

REQUEST FOR COUNCIL ACTION CITY OF SAN DIEGO	CERTIFICATE NUMBER (FOR COMPTROLLER'S USE ONLY)
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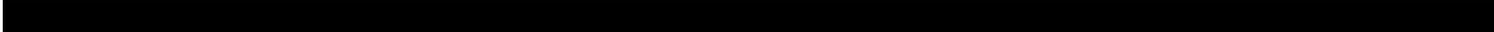
TO: CITY COUNCIL	FROM (ORIGINATING DEPARTMENT): Public Utilities - Water	DATE: 07/09/2013
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SUBJECT: UPDATE ON THE INTEGRATED REGIONAL WATER MANAGEMENT (IRWM) PLAN FOR THE SAN DIEGO REGION

PRIMARY CONTACT (NAME, PHONE): Marsi Steirer, 619-533-4112 MS 906	SECONDARY CONTACT (NAME, PHONE): Cathleen Pieroni, 619-533-6612 MS 906
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COMPLETE FOR ACCOUNTING PURPOSES

FUND	700011				
DEPT / FUNCTIONAL AREA					
ORG / COST CENTER	200014111				
OBJECT / GENERAL LEDGER ACCT					
JOB / WBS OR INTERNAL ORDER					
C.I.P./CAPITAL PROJECT No.					
AMOUNT	0.00	0.00	0.00	0.00	0.00



FUND					
DEPT / FUNCTIONAL AREA					
ORG / COST CENTER					
OBJECT / GENERAL LEDGER ACCT					
JOB / WBS OR INTERNAL ORDER					
C.I.P./CAPITAL PROJECT No.					
AMOUNT	0.00	0.00	0.00	0.00	0.00

COST SUMMARY (IF APPLICABLE):

ROUTING AND APPROVALS

CONTRIBUTORS/REVIEWERS:	APPROVING AUTHORITY	APPROVAL SIGNATURE	DATE SIGNED
Liaison Office	ORIG DEPT.	Sasaki, Ann	7/12/2013
	CFO		
	DEPUTY CHIEF		
	COO		
	CITY ATTORNEY		
	COUNCIL PRESIDENTS OFFICE		

PREPARATION OF: RESOLUTIONS ORDINANCE(S) AGREEMENT(S) DEED(S)

This is an informational item only. No action required by Committee.

STAFF RECOMMENDATIONS:
Informational Item Only.

SPECIAL CONDITIONS (REFER TO A.R. 3.20 FOR INFORMATION ON COMPLETING THIS SECTION)

COUNCIL DISTRICT(S):	Citywide
COMMUNITY AREA(S):	Citywide
ENVIRONMENTAL IMPACT:	N/A
CITY CLERK INSTRUCTIONS:	

**COUNCIL ACTION
EXECUTIVE SUMMARY SHEET
CITY OF SAN DIEGO**

DATE: 07/09/2013

ORIGINATING DEPARTMENT: Public Utilities - Water

SUBJECT: UPDATE ON THE INTEGRATED REGIONAL WATER MANAGEMENT (IRWM) PLAN FOR THE SAN DIEGO REGION

COUNCIL DISTRICT(S): Citywide

CONTACT/PHONE NUMBER: Marsi Steirer/619-533-4112 MS 906

DESCRIPTIVE SUMMARY OF ITEM:

This is an informational item regarding the 2013 San Diego IRWM Plan Update. The final draft version of the Plan will be brought to the City Council for adoption in the fall.

STAFF RECOMMENDATION:

Informational Item Only.

EXECUTIVE SUMMARY OF ITEM BACKGROUND:

In 2007, Resolution R-303237 authorized the Mayor to adopt the 2007 San Diego Integrated Regional Water Management (IRWM) Plan, the first IRWM Plan ever established for the San Diego region. The development of an IRWM Plan is required for regional eligibility for IRWM State grant funds. To date, \$34 million of IRWM grant funds have been awarded to the San Diego region and another \$10 million grant request is pending award. The 2007 IRWM Plan is written in accordance with the California Department of Water Resources' (DWR) requirements for IRWM Plans. DWR is the State agency administering the IRWM Program.

In order for the San Diego region to remain eligible for future grant funding, the 2007 San Diego IRWM Plan must be updated to incorporate DWR's new guidelines. The draft 2013 San Diego IRWM Plan was posted online at www.sdirwmp.org on June 20, 2013 for public review. The draft 2013 Plan updates outdated information in the 2007 Plan, incorporates input from stakeholders from throughout the region who attended various meetings over the course of the past year, and it satisfies all new DWR requirements. The final version of the 2013 IRWM Plan will be brought to the City Council for consideration of adoption in the Fall of 2013. This is an informational update only. For additional information, please see the attached Report to Council.

