Section 7: Data Management, Technical Analyses, and Plan Performance

This section is organized into two parts to summarize the data management, technical analyses, and performance of the Upper Santa Clara River IRWMP. Section 7.1 describes the data management efforts and technical analyses conducted during preparation of the IRWMP. Section 7.2 examines monitoring, ongoing data management, and plan performance during implementation, and describes how performance data will be used to improve future versions of the IRWMP.

In general, the success of the IRWMP will depend on how well the individual plan objectives are accomplished. Achievement of all of these objectives will, in large part, determine the success of local integrated regional water management planning processes.

The following measurable objectives, discussed in Section 3, were developed to allow progress of the overall IRWMP to be measured:

- **Reduce Water Demand:** Implement technological, legislative and behavioral changes that will reduce user demands for water.
- *Improve Operational Efficiency:* Maximize water system operational flexibility and efficiency, including energy efficiency.
- Increase Water Supply: Understand future regional demands and obtain necessary water supply sources.
- *Improve Water Quality:* Supply drinking water with appropriate quality; improve groundwater quality; and attain water quality standards.
- **Promote Resource Stewardship:** Preserve and improve ecosystem health; improve flood management; and preserve and enhance water-dependent recreation.

7.1 Data Management and Technical Analyses for Plan Preparation

The Upper Santa Clara River IRWMP documents the results of a comprehensive 16 month effort of over 10 public agencies with varying water and flood management responsibilities, as well as numerous other interested entities. The IRWMP was prepared using information and guidance provided by the RWMG and Stakeholder group. The IRWMP in turn, will be used by these same entities to guide and support their future water management efforts.

Extensive information and data on the Region have been prepared by various agencies and groups. That information was reviewed and evaluated as part of this IRWMP and served as the foundation for the development of this plan, as described below.

7.1.1 Existing Information and Reports

The following documents contain the baseline information used in the development of the IRWMP. A brief summary of the reports, how often they are updated, identification of who participates in their preparation and identification of the type of information generated by the document is provided for each report listed.

7.1.1.1 Water Resource Management Reports

These reports document the reliability and availability of the Region's water supplies to meet current and projected demands. These reports include both urban water management plans and groundwater management plans.

The California Urban Water Management Planning Act applies to public and private municipal water suppliers with more than 3,000 connections or supplying more than 3,000 AFY. The act requires suppliers to describe and evaluate sources of water supply, efficient uses of water, certain demand management measures (DMMs), implementation strategy and schedule, and other relevant information and programs. This information is used by the urban water supplier to develop an UWMP which is submitted to DWR in years ending in five and zero (e.g., 2000, 2005, 2010).

Assembly Bill 3030 (AB 3030), the Groundwater Management Act, authorized local agencies to prepare groundwater management plans for groundwater basins not subject to adjudication or other form of regulation. AB 3030 lays out a procedure for development of a groundwater management plan. The act also specifies twelve technical components which can be included in a groundwater management plan, including replenishment strategy, mitigation of overdraft, mitigation of contaminated groundwater, and avoidance of saline intrusion.

7.1.1.1.1 2005 Antelope Valley-East Kern Water Agency UWMP

A small amount of SWP water is available to a portion of the eastern part of the Region through deliveries from AVEK, a wholesale SWP provider. The 2005 AVEK UWMP assesses current (2005) and projected water supplies for AVEK's service area. AVEK's UWMP will be updated in 2010.

7.1.1.1.2 2005 CLWA and Retail Water Purveyors UWMP

The 2005 UWMP was prepared for CLWA and three of the purveyors: NCWD, SCWD, and VWC. The fourth purveyor, LACWWD No. 36, was not included because it does not meet the Urban Water Management Plan Act's threshold requirements for preparation of UWMPs. However, LACWWD No. 36 participated in the development of the plan. The 2005 UWMP contains information on water use, water resources, recycled water, water quality, reliability planning, DMMs, and water shortage contingency planning within the CLWA service area. The 2005 UWMP will be updated in 2010.

7.1.1.1.3 Castaic Lake Water Agency GWMP

CLWA has prepared a GWMP, pursuant to AB 3030 for the Santa Clara River Valley Groundwater Basin, East Subbasin. The East Subbasin is comprised of two aquifer systems, the Alluvium generally underlying the Santa Clara River and its several tributaries, and the

Saugus Formation which underlies much of the entire Upper Santa Clara River area. The GWMP provides background information on the East Subbasin. The GMWP has also led to ongoing data monitoring and reporting, detailed in section 7.1.3.

