



2013 San Diego Integrated Regional Water Management Plan

11 Implementation

This chapter addresses requirements set forth in the Impact and Benefit Standard, the Plan Performance and Monitoring Standard, and the Finance Standard in the 2012 IRWM Program Guidelines (DWR 2012).

11.1 Overview

The intent of this chapter is to document various aspects associated with implementation of the 2013 San Diego IRWM Plan. Specifically, this chapter includes information regarding:

- Actions that can be taken to implement priorities established in the planning studies associated with the 2013 IRWM Plan.
- Potential impacts and benefits that may result from implementation of the 2013 IRWM Plan, including impacts and benefits within the Region, between regions (inter-regional), and those directly affecting disadvantaged communities (DACs), environmental justice-related concerns, and Native American Tribal communities.
- Performance measures and monitoring that will document progress that is being made towards meeting the objectives set forth in the 2013 IRWM Plan.
- Actions that will be taken to ensure that the projects listed in the 2013 IRWM Plan are being implemented.
- Necessary monitoring to ensure that the projects included in the 2013 IRWM Plan comply with applicable rules, laws, and permit requirements.
- Financing information that demonstrates how the 2013 IRWM Plan will be adequately funded, and therefore implemented.

11.2 Implementation Action Plan

The following section provides detailed information regarding implementation actions that may be taken for various priorities identified in the 2013 IRWM Plan. Implementation of these priorities will serve as a benchmark against which to assess how well the 2013 IRWM Plan has been implemented. As discussed in detail in Section 11.5, the implementation status of these priorities will be considered in the triennial review completed for the IRWM Program.

11.2.1 Implementation Action Plans for Regional Priorities

As described in detail in *Chapter 2, Vision and Objectives*, the workgroup that was convened to evaluate the vision, mission, goals, and objectives for the 2013 IRWM Plan (the Priorities and Metrics Workgroup) did not establish short-term and long-term priorities for the 2013 IRWM Plan. Instead, updated priorities were established based on technical work (planning studies) completed for the 2013 IRWM Plan. Each planning study conducted as part of the 2013 IRWM Plan (refer to *Chapter 7, Regional Coordination*) – the Regulatory Workgroup Report, the Land Use and Water

Management Planning Study, the Climate Change Planning Study, and the Integrated Flood Management Planning Study – include specific recommendations that were determined by and vetted through the stakeholder groups convened for each planning study.

The planning study recommendations, while aimed at addressing priority action items specific to each study, can also be considered priorities for the IRWM Program itself because they can be implemented through the IRWM Program. The recommendations may also be implemented through the IRWM projects included in and potentially financed through the IRWM Program. A complete list of the recommendations from the planning studies was presented to the Regional Advisory Committee (RAC) at a joint RAC Meeting/Public Workshop held on April 3, 2013. During this meeting, RAC members and members of the public were asked to review the list of planning study recommendations and take one month (April 10 to May 10, 2013) to identify which actions they would be willing to either 1) take responsibility as lead organization for accomplishing the task or 2) provide support and involvement. RAC members and members of the public were also asked to obtain and confirm their commitment to work towards accomplishing the selected tasks. For each action, RAC members or members of the public are expected to meet the following commitments:

1. Actions should be completed in approximately three years and a final presentation will be made to the RAC;
2. Actions will require development of a work plan and quarterly reporting, using forms that will be made available on the San Diego IRWM website; and
3. A report will be made to the RAC on the status of each action approximately 12-16 months after commitments have been finalized through adoption of the 2013 IRWM Plan.

A final list of recommendations to include in the 2013 IRWM Plan was presented to the RAC at the June 5, 2013 meeting. Table 11-1 provides an overview of the recommendations for the planning studies, the party or parties that have committed to implementing the recommendation(s), and the specific action that will be implemented (specific party commitment). Please note, that as indicated in Table 11-1, some of the commitments made by interested parties are not the same as the full recommendation action included in the planning studies. The specific party commitments have been included as the short-term priorities for the 2013 IRWM Plan, and are expected to be completed or implemented prior to a future update to the IRWM Plan or to have made substantial progress towards completion or implementation. Further, Table 11-2 includes a list of the planning study recommendations that have not yet received implementation commitments. While the recommendations without commitments are not included in the 2013 IRWM Plan as short-term priorities, they are considered regional priorities, and the IRWM project selection process encourages stakeholders and other interested parties to implement these items in the future (refer to *Chapter 9, Project Evaluation and Prioritization*).

Implementation Actions for Short-Term Priorities Included in the 2007 IRWM Plan

The 2007 IRWM Plan identified seven short-term priorities to address immediate implementation needs. Due to the substantial progress made toward meeting each of these priorities, as well as priority shifts that have occurred since 2007, these priorities are being replaced with those outlined below in Table 11-1.

Short-Term Priority	Progress Toward Meeting Each Priority
1. Implement priority projects and programs that support the Region's IRWM goals and objectives.	<ul style="list-style-type: none"> Project and program selection for IRWM-related funding programs (Proposition 50 and Proposition 84) has emphasized support for San Diego's IRWM goals and objectives. Each IRWM grant proposal submitted to DWR has included projects that meet multiple IRWM Plan objectives.
2. Formally establish a long-term institutional structure to guide the ongoing development and implementation of the San Diego IRWM Plan.	<ul style="list-style-type: none"> The RWMG agencies adopted a revised MOU in 2011 that clarified their roles and responsibilities through 2016. In 2009 the RAC indicated support for the existing institutional structure, which had been in place since before adoption of the 2007 IRWM Plan. In 2012 a workgroup of the RAC (the Governance and Financing Workgroup) was convened to discuss long-term governance of the IRWM Program. As discussed in <i>Chapter 6, Governance and Stakeholder Involvement</i>, the workgroup and the RAC re-indicated their support for the existing institutional structure.
3. Implement and update (as needed) a Public Outreach Plan that ensures key stakeholders and affected parties are informed and engaged in IRWM planning and implementation.	<ul style="list-style-type: none"> The 2007 IRWM Plan included a Public Outreach and Disadvantaged & Environmental Justice Community Involvement Plan designed to ensure key stakeholders and others are involved in IRWM activities. The plan was updated in 2009, and again in 2012. Since 2007, the RWMG and RAC have continued to identify stakeholders as necessary additions to the IRWM planning process. Original RAC members were selected to represent a variety of water-related interests in the region. New RAC members invited to participate in 2013 represent water-related interests across the Region as defined by the Governance and Financing Workgroup.
4. Establish a regional, web-based system for sharing, disseminating, and supporting the analysis of water management data and information.	<ul style="list-style-type: none"> The RWMG has developed a website dedicated to IRWM planning for the San Diego region (www.sdirwmp.org). The website contains detailed information about how one may get involved with the San Diego IRWM planning process. The Region's Proposition 84-Round 1 IRWM Implementation Grant award included funding for a Regional Data Management Program, and the County is moving forward with implementing this project.
5. Complete a needs assessment and develop recommendations for addressing existing deficiencies in the technical and scientific foundation of San Diego Basin Plan beneficial uses and water quality objectives.	<ul style="list-style-type: none"> A workgroup (the Regulatory Workgroup) was convened as part of the 2013 IRWM Plan process to develop a report on collaboration with the San Diego Regional Board (refer to <i>Chapter 7, Regional Coordination</i> for more information). The workgroup explored possibilities for furthering collaboration with the Regional Board, including collaborative efforts that could increase the technical and scientific foundation of regulatory requirements.
6. Complete an updated assessment of local water management plans to ensure effective and upfront input from these plans during all phases of IRWM planning and implementation. Where planning deficiencies are identified, address these deficiencies as part of the 2013 IRWM Plan process.	<ul style="list-style-type: none"> A planning study of water management and land use planning was conducted in 2012 as part of the 2013 IRWM Plan (refer to <i>Chapter 7, Regional Coordination</i> for more information). This planning study included an updated assessment of water management plans in the Region, as well as acknowledgement and resolution of any inconsistencies with the IRWM Plan and local land use plans.
7. Revise the IRWM Plan and publish the Second Edition of the San Diego IRWM Plan.	<ul style="list-style-type: none"> The 2007 IRWM Plan is currently being updated, and this priority will be considered complete once the 2013 IRWM Plan has been adopted (anticipated in Fall of 2013).

Table 11-1: Implementation Commitments from Planning Study Recommendations

Planning Study	Objective	#	Recommendation Action from Planning Study	Responsible Party	Party Commitment
Regulatory Workgroup Report¹	Improve communication between IRWM Program and the San Diego Regional Water Quality Control Board (Regional Board)	R-1	Assign IRWM liaison to Regional Board	City Public Utilities	City will assign Senior Staff to be IRWM liaison to Regional Board
		R-2	Provide periodic IRWM progress reports to Regional Board	City Public Utilities	City's commitment will involve assigning existing staff to: 1) attend monthly meetings of the Water Board, 2) review agendas and proposed Board Actions ahead of each meeting, 3) report out at RAC meetings on Water Board actions, and 4) once or twice per year make a presentation to the Water Board about the status of the San Diego IRWM Program.
	Ensure consistency between IRWM Plan and Regional Board Practical Vision	R-3	Monitor development of Regional Board Practical Vision ²	RWMG	Same as Recommendation Action
		R-4	Incorporate priority themes from Regional Board Practical Vision into IRWM Plan	RWMG	Same as Recommendation Action
		R-5	Coordinate with Regional Board for consistency in IRWM Plan and Practical Vision	RWMG	Same as Recommendation Action
	Identify science-based Basin Plan modifications that may warrant higher priority than provided in 2011 triennial review	R-6	Convene IRWM stakeholders to (1) review Basin Plan review priorities, resources, and schedules, (2) identify additional priorities of interest to IRWM stakeholders, (3) determine IRWM stakeholder interest in supporting Regional Board to address additional priorities	RWMG IEA- Support ³	RWMG will obtain input from IRWM Stakeholders regarding the three actions identified in the Recommendation Action
		R-7	Convene workshop with Regional Board and IRWM stakeholders to discuss priorities identified by IRWM stakeholders	RWMG	Same as Recommendation Action
	Identify research, data collection, data management, data assessment, and resources required to support Regional Board's process for science-based evaluation of the prioritized Basin Plan objectives	R-8	Convene workshop with Regional Board and IRWM stakeholders to discuss research, data collection, management and assessment, and resources required to address objectives that warrant scientific update or development of site-specific objectives	RWMG IEA- Support	RWMG will provide a forum for the Regional Board and IRWM stakeholders to convene, and will share outcomes with the RAC

¹ Recommendations not prioritized

² The Regional Water Quality Control Board Draft Practical Vision is described in *Chapter 7, Regional Coordination*

