1. INTRODUCTION

San Gabriel Mountains

The San Gabriel Mountains are a significant source of water supply for the Region.

1.1 Background

To meet the demand for water in the Greater Los Angeles County Region (or Region, as depicted in Map 1-1) over the last century, federal, state, and local agencies developed creative plans and implemented large projects to move vast quantities of water great distances. Therefore, the Region is now reliant on supplies that vary with the climate fluctuations across numerous states. At the same time, the quantity and quality of local supplies are threatened with degradation over time. The need to protect lives and property from flooding resulted in extensive channelization and modification of the rivers and streams on the coastal plain and inland valleys. The flood protection system quickly transports runoff to the ocean but provides limited opportunities for percolation of runoff and hinders the potential for natural processes to reduce or transform pollutants. As a result, most of the trash, metals, bacteria, and organic chemicals from developed areas are transported directly to inland water bodies and downstream coastal bays. This results in impairments that hinder the designated beneficial uses of surface water bodies. In some areas, land practices, inadequate disposal of industrial materials, and leaking underground storage tanks have contaminated soils and percolated to groundwater basins, reducing the ability to use these supplies.

Historically, water agencies in the 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. However, the long-term sustainability of the Region's water supply faces increasing challenges. As noted in the California Water Plan Update 2005 (Bulletin No. 160):

> "Like many regions in the state, water quality and water supply challenges are intertwined. The… region must manage for uncertainties caused by population and economic growth. Growth will not only affect demand, but it will add contamination challenges from increases in wastewater discharges and urban runoff, as well as increased demand for water-based recreation… The region must also assess and plan for impacts of climate variations and global climate change, as well as the cost of replacing aging infrastructure.
>
> Given the size of the region and the diverse sources of water supply, the challenges to the region's water quality are varied. Surface water quality issues… are dominated by stormwater and urban runoff, which contribute contaminants (including trash) to local creeks and rivers…" (Department of Water Resources [DWR], 2005).

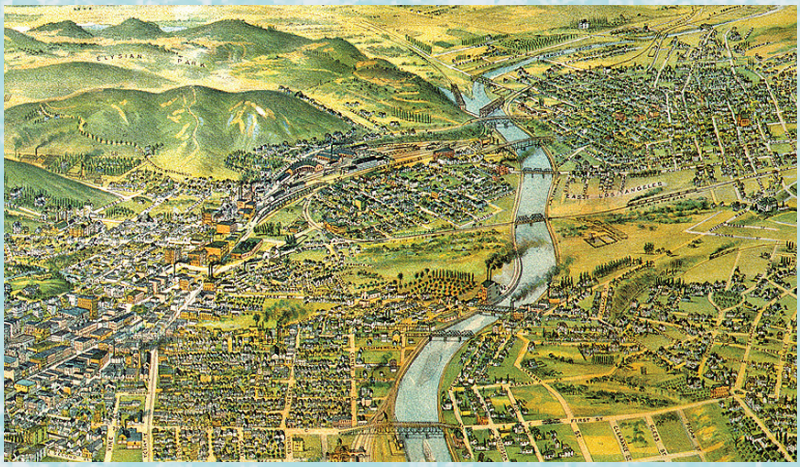
To ensure the delivery of clean and reliable water in this century, agencies and jurisdictions in the Region will benefit from a visionary plan that integrates water supply, water quality, and open space strategies; and maximizes the utilization of local water resources. This IRWMP is the next step in the Region's collaborative efforts to ensure a sustainable water supply through the more efficient use of water, the protection and improvement of water quality, and environmental stewardship including habitat restoration. This Plan also provides an opportunity to provide information on the region's needs and future at a scale that can contribute to the California Water Plan.

1.2 Context

Cooperation at a Regional scale is not new. Flood control districts, sanitation districts, and wholesale water agencies have a long tradition of working across jurisdictional boundaries to implement projects that have multiple benefits. However, most resource management agencies were originally formed with single-purpose missions, which limit their ability to develop and implement multi-purpose programs and projects. Yet, in recent years, the potential for a transformation of the watersheds in this Region has emerged, beginning with visions of restoring the Los Angeles and San Gabriel Rivers, development of watershed management plans on most of the major tributaries and creeks, and the preparation of Integrated Resources Plans (IRPs) by large water and sanitation agencies. These plans promote integrated efforts to manage resources and recognize that water and watershed

Map 1-1. Greater Los Angeles County Region

PAST AND PRESENT



Historic illustrated map of the Los Angeles Basin

"The River" (courtesy of the San Gabriel Mountains Regional Conservancy)

Local stormwater runoff is collected in a comprehensive set of groundwater recharge basins throughout the Region.

Figure 1-1. Region History. While the Region's rivers historically provided ample water supply, exponential population growth over the last century has required creative solutions to meet demands.

The mission of The Greater Los Angeles County Integrated Regional Water Management Plan is **"to address the water resources needs of the Region in an integrated and collaborative manner."**

resources are interconnected. Thus, the concept of integrated resource management in this Region is not new.

This IRWMP is an outgrowth of ongoing efforts to develop plans, projects, and programs at regional levels, and utilize an integrated approach to water and other resource management issues and acknowledges that for the Region to meet its future needs, water supply planning must be integrated with other water resource strategies. These consist of urban stormwater runoff management, wastewater quality improvements, maintenance of flood protection, and other environmental needs including habitat and open space conservation and the provision of sufficient park space. In a region facing significant urban challenges such as population growth, densification, traffic congestion, poor air quality, and quality of life, water resource management also must be integrated with other urban planning issues. This IRWMP suggests a proactive approach to addressing the Region's water resource needs, based on a vision established through extensive stakeholder input that is consistent with some of the planning principles identified in regional planning documents such as the SCAG Compass Growth Vision Report (SCAG, 2004).

