Attachment

Greater Los Angeles County Region

13

IRWM Implementation Grant Proposal IRWM Plan – Reduce Delta Dependence

Attachment 13 consists of the following items:

Summary of IRWM Plan Relating to Reducing Delta Water Dependence. This attachment describes how the 2006 Greater Los Angeles County (GLAC) Integrated Regional Water Management (IRWM) Plan will reduce dependence on the Sacramento-San Joaquin Delta (Delta) for water supply.

Assurances that IRWM Plan Update Will Continue Reducing Delta Water Dependence. The GLAC Regional Water Management Group (RWMG) is committed to ongoing implementation and revision of the IRWM Plan in ways that continue to reduce dependence on the Delta.

Summary of IRWM Plan Relating to Reducing Delta Water Dependence

The adopted 2006 GLAC IRWM Plan (Plan) acknowledges the GLAC Region's (Region) reliance on imported water, both from the Delta and the Colorado River. The Plan also acknowledges the need to reduce this reliance and discusses how implementation of the Plan will help meet this need. The following are examples from the 2006 IRWM Plan that document these claims.

Reliance on Imported Supply

The Region depends upon an imported water supply to provide for a portion of its water demand, as described in the following excerpts:

(From Section 2.2 of Regional Description: p. 2-1 to 2-2): Although the development of an IRWMP at this scale was not originally envisioned by local stakeholders, the preparation of an IRWMP for this Region is appropriate, given the consistency of the major water resource management issues, including substantial dependence on imported water, poor surface water quality due to urban and stormwater runoff, opportunities to expand water conservation and the production and utilization of recycled water, and significant groundwater resources in much of the area.

(From Section 2.5 of Sources of Water Supply: p. 2-5): The Region has developed a diverse mix of local and imported water supply sources. Local water resources include groundwater, surface water, recycled water, water conservation, water transfers, and storage. Water is imported through the California State Water Project (SWP), the Colorado River Aqueduct, and the Los Angeles Aqueducts.

(From Section 2.5 of Regional Description: p. 2-15): The water supply in the Region is heavily dependent on imported surface water; therefore various surface reservoirs (managed by Metropolitan Water District and the SWP) located outside the Region (such as Diamond Valley Lake) are used to facilitate water delivery to local water agencies and districts.

Need to Reduce Reliance on Imported Supplies

The Region identifies the need to reduce its reliance on imported supplies, as described below.

(From Section 2.2 of Regional Description, p. 2-13): Environmental concerns in the Sacramento-San Joaquin Delta have limited the volume of water that can be pumped from the SWP. The potential impact of further declines in ecological indicators in the Bay-Delta system on SWP water deliveries is unclear. Uncertainty about the long-term stability of the levee system surrounding the Delta system raises concerns about the ability to transfer water via the Bay-Delta to the SWP.

(From Section 2.13 of Regional Description, p. 2-36): The watershed management plans for many of the Region's major watersheds identify various goals, objectives, and guiding principles. Those various concepts are incorporated in this Plan as objectives in Section 3.1, but noted here as a reflection of the social and cultural values of the Region. They include: reduce dependence on imported water, optimize use of local water resources, enhance water supply reliability, improve the quality of urban runoff and stormwater, maintain and enhance flood protection, increase watershed friendly recreation and accessible open space for all communities, conserve and restore native habitat, manage public open spaces to reduce the risk of catastrophic wildland fires, and promote the application of watershed approaches to resource management issues.

How Plan Will Help Reduce Reliance on Imported Supplies

One of the six objectives of the Plan is to "Optimize local water resources to reduce the Region's reliance on imported water". To help it to meet this objective, the Region has set the following numerical targets to increase the use of local water supplies (Section 3.2 of Objectives and Priorities, p. 3-2, Table 3-1):

Table 3-1. Greater Los Angeles County Region Objectives and Planning Targets for Year 2026 - To Promote an Integrated, Multi-Benefit, Inter-Regional Approach to Regional Water Management and Planning						
	Objectives	Planning Targets				
(3)	Improve Water Supply					
	Optimize local water resources to reduce the Region's reliance on imported water.	Increase water supply reliability and quality by providing 800,000 acre-feet/year of additional water supply and demand reduction through conservation.				
		Included within the 800,000 acre-feet/year noted above, reuse or infiltrate 130,000 acre-feet/year of reclaimed water (110 percent increase over existing reclaimed water use).				

The Region has also set a long term priority to "Reduce demand on imported water sources" (Section 3.4 of Objectives and Priorities, p. 3-12): Implementation of projects included in the Plan and consistent with the objectives and planning targets provided above, would substantially reduce demand for imported and therefore Sacramento-San Joaquin Delta supplies, even with potential population increases in the Region.

The Plan identifies a number of projects designed to help the Region improve its water supply diversity, as described in the excerpt below:

(From Section 5.2 of Integrated Regional Projects, p. 5-2, 5-3): Table 5-1 provides a summary of projects including project concepts contained in the database as of October 31, 2006 by subregion and identified benefit category. Breaking down by benefits category provides a picture of the composition of those projects.