³ IEA is an abbreviation for the Industrial Environmental Association, a non-governmental organization

Table 11-1: Implementation Commitments from Planning Study Recommendations

Planning Study	Objective	#	Recommendation Action from Planning Study	Responsible Party	Party Commitment
Regulatory Workgroup Report⁴	Identify existing 303(d) listings that may warrant reevaluation or reclassification	R-9	Convene IRWM stakeholders to (1) review 303(d) listings of the Region's reservoirs, (2) identify 303(d) listings of reservoirs that may warrant reevaluation or reclassification, (3) determine IRWM interest in supporting Regional Board reassessment or reclassification of 303(d) reservoir listings of concern	Water Authority IEA- Support ⁵	Water Authority will obtain input from IRWM Stakeholders regarding the three actions identified in the Recommendation Action
		R-10	Convene workshop with Regional Board and IRWM stakeholders to discuss 303(d) waters that may warrant reevaluation or reclassification to better support IRWM goals and Practical Vision priorities	RWMG	RWMG will provide a forum for the Regional Board and IRWM stakeholders to convene, and will share outcomes with the RAC
	Identify projects or actions that could improve water quality of 303(d) listed waters and attain water quality objectives	R-11	Convene workshop with Regional Board and IRWM stakeholders to identify (1) projects that could improve water quality of 303(d) waters and (2) alternate means to traditional TMDLS to achieve water quality objectives	RWMG City Stormwater - Support	RWMG will provide a forum for the Regional Board and IRWM stakeholders to convene, and will share outcomes with the RAC
	Identify research, data collection, data management, data assessment, and resources required to support the Regional Board's process for science-based evaluation of the prioritized 303(d) listings	R-12	Convene workshop with Regional Board and IRWM stakeholders to discuss data collection, management, and assessment, and required resources to reevaluate or reclassify 303(d) listings	RWMG City Stormwater - Support	If needed, the RWMG will convene a workshop to discuss actions included in the Recommendation Action, and will share outcomes with the RAC
	Develop and maintain a list of wetlands and riparian habitat restoration needs and opportunities	R-13	Convene regulators and IRWM stakeholders to discuss (1) means of identifying, coordinating, and prioritizing restoration needs and opportunities and (2) potential action plan for developing and maintaining habitat restoration needs and opportunities priorities list	RWMG	RWMG will assist regulators and IRWM stakeholders in discussing the actions included in the Recommendation Action
	Evaluate potential opportunities for coordination of Regional Board SEP process and other compensatory mitigation programs to support and promote habitat restoration and recovery	R-14	Convene meeting with Regional Board to assess means for coordinating IRWM Program support with Regional Board SEP process and other mitigation programs	RWMG	Same as Recommendation Action

⁴ Recommendations not prioritized

⁵ IEA is an abbreviation for the Industrial Environmental Association, a non-governmental organization

Table 11-1: Implementation Commitments from Planning Study Recommendations

Planning Study	Objective	#	Recommendation Action from Planning Study	Responsible Party	Party Commitment
Land Use Planning Study⁶	Support or facilitate collaborative preparation of various joint water resources and land use planning efforts and work in the Region	L-2	Prepare model grey water ordinance	Zoo ⁷	Same as Recommendation Action
		L-3	Prepare guidelines for distribution outside agencies to encourage “watershed friendly” design, construction, and maintenance of development	City Public Utilities	City’s commitment will involve: 1) updating the Source Water Protection (SWP) Guidelines for New Development that the Water Department published in 2004, and 2) embarking on an outreach effort to have land use agencies put the SWP Guidelines to use, which would include informational documents.
		L-4	Prepare information sheets on potential water resource impacts of various land uses for land use planners to refer when evaluating proposals	City Public Utilities	Same as commitment for Recommendation Action L-3
		L-5	Prepare model sustainable landscape guidelines	Water Authority	Same as Recommendation Action
	Support or facilitate collaborative preparation of various joint water resources and land use planning efforts and work in the Region	L-6	Incorporate broader range of water resources goals which support IRWM Plan into SANDAG’s Regional Comprehensive Plan	Water Authority	Same as Recommendation Action
		L-7	Prepare model stormwater management ordinance	City Stormwater	Same as Recommendation Action
		L-9	Prepare conservation or resource management plans/guidelines for community and backyard gardens	Water Authority	Same as Recommendation Action
	Provide opportunities for information sharing, regular communication, and meaningful collaboration for water resources and land use managers	L-15	Build relationships and share information through workshops, webinars, lunch sessions, etc. hosted by various professional associations (AEP, APA, APWA, etc.) Informal “meet & greet” preceding each event.	Zoo	Same as Recommendation Action
		L-16	Provide annual forum on topics of mutual interest and importance to water resources and land use agencies	Zoo Water Authority	Same as Recommendation Action
Climate Change Planning Study⁸	Include recommended objectives and targets in the Plan	C-2	Objective: Effectively address climate change through adaptation and mitigation in water resource management	Incorporated in 2013 IRWM Plan	Same as Recommendation Action

⁶ Recommendations prioritized within each objective

⁷ Zoo is an abbreviation for the Zoological Society of San Diego, a non-governmental organization

⁸ Recommendations not prioritized

Table 11-1: Implementation Commitments from Planning Study Recommendations

Planning Study	Objective	#	Recommendation Action from Planning Study	Responsible Party	Party Commitment
Climate Change Planning Study⁹	Include recommended objectives and targets in the Plan	C-3	Target 1: Encourage development of cost-effective carbon-efficient strategies for water management projects	Incorporated in 2013 IRWM Plan	Same as Recommendation Action
		C-4	Target 2: Incorporate adaptation strategies to respond to sea-level rise, rainfall variability, and temperature variability in planning for water and wastewater management	Incorporated in 2013 IRWM Plan IEA- support	Same as Recommendation Action
		C-5	Target 3: Reduce or neutralize GHG emissions in all areas of water resource management	Incorporated in 2013 IRWM Plan	Same as Recommendation Action
Integrated Flood Management Planning Study¹⁰	Increase regional floodplain manager and agency collaboration	F-1	Develop framework and process for different level of communication for floodplain managers	County	Same as Recommendation Action
		F-2	Engage watershed stakeholders in workshop forum which brings together the regulators and floodplain managers to discuss different competing watershed issues (1) roadblocks to flood management, (2) regulatory constraints	FMA ¹¹	Same as Recommendation Action
		F-3	Provide basis for regional working forum of floodplain managers that allows increased collaboration and future regular meetings	County FMA	Same as Recommendation Action
	Increase regional floodplain manager and agency collaboration	F-4	Promote communication across jurisdictional boundaries and within watershed	County FMA	Same as Recommendation Action
	Improve understanding of regional flood risks	F-5	Develop understanding of the different types of flooding from both regional level, watershed level, and local level included specific flood problems for the different areas.	City Stormwater– Support FMA	Same as Recommendation Action

⁹ Recommendations not prioritized

¹⁰ Recommendations not prioritized

¹¹ FMA is an abbreviation for the Floodplain Management Association, a non-governmental organization

Table 11-1: Implementation Commitments from Planning Study Recommendations

Planning Study	Objective	#	Recommendation Action from Planning Study	Responsible Party	Party Commitment
Integrated Flood Management Planning Study¹²	Improve understanding of regional flood risks	F-6	Provide methodology to define the magnitude of flood risks in order to better prioritize the level of flood risk which integrates potential flood damage	City Stormwater– Support FMA- Support	Same as Recommendation Action
	Improve understanding of regional flood risks	F-7	Review common recurring flood damage losses	City Stormwater - Support	Same as Recommendation Action
	Develop watershed database to assist in flood management planning	F-8	Collect and compile watershed mapping information related to flood hazards and watershed information in a GIS format, as well as developing a schema for managing the data to benefit future watershed planning	City Stormwater - Support	Same as Recommendation Action
	Identify common agency flood management issues and constraints	F-9	Develop background from stakeholder information on the common problems implementing flood hazard mitigation projects and the different constraints.	City Stormwater - Support	Same as Recommendation Action
	Define different watershed flood management goals	F-10	Develop understanding of the different priority goals of the watershed stakeholders based on the common recurring flooding issues/problems/hazards	City Stormwater - Support	Same as Recommendation Action
	Initiate understanding and awareness of “integrated flood management” (IFM)	F-11	Prepare educational material and information on background of IFM to encourage better understanding of the required thought process	City Stormwater - Support FMA- Support	Same as Recommendation Action
	Initiate understanding and awareness of “integrated flood management” (IFM)	F-12	Provide examples of IFM projects to assist in understanding how to apply and the basis of the key planning principles which are different from conventional watershed planning	City Stormwater - Support	Same as Recommendation Action
	Identify applicable IFM strategies on global and watershed basis	F-13	Define common types of IFM strategies which integrate different planning principles through different scales (1) watershed level, (2) city level, and (3) neighborhood/local level	IEA- Support ¹³	Same as Recommendation Action

¹² Recommendations not prioritized

¹³ IEA is an abbreviation for the Industrial Environmental Association, a non-governmental organization

Table 11-2: Planning Study Recommendations without Commitments

Planning Study	Objective	#	Recommendation Action from Planning Study	Responsible Party	Party Commitment
Land Use Planning Study ¹⁴	Support or facilitate collaborative preparation of various joint water resources and land use planning efforts and work in the Region	L-1	Distribute model water resources policies for use by municipalities	No responsible parties or commitments have been identified.	
		L-8	Prepare model guidelines for green infrastructure for public agencies and for private development		
		L-10	Coordinate BMPS in municipal codes when water agency is not the municipality		
		L-11	Prepare conservation or resource management plans/guidelines for agricultural operations		
		L-12	Prepare model green building standards		
	Provide opportunities for information sharing, regular communication, and meaningful collaboration for water resources and land use managers	L-13	Create GIS-based Resource Guide of all agencies, organizations, and stakeholders responsible for or involved in water management and land use planning for region. Host Guide on IRWM website. See study for details on what Guide would contain.		
		L-14	Expand SANDAG's emphasis on smart growth to encompass strategies that improve reliability and quality of water resources		
		L-17	Develop meeting template that includes all entities involved in land use planning and water resource planning and management for each jurisdiction.		
	Provide opportunities for information sharing, regular communication, and meaningful collaboration for water resources and land use managers	L-18	Utilize existing groups to disseminate key information and support integrated approach to water resources management and land use decision making		
		L-19	Include examples of viable land use practices that can improve reliability and quality of water resources on IRWM website		
		L-20	Develop a guide for engaging tribal nations in land use planning and water management		
		L-21	Utilize social media, pertinent websites, etc. to share key information with officials, planners, and water resources managers		
Climate Change Planning Study ¹⁵	Use of adaptive management ¹⁶	C-1	Encourage consideration of DWR's <i>Climate Change Handbook</i> recommendations on developing adaptive management plans: 1) Identify risk triggers 2) Quantify impacts and uncertainties 3) Evaluate strategies and define flexible implementation paths 4) Monitor performance and critical variables 5) Implement or reevaluate strategies when triggers are reached	No responsible parties or commitments have been identified.	