FISCAL CONSIDERATIONS:N/A

EQUAL OPPORTUNITY CONTRACTING INFORMATION (IF APPLICABLE): N/A

PREVIOUS COUNCIL and/or COMMITTEE ACTION (describe any changes made to the item from what was presented at committee):

A Memorandum of Understanding (MOU) between the three RWMG agencies was first approved by Council in 2005 (R-300517) and since has been amended twice (R-302766 and R-304719), extending the term and program funding to allow the City and other RWMG partners to

continue providing program support through 2016. In 2007, Council adopted the first San Diego IRWM Plan (R-303237).

COMMUNITY PARTICIPATION AND PUBLIC OUTREACH EFFORTS:

Recognizing the need for broad stakeholder involvement in IRWM Planning, the RWMG formed a Regional Advisory Committee (RAC) in December 2006. The RAC meets bimonthly and as needed to assist with the development of the IRWM Plan and in the prioritization of projects in funding applications. Additionally, the public is welcome to participate in RAC meetings and various workshops on specific topics. A list of the 34 RAC members is attached (Attachment 3).

Regional outreach for the 2013 San Diego IRWM Plan has been extensive, beginning with a kick-off summit on February 29, 2012 that included a key-note presentation by Mayor Sanders. Since then, 20 public workshops have occurred in addition to 20 publicly noticed workgroup meetings working on key planning study issues.

The IRWM Program maintains an electronic distribution list of more than 450 stakeholders and interested parties who receive IRWM Program updates, announcements, RAC meeting agendas and summaries, water-related workshops and seminars, and updates from DWR. Also, the IRWM Program maintains a website, which can be found at www.sdirwmp.org.

KEY STAKEHOLDERS AND PROJECTED IMPACTS:

Stakeholders in IRWM Planning are governmental or non-governmental entities that have a role in or are affected by the management of water in the San Diego Region. Many agencies are represented on the San Diego IRWM Regional Advisory Committee.

Sasaki, Ann

Originating Department

Deputy Chief/Chief Operating Officer



THE CITY OF SAN DIEGO
REPORT TO THE CITY COUNCIL

DATE ISSUED: July 31, 2013 REPORT NO: 13-067

ATTENTION: Natural Resources & Culture Committee
Agenda of

SUBJECT: Informational Update on the Integrated Regional Water Management (IRWM) Plan for the San Diego Region

REFERENCE: 1) Resolution Number R-300517, June 13, 2005, approving a Memorandum of Understanding (MOU) between the City of San Diego, County of San Diego and San Diego County Water Authority to form a Regional Water Management Group (RWMG).
2) Resolution Number R-302766, June 29, 2007, extending the term and increasing the program funding of the original MOU.
3) Resolution Number R-303237, December 18, 2007, adopting the 2007 San Diego IRWM Plan.
4) Resolution Number R- 304719, March 20, 2009, extending the term and increasing the program funding of the amended MOU.

REQUESTED ACTION: Information item only. No action is required.

SUMMARY

In 2002, the Integrated Regional Water Management (IRWM) Planning Act (SB 1672) was chaptered into law, establishing the basis by which the California Department of Water Resources (DWR) would administer the State's IRWM Program. Propositions 50 and 84 were approved by the voters in 2002 and 2006 respectively, authorizing a total of \$1.5 billion of State grant funds statewide for IRWM Planning and Programs. Additionally, Proposition 1E was approved by the voters in 2006, authorizing an additional \$300 million in grant funding for stormwater flood management projects that are identified in IRWM Plans.

Since 2005, the Public Utilities Department (Department) has participated materially and financially in the development and implementation of the San Diego IRWM Plan and Program. Public Utilities partnered with the County of San Diego (County) and the San Diego County Water Authority (Water Authority) to form a Regional Water Management Group (RWMG). The RWMG agencies are equal partners, sharing equally in the costs to administer the program. The Water Authority accepted the lead role on behalf of the RWMG and maintains the contractual relationship with the State. The RWMG identified the San Diego IRWM planning region as comprising the 11 hydrologic units (or major watersheds) in San Diego County that flow west to the coastal waters (Attachment 1).

The formation of an RWMG is required by State law in order for regions to be eligible to participate in State IRWM Program grant funding. To date, the IRWM Program has resulted in the award of State grant funding of \$34 million for water management related projects in the San Diego region. Another \$10 million award is currently being reviewed by the State and a balance of \$46 million from Proposition 84 funding will be awarded in subsequent grant rounds.

Integrated Regional Water Management focuses on collaborative efforts to manage all aspects of water resources. IRWM crosses jurisdictional, watershed, and political boundaries; involves multiple agencies, stakeholders, individuals, and groups; and attempts to address the issues and differing perspectives of all the entities involved through mutually beneficial solutions.

One of the unique features of the IRWM Program is that the State does not select projects for grant funding, the regions do. The grant funds made available by Propositions 50 and 84 have been allocated equitably among regions¹. As part of DWR's grant application process, regions must demonstrate that the suite of preferred projects selected by the Region for grant funding meet State and regional goals, as established in each region's Integrated Regional Water Management Plan.