7.1.1.1.4 Annual Santa Clarita Valley Water Reports

Publication of the *Annual Santa Clarita Valley Water Report* began in 1998. These reports provide current information about local groundwater resources, SWP water supplies, water conservation, and recycled water in the Valley on an annual basis. The reports review the sufficiency and reliability of supplies in the context of existing water demand, with focus on actual conditions in the year prior to publication, and provide a short-term outlook of water supply and demand for the upcoming year. The reports are prepared by CLWA and the four water purveyors: LACWWD 36, NCWD, SCWD, and VWC.

7.1.1.2 Facilities Plans and Master Plans

A facilities plan and/or master plan is a physical development plan that provides the framework by which future planning decisions are made. It is an action plan for a particular resource or service such as recycled water, flood control, and wastewater facilities.

7.1.1.2.1 2015 Santa Clarita Valley Joint Sewerage System Facilities Plan

The 2015 Santa Clarita Valley Joint Sewerage System Facilities Plan (2015 Plan), was prepared in 1998 by the LACSD Nos. 26 and 32. LACSD No. 26 and 32 provide sewerage services to the Valley, and they jointly operate a regional wastewater system known as the Santa Clarita Valley Joint Sewerage System (SCVJSS). The SCVJSS service area includes the City of Santa Clarita and unincorporated County areas. The objective of the 2015 Plan is to provide for the necessary wastewater conveyance, treatment, and disposal facilities to meet the needs of the projected service area for LACSD Nos. 26 and 32 through the year 2015 in a cost-effective and environmentally sound manner.

7.1.1.2.2 Acton-Agua Dulce Conceptual Master Plan for Water Facilities

Acton and Agua Dulce are communities located in the unincorporated areas of the County in the upper parts of the Watershed. The 2004 *Acton-Agua Dulce Conceptual Master Plan for Water Facilities* was prepared for LACWWD No. 37 for the purpose of developing a conceptual plan for providing water service to Agua Dulce and portions of Acton in order to assess the feasibility and interest in connecting these areas into the District's existing distribution system. The report provides the current and forecasted water demands for Acton and Agua Dulce private users, and for the Agua Dulce Winery and Vineyard.

7.1.1.2.3 CLWA Draft Recycled Water Master Plan

CLWA's 2002 *Draft Recycled Water Master Plan* (2002 Master Plan) is a planning document that updates the 1993 *Draft Reclaimed Water Master Plan*. The 2002 Master Plan was prepared to provide the information necessary to allow CLWA to develop a cost-effective recycled water system within its service area. The document considers significant issues affecting recycled water sources, supplies, users, and demands.

7.1.1.3 City, County, and Federal Land Use Plans

Land use plans provide for the scientific, aesthetic, and orderly disposition of land, resources, facilities and services of urban and rural communities. General plans are a compendium of city or county policies regarding long-term development, in the form of maps and accompanying text. In California, general plans have seven mandatory elements (circulation, conservation, housing, land use, noise, open space, safety and seismic safety) and may include any number of optional elements (such as water, air quality, economic development, hazardous waste, and parks and recreation). Most local general planning documents generally have identified water management resource strategies that integrate with land use planning efforts. By law, each city and county is required to update the Housing Element of its general plan every five years and the Governor's Office of Planning and Research recommends that the remaining elements be reviewed every eight to ten years.

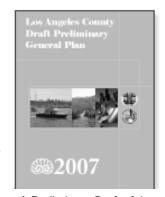
7.1.1.3.1 City of Santa Clarita General Plan

The City of Santa Clarita General Plan was prepared in 1991. The General Plan is comprised

of 12 elements, including the seven elements mandated by the State and six additional elements: Community Design; Air Quality; Parks and Recreation; Human Resources; Economic Development and Community Revitalization; and Public Services, Facilities, and Utilities. The General Plan also identifies potential recycled water users.