¹⁴ Recommendations prioritized within each objective

¹⁵ Recommendations not prioritized

¹⁶ The process of adaptive management includes: 1) data gathering and analysis of vulnerabilities when determining triggers and 2) evaluating if triggers have been met. It is further anticipated that climate change vulnerabilities will be reassessed during future IRWM Plan updates.

Table 11-2: Planning Study Recommendations without Commitments

Planning Study	Objective	#	Recommendation Action from Planning Study	Responsible Party	Party Commitment
Integrated Flood Management Planning Study¹⁷	Identify applicable IFM strategies on global and watershed basis	F-14	Develop background on specific types of “opportunities” within the watershed that facilitate the application of IFM	No responsible parties or commitments have been identified.	
		F-15	Develop regional mapping of both opportunities and constraints related to flood management		
	Develop watershed planning guidance program implementing IFM	F-16	Develop watershed planning process framework with key planning principles for implementing IFM that focuses on linking sustainability, water resource management, and land use planning to flood management and the entire hydrologic cycle.		
		F-17	Prepare guidance on integrating “land use planning” as central element of IFM and define how it can be utilized for different type of floodplain hazards issues		
		F-18	Develop overall guidance document that provides stakeholders the basis for watershed planning with IFM		
	Create watershed planning tools to facilitate IFM project development	F-19	Develop a specialized GIS based tool which assists in the defining locations of IFM projects at a regional scale and can provide maximum multiple benefits and provides method for prioritizing flood management projects		

¹⁷ Recommendations not prioritized

11.2.2 Implementation Issues for Priority Projects

Action items listed in Table 11-1 above will likely be implemented through projects that are designed to address regional priorities established for the Region in the planning studies conducted for the 2013 IRWM Plan. These projects may be implemented through the IRWM Program and subsequently funded through IRWM-related funding mechanisms, or may be implemented independently of the IRWM Program through other programs and funding mechanisms.

If the programs are implemented independently of the IRWM Program, implementation issues may occur as a result of funding priorities. In other words, given that independent implementation would occur at the discretion of the entities listed in Table 11-1, those entities may experience prioritization shifts, budget changes, and other unforeseen funding issues that could delay or stall implementation.

If projects that are implemented to address the action items listed Table 11-1 are funded by the IRWM Program, there could be potential implementation issues associated with IRWM Program funding. Potential IRWM Program-related implementation issues that have been experienced to date, and are anticipated to continue given the current status of the statewide IRWM Program include: 1) the ability to fund pilot projects and studies and 2) the amount of technical information required by IRWM grant applications. Those issues are described further below.

Funding Pilot Projects and Studies

Proposition 84 Implementation Grants administered through the California Department of Water Resources (DWR) emphasize the construction/implementation phase of projects, and therefore are best-suited to fund projects that are shovel-ready. This emphasis on implementation means that the IRWM Program provides limited funding for other types of projects, such as pilot projects and studies. While funding may be limited for pilot projects and studies, these types of projects are often necessary in order to assess alternatives and develop projects that can be successfully implemented to achieve desired benefits. Without pilot projects and studies, projects may be shelved, or money may be wasted implementing projects that encounter unexpected obstacles that could have been revealed and avoided through implementation of a pilot project or study.

As demonstrated in Table 11-1, several of the short-term priorities for the San Diego IRWM Program could be addressed through the implementation of pilot projects or studies. Given the current status of Proposition 84 Implementation Grant funding, it is possible that these pilot projects and studies will not be funded through the IRWM Program (Proposition 84) unless future Proposition 84 Implementation Grant solicitations are altered to provide flexibility for funding projects that are not in the implementation phase.

Technical Requirements

Proposition 84 Implementation Grant applications require a substantial amount of technical information to complete, particularly with respect to economic cost/benefit analyses. The technical information required for the Proposition 84 Implementation Grant applications is often so involved that it is beyond the ability of project partners (local project sponsors) to provide in sufficient detail at the time of the proposal solicitation. This is especially true for small non-profit organizations, disadvantaged communities, and tribes, which may not have the resources necessary to gather this information. The technical requirements of IRWM-related grant opportunities have been noted by San Diego IRWM stakeholders as a barrier that prevents some stakeholders from seeking out IRWM

funding; therefore the technical requirements of IRWM-related grant opportunities may also be a potential barrier to implementation of the priorities included in Table 11-1.

Regulatory Requirements

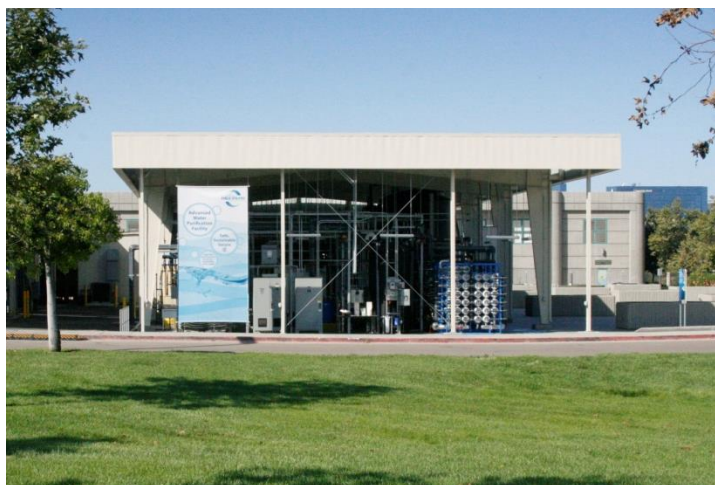
Proposition 84 Implementation Grants currently require grantees to comply with all applicable California regulations in order to be eligible for funding. Tribal nations in the Region have expressed concern that DWR may inappropriately apply California Environmental Quality Act (CEQA) requirements to tribal projects submitted to the IRWM Program. Tribal reservations are not subject to CEQA. However, this perception is a significant barrier to tribal participation in the IRWM Program since it would require tribes to give up their tribal sovereignty in order to use State funding for a project on tribal land.

11.3 Benefits and Impacts

The purpose of this section of the 2013 IRWM Plan is to document potential impacts and benefits associated with implementation of the Plan, and to clearly communicate those potential impacts and benefits to IRWM stakeholders. Implementation of the 2013 IRWM Plan involves both implementation of the IRWM Program itself and implementation of water management projects. As such, the following sections contain information regarding potential impacts and benefits of IRWM Plan implementation within the Region, between IRWM regions (inter-regional), and those that may directly affect DACs, environmental justice-related concerns, and Native American Tribal communities. Table 11-3 includes a synthesis of this information, and also includes examples of potential projects that could be implemented to address each objective.

One of the central features of the 2013 IRWM Plan is the San Diego IRWM Objectives that were revised by stakeholders as part of the 2013 IRWM Plan development process (refer to *Chapter 2, Vision and Objectives* for more information). Due to the importance of the IRWM Objectives, the objectives were used to determine potential impacts and benefits associated with implementation of the 2013 IRWM Plan.

Projects that are implemented through the IRWM Program undergo an impact/benefit analysis during the project selection and vetting process as the project selection workgroup determines and weighs the benefits and impacts of each project. This benefit/impact evaluation process, including the numeric scoring criteria assigned to each project, is described in *Chapter 9, Project Evaluation and Prioritization*. Further, a robust economic benefit/cost analysis is currently required by the Proposition



For the San Diego Region, pilot testing at the Advanced Water Purification Facility will lead to future supply reliability.

Photo credit: Marsi Steirer, City of San Diego

84 Implementation Grant Proposal Solicitation Package. Assuming that DWR will continue to require the economic benefit/cost analyses for future grant solicitations, it is assumed that each

project funded through the IRWM Program will undergo a formal impact/benefit (cost/benefit) analysis during the grant proposal preparation process.

11.3.1 Potential Benefits and Impacts

Regional Benefits and Impacts

Implementation of the 2013 IRWM Plan (and achievement of the San Diego IRWM Objectives) is expected to result in substantial benefits to the Region. Due to the wide-ranging nature of the San Diego IRWM Objectives, potential water resources benefits are anticipated to be diverse and extensive. Collectively, the San Diego IRWM Objectives would result in the regional benefits described in Table 11-3 below. The benefits associated with the IRWM Program and IRWM Projects are anticipated to address issues and concerns of stakeholders and interested parties within the Region and within the San Diego Funding Area.

Implementation of the 2013 IRWM Plan could also potentially result in impacts to the Region. Potential impacts associated with the IRWM Program generally include time and costs associated with implementing the program. Potential impacts associated with IRWM projects would be similar to those impacts associated with any other water resources-related planning, design, or construction projects. Impacts may include short-term, site-specific impacts related to construction, and long-term impacts associated with project operation. Table 11-3 below provides a summary of potential impacts that could occur due to implementation of the 2013 IRWM Plan.

Inter-Regional Benefits and Impacts

Implementation of the San Diego IRWM Objectives is expected to result in benefits and impacts that extend beyond the IRWM Region. Collectively, the San Diego IRWM Objectives will result in the inter-regional benefits and impacts described in Table 11-3 below.

Benefits and Impacts to Disadvantaged Communities, Environmental Justice Concerns, and Native American Tribal Communities

Due to the diverse nature of benefits associated with the IRWM Program and with IRWM Projects, benefits are anticipated to span throughout the IRWM Region, and even potentially beyond the IRWM Region. As described in detail in *Chapter 3, Region Description*, disadvantaged communities (DACs) and communities impacted by environmental justice issues are dispersed throughout the Region. Further, Native American tribal communities are also located in various areas throughout the Region, albeit more heavily concentrated in the eastern portion of the Region. Due to both the dispersed nature of potential benefits from the IRWM Program and IRWM projects and the dispersed nature of DACs, Environmental Justice communities, and Native American Tribal communities, benefits provided to the aforementioned communities as a result of IRWM Program or IRWM project implementation are likely to be similar to those that would occur throughout the Region as a whole. Table 11-3 highlights in italics how implementation of the IRWM Program and IRWM projects may specifically and directly benefit DACs and Tribal communities, and address Environmental Justice-related concerns.

Due to both the dispersed nature of the potential IRWM Program and IRWM Project impacts and the dispersed nature of DACs, EJ communities, and Native American Tribal communities, impacts that would occur to the aforementioned communities as a result of IRWM Program or IRWM project implementation are not anticipated to be acute, and are likely to be similar to those that would occur throughout the Region as a whole.

