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# GREATER LOS ANGELES COUNTY INTEGRATED REGIONAL WATER MANAGEMENT PLAN REGION ACCEPTANCE PROCESS APPLICATION

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## 1. SUBMITTING ENTITY

This application is submitted by the Los Angeles County Flood Control District (LACFCD), chair of the Leadership Committee. The Leadership Committee serves as the Regional Water Management Group for the Greater Los Angeles County (GLAC) Region. On March 25, 2009, the Leadership Committee authorized the LACFCD to submit this application on behalf of the GLAC Region. The contact for the submitting entity is:

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## 2. WATER MANAGEMENT IN GLAC REGION

### 2.1 RWMG Members

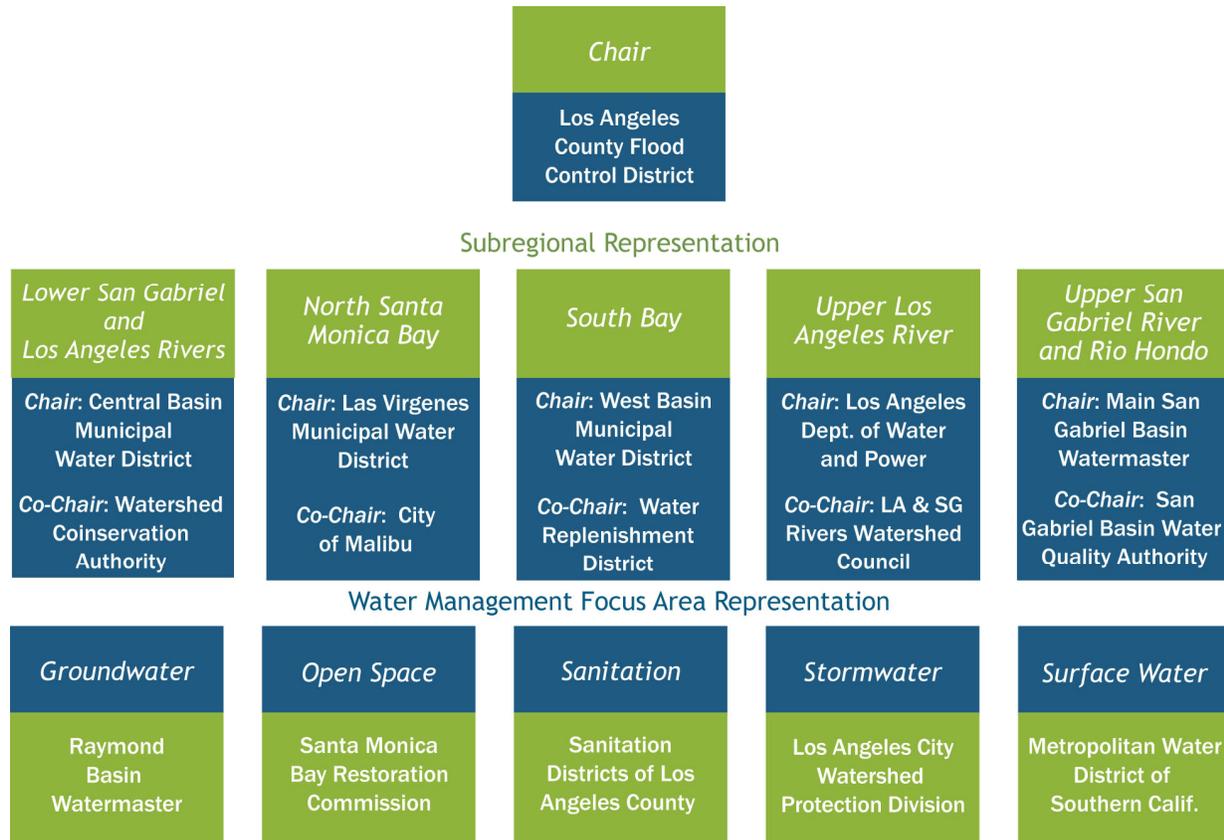
Consistent with Sections 10530–10546 of the Water Code, preparation of an Integrated Regional Water Management (IRWM) Plan must be guided by an RWMG comprised of three or more local public agencies, at least two of which have statutory authority over water supply, formed by means of a joint powers agreement, memorandum of understanding (MOU), or other written agreement that is approved by the governing bodies of the local public agencies. Consistent with the IRWM Plan guidelines, the RWMG for the GLAC Region is comprised of signatories to an MOU signed in 2006 that established the Greater Los Angeles County RWMG. In 2008, a revised MOU was adopted by the members of the RWMG (as discussed in Section 5.2 below).

The Leadership Committee of the GLAC Region has sixteen voting members, as shown in Figure 1, including the LACFCD (committee chair), the chairs and co-chairs of the five Subregional Steering Committees, and five agency representatives for the following water management areas: groundwater, open space, sanitation, stormwater, and surface water. The Leadership Committee also includes thirteen ex-officio (non-voting members), including Bureau of Reclamation, California Department of Fish and Game, California Coastal Commission, California Coastal Conservancy, California Department of Transportation, California Department of Water Resources (DWR), California Environmental Protection Agency, California Regional Water Quality Control Board Los Angeles Region (RWQCB), California Department of Parks and Recreation, California Department of Public Health, National Parks Service, U.S. Army Corps of Engineers (USACE), and U.S. Department of Agriculture Forest Service.

The composition of the Leadership Committee achieves a cross-sectional representation of all water management issues: Central Basin Municipal Water District, Las Virgenes Municipal Water District, Los Angeles Department of Water and Power, Metropolitan Water District of Southern California, and West Basin Municipal Water District are involved in water supply, conservation, and water recycling issues; the Main San Gabriel Basin Watermaster, the Raymond Basin Watermaster, the San Gabriel Basin Water Quality Authority, and the Water Replenishment District of Southern California are focused on groundwater supply and groundwater quality issues; LACFCD deals with stormwater quality, flood protection, and the conservation of stormwater runoff; the City of Malibu provides a municipal perspective on water management issues; Los Angeles County Sanitation Districts is the main agency for wastewater treatment in the GLAC Region, as well as a leader in water recycling; and the Los Angeles and San Gabriel Rivers Watershed Council, Santa Monica Bay Restoration Commission, and the Watershed Conservation

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Authority are proponents for open space, habitat, and water quality issues. Collectively, the members of the Leadership Committee provide regional representation for all water management areas.



**Figure 1 – Voting Members of Leadership Committee**

The specific management responsibilities of the voting members of the Leadership Committee as relates to water management are summarized below.

**Committee Chair**

▪ **Los Angeles County Flood Control District**

The LACFCD chairs the Leadership Committee. LACFCD provides for the control and conservation of the flood, storm, and other waste waters of the District. It also conserves such waters for beneficial and useful purposes by spreading, storing, retaining, or causing them to percolate into the soil within the District. The District also protects the harbors, waterways, public highways, and property in the District from damage from such waters and may provide for recreational use of District facilities. The District was created in 1915 and now operates and owns 15 major dams, 14 rubber dams, 529 miles of open channels, 2,811 miles of underground storm drains, 77,917 catch basins, 48 stormwater pumping plants, 116 sediment entrapment basins, 232 concrete crib check dams, 27 groundwater recharge facilities, 35 sediment placement sites, and 3 seawater intrusion barriers. In January 1985, the District consolidated with the County Engineer and the County Road Department to form the Department of Public Works. The Director of the Department of Public Works is therefore the Chief Engineer of the District, the County Engineer, and the Road Commissioner.

**Lower San Gabriel and Los Angeles Rivers Subregion**

▪ **Central Basin Municipal Water District**

The Central Basin Municipal Water District (MWD) represents the Lower Los Angeles and San Gabriel River

Subregion, as chair of the subregional Steering Committee. Central Basin MWD is a public agency that purchases imported water from the Metropolitan Water District of Southern California (MWDSC). Central Basin wholesales the imported water to cities, mutual water companies, investor-owned utilities, and private companies in southeast Los Angeles County. (Imported water is transported through the expansive Colorado River Aqueduct system and from Northern California.) Central Basin also supplies water used for groundwater replenishment and provides the region with recycled water for municipal, commercial, and industrial use. There are 24 cities in Central Basin's service area.

- **Watershed Conservation Authority**

The Watershed Conservation Authority (WCA) represents the Lower San Gabriel and Los Angeles Watersheds Subregion as co-chair of the Steering Committee. WCA is a joint powers entity between the San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy and LACFCD whose focus is to provide multiple benefits such as open space, habitat restoration, recreational opportunities, and watershed improvement in the San Gabriel and Lower Los Angeles Watersheds.

### **North Santa Monica Bay Subregion**

- **Las Virgenes Municipal Water District**

Las Virgenes MWD represents the North Santa Monica Bay Watersheds Subregion as chair of the Steering Committee. Las Virgenes MWD provides potable water, wastewater treatment, recycled water, and biosolids composting to more than 65,000 residents in the cities of Agoura Hills, Calabasas, Hidden Hills, Westlake Village, and unincorporated areas of western Los Angeles County. Las Virgenes MWD maximizes water resources by bringing water full circle. Wastewater is treated to be beneficially used as recycled water and biosolids converted to compost.

- **City of Malibu**

Malibu represents the North Santa Monica Bay Watersheds Subregion as the co-chair the Steering Committee. The 19-square-mile city has 13,000 residents and is located at the western extent of the Greater Los Angeles IRWM Region. The 22-mile coastline attracts 15 million annual visitors—800,000 on a single weekend. The entire city is in the Santa Monica Mountains National Recreation Area and one-half of the coastline in the city is designated as an Area of Special Biological Significance. Malibu is subject to many water quality regulations and shares this responsibility with upper watershed cities, Los Angeles County, the California Department of Transportation, and other open space agencies. Malibu Creek flows into Malibu Lagoon and then Santa Monica Bay, a National Estuary.

### **South Bay Subregion**

- **West Basin Municipal Water District**

West Basin MWD represents the South Bay Watersheds Subregion, as chair of the Steering Committee. West Basin MWD is a public agency that wholesales imported water to cities, investor-owned utilities, and private companies in the South Bay and unincorporated areas of Los Angeles County, serving a population of more than 885,000. In addition, West Basin MWD provides recycled water for municipal, commercial, and industrial uses. West Basin MWD owns the Edward C. Little Water Recycling Facility in El Segundo, where over 32,000 acre-feet per year (AFY) of secondary treated wastewater from Hyperion Treatment Plant is additionally treated and distributed throughout the Region. Formed in 1947, West Basin MWD is committed to ensuring a safe and reliable water supply for the Region.

- **Water Replenishment District**

The Water Replenishment District of Southern California (WRD) represents the South Bay subregion, as co-chair of the Steering Committee. The WRD manages groundwater for nearly four million residents in 43 cities of southern Los Angeles County. The 420 square mile service area uses about 250,000 acre-feet of groundwater per year, which equates to nearly 40% of the total demand for water. The WRD ensures that a reliable supply of high quality groundwater is available through its clean water projects, water supply programs, and effective management principles.

## Upper Los Angeles River Subregion

### ▪ **City of Los Angeles Department of Water and Power.**

Los Angeles Department of Water and Power (LADWP) represents the Upper Los Angeles River Watershed Subregion, as chair of the Steering Committee. LADWP is responsible for delivering water to 640,000 customers (including households, multi-family dwellings, and businesses) and electricity to 1.4 million customers in the City of Los Angeles.

### ▪ **Los Angeles and San Gabriel Rivers Watershed Council**

The Los Angeles and San Gabriel Rivers Watershed Council (LASGRWC) represents the Upper Los Angeles subregion, as co-chair of the Steering Committee. The Council is a 501(c)(3) non-profit organization with a mission to facilitate an inclusive consensus process to preserve, restore, and enhance the economic, social, and ecological health of the Los Angeles and San Gabriel Rivers Watershed through education, research, and planning.

## Upper San Gabriel River and Rio Hondo Subregion

### ▪ **Main San Gabriel Basin Watermaster.**

The Main San Gabriel Watermaster represents the Upper San Gabriel River and Rio Hondo Subregion as chair of the Steering Committee. The Main San Gabriel Basin Watermaster is the agency charged with administering adjudicated water rights within the watershed and managing groundwater resources in the Main San Gabriel Basin.

### ▪ **San Gabriel Basin Water Quality Authority**

The San Gabriel Basin Water Quality Authority (WQA) represents the Upper San Gabriel River and Rio Hondo Subregion as co-chair of the Steering Committee. The WQA was created by the State in 1993 to address the problem of groundwater contamination in the San Gabriel Valley. The WQA is empowered to address the problem of the migration of contaminated groundwater within the San Gabriel Basin and, in particular, the migration of contaminated water through the Whittier Narrows into the Central Groundwater Basin. The WQA currently operates groundwater cleanup projects for beneficial uses in the San Gabriel Valley that are actively intercepting contaminated groundwater flowing toward the Whittier Narrows.

## Water Management Focus Area Representatives

### ▪ **Raymond Basin Watermaster**

The Raymond Basin Watermaster represents the Groundwater Water Management Area on the Leadership Committee. The watermaster for the Raymond Basin is responsible for managing the current and future quality and quantity of water resources for the benefit of the communities and member agencies served by the Raymond groundwater basin.

### ▪ **Santa Monica Bay Restoration Commission**

The Santa Monica Bay Restoration Commission (SMBRC) represents the Open Space Water Management Area on the Leadership Committee. The State of California and the U.S. Environmental Protection Agency established the Santa Monica Bay Restoration Project as a National Estuary Program in December 1988, to develop a plan that would ensure the long-term health of the 266-square-mile Santa Monica Bay and its 400-square-mile watershed. That plan, known as the Santa Monica Bay Restoration Plan, won state and federal approval in 1995. On January 1, 2003, the Santa Monica Bay Restoration Project formally became an independent state organization and is now known as the Santa Monica Bay Restoration Commission.

### ▪ **County Sanitation Districts of Los Angeles County**

The County Sanitation Districts of Los Angeles County (LACSD) represents the Sanitation Water Management Area on the Leadership Committee. The LACSD is a confederation of independent special districts serving about 5.1 million people in Los Angeles County. Its service area covers approximately 800 square miles and encompasses 78 cities and unincorporated territory within the County. LACSD constructs, operates, and maintains facilities to collect and treat approximately 500 million gallons per day (MGD) of municipal wastewater. Approximately 30 percent of the treated wastewater is reclaimed by LACSD, of which nearly one half is beneficially reused. LACSD also manages solid waste including disposal, transfer operations, and materials recovery.

▪ **City of Los Angeles Bureau of Sanitation, Watershed Protection Division**

The Watershed Protection Division (WPD) represents the Stormwater Water Management Area on the Leadership Committee. The WPD, founded in 1990, is responsible for the development and implementation of stormwater pollution abatement projects within the City of Los Angeles, which covers approximately 23 percent of the Region.

▪ **Metropolitan Water District of Southern California**

The Metropolitan Water District of Southern California (MWDSC) represents the Surface Water Management Area on the Leadership Committee. The MWDSC is a consortium of 26 cities and water districts that provides drinking water to nearly 19 million people in parts of Los Angeles, Orange, San Diego, Riverside, San Bernardino, and Ventura counties. The District’s mission is to provide its service area with adequate and reliable supplies of high-quality water to meet present and future needs in an environmentally and economically responsible way. Of the total amount of water supplied by MWDSC each year, approximately 47 percent is provided to member agencies in the GLAC Region.

At the time the IRWM Plan was being developed, SB 1672 (Costa, Chapter 767, Statutes of 2002), which enacted The Integrated Regional Water Management Planning Act of 2002, conditioned the award of implementation funding on the adoption of an IRWM Plan by January 1, 2007. On December 13, 2006, the RWMG adopted the IRWM Plan for the GLAC Region, consistent with the deadline specified by statute. Individual members of the RWMG did not formally adopt the Plan at that time, as adoption by individual agencies was not required by statute or the program’s guidelines, and the time needed for formal adoption by individual agencies could have pushed adoption by the RWMG beyond the mandated deadline. Some members of the RWMG did receive delegated authority from their governing boards to vote for Plan adoption. As the planning process moves forward, members of the RWMG will comply with requirements related to plan adoption.

**2.2 Agencies with Statutory Water Authority**

Consistent with the requirements of the Water Code, the RWMG is comprised of at least 3 entities of which 2 have statutory authority over water supply or water management. As shown in Table 1, 12 of the 16 voting members of the RWMG have statutory water management authority.

Table 1. Statutory Water Management Authority of RWMG Members					
RWMG Members	Water Management Statutory Authority				
	Water Supply	Groundwater	Flood Management	Stormwater Management	Wastewater
Los Angeles County Flood Control District			X	X	
Central Basin Municipal Water District	X				
Watershed Conservation Authority					
Las Virgenes Municipal Water District	X				X
City of Malibu					
West Basin Municipal Water District	X				
Water Replenishment District		X			
City of Los Angeles Department of Water and Power	X	X			
Los Angeles and San Gabriel Rivers Watershed Council					
Main San Gabriel Basin Watermaster	X	X			
San Gabriel Basin Water Quality Authority		X			

Table 1. Statutory Water Management Authority of RWMG Members					
RWMG Members	Water Management Statutory Authority				
	Water Supply	Groundwater	Flood Management	Stormwater Management	Wastewater
Raymond Basin Watermaster		X			
Santa Monica Bay Restoration Commission					
County Sanitation Districts of Los Angeles County					X
City of Los Angeles Watershed Protection Division				X	
Metropolitan Water District of Southern California	X				

### 2.2.1 Water Supply Authorities in GLAC Region

Major water wholesalers, regional water agencies, and individual cities with water departments that were invited to participate in the IRWM Plan development process are listed in Table 2.