7.1.1.3.2 Los Angeles County General Plan

The Los Angeles County General Plan, published in 1980, is the outline for growth and development in the unincorporated areas of the County. The Plan provides for the management and preservation of existing land uses and community character, including agricultural, residential, open space, etc. within the County, while providing for new recreational opportunities and infrastructure to support the population's needs. The General Plan is designed to guide the long-term physical development and conservation of the County's land and environment



A Preliminary Draft of the Los Angeles County General Plan Update was released in 2007

through a framework of goals, policies and implementation programs. The General Plan also provides a foundation for more detailed plans and implementation programs, such as Area or Community Plans, zoning ordinances, and Specific Plans. The General Plan is currently being updated, with a preliminary draft plan released in 2007.

7.1.1.3.3 Newhall Ranch Specific Plan

The Newhall Ranch Specific Plan, prepared for the County and adopted in 2003, guides future development of the Newhall Ranch property. The document sets forth a comprehensive set of plans, development regulations, design guidelines, and implementation programs designed to produce a project consistent with the goals, objectives, and policies of the Los Angeles County General Plan and Santa Clarita Valley Area Plan, as proposed for amendment according to General Plan Amendment No. 94-087. This Specific Plan is regulatory in nature and serves as zoning for the Newhall Ranch community. Subsequent development plans and subdivision maps must be consistent with both this Specific Plan and the Los Angeles County General Plan.

7.1.1.3.4 Los Angeles County, Santa Clarita Valley Area Plan

The Santa Clarita Valley Area Plan, prepared in 1984 and updated in 1990, was prepared by the County for use in making public policy decisions relating to the future of the Valley. The Area Plan provides population forecasts for the communities within the Valley, as well as policies specific to the entire Valley for most resource categories; however, water management is discussed in brevity within the Area Plan. The Area Plan has since become outdated and no longer addresses the current concerns of the Valley especially as it has grown rapidly during the past decade. The Area Plan addresses issues from the City of Santa Clarita and County viewpoints independently, when in many cases, these issues could be addressed jointly for more efficiency and greater effectiveness. For this reason, the City of Santa Clarita and County have come together to develop, the Santa Clarita Valley General Plan ("One Valley, One Vision") (OVOV), to guide future development and protect the resources within the Valley.

7.1.1.3.5 One Valley, One Vision Valleywide General Plan Project

OVOV is a joint effort between the County, the City of Santa Clarita, and some of the regional stakeholders to develop a strategy for the future growth of the Valley and the preservation of natural resources. The results of this project will be a 20-plus year General Plan document and EIR for the entire Valley Planning Area. The Valley Planning Area includes the communities of Stevenson Ranch, Castaic, Val Verde, Agua Dulce, and the future Newhall Ranch; it also includes the City of Santa Clarita and its four communities of Canyon Country, Newhall, Saugus and Valencia. Day-to-day implementation of this General Plan, based on the Guiding Principles, will be administered by both the City of Santa Clarita and County for lands within their respective jurisdictions.

7.1.1.3.6 Business Plan for the Angeles National Forest

The *Business Plan for the Angeles National Forest*, which represents 70 percent of the County's open space, was developed by the US Forest Service to improve the abilities of the national forest to clearly communicate forest conditions and status to principal stakeholders. The plan discusses resource management in the Angeles National Forest, which encompasses activities related to the management, preservation, and protection of the forest's natural and cultural resources. The plan describes how watershed, soil and air management personnel work to protect and monitor air, water, and soil resources throughout the forest and surrounding area. Special designation areas and land ownership and adjustment staff work on programs to protect and enhance the geographic integrity of forest lands. Finally, data management allows forest personnel to analyze and store all data collected as part of these various programs.

7.1.1.4 Resource Conservation Plans

7.1.1.4.1 Santa Clara River Enhancement and Management Plan

The purpose of the SCREMP is to provide a guidance document for the preservation, enhancement, and sustainability of the physical, biological, and economic resources that occur within the 500-year floodplain limits of the Santa Clara River, one which will be of benefit to Stakeholders when planning and implementing projects and activities. The plan was prepared by the Ventura County Watershed Protection District (VCWPD) and the LACDPW. The final SCREMP document summarizes reports that were prepared in 1995 and 1996, characterizing biological and water resources, cultural resources, aggregate, flooding, and access and

recreation. More recent products include wetland plant and environmental permitting guides for stakeholders, a workstation at the County that will allow the public to use available information to develop their environmental permit application materials, and a water quality monitoring station at the Los Angeles/Ventura County line to improve the existing river water quality database.