Table 11-3: Summary of Potential Impacts and Benefits

San Diego IRWM Objectives		IRWM Program	IRWM Projects - Regional	IRWM Projects - Interregional	Project Examples
A. Encourage the development of integrated solutions to address water management issues and conflicts	Benefits	<ul style="list-style-type: none"> Encourages development of integrated projects Communication and trust-building among IRWM stakeholders enables partnerships for addressing water management issues 	<ul style="list-style-type: none"> Integrated solutions can be more cost-effective, saving the Region time and money Integration can reduce conflicts, which can result in faster implementation and therefore faster accrual of project-related benefits Integration may include a variety of sponsors, who can add expertise to a project and increase the overall benefits provided by the project <i>Integration can potentially partner DACs, EJ, and Tribal communities with other partners that can facilitate project implementation. This is especially true of Tribal communities that may find contracting with DWR difficult without a non-Tribal partner</i> 	<ul style="list-style-type: none"> Integration can result in more benefits than single-purpose projects. Such benefits could extend beyond the IRWM Region and directly benefit other IRWM regions Provide guidance to the priorities and issues facing each sub-region 	Any IRWM project that includes partnership integration (multiple partners), resource management integration, beneficial use integration, geographic integration, or hydrologic integration. Due to the importance of integration, projects are required to include a form of integration to be considered for IRWM Program funding (refer to Chapter 9, Project Evaluation and Prioritization)
	Impacts	<ul style="list-style-type: none"> Will require an expenditure of public funds and/or staff time to accomplish 	<ul style="list-style-type: none"> Integration can require additional time and effort to implement as compared to single-agency, single-use projects Integration may be difficult for projects that are shovel-ready 	<ul style="list-style-type: none"> Integrated projects within the San Diego IRWM Region could potentially detract from implementation of inter-regional projects 	
B. Maximize stakeholder/ community involvement and stewardship of water resources, emphasizing education and outreach	Benefits	<ul style="list-style-type: none"> Enhance stakeholder participation <i>May benefit DACs, EJ, and Tribes by connecting these groups with other IRWM stakeholders that they would generally not engage or partner with</i> 	<ul style="list-style-type: none"> Target resources to projects meeting urgent needs from different communities. Streamline prioritizing process with regional stakeholder meetings 	<ul style="list-style-type: none"> Address interregional water resource management issues with stakeholders, optimize resource allocation 	Any IRWM project that directly involves stakeholder or community involvement could result in the benefits or impacts associated with this objective. Due to the importance of stakeholder involvement, projects are

San Diego IRWM Objectives		IRWM Program	IRWM Projects - Regional	IRWM Projects - Interregional	Project Examples
	Impacts	<ul style="list-style-type: none"> Increased coordination among the region's water resource managers could increase competition for limited State and federal grant funding Increased stakeholder involvement could result in conflicting missions between stakeholders leading to increased difficulty in decision making 	<ul style="list-style-type: none"> Increased stakeholder involvement could lead to more projects requesting funding, making project selection more difficult, expensive, and time consuming 	<ul style="list-style-type: none"> Increased stakeholder participation could make interregional efforts more challenging 	
C. Effectively obtain, manage, and assess water resource data and information	Benefits	<ul style="list-style-type: none"> Collect and assess water resource management data for decision making and future resource management activities 	<ul style="list-style-type: none"> Active sharing of most current understanding on water management issues and alternative solutions 	<ul style="list-style-type: none"> Contributes accessible data for improved resource management within the San Diego Funding Area and throughout California 	Any IRWM project that works to provide centralized public access to water management data or involves the collection and evaluation of water resources data to support decision-making or problem-solving
	Impacts	<ul style="list-style-type: none"> Data requirements may reduce willingness to participate in IRWM efforts 	<ul style="list-style-type: none"> <i>Could increase costs to collect and manage data</i> 	<ul style="list-style-type: none"> Could contribute to interregional decisions based on regional data that may not apply to other regions 	
D. Further scientific and technical foundation of water management	Benefits	<ul style="list-style-type: none"> Obtain valid and empirical knowledge of water resource management Active sharing of most current understanding on water management issues and alternative solutions 	<ul style="list-style-type: none"> Would help projects identify effective or efficient solutions Increase project ability to receive funding by providing scientific support and justification 	<ul style="list-style-type: none"> Develop water management techniques and strategies applicable to other regions for improved resource management in California 	Any IRWM project that works to collaborate with regulatory agencies to resolve water management issues; projects may include pilot projects or studies
	Impacts	<ul style="list-style-type: none"> Could lead to stakeholder conflict if perceived as only addressing a few 	<ul style="list-style-type: none"> Science may not support the methods or goals of projects that stakeholders wish to pursue 	<ul style="list-style-type: none"> May result in conflicts between regional management. 	

San Diego IRWM Objectives		IRWM Program	IRWM Projects - Regional	IRWM Projects - Interregional	Project Examples
		management goals, rather than all management goals			
E. Develop and maintain a diverse mix of water resources, encouraging their efficient use and development of local water supplies	Benefits	<ul style="list-style-type: none"> Can help water suppliers to coordinate management activities related to supply diversification 	<ul style="list-style-type: none"> Can help to increase water supply reliability for the region Improve irrigation and landscaping efficiency Development of local projects provides more local control over implementation and management of resource Potential for improved water quality from local seawater and groundwater demineralization projects <i>Could potentially increase the reliability of water pricing, which would directly benefit all water customers, but would specifically benefit DACs that are more heavily impacted by steep water rate increases</i> 	<ul style="list-style-type: none"> Could reduce dependence on imported water supplies that are ultimately sourced from outside the Region, therefore making those imported water supplies available for other users outside of the IRWM Region 	Any IRWM project that increases local water supplies within the region. These projects may include recycled water supply projects (non-potable or potential potable projects) or projects that provide additional groundwater supplies
E. Develop and maintain a diverse mix of water resources, encouraging their efficient use and development of local water supplies	Impacts	<ul style="list-style-type: none"> Potential issues may arise between water suppliers if there are conflicts or disagreement regarding how water supplies should be diversified 	<ul style="list-style-type: none"> Some local water supply sources may be of lower water quality than existing sources, which could exacerbate water quality issues Construction related impacts including dust, noise, and traffic generation associated with large-scale water supply projects Alternative water supplies may be more expensive than existing water supplies from the perspective of end-users (water rate payers) 	<ul style="list-style-type: none"> Local water supply development in the San Diego Region may differ from water supply provisions and planning efforts in other regions, therefore creating conflicts with other IRWM Regions 	

San Diego IRWM Objectives		IRWM Program	IRWM Projects - Regional	IRWM Projects - Interregional	Project Examples
F. Construct, operate, and maintain a reliable infrastructure system	Benefits	<ul style="list-style-type: none"> Provide awareness and support for regional water-related infrastructure needs, and provide a forum for stakeholders to discuss infrastructure issues 	<ul style="list-style-type: none"> Provide infrastructure for water and wastewater treatment and conveyance to maintain supply reliability and improve water quality. Provide infrastructure for storm water treatment and conveyance to protect and restore water quality <i>Will help address critical water supply and water quality needs of DACs and Tribes, which may suffer from unreliable or unsafe water infrastructure due to lack of funds or technical capacity</i> 	<ul style="list-style-type: none"> Improve interregional water supply reliability and water quality Reduce risk to water supply and water delivery from natural or man-made disaster 	Any IRWM project that directly or indirectly involves water-related infrastructure. These projects may include regional construction-related infrastructure projects that attempt to address emergency and carry-over water deliveries or site-specific habitat-related projects that attempt to maintain natural water resources functions
F. Construct, operate, and maintain a reliable infrastructure system	Impacts	<ul style="list-style-type: none"> Support for certain infrastructure projects and improvements may be controversial, therefore potentially hampering stakeholder relations and outreach efforts 	<ul style="list-style-type: none"> Construction related impacts including dust, noise, mitigation, and traffic generation associated with large-scale infrastructure projects Large-scale infrastructure projects can be costly to implement and could potentially cause rate increases. 	<ul style="list-style-type: none"> Local infrastructure development in the San Diego Region may detract from interregional infrastructure investments, such as those associated with imported water supplies. Such projects could potentially create conflicts with other IRWM Regions 	
G. Enhance natural hydrologic processes to reduce the effects of hydromodification and encourage integrated flood management	Benefits	<ul style="list-style-type: none"> Provide a forum for coordination of flood management efforts across various jurisdictions, and increase coordination between flood managers and other functional areas such as water quality and stormwater 	<ul style="list-style-type: none"> Protect and improve regional water quality downstream of areas with significant erosion Alleviate flood protection requirements in downstream watersheds 	<ul style="list-style-type: none"> Promote collaboration on integrated flood management with adjacent regions Enhancing flood protection in upstream regions is more cost-effective 	Any IRWM project that addresses hydromodification, either directly by enhancing or restoring natural hydrologic processes, or indirectly by promoting planning efforts to reduce hydromodification and related impacts

San Diego IRWM Objectives		IRWM Program	IRWM Projects - Regional	IRWM Projects - Interregional	Project Examples
	Impacts	<ul style="list-style-type: none"> Increasing coordination between functional areas could result in increased conflict or time to resolve flood-related issues 	<ul style="list-style-type: none"> Can be costly to implement Hydromodification may have altered the stream in such a way that removal may not result in the expected or desired outcome 	<ul style="list-style-type: none"> May lead to conflict between flood management goals for different regions 	
H. Effectively reduce sources of pollutants and environmental stressors to protect and enhance human health, safety, and the environment	Benefits	<ul style="list-style-type: none"> Provide a forum to increase awareness for impacts associated with pollutants and environmental stressors 	<ul style="list-style-type: none"> Protect and improve regional water quality downstream of discharge locations Reduce human health threats and environmental stressors in downstream water bodies. Reduce run-off and pollutant discharge Improve water quality <i>Protect EJs, which suffer from disproportionately poor water quality and will benefit more from reduction in pollutants than non-EJs.</i> 	<ul style="list-style-type: none"> Promote collaboration on water quality issues with adjacent regions, such as large groundwater basins and water bodies that encompass multiple regions 	Any IRWM project that directly addresses/reduces pollution by removing pollutant sources, or those projects that indirectly address water quality and environmental stressors through mitigation activities
	Impacts	<ul style="list-style-type: none"> Could be conflict over true source of pollutants or stressors or what constitutes a “safe” level of these constituents 	<ul style="list-style-type: none"> There may be trade-offs between other project benefits and potential pollutants/environmental stressors 	<ul style="list-style-type: none"> There may be interregional conflicts between the sources of pollutants/environmental stressors and those who are impacted by impacts associated with these constituents 	
I. Protect, restore, and maintain habitat and open space	Benefits	<ul style="list-style-type: none"> Can provide an opportunity for agencies and parties that manage habitat and open space to coordinate and collaborate with water managers and other parties that can both impact and benefit habitat and open space 	<ul style="list-style-type: none"> Maintain habitat for natural riparian and aquatic species, improve water quality and flood control in natural channels Could contribute to improved public health through reduced pollution and increased recreation opportunities 	<ul style="list-style-type: none"> Promoting habitat integrity across regions will increase habitat for natural species and enhance resource stewardship Habitat restoration could improve air quality and contribute to statewide air quality goals 	Any IRWM project that directly protects and restores habitat and open space, or indirectly contributes to habitat and open space via water quality protection, flood management, etc.

