Chapter 4 Institutional Setting & Collaborative Efforts

As is likely to occur within any watershed, the sometimes conflicting goals or priorities of various watershed agencies can hinder progress. Within the Watershed there are over 100 large and small water districts (**Figure 4-1** below), local, regional, State and Federal agencies, and public/private stakeholder groups. SAWPA recognizes that all of these stakeholders have their own valid interests in ensuring that there is sufficient clean, reliable water in the watershed, and SAWPA takes the initiative to keep all of these groups working together to solve the Watershed's issues.

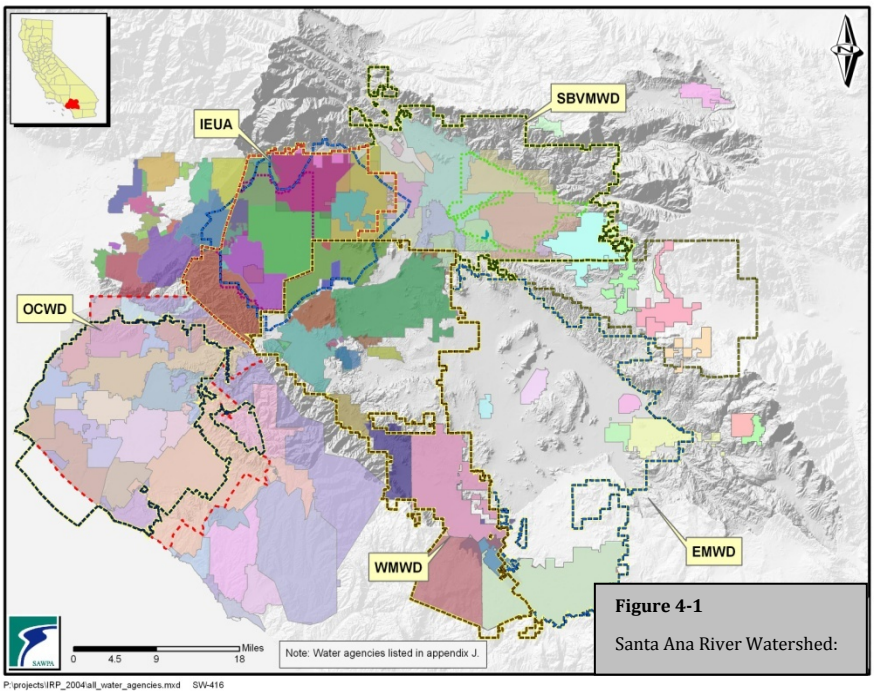


Figure 4-1

Santa Ana River Watershed:

SAWPA strives for a collaborative approach to bring together the planning community, including both public and private sector planners, to advance the benefits of planning on a watershed scale and integrating watershed thinking into the everyday planning process. Working with varied interests and agendas, this watershed planning process has opened the doors to great partnerships, funding opportunities, connectivity, and increased awareness of planning projects and opportunities both in the city next door, and in the community on the other side of the Watershed.

As many cities and counties are in the process of updating their General Plans, funding opportunities and greater collaboration between water agencies, non-governmental organizations, and local land use authorities are facilitating beneficial projects such as conservation, open space, restoration, enhancement, connectivity, and multi-benefit approaches. In this way, planners are finding themselves in a new place, one of noting the quality

of these projects and how to get them through the regulatory planning process with more agreement and greater speed. State law is helpful in this process because Conservation, Safety, Open Space, and Land Use Elements are required elements of every General Plan in the State of California. These elements provide essential components of good watershed plans. In addition, newly proposed Fire Hazard Planning, as well as the more traditional floodplain management guidelines for preparation of General Plans include helpful explanations and instructions for planners trying to make sense of how watershed planning can be and should be integrated into General Plan Updates.

In developing regional plans and prioritizing multi-benefit projects, it is important to not only coordinate efforts with other planning agencies within the region, but it is equally important to coordinate across regional boundaries. During the preparation of the Santa Ana IRWMP, SAWPA staff exchanged information and discussed priorities with planners from regions adjoining the Watershed. For example, SAWPA staff coordinated closely with planners and project proponents in south Orange County, the Los Angeles and San Gabriel River valleys, Upper Santa Margarita, Mojave and Coachella Valley regions.

Collaborative Efforts within the Santa Ana River Watershed

SAWPA, as the leading regional water resource agency for the Santa Ana River Watershed and region, plays a major role in administering, participating, coordinating, and facilitating efforts to address regional water management issues. In fact, since its formation, this has been one of the major purposes of SAWPA in supporting the resolution of water issues and conflicts, and is one of the primary reasons why it was formed in the first place. From the early 1930s to the late 1960s, litigation occurred between upstream and downstream water agencies in the watershed over water rights issues affecting the Santa Ana River, and an adjudicated settlement occurred. As part of the recommendations for the adjudicated settlement, the need for a way to resolve regional differences and conflicts in a cooperative approach was suggested and realized by the creation of SAWPA. The cooperative approach exists today by the regular meetings among the SAWPA member districts but also among the many multi-agency and multi-organizations that SAWPA supports through what is described as the "SAWPA Roundtable".

Some of the past collaborative efforts that have resulted in outstanding results include the following:

- Santa Ana Basin Plan Updates
- San Jacinto Basin Plan Update
- Nitrogen TDS Task Force
- Santa Ana River Use Attainability Analysis
- Biological Denitrification Research
- Chino Basin Water Resources Management Study
- Riverside Colton Conjunctive Use
- Redlands Toxic Study
- Southern California Regional Water Reclamation and Reuse Study
- Southern California Water Recycling Initiative
- Wellhead Treatment

The results of the Nitrogen and TDS Task Force serves as an outstanding template for salt management evaluations and was sighted as an outstanding example of collaborative efforts to resolve a water quality issues by the State Water Resources Control Board.

Utilizing the capable skills of SAWPA staff, multi-agency agreements are developed, consultant contracts are managed, and discussion meetings are administered. The end products of these efforts are successful programs and projects that represent the best in collaboration and facilitation support services. In addition, by the positive and cooperative relationship that SAWPA has with the Santa Ana Regional Water Quality Control Board, SAWPA has served as an effective liaison between the regulators and regulated community in producing effective partnerships and working relationships.

The following task forces and workgroups are examples of watershed partnerships that SAWPA has administered and formed by working closely with the Regional Board in response to the need for updating various components of the Basin Plan.

Agriculture and Dairy Efforts

The San Jacinto Basin Resource Conservation District , in partnership with dairy operators in the San Jacinto River Watershed and represented by the Western Riverside County Agricultural Coalition (WRCAC), is developing an Integrated Regional Dairy Management Plan (IRDMP) to select and implement practices consistent with regional goals for water quality and environmental protection. This progressive roadmap approach is the first effort of its kind to address dairy management on a regional scale.

The IRDMP will incorporate several key components into an overall plan for dairies in the San Jacinto River Watershed. Part of this process involves defining issues and objectives and identifying appropriate solutions. Primary objectives and activities include the following:

- Source Identification for Phosphorus, Nitrates, and Salts in the San Jacinto Watershed and Identification of Technologies and Alternative Control Measures Report
- Transport and Fate of Nitrate and Pathogens at a Dairy Lagoon Water Application Site: An Assessment of CNMP Performance
- Comprehensive Nutrient Management Plan for the San Jacinto River Watershed
- California Dairy Quality Assurance Program
- Irrigation Efficiency Study
- Voluntary Agricultural TMDL Program (WRCAC)
- Agriculture Database Tool Development
- Irrigation Technology Study

- Irrigation Management Study
- IRDMP with BMP Implementation in the San Jacinto River Watershed

Basin Monitoring Program Task Force

The Basin Monitoring Program Task Force is a collaborative effort of public and private sector agencies and interests to conduct water quality evaluations in the Watershed. The Task Force was formed as a spinoff of the TIN/TDS Task Force in 2003 with the mission of implementing the monitoring requirements required as part of the original TIN/TDS Task Force effort. These monitoring requirements include a triennial update of the ambient groundwater quality throughout all the groundwater basins in the Watershed, an annual report on the Nitrogen and TDS in the SAR for Reaches 2, 4 and 5, and an optional annual monitoring program with report to justify an increased nitrogen loss coefficient of more than 25%. Agencies participating in this task force are largely the same as those who participated in the TIN/TDS Task Force and have elected to combine their efforts and provide watershed-wide monitoring reports rather than providing separate reports for each of their separate jurisdictions.

