Appendix F: Groundwater Management Plan

Groundwater Management Plan

Santa Clara River Valley Groundwater Basin, East Subbasin

Los Angeles County, California

CASTAIC LAKE WATER AGENCY

December, 2003

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I. Introduction

Castaic Lake Water Agency

Castaic Lake Water Agency (CLWA) was formed in 1962 as a State Water Project Contractor to provide wholesale water supply from the State Water Project (SWP) to retail water purveyors in the Upper Santa Clara River area, most notably to Newhall County Water District, Los Angeles County Waterworks District No. 36, Santa Clarita Water Company and Valencia Water Company. In 2001, as part of legislation authorizing CLWA to provide retail water service to individual municipal customers in addition to its ongoing wholesale water supply, Assembly Bill 134 included a requirement that CLWA prepare a groundwater management plan in accordance with the provisions of Water Code Section 10750 et seq., which was originally enacted by, and is commonly known as, Assembly Bill 3030. This groundwater management plan has been prepared to satisfy the requirements of AB 134 and to both complement and formalize a number of existing water supply and water resource planning and management activities in the CLWA service area.

The CLWA service area encompasses all of the existing and currently planned municipal water service areas of the Upper Santa Clara River area, i.e. the suburban areas generally proximate to the Santa Clara River in Los Angeles County, generally between hills of the San Gabriel Mountains and the Santa Susana Mountains on the north and south, and between the Los Angeles/Ventura County line and Lang Station on the west and east, respectively. The extent of the CLWA service area and the geographical locations of the individual water purveyors within the CLWA service area are illustrated in Figure 1-1.

Santa Clara River Valley Groundwater Basin, East Subbasin

The groundwater basin generally beneath the CLWA service area, identified in DWR Bulletin 118 as the Santa Clara River Valley Groundwater Basin, East Subbasin (Basin No. 4-4.07), 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 mapped extent of the Santa Clara River Valley East Subbasin in Bulletin 118, which is approximately the outer extent of the Alluvium and the Saugus Formation, and its