San Diego IRWM Objectives		IRWM Program	IRWM Projects - Regional	IRWM Projects - Interregional	Project Examples
	Impacts	<ul style="list-style-type: none"> Increasing coordination between different groups could result in increased conflict or time to resolve issues, including regulatory issues across federal, state, and local jurisdictions. 	<ul style="list-style-type: none"> Implementing habitat restoration and open space projects may conflict with other land uses and be inconsistent with flood management goals and objectives to maintain flood conveyance capacity. 	<ul style="list-style-type: none"> Integrated projects within the San Diego IRWM Region could potentially detract from implementation of inter-regional projects 	
J. Optimize water-based recreational opportunities	Benefits	<ul style="list-style-type: none"> Provide awareness and support for water-based recreational opportunities, including recreational beneficial uses established in the Basin Plan 	<ul style="list-style-type: none"> Maximize beneficial use of available water resources within the Region for recreational purposes Protect and enhance the serviceability of existing recreational sites and create additional resources for recreational purposes Could increase recreation-based tourism 	<ul style="list-style-type: none"> Water-based recreational opportunities in the San Diego Region may be utilized by residents of other IRWM Regions, or may reduce demands for water-based recreation opportunities in other IRWM regions 	Any IRWM project that directly or indirectly supports water-based recreational opportunities, such as those projects involving habitat restoration, flood control, and watershed protection
	Impacts	<ul style="list-style-type: none"> Support for recreational beneficial uses could conflict with support for other beneficial uses 	<ul style="list-style-type: none"> Could lead to increased impacts associated with pollution, traffic, etc. that may result from recreation or tourism Increased competition for limited water resources in the region for other potential beneficial uses 	<ul style="list-style-type: none"> Support for recreational beneficial uses in the San Diego IRWM Region may conflict with other beneficial uses in upstream water bodies, including those located within other IRWM regions 	
K. Effectively address climate change through adaptation or mitigation in water resource management	Benefits	<ul style="list-style-type: none"> Provide integrated adaptation and mitigation measures towards potential climate change impacts on regional water resources 	<ul style="list-style-type: none"> Reduce energy intensity and carbon footprint related to various water resources Adaptation projects increase certainty and reliability of resource mix Provide additional flood and fire protection to local communities 	<ul style="list-style-type: none"> Contribute to achieving statewide climate change goals such as those established by Assembly Bill 32 	Any IRWM project that addresses climate change either directly or indirectly via the implementation of adaptation or mitigation strategies, including the implementation of resource management strategies that may contribute to climate

San Diego IRWM Objectives		IRWM Program	IRWM Projects - Regional	IRWM Projects - Interregional	Project Examples
	Impacts	<ul style="list-style-type: none"> Uncertainty related to climate change could lead to stakeholder conflict or to increased difficulty in decision-making regarding how to best address climate change 	<ul style="list-style-type: none"> Uncertainty in climate change impacts or timing can make project planning difficult Climate change-related goals could potentially conflict with other goals <i>Protect EJs, which suffer from disproportionately poor air quality and will benefit more from reduction in pollutants than non-EJs. Will help mitigate DACs that may be impacted to a greater degree by climate change than non-DACs.</i> 	<ul style="list-style-type: none"> IRWM regions may not agree on the certainty or magnitude of climate change impacts, or how to address such impacts 	change adaptation (refer to <i>Chapter 6, Resource Management Strategies</i>)

11.4 Finance

This section of the 2013 IRWM Plan documents a plan for implementation and financing of the IRWM Program and IRWM projects included in this plan. As per requirements established by DWR, this section includes the following items:

- Known and potential funding sources, programs, and grant opportunities for the development and ongoing funding of the IRWM Plan.
- Potential funding mechanisms for projects that implement the IRWM Plan.
- An explanation of the certainty and longevity of potential funding sources.
- An explanation of how operation and maintenance costs for IRWM projects could potentially be funded.

As explained in *Chapter 6, Governance and Stakeholder Involvement*, the Governance and Financing Workgroup that was convened for the 2013 IRWM Plan provided input regarding potential funding mechanisms for the IRWM Program and IRWM projects. As such, the sections below contain information provided by the IRWM stakeholders that comprised the Governance and Financing Workgroup.

11.4.1 Plan Financing

The Governance and Financing Workgroup discussed a variety of potential financing options for the IRWM Program. Information provided by the workgroup and elaborated upon through development of the 2013 IRWM Plan is summarized in Table 11-4.

The Governance and Financing Workgroup discussed four potential funding sources for the IRWM Program, including:

- Business as usual: the IRWM Program is funded by the RWMG (San Diego County Water Authority, City of San Diego, and County of San Diego). This option is abbreviated at “business as usual” in the following table.
- 501(c)(3): The IRWM Program officially becomes a 501(c)(3) non-profit organization, and raises funds accordingly. This option is abbreviated as “501(c)(3)” in the following table.
- Regional sales tax: The Region could impose a regional sales tax to fund the IRWM Program. This option is abbreviated as “tax” in the following table.
- Participation fee: Each participating agency (potentially RAC members or all stakeholders) could pay a small fee to participate in the IRWM Program. This option is abbreviated as “fee” in the following table.
- Joint Powers Authority (JPA): Formation of a JPA with participating agencies paying a fee for inclusion in the JPA.

The Workgroup also discussed potential barriers that may exist to financing for the IRWM Program, including:

- It may be difficult to raise funds for the IRWM Program, because program management items do not necessarily result in tangible results. Tangible results are often required or desired for various funding sources, especially from public funding sources.

- Precedent has currently been set by the RWMG to fund the IRWM Program. It may be difficult for regional stakeholders to understand the need for IRWM Program funding given this precedent.

Table 11-4 provides an overview of the costs associated with each of the existing program elements that are undertaken to manage the IRWM Program, as well as costs required to prepare and manage the IRWM grant (Proposition 50 and Proposition 84) process. The table also outlines the certainty and longevity of each potential funding source that was identified by the Governance and Financing Workgroup, and describes the potential responsible entity associated with each funding source. Please note that as operations and maintenance costs are not applicable to the IRWM Program efforts, those costs are not elaborated upon in the following table.

Table 11-4: Potential IRWM Plan Financing Components

Program Element	Likely Annual Project Cost	Likely RWMG Staff Commitment		Possible Responsible Entity	Potential Funding Source	Certainty/Longevity of Funding Source
IRWM Program Management						
RWMG Meetings ¹	\$38,000	8 hrs pp/month		RWMG agencies	Business as usual	RWMG MOU funds the IRWM Program through 2016. After 2016 there is no certainty of funding.
RAC Meetings ¹	\$33,000	8 hrs pp/quarter		501(c)(3) Executive Director and/or Staff	501(c)(3)	Very uncertain. Region would need to determine who would form the non-profit, and this process could take years to establish. This funding source could potentially be sustainable in perpetuity once established.
Tri-County FACC Meetings ¹	\$4,000	2 hrs pp/quarter				
DAC Outreach ¹	\$20,000	4 hrs pp/quarter		Stakeholders - unknown	Fee	Very uncertain. Governance and Finance Workgroup noted that imposing a fee would potentially reduce involvement in the IRWM Program. The potential longevity of this fee would need to be determined by the implementing entity.
Tribal Outreach ¹	\$20,000	4 hrs pp/quarter				
Public Outreach ¹	\$34,000	8 hrs pp/quarter				
SDIRWM Report Card ²	\$6,500	8 hrs pp		Stakeholders - unknown	JPA	Very uncertain. Governance and Finance Workgroup noted that a JPA would require interested agencies that would not only participate in the IRWM Program, but would also be willing and able to provide funding. The certainty and longevity of the funding source would, therefore, be dependent upon the status of each agency willing to participate in the JPA.
Data Management System Administration	TBD	96 hrs/quarter				
Future Update of the IRWM Plan						
Future IRWM Plan Update, including Highlights ¹	\$120,000	8 hrs pp/quarter		RWMG agencies	Business as usual	Very uncertain. The next IRWM Plan Update is anticipated in 2018 (in five years). There is no RWMG MOU in place for 2018, so there is no certainty of funding for a future IRWM Plan Update/Highlights document.

Program Element	Likely Annual Project Cost	Likely RWMG Staff Commitment	Possible Responsible Entity	Potential Funding Source	Certainty/Longevity of Funding Source
			501(c)(3) Executive Director and/or Staff	501(c)(3)	Very uncertain. The Region would need to determine who would form the non-profit, and this process could take years to establish. Funding sustainability is also dependent upon the funding stream(s) used by the non-profit.
			Stakeholders - unknown	Fee	Very uncertain. It is highly unlikely that the Region could levy a fee to pay for a future planning document.
			Stakeholders - unknown	JPA	Very uncertain. The certainty and longevity of the funding source would, therefore, be dependent upon the status of each individual agency willing to participate in the JPA.
Grants					
Grant administration – currently covered through Implementation Grant funding			RWMG agencies	Grants	Uncertain until grants are awarded. If proposals are only partially funded, cost may be difficult to fund.
Grant applications ³	\$108,000	16 hrs/mo during grant preparation	RWMG agencies	Business as usual	RWMG MOU funds development of grant applications through 2016. After 2016 there is no certainty of funding.
			501(c)(3) Executive Director and/or Staff	501(c)(3)	Very uncertain. The Region would need to determine who would form the non-profit, and this process could take years to establish. This funding source could potentially be sustainable in perpetuity once established.
			Stakeholders - unknown	Fee	Very uncertain. Governance and Finance Workgroup noted that imposing a fee for project proponents would potentially reduce involvement in the IRWM Program. The potential longevity of this fee would need to be determined by the implementing entity.
			Stakeholders - unknown	JPA	Very uncertain. Governance and Finance Workgroup noted that a JPA would require interested agencies that would not only participate in the IRWM Program, but would also be willing and able to provide funding. The certainty and longevity of the funding source would, therefore, be dependent upon the status of each agency willing to participate in the JPA.
TOTAL	\$380,000				

1 Costs are estimated based on cost estimates in the 2010 Planning Grant contract, with amendments, divided by two years

2 Costs are estimated based on costs required to produce the first Report Card in 2011, divided by three years.

3 Costs are estimated based on total fee assigned to existing consultant for 2 grant cycles, divided by five years.

11.4.2 Project Funding

IRWM planning provides an important first step in positioning the Region to secure the outside funding critical to allow the Region to implement much-needed water management projects and programs. An approved IRWM Plan is necessary for regions to be eligible for funding from the State of California under Propositions 50, 84, and 1E. Future funding opportunities are likely to also require an approved IRWM Plan, as the importance and value of integrated planning and management gains recognition.