Table 2. Water Districts, Agencies, and Authorities in Greater Los Angeles County Region	
Regional District or Authority	Cities and Communities Served
Central Basin MWD*	Artesia, Bell, Bellflower, Bell Gardens, Cerritos, Commerce, Cudahy, Downey, East Los Angeles, Florence, Hawaiian Gardens, Huntington Park, La Habra Heights, Lakewood, La Mirada, Lynwood, Maywood, Montebello, Norwalk, Paramount, Pico Rivera, Santa Fe Springs, Signal Hill, South Gate, South Whittier, Vernon, Whittier
Foothill MWD*	Altadena, La Cañada Flintridge, La Crescenta, Montrose
Las Virgenes MWD*	Agoura, Agoura Hills, Calabasas, Chatsworth, Lake Manor, Hidden Hills, Malibu Lake, Monte Nido, Westlake Village, West Hills
Metropolitan Water District of Southern California	Anaheim, Beverly Hills, Burbank, Compton, Fullerton, Glendale, Long Beach, Los Angeles, Pasadena, San Fernando, San Marino, Santa Ana, Santa Monica, Torrance
Municipal Water District of Orange County*	Brea, Buena Park, Cypress, La Habra, La Palma, Los Alamitos, Placentia, Seal Beach
San Gabriel Basin Water Quality Authority	Baldwin Park, Bradbury, Duarte, La Puente, La Verne, Rosemead, San Dimas, San Gabriel, San Marino, Sierra Madre, South El Monte, Temple City, West Covina
San Gabriel Valley MWD	Alhambra, Azusa, Monterey Park, Sierra Madre
Southeast Water Coalition Joint Powers Authority	Cerritos, Commerce, Downey, Huntington Park, Lakewood, Norwalk, Paramount, Pico Rivera, Santa Fe Springs, South Gate, Vernon and Whittier
Three Valleys MWD*	Azusa, Charter Oak, Claremont, Covina, Covina Knolls, Diamond Bar, Glendora, Industry, La Verne, Pomona, Rowland Heights, San Dimas, South San Jose Hills, Walnut, West Covina
Upper San Gabriel Valley MWD*	Avocado Heights, Arcadia, Baldwin Park, Bradbury, Citrus, Covina, Duarte, El Monte, Glendora, Hacienda Heights, Industry, Irwindale, La Puente, Mayflower Village, Monrovia, Rosemead, San Gabriel, South El Monte, South Pasadena, South San Gabriel, Temple City, Valinda, West Covina, West Puente Valley

Table 2. Water Districts, Agencies, and Authorities in Greater Los Angeles County Region	
Regional District or Authority	Cities and Communities Served
Water Replenishment District of Southern California	Artesia, Bell, Bellflower, Bell Gardens, Carson, Cerritos, City of Commerce, Compton, Cudahy, Downey, El Segundo, Gardena, Hawaiian Gardens, Hawthorne, Hermosa Beach, Huntington Park, Inglewood, La Habra Heights, La Mirada, Lakewood, Lawndale, Lomita, Long Beach, Los Angeles, Lynwood, Manhattan Beach, Maywood, Montebello, Monterey Park, Norwalk, Palos Verdes Estates, Paramount, Pico Rivera, Rancho Palos Verdes, Redondo Beach, Rolling Hills, Rolling Hills Estates, Santa Fe Springs, Signal Hill, South Gate, Torrance, Vernon, Whittier
West Basin MWD*	Alondra Park, Carson, Culver City, El Segundo, Gardena, Hawthorne, Hermosa Beach, Inglewood, Ladera Heights, Lawndale, Lennox, Lomita, Malibu, Manhattan Beach, Marina Del Rey, Palos Verdes Estates, Rancho Palos Verdes, Redondo Beach, Rolling Hills, Rolling Hills Estates, Ross-Sexton, Topanga Canyon, Torrance, West Athens, West Hollywood
<p>Sources: Metropolitan Water District of Southern California, San Gabriel Valley MWD, San Gabriel Basin Water Quality Authority, Southeast Water Coalition, Water Replenishment District of Southern California</p> <p>* Also served by the Metropolitan Water District of Southern California</p>	

All of the regional water districts and authorities were participants in development of the Plan and continue to be active participants in ongoing planning activities. All of the 92 cities in the Region were represented during development of the Plan and continue to be represented in ongoing Plan activities, either directly by the participation of their water department, or indirectly via representation by the wholesale agency or district that supplies water to those cities. Water users in unincorporated areas were either represented by the appropriate wholesale agency and/or local water retailer (including Los Angeles County).

Consistent with the requirements of SBxx1, as the planning process moves forward, outreach efforts will need to expand to invite the participation of additional water supply entities, including mutual water companies, water corporations (as defined by Section 241 of the Public Utilities Code), and self-supplied water users (including agricultural, industrial, residential and park districts, school districts, colleges and universities).

### 2.2.2 Groundwater Authorities in GLAC Region

Groundwater represents a significant portion of local supplies in the GLAC Region, approximately 23 percent of the Region’s entire supply in an average year, and 29 percent in a dry year. All of the major groundwater basins in the Region are adjudicated, and producers within these basins follow management guidelines established by their respective adjudications. Non-adjudicated basins in the Region include the Santa Monica Basin, Hollywood Basin, and the Orange County Basin. The City of Santa Monica plans to implement a groundwater management plan for that basin. The Orange County Basin (which extends outside the southeastern boundary of the GLAC Region) is managed by the Orange County Water District.

The following groundwater management entities are active members of a Steering Committees and/or the Leadership Committee, including:

- **San Gabriel Basin:** Main San Gabriel Basin Watermaster and San Gabriel Basin Water Quality Authority
- **Raymond Basin:** Raymond Basin Watermaster
- **Central Basin:** Central Basin Watermaster (DWR), Central Basin MWD, Southeast Water Coalition Joint Powers Authority, and Water Replenishment District of Southern California
- **West Basin:** West Basin Watermaster (DWR) and Water Replenishment District of Southern California
- **San Fernando Basin:** Upper Los Angeles River Area Watermaster

Thus all groundwater management entities with statutory authority for the major groundwater basins in the GLAC Region were involved in Plan development and continue to be active participants in ongoing planning activities.

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### 2.2.3 Flood Management Authorities in GLAC Region

Regional flood management within the GLAC Region is the responsibility of three agencies: LACFCD, Orange County Flood Control District, and the Ventura County Watershed Protection Division. LACFCD is chair of the Leadership Committee, Orange County Flood Control District is represented by Orange County Public Works, a voting member of the Lower Los Angeles and San Gabriel Subregion, and the Ventura County Watershed Protection Division, which occasionally attends meetings of the North Santa Monica Bay Steering Committee. Thus, all agencies with primary responsibility for flood management in the GLAC Region were involved in Plan development and continue to be active participants in ongoing planning activities. In addition, cities provide flood protection on a local basis.

### 2.2.4 Stormwater Management Authorities in GLAC Region

Stormwater management in Los Angeles County is governed by two stormwater Nationwide Pollutant Discharge Elimination System (NPDES) permits: one for Los Angeles County (and 84 cities as co-permittees) and another for the City of Long Beach, administered by Los Angeles County Public Works and the City of Long Beach respectively. Separate permits cover Orange County, which is administered by Orange County Public Works and Ventura County, administered by the Ventura County Watershed Protection Division. The Los Angeles County Department of Public Works (represented by the LACFCD), the City of Long Beach, and Orange County Public Works are all Steering Committee members, and LACFCD chairs the Leadership Committee. Ventura County Watershed Protection Division occasionally attends meetings of the North Santa Monica Bay Steering Committee. Thus, Plan development was informed by the participation of all entities with statutory authority for stormwater management in the GLAC Region and those entities continue to be active participants in the planning process.

### 2.2.5 Wastewater Authorities in GLAC Region

Wastewater treatment services within the GLAC Region are currently provided by:

- County Sanitation Districts of Los Angeles County;
- Orange County Sanitation Districts;
- City of Los Angeles Department of Public Works, Bureau of Sanitation;
- Las Virgenes MWD (under a joint partnership with Triunfo Sanitation District);
- City of Burbank;
- City of Glendale;
- Los Angeles County Department of Public Works; and
- Other municipal agencies.

With the exception of the Orange County Sanitation Districts, all major wastewater service providers with statutory authority for wastewater treatment and collection were involved in development of the Plan and continue to be active participants in ongoing planning activities.

As the planning process moves forward, the Steering Committee for the Lower Los Angeles and San Gabriel Rivers subregion will need to work with the Orange County Public Works Department (a voting member of the Steering Committee) to assure that the interests of the Orange County Sanitation Districts are represented.

## 2.3 Other RWMG Members

All of the members of the RWMG were described above in Section 2.1. The participation of stakeholders in the planning process is described in Section 3 below, and the opportunities for public participation are described in Section 4 below.

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## 2.4 Working Relationships

### 2.4.1 Plan Development

Development of the IRWM Plan, which was adopted in 2006, required substantial cooperation between dozens of agencies, organizations and individuals, to develop various plan components including the regional description, assessments of water supply and demand, plan objectives, and the planning targets, which quantified the Region's water management needs. This required substantial information sharing, discussion of competing and mutual interests, and the articulation of conceptual and specific multi-purpose solutions which could meet the identified water management needs.

One of the outcomes of the planning process has been to bring together disparate groups in a forum where common needs and opportunities for collaboration and integration could be pursued. There have been many examples of partnerships that have formed to date in the planning process, including the formation of the Leadership Committee and the Steering Committees, which have required multiple agencies to work together at new planning scales, both Regional and Subregional. As the planning process moves forward, several types of partnerships are expected to form as projects are identified and implemented, including geographic partnerships between jurisdictions in close proximity, and public-private partnerships with stakeholder organizations that have common interests, and common-purpose partnerships between entities with similar goals.

Development of the Plan benefited from the involvement of, and coordination with, a variety of state and federal agencies and enhanced coordination of ongoing activities between many entities. For example, the meetings of the North Santa Monica Bay Steering Committee provide a forum for discussion of a wide range of issues among the participants, including local, state, federal and non-governmental entities. This includes the National Park Service, which owns a great deal of land in the Santa Monica Mountains, and the Santa Monica Mountains Resource Conservation District, which implements projects and programs that benefit privately owned agricultural and ranch lands in the Santa Monica Mountains. Without the Steering Committee meetings, interaction between these numerous entities would be less regular and more focused on specific projects. The prospect of long-term plan implementation creates the potential for more sustained coordination.

### 2.4.2 Project Development

During development of the original planning grant applications, several regional groups identified a list of 149 projects for implementation funding, which was subsequently narrowed down to 58 projects, which were submitted for implementation funding (in Step 1 of Round 1) from Proposition 50, Chapter 8. Following the consolidation of the initial planning efforts (described in Section 7), the State requested a single (Step 2) implementation grant application from the Region, which required further integration and prioritization that ultimately resulted in a list of fourteen priority projects.

The identification of projects lead to the formation of collaborative partnerships and will likely continue to do so during Plan implementation. One example is the Large Landscape Water Conservation Project (submitted as part of the Region's Proposition 50 Step 2 grant application) which was a partnership between the Surfrider Foundation and the West Basin MWD. Although the interests and roles of the two partners are very different, they have found that implementation of the project will meet some of their shared goals. Water conservation is important to the West Basin MWD as it will reduce demand for imported water supplies and help to improve water supply reliability for the Region. Water conservation is also important to the Surfrider Foundation because it can reduce dry weather urban runoff to the Santa Monica Bay. By working together these two partners increased the potential for successful outcomes that enhance their ability to meet individual goals.

To identify the many potential projects in the Region and to gauge the cumulative contribution of these projects towards meeting the objectives and planning targets, development of the IRWM Plan included a "Call for Projects" which afforded stakeholders the opportunity to directly submit their projects and project concepts for consideration. Stakeholders were asked to submit projects that were at any stage of development and ideas about possible projects (or project concepts). There were a variety of avenues available for participating in the Call for Projects including the submission of projects via a project identification form (in either a short- or long-form

version), in spreadsheet form (for the submission of multiple projects), or directly on-line via the website ([www.lawaterplan.org](http://www.lawaterplan.org)). Currently, more than 1,600 projects have been submitted to the database, and project proponents can add additional projects as they are identified.

### 2.4.3 Ongoing Planning

Since the Plan was adopted more than two years ago, many significant accomplishments have been realized, including:

- Approval of a revised MOU and an update to the Operating Guidelines (described in Section 2.5 below);
- Regular meetings of the Steering and Leadership Committees (e.g., ten to eleven times per year);
- Expansion of representation on both the Steering and Leadership Committees;
- Voluntary contributions totaling \$1,996,250 from participating agencies to (fund IRWM Plan development and support continued planning activities);
- Updated analysis of the Region's water supply gap in light of drought and Delta pumping restrictions (described in Section 7.4.2 below);
- Refinements to the online project database, which has grown to more than 1,600 projects;
- Development of a draft project prioritization framework (and the application of that draft framework to the projects in the database); and
- Development of an outreach plan for Disadvantaged Communities (for which implementation is ongoing).

Many of the 1,600 projects identified by stakeholders to date are single purpose, yet project location maps depict numerous projects at the same location or in close proximity. Thus, substantial opportunities exist for project integration, which has been the subject of much discussion at the subregional level for the past two years.

Watershed (and sub-watershed) boundaries create obvious opportunities for geographic project integration, particularly for projects and programs that address surface water quality. The adopted (wet- and dry-weather) bacteria Total Maximum Daily Loads (TMDLs) for Santa Monica Bay beaches, the metals TMDL for the Los Angeles River, and the Malibu Creek Bacteria Nutrient TMDLs require the establishment of jurisdictional groups, which are organized on watershed boundaries, or other logical geographic groupings (e.g., smaller watersheds in the South Bay, or an individual reach of a river). Pending future TMDLs may include a similar requirement. Thus, implementation plans for some TMDLs will result in the geographic integration of projects and programs related to surface water quality. The Los Angeles RWQCB has suggested that it may consider adoption of watershed-based NPDES permits, which would provide additional impetus for coordination of stormwater and NPS programs on a geographic basis.

In addition, individual agencies, cities, and counties have the ability to implement projects and programs that address more than one of the Region's water management needs. As many resource management agencies typically have single-purpose missions, the implementation of multi-purpose projects may be a challenge. However, given potential affinities between some of the strategies (e.g., water supply and water quality, or open space and recreation); agencies are increasingly finding opportunities to integrate multiple strategies.

Partnerships provide opportunities for agencies, cities, communities, and groups to work together for common goals. Cities can, and sometimes do, coordinate planning with adjacent jurisdictions. Agencies can work with cities, other agencies, and non-profit groups, to coordinate studies and implement projects. Interest groups may band together to work on issues of common interest. Neighborhoods and associations can strive to identify consensus on broad goals. These all represent forms of collaboration, which can result in partnerships that increase the strength of individual voices, expand the influence of groups, and extend benefits of projects and programs beyond individual cities or jurisdictions.

Given the large number of agencies, cities, and counties with jurisdiction in the Region, and the diversity of neighborhoods and interest groups, the range of interests and issues is very diverse and extends beyond water resource management. Instead of differences, ongoing planning has created opportunities to focus on common themes on which virtually everyone can concur: protect the environment, protect water supply and water quality,

and provide more parks and open space. Through ongoing planning activities, agencies, organizations and individuals have worked together to plan and develop multi-purpose projects and programs that meet both local needs and agency mandates while also helping to enhance water supplies and improve water supply reliability.

### 2.4.4 Challenges

With so many agencies, jurisdictions, organizations, and interested individuals in the GLAC Region, maintaining a high level of participation continues to be a challenge (please see Section 7.3 below). After the initial success during Plan development, participation in Steering Committees and the Leadership Committee has generally stabilized, with approximately 10-15 people per Steering Committee meeting (or 50-75 people for the five subregions) and about 30-35 people per Leadership Committee. With six meetings generally held each month, more than two years after plan adoption, ongoing participation averages between 80 and 110 people.

The lack of available funding for implementation of projects, coupled with limited staff resources, has probably limited the willingness of local agencies and organizations to commit staff time and other resources to ongoing IRWM meetings. It is anticipated that as additional implementation funding (from Proposition 84) becomes available, participation in workshops and other meetings will expand. As discussed below in Section 3.4, per new requirements in SBxx1, outreach to additional entities will be required as the planning process moves forward.

## 3. STAKEHOLDER OUTREACH & PARTICIPATION

### 3.1 Stakeholder Outreach

During the planning process that led to development of the adopted Plan, invitations were transmitted to over 1,400 individuals representing hundreds of cities, agencies, districts, and organizations to participate in stakeholder workshops, project identification, and related planning activities. This included:

- **Federal Agencies:** U.S. Army Corps of Engineers, Bureau of Reclamation, Forest Service, National Park Service, Natural Resources Conservation Service
- **State Departments and Agencies:** Caltrans, Fish and Game, Health Services, Parks and Recreation, Resources Agency, State Water Resources Control Board, University of California Cooperative Extension, Water Resources
- **State Conservancies:** San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy, Santa Monica Mountains Conservancy, Coastal Conservancy, Baldwin Hills Conservancy
- **Regional Agencies:** Southern California Association of Governments, Los Angeles and Santa Ana Regional Water Quality Control Boards
- **Special Districts:** County Sanitation Districts of Los Angeles County, Triunfo Sanitation District
- **Los Angeles County Departments:** Public Works, Regional Park and Open Space District, Parks and Recreation, Regional Planning, Beaches and Harbors, Flood Control
- **Orange County Departments:** Resources and Development Management Department and Watershed and Coastal Resources
- **Water Districts:** Central Basin MWD, Foothill MWD, Las Virgenes MWD, Metropolitan Water District of Southern California, Municipal Water District of Orange County, San Gabriel Basin Water Quality Authority, San Gabriel Valley MWD, Southeast Water Coalition JPA, Three Valleys MWD, Upper San Gabriel Valley MWD, Water Replenishment District of Southern California, West Basin MWD (and cities with water departments, as identified in Table 1 above)
- **Cities in Los Angeles County** (including City Managers and the Departments of Planning, Public Works, and Parks and Recreation): Agoura Hills, Alhambra, Arcadia, Artesia, Azusa, Baldwin Park, Bell, Bellflower, Bell Gardens, Beverly Hills, Bradbury, Burbank, Calabasas, Carson, Cerritos, Claremont, Commerce, Compton, Covina, Cudahy, Culver City, Diamond Bar, Downey, Duarte, El Monte, El Segundo, Gardena, Glendale, Glendora, Hawaiian Gardens, Hawthorne, Hermosa Beach, Huntington Park, Industry, Inglewood, La Canada

Flintridge, La Habra Heights, Lakewood, La Mirada, La Puente, La Verne, Lawndale, Long Beach, Los Angeles, Lomita, Lynwood, Malibu, Manhattan Beach, Maywood, Monrovia, Montebello, Monterey Park, Norwalk, Palos Verdes Estates, Paramount, Pasadena, Pico Rivera, Pomona, Rancho Palos Verdes, Redondo Beach, Rolling Hills, Rolling Hills Estates, Rosemead, San Dimas, San Fernando, San Gabriel, San Marino, Santa Fe Springs, Santa Monica, Sierra Madre, Signal Hill, South El Monte, South Gate, South Pasadena, Temple City, Torrance, Vernon, Walnut, West Covina, West Hollywood, Westlake Village, and Whittier

- **Cities in Orange County:** (including City Managers and the Departments of Planning, Public Works, and Parks and Recreation). Anaheim, Brea, Buena Park, Cypress, Fullerton, La Habra, La Palma, Los Alamitos, Placentia, and Seal Beach
- **Other Governmental and Non-Governmental Organizations:** Non-profit organizations (trusts, foundations, conservancies, associations, societies, coalitions, alliances, councils); joint powers authorities (including Councils of Government), businesses, property owners; financial institutions; businesses and industry associations; Chambers of Commerce; educational institutions; civic organizations; environmental groups; watershed councils; and interested individuals

## 3.2 DAC Outreach

Consistent with the IRWM program guidelines, outreach to Disadvantaged Communities (DACs) has been an element of the planning process since planning began in earnest at the end of 2005. An analysis of census tract data was coupled with GIS mapping to identify DACs in the GLAC Region. A gap analysis was then conducted to determine which communities were not represented in the outreach lists developed for the planning process, and efforts began to identify and invite the participation of potential representatives of those communities, including jurisdictions, non-profit organizations, and community groups. The Interim Draft IRWM Plan (developed in June 2006 in support of the Round 1 implementation grant application) identified nine specific activities that were needed as Plan development moved forward. Those activities continued after Plan adoption and primarily related to the identification of projects that would benefit DACs.

DAC efforts were re-energized through development of a Draft DAC Outreach Plan in May 2008 (which was finalized in September 2008). Efforts to expand and include DACs is ongoing and continue to evolve, through the efforts of an “Ad Hoc” committee of several non-governmental organizations (NGOs) that have traditionally worked with DAC communities to address recreation, open space, water supply, water quality, and other environmental justice issues. This group and members from each of the Subregional Steering Committees are working to refine a proposal that could result in more substantive role of the NGOs in this process. Thus, although the DAC Outreach Plan has been finalized, the DAC outreach process continues to evolve to assure that DAC participation expands and reaches target groups.

The goals, objectives, and strategies from the DAC Outreach Plan include:

### 3.2.1 Goals

- Identify and address the water-related needs of DACs in the GLAC region.
- Reach and involve DACs in the planning process and in identifying and developing projects and programs that benefit their communities.