Big Bear TMDL Task Force

To address lake quality problems at Big Bear Lake, a new multi-agency task force was formed in 2008. This task force is working closely with the Regional Board in meeting new surface water quality regulations known as TMDLs to help restore Big Bear Lake. The task force serves an important role in assisting local stakeholders address the Regional Board TMDL implementation tasks to be undertaken by specific stakeholders.

Chino Basin Partners

Through the collaboration of community leaders including the Milk Producers Council, IEUA, Chino Basin Watermaster, and many others, the Chino Basin has developed an award winning organics management and groundwater protection strategy that offers an integrated (multiple benefit) watershed plan for treating, recycling, and reusing organic materials. This partnership is working to deliver significant water and air quality improvements for the region, enhance the reliability of local water supplies, generate clean renewable energy and recycled organic materials, provide significant local economic benefits, and contribute to enhanced wildlife habitats within the Chino Basin. Innovative projects include state-of-the-art anaerobic digesters and composting facilities, as well as the construction of California's first platinum Leadership in Energy and Environmental Design (LEED) rated water and energy- efficient office building that serves as the headquarters for IEUA.

Crest-to-Coast Partnership

SAWPA has been working with the Crest-to-Coast Partnership in assisting efforts to complete the entire SAR Crest-to-Coast Trail and add parkway elements to the river. The Santa Ana River Trail is a continuous multi-use regional trail system and parkway along the SAR corridor. The effort is funded by the counties and cities in the watershed, and by environmental groups interested in facilitating the completion of the 110 miles of trail system. Three county parks districts—Orange County, San Bernardino County, and Riverside County—are leading the charge with help from the Wildlands Conservancy in completing this process. The trail is viewed as a valuable resource providing multi-benefit opportunities including connectivity, transportation alternatives, scenic relief to urban dwellers, recreational activities, and linear parkways with opportunities for environmental restoration as well as education.

Emerging Constituents Workgroup

Based on an April 2008 agreement between the Regional Board and nine local imported water recharge agencies, the signatories to the agreement agreed to develop a plan to investigate "emerging constituents" in water that is intentionally recharged to local aquifers. In general, the phrase "emerging contaminants" refers to a relatively large group of man-made chemical compounds

for which the EPA and the State of California have not enacted a numeric water quality objective or a numeric translator for relevant narrative objectives, nor has the California Department of Public Health (CDPH) adopted a Maximum Contaminant Level (MCL). These compounds also are sometimes called "emerging contaminants or pollutants," and/or "unregulated chemicals" and/or "emerging chemicals-of-concern." To prepare this plan, an Emerging Constituents Workgroup was formed among the signatories and interested parties, such as POTWs, to design and implement the proposed study of emerging constituents. The Workgroup is administered by SAWPA.

The Workgroup's initial investigation was divided into two phases. Phase I surveyed current water quality monitoring programs, regulatory issues, stakeholder concerns, analytical methods, and state-of-the-science, with respect to potential public health and environmental impacts. Phase I culminated in a written report to the Regional Board in December 2008 characterizing the workgroup's preliminary findings. Phase II covered the development of an appropriate water quality characterization program designed to address the concerns raised by regulatory agencies and other stakeholders throughout the watershed. The Workgroup submitted the Phase II report to the Regional Board in December of 2009. An annual sampling program for emerging constituents is prepared by the workgroup and is submitted to the Regional Board.

The Friends of Harbors, Beaches and Parks

The Friends of Harbors, Beaches and Parks was established to promote the protection, enhancement, and expansion of Orange County Regional Parks, Open-Space preserves, recreational trails, and coastal recreational facilities. With a paid membership of over 500 persons and organizations, the Friends of Harbors, Beaches and Parks work with numerous partners including local cities, Orange County nonprofit organizations, and private entities. This group has proposed to create a 1,400-acre park at the mouth of the SAR. This park would be assembled from a patchwork quilt of neighboring lands owned and individually managed by three cities, the County of Orange, several regional, State, and Federal agencies, and private entities. SAWPA has coordinated with this group in addressing water resource and water quality issues particularly in the Huntington Beach and Newport Bay areas of Orange County.

Imported Water Recharge Workgroup

On January 18, 2008, a cooperative agreement for imported water recharge entitled "Cooperative Agreement to Protect Water Quality and Encourage the Conjunctive Uses of Imported Water in the Santa Ana River Basin" was approved by the Regional Board and nine imported water recharging agencies in the Watershed. In accordance with the cooperative agreement, the recharging parties are required to complete a summary of the amount and quality of imported water recharged during the previous three-year period, as well as a projection at six-year intervals of the ambient water quality in each groundwater management zone that is being recharged with imported water. SAWPA serves as administrator of this effort. Principles of agreement on implementation and modeling were completed in July 2009.

Lake Elsinore & San Jacinto Watersheds Authority (LESJWA)

LESJWA is a joint powers authority entrusted with $15 million from the State of California Proposition 13 Water Bond to improve water quality and wildlife habitats, primarily in Lake Elsinore, as well as in Canyon Lake and the surrounding San Jacinto River Watershed. LESJWA members include Riverside County, City of Lake Elsinore, City of Canyon Lake, Elsinore Valley Municipal Water District, and SAWPA, which serves as LESJWA administrator. LESJWA's mission is to support planning, design and implementation of projects to improve water quality in the lakes and watersheds, to secure reliable funding to operate and maintain water quality improvement projects, to serve as administrator of the Lake Elsinore and Canyon Lake TMDL Task Force and a water quality trading program for the San Jacinto River Watershed and to seek ongoing reliable revenue to operate LESJWA JPA in fulfillment of its mission. LESJWA provides a framework in the Watershed to strengthen working relationships between member agencies and stakeholders in an effort to better identify solutions to water and habitat problems that no single agency could effectively address before.

Using the $15 million grant funding and other Federal and State grants, SAWPA and LESJWA have led the way in several major improvements made to Lake Elsinore, Canyon Lake, and for the San Jacinto River Watershed. These include a carp removal program, well improvements for lake stabilization, lake mixing systems, lake aeration, lake dredging, nutrient removal for lake level stabilization using recycled water, and fish stocking.

Lake Elsinore and Canyon Lake Nutrient TMDL Task Force

The Lake Elsinore and Canyon Lake Nutrient TMDL Task Force is comprised of local stakeholders seeking to address the nutrient TMDLs defined by the Regional Board for two impaired water bodies in the San Jacinto River Watershed – Canyon Lake and Lake Elsinore. This Task Force was organized and formed by SAWPA and LESJWA to address water quality targets in a cost effective manner among over 20 agencies and coalitions, including Federal, State, and local agencies. The Task Force meets monthly and includes representatives from local cities, Riverside County, agriculture and dairy, environmental groups, as well as the regulatory community. At the request of the Regional Board, SAWPA served as a neutral facilitator for the early TMDL development process for Lake Elsinore and Canyon Lake.

Middle Santa Ana River Pathogen TMDL Task Force

The Middle SAR Pathogen TMDL Task Force is a collaborative effort of public and private sector agencies and interests focused on the development of pathogen TMDLs for SAR Reach 3, its tributaries, and other water bodies in the Chino Basin area. Formed in 2007, the Task Force has been working on several pathogen-related activities and studies for the Chino Basin. The objectives of this Task Force are to implement a number of tasks identified by the Regional Board in their 2005 Amendment to the Basin Plan. These include the implementation of a watershed-wide monitoring program to assess compliance with REC-1 beneficial use water quality objectives for fecal coliform, evaluate numeric targets established for *E. coli*, and identify and implement measures to control sources of impairment. The Task Force works with the Regional Board in the formulation of pathogen TMDL allocation and implementation strategies. SAWPA serves as the neutral facilitator and administrator of the Task Force.

Nitrogen and TDS Task Force

In 1996, a multi-agency task force was formed to re-evaluate the nitrogen and TDS groundwater objectives in the Watershed based on the best data and science available. The Task Force, led by SAWPA, included 23 water and wastewater agencies, as well as the Regional Board. Under this effort, a massive data compilation and analysis was conducted for groundwater quality to determine both historical and ambient water quality. The focus of this evaluation was on nitrogen and TDS. Under this agreement, the first maximum benefit demonstrations in the State were conducted for effective management of a groundwater management area. The results of the studies were incorporated into the Santa Ana Basin Plan. The efforts by the Regional Board and local stakeholders are now recognized as a statewide template for regional collaboration among regulators and the regulated community, and have saved millions of dollars by protecting groundwater basins.