The Proposition 50 Chapter 8 IRWM Grant Program is a joint program between DWR and the State Board, which provides funding for projects that protect communities from drought, protect and improve water quality, and reduce dependence on imported water. The IRWM Grant Program includes two separate grant types - Planning Grants and Implementation Grants. The San Diego IRWM Region has received \$25 million under Proposition 50, to fund 19 projects.

Proposition 84, consisting of three rounds of funding, began in the summer of 2008, and is expected to provide approximately \$91 million in funding for IRWM projects in the San Diego Region. To date, the San Diego Region has received \$8 million under Proposition 84 – Round 1, to fund 11 projects, and applied for an additional \$10.5 million through Round 2, to fund 7 projects.

Proposition 1E is expected to provide \$300 million statewide for grants for stormwater and flood management projects. These funds are applied for by individual project sponsors, rather than the IRWM Program. Within the San Diego IRWM Region, the City of Escondido has received \$15 million of Proposition 1E funds.

Projects funded through inclusion in the IRWM Plan range from pilot projects for innovative water treatment technology, recycled water systems, water quality and supply for DACs, flood control and stormwater management, and water supply and reliability.

Beyond Propositions 50, 84, and 1E, a variety of future state and federal funding opportunities for water-related projects are expected. Those additional funding opportunities are elaborated upon in the following section.

11.4.3 Project Financing Options

The Governance and Financing Workgroup also discussed potential financing options for projects included in the 2013 IRWM Plan. Information provided by the workgroup and elaborated upon through development of the 2013 IRWM Plan is summarized in Table 11-5.

The Governance and Financing Workgroup discussed multiple potential funding sources for IRWM projects, including those at the local/regional, state, and federal levels. Further, due to the diverse nature of projects included in the 2013 IRWM Plan, the Workgroup discussed projects by functional area (water supply, wastewater, recycled water, groundwater, stormwater, flood control, and habitat/open space). Information regarding potential funding sources for projects within each of the aforementioned functional areas is provided in Table 11-5.

Table 11-5: Potential IRWM Project Financing Options

Potential Funding Source	Description of Funding Source and Potential Certainty/Longevity	Functional Area							Funding Includes O&M?
		Water Supply	Wastewater	Recycled Water	Groundwater	Stormwater	Flood Control	Habitat/Open Space	
Local / Regional									
Capital Improvement Programs	A majority of the large infrastructure IRWM projects are included in Capital Improvement Program (CIP) budgets prepared and adopted by implementing agencies. The CIPs address project costs, project implementation schedules, and funding sources for implementing budgeted projects. Large-scale CIP projects are typically funded through debt (revenue bonds or general obligation bonds) serviced by water and sewer rates, capacity charges, standby charges, or agency shares of property taxes or assessments. Smaller scale CIP projects may be funded by the agencies with cash on hand, short-term lines of credit, or directly from water or sewer rates. Flood control CIPs may be funded through debt service (bonds) backed by agency general funds. CIP projects may also be funded, in part, by outside grants or financial assistance. Due to the varied nature of CIP budgets, the longevity and certainty of this funding source is highly variable.	x	x	x	x	x	x	x	No
Special Property Assessments	Special property assessments can provide funding for both capital projects and operations and maintenance. For example, monitoring Special Drainage Area fee is charged to development projects to fund new facilities or upsizing of old ones. Some districts pay special fees to maintain specific facilities, or a tax that contributes to flood control O&M. Note that a special property assessment would be subject to California Proposition 218 requirements.					x	x		Poten- tially
Water user rates	Water rates could be used to fund or partially fund IRWM Projects. These funds would likely be reserved for water supply, water supply quality, or wastewater projects, or those projects which have the potential to reduce future water rate inflation (e.g. projects that reduce dependence on imported water). These funds could potentially be used to fund operations and maintenance; however, the certainty and longevity of the funding source is dependent upon individual water users' willingness to pay.	X	X	X	X				Poten- tially
Local Water Supply Development (LWSD) Program	The Water Authority's LWSD program provides member agencies with financial incentives of up to \$200 per acre-foot for the development of recycled water and groundwater projects capable of relieving imported demands on Water Authority facilities. This incentive contribution offsets projects costs, especially in the early years of project start-up. In order to continue to qualify for these incentives, project expenses must exceed project revenues. Incentives are available for up to 25 years based on continued financial need. As cost of imported water goes up, the need for financial incentives will diminish and this program will phase out.			x	x				No

Potential Funding Source	Description of Funding Source and Potential Certainty/Longevity	Functional Area							Funding Includes O&M?
		Water Supply	Wastewater	Recycled Water	Groundwater	Stormwater	Flood Control	Habitat/Open Space	
Local Resources Program (LRP)	The LRP program features financial incentives from the Metropolitan Water District of Southern California (Metropolitan) for recycled water and groundwater development projects that offset demands for imported water. The LRP is designed to ensure the financial feasibility of local projects during the initial years of operation. The LRP provides incentives of up to \$250 per acre-foot for up to 25 years for qualifying recycled water and groundwater projects. This funding source is not currently available to the San Diego Region, but could potentially become available again in the future.			x	x				Yes
Quality of Life Funding Strategy	Led by SANDAG, the Quality of Life Funding Strategy has been exploring potential funding mechanisms for four identified infrastructure needs: habitat conservation, shoreline preservation, water quality enhancement, and public transit. The group has considered a sales tax, user fees, bond measures, special assessments, and impact fees, but no policy decision has been made yet. As such, the certainty and longevity of this funding source are uncertain at this time.					x			Potentially
NGO Funding or Endowments	Non-government organization (NGO) funds may be derived from endowments, contributions, fundraisers, membership dues, or other similar sources. Many NGO-sponsored projects include some funding from these sources. Additionally, if the San Diego IRWM Program were to establish itself as a 501(c)(3) organization, additional funding for IRWM projects could be garnered directly by the IRWM Program. Due to the diverse and uncertain nature of this funding source, its use and longevity are also highly uncertain at this time.	x	x	x	x	x	x	x	Potentially
Private Grants	Hundreds of foundations or businesses provide support for environmental projects through private grants. If the San Diego IRWM Program were to establish itself as a 501(c)(3) organization, private grant funding for IRWM projects could be garnered from multiple sources. Due to the diverse and uncertain nature of this funding source, its use and longevity are also highly uncertain at this time.	x	x	x	x	x	x	x	Potentially
State									
Proposition 50 – Water Use Efficiency Program	Proposition 50 established a funding program for agricultural water use efficiency projects, including research and development, feasibility studies and pilot/demonstration projects, public information and education, and technical assistance. Approximately \$15,000,000 is available in the 2012 funding cycle. (http://www.water.ca.gov/wateruseefficiency/finance/)	x							No

Potential Funding Source	Description of Funding Source and Potential Certainty/Longevity	Functional Area							Funding Includes O&M?
		Water Supply	Wastewater	Recycled Water	Groundwater	Stormwater	Flood Control	Habitat/Open Space	
Proposition 50 – Chapter 6(b) and (c)	Proposition 50 Chapter 6(b) and (c) provide funding for public water systems. Section (b) funds new technologies to clean drinking water. Section (c) funds improvements to systems with MCL compliance violations, surface water treatment microbial requirements, and mandatory disinfection required by CDPH. Grant funding up to \$50,000,000 is provided, with 50% matching funds required. No match is required for projects serving disadvantaged communities (DACs). (http://www.cdph.ca.gov/certlic/drinkingwater/Documents/Funding/DWRfundingnotice-06-2010.pdf)	x							No
Proposition 84 – IRWM Grant Program	Proposition 84, approved by California voters in November 2006, provides funding for planning and projects that assist local agencies to meet long-term State water needs, including delivery of safe drinking water, flood risk reduction, and protection of water quality and the environment. A maximum of \$1,000,000 is available per region for a one-time Plan Update to be completed by 2013. San Diego received this grant award; however, it does not provide long-term program financing. A total of \$1,000,000,000 is available statewide (with \$71,000,000 available to the San Diego IRWM region) for project implementation, with funding allocated through periodic application processes. A 25% minimum cost share is required. Projects must be part of an IRWM plan. The California Department of Water Resources (DWR) administers the IRWM grant program under Proposition 84. (http://www.water.ca.gov/irwm/)	x	x	x	x	x	x	x	No
Proposition 84 – Storm Water Grant Program (SWGP)	The SWGP, funded through Proposition 84, provides grant funding for the reduction and prevention of storm water pollution of rivers, lakes, and streams. Approximately \$82,000,000 is available for planning and implementation of eligible projects. The Round 1 solicitation is currently underway. The State Water Resources Control Board (State Board) is administering the SWGP. (http://www.waterboards.ca.gov/water_issues/programs/grants_loans/prop84/index.shtml)					x			No
Proposition 1E – Stormwater Flood Management Grant Program	Proposition 1E, also approved by California voters in November 2006, provides funding for stormwater and flood management projects that can demonstrate reduction in flood damage. Proposition 1E provides grant funding of up to \$30,000,000 per eligible project. A 50% minimum cost share is required. Projects must be part of an IRWM plan. DWR administers the Proposition 1E funding program. (http://www.water.ca.gov/irwm/integregio_stormwaterflood.cfm)					x	x		No
Flood Protection Corridor Program (FPCP)	The FPCP program, funded by both Proposition 84 and Proposition 1E, to provide grant funding for nonstructural flood management projects. Eligible projects seek to acquire, restore, enhance and protect real property for the purposes of flood control protection, together with agricultural land preservation and/or wildlife habitat protection. The program provides grant funding of up to \$5,000,000 per project. DWR administers the FPCP program. (http://www.water.ca.gov/floodmgmt/fpo/sgb/fpcp/)						x	x	No