### 3.2.2 Objectives:

- Use a phased approach to implement the outreach plan, gradually reaching more people living and working in the region’s DACs with water resource issues to address.
- In the near term, given currently available resources, work with DACs to develop projects from the current projects list. This includes providing technical support and helping DACs identify leads, funding sources, and other resources.
- Over time, work with identified DACs and their representatives to develop a comprehensive analysis of the water-related needs of these communities throughout the region.

- Also over time, as additional resources become available, work with DACs to develop a suite of projects to address the identified needs and include them in the planning process.

### **3.2.3 Strategies to Achieve the Objectives of Outreach to Disadvantaged Communities:**

- Involve DAC representatives in project identification, development, and implementation.
- Build a comprehensive database of disadvantaged communities and community representatives in each subregion and use this to target outreach to neighborhoods in order to increase the number of representatives and residents of DACs who are participating in the process and in each subregion's Steering Committee meetings.
- Inform representatives and residents of DACs about opportunities to be involved with their subregional planning activities.
- Inform DACs about realistic benefits and opportunities for their communities through collaboration and through partnerships with agencies and organizations.
- Conduct outreach in DACs to gather information on community needs.
- Conduct outreach to assist DACs in developing existing projects by providing in-kind planning, design, environmental, and engineering assistance—and where needed, add new projects to the projects list.

## **3.3 Extent of Stakeholder Participation**

Although initial outreach activities resulted in contact with more than 1,400 individuals, approximately 300 agencies and organizations participated in the subregional and regional workshops and/or submitted projects during plan development. Currently, 71 agencies and organizations are represented as voting members on the Steering Committees, as shown on Table 3. As noted above, monthly participation averages 80 to 110 people.

## **3.4 Additional Future Outreach**

Consistent with the requirements of SBxx1, as the planning process moves forward, additional outreach will be needed to assure that additional stakeholders are invited to participate in the process, including:

- Mutual water companies and water corporations;
- Self-supplied water users (including agricultural, industrial, residential and park districts, school districts, colleges and universities);
- Special Districts;
- Electrical Corporations; and
- Native American Tribes (with lands in the GLAC Region, if any)

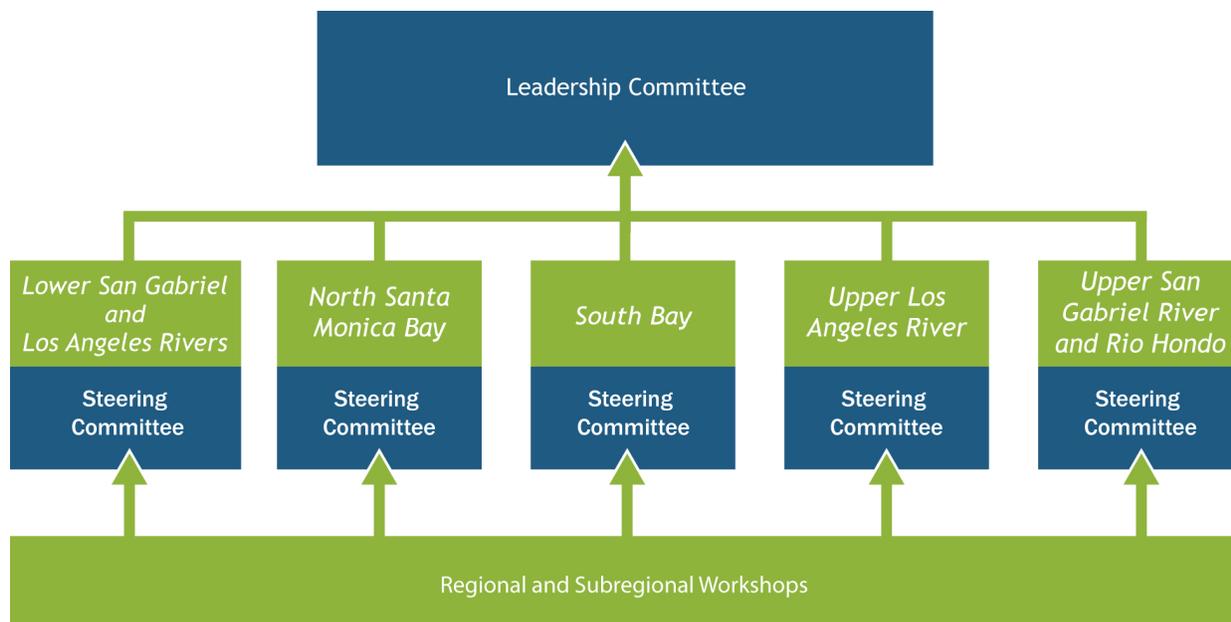
## **3.5 Stakeholder Processes**

### **3.5.1 Organization for Stakeholder Input and Participation**

To manage input from the stakeholders across the entire region and reflect local variations, five Subregional Steering Committees were established, which provide input to the Leadership Committee. The 71 agencies and organizations that are current members of the five Subregional Steering Committees are identified in Table 3. These Steering Committees receive additional stakeholder input from subregional workshops on specific topics. The overall organization of stakeholder input and participation is illustrated in Figure 2.

**Table 3. Steering Committee Representation**

South Bay Watersheds	North Santa Monica Bay Watersheds	Upper Los Angeles River Watershed	Lower San Gabriel and Los Angeles Rivers Watersheds	Upper San Gabriel and Rio Hondo Watersheds
<ul style="list-style-type: none"> <li>• City of Los Angeles Bureau of Sanitation</li> <li>• City of Los Angeles Dept. of Water and Power</li> <li>• City of Torrance</li> <li>• Heal the Bay</li> <li>• Los Angeles County Flood Control District</li> <li>• Los Angeles County Sanitation Districts</li> <li>• Santa Monica Bay Restoration Commission</li> <li>• South Bay Cities COG</li> <li>• Water Replenishment District of Southern California</li> <li>• West Basin Municipal Water District</li> <li>• Westside Cities COG</li> </ul>	<ul style="list-style-type: none"> <li>• California Department of Parks and Recreation</li> <li>• California Coastal Conservancy</li> <li>• California Department of Transportation</li> <li>• City of Calabasas</li> <li>• City of Malibu</li> <li>• City of Westlake Village</li> <li>• Heal The Bay</li> <li>• Las Virgenes Municipal Water District</li> <li>• Los Angeles County Beaches &amp; Harbors</li> <li>• Los Angeles County Flood Control District</li> <li>• Malibu Lake Mountain Club</li> <li>• Mountains Restoration Trust</li> <li>• National Park Service</li> <li>• Resource Conservation District of the Santa Monica Mountains</li> <li>• Santa Monica Bay Restoration Commission</li> <li>• Santa Monica Baykeeper</li> <li>• Santa Monica Mountains Conservancy</li> <li>• Triunfo Sanitation District</li> <li>• Water District #29 Los Angeles County Waterworks Division</li> <li>• West Basin Municipal Water District</li> </ul>	<ul style="list-style-type: none"> <li>• Arroyo Seco Foundation</li> <li>• California Coastal Conservancy</li> <li>• Cities of Burbank &amp; Glendale</li> <li>• Cities of Pasadena &amp; South Pasadena</li> <li>• City of Calabasas</li> <li>• City of Los Angeles Bureau of Sanitation</li> <li>• City of Los Angeles Department of Recreation and Parks</li> <li>• Los Angeles &amp; San Gabriel Rivers Watershed Council</li> <li>• Los Angeles County Department of Public Works</li> <li>• Los Angeles Department of Water and Power</li> <li>• LA Trails</li> <li>• Mountains Recreation &amp; Conservation Authority</li> <li>• TreePeople</li> <li>• Tujunga Watershed Area</li> </ul>	<ul style="list-style-type: none"> <li>• Central Basin Municipal Water District</li> <li>• City of Long Beach</li> <li>• Environmental Justice Coalition for Water</li> <li>• Gateway COG—City of Downey</li> <li>• Gateway COG—City of Lakewood</li> <li>• Gateway COG—City of Paramount</li> <li>• Los Angeles &amp; San Gabriel Rivers Watershed Council</li> <li>• Los Angeles County Flood Control District</li> <li>• Los Angeles County Sanitation Districts</li> <li>• Orange County Public Works</li> <li>• Water Replenishment District</li> <li>• Watershed Conservation Authority</li> </ul>	<ul style="list-style-type: none"> <li>• California Department of Water Resources (as Central Basin Watermaster)</li> <li>• Los Angeles &amp; San Gabriel Rivers Watershed Council</li> <li>• Los Angeles County Flood Control District</li> <li>• Los Angeles County Sanitation Districts</li> <li>• Main San Gabriel Basin Watermaster</li> <li>• Rivers and Mountains Conservancy</li> <li>• San Gabriel Basin Water Quality Authority</li> <li>• San Gabriel Mountains Regional Conservancy</li> <li>• San Gabriel Valley Council of Governments</li> <li>• San Gabriel Valley Municipal Water District</li> <li>• San Gabriel Valley Water Association</li> <li>• Three Valleys Municipal Water District</li> <li>• Upper San Gabriel Valley Municipal Water District</li> </ul>



**FIGURE 2 – Structure for Stakeholder Input**

### 3.5.2 Opportunities for Stakeholder Participation

To inform Plan development and ongoing planning activities, an array of mechanisms have been employed to involve stakeholders and incorporate their input, including:

- **Technical Memoranda:** A significant body of work related to water supply, surface water quality, and open space is contained within numerous plans, reports, and studies. Rather than attempt to synthesize those documents in the Plan, a series of TMs was developed. The subject of the TMs included water supply, water quality/flood management, open space, water quality strategy integration, project integration, benefits assessment, and implementation. These incorporated and integrated stakeholder-generated information from stakeholder workshops and accumulated that information across the entire region. In addition, a summary of existing plans, reports, and studies was compiled to confirm the relevance of these various documents, along with interviews with selected stakeholders (e.g., water supply agencies) to obtain the individual perspective of those entities. Since Plan adoption, several other TMs have been developed related to project prioritization, planning needs, and a potential update of the adopted Plan.
- **Subregional Stakeholder Workshops:** The primary venue for stakeholder input continues to be subregional workshops. During plan development, twenty subregional workshops were held (four in each of the five Subregions). These workshops provided background on the planning process; identified issues, opportunities, and constraints; considered opportunities for project integration; and identified comments on the Public Review Draft of the IRWM Plan. Since Plan adoption, subsequent subregional workshops have focused on project identification and integration.
- **Regional Workshops:** During plan development, four regional stakeholder workshops were held to encourage regional consistency and the formation of partnerships. Workshop content focused on (1) background, context, and schedule; (2) objectives and strategies; (3) project scenarios and benefits; and (4) review of the Draft Plan.
- **Steering Committees:** The Subregional Steering Committees provide a forum for more detailed discussion of the issues related to development of the IRWM Plan and for input on issues considered by the Leadership Committee, including the prioritization and selection of projects. The Steering Committees also assist in preparations for Subregional stakeholder workshops. Approximately 50 Steering Committee meetings occur on an annual basis, with more than 165 meetings since the planning process began in late 2005.
- **Leadership Committee:** The Leadership Committee generally meets once per month and occasionally more frequently when needed, to provide direction for the IRWM Plan development process, make formal decisions

regarding administration of the Plan, and determine project priorities (e.g., the final selection of Step 2 projects). Approximately 10 Leadership Committee meetings occur on an annual basis, with nearly 40 meetings since the planning process began in late 2005.

- **Project Website:** A project website was developed during the initial stages of Plan development ([www.lawaterplan.org](http://www.lawaterplan.org)) to facilitate the distribution of project information to stakeholders and the public. The website continues to be maintained and serves as the primary information portal for ongoing planning activities (as discussed below in Section 4.1.3).
- **Electronic and Written Communications:** Electronic mail was the main tool used to maintain a high level of stakeholder communication and engagement. All meetings and workshop announcements were sent as far in advance as possible to stakeholders. Various stakeholder groups (e.g., the Ballona Creek Watershed Task Force) also forwarded messages to their constituencies, thereby extending the reach to additional stakeholders. In addition, written communications in the form of letters to cities and press releases to the media were utilized to expand awareness of, and participation in, Plan development.

## 4. PUBLIC INVOLVEMENT

Public participation in development of the Plan, identification of projects, and ongoing planning activities is encouraged via meeting notices, opportunities for public comment at all meetings, a website, brochures, press releases and presentations to organizations, elected officials and other groups, as described below.

### 4.1.1 Meeting Notices

Public notice of meetings and workshops are posted on the [lawaterplan.org](http://lawaterplan.org) website (discussed below) at least one week prior to meetings and are also provided (in a similar timeframe) via e-mail to parties that have expressed an interest in receiving such notices.

### 4.1.2 Public Comment at Meetings

Agendas for meetings of Leadership Committees include a “public comment” item, allowing any person in attendance to address the group on any topic. Steering committees are generally less formal (than the Leadership Committee) and allow comments on agenda items by all those in attendance, including members of the public.

### 4.1.3 Website

The [lawaterplan.org](http://lawaterplan.org) website was created early in 2006 and continues to be maintained, supporting the wide availability of information related to the Plan, projects, funding, and opportunities to get involved. The website provides information on the following topics:

- **Projects:** An overview of the type of projects that are being promoted via the process and how project proponents may submit additional projects to the online project database.
- **Calendar:** A list of upcoming meetings, agendas, and meeting summaries, for Leadership and Steering Committees and public workshops.
- **Documents:** Currently, 78 documents are available for download, providing a wealth of information on (1) Organizational Structure (and Governance), (2) Meetings, (3) Plans and Grant Applications, (4) Press Releases and Presentations, (5) Technical Memoranda and Supporting Information, and (6) Correspondence.
- **F.A.Q.:** Answers to frequently asked questions, including what constitutes an IRWM Plan, what types of projects are eligible for funding, and why should agencies or entities get involved in the planning process.
- **Prop 50 Grant Administration:** Recipients of Proposition 50 grant funds utilize this section to upload information concerning status of the fourteen projects funded by the (Round 1) grant.
- **Contact:** A single point of contact (at the Los Angeles County Flood Control District) is identified if individuals or entities wish to participate in the process, and such requests are forwarded to the consultant team and the relevant Subregional steering committees.

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#### **4.1.4 Brochures**

To assure wide distribution of information concerning the Plan, ongoing meetings, and the potential to submit projects, several brochures have been developed for distribution to elected officials, stakeholder groups, non-profit organizations, and other interested parties. The most recent brochure, the “Highlights Lite” document, was completed in November 2008.

#### **4.1.5 Press Coverage**

At various milestones in the planning process, Los Angeles County and other members of the RWMG have issued press releases on major topics (which are available on the website), such as adoption of the Plan and the award of the \$25 million Proposition 50 grant, which have resulted in both print and local television news coverage, enhancing public awareness of the collaborative effort to develop the IRWM Plan and implement projects.

#### **4.1.6 Presentations to Organizations and Groups**

Various presentations have been developed to inform specific audiences during the planning process, which is still on-going. Venues included regional and subregional workshops, press conferences, a celebration of the award of project implementation funds, and other events. Some of these have also been used to provide an overview of planning activities to other groups, such as elected officials, stakeholder groups, non-profit organizations, and community groups. A number of these presentations are posted on the website, and thus remain available for use in ongoing outreach activities.

### **5. GOVERNANCE**

#### **5.1 Structure**

The Leadership Committee established to guide the development and implementation of the Plan serves as the RWMG for the GLAC Region, consistent with the MOU which formed the RWMG. The Leadership Committee makes formal decisions with respect to the scope and content of the Plan. To manage input from the stakeholders across the entire region and reflect local variations, five Subregional Steering Committees were established, which provide input to the Leadership Committee, consistent with the MOU and Operating Guidelines. Additional input is received from stakeholders via subregional and regional workshops on specific topics. As illustrated in Figure 2 (above), stakeholder input to the RWMG is structured around the five Subregional Steering Committees and the stakeholder workshops. Thus the governance structure provides for broad involvement in decision-making and numerous opportunities for stakeholder input and involvement.

#### **5.2 RWMG Decision-Making**

The Leadership Committee guides the development and implementation of the Plan, with input from the five Subregional Steering Committees, and stakeholder workshops on specific topics. On an ongoing basis, the agendas for Leadership Committee meetings are shared with the Steering Committees, which generally meet in advance of the Leadership Committee. The Steering Committees review the agenda for the Leadership Committee and make formal recommendations with respect to action items. When the Leadership Committee subsequently considers the item, the Chair and Co-Chairs of the Steering Committee cast their votes in accordance with the recommendations of their steering committees. Thus, decision-making by the RWMG is regularly based on a broad consensus of the more than 70 voting members of the steering committees, with additional input from the ex-officio members the Leadership Committee and others in attendance (including the public) at Steering and Leadership Committee meetings.

A relevant example of decision-making is the process for revision of the Memorandum of Understanding and the Operating Guidelines. The adopted IRWM Plan, dated December 13, 2006, acknowledged the potential for revisions to the governance structure and identified several options, including:

- Maintaining existing structures (of the Leadership and Steering Committees);
- Modifying existing structures (e.g., by expanding representation on both the Leadership and Steering Committees);
- Integrating existing structures (by including other groups and efforts into the planning process);
- Creating new structures (e.g., if the RWMG planned to assume responsibility for implementation of projects).

Following adoption of the IRWM Plan, the Steering Committees began discussing potential modifications to the governance structure and decision-making process. This eventually resulted in specific proposals to expand membership of the committees, enhance involvement of the Steering Committee in decision-making, and clarify terms of committee membership. These modifications were formally adopted in April 2008 via a revised MOU (signed by members of the Leadership Committee) and Operating Guidelines (both of which are included as Appendix A to this application).

The major revisions included:

- Allow individual Steering Committees to determine their membership (and thus expand as new organizations and entities demonstrate an interest in participation);
- Clarify how interested parties can become voting members of Steering Committees (with no requirement for financial participation);
- Expand the membership of the Leadership Committee from eleven to sixteen persons, including the chair and co-chair of each Steering Committee, five Water Management Area representatives (for groundwater, open space, sanitation, stormwater, and surface water), plus the Chair (currently the Los Angeles County Flood Control District);
- Require that Steering Committees be given an opportunity to review and comment on the agenda of the Leadership Committee;
- Clarify the period of review (e.g., 3 years, on a staggered basis) for membership on the Leadership Committee;
- Identify qualifications for the Water Management Area representatives; and
- Clarify that the RWMG is composed of the members of the Leadership Committee.

By expanding the membership of both the Steering and Leadership Committees, participation in decision-making was expanded to include more non-profit organizations. The Steering Committees are able to review and take formal positions on the proposed action items of the Leadership Committee. This process ensures that the decisions of the Leadership Committee reflect the broadest possible consensus of all participants.

### **5.3 Potential for Expanded RWMG Membership**

As noted above, the Operating Guidelines specify that the Steering Committee may determine their own membership, and thus new agencies and organizations can become voting participants in the ongoing planning process. In addition, the Operating Guidelines also provide for the periodic review of the membership of the Leadership Committee, which could result in changes in the Water Management Area representatives, the number of voting members or other modifications to the composition of the committee.

### **5.4 How the Governance Structure Fosters Collaboration**

The governance structure, with a Leadership Committee serving as the RWMG, five subregional steering committees that make formal recommendations to the Leadership Committee on action items, and the utilization of subregional and regional workshops to discuss key topics, fosters broad collaboration on a broad range of planning topics and broad participation in decision-making.