Orange County Water District and Municipal Water District of Orange County Groundwater Basin Study

OCWD and Municipal Water District of Orange County updated a study on the feasibility and necessary infrastructure required to expand the operating range of the OCWD Groundwater Basin from an overdraft of 500,000 AF to 600,000 AF, 700,000 AF, or even greater if possible. The current operating range of the groundwater basin allows for an overdraft condition of up to approximately 500,000 AF. Seawater intrusion issues begin to occur when the basin is overdrafted by this amount. Additionally, some groundwater production wells will have a difficult time operating with the lower water levels associated with an overdraft greater than this amount. With much larger overdraft conditions, localized subsidence issues also may occur.

Depending upon the necessary infrastructure to sustain larger overdraft conditions, and any additional infrastructure to allow for the utilization of the new storage space, it could be very economical to expand the operating range of the OCWD groundwater basin, which would create additional storage volume for the southern California region.

Prado Basin Sediment Management Project

The objective of the Prado Basin Sediment Management Project is to remove sediment from behind Prado Dam in order to increase water storage capacity. The secondary purpose of this project is to induce sediment movement through the dam to recreate a natural sediment transport regime.

Since the construction of Prado Dam in 1941, the average annual sediment accumulation is estimated at 700 AFY. This sediment accumulation is due to both the natural deposition of materials as water from the four main tributaries (Chino Creek, Mill-Cucamonga Creek, SAR and Temescal Creek) flows to Prado Basin, as well as the artificial blockage of sediment flow from the dam. Blockage of natural sand deposition in the recharge section of the river results in armoring and subsequently the lowering of percolation rates.

OCWD has met with the U.S. Army Corps of Engineers to discuss the issue of sediment management. Both parties have agreed to conduct a feasibility study to determine the most effective and environmentally responsible method, and to construct a pilot sediment transport channel concurrently or after the feasibility study is completed.

Riverside Basin Groundwater Modeling

The Riverside Groundwater Basin is a large alluvial fill basin that is bounded by major faults and topographic barriers. Recharge to the basin occurs by the underflow from basins to the north, contributions from the SAR, and from percolation of surface water runoff from the surrounding uplands, particularly the Box Spring Mountains to the east.

The City of Riverside currently produces about 18,000 AFY of water from the southern portion of the Riverside

Basin and is planning to increase production up to a total of 45,000 AFY in the future. To address the issues associated with increasing groundwater production in the southern portion of the Riverside Basin, SAWPA is assisting the City of Riverside in developing a groundwater flow modeling study.

Santa Ana River Dischargers Association

The Santa Ana River Dischargers Association is an ad hoc group of approximately ten wastewater treatment agencies that are located in the upper Watershed and generally discharge to the SAR or its tributaries. The group serves as a coordinating body in addressing existing and future wastewater treatment regulations and permit requirements. One of the major annual activities of the group is the administration and preparation of a report on mercury concentrations from fish sampling which is then provided to the Regional Board. The Santa Ana River Dischargers Association also has served as a funding party for past regional studies such as the SAR Use Attainability Analysis and the Nitrogen and TDS Evaluation, administered through SAWPA. The group meets monthly and currently is conducting an evaluation of cyanide measurement procedures at wastewater treatment plants.

San Jacinto River Watershed Council

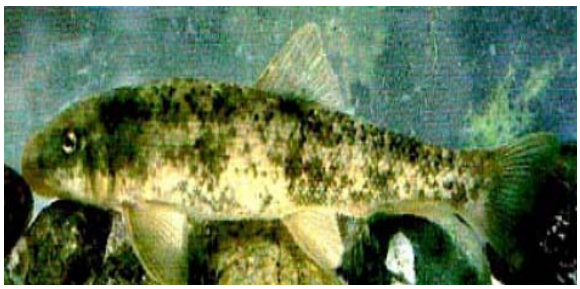
The San Jacinto River Watershed Council (SJRWC) is a multi-agency non-profit group of watershed stakeholders within the San Jacinto River Watershed, a sub-watershed of the Watershed. Among the members are local government, water agencies, agriculture, dairy owners, and environmental representatives. Their purpose is to coordinate with stakeholders to ensure that the current and potential uses of the San Jacinto River Watershed's resources are sustained, restored, and where possible, enhanced, while promoting the long-term social and economic vitality of the region. SAWPA is a member of the SJRWC's governing board. Under an agreement and funding with the State, the SJRWC administered the first Integrated Regional Watershed Plan for the San Jacinto Basin, a sub-region of the Watershed.

Santa Ana River Watershed Alliance

In, 2004, the Department of Conservation provided a grant to Earth Resource Foundation to help implement water conservation and better water quality management practices within the lower watershed. This grant led to the formation of the Santa Ana River Watershed Alliance (SARWA), which is composed of over 50 stakeholders from throughout the watershed. The goal of SARWA is to develop a public understanding of the issues within the watershed and the tasks being undertaken to address them, and to foster support among public and private organizations and agencies for the advance of watershed management.

Santa Ana Sucker Conservation Team

The Santa Ana Sucker Conservation Team is a multi-agency group effort formed by SAWPA, established to coordinate applied research and direct efforts toward the recovery and delisting of the Santa Ana sucker fish species. Work under this activity allows program participants to continue routine maintenance activities with a Regional Programmatic Section 7 consultation. Partners providing financial support include the City of Riverside, City of San Bernardino, County of Orange RDMD, OCSD, OCWD, RCFCWCD, San Bernardino County Flood Control District, and SAWPA. Other participants include the USFWS, CDFG, the Regional Board, Riverside-Corona RCD, and the City of Corona. The group has completed a draft Conservation Program for the threatened fish, which has been submitted to the USFWS. This program enumerates activities that may be undertaken by organizations within the Watershed to minimize effects on the sucker.



Santa Ana Watershed Association

The Santa Ana Watershed Association (SAWA) is a group composed of four RCDs (San Jacinto Basin, Inland Empire, Riverside-Corona, and Elsinore-Murrieta-Anza), OCWD, and several other participating agencies. The group is committed to the protection and improvement of areas within the Watershed. Major focuses of SAWA are the removal of invasive species, which is a significant problem throughout the Watershed, native habitat enhancement, and the protection of endangered and threatened species. SAWA has an active Arundo removal program, biological monitoring program, and education program.

Stormwater Quality Standards Task Force

The Stormwater Quality Standards Task Force is a collaborative effort of public and private sector agencies and interests. The Task Force was formed in 2003 to assist the Regional Board in providing additional data and science in the evaluation of the REC-1 beneficial use designation and associated water quality objectives for the River. Beneficial use designations and water quality objectives define the quality of point and non-point discharges into receiving waters. These receiving waters are

regulated by the Regional Board and municipal stormwater entities, as well as other regulated business, industrial, and development groups, who are interested in providing the best available information to update the water quality objectives and designated beneficial uses of receiving waters. Task Force members will develop a basin-wide assessment of existing conditions of receiving waters and of existing beneficial uses supported by those waters, and identify data gaps and other areas where further assessment is needed.

The Task Force is composed of all three county flood control agencies, and was formed with SAWPA as the Task Force administrator. The work of this Task Force has resulted in one of the most detailed photographic data collection efforts of tributaries' beneficial uses in the country, as well as new pathogen water quality standards based on the best available data and science.

Southern California Water Recycling and Brine Management Studies

Over the past two decades, cooperative partnerships have been forged among the U.S. Bureau of Reclamation (USBOR) and various southern California agencies to evaluate ways to maximize water recycling and manage salt, which often inhibits the use of water recycling. In the mid-90s, the first large-scale study was called the Southern California Comprehensive Water Reclamation and Reuse Study (SCCWRRS). This cooperative effort is a partnership of the following agencies: the USBOR, DWR, Central Basin and West Basin Municipal Water Districts, City of Los Angeles, City of San Diego, MWD, San Diego County Water Authority, SAWPA, and South Orange County Reclamation Authority. The six million dollar, six-year study culminated in a comprehensive evaluation to reach a long-term goal of recycling over one million AF by the year 2020.

Follow up studies included the Southern California Water Recycling Initiative, which covered a programmatic EIR/EIS for the short-term implementation plan; a regional evaluation of regulatory issues facing projects, regional salinity management opportunities, and Year 2010 to 2020 implementation plans. This study, similar to the SCCWRRS, was conducted under a 50-50 cost share with the USBOR.