Potential Funding Source	Description of Funding Source and Potential Certainty/Longevity	Functional Area							Funding Includes O&M?
		Water Supply	Wastewater	Recycled Water	Groundwater	Stormwater	Flood Control	Habitat/Open Space	
Urban Streams Restoration Program	The Urban Streams Restoration Program, administered by DWR, seeks to reduce property damage caused by flooding or erosion, restore or protect the natural ecological values of streams, and promote community involvement and stewardship. Eligible projects include creek cleanups, invasive removal, revegetation, channel reconfiguration, flood protection, and community involvement. Grant funding up to \$1,000,000 is available to local agencies and NGOs (working together). (http://www.water.ca.gov/urbanstreams/)						x	x	No
Local Groundwater Assistance (LGA) Program	The LGA program, administered by DWR, provides funding for groundwater studies, management, and monitoring. The program provides grant funding of up to \$250,000 per applicant. (http://www.water.ca.gov/lgagrants/)				x				No
Infrastructure State Revolving Fund (ISRF) Program	The Infrastructure State Revolving Fund (ISRF) program, through the California Infrastructure and Economic Development Bank, provides low-cost financing to public agencies for qualifying infrastructure projects. The ISRF program funding is available in amounts ranging from \$250,000 to \$10,000,000, with loan terms of up to 30 years. Interest rates are set on a monthly basis. Eligible project categories include drainage, water supply and flood control, environmental mitigation measures, parks and recreational facilities, sewage collection and treatment, and water treatment and distribution. (http://www.ibank.ca.gov/infrastructure_loans.htm)	x	x	x	x	x	x	x	Yes
Safe Drinking Water State Revolving Fund (SDWSRF)	The SDWSRF, through the California Department of Public Health (CDPH), provides agencies with low interest loans for projects that upgrade public drinking water infrastructure, including wells, pumps, storage tanks, treatment, surface water intakes, pipes, and other components. Prioritization is based on risk to public health. For construction, funding is available in amounts up to \$20,000,000 per year per project and \$30,000,000 per year per entity, with loan terms of up to 20 years. For planning, funding is available in amounts up to \$500,000 per project, with loan terms of up to 5 years. These loans carry an interest rate equal to half of the State's general obligation bond interest rate. This below market interest rate can result in substantial savings on debt service. Further, a 0% interest rate and up to 80% grant (up to \$3,000,000) is possible for projects serving DACs. (http://www.cdph.ca.gov/services/funding/Pages/SRF.aspx)	x			x				Yes

Potential Funding Source	Description of Funding Source and Potential Certainty/Longevity	Functional Area							Funding Includes O&M?
		Water Supply	Wastewater	Recycled Water	Groundwater	Stormwater	Flood Control	Habitat/Open Space	
Clean Water State Revolving Fund (CWSRF)	The CWSRF, through the State Board, provides agencies with low interest construction loans for wastewater, water recycling, and nonpoint source projects. The CWSRF funding is available in amounts up to \$50,000,000 per agency, with loan terms of up to 20 years. These loans carry an interest rate equal to half of the State's general obligation bond interest rate. This below market interest rate can result in substantial savings on debt service. Principal forgiveness may be made available to projects serving DACs. Applications are accepted continuously. (http://www.waterboards.ca.gov/water_issues/programs/grants_loans/srf/index.shtml)			x	x	x			Yes
Water Recycling Funding Program	The Water Recycling Funding Program, through the State Board, provides agencies with low interest construction loans for water recycling projects, including treatment, distribution, and groundwater recharge. These loans carry an interest rate equal to half of the State's general obligation bond interest rate. This below market interest rate can result in substantial savings on debt service. Planning grants are also available to reimburse up to 50% of eligible costs, to a maximum of \$75,000. Applications are accepted continuously. (http://www.waterboards.ca.gov/water_issues/programs/grants_loans/water_recycling/index.shtml)			x					Yes
Nonpoint Source Grant Program	The Nonpoint Source (NPS) Grant Program, through the State Board, annually allocates Clean Water Act Section 319(h) funding from the U.S. Environmental Protection agency to projects that address water quality problems in surface and ground water resulting from NPS pollution. The goal of these projects is to ultimately lead to restoring the impacted beneficial uses in these water bodies. Projects are required to be located in a watershed that has an adopted/nearly adopted Total Maximum Daily Load (TMDL) for the constituent of concern and has been identified in the NPS Program Preferences. A 25% funding match is required. (http://www.waterboards.ca.gov/water_issues/programs/nps/grant_program.shtml)					x			No
Groundwater Management Program Assessments	In areas where a Groundwater Management Program is established per requirements of the State of California Groundwater Management Act (AB 3030), the implementing agency may fund groundwater improvement projects through assessments levied against groundwater users (provided that voter approval of such assessments is granted).				x				Yes
California State Coastal Conservancy	The Coastal Conservancy provides funding for protection, public access, and restoration, and enhancement of coastal resources. There are no established minimum or maximum grant amounts; however, projects must be consistent with the purposes of available funding sources (e.g., Proposition 84). Applications are accepted continuously. (http://scc.ca.gov/category/grants/)							x	Potentially

Potential Funding Source	Description of Funding Source and Potential Certainty/Longevity	Functional Area							Funding Includes O&M?
		Water Supply	Wastewater	Recycled Water	Groundwater	Stormwater	Flood Control	Habitat/Open Space	
Federal									
Title XVI Water Reclamation and Reuse – Construction	The Reclamation Wastewater and Groundwater Study and Facilities Act (Title XVI, Public Law 102-575) authorizes the federal government, via U.S. Bureau of Reclamation (USBR), to fund up to 25% of the capital cost of congressionally authorized recycling projects. Funding for construction is available in accordance to each project’s authorization and the funding opportunity announcement (FOA). (http://www.usbr.gov/WaterSMART/title/)			x					No
Title XVI Water Reclamation and Reuse – Feasibility Study	USBR also releases FOAs for development of new feasibility studies for congressionally authorized recycling projects. Grant funding is available up to \$150,000 per applicant with a 50% cost share. Studies must be completed by March 2014. (http://www.usbr.gov/WaterSMART/title/)			x					No
WaterSMART Water & Energy Efficiency Grants	Through the WaterSMART, USBR provides 50% cost share funding to irrigation and water districts, Tribes, States and other entities with water or power delivery authority. Projects should seek to conserve and use water more efficiently, increase the use of renewable energy, protect endangered species, or facilitate water markets. Projects must be completed within 24 months that will help sustainable water supplies in the western United States. (http://www.usbr.gov/WaterSMART/weeg/index.html)	x		x				x	No
WaterSMART System Optimization Review Grants	USBR provides grant funding for System Optimization Reviews, which are a broad look at system-wide efficiency focused on improving efficiency and operations of a water delivery system, water district, or water basin. The System Optimization Review results in a plan of action that focuses on improving efficiency and operations on a regional and basin perspective. This grant program provides 50% cost share, up to \$300,000. Agencies must be able to complete the System Optimization Review within 24 months. (http://www.usbr.gov/WaterSMART/sor/index.html)	x							No
WaterSMART Advanced Water Treatment and Pilot and Demonstration Project Grants	USBR provides grant funding for pilot and demonstration projects that address the technical, economic, and environmental viability of treating and using brackish groundwater, seawater, impaired waters, or otherwise creating new water supplies within a specific locale. (http://www.usbr.gov/WaterSMART/awtg/index.html)			x	x				No

Potential Funding Source	Description of Funding Source and Potential Certainty/Longevity	Functional Area							Funding Includes O&M?
		Water Supply	Wastewater	Recycled Water	Groundwater	Stormwater	Flood Control	Habitat/Open Space	
WaterSMART Grants to Develop Climate Analysis Tools	This program, through the USBR, is for research projects focused on the information gaps detailed in the joint USBR and United States Army Corps of Engineers (USACE) Report titled "Addressing Climate Change in Long-Term Water Resources Planning and Management: User Needs for Improving Tools and Information" (Section 3). This grant program provides 50% cost share. (http://www.usbr.gov/WaterSMART/cat/index.html)	x							No
WaterSMART Program for Basin Studies	This program, through the USBR, is for basin studies that complete work to evaluate and address climate change impacts. (http://www.usbr.gov/WaterSMART/bsp/)	x	x	x	x	x			No
Cooperative Watershed Management Program (CWMP)	The purpose of the CWMP, through the USBR, is to improve water quality and ecological resilience and to reduce conflicts over water through collaborative conservation efforts in the management of local watersheds. The CWMP will provide financial assistance to form new watershed groups, to expand existing watershed groups, and/or to conduct one or more projects in accordance with the goals of watershed groups. Establishment or expansion of a watershed group may be funded \$100,000 for up to 3 years. Planning and implementation of a watershed projects may be 50% cost share. (http://www.usbr.gov/WaterSMART/cwmp/index.html)					x		x	No
Water and Waste Revolving Fund Grants	The U.S. Department of Agriculture (USDA) Rural Development assists communities with a population less than 10,000 with water and wastewater systems. The grant recipients will use the grant funds to establish a revolving loan fund. The loans will be made to eligible entities to finance pre-development costs of water and wastewater projects or short-term small capital improvement projects not part of the regular O&M of current water and wastewater systems. The amount of financing to an eligible entity shall not exceed \$100,000 and shall be repaid in a term not to exceed 10 years. (http://www.rurdev.usda.gov/UWP-revolvingfund.html)	x	x		x				No
Water and Waste Disposal Grants and/or Guaranteed Loans	USDA Rural Development assists communities with a population less than 10,000 with water and wastewater systems. To qualify, applicants must be unable to obtain the financing from other sources at rates and terms they can afford and/or their own resources. Funds can be used for design, construction, land acquisition, legal fees, equipment, and initial operations and maintenance. Projects must be primarily for the benefit of rural users. The rates that are used to calculate these loans are subject to change quarterly. Loans are made based on the applicant's authority and the life expectancy of the system's project, which may be up to the maximum of 40 years. (http://www.rurdev.usda.gov/UWEP_HomePage.html)	x	x		x				Yes

11.5 Plan Performance and Monitoring

11.5.1 Methods to Evaluate Plan Performance

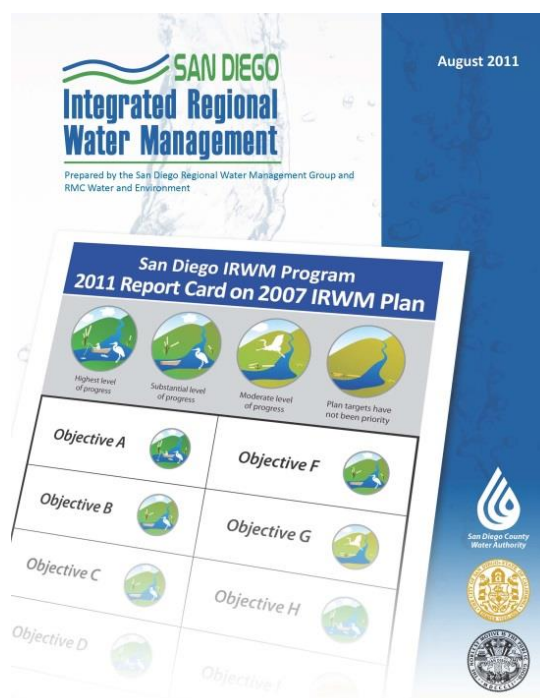
The San Diego IRWM Program uses a Report Card to evaluate IRWM Plan performance. This Report Card was last produced in August 2011, and is anticipated to be produced approximately every three years. Assessing the IRWM Plan every three years will allow enough time to pass after the IRWM Plan has been finalized to provide an opportunity assess what progress has been made towards achieving IRWM Plan goals, objectives, and priorities, and implement changes to improve performance. The Report Card provides an overview of the progress that has been made toward obtaining the IRWM Plan goals and objectives (see *Chapter 2, Vision and Objectives*), the IRWM priorities (established in Section 11.2 of this chapter), and anticipated benefits associated with projects funded through the IRWM Program (Proposition 50 and Proposition 84). During this evaluation, the Impacts and Benefits section of the Plan will be revisited and updated, if necessary. The Report Card only assesses activities specific to the IRWM Program, and does not evaluate other, non-IRWM activities in the Region.