To define benchmarks for a more sustainable water future, an 11-agency Leadership Committee (which guided development of the Plan) has established quantifiable planning targets for water supply, urban runoff, flood protection, habitat, and open space. These targets identify the magnitude of the Region's major water resource management issues and also provide a basis for estimating the cost of implementing projects and programs to meet these targets.

In the coming decades, water supply and conservation projects and programs will compete for limited fiscal resources with concurrent efforts to improve urban and stormwater runoff quality. With the cost of compliance with surface water quality regulations estimated to range from $43 to $284 billion (Brown and Caldwell, 1989 and Gordon, et al, 2002), jurisdictions and agencies in the Region face difficult funding choices.

The integration of multiple water management strategies via multipurpose projects creates opportunities to meet regional water resource needs, efficiently use fiscal resources, and provide the public with tangible community benefits. It is within this context that the following Plan is presented.

1.3 Mission and Purpose

The Leadership Committee developed the Plan's mission statement through a collaborative process with input from five Subregional Steering Committees and stakeholders at both Regional and Subregional workshops.

The purpose of this IRWMP is to improve water supplies, enhance water supply reliability, improve surface water quality, preserve flood protection, conserve habitat, and expand recreational access in the Region. This Plan is also intended to define a comprehensive vision for the Region which will generate local funding, position the Region for future state bonds, and create opportunities for federal funding.

1.4 IRWMP Process

In response to the release of the Integrated Regional Water Management Grant Program Guidelines (DWR, 2004), six Regional groups within Los Angeles County submitted grant applications (in May 2005) to support development of an IRWMP, including the Santa Monica Bay Restoration Commission, the City of Los Angeles, the Watershed Conservation Authority, the Upper San Gabriel Municipal Water District (MWD), the West Basin MWD, and the City of Downey. Although DWR initially recommended funding only one application, DWR ultimately expanded the funding pool and proposed a single grant of $1.5 million, on the condition that the six original applicants prepare a single plan for the Region. In December 2005, a consultant team was selected to consolidate the previous efforts and develop a single plan.

The IRWMP Region includes approximately 10.2 million residents, portions of 4 counties, 92 cities, and hundreds of agencies and districts. To make stakeholder outreach manageable, the IRWMP was organized to solicit input from five Subregions (depicted on Map 1-2) which acknowledge variation in geographic and water management strategies in a region of 2,058 square miles. The five Subregions include:

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

The organizational structure for the IRWMP is defined by a Leadership Committee and five Subregional Steering Committees. The Leadership Committee was chaired by the Los Angeles County Flood Control District (LACFCD) and included representatives of five Subregional Steering Committees and five additional seats representing specific water management focus areas (including groundwater, sanitation, surface water supply, recreation and habitat, and stormwater). Each Subregional Steering Committee included agency,