In 2008, a new multi-agency cooperative study among southern California agencies and the USBOR was kicked off, entitled the Southern California Regional Brine Concentrate Management Study. The goal of this new Study is to update existing brine management resources, evaluate existing pilot and bench scale projects and research, assess existing and potential regulatory trends, and use the information to participate in the recommendation and selection of the next project phase: develop one or more projects as a full scale demonstration pilot study; develop analytical models and research project(s) to address information gaps and model scenarios; and/or develop general design plans for constructing a brine-concentrate facility. An additional goal of the Study is to identify opportunities to build a consensus on brine-concentrate management between government, industry, and the public in an environmentally and economically sound manner. The study was completed in late 2009.

In May 2010, SAWPA applied for federal funding to partner with Reclamation to conduct a Basin Studies Program for the Santa Ana River Watershed. In August 2010, SAWPA was announced as the

funding recipient, one of six basin studies funded by Reclamation across the country. The 50-50 cost share study will assist the next update to the OWOW plan.

Southern California Salinity Coalition

On April 2, 2002 the Southern California Salinity Coalition officially was incorporated as a non-profit organization formed to provide a means of coordinating the efforts of stakeholders to address the critical need to remove salt from water supplies and preserve water resources, in the best interests of California and its citizens. The organization is composed of 12 member agencies including SAWPA, Calleguas Municipal Water District, Central and West Basins Municipal Water Districts, City of Los Angeles Department of Water and Power, IEUA, Irvine Ranch Water District, Los Angeles County Sanitation District, MWD, Mojave Water Agency, OCSD, OCWD, and the Water Replenishment District of Southern California. The National Water Research Institute serves as the administrator.

Southern California Wetlands Recovery Program

The Southern California Wetlands Recovery Program is a multi-agency group working cooperatively to acquire, restore, and enhance coastal wetlands and watersheds between Point Conception and the international border with Mexico. Using a non-regulatory approach and an ecosystem perspective, the Wetlands Partnership will work together to identify wetland acquisition and restoration priorities, prepare plans for these priority sites, pool funds to undertake these projects, implement priority plans, and oversee post-project maintenance and monitoring. The goal of the Southern California Wetlands Recovery Program is to accelerate the pace, the extent, and the effectiveness of coastal wetland restoration in southern California through developing and implementing a regional prioritization plan for the acquisition, restoration, and enhancement of southern California's coastal wetlands and watersheds. Ultimately, the Wetlands Program's efforts will result in a long-term increase in the quantity and quality of the region's wetlands.

Team Arundo

Team Arundo is recognized throughout the State of California as a leader in the removal of *Arundo donax*, a rapidly growing and water thirsty species of giant reed that has infested the Watershed. Partners include SAWA, the Riverside County Parks and Open-Space District, RCFCWCD, OCWD, the Orange County Public Works, the Monsanto Company, the Orange County Conservation Corps, the California Conservation Corps, and SAWPA, which serves as administrator. Historically, the Nature Conservancy also has participated in Team Arundo. Team Arundo members have undertaken a number of ambitious invasive species removal and restoration projects throughout the Watershed. The foresight and leadership of these groups have proven instrumental in elevating the need for Arundo removal to an issue of statewide and federal importance.

SAWPA strives for a collaborative approach to bring together the planning community; however, it cannot address all watershed planning issues and concerns, nor will it fit together all existing plans and policies of every agency within the watershed. In these cases, SAWPA coordinates with the sponsors of these activities and provides resources when possible.

Newport Bay Executive Committee

The Newport Bay Watershed Executive Committee is the successor to the Upper Newport Bay Sediment Control Executive Committee established through a cooperative agreement in the early 1980s. The Cities of Newport Beach, Tustin, and Irvine, the County of Orange, the California Department of Fish and Game, and The Irvine Company entered into an agreement to develop and implement a comprehensive program to manage sediment in San Diego Creek and Upper Newport Bay. The Executive Committee was formed by a cooperative agreement in 1999, and now includes in its interests the impairments of Newport Bay caused by nutrients, toxics, and pathogens in addition to sediment, as well as related integrated water resource planning. Additional members have been added over time including the Santa Ana Regional Water Quality Control Board, Irvine Ranch Water District and the cities of Santa Ana and Costa Mesa. Members of the Executive Committee are elected, appointed, or executive level managers, with one member from each of the signatories to the agreement. It typically meets four to six times a year with meetings governed by the Brown Act. The Executive Committee provides strategic direction for environmental enhancement programs in the watershed, advocacy of these programs to the elected/appointed boards of the member organizations, and a forum for discussion of watershed environmental issues.

Nitrogen and Selenium Management Program (NSMP)

The NSMP Working Group consists of staff level technical representatives of watershed stakeholders that include state, county, and city agencies, water districts, and private entities that have agreed to fund and implement a Work Plan to address selenium and nitrogen groundwater-related inflows in the Newport Bay Watershed. The Working Group was created in response to a permit issued by the Santa Ana Regional Water Quality Control Board (R8-2004-0021) to regulate short-term groundwater-related discharges. Since the adoption of the Order in December 2004, the Working Group has conducted scientific assessment and research on methods of source control and treatment. Additionally, the Working Group realizes that public participation and input is an integral component of the implementation of the Work Plan. Therefore, as part of its public participation strategy, the Working Group also provides for "Participating Member" positions. Participating members are not members of the Working Group per se, but are involved in all discussions and decisions of the Working Group, with the exception of funding decisions related to the Work Plan. Unlike Working Group members, Participating Members are not required to financially contribute to the Work Plan.

Collaborative Efforts with Areas Adjacent to the Watershed

The Santa Ana IRWM region is surrounded by six other IRWM regions, as shown in the map below, including: South Orange County Watershed Management Area, Upper Santa Margarita, Greater Los Angeles County, Gateway Region, Coachella Valley and Mojave.

Of these six regions, the largest opportunities for coordination and cooperation are Los Angeles, South Orange County, and Gateway. Coordination with Orange County is frequent, as part of Orange County is located in the watershed and there are multiple forums for coordination. As part of this planning effort, meetings were held with Greater Los Angeles and Gateway.

SAWPA proactively seeks meeting with neighboring regions quarterly to share and stay abreast of critical issues, ongoing efforts, and opportunities for collaboration in the region.

The watershed area encompasses the service areas of many local agencies and organizations. There are over 120 local agencies contained within the watershed that may be considered water entities.

Overview of Governing Laws, Judgments and Agreements

This section briefly describes some of the governing laws, judgments, and agreements in place that have had significant influence on water management in the Watershed. Below is a general overview of these documents.

Settlement Agreement between City of San Bernardino and City of Riverside and Riverside Water Company, 1922

In November 1922, after a Supreme Court of the State of California decision, the City of San Bernardino (Plaintiff) and the City of Riverside, and Riverside Water Company (Defendants) negotiated a settlement agreement to take, divert, and use water from the "San Bernardino Artesian Basin," Lytle Creek, Warm Creek, and Devil Canyon Creek. The agreement was approved by the San Bernardino County Superior Court in a stipulated judgment that constituted authorities and rights of the parties for taking, diverting, and using the water. The court also established a provision for daily record keeping of all the diversions and use of water by all said parties.

Colorado River Compact, 1922

Storage and regulation of the Colorado River was essential for the flood protection and development of its lower basin (portions of California, Nevada, Arizona, Utah and New Mexico), but also to ensure an adequate water supply for appropriators in its upper basin (portions of Wyoming, Utah, Colorado,

New Mexico, and Arizona). As unregulated flow of the river began to be apportioned by users in the lower basin, an allocation of use of the Colorado River system water between the basins became imperative. Thus, on November 24, 1922, the Colorado River Compact was signed allocating use of the Colorado River system water between the basins with internal allocations remaining to interests within each basin. The Compact provided Colorado River system use allocations of 7.5 million acre-feet (AF) for both the upper and lower basins, and an additional one million AF for the Lower basin.

Seven-Party Agreement, 1931

A contract was signed on April 24, 1930, between the Federal Government and the MWD providing for the storage and delivery of up to 1,050,000 AF of Colorado River water annually. The contract later was supplemented to provide for further allocation of use among agricultural use. The supplementary water delivery contract was based on an agreement, signed on August 18, 1931, which became known as the "Seven-Party Agreement." The agreement was approved by DWR and submitted to the Secretary of the Interior with the recommendation that a system of priorities be incorporated as a uniform clause in all California water contracts. One of the priorities included delivery of water in excess of California's annual 4,400,000 AF entitlement.