7.1.1.4.2 South Coast Missing Linkages Project

In 2006, South Coast Wildlands, an environmental non-profit (501c3) organization dedicated to protecting and restoring connected wildland systems and the ecosystems upon which these systems rely, completed the South Coast Missing Linkages Project, aimed at maintaining and restoring connections between wild lands in the South Coast Region. The steering committee for the report included staff from the US Forest Service, CDFG, and US FWS. The report, "Missing Linkages," examines 15 specific geographic connections in Southern California that conserve essential biological and ecological processes. More than 125,000 acres of open space between Los Padres National Forest and the Santa Monica Mountains National Recreation Area are named as areas that need protection to create wildlife corridors. The report is intended to be a guide for cities, counties, Caltrans and land protection groups such as The Nature Conservancy looking to mitigate the effects of development on wildlife. There are three identified linkages in the Region: Santa Susana Mountains to the Sierra Madre Range, Sierra Madre Range to Castaic Range, and San Gabriel Mountains to Castaic Range.

7.1.1.4.3 Upper Santa Clara River Upper Watershed Conservation Plan

This plan was developed by the Nature Conservancy to guide conservation activities in the Upper Santa Clara River Watershed, with particular emphasis on protecting the wildlife corridor known as the San Gabriel-Castaic Linkage. Using input from over a dozen different entities, natural communities and species to be conserved were identified, threats to the viability of natural communities were documented, and opportunities for protection and enhancement were charted. Based on this information conservation targets are developed. The plan identifies strategies that can be undertaken to enhance the viability of the conservation targets. Benchmarks are described against which plan success can be measured.

7.1.1.4.4 Upper Santa Clara River Watershed Arundo and Tamarisk Removal Program Long-Term Implementation Plan

The Ventura County Resource Conservation District (VCRCD), as lead agency for the Ventura County Arundo Task Force, in conjunction with its partners, are developing a regional Arundo and Tamarisk eradication program in the Upper Santa Clara River Watershed. The California Department of Food and Agriculture (CDFA) recently proposed the addition of Arundo and Tamarisk to the CDFA Noxious Weed List in the California Code of Regulations. The project benefits the Upper Santa Clara River Watershed,

Invasive tamarisk plant

and helps restoration efforts downstream in Ventura County as it will reduce the amount of Arundo that annually washes out of the river channel and is deposited on downstream beaches. The long-term goal of the Ventura County Arundo Task Force is the eradication of Arundo from all portions of the Santa Clara River, both in Los Angeles and Ventura counties.

7.1.1.5 Water Quality Plans

7.1.1.5.1 Los Angeles Regional Water Quality Control Board Basin Plan and Amendments

The Los Angeles RWQCB Basin Plan, prepared in 1994, is designed to preserve and enhance water quality and protect the beneficial uses of water within the Los Angeles region. Specifically, the Basin Plan designates beneficial uses for surface and ground waters, sets narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the state's anti-degradation policy, and describes implementation programs to protect all waters in the Region. In addition, the Basin Plan incorporates (by reference) all applicable State and Regional Board plans and policies and other pertinent water quality policies and regulations. As conditions change, such as the identification of new TMDLs or water quality standards, the Basin Plan is amended. Following adoption by the RWQCB, the Basin Plan and subsequent amendments are subject to approval by the SWRCB, the State Office of Administrative Law, and the US EPA.

7.1.2 Monitoring and Data Management

Within the Region there is an existing system in place for collecting data on groundwater and surface water supplies and water quality. Collection of data can be used to help quickly identify data gaps, assess project and program performance, support statewide data needs, and integrate with other regional and statewide programs.

Data is vitally important to agencies trying to maximize operating efficiency and design projects with limited budgets. The types of data available, current relevance and trends, and knowledgeable people that can interpret the data are all important. Equally important is the opportunity for Federal and State agencies to view local data for their own monitoring needs and to better understand local conditions.

7.1.3 Monitoring

7.1.3.1 Groundwater Monitoring

7.1.3.1.1 MOU between the Santa Clarita Valley Purveyors and the United Water Conservation District

United Water Conservation District (UWCD) is a water district in Ventura County that encompasses 214,000 acres of the Santa Clara River Valley and the Oxnard Plain. In 2001, Upper Basin Water Purveyors (CLWA, LACWWD No. 36, NCWD, SCWD, and VWC) and UWCD prepared and executed a MOU to cooperatively manage local groundwater supplies. As a result of the MOU, the cooperating agencies have undertaken the following measures: integrated their database management efforts; developed and utilized a numerical groundwater flow model for analysis of groundwater basin yield and containment of groundwater contamination; and continued to monitor and report on the status of Basin conditions, as well as on geologic and hydrologic aspects of the overall stream-aquifer system. This information is now embodied in the Region's GWMP.