Table 5-1. Stakeholder Projects by Subregion and Benefit Category								
		Number of Projects by Benefit Category (1), (2)						
Subregion	Total Projects Submitted ⁽¹⁾	Water Supply (3)	Water Quality ⁽⁴⁾	Habitat & Open Space ⁽⁵⁾	Other Benefits ⁽⁶⁾			
Lower San Gabriel and Los Angeles River Watersheds	212	74	59	53	62			
North Santa Monica Bay Watershed	215	43	66	58	36			
South Bay Watershed	309	56	98	143	53			
Upper Los Angeles River Watershed	296	108	152	119	97			
Upper San Gabriel River and Rio Hondo Watersheds	433	96	49	23	14			
Regional Projects (7)	56	15	7	20	6			
TOTAL	1521	392	431	416	268			

- 1. Based on projects submitted by October 31, 2006. Stakeholders identified qualitative benefit information for only 850 of the 1,521 projects.
- Projects for which more than one qualitative benefit was identified were included in each benefit category. Thus the total number of projects included in each benefit category exceeds 850.
- Includes potable and non-potable supply benefits including potable supply benefits from drinking water treatment and non-potable supply benefits from water recycling, urban dry weather runoff/stormwater treatment.
- 4. Includes dry weather urban runoff and stormwater capture benefits.
- 5. Includes public access, open space, habitat, and repair and replacement.
- Includes flood protection and infrastructure repair and replacement. These benefits did not require quantified benefits, hence the numbers listed reference qualitative benefits
- 7. Projects that fell within multiple or all Subregions, or projects for which location information was not provided or incomplete.

(From Section 5.3 of Integrated Regional Projects, p. 5-14): The various water management strategies identified in this document can be integrated into projects and programs to achieve broad objectives.

Improve water supply and enhance water reliability: desalination; groundwater management/conjunctive use; imported water; surface storage; water and wastewater treatment; water conservation; water recycling; water supply reliability; and water transfers.

(From Section 7.5 of Implementation, p. 7-17): The projects proposed for implementation in the IRWMP in conjunction with Round 1 of Proposition 50, Chapter 8 funding are supported through technical studies and reports that document their ability to meet the intended objectives. As future projects are

recommended for funding and implementation, it is assumed that similar technical studies and reports will document the feasibility of those projects and provide support for the ability of the projects to generate the identified benefits. The technical support for these projects on a programmatic level is summarized by the IRWMP objective below.

Optimize local water resources to reduce the Region's reliance on imported water. Projects selected to meet this objective could include water conservation, desalination, and recycled water projects. Water conservation projects typically involve the use of proven technology, such as irrigation controllers, which utilize a computer that accounts for a series of factors to deliver the correct amount of water for conditions. The technical feasibility of desalting projects has been well established and efficiency is increasing due to improvements in membrane technology. Recycled water projects utilize treatment processes for producing water that meets Title 22 standards. An example is the use of dual barrier free chlorine UV system which is a well documented practice for producing tertiary water for reuse while avoiding formation of NDMA.

Finally, the Plan identifies the ways in which it is consistent with Statewide Priorities, including the priority to "Assist in Meeting Delta Water Quality Objectives":

(From Appendix A Consistency with Statewide Priorities, p. A-4): The Plan includes a planning target to sustain current local water resources production capacity and provide additional water supply and/or demand reduction. The Plan identifies options to meet that target, which include expansion of water conservation programs, expanded use of recycled water (to offset potable water demand), and the optimized use of local supplies, including improved management and cleanup of groundwater basins and the potential to capture, treat, infiltrate or directly reuse urban and stormwater runoff. The combined effect of these proposals will be to minimize demand on imported supplies. This will improve water supply reliability for the Region and could concurrently reduce demand on State Water Project supplies and enhance the potential for improved management of the Bay-Delta system in order to meet identified water quality objectives, including salinity.

Assurances that IRWM Plan Update Will Continue Reducing Delta Water Dependence

Since the adoption of the 2006 Plan, there has been a commitment to implement projects in the Region that will reduce the dependence on imported Delta supply. In 2012, the Region committed to updating its 2006 IRWM Plan by providing local funding to increase regional self-sufficiency. In the recent proposal to update its IRWM Plan, the Region committed \$341,000 in local contributions and in-kind services for that purpose.

The 2013 IRWM Plan Update will include a more in-depth discussion of the Region's "substantial dependence on imported water" while recognizing that imported water is currently an important component of the Region's water supply portfolio.

As part of the development of the 2013 IRWM Plan Update, the objectives and targets were recently reviewed and modified. Although not yet adopted (expected in 2013), the RWMG and Regional Stakeholders have already agreed on measurable targets that will further emphasize the Region's commitment to reducing its reliance on Delta supplies. The main objective that states this intent is: Optimize local water resources to reduce the Region's reliance on imported water. This objective was retained from the 2006 IRWM Plan.

The associated targets that will help to reduce the Region's reliance on Delta water supplies include:

- Conserve 117,000 acre-feet per year (AFY) of water through water use efficiency and conservation measures.
- Create additional ability to pump 97,000 AFY using a combination of treatment, recharge, and storage access.
- Increase indirect potable reuse by 80,000 AFY.
- Increase non-potable reuse of recycled water by 83,000 AFY.
- Increase capture and use of stormwater runoff by 27,000 AFY that is currently lost to the ocean.
- Increase both centralized and distributed stormwater infiltration by 75,000 AFY.
- Develop 26,000 AFY of ocean water desalination.

As part of the Region's criteria for inclusion of projects in the IRWM Plan, projects are required to help the Region meet at least one plan objective and target. As these objectives and targets promote ways to reduce the Region's reliance on imported water, it follows that a portion of the projects included in the 2013 IRWM Plan Update will help the Region to reduce its reliance on imported water.