San Diego's draft 2013 IRWM Plan does not deviate greatly from the goals and objectives established in its 2007 IRWM Plan, validating the direction originally established. The 2013 IRWM Plan continues to identify the following overarching 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 integrated water resource management.

The 2013 IRWM Plan expands on certain subjects including: sustainability and climate change; regulatory processes enhancing integrated water management; flood and storm water management; tribal nations; disadvantaged communities; and, technical analysis.

The complete draft 2013 IRWM Plan can be found at www.sdirwmp.org. The final version of the 2013 IRWM Plan will be brought to the City Council for adoption in the fall. The Water Authority's Board of Directors and the County's Board of Supervisors will similarly be asked to formally adopt the 2013 IRWM Plan. Approval of the Plan by the governing bodies of all three RWMG agencies is required by DWR for ultimate Plan approval.

FISCAL CONSIDERATIONS:

Since 2005, the Department has pledged \$600,000 plus staff resources towards the management of the IRWM Program through 2016. This funding amount has been matched by the County and the Water Authority. To date, the Department has directly received grant awards totaling \$11.5 million for City sponsored or co-sponsored projects. A list of all San Diego IRWM Projects

¹ Of the \$1.5 billion total grant funding for IRWM projects statewide, \$91 million is allocated to the San Diego planning region. The San Diego IRWM program selects projects for award; however DWR maintains final approval authority.

funded to date is attached (Attachment 2). This informational update does not include a request for consideration of a fiscal expenditure.

PREVIOUS COUNCIL and/or COMMITTEE ACTION:

A Memorandum of Understanding (MOU) between the three RWMG agencies was first approved by Council in 2005 (R-300517) and since has been amended twice (R-302766 and R-304719), extending the term and program funding to allow the City and other RWMG partners to continue providing program support through 2016. In 2007, Council adopted the first San Diego IRWM Plan (R-303237).

COMMUNITY PARTICIPATION AND PUBLIC OUTREACH EFFORTS:

Recognizing the need for broad stakeholder involvement in IRWM Planning, the RWMG formed a Regional Advisory Committee (RAC) in December 2006. The RAC meets bimonthly and as needed to assist with the development of the IRWM Plan and in the prioritization of projects in funding applications. Additionally, the public is welcome to participate in RAC meetings and various workshops on specific topics. A list of the 34 RAC members is attached (Attachment 3).

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The IRWM Program maintains an electronic distribution list of more than 450 stakeholders and interested parties who receive IRWM Program updates, announcements, RAC meeting agendas and summaries, water-related workshops and seminars, and updates from DWR. Also, the IRWM Program maintains a website, which can be found at www.sdirwmp.org.

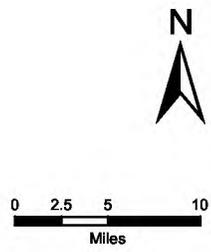
KEY STAKEHOLDERS: Stakeholders in IRWM Planning are governmental or non-governmental entities that have a role in or are affected by the management of water in the San Diego Region. Many agencies are represented on the San Diego IRWM Regional Advisory Committee.

Roger S. Bailey
Public Utilities Department

Attachments:

1. Map of IRWM Funding Area
2. San Diego IRWM Program Projects
3. List of Regional Advisory Committee Members

Figure 1-2: San Diego IRWM Region



Source: San Diego Association of Governments (SANDAG) - GIS Data Warehouse
 \\vmcsd\IRMCSD\Projects GIS\0188-003 SDIRWM Plan Update\AdminDraft\Maps\060713_JD\Fig1-2_IRWM Region 060713.mxd

In 2013, the San Diego IRWM program submitted a grant proposal to the Department of Water Resources for \$9.991 million in funds made available through the voter-approved Proposition 84 (2006). This proposal included 7 projects that would implement high priority programs to meet the San Diego Region's water management needs.

Project 1: North San Diego County Regional Recycled Water Project (NSDCRRWP) – Phase II



This project will implement the 10 priority sub-projects identified in Phase I of the NSDCRRWP to increase connectivity between recycled water facilities in North San Diego County. This effort will increase use of recycled water by allowing it to be distributed across the North County region, and will produce an estimated 6,790 AFY of recycled water. Project benefits include: reducing imported water dependency, reducing discharge of recycled water to the ocean, reducing energy consumption from pumping imported water, and providing more recycled water for future water needs. The agencies involved with this effort are the Leucadia Wastewater District, Vallecitos Water District, Vista Irrigation District, Rincon del Diablo Municipal Water District, Olivenhain Municipal Water District, Santa Fe Irrigation District, Carlsbad Municipal Water District, the City of Escondido, the City of Oceanside, and the San Elijo Joint Powers Authority.