Stakeholder workshops provided opportunities to capture broad stakeholder views that informed development of the IRWM Plan, including: 1) background material that informed development of the IRWM Plan; 2) reviewed the draft mission, objectives and planning targets; 3) issues, opportunities, and constraints that needed to be addressed

in an integrated plan; 4) opportunities and methodologies for project integration; and 5) discussed comments on the Draft IRWM Plan. Since Plan adoption, subsequent subregional workshops have focused on project identification, integration, and prioritization, which fosters collaboration as agencies and organizations realize opportunities to collaborate on multi-objective projects.

## 6. REGIONAL BOUNDARY

### 6.1 Basis for Boundary Selection

The GLAC Region, an area of approximately 2,058 square miles, is located in coastal Southern California (refer to Map 1). The Region contains portions of four counties—Los Angeles, Orange, Ventura, and San Bernardino—and is primarily defined by the coastal watersheds within the area that drain to Santa Monica Bay and San Pedro Bay. Thus, the regional boundary reflects watershed areas, which are defined by topography and include the floodplains, surface water bodies, and impaired water bodies located within those watersheds.

The regional boundary is not based on 1) political or jurisdictional boundaries; 2) water, conservation, irrigation, or flood district boundaries; 3) groundwater basins; 4) the boundary of the Los Angeles Regional Water Quality Control Board; 5) major water related infrastructure; 6) population; 7) biological significant units or other biological features (critical habitat areas); or 8) disadvantaged communities with median household income demographics. Although each of those factors is relevant to the development of an integrated plan, they did not form the basis for determining the regional boundary.

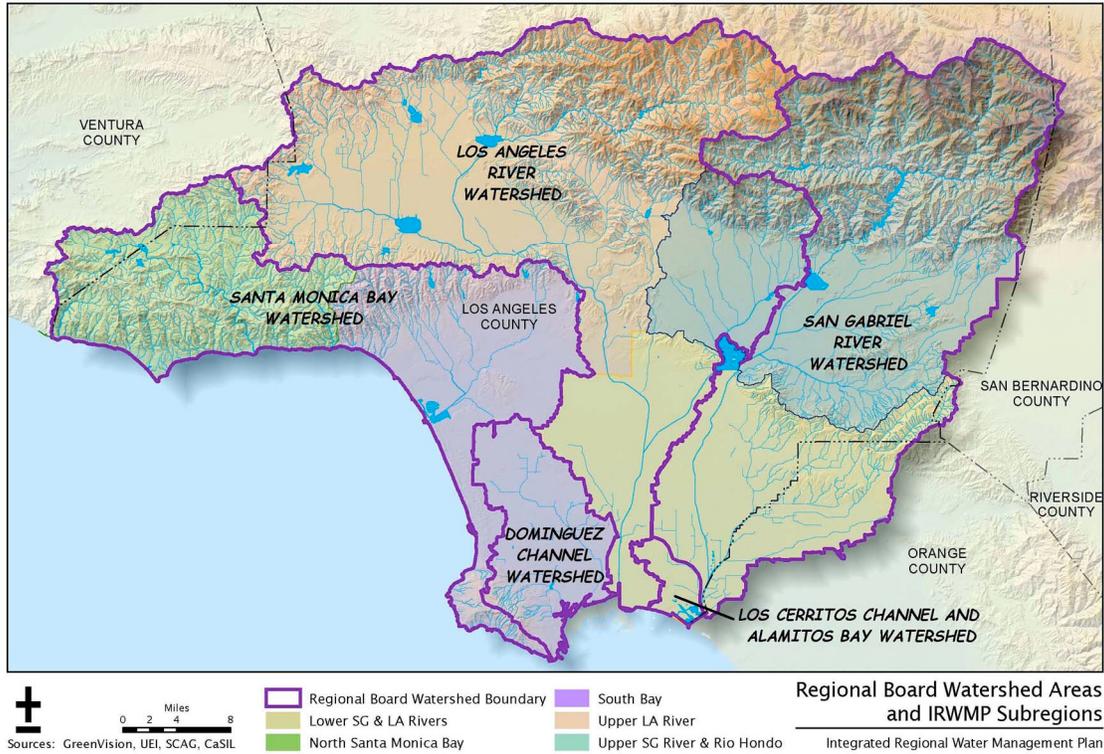


**MAP 1 – Greater Los Angeles County Region**

The Los Angeles and San Gabriel Rivers drain approximately 1,513 square miles of the Region and discharge to San Pedro Bay. These two watersheds are connected via the Rio Hondo, which transfers flood waters during large storm events from the San Gabriel to the Los Angeles River. Other major watersheds in the region include Malibu

Creek, Topanga Creek, Ballona Creek (which drain to Santa Monica Bay), and the Dominguez Channel (which drains to San Pedro Bay). Dozens of smaller watersheds drain directly to Santa Monica or San Pedro Bays.

The boundaries of the GLAC Region reflect the combined area of five Watershed Management Areas (WMA) identified in the Watershed Management Initiative chapter of the Basin Plan for Los Angeles and Ventura Counties, prepared by the Los Angeles Regional Water Quality Control Board. These are the Los Angeles River Watershed, the San Gabriel River Watershed, the Santa Monica Bay WMA, the Los Cerritos Channel/Alamitos Bay WMA, and the Dominguez Channel WMA, as shown on Map 2.



**MAP 2 – Los Angeles RWQCB Watershed Management Areas**

Given the size and complexity of the GLAC Region and the number of stakeholders and agencies that could participate in Plan development and other planning activities, to manage stakeholder input and acknowledge geographic variation, five subregional planning areas were established (as depicted on Map 3):

- North Santa Monica Bay Watersheds;
- Upper Los Angeles River Watershed;
- Upper San Gabriel River and Rio Hondo Watersheds;
- Lower San Gabriel and Los Angeles Rivers Watersheds; and
- South Bay Watersheds.



MAP 3 – GLAC Subregional Planning Areas

## 6.2 How the Boundary Facilitates Integrated Water Management

Given the region’s substantial reliance on local surface water supplies (and the groundwater recharge that results) and the extensive range of surface water quality impairments, the aggregation of coastal watersheds to form the GLAC Region is logical and an appropriate scale for integrated water management. These coastal watersheds share many of the same water resource management issues, including substantial dependence on imported water, significant opportunities to further expand water conservation, and substantial utilization of recycled water. Water resource management planning at this scale provides an opportunity to optimize use of local water resources including stormwater runoff, recycled water, and groundwater to reduce dependence on imported water and concurrently enhance water supply reliability. Thus, the selection of a regional boundary based on coastal watershed boundaries facilitates the development of an integrated water supply portfolio that relies on multi-purpose projects and programs to address similar water management issues.

## 7. HISTORY OF IRWM EFFORTS

### 7.1 History

Historically, water agencies in the GLAC Region have tapped a variety of sources, implemented new technologies, responded to evolving regulatory requirements, and navigated changing political conditions to deliver ample supplies in most years. As a result, the Region has one of the broadest and most diverse water supply portfolios in California. This diverse portfolio has resulted from substantial cooperation at regional scales, as flood control districts, sanitation districts, and wholesale water agencies have worked across jurisdictional boundaries to implement projects that have multiple benefits. Yet, as most resource management agencies were originally formed with single-purpose missions, their ability to develop and implement multi-purpose programs and projects has

traditionally been limited. The passage of Proposition 50 and the availability of funds to support truly-integrated planning at a regional scale provided the impetus to expand and integrate previous efforts.

In response to the release of the IRWM Grant Program Guidelines in 2004, six regional groups separately submitted planning grant applications (in May 2005) to support development of IRWM Plans, including the Santa Monica Bay Restoration Commission, the City of Los Angeles, the Watershed Conservation Authority, the Upper San Gabriel Valley MWD, the West Basin MWD, and the City of Downey. Based on review of the applications, DWR recommended funding only one application—from the Watershed Conservation Authority. In response, representatives of the regional groups worked together and with DWR and the SWRCB to expand the funding pool and provide funds for additional applications. In September 2005, DWR expanded the funding pool and proposed a single grant of \$1.5 million, on the condition that the six original applicants prepare a single consolidated plan for the entire GLAC Region. In November 2005, a consultant team was selected to consolidate the previous planning efforts and develop a single plan.

During development of the planning grant applications, the regional groups identified a list of 149 projects for implementation funding, which was subsequently narrowed down to 58 projects, which were submitted for implementation funding (in Step 1 of Round 1) from Proposition 50, Chapter 8. Following the consolidation of the initial planning efforts, the State requested a single (Step 2) implementation grant application from the Region, which required further integration and prioritization that ultimately resulted in a list of fourteen priority projects. In July 2006, the GLAC Region submitted a Step 2 grant application for implementation funding.

To support the grant application, DWR required the submission of either an adopted plan or an interim draft plan. To prepare an interim draft plan, existing plans, studies, and documents were reviewed to determine the extent to which those documents reflected concepts of integrated resource management and to identify whether those documents could collectively be integrated into an IRWM Plan. As a result of this analysis, it was determined that the existing plans and studies could not readily be assimilated into a functionally equivalent IRWM Plan and thus preparation of a new document would be required.

The Interim Draft Plan utilized technical information from the original planning grant applications and various existing plans, studies, and documents. The discussion of water supply relied upon water supply and demand information from the Urban Water Management Plans from many water agencies in the Region and the Metropolitan Water District's Integrated Resources Plan. The regional description and discussion of water quality issues was derived from local watershed plans (including Arroyo Seco Watershed Restoration Feasibility Study, Ballona Creek Watershed Management Plan, Common Ground, from the Mountains to the Sea, Compton Creek Watershed Management Plan, Dominguez Channel Watershed Management Master Plan, Malibu Creek Watershed Management Area Plan, Rio Hondo Watershed Management Plan, Sun Valley Watershed Plan, and the draft Upper San Gabriel River Watershed Management Plan), and existing and proposed TMDLs developed by the Los Angeles Regional Water Quality Control Board. The Interim Draft Plan was adopted by the Leadership Committee on June 28, 2006 (and submitted as part of the Step 2 application in July). In November 2006, DWR announced an award of \$25 million to the GLAC Region for implementation of the fourteen projects.

Following submission of the Step 2 implementation grant, efforts continued towards development of a complete plan. This process was informed by input from twenty-four stakeholder workshops, which provided the basis for the mission, objectives, and planning targets articulated in the IRWM Plan, identification of short-term and long-term priorities, and the relative application of the water management strategies in the GLAC Region. On December 13, 2006, the Leadership Committee adopted the IRWM Plan for the GLAC Region.

Since the plan was adopted more than 2 years ago, many significant accomplishments have been realized (as discussed in Section 2.4.3 above), including: a revised MOU and Operating Guidelines, expanded representation on the Steering and Leadership Committees, continued regular meetings of both the Steering and Leadership Committees, voluntary contributions from participating agencies to fund continued planning activities; refinements to the online project database; development of a draft project prioritization framework and development of an outreach plan for Disadvantaged Communities. Thus ongoing planning activities in the GLAC Region and participation by a wide spectrum of agencies and organizations continue to be robust and sustained.

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## **7.2 Water Management Issues in GLAC Region**

### **7.2.1 Reliable Water Supplies**

Most years, the San Gabriel Mountains receive substantial rainfall and existing dams and natural storage slowly release runoff, providing an important source of high-quality and low-cost water that can be treated for direct use or recharged into groundwater basins for later use. At several locations, recharge is limited by the capacity of existing recharge facilities. Rehabilitation and expansion of recharge facilities, modified operation of existing storage facilities, and rehabilitation and enlargement of upstream storage capacity, and optimization of operational practices could improve the utilization of this local water source.

Recharge or direct reuse of runoff from urbanized areas is generally limited by concerns about the presence of contaminants. To increase the utilization of this local resource, runoff capture and infiltration could be expanded (where appropriate), the quality of surface runoff improved, and projects implemented to capture, treat, and utilize stormwater for either non-potable direct use or recharge.

The widespread implementation of water conservation projects and programs has resulted in significant reductions in demand throughout the Region. Aggressive adoption of additional measures, such as public outreach, ultra low-flush toilets, and evapotranspiration-based irrigation controllers will be needed to continue progress.

Although local wastewater treatment plants produce substantial amounts of recycled water, due to demand and infrastructure limitations, not all of this production is currently utilized to augment water supply, resulting in the discharge of excess supplies to the rivers and creeks. Expansion of distribution systems and the creation of new storage facilities could facilitate increased production and expand the utilization of this local resource for direct non-potable reuse (e.g., landscape irrigation) and groundwater recharge. Expansion of this valued resource must be coupled with salt management programs and projects to limit potential effects of salt build-up, particularly in groundwater basins.

Desalination is being considered by some coastal agencies to improve supply reliability and reduce dependence on imported water. Seawater desalination has become more economical in recent years due to improvements in membrane technology, plant siting strategies, and increased costs for traditional water treatment. Additional research and supporting studies will be needed to optimize treatment technology, develop pretreatment alternatives, resolve brine disposal management issues, and identify appropriate mitigation for any adverse environmental impacts

### **7.2.2 Preservation & Enhancement of Water Quality**

Improving the quality of urban and stormwater runoff will reduce or eliminate impairment of the designated beneficial uses of rivers, creeks, beaches, and other bodies of water in the Region. Continued compliance with National Pollutant Discharge Elimination System (NDPES) permit requirements and the implementation of additional programs and projects will be required to reduce contaminant levels to the limits established by current, pending, and future TMDLs. Improving the quality of urban and stormwater runoff could also make these local supplies available for direct reuse or groundwater recharge in some locations depending on land use.

The Region's many groundwater basins provide a substantial portion of local water supplies, particularly during drought periods. In some locations, groundwater quality has been degraded by industrial discharges, agricultural and residential chemical usage, naturally occurring minerals and organics, and overdrafting of some basins, which has resulted in seawater intrusion along the coast. Identifying sources of contaminants and taking appropriate measures to reduce or eliminate the potential for contamination, is crucial to ensuring a reliable water supply. Where contamination has occurred, programs and projects must be implemented to treat the contaminated groundwater and make these additional supplies available.

### **7.2.3 Maintenance & Enhancement of Water-Related Infrastructure**

Although abundant sunshine is one of the Region's main attractions, occasional storm events have the potential to generate substantial amounts of runoff which can create significant flood risks. The Region's extensive flood

management system must be operated, maintained, and enhanced where needed to protect lives and property. As elements of the flood protection system warrant significant repair or replacement, consideration must be given to the implementation of more integrated flood management systems. Projects that propose to: 1) reduce runoff via onsite best management practices; 2) capture and treat urban and stormwater runoff for treatment; 3) expand groundwater recharge; or 4) restore habitat, must also preserve or enhance existing flood protection levels.

Many water and wastewater systems in the Region have been operating for up to five decades or longer with differing approaches and issues related to maintenance and infrastructure replacement. As these systems age or system demands increase, adequate maintenance and appropriate enhancements should be implemented to improve the quality of water delivered to consumers, maintain the quality of wastewater effluent discharge, expand recycled water production, enhance system flexibility, and improve water supply reliability in an integrated manner as much as possible.

#### **7.2.4 Habitat Quality and Connectivity**

Urban and suburban growth in the Region has displaced extensive areas of native habitat, including wetlands, riparian, and upland habitats, which has adversely affected local watersheds and water resources. The protection of existing habitats, including wetland and riparian habitats along the coast and interior valleys and upland habitats in the foothills and mountains will preserve areas that contribute to the natural recharge of precipitation. Many of these existing habitats have been adversely affected by land use practices and the introduction of invasive and non-native species and thus are in need of preservation and restoration to enhance their value as native habitat. Functional linkages between the remaining areas of native habitat are needed to preserve long-term species diversity.

The loss of functional native habitat and the extensive modification of natural channels in urbanized areas have also reduced the extent to which natural processes can remove or sequester contaminants in urban and stormwater runoff, cycle nutrients through watersheds, and provide functional habitat for aquatic and terrestrial species that inhabit or depend on these areas. The protection, restoration and enhancement of native functional riparian habitats should also restore natural ecosystem processes to the extent feasible.

The amount of undeveloped open space and habitat in the upper portions of many watersheds has been decreasing as urbanization continues. To maintain the water supply, water quality, habitat and recreational benefits that these areas provide, the undeveloped portions of the upper watersheds not currently included within protected areas (i.e., national forests or parks) need to be identified, quantified, and protected where feasible. Analysis of the benefits of restoring natural processes may be useful to convince local jurisdictions of the value of this practice.

Fire is an integral part of many local ecosystems, which have adapted to these occasional events in ways that renew vegetation and recycle nutrients. Historical patterns of open space management have relied heavily on fire suppression, which in some instances has increased fuel loads, transforming once minor fires to major conflagrations that have severe impacts on habitat and create substantial risks to lives and property. Once denuded of vegetation, exposed soils are susceptible to erosion and failure, reducing the ability of these lands to absorb rainfall and recharge groundwater, and sometimes resulting in debris flows that clog channels and fill reservoirs with sediment, adversely affecting downstream water quality. Sensitive fuel management techniques, including controlled burns and fuel load management are needed to restore the ability of these lands to accommodate minor fires, while preserving and protecting habitat for sensitive species.

#### **7.2.5 Enhanced Recreation Opportunities**

Open space and parkland has the potential to enhance groundwater resources (by preserving or expanding the area available for natural groundwater recharge), improve surface water quality (to the extent that these open spaces filter, retain, or detain stormwater runoff), and provide opportunities to reuse treated runoff or recycled water for irrigation (thereby reducing the demand for potable water). The amount of existing parkland in the urbanized portions of the Region does not meet national standards per capita parkland access, particularly in Disadvantaged Communities. Additional watershed-friendly recreational space is needed and these spaces should provide native vegetation to create habitat, passive recreational opportunities, and where feasible, contribute to stormwater detention and treatment and natural groundwater recharge.

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## 7.3 Water Management Conflicts

With so many agencies and jurisdictions responsible for water management in the GLAC Region, the development of an IRMW Plan has not resolved or eliminated every potential conflict in a region of more than 2,000 square miles. However, the development of the IRWM Plan, ongoing meetings to discuss common issues and concerns, identification and integration of multi-purpose projects, and collaborative efforts to increase opportunities to fund those projects, has greatly enhanced the willingness of these entities to seek mutually beneficial solutions to problems that historically were a source of conflict.

During the development of the adopted Plan and throughout the first two years of the IRWM planning activities in the GLAC Region, each of the subregional planning areas benefited from the widespread participation of agencies, jurisdictions, organizations, and many individuals from within those subregions. In 2008, several jurisdictions in the Lower Los Angeles and San Gabriel Rivers Subregion elected to form a Joint Powers Authority (JPA) for the purposes of establishing the Los Angeles Gateway Area IRWM planning region, out of a concern about the appropriate scale for regional planning. This effort resulted in a decline in participation by members of the JPA and other cities represented by the Gateway Cities Council of Governments (COG), although the remaining steering committee members have continued to meet and be engaged. In response, the Los Angeles County Flood Control District and members of the Leadership Committee and the Steering Committee of the Lower Los Angeles and San Gabriel Rivers Subregion engaged in various efforts to encourage members of the Gateway Cities COG and the Los Angeles Gateway Area JPA to more fully engage in ongoing planning activities in the GLAC Region, including the potential for expanded planning at a subregional scale. In June 2008, in a letter from DWR Director Lester Snow, DWR encouraged the GLAC Region and members of the Gateway JPA to work together to resolve issues and concerns. Subsequently, the Chair and members of the Steering Committee for the Lower Los Angeles and San Gabriel Rivers subregion, along with the LACFCD, redoubled their efforts to engage participants in the Gateway Area JPA effort to encourage their continued participation in the GLAC planning process. Since that time, participation in the Steering Committee has improved, but has not entirely rebounded to the level prior to the Gateway JPA efforts. It is hoped that these entities will continue to participate in the GLAC planning process and that their participation will continue to expand.