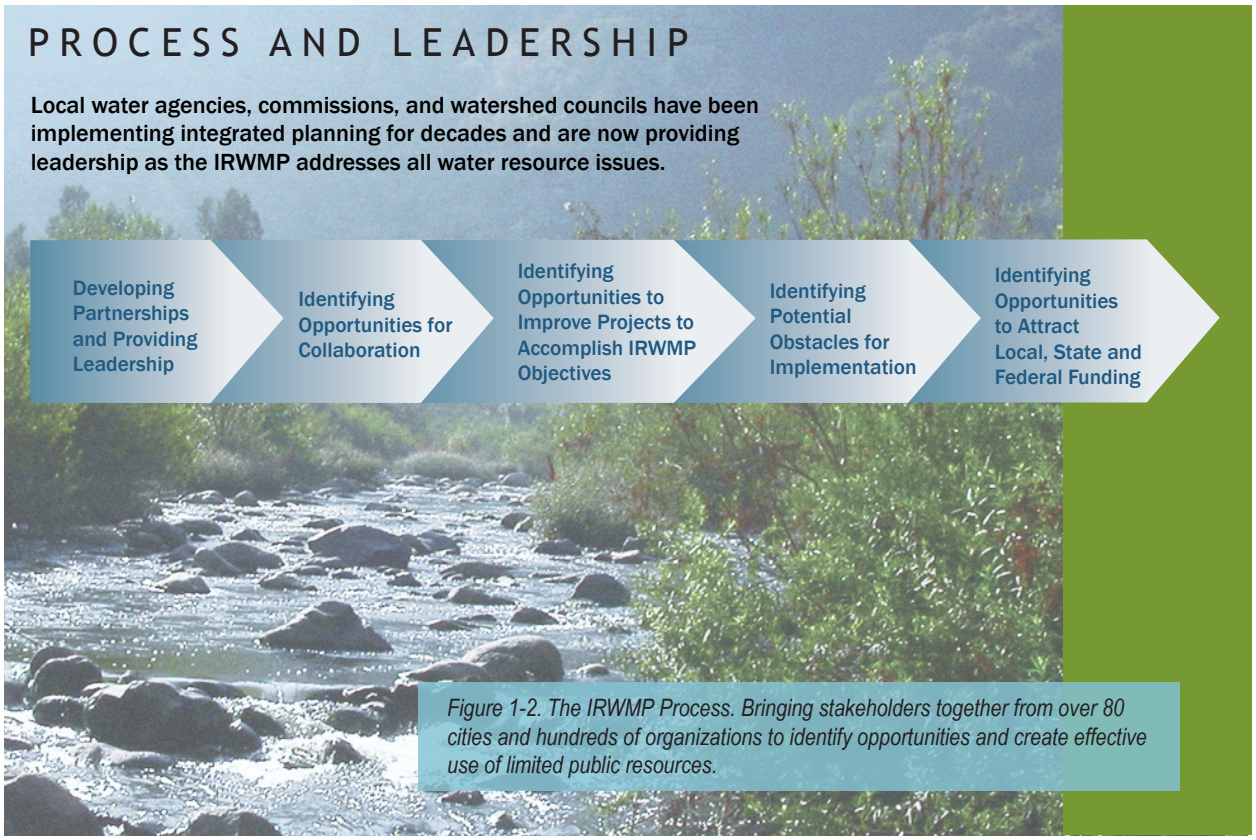


Figure 1-2. The IRWMP Process. Bringing stakeholders together from over 80 cities and hundreds of organizations to identify opportunities and create effective use of limited public resources.

IRWMP LEADERSHIP COMMITTEE

Leadership Committee members are actively engaged in monthly meetings. Membership includes director-level staff from a large number of local agencies.

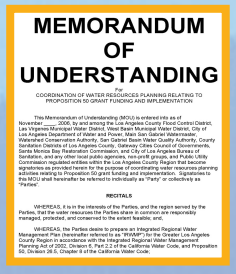
MILESTONE ACCOMPLISHMENTS

Demonstrated cooperative efforts between Regional and Subregional groups

Leadership Committee as well as Subregional Steering Committees meet monthly. Members are dedicated agency directors and high-level decision makers

Four Regional workshops and 20 Subregional workshops were well attended and provided opportunity for collaboration

1,521 projects were submitted during the Call for Projects



MEMORANDUM OF UNDERSTANDING

For

COORDINATION OF WATER RESOURCES PLANNING RELATING TO PROPOSITION 50 GRANT FUNDING AND IMPLEMENTATION

This Memorandum of Understanding (MOU) is entered into as of November 2004 by the Los Angeles County Flood Control District, Los Virgenes Municipal Water District, Three Basins Municipal Water District, City of Los Angeles Department of Water and Power, Main San Gabriel Watermaster, Watershed Conservation Authority, San Gabriel Basin Water Quality Authority, County Sanitation Districts of Los Angeles County, Gateway Cities Council of Governments, San Gabriel Valley Council of Governments, City of Los Angeles Bureau of Sanitation, and any other local public agencies, non-profit groups, and Public Utility Commission regulated entities within the Los Angeles County Region that become signatories as provided herein for the purpose of coordinating water resources planning activities relating to Proposition 50 grant funding and implementation. Signatories to this MOU shall hereinafter be referred to individually as "Party" or collectively as "Parties".

RECITALS

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

WHEREAS, the Parties desire to prepare an Integrated Regional Water Management Plan ("IRWMP") for the Greater Los Angeles County Region in accordance with the Integrated Regional Water Management Planning Act of 2002, Division 6, Part 2.2 of the California Water Code, and Proposition 50, Division 26.5, Chapter 8 of the California Water Code.

Memorandum of Understanding drafted and signed by members of the Leadership and Steering Committees

Figure 1-3. Leadership Committee Milestones. IRWMP has made significant milestone accomplishments with a broad outlook: 1,400 Stakeholders, over 500 agencies, and 5 Subregional Steering Committees.

city, and stakeholder representatives, and additional representatives for the water management focus areas. This structure provided opportunities for coordination, integration of decision-making, and stakeholder input. These committees met monthly, or on a more frequent basis, during development of the IRWMP.

To provide opportunities for direct input by the entire range of stakeholders in the Region, the IRWMP process also included 20 workshops at the Subregional level and four workshops at the Regional level. Workshops were focused on specific topics (e.g., objectives, project integration, and Plan implementation).

To prepare this IRWMP, existing plans, studies, and documents were reviewed to determine the concepts of integrated resource management and assess whether existing documents could collectively be integrated into an IRWMP. The assessment determined that the existing plans and studies could not readily be assimilated into a functionally equivalent IRWMP and preparation of a coordinated IRWMP is required.

This IRWMP utilizes and adapts appropriate technical information from the original planning grant applications and various existing plans, studies, and documents. The discussion of water supply relies upon water supply and demand information from Urban Water Management Plans (UWMPs) water agencies in the Region and the IRP developed by the Metropolitan Water District of Southern California (Metropolitan). The Regional description and discussion of water quality issues is 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, the draft Upper San Gabriel River Watershed Management Plan), the Santa Monica Bay Restoration Plan, and existing and proposed TMDL requirements. These documents, along with input from the stakeholder workshops, provide a basis for the mission, objectives, and planning targets articulated in this IRWMP. The documents also inform the Region's short-term and long-term priorities and the water management strategies that are relevant.

The development of the IRWMP is supported by various Technical Memoranda (TMs) and related products. The TMs cover topics such as water management strategies, project integration, benefit/cost analysis, and framework for implementation; and provide the background and technical analysis that support the Plan, including water supply and demand. Feedback from the Leadership Committee, Steering Committees, and stakeholder workshops helped to articulate how water management strategies can be integrated into Regional project concepts and prioritize which Regional project concepts are most appropriate for the individual Subregions.