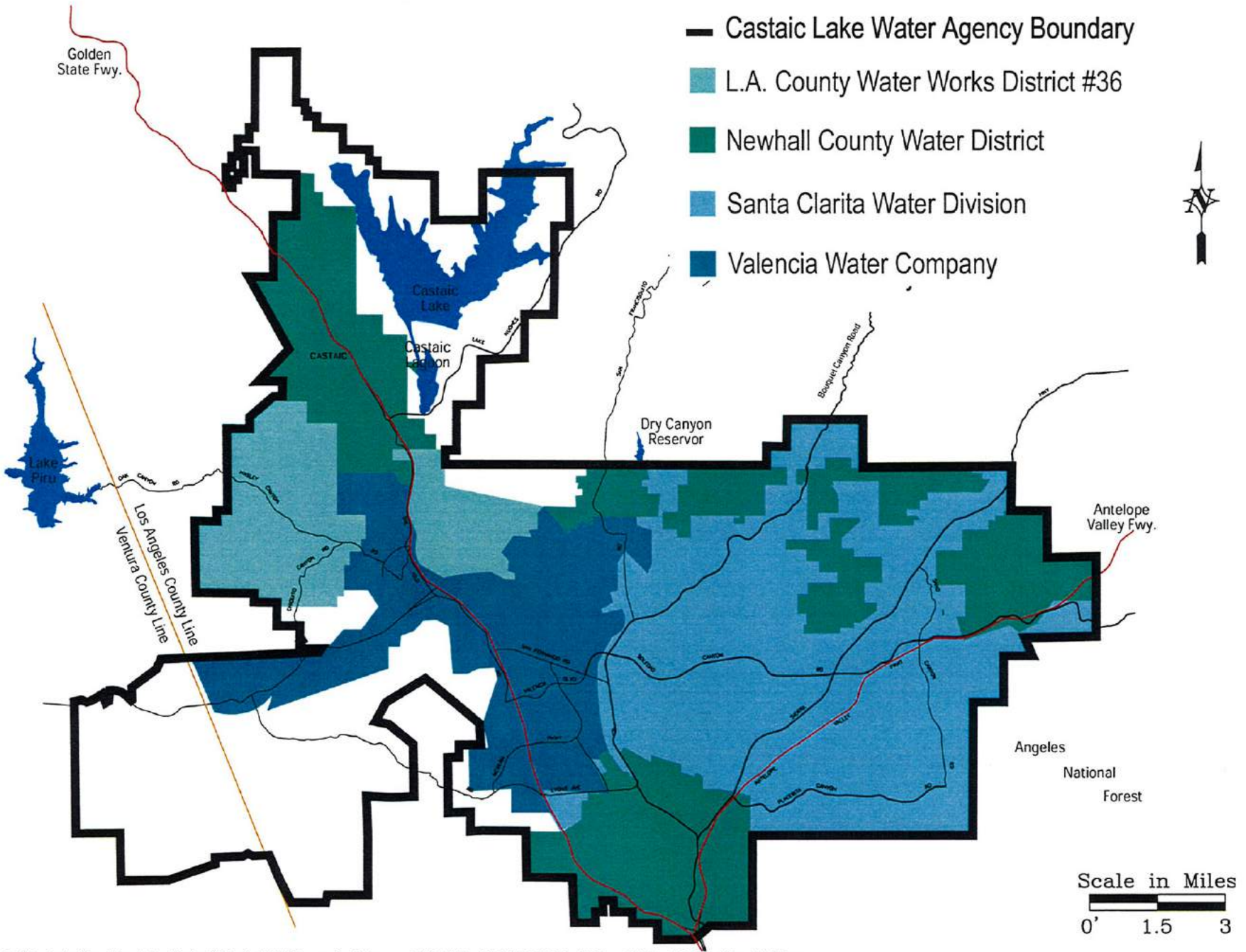

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Figure 1-1
CLWA and Purveyors` Service Areas

relationship to the extent of the CLWA service area are illustrated in Figure 1-2.

The two aquifer systems that comprise the groundwater basin are described in detail in this plan. For purposes of this plan, the groundwater basin is encompassed by the CLWA service area, and CLWA is the logical public water supply agency to prepare and implement a groundwater management plan for the Santa Clara River Valley East groundwater subbasin.

Overview of Water Requirements and Supplies

Historically, while development of local water supplies dates back at least 100 years, the earliest complete records of water use in the basin date from the late 1940's, when practically all water demand was for agricultural use. From that time through the early 1960's, agricultural water use, which was solely supplied by local groundwater, ranged from about 27,000 to about 42,000 acre-feet per year (afy). Over the succeeding three decades, agricultural water use progressively declined, into the range of about 8,000 to 10,000 afy, followed by a slight increase into the range of about 12,000 to 15,000 afy over the last ten years. Current projections are for agricultural water use to substantially decline, to about 7,000 afy, over the next 20 years.

Significant municipal water use in the basin did not begin until the early 1960's, when municipal uses, which were met exclusively at that time by local groundwater, were in the range of about 5,000 to 10,000 afy. By 1980, when supplemental surface water from the State Water Project (SWP) began to be imported to the basin, municipal water demands had increased to about 22,000 afy. Since then, municipal water demands have further increased, to their current level of about 61,000 afy, about 60 percent of which is supplied by SWP water, with the balance supplied by local groundwater. Current projections are for municipal water requirements to increase to about 106,000 afy over the next 20 years.

Historical and projected water requirements and supplies in the basin are discussed in more detail in Section IV of this Plan.

Water Code Section 10750 et. seq.

In 1992, the California State Legislature adopted Assembly Bill 3030 (AB 3030); that legislation was subsequently incorporated into the Water Code, Section 10750 et seq., to encourage local public agencies/water purveyors to adopt a formal plan to manage groundwater resources within