## 7.4 Water Related Components in Region

### 7.4.1 Water Supply

The Region has developed a diverse mix of local and imported water supply sources which collectively provide an approximately 2.55 million acre-feet/year (AFY), assuming California State Water Project (SWP) deliveries in a single dry year would be 5 percent of entitlement. Local water resources include groundwater, surface water, recycled water, water conservation, water transfers, and storage. Water is imported through the SWP, the Colorado River Aqueduct, and the Los Angeles Aqueducts. Major water supply sources are described below.

#### 7.4.1.1 Groundwater

Groundwater represents a significant portion of local supplies in the Region, approximately 23 percent of the Region's entire supply in an average year, and 29 percent in a dry year. Most groundwater basins in the Region are adjudicated (via a court decision) and producers within these basins follow management guidelines established by their respective adjudications. Exceptions are the Orange County Basin, Santa Monica Basin and Hollywood Basin. The City of Santa Monica plans to implement a groundwater management plan for that basin. The Orange County Basin (which extends outside the southern boundary of the Region) is managed by Orange County Water District, which was established in 1933. There are no significant groundwater basins in the North Santa Monica Bay Watersheds.

Groundwater basin water quality is a significant issue in the Region, as natural conditions result in high dissolved salt levels. In some aquifers, salt levels are so high the water is termed "brackish," which either requires desalination or advanced treatment to make the supply usable or blending the treated water with other supplies that have a lower salt content. In addition, land use practices and production practices have deteriorated water quality in portions of certain groundwater basins. Many factors have contributed to the deterioration of water

quality including historic overdrafting of groundwater basins (sometimes resulting in seawater intrusion), industrial discharges, agricultural chemical usage, livestock operations, contaminants in urban runoff, and naturally occurring constituents. The cost of treating these contaminants is often significant, and for some improperly disposed chemicals, effective treatment has not yet been identified. Various agencies, including the San Gabriel Basin Water Quality Authority and the Water Replenishment District have implemented programs to assess treatment options and treat the contaminated groundwater.

#### **7.4.1.2 Local Surface Water**

The Los Angeles River flows 51 miles from the union of Bell Creek and Arroyo Calabazas in the San Fernando Valley, then southeast through the City of Burbank and eventually southward to Long Beach. Originally, the Los Angeles River was the primary water source for the City of Los Angeles. Following several catastrophic floods, the U.S. Army Corps of Engineers encased most of the river bed and banks in concrete, effectively eliminating interaction between groundwater and surface water, except for those portions where the natural bottom was retained due to high groundwater levels that made concrete lining infeasible. Today, the river is primarily fed from stormwater, effluent from wastewater treatment plants, urban runoff, base flow from the Santa Monica and San Gabriel Mountains, and groundwater inflow in the Glendale Narrows. Runoff from several tributaries is diverted to spreading grounds and facilities at various locations in the San Fernando Valley.

The San Gabriel River flows 75 miles southwest from the San Gabriel Mountains, then southward from the Whittier Narrows to its ocean discharge at the City of Seal Beach. Unlike the Los Angeles River, due to more favorable soil conditions the San Gabriel River has a natural bed for most of its length, although the banks are armored with rip rap and concrete for flood control purposes. The river is fed by stormwater, base flow from the San Gabriel Mountains, dry weather urban runoff and effluent from wastewater treatment plants. Municipalities in the upper portion of the watershed receive portions of their water supply from surface water runoff from the San Gabriel Mountains. Significant quantities of surface water naturally recharge groundwater via the permeable bottom in the San Gabriel River and are also used for groundwater recharge in several locations. During the dry season, the presence of dams and other diversions results in river flow that is sometimes discontinuous, as some river reaches are dry, while other reaches have flow.

#### **7.4.1.3 Imported Water**

The California SWP carries water from Lake Oroville and other facilities north of Sacramento to the Sacramento-San Joaquin Delta and then transports that water to central and southern California, including two agencies that service the GLAC Region: the MWDSC and the San Gabriel Valley MWD. Although the system was never fully completed and typically delivers less than designed, when water is available the SWP often delivers more than four million AFY. 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.

California water agencies are entitled to 4.4 million AFY of water from the Colorado River. Of this amount, MWDSC's fourth priority entitlement is 550,000 AFY. Until a few years ago Metropolitan routinely had access to 1.2 million AFY of Colorado River water. Although the Quantification Settlement Agreement (QSA) affirms the state's right to 4.4 million AFY, water allotments to California could be reduced in the future. By 2020, the QSA programs are expected to allow delivery to full capacity of the Colorado River Aqueduct of up to 1.25 million acre-feet.

High-quality water from the Mono Basin and Owens Valley is delivered through the Los Angeles Aqueducts to the City of Los Angeles. Construction of the original 233-mile Los Angeles Aqueduct from the Owens Valley was completed in 1913. In 1940 the aqueduct was extended 105 miles north to Mono Basin. A second aqueduct from Owens Valley was completed in 1970 to further increase capacity. Approximately 480,000 AFY of water can be delivered to the City of Los Angeles each year; however the amount the aqueducts deliver varies from year to year due to fluctuating precipitation in the Sierra Nevada Mountains and mandatory in-stream flow requirements. In addition, the diversion of water from Mono Lake has been reduced following a decision of the SWRCB and exportation of water from the Owens Valley is limited by the Inyo-Los Angeles Long Term Water Agreement (and

related MOU) and an additional MOU between the Great Basin Air Pollution Control District and the City of Los Angeles (to reduce particulate matter air pollution from the Owens Lake bed). As a result of these restrictions on water transfers, future deliveries are expected to be reduced to an average of 321,000 AFY over the next 20 years.

#### **7.4.1.4 Recycled Water**

Current average annual recycled water production in the Region is approximately 225 million gallons per day (MGD), which represents approximately 25 percent of the current average annual effluent flows. Of the 225 MGD of recycled water produced, approximately 107 MGD is currently reused for municipal uses (e.g., irrigation), industrial applications, environmental uses, groundwater replenishment, or maintenance of seawater barriers in groundwater basins along the coast. The remainder is currently discharged to creeks and rivers, supporting riparian habitat in some locations, or directly to the ocean.

#### **7.4.1.5 Water Transfers**

In response to the 1991 drought, the Governor's Water Bank was developed. MWDSC and other SWP contractors took advantage of the program to augment supplies and lessen the severity of drought impacts. Since that time, Metropolitan has participated in water transfers as a water management strategy to augment supplies. The City of Los Angeles plans to develop water transfers as part of its supply strategy. Should the costs of purchasing and wheeling (or moving) water from outside the Region be lower than purchasing MWDSC water, other agencies would likely be interested in implementing water transfers as a supply strategy.

#### **7.4.1.6 Storage**

The water supply in the GLAC 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. Several smaller reservoirs have also been developed within the Region to assist in the management of water supplies. However, most of these local reservoirs are limited in their ability to capture local runoff. Most of the remaining dams in the Region have been developed for flood management purposes and are typically not used for long-term (e.g., multi-year) surface water storage.

LACDPW oversees several surface water storage facilities, which were created to improve flood protection and store runoff for subsequent release and diversion to 27 groundwater spreading grounds for recharge. Eleven dams were constructed as part of the San Gabriel River and Montebello Forebay water conservation system to impound runoff from the San Gabriel Mountains prior to release for downstream spreading and groundwater recharge. Runoff in the San Gabriel River is captured by three dams in San Gabriel Canyon: Cogswell Dam on the West Fork, San Gabriel Dam below the confluence of the East and West Forks of the San Gabriel River, and Morris Dam, a few miles downstream of San Gabriel Dam. Once released from the upper canyon facilities, runoff flows to Santa Fe Dam and may be diverted to the Santa Fe spreading grounds, located off-river along the northern boundary of the dam, or conveyed downstream to the Rio Hondo and San Gabriel Coastal Basin Spreading Grounds. On tributaries to the Los Angeles River, the Big Tujunga and Pacoima dams provide similar functions. LACDPW also oversees 17 inflatable rubber dams throughout the Los Angeles Basin. Most are used to divert flows into the spreading grounds, although several rubber dams in the San Gabriel watershed also promote short-term groundwater recharge through the unlined channel bottoms.

### **7.4.2 Water Demand**

As water agency boundaries are not aligned with the Region's boundaries, an estimate of the Region's water supply and demand was not readily available for this Plan. Water supply and demand for the Region was estimated based on review of key documents, the results of a survey distributed to water agencies in the Region, and meetings with Metropolitan Water District and other water agencies staff. Based on that analysis, the potential future gap between water supply and demand was estimated to be 800,000 AFY.

Since adoption of the IRWM Plan, pumping restrictions in the Delta have reduced the availability of imported water from the SWP. To address this potential, a Water Supply Gap analysis was conducted to determine the

GLAC Region's current supplies under six supply scenarios, and for each scenario, calculate the gap between the current local and imported supplies and projected water demand. This analysis indicates that the future supply gap could range between 353,000 and 930,000 AFY.

### 7.4.3 Water Management Planning Targets

To establish quantified implementation benchmarks, during development of the IRWM Plan, planning targets were defined based on much discussion with the relevant agencies and stakeholders (via regional and subregional workshops), which provide more definition to the Region's major water resource needs over the next 20 years. Although the IRWM Plan is intended to address the Region's water resource management needs, this document also identifies several open space and habitat targets, as the implementation of water supply and water quality projects have the potential to contribute towards these other Regional needs. In addition, habitat, open space, and parkland projects have the potential to generate water supply and water quality benefits.

#### 7.4.3.1 Improve Water Supply

**Increase water supply reliability by providing 800,000 AFY of additional water supply and demand reduction through conservation.** The Region's current water supplies (for a single dry year) were estimated at approximately 2.55 million AFY (assuming SWP deliveries in a single dry year would be 5 percent of entitlement). By comparing the Region's current supply to an estimate of future demand (in 2025), the difference between water demand and supply was estimated to be approximately 800,000 AFY. [As noted above, since the IRWM Plan was adopted, a subsequent Water Supply Gap analysis determined that based on varying assumptions about imported supply and climate change, the future supply gap could range between 353,000 and 930,000 AFY.]

**Included in the 800,000 AFY target noted above, reuse or infiltrate 130,000 AFY of recycled water.** The Region produces substantial amounts of recycled water, but this production exceeds current demand. Expanding opportunities for utilization of this local resource for direct non-potable reuse, indirect potable reuse, injection into seawater intrusion barriers in coastal groundwater basins, and recharge through groundwater recharge basins, could displace the need to import, pump and/or treat "new" water and would improve water supply reliability. This will require enhanced treatment, expanded distribution systems, rehabilitation of existing infrastructure, and the identification of new customers and/or new uses for recycled water.

This target recognizes the substantial volume of current production (approximately 120,000 AFY) and suggests that with aggressive expansion of existing systems, production and utilization could be increased and perhaps more than doubled (to 250,000 AFY) over the next 20 years. This target is subsumed within the above planning target for water supply.

#### 7.4.3.2 Improve Water Quality

**Reduce and reuse 150,000 AFY (~40 percent) of dry weather urban runoff and capture and treat an additional 170,000 AFY (~50 percent), for a total target of approximately 90 percent.** During periods of dry weather, runoff from landscape irrigation, washing impervious surfaces, unregulated industrial discharges, illicit sewer connections, and seepage from natural springs, cumulatively result in the discharge of a substantial volume of runoff into local creeks, rivers, and the ocean. This urban runoff typically contains moderate levels of contaminants which degrade surface water quality and limit the potential to utilize this resource to augment local water supplies. To reduce adverse impacts to beneficial uses in the creeks and rivers, the volume of urban runoff could be reduced (i.e., more efficient landscape irrigation or onsite BMPs to infiltrate and reduce runoff). The remaining urban runoff should be captured, treated, infiltrated, or reused for other purposes, which would require the development of infrastructure for detention, treatment and infiltration.

This target for the volume of urban runoff is based on stream gauge records of current dry-weather flows in major channels in the Region. The estimate of the range of annual volumes that should be reduced, captured and/or treated corresponds to cumulative flows of between 210 to 450 cubic feet per second (cfs) for the entire Region. The IRP for the City of Los Angeles establishes a target for a 50 percent reduction in runoff. The lower limit for this target (40 percent) reflects a concern that the City's IRP target may be difficult to achieve during the 20-year planning horizon. As existing habitat in some creeks and rivers has become dependent on the year-round flows

which result from urban runoff (and the discharge of treated effluent from wastewater treatment plants at some locations), the complete elimination of urban runoff could result in adverse impacts to in-channel habitat and the native and migratory species that utilize those habitats. Thus, rather than propose the complete elimination of urban runoff, this target sets an upper limit of the 90 percent for the reduction and/or capture, treatment, and reuse of urban runoff.

**Reduce and reuse 220,000 AFY (~40 percent) of stormwater runoff from developed areas, and capture and treat an additional 270,000 AFY (~50 percent), for a total of ~90 percent.** Extensive urban and suburban development in the Region has significantly increased impervious surfaces and increased stormwater runoff to the creeks and rivers. The flood management system has been designed to efficiently carry stormwater runoff to the Santa Monica and San Pedro Bays. Due to the presence of trash, bacteria, metals, nutrients and organic chemicals in stormwater, this local resource is generally not being pursued as a potential source to augment local water supplies, likely due to perceived cost and logistical constraints. At sites where contaminant levels are generally low (such as residential parcels), stormwater runoff volumes should be reduced through onsite measures (by reducing impervious surfaces, or utilizing swales, berms and other onsite BMPs to capture and infiltrate runoff). This has the potential to augment local supplies through natural recharge and could reduce demand for potable water (e.g., by capturing runoff in cisterns for subsequent reuse as irrigation water).

Although measures to reduce runoff from urbanized sites (per the above target) would reduce the volume of stormwater discharged to storm drains, creeks and rivers, most of the remaining runoff that is discharged will need to be captured and treated in order to meet applicable water quality standards. Although some situations may warrant single-purpose stormwater treatment solutions, preference should be given to multi-purpose solutions that provide functional native habitat, create recreational opportunities, and utilize treated runoff to augment water supplies, either via direct non-potable reuse or groundwater recharge.

The lower range of this target (40 percent) reflects a concern that the City's IRP target (to reduce runoff by 50 percent) may be difficult to achieve during the 20-year planning horizon. The upper limit (90 percent) for the capture and treatment of runoff is generally consistent with the 85th percentile runoff target for the Standard Urban Stormwater Mitigation Plan established by the Los Angeles RWQCB, which requires the detention of stormwater runoff (from rainfall events with approximately  $\frac{3}{4}$  inch of precipitation) for several development types. This target also acknowledges that large storm events produce runoff volumes which are too large to feasibly capture and treat. For the purposes of this plan, it is assumed that TMDL compliance can be achieved through a combination of reducing runoff volumes (up to the 40 percent of runoff) and the subsequent capture and treatment (up to 90 percent) of (both dry-weather and) stormwater runoff from developed areas.

**Treat 91,000 AFY of contaminated groundwater.** Groundwater quality in many basins has been degraded by industrial discharges, agricultural and residential chemical usage, contaminants in urban runoff, naturally occurring constituents, and seawater intrusion at some locations along the coast. Where contamination has occurred, many programs and projects have been implemented to treat and augment local supplies and enhance water supply reliability. Remediating contaminated portions of our groundwater basins can provide significant and direct benefits locally and to the state from making additional groundwater supplies available. These benefits are immediate, quantifiable, and long term. Cleaning up the groundwater has a direct nexus and achieves the primary purpose of this Plan. This task requires significant coordination between agencies and stakeholders. This target is based on estimates of the volume of contaminated groundwater requiring cleanup in the major groundwater basins provided by groundwater basin managers in the Region.

#### **7.4.3.3 Enhance Habitat**

**Restore 100+ linear miles of functional riparian habitat and associated buffer habitat.** Existing riparian habitat in the Region is mostly confined to the San Gabriel and Santa Monica Mountains. Although much of this habitat in the San Gabriel Mountains is protected within the Angeles National Forest, much of the riparian habitat in the rest of the Region has been subject to modification. Historically, many of the streams that supported this habitat also supported native populations of steelhead trout. To help restore the population of species associated with these stream corridors, preservation and restoration of functional riparian habitat and associated habitat buffer and water quality improvements in those streams will be required.

This target is based on a goal established by the Santa Monica Bay Restoration Commission to restore 20 linear miles of steelhead trout habitat in the Santa Monica Mountains, which would require removal of barriers to fish migration and restoration of functional riparian habitat and associated buffer habitat. Although specific targets for restoration of riparian habitat have not been established for the other Subregions (in part due to a lack of adequate baseline information on the extent of existing habitat), the target for the North Santa Monica Bay Subregion (of 20 linear miles) was applied to each of other Subregions, resulting in the cumulative planning target. This planning target is included in the IRWM Plan to recognize that functional riparian habitat can provide water supply and water quality benefits and to determine to what extent implementation of the Plan can contribute towards meeting this Regional resource conservation need.

**Restore 1,400 acres of functional wetland habitat.** Approximately 90 percent of the coastal wetlands in the Region have been lost due to habitat loss and development. Wetlands can cleanse polluted waters, prevent or mitigate floods, protect shorelines and channel banks, and recharge groundwater aquifers. Additionally, wetlands provide unique and critical habitats for large numbers of flora and fauna. Thus, restoration of existing and historic wetlands has the potential to improve water quality, improve flood protection, restore habitat, and enhance groundwater recharge.

This target is based on an estimate of remaining wetland habitat in the Region (approximately 1,400 acres) developed by the Southern California Wetlands Recovery Project. This planning target is included in the IRWM Plan to recognize that functional wetland habitat can provide water supply and water quality benefits and to determine to what extent implementation of the Plan can contribute towards meeting this Regional resource conservation need.

#### **7.4.3.4 Enhance Open Space, Recreation**

**Develop 30,000 acres of recreational open space, focused in under-served communities.** To address existing deficiencies in access to parkland and open space in urbanized areas, and meet additional demand associated with projected population growth, additional recreational open space is required. As many Disadvantaged Communities lack sufficient park space, development of new recreational open space should be focused in those communities. Watershed-friendly recreational open space includes native vegetation for habitat, provides passive recreational activities, and where feasible, contributes to stormwater detention and treatment and groundwater recharge.

Currently the Region has approximately 52,800 acres of parks (excluding the Angeles National Forest, the Santa Monica Mountains Recreation Area and other state lands, which are not accessible to many residents). With a current population of approximately 10.2 million, there is approximately 5.2 acres of parkland for each 1,000 residents. The National Recreation and Park Association suggests that a park system serving an urban area should be composed of a “core” system of parklands, with a minimum of 6.25 acres of developed open space per 1,000 residents. With a projected population increase of approximately 15.4 percent over the 20 year plan horizon (SCAG, 2004), it is estimated that approximately 30,380 acres of additional parkland would be needed within the developed portions of the Region (e.g., in close proximity to the population being served, such as walking distance) to meet the minimum recommendation for parkland.

The inclusion of a planning target for recreational open space is intended to gauge to what extent the implementation of the IRWM Plan can contribute towards meeting the Regional need for additional recreational space through the inclusion of watershed-friendly recreational or open space features in water quality and water supply projects.