1.5 Stakeholder Involvement

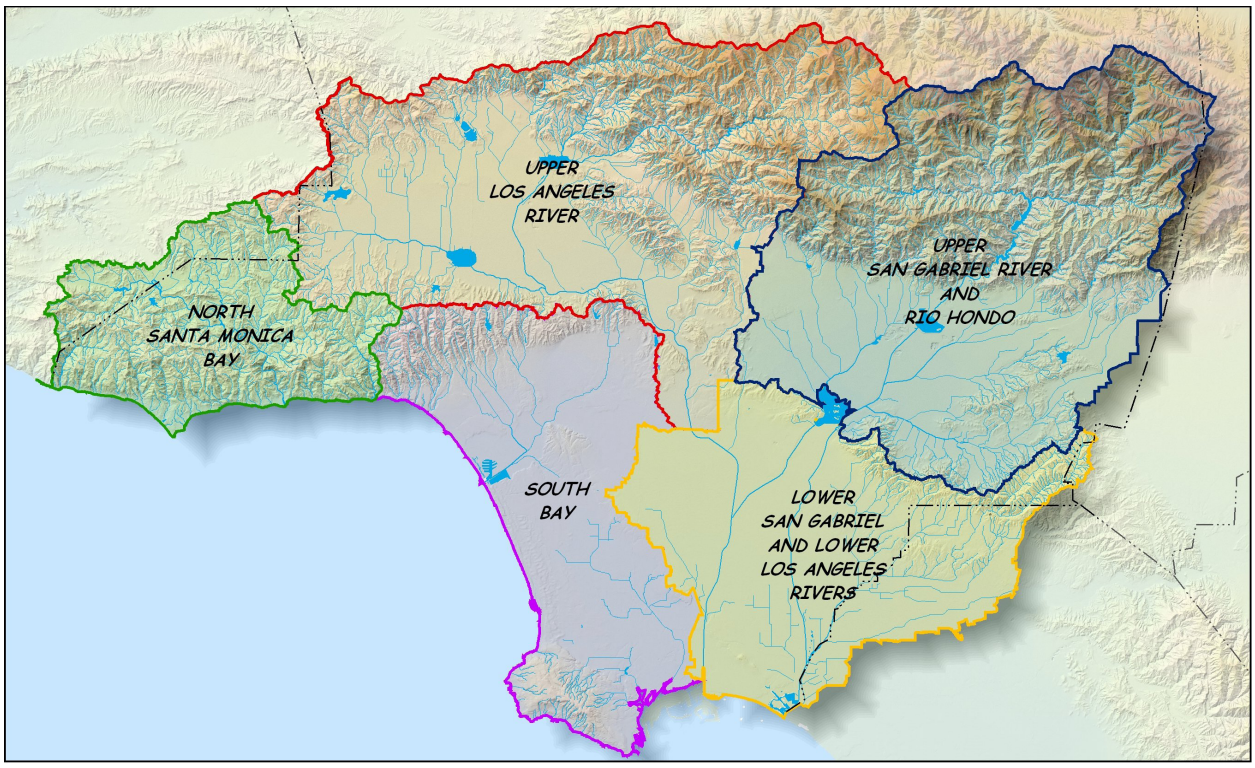
An extensive stakeholder outreach process was crucial to ensure that the Plan reflects local needs, promotes the formation of partnerships, and encourages coordination with state and federal agencies.

Regional Water Management Group

Consistent with Sections 10530 - 10546 of the Water Code, preparation of an IRWMP must be guided by a Regional Water Management Group (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 IRWMP guidelines, the RWMG is comprised of signatories to a MOU that established the Greater Los Angeles County RWMG.

Leadership and Steering Committees

The Leadership Committee made formal decisions associated with the scope and content of the Plan. Five Subregional Steering Committees provided input to the Leadership Committee on the major issues contained in the Plan. Stakeholder work-



Map 1-2. IRWMP Subregions, Los Angeles Region.

shops provided additional input to the process. As illustrated in Figure 1-4, stakeholder input to the Leadership Committee was structured around the five Subregional Steering Committees and stakeholder workshops.

The Leadership Committee and the Steering Committees are currently governed by interim operating guidelines.

The Leadership Committee has 11 voting members, as shown in Figure 1-5, including the LACFCD (committee chair), chairs of the five Subregional Steering Committees, and five stakeholder agencies representing the following water management strategy areas: groundwater; surface water; sanitation; habitat/open space; and stormwater. The Leadership Committee also includes 14 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 DWR; California Environmental Protection Agency (EPA); California Regional Water Quality Control Board Los Angeles Region (RWQCB); Californian Department of Parks and Recreation; California Department of Health Services (DHS); Metropolitan Water District of Southern California; National Parks Service; U.S. Army Corps of Engineers (USCOE or Corps); and U.S. Department of Agriculture (USDA) Forest Service.

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

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.

West Basin MWD. West Basin MWD represents the South Bay Watersheds Subregion on the Leadership 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 851,000. In addition, West Basin MWD provides recycled water for municipal, commercial, and industrial uses. West Basin MWD owns the West Basin Water Recycling Facility in El Segundo, where approximately 28,000 acre-feet per year (acre-feet/year) 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.

Las Virgenes MWD. Las Virgenes MWD represents the North Santa Monica Bay Watersheds Subregion on the Leadership 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 Los Angeles Department of Water and Power. Los Angeles Department of Water and Power (LADWP) represents the Upper Los Angeles River Watershed Subregion on the Leadership 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.

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

Main San Gabriel Basin Watermaster. The Main San Gabriel Watermaster represents the Upper San Gabriel River Watershed Subregion on the Leadership 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 Groundwater Water Management Area on the Leadership Committee. The San Gabriel Basin 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 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.

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.