7.1.3.1.2 Regional Groundwater Flow Model for the Santa Clarita Valley

The development and calibration of a numerical groundwater flow model of the entire basin was initiated as a result of the 2001 MOU among the Upper Basin Water Purveyors (CLWA, LACWWD No. 36, NCWD, SCWD, and VWC) and UWCD. The groundwater model was initially intended for use to predict aquifer response to the planned operating ranges of pumping. However, the groundwater flow model has also been used to analyze the control of perchlorate contaminant migration under selected pumping conditions. In 2004, the DTSC reviewed and approved the construction and calibration of the regional model as described in the final model report, *Regional Groundwater Flow Model for the Santa Clarita Valley, Model Development and Calibration* (CH₂M Hill 2004a). After DTSC approval, the model was used to simulate the

capture and control of perchlorate by restoring impacted wells, with treatment. The results of that work are summarized in a second report, *Analysis of Perchlorate Containment in Groundwater Near the Whittaker-Bermite Property, Santa Clarita, California* (CH₂M Hill 2004b).

The purveyors and CLWA have initiated an update to the Groundwater Basin Yield Analysis and the Operations Plan to reflect changes in groundwater anticipated due to global warming, reduced state water reliability, and planned recharge projects. It is anticipated that this update will be completed by Fall 2008.

Groundwater Observation Well

7.1.3.1.3 Groundwater Operating Plan (from 2005 UWMP)

The groundwater component of overall water supply in the Region derives from a groundwater operating plan developed over the last

20 years to meet water requirements (municipal, agricultural, small domestic) while maintaining groundwater in a sustainable condition (i.e., no long-term depletion of groundwater or interrelated surface water). This operating plan also addresses groundwater contamination issues, consistent with both the MOU and the GWMP described above. The groundwater operating plan is based on the concept that pumping can vary from year to year to allow increased groundwater use in dry periods and increased recharge during wet periods and to collectively ensure that groundwater is adequately replenished through various wet/dry cycles. As described in the MOU, and subsequently formalized in the GWMP, the operating yield concept has been quantified as ranges of annual pumping volumes.

The ongoing work of the 2001 MOU has produced two formal reports. The first report, described above (CH₂M Hill 2004a), documents the construction and calibration of the groundwater flow model for the Valley. The second report, dated August 2005, presents the modeling analysis of the purveyors' groundwater operating plan (CH₂M Hill and Luhdorff and Scalmanini 2005). Ultimately, the intent to of the operating plan is to maintain sustainable groundwater conditions to support the combination of municipal (purveyor), agricultural, and small private groundwater use on an ongoing basis.

The groundwater operating plan is summarized in Table 7.1-1.

TABLE 7.1-1
GROUNDWATER OPERATING PLAN FOR THE SANTA CLARITA VALLEY

Groundwater Production (acre-feet)

 Aquifer	Normal Years	Dry Year 1	Dry Year 2	Dry Year 3
Alluvium	30,000 to 40,000	30,000 to 35,000	30,000 to 35,000	30,000 to 35,000
Saugus	7,500 to 15,000	15,000 to 25,000	21,000 to 25,000	21,000 to 35,000
Total	37,500 to 55,000	45,000 to 60,000	51,000 to 60,000	51,000 to 70,000

Source: 2005 UWMP.

7.1.3.2 Water Quality Monitoring

Drinking water quality is monitored through the following means.

7.1.3.2.1 Safe Drinking Water Act (SDWA) Compliance Monitoring and Reporting

All public water systems are required to produce water that complies with the SDWA. To this end, specific monitoring information is required and conducted routinely. Results of the monitoring are reported to DPH. In addition, monitoring information is required to be published in an annual Consumer Confidence Report (described below).