Project 2: Turf Replacement and Agricultural Irrigation Efficiency Program

This project creates a fund to improve irrigation efficiency and reduce water use in both agricultural areas and urban landscapes. Through rebate and incentive programs administered by the San Diego County Water Authority and the City of San Diego Public Utilities Department, landowners will be encouraged to implement turf replacement, and retrofit on-site potable water irrigation systems used on agricultural lands to use recycled water. Additionally, this project will fund an outreach effort by the City of San Diego Transportation & Storm Water Department emphasizing dry weather runoff prevention and water quality protection achieved through improvements in irrigation efficiency.

Project 3: Rural Disadvantaged Community (DAC) Partnership Program – Phase II

This program will fund critical water supply and water quality projects in rural DACs in San Diego County. Projects will be chosen based on a project selection criteria developed by the Rural Community Assistance Corporation, the organization heading the Rural DAC Partnership Project. The communities that will be selected are low income, and all projects will have a public health benefit, and address critical water concerns of quality, reliability, and quantity. This program may also fund tribal projects. Examples of the types of projects that may be selected include well replacement, storage tank construction or replacement, or conversion from well water to supplies from a local water agency. Program partners include the San Diego County Water Authority, Indian Health Services, California Department of Public Health, United States Department of Agriculture, United States Environmental Protection Agency, Rural Community Assistance Partnership, City of San Diego, County of San Diego, and the United States Department of Health and Human Services.



Project 4: Failsafe Potable Reuse at the Advanced Water Purification Demonstration Facility



This project is designed to develop and demonstrate a safe and reliable method of designing and implementing potable reuse treatment methods. Through the four tasks in this project, the WaterReuse Research Foundation, the City of San Diego, the Padre Dam Municipal Water District, and the Helix Water District will develop expert panel guidelines for requirements for potable reuse without an environmental buffer, develop a test plan for a failsafe potable reuse system, perform testing to evaluate, monitor, and demonstrate the failsafe concepts developed in the test plan, and provide a complete strategy for failsafe potable reuse. In the process, this project will also test alternative disinfection and oxidation processes, and assess treatment alternatives, monitoring, system

responses, and system reliability. Throughout the project, expert input and information gained through the testing process will be incorporated into the final strategy for failsafe potable reuse.

Project 5: Sustaining Healthy Tributaries to the Upper San Diego River and Protecting Local Water Supplies

This project will protect Boulder Creek, within the San Diego River Watershed, from numerous threats such as sedimentation, temperature increase, and nutrient loading. Given the high quality of Boulder Creek, data collected along the creek will be used as a baseline for other streams in the San Diego River Watershed. Additionally, this project has a goal to purchase and restore up to 3,000 feet of stream currently damaged by private development and wildlife. Utilizing the partnerships formed in developing this project, increased monitoring of creeks draining into the El Capitan Reservoir will occur, and educational programs will be implemented to engage private land owners and reduce pollutant loading, erosion, and sedimentation. Further, outreach specifically geared to three tribes will enable them to survey and monitor water quality on tribal lands. This project is important for protecting the largest local water supply in the region, the El Capitan Reservoir. By protecting and improving water quality upstream of the reservoir, water treatment costs are reduced and the reservoir will better maintain its capacity, reducing the need for imported water. Organizations involved in this integrated effort include the San Diego River Park Foundation, Kumeyaay Diegueno Land Conservancy, San Diego River Conservancy, San Diego State University, Helix Water District, San Diego Stream Team, and San Diego Fly Fishers.



Project 6: Chollas Creek Integration Project – Phase II



This project is part of a larger phased project, which will utilize knowledge gained from the initial project phase to implement restoration activities along key portions of Chollas Creek, which runs through Southeastern San Diego, a large disadvantaged community. This phase of the project is comprised of three parts: Northwest Village Creek Restoration; Invasive Species Removal and Restoration; and Water Pollution Source Tracking, Citizen Monitoring, Pollution/Conservation Education, and Community Engagement. The Northwest Village Creek Restoration improves water quality and reduces flood damage by realigning the creek, installing retaining walls and drop structures, widening culverts and installing headwalls, and removing non-native plants while restoring native

vegetation. This will reduce erosion, slow creek flow, and improve water quality, leading to a healthier creek system. The Invasive Species Removal and Restoration segment of the project uses data from Phase I to select restoration sites prioritizing water quality, recreation, wildlife conservation, and stakeholder benefits. Across the five sites selected, a total of six acres of invasive vegetation will be removed and restored to control erosion and create habitat. The final component of this project engages stakeholders through resident-led water quality monitoring and targeted educational outreach. Engaging stakeholders through local citizen science will help further protect the restoration efforts of this project. This project is headed by the Jacobs Center for Neighborhood Innovation, in partnership with Groundwork San Diego, San Diego Coastkeeper, University of California Cooperative Extension, City of San Diego, and Jackie Robinson YMCA.