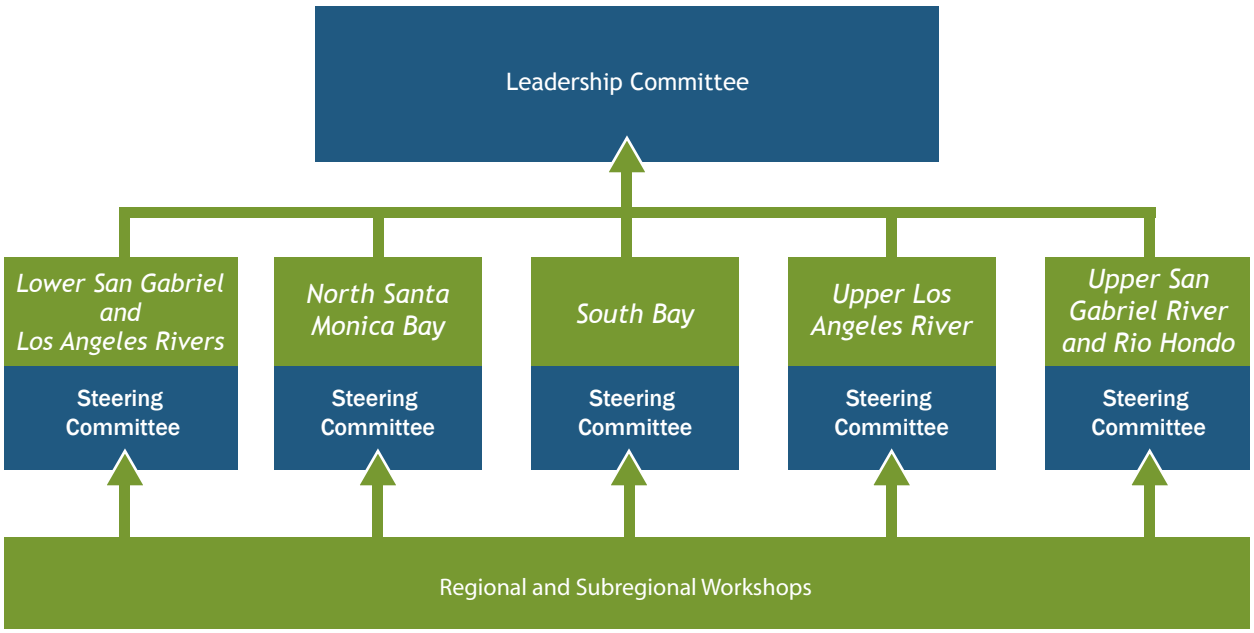


Figure 1-4. Stakeholder Structure. The IRWMP stakeholder structure provides the Leadership Committee with all the stakeholder and Subregional steering committees' feedback, projects, comments and concerns.

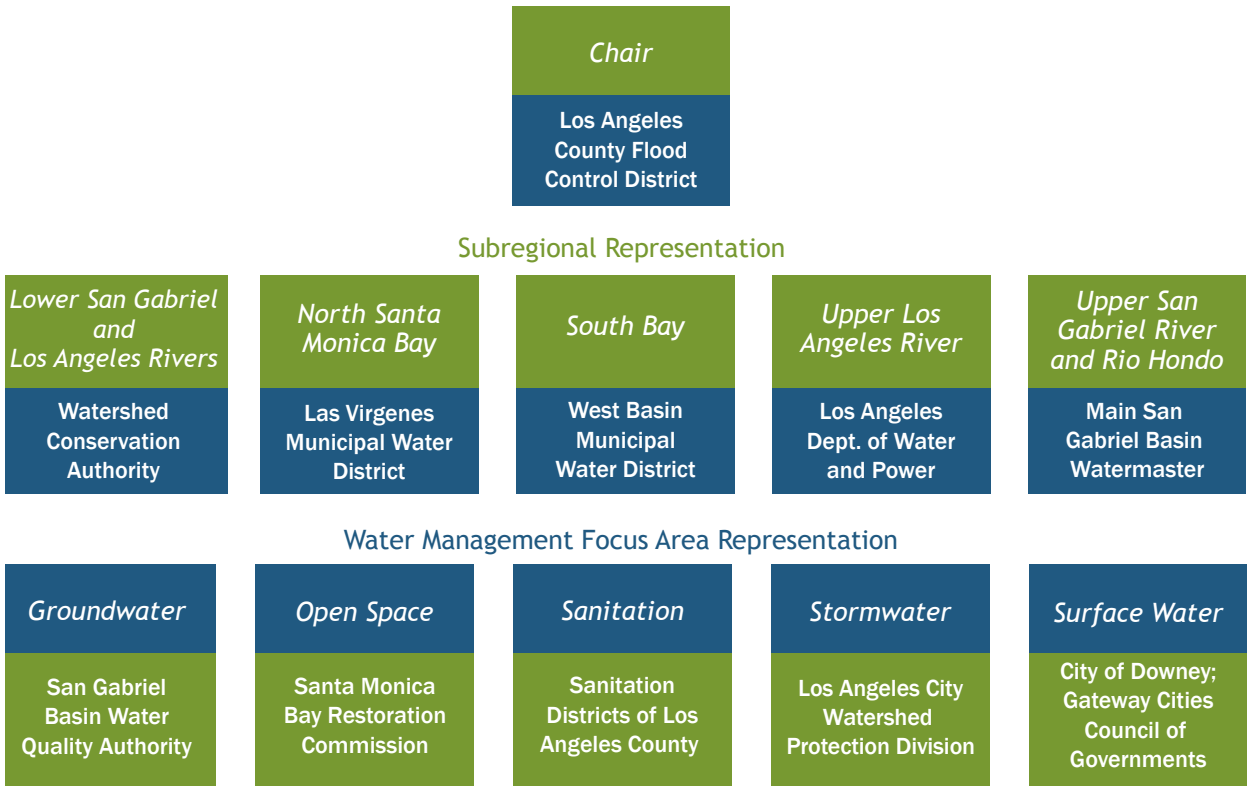


Figure 1-5. Leadership Committee. The Leadership Committee consist of representatives from each Steering Committee and each water management focus area.