7.1.3.2.2 Unregulated Contaminant Monitoring Rule Results

The 1996 SDWA Amendments mandate that the US EPA publish a list of unregulated contaminants that may pose a potential public health risk in drinking water. This list is called the Contaminant Candidate List. The initial 1998 accounting listed 60 contaminants. US EPA uses this list to prioritize research and data collection efforts for future rulemaking purposes. The 1996 SDWA Amendments incorporated a tiered monitoring approach. The rule required all large public water systems and a nationally representative sample of small public water systems serving less than 10,000 people to monitor the contaminants. The information from the monitoring program for the Region are compiled and submitted to the State.

7.1.3.2.3 Monitoring Done as Part of TMDL Implementation

As discussed in Section 7.1.1.5, as conditions change in the Region, such as the identification of new TMDLs or water quality standards, the Los Angeles RWQCB Basin Plan is amended. Compliance monitoring is required by the Los Angeles RWQCB, and performed on an ongoing basis in order to determine if a watershed is in compliance with an identified TMDL. A compliance monitoring program for implementing a TMDL would generally include the anticipated compliance points for the monitoring program, parameters to be measured, analytical methods and their sensitivity for reliably detecting the regulated chemicals, frequency of measurements, etc. With such information it will be possible to evaluate whether the proposed compliance monitoring could be expected to be adequate for detecting significant violations of the requirements set forth in the TMDL.

7.1.3.3 Surface Water Flow Monitoring

LACDPW operates and maintains six automatic rain gauges and two stream flow gauges in the Region. Rain gauges continuously record information for precipitation in durations ranging from 5 minutes to 24 hours. Rain gauges are located in Newhall, Aliso Canyon, Bouquet Canyon,

Mint Canyon, Acton Camp, and at the Santa Clara River headwaters. The two stream flow gauges are located near the Lang railroad bridge and near the Interstate-5 crossing of the Santa Clara River. The records for these gauges go back for many years. For example, the Lang stream flow gauge record goes back to April 1970 and the Old Road Bridge (Interstate-5) gauge goes back to September 1981.

7.1.4 Data Reporting

7.1.4.1 Data Reporting as Part of the City of Santa Clarita Municipal National Pollutant Discharge Elimination System Permit

The City of Santa Clarita's Municipal National Pollutant Discharge Elimination System (NPDES) Permit requires developers of certain developments/redevelopments to prepare engineering documents to prevent potential pollutants from entering the storm drain system, such as an Urban Storm Water Mitigation Plan (USMP) and/or Storm Water Pollution Prevention Plan (SWPPP). The municipal NPDES requires the City of Santa Clarita to submit an Annual Storm Water Permit Report and Assessment to the Los Angeles RWQCB. The Annual Reports include the information necessary to assess compliance relative to the permit, and the effectiveness of implementation of permit requirements on storm water quality.

7.1.4.2 Data Reporting as Part of County of Los Angeles Municipal Storm Water Permit

The County of Los Angeles Municipal Storm Water Permit provides the waste discharge requirements for the discharge or contributions to discharges of storm water and urban runoff from municipal separate storm sewer systems (storm drain systems). The countywide permit covers the LACFCD, the County, and the 84 incorporated cities within the LACFCD, including the City of Santa Clarita. Each entity permitted under the countywide permit must implement a storm water quality management program (SQMP). The data that is collected as part of the SQMP is submitted annually to the Los Angeles RWQCB, which is then compiled in the unified Annual Storm Water Program Report. Each unified report documents the Permittees' progress in implementing the SQMP and the requirements of the countywide permit. Data that is collected, including the annual reports, are available for public review on the Los Angeles RWQCB's website.

7.1.4.2.1 Annual Santa Clarita Valley Consumer Confidence Reports

The preparation of Consumer Confidence Reports is required by the California Health and Safety Code §116470, as well as the SDWA and US EPA. This code requires every public water system, as a condition of its operating permit, to annually prepare a report and provide a copy of that report to each customer. It also requires public water systems with more than 10,000 service connections that detect contaminants above their public health goals (PHGs) to provide PHG exceedance reports every three years and to hold public hearings regarding their reports. The Consumer Confidence Report includes information on a system's source water, the levels of any detected contaminants, and compliance with drinking water regulations, plus some educational material. Contaminants typically reported include turbidity, coliform, lead/copper, unregulated contaminants, and those contaminants of concern specific to a particular location.