#### **7.4.3.5 Sustain Infrastructure for Local Communities**

**Repair and/or replace 40 percent of the aging water resources infrastructure.** Various elements of the flood protection system, including debris basins, dams, reservoirs, pump stations, underground storm drains, and concrete-lined channels, are many years old and have exceeded their design life span. As a result, many have signs of structural strains, or are showing deterioration or other aging effects. Several dams and debris basins have been identified by the state department of Water Resources Division of Safety of Dams as subject to failure during a maximum credible earthquake or probable maximum flood. Results of years of channel and underground inspections and safety concerns have prompted agencies to monitor and perform immediate repairs to several channels and drains with various deficiencies. Many water and wastewater systems in the Region have been

operating for five decades or longer with varying priorities about, and capacity for, infrastructure maintenance and replacement. As these systems age or system demands increase, repair or replacement of system elements should be implemented to improve the quality of water delivered to consumers, maintain the quality of wastewater effluent discharge, expand recycled water production, enhance system flexibility, and improve water supply reliability and protection.

Although many agencies regularly plan for infrastructure repair and replacement, this target acknowledges the need for a systematic repair and replacement of the aging water resources infrastructure. As elements of the flood protection system warrant significant repair or replacement, consideration should be given to the implementation of integrated flood management systems.

#### **7.4.4 Projects and Programs to Meet Planning Targets**

To improve water supplies, enhance water supply reliability, improve surface water quality, expand recreational access, conserve habitat, and enhance infrastructure in the Region, agencies, jurisdictions, and organizations have developed hundreds of water supply, watershed management, water quality compliance and other water resource management projects. Collectively, these projects have the potential to generate substantial amounts of new water, significantly improve surface water quality, restore important habitat areas, enhance flood protection, and repair and replace critical water supply, water quality, and flood protection infrastructure.

To identify the many potential projects in the Region and to gauge the cumulative contribution of these projects towards meeting the objectives and planning targets, development of the IRWM Plan included a “Call for Projects” which afforded stakeholders the opportunity to directly submit their projects and project concepts for consideration. Stakeholders were asked to submit projects that were at any stage of development and ideas about possible projects (or project concepts). Currently, more than 1,600 projects and project concepts are included in the project database. Although some conclusions are possible from an analysis of the projects and project concepts in the database, a comparison of the cumulative benefits of those projects to the planning targets was ultimately not included in the IRWM Plan. However, based on review of the projects, the IRWM Plan acknowledged that it was unlikely that the stakeholder-identified projects would provide sufficient benefits to meet the planning targets discussed above.

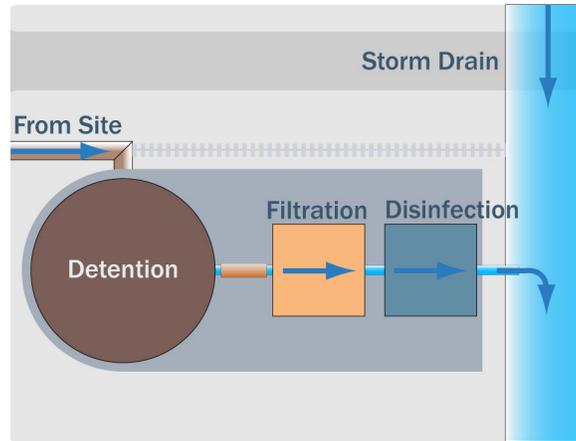
To demonstrate integrated approaches that could assist the region in meeting the planning targets, the IRWM Plan identified three conceptual approaches that combine selected project concepts into conceptual projects termed Regional Planning Tools (or Planning Tools). Although the Planning Tools depict three conceptual approaches to meet the planning targets for water supply and water quality, numerous combinations of the project concepts included in the tools are possible. The Planning Tools are not intended to represent every possible combination and no inference should be drawn from the omission of any individual project concept in any of the tools. The tools are intended to generate a discussion of how to meet the planning targets while maximizing the integration of water supply and water quality projects and simultaneously generating benefits for habitat, open space, and recreational access. As the stakeholder-identified projects do not cumulatively meet the planning targets, the Regional Planning Tools could be utilized to define a set of new Regional or Subregional integrated projects, and when combined with the stakeholder-identified projects, would provide a comprehensive management solution to many water resource issues. A description of each of the three Regional Planning Tools follows.

##### **7.4.4.1 Planning Tool 1: Site Scale**

Public agencies throughout the Region have a variety of projects and programs to address water supply, improve surface water quality, maintain flood protection, and expand parkland and open space. However, as most public agencies have single-purpose missions and mandates, most of these projects and programs tend to be single-purpose. Thus, one option to fill the identified gap would be to continue to focus on single purpose projects at the site scale level.

For water supply, site scale projects would include: expanded groundwater recharge (e.g., by expanding capacity at existing recharge facilities); groundwater basin optimization (including remediation of existing contamination); expansion of water conservation; expanded utilization of recycled water, ocean water desalination, and surface storage (e.g., using flood control facilities to retain additional runoff). Water quality improvement site scale tools

would include various projects and programs identified to treat stormwater contaminants (trash, bacteria, metals, and organic chemicals), through a variety of treatment technologies (e.g., on-site BMPs, catch basin filters, continuous deflection separators, oil and grease separators, disinfection systems, or ultraviolet light systems).. Figure 3 shows an example of stormwater capture and treatment BMPs being used as a site scale tool for water quality.



**Figure 3– Site Scale Planning Tool**

Given the volume estimates for stormwater that must be treated, it is assumed that projects would need to be located within existing residential street boundaries, rights-of-way, and small catchments, where individual storm drains meet the river, or major creek channels. The actual treatment technology that would be needed for individual storm drains would vary depending on which contaminants are present. The capacity requirements for these technologies would be reduced over time as more and more residences begin to capture and infiltrate their stormwater runoff on-site.

The site scale option could be adapted via an analysis of the project database to identify specific projects and programs to restore wetland and riparian habitat and associated buffer areas. This may include removal of barriers to fish migration in the Santa Monica Mountains, invasive species removal, land acquisition, and measures to improve water quality in contributing areas. Although site scale tool is by definition the utilization of single-purpose projects, implementing them in conjunction with the IRWM Plan requires that all attempts be made to find linkages and synergies to other projects where-ever possible.

#### **7.4.4.2 Planning Tool 2: Neighborhood Scale**

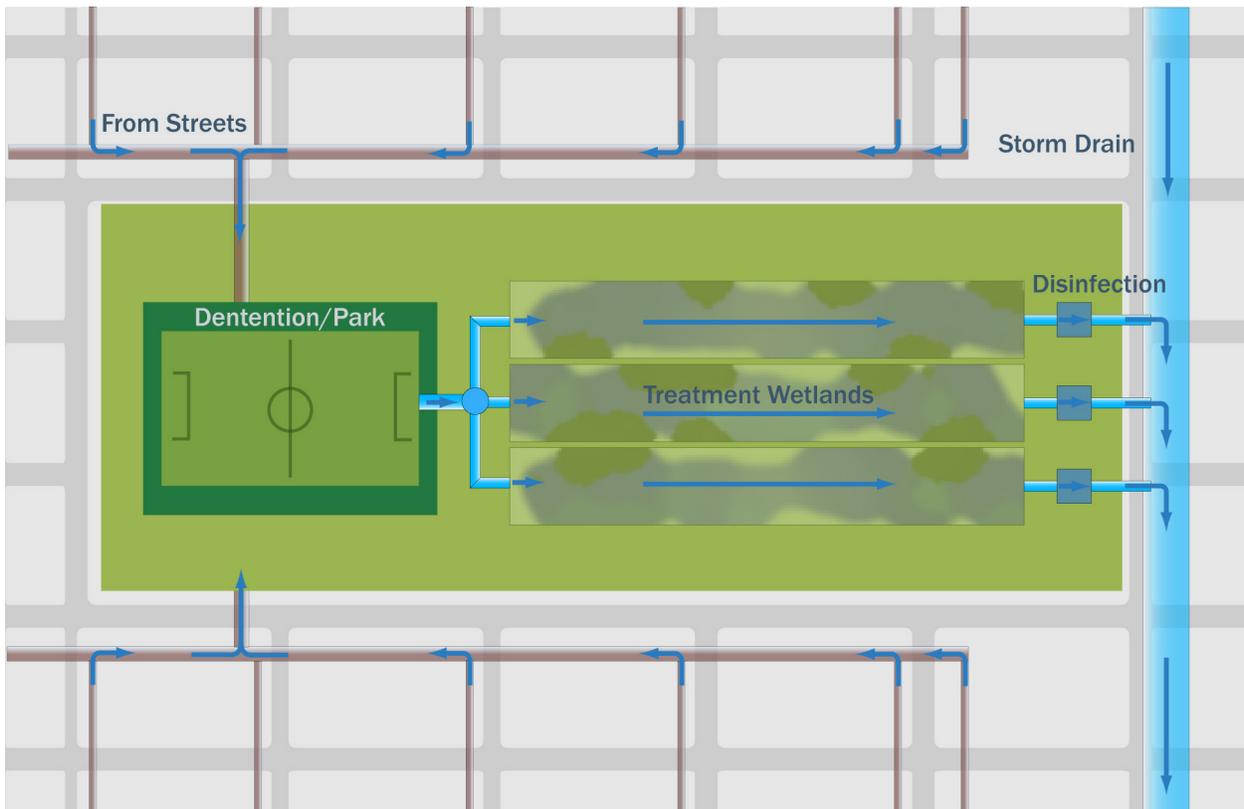
From a water quality and water supply standpoint, neighborhood-scale projects shift the focus from projects on individual sites (as in Planning Tool 1) to the installation of large scale water quality treatment facilities for urban and stormwater runoff at the neighborhood scale. Fundamentally, this concept reflects a shift away from single-purpose water supply and water quality projects through the reuse of 130,000 AFY of treated urban runoff for non-potable uses (e.g., irrigation), thereby augmenting local water supplies and reducing demand for other sources.

Planning Tool 2 consists of multi-purpose projects and programs implemented at the neighborhood scale all across the Region. Neighborhood scale projects would be specifically designed for each of the neighborhood’s needs and conditions. This approach could encourage agencies and jurisdictions to work collaboratively together to implement multipurpose projects and programs.

Using these types of projects assumes that some water supply projects and programs would proceed, such as: expanded groundwater recharge (e.g., by expanding capacity at existing recharge facilities); groundwater basin optimization (including remediation of existing contamination); expansion of water conservation; ocean water desalination; surface storage (e.g., using flood control facilities to retain additional runoff); and expanded utilization of recycled water (recycled dry weather runoff) through development of a localized distribution system at facilities where water users are within a one-mile radius. However, to the extent that stormwater improvement projects and programs make supplies available for direct reuse or recharge, the need for “traditional” water supply projects may

be reduced. The implementation of runoff treatment technologies has traditionally been limited to a single purpose benefit of water quality improvement. Using neighborhood scale projects will allow some additional water supply benefits through reuse of the captured water, converting the project to multi-use and contributing simultaneously to both the water supply and water quality planning targets.

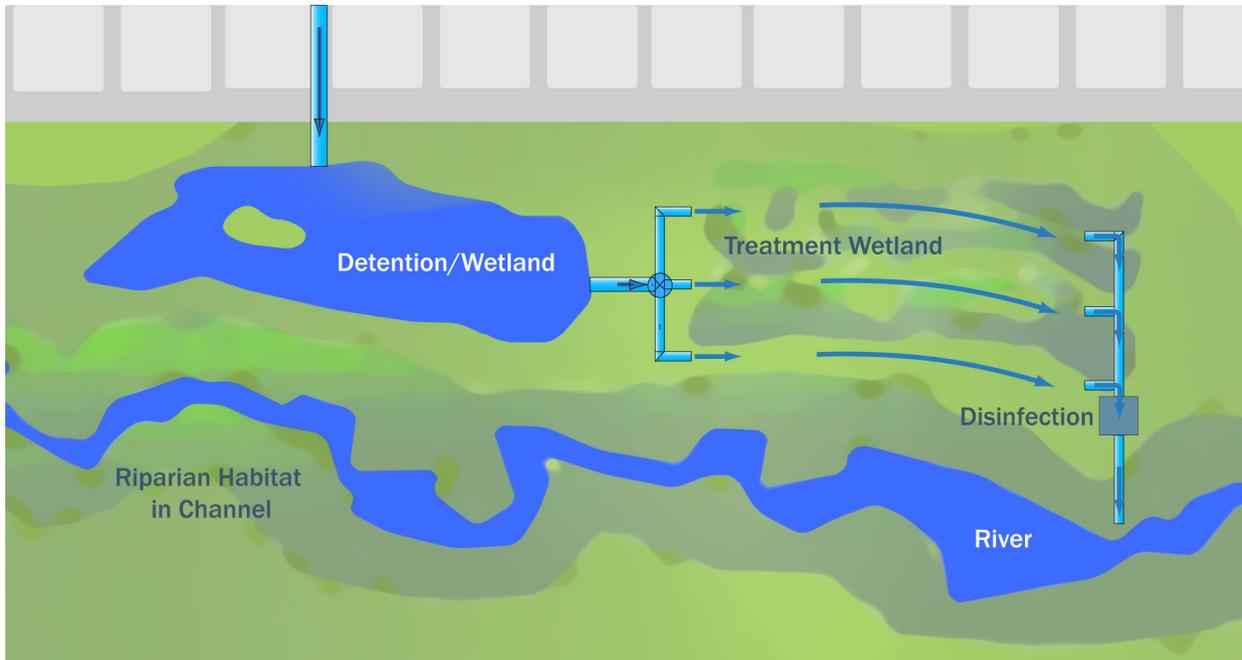
To achieve the multiple benefits envisioned at the neighborhood scale, natural treatment systems would include detention basins to capture, detain and equalize the flow generated from a  $\frac{3}{4}$ -inch storm event, and treatment wetlands to receive the equalized flow effluent from the detention basin. These facilities would be designed to enable the integration of additional purposes into the design of subsequent facilities, such as passive and active recreation, as shown in Figure 4. It is assumed that the facilities would be designed to drain the detention basin in 72 hours in anticipation of the next storm event. These systems could be located at sites throughout the Region, within individual catchments and on smaller storm drains to create a patchwork of small open spaces within individual neighborhoods for both recreation and habitat purposes.



*Figure 4– Neighborhood Scale Planning Tool*

#### 7.4.4.3 Planning Tool 3: Regional Scale

The Regional Scale Planning Tool also emphasizes development of multi-purpose projects. However, instead of projects developed at the neighborhood scale, the capture and treatment of urban and stormwater runoff would occur along the rivers, creeks, and major tributary channels, creating multi-purpose riparian corridors that have the potential to connect the Region with linear green spaces. For this option, a series of detention basins and constructed wetlands would be developed along major channels (as shown in Figure 5) to treat runoff from individual storm drains before they empty into the main channel.



**Figure 5– Regional Scale Planning Tool**

Over time, as additional facilities are constructed and become contiguously linked, existing river channels could potentially be reconfigured to incorporate these facilities into a more naturalized channel to function more like a riparian ecosystem. This concept is generally consistent with the “river parkways” found in the 2001 California Resources Agency document *Common Ground: From the Mountains to the Sea*, which proposed the creation of linear green spaces along the Los Angeles and San Gabriel Rivers, the major tributaries, and other major creeks or channels. The specific width of the parkways would vary, depending on volume of runoff that would need to be treated from specific storm drains or tributary channels and the availability of land.

The river corridor design would increase habitat value benefits by creating a contiguous linear corridor of connected habitats which would provide greater ecological value than the same amount of disconnected habitats isolated by urbanization. In addition, the U.S. Army Corps of Engineers has acknowledged that this approach would be consistent with the Corp’s mandate for ecosystem restoration, which would make these projects eligible for federal cost-sharing (at 65 percent of the cost).

Consistent with Planning Tool 2, this tool also proposes the capture, treatment, and subsequent reuse of urban runoff for non-potable uses, such as landscape irrigation. In addition, Planning Tool 3 also proposes to recharge treated stormwater runoff via recharge features incorporated into the site design.

## 8. ADJACENT REGIONS

### 8.1 Relationship with Adjacent Regions

The GLAC Region is bordered by five other IRWM Planning Regions: the Watersheds Coalitions of Ventura County (which consolidated the Ventura County and Calleguas Creek Watershed efforts) on the west, the North Orange County and the Santa Ana Watershed Project Authority regions to the south and east, and the Upper Santa Clara River and Antelope Valley regions to the north.

The Orange County Public Works Department is a voting member on the Steering Committee for the Lower Los Angeles and San Gabriel Watersheds Subregion, which includes all or part of seven cities located within the portion of the Coyote Creek Watershed in Orange County. This area is an overlap between the GLAC and the North Orange County planning regions. Thus, interaction with North Orange County planning region is ongoing,

and has resulted in an understanding that projects located within the overlap area could appear in either region's list of projects, as deemed appropriate. In addition, it has been acknowledged that the inclusion of any projects (in the overlap area) in an implementation grant application would require close coordination to assure that a duplicate project submission does not occur.

Additional interaction has occurred with the Watersheds Coalition of Ventura County and the Upper Santa Clara River region, as both of those entities are within the Los Angeles/Ventura funding area defined by Proposition 84. Discussions with those regions have focused primarily on the development of a conceptual methodology to share available funding, based on agreed upon water resource management factors. In addition, representatives of the Ventura County Watershed Protection District (a member of the Watersheds Coalitions of Ventura County) have attended Steering Committee meetings of the North Santa Monica Bay Subregion, to assure coordination within that portion of the North Santa Monica Bay Subregion located within Ventura County.

## **8.2 Overlapping Areas**

The Orange County Public Works Department is a voting member on the Steering Committee for the Lower Los Angeles and San Gabriel Watersheds Subregion, which includes all or part of seven cities located within the portion of the Coyote Creek Watershed in Orange County. This area is an overlap between the GLAC and the North Orange County planning regions. Thus, interaction with North Orange County planning region is ongoing, and has resulted in an understanding that projects located within the overlap area could appear in either region's list of projects, as deemed appropriate. In addition, it has been acknowledged that the inclusion of any projects (in the overlap area) in an implementation grant application would require close coordination to assure that a duplicate project submission does not occur.

As discussed in Section 7.3 above, in 2008 several jurisdictions in the Lower Los Angeles and San Gabriel Rivers Subregion elected to form a Joint Powers Authority (JPA) for the purposes of establishing the Los Angeles Gateway Area IRWM planning region, which would overlap a portion of the GLAC Region. The Los Angeles County Flood Control District and members of the Leadership Committee and the Steering Committee of Lower Los Angeles and San Gabriel Rivers Subregion have been engaged in various efforts to encourage members of the Gateway Cities COG and the Los Angeles Gateway Area JPA to more fully participate in ongoing planning activities in the GLAC Region.

## **8.3 Potential for Uncovered or Void Areas**

The GLAC Region and the immediately adjacent IRWM planning regions (Ventura County, North Orange County, Santa Ana Watershed Project Authority, Upper Santa Clara River and Antelope Valley) provide complete and contiguous IRWM planning coverage and thus there are no uncovered or void areas.

## **8.4 Presence of Excluded Areas**

There are no areas within the planning boundary of the GLAC Region that have been excluded.

## **8.5 Differences Between Adjacent or Overlapping IRWM Regions**

Differences between the GLAC Region and the adjacent or overlapping regions include:

- Antelope Valley: drains to a different watershed (Mojave River and internal sink), has a markedly different climate, and relies substantially less on surface water supplies.
- Los Angeles Gateway Area: no substantive differences in water management issues.
- North Orange County: drains to a different watershed (Santa Ana River), and relies more substantially on groundwater resources.
- Santa Ana Watershed Project Authority: drains to a different watershed (Santa Ana River), and relies more substantially on groundwater resources.