Rialto Basin Judgment, 1961

The Rialto-Colton Basin was adjudicated in the Lytle Creek Water and Improvement Company vs. Fontana Ranchos Water Company, et. al., San Bernardino County Superior Court Action 81264, entered on December 22, 1961. Limits on groundwater extractions are based on the average of the spring-high water level elevations of three wells within the basin. The pro-rata water productions by each party (City of Colton, City of Rialto, Fontana Union Water Company, Citizen Land and Water Company, and Lytle Creek Water Improvement Company) are based on the “spring-high water level” in the three index wells as described below:

Above 1002.3 feet	Unlimited
Between 1002.3 feet and 969.7 feet	As imposed by the judgment
Below 969.7 feet	Reduced by 1% for every foot the average is below 969.7

At the request of the stipulating parties, Valley District monitors compliance with the decree, and has done so since the early 1990s.

Chino Basin-City of Pomona Agreement, 1968

This agreement, negotiated prior to the final settlement of the Orange County/Chino and Western/San Bernardino Judgments was effective October 20, 1968. It provides the means by which the City of Pomona can pay its share of Prado Settlement costs and costs associated with IEUA's obligation to deliver a primary contribution of 16,875 AFY to the SAR near Prado Dam. The City of Pomona produces water from wells in the Chino Groundwater Basin that are outside the IEUA boundaries. The City of Pomona is sharing in these costs because the area they are pumping from is tributary to the SAR at Prado Dam.

Orange County/Chino Judgment, 1969

On October 18, 1963, OCWD filed a complaint against more than 2,500 water users in the upper watershed of the SAR Basin to seek an adjudication of water rights. In 1968, additional cross-complaints were filed which expanded the adjudication requirements to include 1,500 water users downstream of Prado Dam.

On April 17, 1969 the California Superior Court stipulated a judgment known as the Orange County/ Chino Judgment. The Orange County/Chino Judgment established the entitlements and obligations of the following water districts: OCWD, WMWD, Chino Basin Municipal Water District (CBMWD, now known as IEUA), and Valley District. All other defendants and cross-defendants were dismissed within the Orange County/Chino Judgment. The provisions of the Orange County/Chino Judgment became effective on October 1, 1970.

The Orange County/Chino Judgment stipulated the physical solution that Valley District is responsible for providing an average annual adjusted base flow of 15,250 AF at Riverside Narrows. In addition, IEUA and WMWD are required to provide an average annual adjusted base flow of 42,000 AF at the Prado Dam. Water users downstream of Prado Dam, the lower Watershed, also have the right to all storm flow that occurs at the Prado Reservoir. The Orange County/Chino Judgment allows for unlimited conservation, spreading, and impoundment of water by the upper Watershed users as long as the Riverside Narrows and Prado Dam requirements are met.

Western/San Bernardino Judgment, 1969

A suit was filed on March 1, 1963, by WMWD and others seeking a general adjudication of water rights within the San Bernardino Basin area. Increasing groundwater withdrawals were causing concern as groundwater resources made up a large portion of the supply to the Cities of San Bernardino, Redlands, and Riverside. WMWD and Valley District viewed the Orange County/Chino suit as a vehicle by which a settlement over San Bernardino Basin water resources could be achieved. When settlement documents were prepared for the Orange County/Chino suit, WMWD prepared settlement documents for their own suit. Possibly because of the interrelated nature of the two suits, both sets of settlement documents were entered. The California Superior Court instituted a judgment on April 17, 1969.

The Western/San Bernardino Judgment determined the rights of groundwater extraction from the San Bernardino Basin area and provided for replenishment of that area. The San Bernardino Basin is defined as the area above the Bunker Hill Dike excluding the Yucaipa, San Timoteo, Oak Glen, and Beaumont Basins. This Judgment also established the base rights and replenishment requirements for the Colton Basin, Riverside Basin area within San Bernardino County, and Riverside Basin area within Riverside County.

At the same time, the Judgment ordered the appointment of a Watermaster. The Watermaster is a committee consisting of one representative each from Valley District and WMWD. The Watermaster determines and verifies the amounts of water diverted and pumped from local streams and from the groundwater basins identified in the Western/San Bernardino Judgment.

Once the determinations and verifications are complete, the Watermaster then maintains annual accounting of surface and groundwater production so the Court can compare the verified entitlements.

Western, Chino Basin, County of Riverside, Riverside County Flood Control and Water Conservation District Agreement, 1969

WMWD, IEUA, the County of Riverside, and the Riverside County Flood Control and Water Conservation District (RCFCWCD) entered into an agreement on March 24, 1969. The parties agreed on several items that impacted the effectiveness of Orange County/Chino Judgment.

RCFCWCD would transfer its water right applications for storage of water in Prado Dam to OCWD. This agreement required that RCFCWCD would sign the "Stipulation and Order Re-Dismissal of Certain Defendants" in the Orange County/Chino Judgment. WMWD and IEUA agreed that they would not object to the use of 10,000 AF of base flow at the Prado Dam for the purpose of maintaining recreation lakes. These lakes would have to be constructed after January 1, 1974, and before January 1, 1984.

Also, WMWD and IEUA would have the right to produce base flow by eliminating phreatophytes or by pumping groundwater on lands acquired by the RCFCWCD.

Chino Basin-Western Agreement, 1970

The Orange County/Chino Judgment stipulates that IEUA and WMWD are jointly obligated to provide an average annual adjusted base flow of 42,000 AF at Prado Dam. The purpose of the Chino Basin-Western Agreement, effective October 1, 1970, is to specify the rights and obligations of the parties with respect to the satisfaction of their obligations under the Orange County/Chino Judgment.

This agreement specifies that each party is required to deliver to the SAR, or vicinity, an adjusted primary contribution of 16,875 AFY. Primary contributions are not allowed to include rising water at Riverside Narrows, underflow from Chino Basin Groundwater Basin, or effluent from the Jurupa Community Services District wastewater treatment plant.

This agreement also states that the primary contributions from IEUA and WMWD mostly shall be effluent from municipal wastewater treatment facilities. Effluent from Ontario, Upland, Fontana, Montclair, Chino, and the Cucamonga County water districts will be used to satisfy IEUA obligations. Effluent from wastewater treatment facilities in Corona and Riverside will supply WMWD obligations. Through September 1980, IEUA and WMWD were allowed to supplement their deliveries with groundwater. However, beginning October 1, 1980, the agreement states that either party shall refrain from supplementing their primary contributions with groundwater.

Western-City of Corona Agreement, 1970

This agreement, effective October 1, 1970, provides a commitment of portions of the City of Corona treatment plant effluent for meeting WMWD obligation under the Orange County/Chino Judgment and as specified in the Chino Basin-Western Agreement.

Under this agreement, the City of Corona is obligated to deliver to the SAR 1,625 AFY of wastewater treatment plant effluent. This quantity of water is subject to adjustments based on quality.

The City of Corona can receive credits for adjusted contributions that are greater than is required. These credits can be applied to meet obligations in any given year, but must deliver at least 1,430 AF.

Western-City of Riverside Agreement, 1970

This agreement, effective October 1, 1970, provided commitment of wastewater effluent by the City of Riverside to WMWD for use in meeting base flow requirements of the Orange County/Chino Judgment. The City of Riverside would deliver to the vicinity of Riverside Narrows 15,250 AFY from its treatment plants.

The City of Riverside can receive credits for adjusted contributions that are greater than is required. These credits can be applied to meet obligations in any given year, but must deliver at least 13,420 AF.

If, in the future, the Court modifies WMWD's obligation under the Orange County/Chino Judgment, or if modifications occur to the Western-Chino Basin Agreement, modifications to reduce Riverside obligation under this agreement can be made.

If Riverside is forced to reduce its pumping from any area within the Santa Ana River Basin and replenishment is not being provided by WMWD, or if other pumpers are not subject to similar restrictions, then Riverside has the right to reduce its obligation under this agreement. In these circumstances, Riverside can reduce its effluent commitment by 3,000 acre-feet, which is meant to offset Riverside's reduced pumping. As an alternative, Riverside can increase its pumping by 3,000 acre-feet elsewhere in the Santa Ana River Basin.