The annual Consumer Confidence Report for the Valley is provided by CLWA and the local water purveyors. The goal of the report is to provide customers with the most current information about the quality of their water. Each report contains a summary of thousands of water quality tests performed in the Valley, as well as discussions of noteworthy contaminants, updates on regulatory news, and tips on saving indoor and outdoor water use.

7.1.4.3 Data Reporting as Part of the Memorandum of Understanding Regarding Urban Water Conservation in California

The Memorandum of Understanding Regarding Urban Water Conservation in California was originally executed in 1991. The MOU includes several water conservation BMPs intended to reduce California's long-term urban water demands, and signatory agencies report progress on their implementation to the CUWCC. The BMPs are currently implemented by MOU signatories on a voluntary basis, but recent legislation institutes new requirements for demonstration of water conservation measure implementation in order to qualify for State grant funding.

The County signed the MOU in 1996 on behalf of all its Waterworks Districts. CLWA signed the MOU in 2001 on its own behalf as a water wholesaler, and on behalf of the local retail water purveyors. NCWD signed the MOU separately on its own behalf in 2002. VWC signed the MOU separately on its own behalf in 2006. Each of these agencies now files BMP implementation reports with the CUWCC.

7.1.5 Identified Data Gaps

The Stakeholders have devoted a number of meetings to the discussion of existing data, data formats, and the need for additional information. The initial steps in preparing this IRWMP included conducting a detailed review of existing sources and working with the Stakeholders to identify gaps and deficiencies. Data gaps represent information crucial to a greater understanding of the Region and help develop context for future projects and management actions.

The Stakeholders identified two main gaps/deficiencies:

- Lack of comprehensive knowledge of all groundwater demands, particularly demands from privately owned wells in the watershed
- Lack of model(s) that can simulate the existing and future land uses upstream to forecast changes to flood flows and low flows as well as sediment yield and transport

Lack of comprehensive data on groundwater demands has been an ongoing issue in the Region. Past planning efforts have attempted to quantify the location of, and water demand from privately owned wells in the Region. However, data on private groundwater pumping is not systematically gathered or reported because in California, with few exceptions, a private groundwater pumper is not required to get a permit or to monitor or report their groundwater use. As described in Section 2, during preparation of the 2005 UWMP, the Santa Clarita Valley Well Owners' Association provided an estimate of private well pumping in the San Francisquito Canyon portion of the East Subbasin. This data indicates that pumping is about 1.2 AFY per private well, with total private pumping less than 500 AFY. Based on these estimates, private well pumping is no more than approximately one percent of typical Alluvial Aquifer pumping by the purveyors and other known private well owners (e.g., agricultural pumpers) combined.

Lack of models to forecast runoff based on land use is a subject of ongoing collaboration between the US ACE, LACDPW, and the VCWPD. These agencies are developing a model to simulate land use and resultant river flows. Where possible, this newly generated data will be integrated into the IRWMP documents. It is anticipated that further data deficiencies will be identified. These may be the subject of future funding requests either through Proposition 84 or from other sources. However, the Stakeholders have expressed a clear preference for focusing effort on actions to remedy known problems (i.e., invasive species, hard water) rather than expending time and money on studies.

7.2 Data Management and Monitoring During Plan Implementation

7.2.1 Plan Performance

Generally, the success of the IRWMP will depend on how well the individual plan objectives are accomplished. Achievement of all of these objectives will, in large part, determine the success of local integrated regional water management planning processes.

As described in Section 5, IRWMP updates are a defined task within future IRWMP governance. This IRWMP is a dynamic document and is part of an ongoing local effort to achieve integrated local water management. The process, through Stakeholder participation and plan revisions, will continue for many years and will be an effective mechanism for addressing the water management issues facing the Region. As a consequence, IRWMP objectives, regional priorities, and statewide priorities will continue to be reviewed for relevance and modified as needed to ensure the overall IRWMP reflects regional changing needs and continues to be effective. Additionally, Candidate Projects will be reviewed and evaluated on a regular (every five years) basis to ensure that current plan objectives will be met and that the resulting Plan Projects offer the greatest benefit possible. Periodically, a new set of Plan Projects will be selected to address revised IRWMP objectives and State and regional priorities.