- Upper Santa Clara River: belongs to a different watershed, has more available open space for residential land development.
- Ventura County: drains to different watersheds (Calleguas Creek, Santa Clara and Ventura Rivers) and has significantly more agricultural land uses.

## 9. RWMG REPRESENTATION AT DWR INTERVIEW

### 9.1 Region Acceptance Process Interview Team

One representative from each of the following eight entities from the GLAC Region will be participating in the RAP interview:

- Los Angeles County Flood Control District
- South Bay Watersheds
- North Santa Monica Bay Watersheds
- Upper Los Angeles River Watersheds
- Lower San Gabriel and Los Angeles Rivers Watersheds
- Upper San Gabriel and Rio Hondo Watersheds
- Vacant (To be determined)
- Vacant (To be determined)

---

## APPENDIX A

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### Memorandum of Understanding and Operating Guidelines

The following document was executed by the following:

Organization	Signature	Title	Date
Central Basin Municipal Water District	Art Aguilar	General Manager	08/14/2008
City of Los Angeles, Bureau of Sanitation (Watershed Protection Division)	Cynthia M. Ruiz	President, Board of Public Works	7/18/2008
City of Malibu	Jim Thorsen	City Manager	07/08/2008
County Sanitation District No. 2 of Los Angeles County	Leonis C. Malburg	Chairperson, Board of Directors	06/25/2008
Las Virgenes Municipal Water District	John R. Mundy	General Manager	10/30/2008
Los Angeles & San Gabriel Rivers Watershed Council	Nancy L.C. Steele	Executive Director	06/02/2008
Los Angeles County Flood Control District	Dean Efstathiou	Acting Chief Engineer	10/21/2008
Los Angeles Department of Water and Power	David H. Nahai	Chief Executive Officer & General Manager	7/29/2008
Main San Gabriel Basin Watermaster	Carol Williams	Executive Officer	08/12/2008
Metropolitan Water District	Jeffrey Kightlinger	General Manager	06/02/2008
Raymond Basin Management Board	Tony Zampello	Watermaster	09/24/2008
San Gabriel Basin Water Quality Authority	Grace J. Kast	Executive Director	06/17/2008
Santa Monica Bay Restoration Commission	Shelly Luce	Executive Director	10/17/2008
Water Conservation Authority	Belinda Faustinos	Executive Officer	11/05/2008
Water Replenishment District of Southern California	Robb Whitaker	General Manager	09/15/2008
West Basin Municipal Water District	Richard Nagel	General Manager	06/25/2008

1 MEMORANDUM OF UNDERSTANDING  
2 FOR  
3 INTEGRATED REGIONAL WATER MANAGEMENT PLANNING AND  
4 IMPLEMENTATION  
5

6 This Memorandum of Understanding (MOU) is entered into by and among  
7 members of the Greater Los Angeles County Region Integrated Regional Water  
8 Management Plan Leadership Committee for the purpose of developing, administering,  
9 updating and implementing an Integrated Regional Water Management Plan for the  
10 Greater Los Angeles County Region. Signatories to this MOU shall hereinafter be  
11 referred to individually as "Party" or collectively as "Parties".  
12

13 RECITALS  
14

15 WHEREAS, it is in the interests of the Parties, and the region served by the Parties, that  
16 the water resources the Parties share in common are responsibly managed, protected, and  
17 conserved to the extent feasible; and,  
18

19 WHEREAS, the Parties desire to develop, administer, update and implement an  
20 Integrated Regional Water Management Plan (hereinafter referred to as "IRWMP") for  
21 the Greater Los Angeles County Region (defined in Exhibit A), in accordance with the  
22 Integrated Regional Water Management Planning Act of 2002, Division 6, Part 2.2 of the  
23 California Water Code as such Act may be amended hereafter.  
24

25 NOW, THEREFORE, it is mutually understood and agreed as follows:  
26

27 SECTION 1: PURPOSES AND GOALS  
28

29 1.1 Purposes and Goals:  
30

31 The Parties desire to coordinate and share information concerning water resources  
32 management planning programs and projects and other information for grant funding and  
33 IRWMP implementation, and to improve and maintain overall communication among the  
34 Parties. It is anticipated that coordination and information sharing among the Parties will  
35 assist the agencies in achieving their respective missions and contribute to the overall  
36 well-being of the region. It is expected that all parties will cooperate and coordinate with  
37 one another in order to achieve the goals written above.  
38

39  
40 SECTION 2: JOINT AGENCY PLANNING FOR PROJECTS AND PROGRAMS  
41

42 2.1 Projects and Programs:  
43

44 It is the intent of the Parties that they coordinate and collaborate to develop and  
45 implement projects and programs. Such coordination can achieve greater benefits than

46 single purpose projects. Applicable projects and programs include, but are not limited to,  
47 the following:

48  
49 2.1.1 An IRWMP for the Greater Los Angeles County Region.

50  
51 2.1.2 Solicitation of external funding for implementation of the IRWMP for the  
52 Greater Los Angeles County Region.

53  
54 2.2 Formation of Regional Water Management Group (RWMG) and Adoption of the  
55 IRWMP:

56  
57 2.2.1 Leadership Committee signatories that execute this MOU shall constitute  
58 the Regional Water Management Group (RWMG) pursuant to Cal. Water Code  
59 section 10537. The RWMG shall facilitate the development and implementation  
60 of the Greater Los Angeles County Region IRWMP. Adoption of the IRWMP  
61 for the Greater Los Angeles County Region in accordance with the Integrated  
62 Regional Water Management Planning Act of 2002 requires a simple majority  
63 vote of the RWMG.

64  
65 2.2.2 The Regional Water Management Group established by execution of this  
66 MOU will serve as the Regional Water Management Group for the Greater Los  
67 Angeles County Region IRWMP.

68  
69 2.3 Operations of the RWMG

70  
71 2.3.1 The Parties acknowledge that Operating Guidelines will be adopted and  
72 revised by the RWMG and will be the basis for the decision-making process.

73  
74 2.4 Endorsement by other parties

75  
76 2.4.1 Other parties are encouraged to endorse this MOU to demonstrate support  
77 for the Greater Los Angeles County IRWMP. Such endorsements do not obligate  
78 said parties beyond the demonstration of support for regional water management  
79 cooperation. Said parties will not be members of the RWMG.

80  
81 SECTION 3: GENERAL PROVISIONS

82  
83 3.1 Term: This MOU shall become effective on the date first written above and shall  
84 expire on December 31, 2012 or upon its replacement by the adoption of a subsequent  
85 MOU, Agreement, or Joint Powers Authority Agreement, or unless earlier terminated by  
86 mutual written agreement of a majority of the Parties. Any Party may terminate its  
87 participation in this MOU upon 60 days' written notice to the remaining Parties.

88  
89 3.2 Construction of Terms: This MOU is for the sole benefit of the Parties and shall not  
90 be construed as granting rights to any person other than the Parties or imposing  
91 obligations on a Party to any person other than another Party.

92

93 3.3 Good Faith: Each Party shall use its best efforts and work wholeheartedly and in good  
94 faith for the expeditious completion of the purposes and goals of this MOU and the  
95 satisfactory performance of its terms.

96

97 3.4 Governing Law: This MOU is made under and shall be governed by the laws of the  
98 State of California.

99

100 3.5 Execution: This MOU may be executed in counterparts and the signed counterparts  
101 shall constitute a single instrument. The signatories to this MOU represent that they have  
102 the authority to bind their respective Party to this MOU.

103

104 3.6 Succession: Successor appointees shall sign this MOU prior to being seated on the  
105 Leadership Committee.

106

107 3.7 Administration: The Chair of the Leadership Committee will be responsible for the  
108 ongoing administration of the MOU.

109

110 3.8 Financial Commitment: Neither the signing of this MOU nor the adoption by the  
111 governing boards of the Parties commits any Party to any financial obligation.

112

113 3.9 Severability: The provisions of this MOU shall be deemed severable, and the  
114 invalidity, illegality or unenforceability of any provision of this MOU shall not affect the  
115 validity or enforceability of any other provisions. In the event any provision of this MOU  
116 is found to be invalid, illegal, or unenforceable, the Parties shall endeavor to modify that  
117 clause in a manner which gives effect to the intent of the Parties in entering into this  
118 MOU.

119

120 3.10 Effective Date: This MOU shall take effect upon signature or counter-signature of a  
121 majority of the Parties. Each additional Party shall have up to 60 days after the effective  
122 date to sign the MOU.

123

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### EXHIBIT A

#### Description of the Greater Los Angeles County Region IRWMP (Region)

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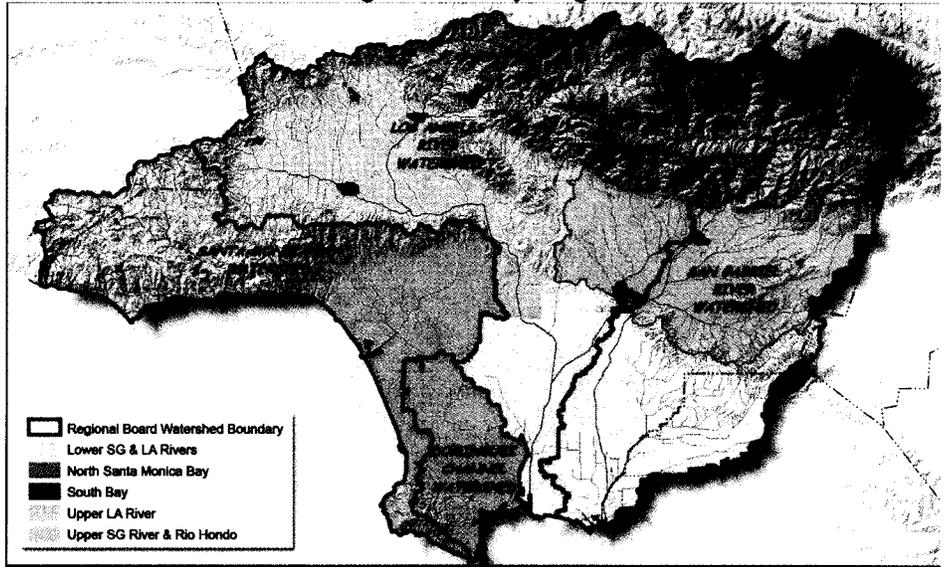
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The Region, an area of approximately 2,058 square miles, is located in coastal southern California. The Region contains portions of four counties; Los Angeles, Orange, Ventura, and San Bernardino. The region encompasses the following watersheds: The Los Angeles River watershed, the San Gabriel River watershed, the Santa Monica Bay watershed, and the Dominguez Channel watershed. The region is organized into five sub-regions: the Lower San Gabriel and Los Angeles Rivers, the North Santa Monica Bay, the South Bay, the Upper Los Angeles River, and the Upper San Gabriel River and Rio Hondo.

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Greater Los Angeles County Region Watersheds

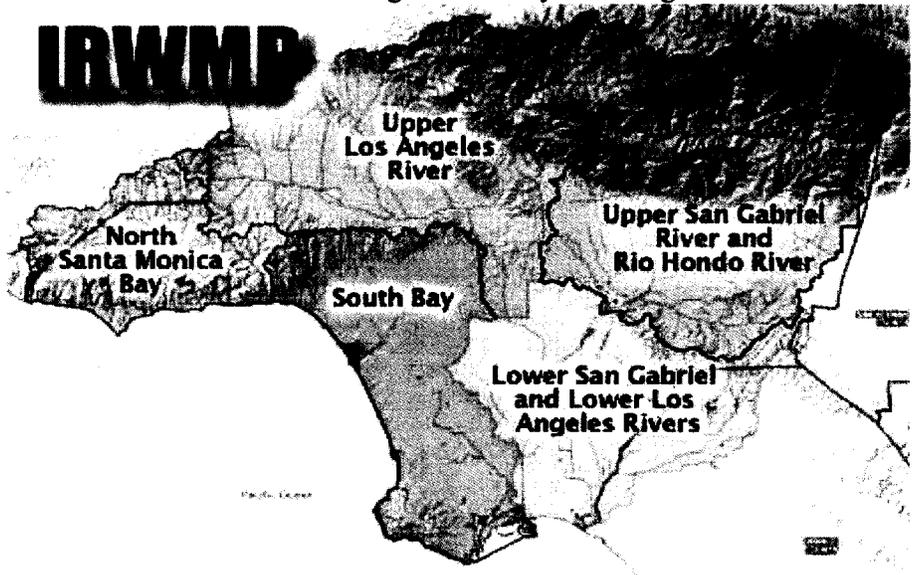


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Greater Los Angeles County Sub-Regions



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139 IN WITNESS WHEREOF, the PARTIES have executed this Memorandum of  
140 Understanding as of the dates opposite their respective signatures.

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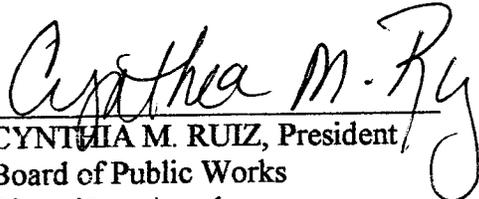


Date: Aug 14, 2008

ART AGUILAR, GENERAL MANAGER,  
CENTRAL BASIN  
MUNICIPAL WATER DISTRICT

139 IN WITNESS WHEREOF, the PARTIES have executed this Memorandum of  
140 Understanding as of the dates opposite their respective signatures.

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CYNTIA M. RUIZ, President  
Board of Public Works  
City of Los Angeles

Date: 7/18/08

141 IN WITNESS WHEREOF, the PARTIES have executed this Memorandum of  
142 Understanding as of the dates opposite their respective signatures.

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Date: 7/8/08

147 City of Malibu

148 By: JIM THORSEN, City Manager

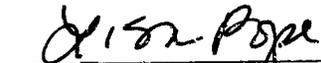
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151 ATTEST:

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154 LISA POPE, City Clerk

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(seal)

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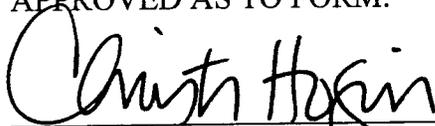
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158 APPROVED AS TO FORM:

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162 CHRISTI HOGIN, City Attorney

IN WITNESS WHEREOF, the PARTIES have executed this Memorandum of Understanding as of the dates opposite their respective signatures.

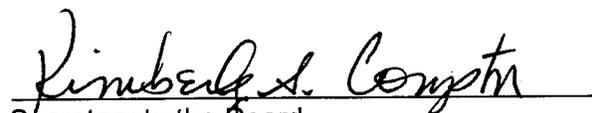
**COUNTY SANITATION DISTRICT NO. 2  
OF LOS ANGELES COUNTY**



Chairperson, Board of Directors

JUN 2 5 2008

ATTEST:



Secretary to the Board

APPROVED AS TO FORM:

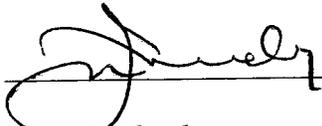
**LEWIS, BRISBOIS, BISGAARD & SMITH LLP**



District Counsel

139 IN WITNESS WHEREOF, the PARTIES have executed this Memorandum of  
140 Understanding as of the dates opposite their respective signatures.

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Date: 10/30/08

John R. Mundy  
General Manager

LAS VIRGENES  
MUNICIPAL  
WATER DISTRICT

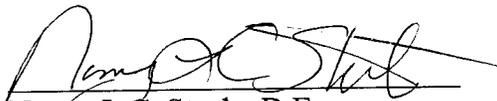
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Date: 6/2/08

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Nancy L.C. Steele, D.Env.

148

Executive Director

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Los Angeles & San Gabriel Rivers Watershed Council

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151

Vice-Chair

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Upper Los Angeles River Sub-regional Steering Committee

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COUNTY OF LOS ANGELES

By: Dean O. Epheth  
Acting Chief Engineer

10-21-08  
LOS ANGELES COUNTY  
FLOOD CONTROL DISTRICT

ATTEST:

APPROVED AS TO FORM:

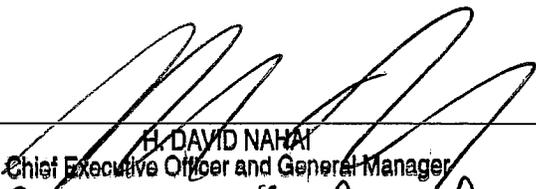
RAYMOND G. FORTNER, JR  
County Counsel

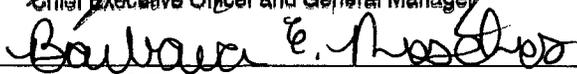
By: Raymond G. Fortner, Jr.

IN WITNESS THEREOF, the parties hereto have executed this Memorandum of Understanding as of the dates opposite their respective signatures.

DEPARTMENT OF WATER AND POWER OF  
THE CITY OF LOS ANGELES BY  
BOARD OF WATER AND POWER  
COMMISSIONERS  
OF THE CITY OF LOS ANGELES

Date: 7/29/08

By:   
H. DAVID NAHAI  
Chief Executive Officer and General Manager

And:   
SECRETARY

AUTHORIZED BY RES. 109 012  
JUL 15 2008

APPROVED AS TO FORM AND LEGALITY  
ROCKARD J. DELGADILLO, CITY ATTORNEY

JUN 26 2008  
BY   
S. DAVID HOTCHKISS  
Assistant City Attorney

139 IN WITNESS WHEREOF, the PARTIES have executed this Memorandum of  
140 Understanding as of the dates opposite their respective signatures.

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Carol Williams

Date: 8/12/2008

Main Sam Gabriel Bastin

Watermaster

EXECUTIVE OFFICER

139 IN WITNESS WHEREOF, the PARTIES have executed this Memorandum of  
140 Understanding as of the dates opposite their respective signatures.  
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APPROVED AS TO FORM:

THE METROPOLITAN WATER DISTRICT  
OF SOUTHERN CALIFORNIA

*Karen L. Tachiki*  
for \_\_\_\_\_  
Karen L. Tachiki  
General Counsel

*Jeffrey Kightlinger*  
\_\_\_\_\_  
Jeffrey Kightlinger  
General Manager

Date: June 2, 2008

Date: 6/2/08

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139 IN WITNESS WHEREOF, the PARTIES have executed this Memorandum of  
140 Understanding as of the dates opposite their respective signatures.

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 RAYMOND BASIN  
MANAGEMENT BOARD  
WATER MASTER

Date: 9-24-08

141 IN WITNESS WHEREOF, the PARTIES have executed this Memorandum of  
142 Understanding as of the dates opposite their respective signatures.

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Grace J. Kast

Date: June 17, 2008

Grace J. Kast  
Executive Director  
San Gabriel Basin Water Quality Authority

139 IN WITNESS WHEREOF, the PARTIES have executed this Memorandum of  
140 Understanding as of the dates opposite their respective signatures.

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Date: 10/17/08

EXECUTIVE DIRECTOR  
SANTA MONICA BAY  
RESTORATION COMMISSION

IN WITNESS WHEREOF, the PARTIES have executed this Memorandum of Understanding as of the dates opposite their respective signatures.