Santa Ana River-Mill Creek Cooperative Water Project Agreement, 1976

The SAR-Mill Creek Cooperative Water Project Agreement (informally known as the Exchange Plan) executed in May 1976, is an agreement among nine agencies and water companies in eastern San Bernardino Valley. The nine parties to the Exchange Plan are as follows:

- Redlands Water Company
- Bear Valley Mutual Water Company (Bear Valley Mutual)
- Crafton Water Company
- North Fork Water Company [East Valley Water District]
- Lugonia Water Company
- City of Redlands
- San Bernardino Valley Water Conservation District (SBVWCD)
- Yucaipa Valley Water District
- Valley District

In an effort to avoid pumping costs and to lower the overall cost of water, the parties have agreed to the exchange of water from the SAR, Mill Creek, and the SWP. The agreement is described as a "bucket-for-bucket exchange," whereby a party to the agreement provides a "bucket" of their water to a second, higher elevation party, and the second party provides a "bucket" of water from an alternate, lower elevation source back to the original party. To facilitate exchanges, parties to the

agreement share their existing facilities. However, specific facilities (called Cooperative Water Project facilities) were built and are operated by Valley District in part to accommodate Exchange Plan deliveries. Given the three water sources and the available facilities, there are multiple delivery possibilities.

Big Bear Municipal Water District/North Fork Water Co. Judgment, 1977

Bear Valley Dam, which forms Big Bear Lake, is the only major dam that affects runoff into Seven Oaks Dam. Big Bear Lake is a water conservation reservoir presently owned by the Big Bear Municipal Water District (Big Bear Municipal). Big Bear Lake is located on Bear Creek, a tributary to the SAR. The lake has a drainage area of about 38 square miles.

Bear Valley Mutual and its predecessors constructed, owned, and operated Big Bear Lake as a supplemental water supply reservoir to meet the irrigation water supply demand within the Bear Valley Mutual service area in the easterly end of the San Bernardino Valley. Historical irrigation releases during dry periods sometimes caused low water levels in Big Bear Lake.

As recreation uses of Big Bear Lake became more important, Big Bear Municipal sought to control the water levels in the lake. On February 4, 1977, a stipulated judgment was entered in San Bernardino County Superior Court for Case No. 165493 *Big Bear Municipal Water District vs. North Fork Water Co. et al.* Big Bear Municipal obtained the opportunity to furnish "in-lieu" water from several other named sources other than Big Bear Lake to meet the water supply demands of Bear Valley Mutual. Big Bear Municipal was allowed to retain an amount of water in Big Bear Lake equal to the amount of water furnished in-lieu to Bear Valley Mutual. Big Bear Municipal explored and implemented the alternate sources. Providing water from these alternate in-lieu sources resulted in water being retained in Big Bear Lake to stabilize the water levels in the lake.

On May 1, 1987, Big Bear Municipal adopted operating criteria for Big Bear Lake that contain conditions regarding when Big Bear Municipal will release water from Big Bear Lake and when Big Bear Municipal will acquire in-lieu water for Bear Valley Mutual.

On February 16, 1995, the Regional Board adopted Order No. 95-4, which requires that Big Bear Municipal make releases from Big Bear Lake through Bear Valley Dam to provide water for preservation of fish in Bear Creek.

On February 1, 1996, Big Bear Municipal and Valley District entered into an agreement that provides for Valley District to furnish all in-lieu water that Big Bear Municipal needs to meet the water supply demands of Bear Valley Mutual.

As a result of the stipulated Judgment, Big Bear Lake now is maintained at higher levels for recreational uses. The lake will spill (*i.e.*, need to release water because the reservoir is full) more often than occurred under the historic irrigation supply operation. However, inflow to the SAR during irrigation months may be less than historic irrigation releases. Inflow to the SAR during winter months may be greater than under the historic operation of Bear Valley Dam. The changes in operation of Big Bear Lake from an irrigation water supply reservoir to a recreation reservoir result in changes in the timing and amounts of water Big Bear Lake and Bear Creek contribute to the SAR.

Chino Basin Judgment, 1978

The Chino Basin Judgment was issued, January 27, 1978 by the California Superior Court for the County of San Bernardino. It adjudicated the groundwater rights in the Chino Basin. The judgment is a stipulated settlement developed by the basin producers on their behalf by IEUA, the City of Chino, *et al*.

The adjudication was based upon a physical solution in which the safe yield of the Chino groundwater basin was determined to be 140,000 AFY. The safe yield is defined as the long-term average annual amount of groundwater that can be produced without creating undesirable results.

Through the judgment and the Watermaster process, assessments are levied so that studies of hydrologic conditions and operations of the Chino Groundwater Basin can be undertaken, and contracts prepared. The maintenance and improvement of water quality within the Chino Basin is one of the major responsibilities of the Watermaster as addressed in the judgment.

The Watermaster staff maintains an annual accounting of stored water and extractions, and can develop a basin management plan taking into consideration both quantity and quality. To develop a plan, the financial feasibility and economic impact of the plan must be confirmed. An important objective in the management of the Chino Groundwater Basin waters is to limit impacts on producers due to unreasonable pumping patterns or recharge practices.

San Bernardino-City of San Bernardino, City of Riverside Agreement, 1981

This agreement, signed on December 22, 1981, among San Bernardino, and Board of Commissioners of the Cities of San Bernardino and Riverside, was made pursuant to the agreement between Valley District and WMWD regarding additional extractions from the San Bernardino Basin area. Annual extraction of additional water is limited to 10,000 AF as specified in the San Bernardino-Western Agreement. This agreement stipulates that all parties making additional extractions will pump from the artesian zone of the San Bernardino Basin. To monitor the effects of the additional extractions, this agreement identifies that water levels will be monitored at the specific wells.

San Bernardino-Western Agreement, 1981

This agreement, signed December 22, 1981, was created as a vehicle to allow specified groundwater producers to pump and export additional San Bernardino Basin groundwater. A surplus of natural groundwater existed in the artesian zone, and extraction of this additional water was determined to be in the interest of sound water resources management. The official designation of this agreement is "Agreement Regarding Additional Extractions from the San Bernardino Basin Area."

An agreement was reached that the additional extractions would be made through the pumping from wells operated by the City of Riverside or pumping by other Valley District producers. The maximum amount of water is limited to 10,000 AFY or less such that the withdrawals would not impose replenishment obligations on San Bernardino. This agreement specified that import water will not be required for replenishment of the additional water extracted. The basic term of this agreement is ten years, but will continue beyond this period until such time as written that either party provides termination.

Three amendments have been applied to this agreement. The first, signed on December 5, 1984, provided for increased extractions for calendar year 1984 only. The extraction limit for 1984 was increased to 13,000 AF. Amendments 2 and 3 were added May 20, 1987 and January 20, 1988, respectively, to increase extractions to 15,000 AF for each of these calendar years.

San Bernardino-Western Agreement, 1983

As groundwater levels continued to rise in the early 1980s, it became apparent that the existing agreement for additional extractions from the Bunker Hill Pressure Zone was not going to relieve the developing emergency water level situation. As a result, an agreement was developed for temporary additional extractions from the San Bernardino Basin area. This agreement, effective October 19, 1983, applied only to natural water supply. Import water was not considered within this agreement. The high groundwater levels have resulted primarily from natural and artificial water recharge during several very wet years.

Valley District and WMWD agreed that an additional amount not-to-exceed 40,000 AFY could be extracted from the artesian zone to help relieve water level problems. The agreement specified that this amount of water could be extracted annually for a six-year period. These extractions were to be permitted in addition to those allowed in the Western/San Bernardino Judgment, which can be made without replenishment obligations.

This agreement was approved by the Superior Court of Riverside County of June 27, 1984. There was, however, no water ever extracted from the San Bernardino Basin under this agreement.

San Bernardino-Western, Orange County, Riverside, and San Bernardino City Agreement, 1985

This agreement signed on February 25, 1985, among Valley District, WMWD, OCWD, and the Cities of Riverside and San Bernardino provided for an emergency program for relieving high groundwater problems within the San Bernardino Basin area. The extraction program involved production of 8,000 AF of natural water for delivery to Orange County spreading grounds via the SAR channel. Extractions made from the basin are in addition to those permitted in the Western/San Bernardino Judgment. The program was agreed to last six months and end on June 30, 1985.

Each of the participants agreed to maximize production from the artesian zone of the San Bernardino Basin, and to extract from the zone relying upon other water sources capable of providing water to the same areas.