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 provides the management of solid wastes including disposal, transfer operations, and materials recovery.

Gateway Cities Council of Governments. The Gateway Cities Council of Governments (COG) represents the Surface Water Management Area on the Leadership Committee, and the seat is currently held by the City of Downey. The council serves as an advocate in representing the 27 member cities and two million residents at the regional, state and federal levels on issues of importance to southeast Los Angeles County. The goal of the council is one of voluntary cooperation among the cities for the collective benefit of cities in southeast Los Angeles County.

Santa Monica Bay Restoration Commission (SMBRC). The SMBRC represents the Habitat/Open Space Water Management Area on the Leadership Committee. The State of California and the U.S. Environmental Protection Agency (USEPA) established the Santa Monica Bay Restoration Project as a National Estuary Program in December 1988. The Project was formed 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, located in the second most populous region in the United States. 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. The SMBRC continues the mission of the Bay Restoration Project and the collaborative approach of the National Estuary Program but with a greater ability to accelerate the pace and effectiveness of Bay restoration efforts.

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.

The composition of the Leadership Committee achieves a cross sectional representation of all water management issues: Las Virgenes MWD, LADWP, and West Basin MWD are involved in water supply, conservation and water recycling issues; the Main San Gabriel Basin Watermaster and the San Gabriel Basin Water Quality Authority are focused on groundwater supply and groundwater quality issues, respectively; LACFCD deals extensively with stormwater quality, flood protection, and the conservation of stormwater runoff; the Gateway Cities Council of Governments provides the perspective of local cities on water issues; LACSD is the main agency for wastewater treatment, as well as a leader in water recycling; and the WCA and SMBRC are proponents for open space, habitat and water quality issues. Collectively, the members of the Leadership Committee represent Regional leadership in all water management areas.

To manage input from the stakeholders across the entire region and reflect local variations, five Subregional Steering Committees were also established. Table 1-1 identifies the agencies and organizations represented on each of the Subregional Steering Committees.

Agency and Stakeholder Participation

The IRWMP synthesizes prior planning efforts in the Region. These efforts include water supply and urban water management plans, resource management plans, river corridor master plans, and watershed plans. Proponents of some of these efforts coalesced to form larger Subregional groups which submitted initial planning grant applications. The decision to consolidate these Subregional efforts into a single plan thus benefits from many years of consensus building and has the potential to yield results that are more expansive than a stakeholder outreach process associated with development of a stand-alone plan.

OPPORTUNITIES AND WORKSHOPS

Figure 1-6. Opportunities for Stakeholders and Agencies. Subregional and Regional workshops have provided opportunities for project collaboration and integration.

Invitations to participate in stakeholder workshops, project identification, and plan development were transmitted to over 1,400 individuals representing hundreds of cities, agencies, districts, and organizations. A summary of the agencies and organizations included in this process follows.

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, RWQCB (Los Angeles and Santa Ana Regions).

Special Districts. County Sanitation Districts of Los Angeles County.

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.

Cities in Los Angeles County (including City Managers and 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 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 Entities. Non-profit organizations (trusts, foundations, conservancies, associations, societies, coalitions, alliances, councils); joint powers authorities, businesses, property owners; financial institutions; businesses and industry associations; Chambers of Commerce; educational institutions; civic organizations; environmental groups; watershed councils; and interested individuals.

Water Agencies and Districts. The major water wholesalers, regional water agencies, and individual cities with water departments were also invited to participate in the IRWMP process, as listed in Table 1-2. Each of the Region's districts and authorities are participants in the IRWMP process, and thus, all of the 92 cities in the Region are represented. With this participation, all entities that are party to groundwater basin adjudications in the Region are also represented. In addition, the Upper Los Angeles River Area Watermaster and the Main San Gabriel Basin Watermaster are participants in the process.

Opportunities for Agency and Stakeholder Involvement

To develop an IRWMP that addresses Regional issues, yet recognizes local conditions and preferences, a process was established with the following mechanisms to involve stakeholders and incorporate their input: TMs, stakeholder workshops (at the Regional and Subregional level), monthly Subregional Steering Committees, monthly Leadership Committee meetings, project website, and e-mail notices. All of the project meetings were open to the public. The methods for stakeholder involvement and input are described below.

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 herein, a series of TM were developed. The subject of the TMs include: water supply, water quality/flood management, open space, water quality strategy integration, project integration, benefits assessment, and implementation. These incorporate and integrate stakeholder-generated information and cumulate 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.

Regional Workshops. Four Regional stakeholder workshops encouraged 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.

Subregional Stakeholder Workshops. The primary avenue for stakeholder input was Subregional workshops. Twenty Subregional workshops were held (four in each of the five Subregions). These workshops provided background on the IRWMP process; identified issues, opportunities and constraints; considered opportunities for project integration, and identified comments on the Public Review Draft of the IRWMP.