This ongoing review and update allows the plan to undergo "adaptive management", e.g., allow the IRWMP to evolve in response to changing conditions and as better data is developed. IRWMP revisions will result in:

- (1) An updated evaluation of information and data related to watershed conditions
- (2) An evaluation of projects/actions and their contribution to meeting IRWMP objectives
- (3) Revised objectives, strategies, and projects based on new conditions and past project successes

As discussed in Section 3.1, in developing the IRWMP objectives, Stakeholders determined that it was important that they not only be measurable, but also that the existing conditions of the resources at issue be quantified so that change/progress could be reasonably ascertained at a later date. These performance measures were developed to allow progress of the individual projects to be measured and to gauge the impact of the overall IRWMP.

As projects are implemented in the Region as part of this IRWMP, project performance will be assessed and outcomes will be monitored, and the results from this monitoring will be used to

guide future project implementation. If monitoring reveals, for example, that a project is progressing as planned and regional changes do not necessitate revisiting project implementation, then changes to project prioritization would not be anticipated. However, if monitoring reveals that a project, or suite of projects, are not producing the anticipated result, corrective actions (whether it be improving a specific project, changing the project prioritization, strengthening the measures by which those projects are being monitored, etc.) can be implemented. This information will feed into future updates of the plan, and keeps it a living document.

7.2.2 Data Collection

As described in Section 7.1.2, groundwater, surface water, and water quality monitoring already takes place within the Region. Many of the mechanisms by which CLWA, the retail purveyors, the SCVSD, and LACDPW collect data are described by the monitoring programs and procedures described therein.

Data collected as part of this IRWMP can be used to support existing state programs such as the Surface Water Ambient Monitoring Program, the Groundwater Ambient Monitoring and Assessment, and the California Environmental Resources Evaluation System.

- Surface Water Ambient Monitoring Program (SWAMP). All the surface water data
 collected as part of the IRWMP will be consistent with SWAMP database compatibility
 guidelines, and will be exported annually to the state database using the required data
 submission formats. Where appropriate, IRWMP sampling activities will be performed
 according to SWAMP quality assurance requirements.
- Groundwater Ambient Monitoring and Assessment (GAMA). Groundwater data
 collection efforts as part of the IRWMP will be coordinated with the needs of the GAMA
 program and will be consistent with database specifications so that the data can be
 easily submitted, shared, and integrated into the GAMA database. Field sampling efforts
 will be coordinated with the GAMA program to eliminate duplicative data collection
 efforts and fill data gaps.
- <u>California Environmental Resources Evaluation System (CERES)</u>. All data and reports
 will be sent to CERES so that information will be available and useful to a wide variety of
 users.

As discussed in Section 5, it will be the responsibility of the Successor RWMG to implement this IRWMP. The Successor RWMG will be tasked with responding to changing conditions and ensuring necessary data is collected and evaluated in order to determine the parameters of the performance measures to be used in project implementation. The Successor RWMG will be required to respond to ongoing decisions and tasks throughout IRWMP implementation to address a systematic approach to tracking, measuring and reporting on the IRWMP performance over time.

7.2.3 Data Reporting

Dissemination of data to Stakeholders, agencies, and the general public is integrated into the IRWMP process to ensure overall success. A requirement of the Proposition 50 Guidelines is

the routine reporting on project performance. The routine collection of data that occurs as part of other processes (as described in Section 7.1.3) will support the data reporting that is required as part of the IRWMP process. A database for maintaining project information is available to each Stakeholder for proposing new, or updating current or old, projects for inclusion in the IRWMP. Although updating the data is not a requirement of the Local Project Sponsors, it is in the best interest of the sponsors and larger Stakeholder group to keep the database current, so the most updated information is used to evaluate projects using the project prioritization framework as outside funding sources become available. Data collected or produced as part of the IRWMP will then be presented and disseminated during future meetings.

A public website has been created to store data and information about the IRWMP process so that the public can find information about public meeting dates, agendas, and notes. The website provides information on the IRWMP process and posts annual reports and relevant documents that can be downloaded. Data collected during the process will be available on the website, as well as links to other existing monitoring programs to promote data between these programs and the IRWMP. This will provide a means to identify data gaps (e.g., information needed to provide a more complete assessment of the status of a specific issue or program) and to ensure that monitoring efforts are not duplicated between programs.

The IRWMP website, <u>www.scrwaterplan.org</u>, provides a mechanism for Stakeholders to upload project information regarding water supply, water quality, and other benefits of the project, which will be collected in a database to manage, store, and disseminate information to the public.