Under this agreement, Valley District was obligated to monitor water levels for the purpose of administering the agreement. Within the agreement, OCWD determined on a day-to-day basis if water produced is usable at its spreading basins within Orange County. OCWD also was to reimburse the cost of the approved production of the emergency extractions. Extractions made without approval were to be made at the expense of the parties producing the water.

This agreement was extended on August 21, 1985, such that emergency extractions were allowed and reimbursable through December 31, 1985. Both the agreement and its extension were approved by the Superior Court of Riverside County.

Monterey Agreement, 1994

In the early 1990s, the California drought and new environmental constraints brought the allocation process for the SWP to the forefront of debate between DWR and the State water contractors. Many agricultural contractors were upset that payments for the SWP still were being required by DWR when water deliveries were being decreased or totally cut off to some contractors. Urban contractors also were concerned about decreasing supplies, as well as an inflexible system that wouldn't allow them to better manage allocated supplies by storing water outside their service area for later use within their service area, for example.

In December 1994, the Monterey Agreement was reached between DWR and the agricultural and urban SWP contractors. The Monterey Agreement is a set of principles that covers a number of issues, including water allocation, use of SWP facilities, water management, and financial rate management.

The Agreement resolves past disputes over the allocation among contractors of SWP water supplies, which now will be allocated on the basis of entitlement. It also provides opportunities for contractors to improve their water supply reliability in the short-term. These opportunities include allowing more flexible use of existing SWP facilities through, for example, use of the California Aqueduct to transport water purchased from non-SWP sources, and access to about half of the storage in Perris and Castaic Reservoirs in southern California by the contractors paying for them.

The Monterey Agreement also provides opportunities for better water management of currently limited SWP supplies by allowing water to be stored outside a contractor's service area for later use within its service area. It also included a rate management program that allows DWR to better handle unanticipated cash flow problems, and involves a reduction in charges for all contractors when SWP cash flow permits.

By May of 1996, 21 of the 29 contractors holding contracts had signed the amendment. In addition, an environmental impact report (EIR) was completed for Monterey Agreement implementation. However, this EIR was challenged in court. These legal challenges continue to delay implementation of the Amendment.

Big Bear Municipal and Valley District Agreement, 1996

On February 1, 1996, BBMWD and Valley District entered into an agreement that provides for Valley District to furnish all in-lieu water that BBMWD needs to meet the water supply demands of Bear Valley Mutual.

As a result of the stipulated Judgment, Big Bear Lake now is maintained at higher levels for recreational uses. The lake will spill (*i.e.*, need to release water because the reservoir is full) more often than occurred under the historic irrigation supply operation. However, inflow to the SAR during irrigation months may be less than historic irrigation releases. Inflow to the SAR during winter months may be greater than under the historic operation of Bear Valley Dam. Changes in the operation of Big Bear Lake from an irrigation water supply reservoir to a recreation reservoir result in changes in the timing and amounts of water Big Bear Lake and Bear Creek contribute to the SAR.

Chino Basin Peace Agreement, 2000

Part of the 1978 Chino Basin Judgment was that the Chino Basin Watermaster would develop an Optimum Basin Management Program (OBMP) and update it every five years. The OBMP had four goals: enhance basin water supplies, protect and enhance water quality, enhance management of the basin, and equitably finance the OBMP.

As part of the development of the OBMP, a historic Chino Basin Peace Agreement between all affected stakeholders in the basin was finalized in June 2000. This Peace Agreement set forth the terms and conditions for the construction and operation of Chino Basin desalters and a general template for the purchase and sale of desalted water.

Integrated Regional Water Management Planning Act, 2002

The California Legislature passed Senate Bill 1672 in 2002, the IRWM Planning Act that the Governor signed into law. The Bill added Part 2.2 (commencing with Section 10530) to Division 6 of the Water Code: Conservation, Development and Utilization of State Water Resources.

The IRWM Planning Act authorized a "regional water management group" to prepare and adopt a regional plan in accordance with certain procedures that addresses programs, projects, reports, or studies relating to water supply, water quality, flood protection, or related matters, over which any local public agency that is a participant in that group has authority to undertake.

The law requires DWR, the California State Water Resources Control Board (SWRCB), and the State Department of Health Services to include in any set of criteria used to select the projects and programs for grant funding "…a criterion that provides a benefit for qualified projects or programs."

To comply with the requirements of the law, DWR and SWRCB prepared standards (also referred to as IRWM Guidelines) for preparation of IRWMPs. In addition, they established set criteria for selection of the projects and programs to be funded under Chapter 8 of Proposition 50, the IRWM Implementation Grant Program.

The guidelines state that, "The intent of the IRWM Grant Program is to encourage integrated regional strategies for management of water resources, and to provide funding through competitive grants for projects that protect communities from drought, protect and improve water quality, and improve local water security by reducing dependence on imported water."

This Santa Ana IRWMP, the OWOW plan, is prepared in compliance with the IRWM Planning Act, DWR and SWRCB Guidelines, and the intent of the grant program.

Groundwater Management Planning Act, 2002

In 2002, Senate Bill 1938, Groundwater Management Planning Act of 2002 was enacted into law. This law amended Assembly Bill 3030, which authorized a local agency to prepare and implement a groundwater management plan. This law requires a local agency that elects to develop a groundwater management plan to follow specific requirements, including public notification and public involvement process as summarized below.

- Make available to the public a written statement describing the manner in which interested parties would be allowed to participate in the development of the plan.
- For the purposes of qualifying as a groundwater management plan and for receiving State funds administered by DWR for the construction of groundwater projects or groundwater quality projects, prepare and implement a plan that includes certain basin management objectives (BMOs) and components, and adopt certain monitoring protocols.
- The law requires the local agency to submit a copy of the plan to DWR in an electronic format, if practicable, approved by the DWR, and DWR would be required to make copies available to the public.
- Prior to adopting a resolution of intention to draft a groundwater management plan, a local agency shall hold a hearing after publication of notice on whether to adopt a resolution of intention to draft a groundwater management plan, pursuant to this part for the purposes of implementing the plan and establishing a groundwater management program. At the conclusion of the hearing, the local agency may draft a resolution of intention to adopt a groundwater management plan pursuant to this part for the purposes of implementing the plan and establishing a groundwater management program. Upon written request, the local agency shall provide any interested person with a copy of the resolution of intention.
- The local agency shall prepare a groundwater management plan within two years of the date of the adoption of the resolution of intention. If the plan is not adopted within two years, the resolution of intention expires, and no plan may be adopted except pursuant to a new resolution of intention adopted in accordance with this chapter.
- After a groundwater management plan is prepared, the local agency shall hold a second hearing to determine whether to adopt the plan. Notice of the hearing shall be given pursuant to Section 6066 of the Government Code. The notice should include a summary of the plan and shall state that copies of the plan may be obtained for the cost of reproduction at the office of the local agency. At the second hearing, the local agency shall consider protests to the adoption of the plan. At any time prior to the conclusion of the hearing, any landowner within the local agency may file a written protest or withdraw a protest previously filed.

Senate Bill 1938 does not require local agencies to prepare a groundwater management plan for the basins that are managed through adjudications. These long-standing adjudications govern the water rights and management of the basins. Any groundwater management planning would need to conform to the provisions of those adjudications and would require agreement and approval of the parties in those adjudications. The basins in the upper Watershed are adjudicated "in gross". The agencies in the region, however, decided to prepare the plan because they strongly support the intent of the law that states, "It is the intent of the Legislature to encourage local agencies to work cooperatively to manage groundwater resources within their jurisdictions. The preparation of certain basin management objectives will assist local agencies in optimizing local resources while protecting groundwater and surface water resources. The preparation of basin management objectives also will facilitate an understanding of the basin or sub-basin, thereby allowing local agencies, individually and cooperatively, to meet local, regional, and State water needs through conjunctive management, while ensuring that no particular water supply is jeopardized."

A purpose of this Santa Ana IWP is to meet the intent and requirements of Senate Bill 1938.

Seven Oaks Accord, 2004

On July 21, 2004, Valley District, WMWD, the City of Redlands, East Valley Water District, Bear Valley Mutual, Lugonia Water Company, North Fork Water Company, and Redlands Water Company signed a settlement agreement known as the Seven Oaks Accord (Accord). The Accord calls for Valley District and WMWD to recognize the prior rights of the water users for a portion of the natural flow of the SAR. In exchange, the water users agree to withdraw their protests to the water right application submitted by Valley District on behalf of itself and WMWD. All the parties to the Accord have agreed to support the granting of other necessary permits to allow Valley District and WMWD to divert water from the SAR. By means of the Accord, Valley District agreed to modify its water right applications to incorporate implementation of the Accord. Additionally, the Accord calls for Valley District to develop and manage a groundwater spreading program that will maintain groundwater levels at a number of specified wells owned and operated by the other parties. This integrated management of the basin will be adopted within five years of SWRCB approval of the water right applications.