Steering Committees. The Subregional Steering Committees provided a forum for more detailed discussion of the issues related to development of the Plan and for input on issues considered by the Leadership Committee, including the prioritization and selection of projects for Round

Table 1-1. Steering Committee Representation

Lower San Gabriel and Los Angeles Rivers Watersheds	North Santa Monica Bay Watersheds	South Bay Watersheds	Upper Los Angeles River Watershed	Upper San Gabriel River and Rio Hondo Watersheds
• California Coastal Conservancy • Central Basin Municipal Water District • City of Long Beach • Gateway COG—City of Downey • Gateway COG—City of Lakewood • Gateway COG—City of Paramount • Los Angeles & San Gabriel Rivers Watershed Council • Los Angeles County Department of Public Works • Orange County Resources and Development Management Department • County Sanitation Districts of Los Angeles County • Water Replenishment District • Watershed Conservation Authority	• California Department of Parks and Recreation • California Coastal Conservancy • California Department of Transportation • City of Agoura Hills • City of Calabasas • City of Malibu • City of Westlake Village • County of Los Angeles Department of Public Works • Heal the Bay • Las Virgenes Municipal Water District • Los Angeles County Beaches & Harbors • Mountains Restoration Trust • National Park Service-Santa Monica Mountains NRA • Resource Conservation District of the Santa Monica Mountains • Santa Monica Bay Restoration Commission • Santa Monica Baykeeper • Santa Monica Mountains Conservancy • Triunfo Sanitation District • Water District # 29 Los Angeles County Waterworks Division • West Basin Municipal Water District	• California Department of Water Resources • City of Los Angeles Bureau of Sanitation • City of Torrance • County of Los Angeles Department of Public Works • County Sanitation Districts of Los Angeles County • Los Angeles Department of Water and Power • Mono Lake Committee • Santa Monica Bay Restoration Commission • South Bay Cities COG • Water Replenishment District • West Basin Municipal Water District • Westside Cities COG	• Arroyo Seco Foundation • Burbank Water and Power • California Coastal Conservancy • City of Calabasas • City of Los Angeles • City of Los Angeles Department of Water and Power • City of Los Angeles Department of Recreation & Parks • City of Los Angeles Department of Public Works, Bureau of Sanitation • City of Pasadena • City of South Pasadena • Coastal Conservancy • Glendale Water and Power • Los Angeles & San Gabriel Rivers Watershed Council • Los Angeles County Department of Public Works • Mountains Recreation and Conservation Authority • Mountains Restoration Trust • Tujunga Watershed Council • Upper Los Angeles River Area Watermaster	• California Department of Water Resources • Los Angeles & San Gabriel Rivers Watershed Council • Los Angeles County Department of Public Works • Main San Gabriel Basin Watermaster • Rivers and Mountains Conservancy • San Gabriel Basin Water Quality Authority • San Gabriel Valley Municipal Water District • San Gabriel Valley Water Association • Three Valleys Municipal Water District • Upper San Gabriel Valley Municipal Water District

1 (Step 2) of Proposition 50, Chapter 8. The Steering Committees also assisted in the preparation for Subregional stakeholder workshops. Approximately 50 committee meetings were held during Plan development.

Leadership Committee. The Leadership Committee met at least once per month and more frequently as needed, to provide direction for the Plan development process, make formal decisions regarding administration of the Plan, and determine project priorities (e.g., the final selection of Step 2 projects).

Project Website. A project website was developed (www.lawaterplan.org) to facilitate the distribution of project information to stakeholders. The website contained background information about the IRWMP plan development, a calendar of meetings and workshops, and contact information. The website also included a database tool through which stakeholders could submit or review projects or project concepts.

Electronic and Written and 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 IRWMP 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.

With this structure, and under the guidance of the Leadership Committee, stakeholders were provided an opportunity to shape the scope, content and priorities articulated in the Plan in an efficient manner. Stakeholders were instrumental in the following:

- Developing the IRWMP mission and objectives;
- Refining procedures for how projects are incorporated into the IRWMP;
- Identifying appropriate implementation strategies; and
- Recommending improvements to stakeholder workshops.

Disadvantaged Community Outreach

Outreach to disadvantaged communities in the Region is a priority. An initial assessment was completed by conducting a census analysis of the five Subregions to identify and map communities with a median income below 80 percent of Statewide Median Household income –the state qualification for Disadvantaged Community (DAC) under Proposition 50, Chapter 8. Only the North Santa Monica Bay Watersheds had no qualifying communities. Activities conducted to expand DAC participation include:

- A gap analysis was conducted of the stakeholder invitation lists to determine which disadvantaged communities in the Plan Region are not represented or are underrepresented. A strategy was developed to increase participation from each of these communities by reaching out to agencies in those communities, including public works, community development, and parks and recreation.
- Phone conservations with, and e-mails to, leaders of the statewide Environmental Justice Coalition for Water (EJCW) served to introduce them to the planning effort. Based on feedback from the EJCW, additional communities and groups were added to the stakeholder lists.
- Briefings with steering committee leaders of the Los Angeles Working Group on the Environment (LAWGE), a coalition of over 50 environmental and environmental justice groups that have been working together since 2005 to develop a cohesive environmental agenda for the City of Los Angeles, including a safe and reliable water supply.
- Phone conservations or in person meetings with opinion leaders to discuss outreach strategy, including representatives of the Desalination Response Group and the Mono Lake Committee.
- E-mails and conversations with various Councils of Government, including the South Bay Cities and Westside Cities COGs.