Project 7: Implementing Nutrient Management in the Santa Margarita River Watershed – Phase II

Continuing work done in Phase I, this project will help establish appropriate water quality objectives for the Santa Margarita River and Estuary. This project has five goals: maximize community involvement, collect feedback from stakeholders to reach consensus on water quality objectives, fill data gaps necessary to establish water quality objectives, develop nutrient water quality objectives for the Santa Margarita River Estuary, and develop nutrient water quality objectives for listed streams in the Santa Margarita River Watershed. This project will improve protection and restoration of the watershed, conservation of water, and control of eutrophication. It will improve science-based management of water resources, and provide a template for similar efforts in the Region. Additionally, it increases stakeholder involvement in the watershed protection process, fostering a sense of stewardship and consensus



that will allow greater progress on future watershed management goals. This project is a partnership between the County of San Diego and the Santa Margarita Watershed Nutrient Initiative – Stakeholder Group. The group includes members from Riverside County Flood Control & Conservation District, County of Riverside, US Marine Corps Camp Pendleton's Office of Environmental Security and Office of Water, Rancho California Water District, US Bureau of Reclamation, Fallbrook Public Utilities District, Caltrans, US Navy Space and Naval Warfare Systems Center Pacific, San Diego County Farm Bureau, Upper Santa Margarita Irrigated Lands, Trout Unlimited, Sierra Club, County of San Diego, and Southern California Coastal Water Research Project.

In 2011, the San Diego IRWM program submitted a grant proposal to the Department of Water Resources for \$8 million (of \$71 million available to the San Diego IRWM region) in Proposition 84 funds. This proposal included 11 projects that would implement four high priority programs to meet the Region's water management needs.

Water Supply/Recycled Water Program

Project 1: Sustainable Landscapes Program. This project is designed to reduce water waste and pollutant infiltration into local waterways through development and implementation of landscape standards and specifications generally consistent with the California State Model Water Efficient Landscape Ordinance and the San Diego Regional Board MS4 Permit. This project is being developed in partnership with San Diego County Water Authority, City of San Diego, County of San Diego, California American Water, and non-profit partners such as California Center for Sustainable Energy, Surfrider Foundation, and Association of Compost Producers. The *Sustainable Landscapes Program* relies on the integration of landscape standards and specifications, education and training, incentives, outreach, and technical assistance to achieve project goals.



Project 2: North San Diego County Regional Recycled Water Project. This project is an effort by North San Diego County water and wastewater agencies to regionalize recycled water systems by identifying new agency interconnections, seasonal storage opportunities, and indirect potable water use that will maximize supplies, reduce wastewater discharges to ocean, reduce energy consumption due to diminished delivery of imported water, and allow recycled water to play an even more significant role in meeting future water needs. This project will involve support from many partners including Olivenhain Municipal Water District, Carlsbad Municipal Water District, Vallecitos Water District, Santa Fe Irrigation District, City of Oceanside, Leucadia Water District, City of Vista/Buena Sanitation District, San Elijo Joint Powers Authority, City of Escondido, and Rincon del Diablo Municipal Water District.

Project 3: North San Diego County Cooperative Demineralization Project. In Southern California wastewater, brackish water, and urban runoff are high in total dissolved solids (TDS) and other impurities that require advanced treatment to allow beneficial reuse. The *North San Diego County Cooperative Demineralization Project* is focused on developing new local water supplies and managing water quality issues by constructing advanced water treatment facilities at the San Elijo Water Reclamation Facility to mitigate high TDS sources, increase beneficial reuse, and study the feasibility of brackish to potable water desalination in North San Diego County.

Project 4: Rural Disadvantaged Community (DAC) Partnership Project. This project will provide funding to address inadequate water supply and water quality affecting rural DACs, including tribal communities. The project will reduce potential for high public health risks in water and/or wastewater systems and will promote environmental justice in rural communities by providing outreach to rural DACs for available infrastructure projects. The Rural Community Assistance Corporation (RCAC) will manage the grant funds and lead a representative group of stakeholders and agencies, including a representative of the San Diego IRWM program, to solicit and select rural DACs for funding of critical infrastructure improvement projects.



Water Quality/Stormwater Program



Project 5: Lake Hodges Water Quality and Quagga Mitigation Measures. This project is intended to address two issues centered within the San Dieguito Hydrologic Unit. The first is improving low water quality within Lake Hodges. The second is mitigating against the potential long term effects of quagga mussels on Lake Hodges, San Dieguito Reservoir, Olivenhain Reservoir, and attached facilities. This project is sponsored by the San Diego County Water Authority, but is complementary to the ongoing effort by the San Dieguito Water District, Santa Fe Irrigation District, City of San Diego, San Dieguito River Valley Conservancy, and the San Dieguito Watershed Council to address long term water quality and environmental issues within the Lake Hodges watershed.