Belinda V. Faustinos Date: 11/5/08  
Belinda V. Faustinos, Exec. Officer  
Watershed Conservation Authority

139 IN WITNESS WHEREOF, the PARTIES have executed this Memorandum of  
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Robb Whitaker

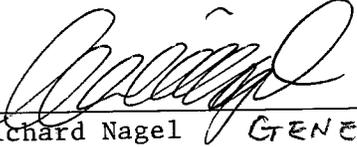
General Manager

Water Replenishment District  
of Southern California

Date: September 15, 2008

139 IN WITNESS WHEREOF, the PARTIES have executed this Memorandum of  
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\_\_\_\_\_  
Richard Nagel GENERAL MANAGER  
West Basin Municipal Water District

Date: 6/25/08

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**Guidelines for the Operation of the Regional Water Management Group and its  
Steering Committees for the Greater Los Angeles County Region  
Integrated Regional Water Management Plan  
April 2008**

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- III. Leadership Committee**
  - a. Formation**
  - b. Roles and Responsibilities**
- IV. Guidelines for Transparency**
- V. Guidelines for Funding Contributions**

68

69 **I. Introduction**

70

71 The intent of the Integrated Regional Water Management program is to encourage integrated regional  
72 strategies for the management of water resources, and to provide funding, through competitive grants, for  
73 projects that protect communities from drought, improve water reliability, protect and improve water quality,  
74 and improve local water security by reducing dependence on imported water.

75 The decision-making structure for the Greater Los Angeles Region IRWMP includes five sub-regional  
76 Steering Committees and a regional Leadership Committee. Each Steering Committee consists of  
77 representatives from local agencies and organizations involved in water management and related areas.  
78 The Leadership Committee consists of: the Chair and Vice-Chair of each Steering Committee; the Chief  
79 Engineer or another representative from the LA County Flood Control District; and five Water Management  
80 Area representatives, one for each water management area. The five Water Management Areas are  
81 surface water, groundwater, sanitation, stormwater and open space.

82

83 **II. Sub-Regional Steering Committees**

84

85 Each of the five sub-regions of the Region's IRWM planning area, as identified on Exhibit A, will be guided  
86 by a Steering Committee consisting of representatives of agencies or organizations (entity(ies)) involved in  
87 local water management and related areas. To the extent feasible, the formation and composition of each  
88 Steering Committee will be consistent with the following:

89

90 **a. Formation**

91

92 1. The entities will represent at least one of the following Water Management Areas: groundwater, surface  
93 water, storm water management/water quality, sanitation, and habitat/open space/recreational access.

94

95 2. Steering Committees should strive to include at least one representative organization for each of the  
96 Water Management Areas and appropriate city representation.

97

98 3. Each entity will designate a member(s) and alternate to represent it on the Steering Committee.

99

100 4. It is desirable, but not required, that the member and alternate designated by each entity should be an  
101 executive level representative. Each member will serve at the pleasure of the appointing entity.

102

103 5. Each entity must adopt or endorse, as appropriate, the Memorandum of Understanding in order to  
104 participate as a voting member of the Steering Committee. Endorsement shall be accomplished by providing

105 a resolution of support of the Memorandum of Understanding from the authorized representative of the  
106 entity.

107

108 6. Each Steering Committee member shall have one vote. The presence of a simple majority of the Steering  
109 Committee members at any meeting of the Steering Committee shall constitute a quorum for the purposes  
110 of conducting business. The affirmative vote of a quorum of the Steering Committee members is required for  
111 all decisions and recommendations of the Steering Committee.

112

113 7. The members of the Steering Committee will elect from among themselves a Chair of the Steering  
114 Committee. The Chair will serve at the pleasure of the Steering Committee and will serve on the Leadership  
115 Committee.

116

117 8. The members of the Steering Committee will elect from among themselves a Vice-Chair to preside over  
118 meetings of the Steering Committee in the absence of the Chair. The Vice-Chair will serve at the pleasure  
119 of the Steering Committee and will serve on the Leadership Committee.

120

121 9. Each Steering Committee will select an alternate for the Chair to serve on the Leadership Committee with  
122 voting rights in his/her absence and an alternate for the Vice-Chair to serve on the Leadership Committee  
123 with voting rights in his/her absence. The selection process for the alternates will be established by each  
124 Steering Committee.

125

126 10. The Steering Committee will nominate one representative for each Water Management Area, without  
127 geographic consideration, for consideration to serve on the Leadership Committee.

128

129 11. Each Steering Committee may, as appropriate, include Ex-Officio members.

130

131 12. Entities wishing to join a Steering Committee shall submit a written request to the Steering Committee  
132 Chair. The written request will be presented to the Steering Committee for deliberation and a vote. A  
133 majority vote of the Steering Committee is required to add members.

134

135 13. The Steering Committee may establish a membership size limitation.

136

137 14. A Steering Committee may request a participating entity replace their representative for failure to  
138 participate.

139

140 15. In addition to the above, individual Steering Committees may adopt rules for their formation and  
141 participation.

142

143 **b. Roles and Responsibilities**

144

145 The Steering Committees will have the following roles and responsibilities:

146

147 1. Represent the interests of the sub-region.

148

149 2. Meet monthly or as required to accomplish their purpose in developing the IRWM Plan, evaluating  
150 proposed projects and conducting necessary business. The Steering Committee Chair may call  
151 meetings as needed.

152

153 3. Establish, as necessary, sub-committees charged with studying, investigating and soliciting information  
154 that will advance the development, implementation and administration of the Plan and/or other areas of  
155 business. Sub-committees will be subject to the oversight of the Steering Committee and no  
156 recommendation or finding of a sub-committee will be binding upon the Steering Committee. Sub-committee  
157 size and composition will be determined by the Steering Committee, and sub-committee members may be  
158 selected from any representative of any Steering Committee agency or organization, or any appropriate  
159 stakeholder.

160

161 4. Identify reliable and long-term funding for the implementation of the Plan and the projects described in  
162 the Plan from sources, including local, state and federal funding, and pursue funds from these sources.  
163 Steering committee members will also lend individual support to efforts to apply for and procure such funds,  
164 to the extent that each entity is able. Steering Committee members may also choose to contribute funds to  
165 support any and all phases of the work to be performed for development and implementation of the Plan.

166

167 5. Prepare periodic reports to its member agencies, organizations and stakeholders describing the progress  
168 of the development, implementation and administration of the Plan.

169

170 6. Share to the extent not otherwise prohibited by law, privilege, or previous lawful agreement, all  
171 information required to develop, prepare, implement and administer and submit documents for the Plan ,  
172 including monitoring data, Computer Assisted Drawing and Design (CADD) and Geographic Information  
173 Systems (GIS) or other electronic data. Such sharing shall be subject to any applicable license agreements  
174 or other restrictions. All data shared among the entities shall be provided "as is" and without warranties as to  
175 accuracy or as to any other characteristics, whether expressed or implied. The intent of this data-sharing  
176 provision is to facilitate the development, implementation and administration of the Plan, and not to authorize  
177 use of this data for tasks unrelated to the Plan, unless deemed appropriate by the Steering Committee.

178

- 179 7. Adopt fiscal procedures as necessary to administer funds that may be received for purposes of  
180 development, administration and/or implementation of the Plan.  
181
- 182 8. To the extent feasible, make all meetings of the Steering Committee open to the public and post meeting  
183 notices on a designated website.  
184
- 185 9. Provide outreach to local entities and communities to ensure adequate input from all stakeholders.  
186
- 187 10. Maintain a sub-regional prioritized project list and ensure that the Leadership Committee's master list of  
188 prioritized projects is current.  
189
- 190 11. Maintain a list of sub-regional goals and priorities as appropriate.  
191
- 192 12. Track progress on sub-regional goals and planning targets (where applicable).  
193
- 194 13. Identify and sponsor sub-regional planning studies as needed.  
195
- 196 14. Work with the Leadership Committee to update and implement the plan as required.  
197
- 198 15. Participate in the Leadership Committee.  
199

### 200 **III. Leadership Committee**

201

#### 202 **a. Formation**

203

- 204 1. The Leadership Committee will serve as the Regional Water Management Group for the Region. Once  
205 comprised, the Leadership Committee will consist of the Chief Engineer of the Los Angeles County Flood  
206 Control District or his/her designee, and the Chairs and Vice-Chairs of each of the five Sub-regional Steering  
207 Committees, and five additional members representing each of five Water Management Areas. An Interim  
208 Leadership Committee, comprised of the Chair of the Leadership Committee and the Chairs and Vice-Chairs  
209 of the five subregional steering committees, will elect the Water Management Area Representatives from  
210 the nominees submitted by the Steering Committees, with one representative selected from each Steering  
211 Committee's list of nominees. Water Management Area representatives must meet the minimum  
212 qualifications set forth in Attachment A. Once the Water Management Area representatives are added to  
213 the Interim Leadership Committee, the body shall constitute the Leadership Committee.  
214

- 215 2. The five Water Management Areas are surface water, groundwater, sanitation, stormwater and open  
 216 space. Each Water Management Area representative will recommend an alternate to serve on the  
 217 Leadership Committee in his/her absence. The alternate must be approved by the Leadership Committee  
 218 and must meet the minimum qualifications for Water Management Area Representatives set forth in  
 219 Attachment A.  
 220
- 221 3. The Chief Engineer of the Los Angeles County Flood Control District or his/her designee will serve as  
 222 Chair of the Leadership Committee, at the pleasure of the Leadership Committee.  
 223
- 224 4. The Leadership Committee will elect an alternate (voting member) as Vice Chair. The Vice Chair will  
 225 serve at the pleasure of the Leadership Committee in the absence of the Chair.  
 226
- 227 5. All Leadership Committee member terms will be reviewed every 3 years on a staggered basis, by each  
 228 sub-region for the Chair and Vice-Chair positions, as illustrated in the table below. The Chair of the  
 229 Leadership Committee and Chairs and Vice Chairs of the Steering Committees will review the Water  
 230 Management Area positions every 3 years as illustrated in the table below. Leadership Committee  
 231 members may serve consecutive terms. The Water Management Area position will rotate its representation  
 232 to a different sub-region every 3 years. Each Steering Committee will nominate a representative to fill the  
 233 Water Management Area position which will be reviewed by the 11 members of the Interim Leadership  
 234 Committee (Chairs, Vice-Chairs, and Leadership Committee Chair) for consideration and appointment.  
 235

Position	Year									
	07	08	09	10	11	12	13	14	15	16
Chair			X			X			X	etc
Vice Chair		X			X			X		etc
<b>WMA</b>										etc
Surface Water	X			X			X			etc
Sanitation	X			X			X			etc
Groundwater	X			X			X			etc
Stormwater	X			X			X			etc
Open Space	X			X			X			etc

236  
 237

238 6. Each entity serving on the Leadership Committee members must sign the Memorandum of  
239 Understanding. Any Leadership Committee member that withdraws from the Leadership  
240 Committee/Regional Water Management Group in writing or consistently fails to participate (as deemed by  
241 majority decree of the Leadership Committee) effectively withdraws their agency from the MOU.

242  
243 7. The presence of a simple majority of the Leadership Committee members at any meeting of the  
244 Leadership Committee will constitute a quorum for the purposes of conducting business. The affirmative  
245 vote of a quorum of the Leadership Committee is required for all decisions and recommendations of the  
246 Leadership Committee.

247  
248 8. The Leadership Committee may include Ex-Officio members.

249

## 250 **b. Roles and Responsibilities**

251

252 The Leadership Committee will have the following roles and responsibilities:

253

254 1. Form Subcommittees and work groups as necessary to achieve the objectives of the IRWMP.

255

256 2. Meet monthly or as required to accomplish its purpose in developing the IRWM Plan and conduct  
257 necessary business. The Leadership Committee Chair may call meetings as needed.

258

259 3. Establish, as necessary, subcommittees charged with studying, investigating and soliciting information  
260 that will advance the development, administration, and implementation of the Plan. The subcommittees will  
261 be subject to the oversight of the Leadership Committee and no recommendation or finding of a  
262 subcommittee will be binding upon the Leadership Committee. Sub-committee size and composition will be  
263 determined by the Leadership Committee, and Subcommittee members may be selected from any  
264 representative of the various Steering Committee entities or any appropriate stakeholder.

265

266 4. Identify and pursue funding for the development and administration of the Plan. The Leadership  
267 Committee will be responsible for determining the amount of contributions necessary for administration of  
268 the plan. Leadership Committee representatives will communicate to their respective Steering Committees  
269 the amount of funding needed and will pursue commitments for contributions from Steering Committee  
270 members and other stakeholders.

271

272 5. Identify reliable and long-term funding for the implementation of the Plan and the projects described in the  
273 Plan from sources including local, state and federal, and pursue funds from these sources.

274

- 275 6. Prepare periodic reports for the Steering Committees and stakeholders describing the progress of the  
276 development, administration and implementation of the Plan.  
277
- 278 7. To share to the extent not otherwise prohibited by law, privilege, or previous lawful agreement, all  
279 information required to develop, prepare, implement and administer and submit documents for the Plan,  
280 including monitoring data, Computer Assisted Drawing and Design (CADD) and Geographic Information  
281 Systems (GIS) or other electronic data. Such sharing shall be subject to any applicable license agreements  
282 or other restrictions. All data shared among the parties shall be provided "as is" and without warranties as to  
283 accuracy or as to any other characteristics, whether expressed or implied. The intent of this data-  
284 sharing provision is to facilitate the development, implementation and administration of the Plan, and not to  
285 authorize use of this data for tasks unrelated to the Plan, unless deemed appropriate by the Leadership  
286 Committee.  
287
- 288 8. Adopt as necessary fiscal procedures to administer funds that may be received for purposes of  
289 development, administration and/or implementation of the Plan.  
290
- 291 9. Establish a project evaluation framework that is consistent across the Region for the purpose of  
292 quantifying project benefits to allow for the categorization and prioritization of projects based on the Water  
293 Management Areas and consistent with the Plan.  
294
- 295 10. Facilitate the adoption of the Plan by those entities within the Region with responsibility for one or more  
296 Water Management Areas.  
297
- 298 11. To the extent feasible, make all meetings of the Leadership Committee open to the public and post  
299 meeting notices on a designated website.  
300
- 301 12. Provide regional oversight to the Greater Los Angeles County Region IRWMP.  
302
- 303 13. Track regional progress towards the Greater Los Angeles County Region IRWMP targets.  
304
- 305 14. Act as liaison between the State and the Steering Committees.  
306
- 307 15. Represent the Region's needs to the State.  
308
- 309 16. Provide a balance for sub-regional interests.  
310
- 311 17. Provide regional outreach related to the Greater Los Angeles County Region IRWMP.

- 312  
313 18. Periodically update the Greater Los Angeles County Region IRWMP.  
314  
315 19. Serve as the Regional Water Management Group in accordance with the Integrated Regional Water  
316 Management Planning Act of 2002, Division 6, Chapter 2.2 of the California Water Code, as amended.  
317  
318  
319

#### 320 **IV. Guidelines for Transparency**

321  
322 The following guidelines have been established to enable participation in the planning effort by all  
323 stakeholders and to ensure transparency in decision-making at the Leadership Committee:  
324

- 325 1. The Leadership Committee will prepare and circulate agendas in advance of their meetings. The Steering  
326 Committees will have an opportunity to discuss those agendas prior to the Leadership Committee meetings  
327 where possible.  
328  
329 2. Minutes from Leadership Committee meetings will be posted on the website and distributed to  
330 stakeholders.  
331  
332 3. Key action items of the Leadership Committee will be submitted in a simple board letter format such that  
333 subsequent interested parties can review and understand the recommendations and actions.  
334

#### 335 **VI. Guidelines for Funding Contributions**

- 336  
337 1. The Leadership Committee will determine the budget for ongoing IRWMP operations (funding target).  
338 Such operations include but are not limited to consultant support, administrative expenses, special  
339 studies, direct costs, etc.  
340 2. The budget shall be determined for multiple years so as to provide participating entities planning  
341 information for their own budgetary purposes.  
342 3. All Steering Committees are expected to contribute equally to the funding target. The Chair and Vice  
343 Chair of each Steering Committee will be responsible for outreach to Steering Committee members and  
344 stakeholders in order to obtain the necessary contributions.  
345 4. All Leadership Committee and Steering Committee members will be expected to contribute towards the  
346 funding target established by the Leadership Committee based on their ability to pay. Leadership  
347 Committee and Steering Committee members are also expected to assist in outreaching to local entities  
348 for funding contributions.

- 349 5. If extenuating circumstances prevent a Steering Committee from raising its portion of the funding target,  
350 the Chair and Vice Chair of the Steering Committee may appeal to the Leadership Committee for an  
351 exception to the funding target.
- 352 6. The Leadership Committee and Steering Committees will seek planning grants and other sources of  
353 funding as available to offset the amount of Steering Committee member contributions or contributions  
354 from other entities.

355  
356  
357

**Attachment A  
Water Management Area Minimum Qualifications**

<b>Greater Los Angeles County Integrated Regional Water Management Region Water Management Area (WMA) Representation Minimum Requirements</b>		
<b>WMA</b>	<b>Minimum Years Of Experience</b>	<b>Description</b>
Groundwater	Five +	<ul style="list-style-type: none"> <li>· Experience in one of the following groundwater areas: remediation, supply, management and/or storage.</li> <li>· Educational background or equivalent work experience in engineering, natural sciences, land use management, conservation, or other water resource-related field.</li> <li>· Must not have competing or conflicting groundwater interests within or outside of the Greater L.A. Region.</li> </ul>
Open Space	Five +	<ul style="list-style-type: none"> <li>· Experience with habitat, open space and/or recreational issues at a regional level (i.e. across municipal jurisdictions and watershed boundaries).</li> <li>· Educational background or equivalent work experience in natural sciences, land use management, conservation, or other water resource-related field.</li> <li>· Familiar with the agencies and organizations involved in habitat/open space issues in the LA Region who are likely to be project proponents, land owners or permittees of projects.</li> </ul>
Sanitation	Five +	<ul style="list-style-type: none"> <li>· Experience in local or regional agency that provides wastewater collection, treatment, recycling and/or disposal services.</li> <li>· Education background and work experience in science, engineering, waste management or related fields.</li> </ul>
Stormwater	Five +	<ul style="list-style-type: none"> <li>· Experience in overseeing/managing stormwater pollution abatement projects and knowledge in stormwater programs in multi-watersheds as defined in the Greater Los Angeles Region IRWMP.</li> <li>· Educational background or work experience in engineering, environmental science, biology, chemistry, toxicology, microbiology, urban planning or closely related field.</li> <li>· Sound knowledge of NPDES Stormwater Permit and TMDL issues as related to the region.</li> <li>· Experience in taking a major role in regional NPDES stormwater permit and TMDL compliance efforts involving multiple jurisdictions.</li> <li>· Ability to provide a regional perspective on stormwater and water quality issues.</li> </ul>
Surface Water	Five +	<ul style="list-style-type: none"> <li>· Expertise in the planning, design and construction, financing, and operations of water works facilities which includes storage</li> </ul>

		<p>reservoirs, transmission and distribution systems, pumping plants, water treatment, water conservation, system optimization particularly as it effects power usage.</p> <ul style="list-style-type: none"> <li>· Education background or work experience in engineering, urban planning, environmental studies or related fields.</li> <li>· Sound knowledge of existing and emerging regulations as well as environmental matters and familiarity with California water law and regulations.</li> <li>· Knowledgeable of the roles of federal, state and local governmental agencies involved in either the regulation of or the operation of waters supply facilities as well as familiarity with key nongovernmental agencies that influence the operations of water systems.</li> <li>· Experience in the acquisition of water rights.</li> </ul>
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359

<p><b>General Minimum Qualifications for all WMA Representatives</b></p> <ul style="list-style-type: none"> <li>· Familiar with the Region's IRWMP, its decision making structure, the committee members, goals and targets, and specific issues, challenges and potential solutions related to the specific WMA on a regional scale.</li> <li>· Must be able to represent regional Interests in the Greater Los Angeles County Region.</li> <li>· Must be able to attend and participate in Leadership Committee meetings.</li> </ul>
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360  
361