For the first Report Card, data used to assess progress related to the IRWM Plan were compiled to provide quantitative assessments when appropriate and possible. Because achievements were found to be difficult to quantify, a qualitative assessment of progress using graphic designations for four degrees of progress was developed. These degrees of progress are as follows:

- Highest level of progress has been made towards achieving IRWM Plan targets
- Substantial progress has been made towards achieving IRWM Plan targets but modest additional progress is needed to fully meet the goals
- Moderate progress has been made toward achieving IRWM Plan targets but moderate additional progress is needed to fully meet the goals
- Plan Targets have not been a priority for IRWM Plan implementation

Given that the IRWM Plan Targets have been substantially updated to ensure the measurability of the IRWM Objectives, future iterations of the Report Card should contain more quantitative assessments than past versions of the Report Card.

In addition, for the first Report Card, IRWM Plan performance was measured, in part, by the progress made towards achieving the short-term priorities described in this chapter. Short-term priorities were assessed using the same qualitative degrees of progress used to assess the objectives. As described above, each of the short-term priorities in the 2013 IRWM Plan has the



The IRWM Report Card assesses both Plan and Project performance for the San Diego IRWM Program.

support of the RAC, and at least one RAC member organization has been assigned the lead on each of these priorities. Each of these lead priorities partners will complete a work plan, submit quarterly reporting, and report on the status of their respective priority actions within one year of finalization of the 2013 IRWM Plan. It is anticipated that these reporting actions will result in information for the Report Card that is more quantified and compiled, therefore also resulting in more quantitative assessments of short-term priorities compared to the first version of the Report Card.

Information pertaining to how plan performance and monitoring will be tracked with a Data Management System, including who will be responsible for maintaining the Data Management System, is included in *Chapter 10, Data and Technical Analysis*.

11.5.2 Methods to Evaluate Project Performance

The Report Card also assesses the performance of projects funded through the IRWM Program (through Proposition 50 and Proposition 84). Assessment of projects is done in two ways: contribution to IRWM Plan objectives, and individual project targets and metrics. Table 11-6 shows projects that have been funded through the IRWM Program, and how they contribute to IRWM Plan objectives. Note that some projects included in the table were funded under Proposition 50 and Proposition 84-Round 1, and are therefore consistent with the 2007 IRWM Plan Objectives. In contrast, the Proposition 84-Round 2 projects were evaluated using the objectives in the 2013 IRWM Plan.

The Report Card will provide a discussion of project progress, as well as project achievements. Further, it will evaluate projects by the individual targets and metrics described for each project in the grant applications and contracts. These targets and metrics are increasingly designed to correspond with appropriate objectives, targets and metrics in the IRWM Plan. Though there may not always be an exact correlation between project targets established for the grant application and contracting process and IRWM Plan targets, the project targets generally support IRWM Plan objectives. Therefore, as projects achieve their individual targets and objectives, they will also contribute towards attainment of the IRWM Plan objectives. As the IRWM Program evolves, closer correlation between project targets and IRWM Plan targets is expected.

Project targets and metrics will be used to measure future project performance and included in the performance measures in future grant applications. Additionally, a Project Assessment and Evaluation Plan will be developed after contract execution for each project selected for funding through the IRWM Program. This Project Assessment and Evaluation Plan will define how projects will be assessed, evaluated, and reported.

11.5.3 Adaptive Management

The San Diego IRWM Plan is a living document. As such, it is expected that periodic updates will occur. The 2013 IRWM Plan is one such update to the original 2007 IRWM Plan, and reflects changes that have occurred in the IRWM Region since the development of the 2007 IRWM Plan. In order to remain relevant, and to ensure that the water management needs of the Region are identified and the structure exists to address these needs, it is anticipated that this Plan will be updated every 5 years through the life of the IRWM Program. It is expected that this will provide sufficient time to implement projects and actions to achieve IRWM Plan goals, while still having the flexibility to address any changes to water management needs that arise through changes in the Region. It should be noted that the RWMG MOU currently extends through 2016. As this MOU

provides the basis for managing and funding the IRWM Program, future updates to the IRWM Plan are contingent upon either a renewal/extension of the RWMG MOU or the development of an alternative governance structure and funding mechanism to implement the IRWM Program.

In addition to the planned updates to the San Diego IRWM Plan designed to provide opportunities for adaptive management, the IRWM Plan incorporates adaptive management through its project selection process. As described in *Chapter 9: Project Evaluation and Prioritization*, projects submitted to the IRWM Program are initially scored using the Project Selection Criteria. These criteria reflect a way to assess how projects address the objectives and purpose of the IRWM Program. The Project Selection Workgroup weights each of these criteria to emphasize which criteria are most important to the IRWM Region at the time of project selection. This allows projects that address the most critical needs of the IRWM Region to be given priority, even as these needs change as they are addressed or as other changes affect the Region.

11.6 References

California Department of Water Resources (DWR). 2012. *Guidelines: Integrated Regional Water Management, Proposition 84 and 1E*. November 2012. Available: http://www.water.ca.gov/irwm/grants/docs/Guidelines/GL_2012_FINAL.pdf

Table 11-6: Consistency of IRWM-Funded Projects with IRWM Plan Objectives

IRWM-Funded Projects	IRWM Plan Objectives Addressed										
	A*	B	C	D	E	F	G	H	I	J	K*
Proposition 50 Projects											
Implementation of Integrated Landscape and Agricultural Efficiency Program		✓	✓	✓	✓						
Irrigation Hardware Giveaway and Dry Weather Runoff Reduction Demonstration		✓	✓	✓	✓						
Over-Irrigation/Bacteria Reduction		✓	✓	✓	✓			✓			
Santee Water Reclamation Facility Expansion Project		✓		✓	✓	✓				✓	
Recycled Water Retrofit Assistance Program		✓		✓	✓						
City of San Diego Recycled Water Distribution System Expansion, Parklands Retrofit, and Indirect Potable Reuse/ Reservoir Augmentation Project		✓		✓	✓	✓		✓		✓	
San Vicente Reservoir Source Water Protection through Watershed Property Acquisition and Restoration					✓	✓	✓	✓	✓	✓	
El Capitan Reservoir Watershed Acquisition and Restoration Program					✓		✓	✓	✓	✓	
Northern San Diego County Invasive Non-Native Species Control Program			✓		✓		✓		✓		
Santa Margarita Conjunctive Use Project					✓						
Carlsbad Desalination Project Local Conveyance		✓		✓	✓	✓			✓	✓	
San Diego Region Four Reservoir Intertie Project Conceptual Design		✓		✓	✓	✓				✓	
South County Water Supply Strategy		✓	✓	✓	✓						
El Monte Valley Groundwater Recharge and River Restoration Project - Phases 1 and 2		✓		✓	✓	✓	✓	✓	✓	✓	
San Diego Regional Pollution Prevention		✓	✓	✓				✓		✓	
Biofiltration Wetland Creation and Education Program		✓		✓			✓	✓		✓	
San Dieguito Watershed Management Plan Implementation		✓		✓				✓	✓	✓	
City of San Diego Green Mall Porous Paving and Infiltration - Phase 1		✓	✓	✓				✓✓		✓	
County of San Diego Chollas Creek Runoff Reduction and Groundwater Recharge			✓	✓			✓	✓		✓	
Proposition 84 – Round 1 Projects											
Sustainable Landscapes Program		✓	✓	✓	✓		✓	✓			
North San Diego County Regional Recycled Water Project - Phase I		✓	✓		✓	✓					
North San Diego County Cooperative Demineralization Project		✓			✓	✓		✓			
Rural Disadvantaged Community (DAC) Partnership Project - Phase I		✓			✓	✓		✓			

Table 11-6: Consistency of IRWM-Funded Projects with IRWM Plan Objectives

IRWM-Funded Projects	IRWM Plan Objectives Addressed										
	A*	B	C	D	E	F	G	H	I	J	K*
Lake Hodges Water Quality and Quagga Mitigation Measures			✓	✓	✓	✓		✓			
Implementing Nutrient Management in the Santa Margarita River Watershed - Phase I		✓	✓	✓				✓			
Bannock Avenue Neighborhood Streetscape Enhancements for Tecolote Creek Watershed Protection		✓	✓	✓	✓					✓	
Pilot Concrete Channel Infiltration Project		✓	✓	✓	✓						
San Diego Regional Water Quality Assessment and Outreach Project		✓	✓	✓	✓			✓	✓		
Chollas Creek Integration Project - Phase I		✓	✓				✓	✓	✓		
Regional Water Data Management Program		✓	✓	✓							
Proposition 84 – Round 2 Projects											
North San Diego County Regional Recycled Water Project (NSDCRRWP) - Phase II	✓	✓	✓		✓	✓		✓			✓
Turf Replacement and Agricultural Irrigation Efficiency Program	✓	✓	✓		✓			✓			✓
Rural Disadvantaged Community (DAC) Partnership Project - Phase II	✓	✓	✓	✓	✓	✓		✓			✓
Failsafe Potable Reuse at the Advanced Water Purification Demonstration Facility	✓	✓	✓	✓	✓			✓			✓
Sustaining Healthy Tributaries to the Upper San Diego River and Protecting Local Water Supplies	✓	✓	✓	✓	✓		✓	✓	✓	✓	
Chollas Creek Integration Project - Phase II	✓	✓	✓				✓	✓	✓		
Implementing Nutrient Management in the Santa Margarita River Watershed - Phase II	✓	✓	✓	✓							

* New IRWM Objectives that were not established at the time of the Proposition 50 or Proposition 84-Round 1 grant applications.