Project 6: Implementing Nutrient Management in the Santa Margarita River Watershed. This project aims to establish nutrient water quality objectives (WQOs) for the Santa Margarita River estuary (Phase I) and ultimately the entire Santa Margarita River watershed (Phase II) that will lead to the implementation of nutrient reduction and water conservation practices in the watershed. The project consists of three major activities: 1) form and facilitate discussions among a Santa Margarita River watershed stakeholder group to guide project activities, 2) conduct monitoring and special studies to address data gaps identified by stakeholders to achieve project objectives, and 3) develop nutrient WQOs for the Santa Margarita River estuary. This project will also involve coordination with an adjacent IRWM region, the Upper Santa Margarita IRWM region.



Project 7: Bannock Avenue Neighborhood Streetscape Enhancements for Tecolote Creek Watershed Protection. The goal of the *Bannock Avenue Neighborhood Streetscape Enhancements for Tecolote Creek Watershed Protection* project is to reduce the pollutant load and volume of runoff entering the storm drain system in the Tecolote Creek Watershed. The load reduction goal will be achieved by diverting stormwater from the street to bioretention and treatment planters through curb cutouts. Enhanced streets will infiltrate storm flows through pervious pavement, which will reduce storm flows. These goals will also be achieved by diverting flows through a trash segregation unit and a series of AbTech (Bacterial Treatment System) units within the watershed.



Project 8: Pilot Concrete Channel Infiltration Project. The *Pilot Concrete Channel Infiltration Project* will convert a portion of the concrete channel in Woodglen Vista Creek (and other channels as budget/logistics permit) to a more porous base, facilitating infiltration of dry weather flows without compromising flood control capacity. This effort will assist the City of Santee and other MS4 Copermittees in the attainment of bacteria TMDL waste loading allocations.

Project 9: San Diego Regional Water Quality Assessment and Outreach Project. This project continues critical work conducted by San Diego Coastkeeper through 2011 as part of the Proposition 50 funding cycle. The project will engage community stakeholders to collect and analyze surface water samples in eight to nine watersheds throughout San Diego County and conduct trash removal in these areas. Samples will be analyzed for physical, chemical, bacterial, dissolved metals and nutrient constituents, as well as toxicity and bioassessment indicators. Resultant water quality data will be publically accessible to support public involvement in water resource conservation and stewardship of watershed function and health.

Natural Resources and Watersheds Program

Project 10: Chollas Creek Integration Project. The purpose of the *Chollas Creek Integration Project* is to gather and generate scientific data and stakeholder input to form an integrated planning process that will update the Chollas Creek Enhancement Program (City of San Diego 2002) and establish implementation strategies. Further, this project will restore native habitat and reduce flooding hazards within Chollas Creek (Section 2A), which will provide baseline data for future water quality and habitat improvements. The project improves and maintains Chollas Creek as a natural urban drainage system that serves as a major conduit for stormwater runoff in the disadvantaged Encanto community.



Data Management Program



Project 11: Regional Water Data Management Program. The goal of the *Regional Water Data Management Program* is to provide a snapshot of current data management efforts and prioritize data needs and lay them out in a basic design parameters recommendations document for the future development of a regional, web-based system for sharing, disseminating and supporting the analysis of water management data and information.

In 2007, the San Diego IRWM program submitted a grant proposal to the Department of Water Resources for Proposition 50 funds. This proposal included 19 projects that would implement four high priority programs to meet the Region's water management needs.

Conservation Program

Project 1: Implementation of Integrated Landscape and Agricultural Efficiency Program. This project aims to increase water efficiency in urban landscapes and agricultural practices, and improve water quality by reducing runoff associated with excessive irrigation. SDCWA will conduct agricultural audits, outreach and education, and retrofits to improve water efficiency without compromising crops or agricultural production. The program has the potential to achieve over 3,600 AFY of water savings.



Project 2: Irrigation Hardware Giveaway and Cash for Plants Project. This project offers customized commercial landscape and residential surveys along with state-of-the-art efficient irrigation hardware, free of charge to customers in the City of San Diego. The project is expected to conserve approximately 91 AFY of water and reduce over-watering, thereby conserving potable water and reducing pollutant-laden dry weather runoff flows.

Project 3: Over-Irrigation Runoff/Bacteria Reduction Project. This project aims to protect water quality by reducing irrigation runoff through improved water use efficiency at eight pilot sites. The project will demonstrate the link between over-irrigation reductions and reductions in pollutant loads. This will be accomplished through water use assessment, flow monitoring and water quality monitoring at key locations in the storm drain system. This project will conserve an estimated 353 AFY of water.

Water Recycling Program

Project 4: Santee Water Reclamation Facility (WRF) Expansion Project. This project includes design and construction of facilities necessary to expand the Title 22 treatment capacity of the Santee WRF from 2 MGD to 4 MGD. This project is part of a coordinated effort to enhance local supplies through an expansion of recycled water production, coupled with increased groundwater recharge using recycled water.

