved in the IRWM Program and to download the 2013 San Diego IRWM Plan visit: [www.sdirwmp.org](http://www.sdirwmp.org)



*The IRWM Plan Capitalizes on the Integrated, Regional Nature of Water Management to Overcome Common Challenges*



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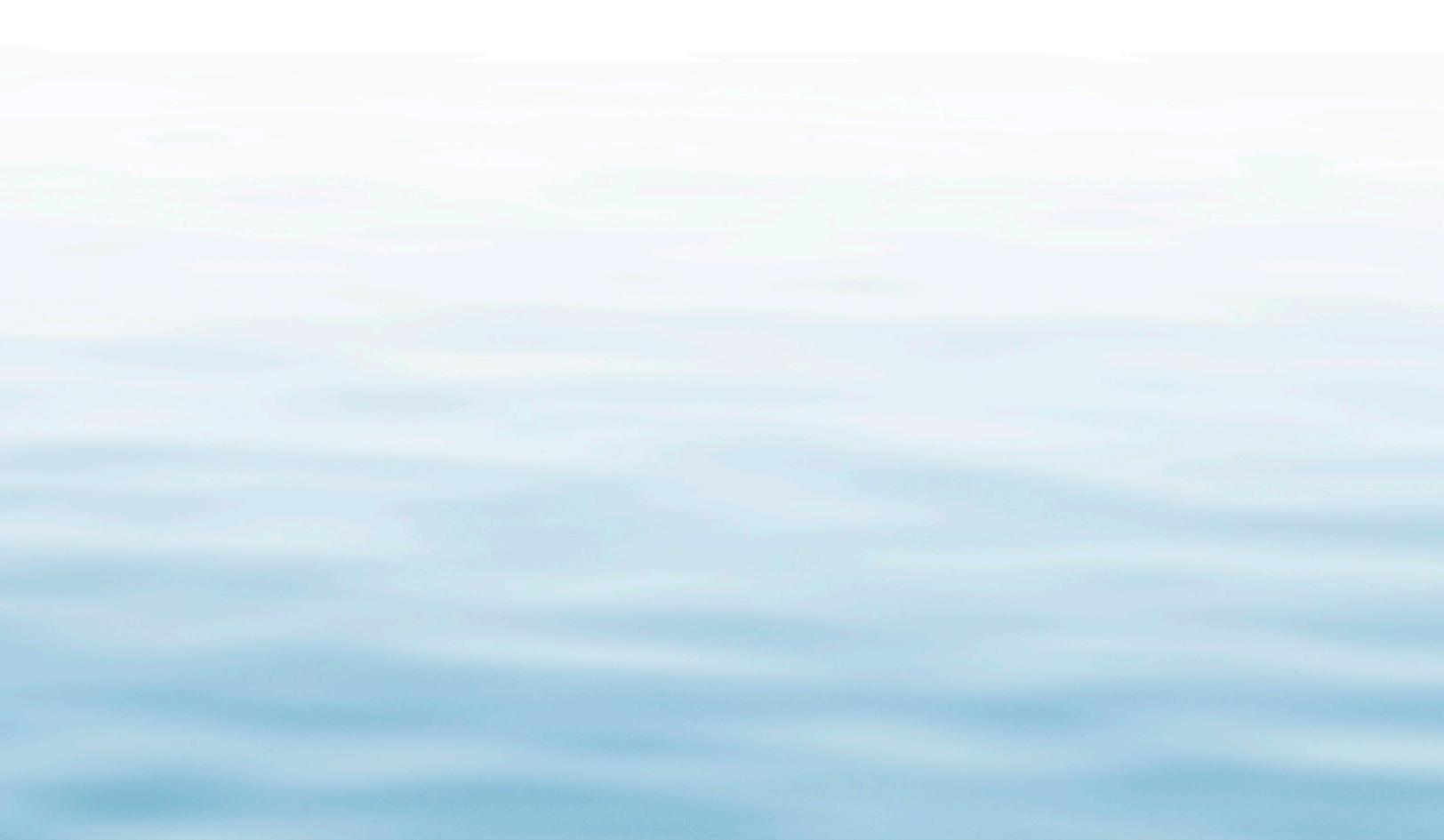
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**Download the complete 2013 San Diego IRWM Plan at:  
[www.sdirwmp.org](http://www.sdirwmp.org)**



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