Table 1-2. Water Districts, Agencies, and Authorities in Greater Los Angeles IRWMP 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
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

** Also served by the Metropolitan Water District of Southern California*

Sources: Metropolitan Water District of Southern California, San Gabriel Valley MWD, San Gabriel Basin Water Quality Authority, Southeast Water Coalition, and Water Replenishment District of Southern California

- Conversations between Subregional area managers and Los Angeles County Department of Public Works (LACDPW) staff to assure coverage of unincorporated areas in each Subregion.
- Conversations with organizers of the Los Angeles Neighborhood Initiative (LANI) program, which serves 17 diverse under-served neighborhoods in the City of Los Angeles that are economically-challenged, have a declining, blighted neighborhood main street, and are predominantly comprised of transit-dependant populations.
- Individual meetings and information disseminated to leaders of specific community groups that focus their efforts in economically disadvantaged communities including: Amigos De Los Rios, People for Parks, The Metropolitan Alliance, Pacoima Beautiful, and Communities for a Better Environment.

- Outreach to Los Angeles Unified and other local school districts.
- Briefings to watershed stakeholder groups including the Ballona Creek Task Force, Coyote Creek Watershed Council, Dominguez Watershed Advisory Council, Sun Valley Stakeholders Group, Tujunga Watershed Project Steering Committee, and Compton Creek Watershed Advisory Group.
- E-mails notices to registered neighborhood councils located in disadvantaged communities in the City of Los Angeles, with the assistance of the Los Angeles Department of Neighborhood Empowerment (DONE).

1.6 Stakeholder Outcomes

A number of outcomes resulted from the stakeholder involvement and coordination process. These outcomes include opportunities to develop partnerships, identify possible obstacles to Plan implementation, and identify areas in which a state agency or agencies may be able to assist in implementing the Plan. Two of these outcomes are discussed below.

Partnerships

One of the outcomes of the IRWMP process is that it brought 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 IRWMP process, including the formation of the Leadership Committee and the Steering Committees, which have required multiple agencies to work together at new planning levels, both Regional and Subregional. As the IRWMP is implemented, several types of partnerships will form, including geographic partnerships between jurisdictions in close proximity, and public-private partnerships, stakeholder organizations with common interests, and common-purpose partnerships between entities with similar goals.

In addition, the identification of projects has lead to the formation of collaborative partnerships and will likely continue to do so during Plan implementation. One example is the Large Landscape Conservation Project (submitted as part of the Region's Proposition 50 Step 2 grant application) which is 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 imported water supplies and help to improve water supply reliability for the Region. Water conservation is also important to the Surfrider Foundation because it will reduce dry weather urban runoff to the Santa Monica Bay. By working together these two partners are increasing chances for successful implementation and thus the ability to meet their own goals.

Coordination with Federal and State Agencies

Development of the Plan benefited from the involvement, and coordination with, a variety of state and federal agencies. A list of the agencies invited to participate in this effort was provided in Section 1.5.2. Federal, state and regional agencies that were Ex Officio members of the Leadership Committee included: U.S. Bureau of Reclamation; California Department of Fish and Game; California Coastal Commission; California Coastal Conservancy; California Department of Transportation; California DWR; California EPA; California RWQCB, Los Angeles Region; California Department of Parks and Recreation; California DHS; Metropolitan Water District of Southern California; National Parks Service; U.S. Army Corps of Engineers; and USDA Forest Service. Several of those agencies also participated at the Subregional level, as noted in Table 1-1.

The involvement of state and federal agencies such as the National Park Service and the U.S. Army Corps of Engineers will be critical during the Plan implementation. Examples are provided below:

- The National Park Service owns a great deal of land in the Santa Monica Mountains which can impact the North Santa Monica Bay Watersheds. The National Forest Service manages large portions of the Upper Los Angeles Watershed and Upper San Gabriel and Rio Hondo Watersheds.

- The Angeles National Forest, which covers approximately 24 percent of the Region, is the headwaters of the San Gabriel River watershed and a portion of the Los Angeles River watershed and has experienced problems with sedimentation following catastrophic wildfires. To address this problem the Upper San Gabriel Valley MWD is partnering with the USDA Forest Service to replant forests that have been denuded by wildfires.
- The U.S. Army Corps of Engineers, which built and operates five dams and portions of several open channels in the Region, is a desired partner in flood damage reduction projects and a necessary partner in any project that affects a Corps-constructed flood control channel. Additionally, it is a necessary partner in any dam-related activities, such as the removal of Rindge Dam in the North Santa Monica Bay watersheds. It also is important in conducting feasibility studies on restoration of local watersheds, including the Arroyo Seco, Ballona Creek, and Coyote Creek, and could play a role in future funding opportunities related to ecosystem restoration along the rivers and major tributary channels.

Similar examples apply to state agencies involvement.

- California State Parks is an active stakeholder in many habitat preservation and park creation activities. Its participation is critical as habitat projects may be implemented on state park land and additional parks may be created. As an active project proponent, it can assist the IRWMP effort by communicating the importance of its projects to the public.
- RWQCB representatives are also engaged in the IRWMP process and are involved in parallel efforts to develop TMDLs and the associated TMDL Implementation Plans. By maintaining contact with both TMDL and IRWMP efforts, the RWQCB can assist in the identification of projects that will meet TMDL requirements while simultaneously meeting other Regional needs. By streamlining the process and avoiding duplication of efforts, the RWQCB can maximize available funds.
- Southern California-based staff from California DWR attended most Leadership Committee and several Subregional Steering Committee meetings to observe the discussion and provide comments and suggestions about potential relationships between local and statewide water resource planning.

Dealing with downstream water quality impacts of erosion and sedimentation caused by forest fires in the Angeles National Forest requires coordinated local/federal efforts.