Project 5: Recycled Water Retrofit Assistance Program. This project will provide direct financial assistance to facilitate conversion from potable to recycled water for landscape irrigation and other uses. The project will target approximately 20-40 sites throughout the SDCWA's service area which will allow approximately 2,000 AFY of additional recycled water to be used. The ultimate goal is to promote the development and use of recycled water capable of supplying 5% of the Region's water demand by 2011.



Project 6: City of San Diego Recycled Water Distribution System Expansion, Parklands Retrofit, and Indirect Potable Reuse/Reservoir Augmentation Project. This project has three parts, which together assist the City of San Diego in achieving its target of beneficially reusing 50% of wastewater flows from its North City Water Reclamation Plan. This project includes a million gallon per day water purification demonstration project that will provide data for the community to decide whether or not to proceed with a full-scale potable reuse project in 2013. The project also includes expansion of the existing recycled water distribution area, and adding recycled water connections to irrigate parks and public spaces.

Local Supply Protection and Development Program

Project 7: San Vicente Reservoir Source Water Protection through Watershed Property Acquisition and Restoration Project. This project will acquire lands from willing sellers around San Vicente Reservoir for the purpose of creating an expanded drinking source water protection buffer. San Vicente Reservoir is being enlarged to nearly 200,000 AF as part of the SDCWA's Emergency Storage Project. The buffer will provide high quality habitat and protect associated sensitive species.



Project 8: El Capitan Reservoir Watershed Acquisition and Restoration Program.

This project will acquire and restore approximately 120 acres of targeted vacant undeveloped lands upstream and in the immediate vicinity of the El Capitan Reservoir. The project will protect source water quality at the reservoir by reducing the potential for non-point source pollution, removing trash and debris from the properties, planting 800 trees, maintaining a biologically significant wildlife corridor, and preserving habitat.

Project 9: Northern San Diego County Invasive Non-Native Species Control Program. This project will aim to eradicate 374 acres of targeted invasive non-native plant species throughout Northern San Diego County. It would protect and enhance habitat; conserve water resources by increasing available groundwater; protect water delivery and storage systems by reducing flood damage; improve water quality by reducing erosion and normalizing sediment discharge processes; and reduce fire risk.

Project 10: Santa Margarita Conjunctive Use Project. This project provides for enhanced recharge and recovery from the groundwater basin to provide a water supply for both Camp Pendleton and Fallbrook as resolution of a long-standing water rights dispute. The project will provide approximately 6,000 AFY of new local supply from the Santa Margarita River by conjunctively managing the groundwater basin. Additionally, 1,380 acres of sensitive habitat will be preserved along the river as a result of this project.



Project 11: Carlsbad Desalination Project Local Conveyance. This project will provide 56,000 AFY of new water supply through the design and construction of pipelines and facilities to serve local desalinated water from the Carlsbad Desalination Project to SDGWA member agencies. The project provides a secure and reliable water supply for 30 years with two possible 30-year extensions.

Project 12: San Diego Region Four Reservoir Intertie Project Feasibility Study. This project will provide an initial design and work plan for a conveyance system that will increase the capability to manage and store imported water in four existing reservoirs. The project would create an enhanced and integrated reservoir system to more efficiently use existing storage, increase water supply reliability, more effectively use imported water aqueducts, and increase accessibility to ~100,000 AF of surface storage.

Project 13: South San Diego County Water Supply Strategy. This project will investigate the sustainable use of the apparently vast groundwater resources of the San Diego Formation (SDF), a natural underground aquifer that underlies the central and south San Diego Bay area. Reliable assessments currently estimate that the SDF holds upward of 1,000,000 AF of water. This extensive local water resource has the potential to significantly supplement water supplies and reduce dependence on imported water through its efficient development and use.

Project 14 was not completed and its grant award was redistributed among several other projects in the package.

Education and Outreach Program

Project 15: San Diego Regional Pollution Prevention Project. This project will remove trash and debris and assess the water quality within San Diego County through citizen monitoring. It seeks to establish a baseline of trash and water quality data that will be transferable to the local communities that live in the Region through two web-based, publicly accessible data portals. The project will teach a minimum of 300 members of the community how to access publicly available water quality data and to analyze and interpret these data to identify water quality impacts on a watershed level.



Project 16: Biofiltration Wetland Creation and Education Program. This project will develop a biofiltration wetland within the Safari Park (San Diego Wild Animal Park), which will be used to improve water quality through natural biological filtration and enhance wetlands habitat. The constructed wetlands will act as biological filters to remove high biological oxygen demand, total suspended solids, organic nitrogen, and nitrates. The wetlands will also be used to educate visitors about water conservation and the importance of conserving wetlands.