Management of water resources in the Valley District/WMWD service area takes place within a complex legal and institutional framework, as will be discussed in the next section. Development of a comprehensive, coordinated regional water management plan will involve the cooperation of many parties interested in water management in addition to the signatories of the Accord. The Accord provides the framework and a cooperative environment for major water entities in the upper Watershed to prepare a plan for the integrated management of the region's surface water and groundwater resources. This Santa Ana IWP enhances and refines the current management and planning activities within the region and develops regional water management strategies and the framework for their implementation.

Beaumont Basin Judgment, 2004

In February 2003, the San Timoteo Watershed Management Authority (STWMA) filed suit in Riverside County Superior Court to adjudicate pumping and storage rights in the Beaumont Basin. The STWMA and the major pumpers developed a Stipulated Agreement to resolve the lawsuit. In February 2004, the Stipulated Agreement was approved by the Court.

This Stipulated Agreement established pumping rights among the two major classes of pumpers, overlying and appropriative. The overlying pumpers were assigned fixed rights with some flexibility to vary their maximum use during any five-year period. The safe yield established in the Stipulated Agreement is 8,650 AFY. The total of the overlying producers' rights is equal to the safe yield.

Collectively, the overlying pumpers produce substantially less than their aggregate rights. Appropriators' rights are stated as a percentage or fraction of water in the safe yield that is not used by the overlying pumpers.

The Stipulated Agreement provides for the orderly transition of land use and associated water uses through detailed provisions that require the assignment of rights from an overlying pumper to an appropriator when the appropriator provides service to the lands of the overlying pumper.

The Stipulated Agreement declares that there is a temporary surplus of water in the basin of 160,000 AF. The temporary surplus can be used by the appropriators during the first ten years of

the Stipulated Agreement. The appropriators will store the unused portion of the temporary surplus for use in subsequent years. The intent of removing the temporary surplus is to create additional evacuated storage space in the basin for use in storing supplemental water. The Stipulated Agreement gives control of the evacuated storage space in the basin, and the overall management of storage to the Watermaster.

Settlement Agreement with San Bernardino Valley Water Conservation District, 2005

Within the settlement agreement dated August 9, 2005, Valley District, WMWD, and SBVWCD have agreed to work cooperatively to develop an annual groundwater management plan.

Memorandum of Understanding with the City of Riverside, 2005

In September 2005, Valley District, WMWD, and the City of Riverside entered into a Memorandum of Understanding (MOU). The MOU stated that the intent of Valley District/WMWD is to work cooperatively with the City of Riverside to devise institutional and physical arrangements through which the City could directly benefit from "new conservation" undertaken as part of the Western Judgment and the pending Valley District/WMWD water right applications. The MOU states, "The Parties (Valley District, WMWD, and the City of Riverside) shall engage in good-faith negotiations with the goal of reaching a long-term agreement relating to the purchase, storage, and sale to Riverside by WMWD of imported water stored in the SBBA, and relating to storage, transport and delivery of conservation water from the Seven Oaks Dam..."

Chino Basin Peace II Agreement, 2008

Following the Chino Basin Peace Agreement, numerous studies have been completed, reviewed, and amended pursuant to comments by the Court's consultants. Based on these studies and negotiations, the Watermaster has proposed documents to further implement the OBMP through a suite of measures commonly referred to as the "Peace II Agreement". The Peace II Agreement involves a basin management strategy to secure hydraulic control through a coordinated groundwater extraction plan and desalting.

Soboba Water Rights Settlement Act, 2008

Decades of litigation between the Soboba Band of Luiseño Indians and MWD, EMWD, and Lake Hemet Water District ended with the signing of the Soboba Water Rights Settlement Act.

Under this settlement, MWD will deliver 7,500 AF of water a year for the next 30 years to EMWD and Lake Hemet Water District. This will enable the water agencies to recharge the San Jacinto Groundwater Basin to help fulfill the Soboba Band's water rights and terminate chronic groundwater overdrafts. The plan eventually will put pumping from the basin on a safe-yield basis, where no more water is taken out of the aquifer than is restored through natural and artificial recharge.

Institutional Controls and Settlement Agreement (ICSA)

The City of San Bernardino Municipal Water Department (SBMWD) is a party to a consent decree lodged with the United States District Court (Court), Central District of California, Western Division. On August 18, 2004, the Consent Decree obligated SBMWD to operate and maintain a system of wells and treatment plants known as the Newmark Groundwater Contamination Superfund Site (Newmark Site).

The Newmark Site specifically treats groundwater contaminated with trichloroethylene (TCE) and perchloroethylene (PCE). SBMWD is required by the terms of the Consent Decree, entered on March 23, 2005, to enact institutional controls and implement an ordinance providing for the protection and management of the Interim Remedy set forth in the Record of Decisions and Explanation of Significant Differences prepared by the U.S. Environmental Protection Agency (EPA).

The City of San Bernardino Ordinance No. MC-1221, approved in March 2006, establishes the management zone boundaries within the City of San Bernardino for water spreading and water extraction activities. The Consent Decree requires the City of San Bernardino to implement an ordinance to ensure that activities occurring in the management zone do not interfere or cause pass-through of contaminants from the Newmark and Muscoy Operable Units. The Interim Remedy requires the extraction of contaminated groundwater from the Bunker Hill Groundwater Basin and within the Newmark and Muscoy Operable Units, and treatment of the groundwater to meet all State and Federal permits and requirements for drinking water. A permit by the SBMWD pursuant to the provisions outlined in the ordinance should first be obtained for any spreading (artificial recharge) or extracting (well pumping) within the Management Zones, as defined in the ordinance.

An ICSA has been executed to develop and adopt a successor agreement, titled Institutional Controls Groundwater Management Program (ICGMP), between the following parties:

- City of San Bernardino Municipal Water Department
- West Valley Water District
- Valley District
- East Valley Water District
- WMWD
- City of Colton
- City of Riverside
- Riverside Highland Water Company

The parties listed above will not be subject to the provisions of City of San Bernardino Ordinance No. MC-1221 as long as each is a party to the ICSA and, subsequently, the ICGMP Agreement.

Agreement Relating to the Diversion of Water from the SAR System among WMWD, Valley District, and City of Riverside

In July 2004, a Settlement Agreement Relating to the Diversion of Water from the SAR System (the Seven Oaks Accord) was signed. The agreement requires Valley District and WMWD to develop a groundwater spreading program in cooperation with other parties, "That is intended to maintain groundwater levels at the specified wells at relatively constant levels, in spite of the inevitable fluctuations due to hydrologic variation." Other requirements are as follows:

- The groundwater management plan shall identify target water-level ranges in the specified "index wells" subject to the requirement that such spreading will not worsen high groundwater levels in the Pressure Zone.
- Thresholds of significance in terms of SAR water diverted by Valley District and WMWD, and spreading by all parties should be observed.
- The determination as to whether a certain groundwater management action will "worsen" high groundwater levels in the Pressure Zone are made through the use of the integrated surface and groundwater models.
- An "integrated management program" must be "adopted" within five years of the date the SWRCB grants a permit to Valley District/WMWD to divert water from the SAR. Valley District and WMWD have presented their data to the SWRCB and were told that any permit "terms" would be available in late 2007.
- Water users agree to limit spreading to conform to an annual management plan.

Cooperative Agreement to Protect Water Quality and Encourage the Conjunctive Uses of Imported Water in the SAR Basin

Water agencies within the SAR Watershed recognize the importance of protecting the quality of its groundwater resources. In July 2007, many of these agencies (Parties) entered into an agreement with the Regional Water Quality Control Board, Santa Ana Region (Regional Board) for purposes of monitoring and improving water quality within the SAR Region. The agreement is limited in scope and specifically addresses Salinity Objectives.

Generally, the agreement requires that the Parties analyze the effects on water quality of recharging imported water into groundwater basins. This analysis will be compiled into a report and submitted to the Regional Board every three years (Triennial Water Quality Report). In addition, any new project that will include the recharge of imported water must analyze its effects prior to implementation.