Project 17: San Dieguito Watershed Management Plan Implementation – Lake Hodges Natural Treatment System Conceptual Design. The Lake Hodges Natural Treatment System Conceptual Design project will provide initial design and a work plan for reduction of pollution loads to the City of San Diego's Lake Hodges Reservoir, which is a water supply source for north county communities and planned to be intertied to the regional water supply system. Natural treatment systems are an established cost-effective and environmentally sound way for reducing pollutant loading.



Project 18: City of San Diego Green Mall Porous Paving and Infiltration. This project will retrofit storm water systems, allowing urban runoff and pollutants carried with it to infiltrate into the ground instead of discharging directly to the storm drain system and adjacent waterbodies. Existing asphalt street paving will be replaced with pervious concrete. Existing curbs and gutters will be moved into the street, and bio-retention systems of crushed rock and trees will be installed in the created space. The project will also include water quality monitoring and educational outreach.

Project 19: County of San Diego Chollas Creek Runoff Reduction and Groundwater Recharge Project. This project will demonstrate practical implementation of a range of low impact development (LID) practices to reduce runoff from three County facilities. The project will include demonstrations of porous pavements over stone reservoirs, capture/infiltration technologies and landscape elements such as rain gardens and swales.



RAC 2.0 Member Composition

* = recommended for 4-year terms

** = already have 2-year terms

***= RWMG members (no terms)

****=Non-Voting members (no terms)

Regional Water Management Group (3)

1. City of San Diego – Marsi Steirer***
2. County of San Diego – Kathy Flannery***
3. San Diego County Water Authority – Ken Weinberg***

Water Supply (5)

Agencies and entities tasked with supplying water to homes, businesses, and agriculture

1. Retail (North County- Inland) – Bill Hunter/SFID**
2. Retail (North County- Coastal) –Cari Dale/Oceanside**
3. Retail (East County) – Mark Umphres/Helix**
4. Retail (South County) – Jennifer Sabine/Sweetwater*
5. Retail (At Large) – Kim Thorner/Olivenhain*

Water Quality (6)

Agencies and entities tasked with managing storm runoff, both quantity and quality, in man-made conveyances and/or collecting and disposing of wastewater, including water recycling

1. Stormwater Management (North County) – Crystal Najera/City of Encinitas*
2. Stormwater Management (South/East County) –Kirk Ammerman/City of Chula Vista**
3. Water Quality (NGO) – Travis Pritchard/San Diego CoastKeeper **
4. Water Quality (NGO) – Leigh Johnson/University of California Cooperative Extension*
5. Wastewater/Recycled Water (Metro JPA) – Bob Kennedy/Otay Water District*
6. Wastewater/Recycled Water (Non-Metro JPA) – Mike Thornton/San Elijo JPA**

Natural Resources and Watersheds (5)

Agencies and entities tasked with preserving, enhancing, and managing natural resources and watersheds

1. Water Conservation (NGO) – Patrick Crais/California Landscape Contractors Association*
2. Protection and Restoration (NGO) – Rob Hutsel/San Diego River Park Foundation **
3. Protection and Restoration (NGO) – Ronald Wooten/Buena Vista Lagoon Foundation*
4. Recreation – Al Lau/Padre Dam Municipal Water District*
5. Coastal Ecosystems (Bays, Estuaries, Lagoons) – Kimberly O’Connell/UCSD Clean Water Utility*

DAC/Environmental Justice (2)

Agencies and entities who represent disadvantaged communities and/or environmental justice concerns

1. Urban DAC – Leslie Reynolds/Groundworks San Diego- Chollas Creek*

2. Rural DAC – Dave Harvey/Rural Community Assistance Corporation**

Other Members (7)

Other agencies and entities with interest in and/or impact on water resource management

1. Flood Management –Dennis Bowling/Floodplain Management Association**
2. Business Community – Anne Bamford/ Industrial Environmental Association **
3. Agriculture – Eric Larson/San Diego County Farm Bureau *
4. Tribal – open
5. Land Use Planning – Katie Levy/San Diego Association of Governments*
6. At Large* - Linda Floumoy/SDSU Center for Regional Sustainability**
7. At Large* -- Robyn Badger/Zoological Society of San Diego*

** For At Large seats, consideration should be given but not limited to the following criteria: academia, climate change, energy/water nexus, solid waste/water nexus, sustainability.*

Total voting members: 28

Non-Voting Members (6)

State, federal, and regional agencies who are interested parties

1. Regional Water Quality Control Board – Laurie Walsh****
2. U.S. Bureau of Reclamation- Jack Simes ****
3. Military Community- John Simpson/USMC Camp Pendleton ****
4. Tri-County FACC (Upper Santa Margarita RWMG)- Denise Landstedt/Rancho California Water District ****
5. Tri-County FACC (South Orange County RWMG)- Marilyn Thoms/ County of Orange****
6. State Coastal Conservancy - open