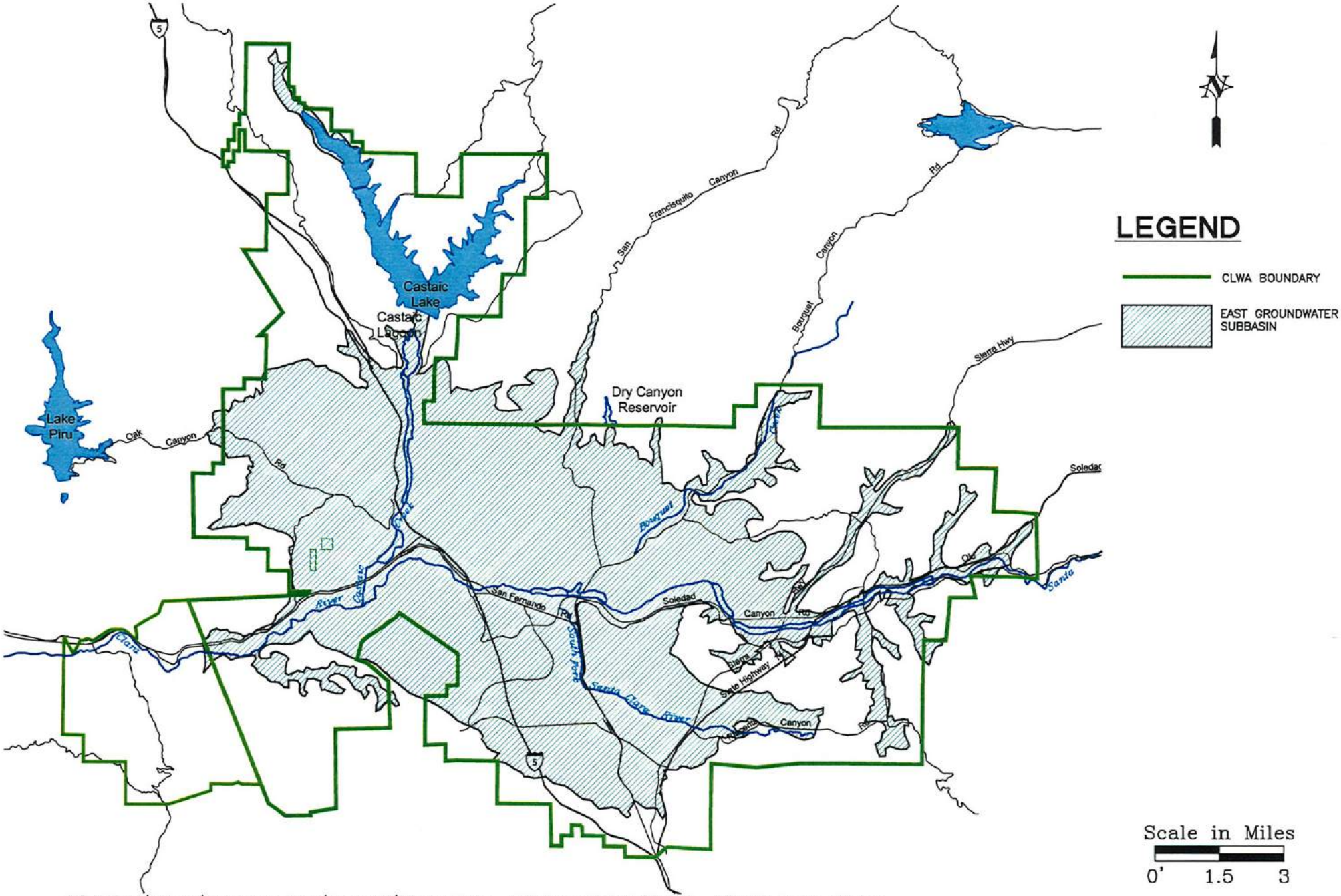

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Figure 1-2
Santa Clara River Valley
East Groundwater Subbasin

their jurisdictions. Within the scope of Water Code Section 10753.8, a local groundwater management plan can potentially include up to twelve specific components. Although the plan need not be restricted to those specific components, the listed components are quite broad and cover essentially all of the groundwater management elements which are part of this plan or are likely to be considered for implementation into this plan in the foreseeable future. To a considerable extent, a number of the groundwater management activities listed in Water Code Section 10753.8 have been implemented in the Santa Clara River Valley East groundwater subbasin as part of an organized effort by the local municipal water purveyors, including CLWA, to manage the groundwater basin within its sustainable yield for the benefit of local water supply, and also to integrate management of the basin with the management of surface and groundwater immediately downstream on the Santa Clara River, in this case specifically with United Water Conservation District in Ventura County, as discussed in more detail herein.

The potential components of a groundwater management plan listed in Water Code Section 10753.8 include:

- the control of saline water intrusion.
- identification and management of wellhead protection areas and recharge areas.
- regulation of the migration of contaminated groundwater.
- the administration of a well abandonment and well destruction program.
- mitigation of conditions of overdraft.
- replacement of groundwater extracted by water producers.
- monitoring of groundwater levels and storage.
- facilitating conjunctive use operations.
- identification of well construction policies.
- the construction and operation by the local agency of groundwater contamination cleanup, recharge, storage, conservation, water recycling, and extraction projects.
- the development of relationships with state and federal regulatory agencies.
- the review of land use plans and coordination with land use planning agencies to assess activities which create a reasonable risk of groundwater contamination.

In 2002, the Legislature adopted Senate Bill 1938 (SB 1938) to amend and add to Water Code Section 10750 et seq. regarding the implementation of local groundwater management plans. While the provisions of SB 1938 did not alter the potential components of a local groundwater management plan, as listed above, it did add the following notable provisions:

- The local agency, in preparing a groundwater management plan, shall make available to the public a written statement describing how interested parties may participate in developing the plan; for purposes of carrying out the preceding requirement, the local agency may appoint, and consult with, a technical advisory committee consisting of interested parties. AB 134 actually anticipated this last item by requiring CLWA to form an Advisory Committee to review its Plan. The membership of the Advisory Committee was specified to consist of one representative from each retail water purveyor within CLWA and one representative from each groundwater producer within CLWA who pumped more than 100 acre-feet in the preceding water year (2000). In conformance with that requirement, CLWA formed an Advisory Committee consisting of representatives from the following organizations, who collectively fulfill the description of the membership specified in AB134:

    - CLWA Santa Clarita Water Division
    - Los Angeles County Sheriff's Department
    - Los Angeles County Waterworks District No. 36
    - Newhall County Water District
    - Newhall Land and Farming Company
    - Robinson Ranch
    - Valencia Water Company

- In order to qualify for funding assistance for groundwater projects or groundwater quality projects, for funds administered by DWR, a local agency must accomplish all the following relative to groundwater management:

    - prepare and implement, or participate in, or consent to be subject to, a groundwater management plan, a basin-wide management plan, or other integrated regional water management program or plan that meets the provisions listed below.

    - include groundwater management components that address monitoring and management of water levels, groundwater quality degradation, inelastic land subsidence, and changes in surface flows and quality that either affect groundwater or are affected by groundwater pumping.

- include provisions to cooperatively work with other public (and presumably private) entities whose service area or boundary overlies the groundwater basin.

- include mapping of the groundwater basin, as defined in DWR's Bulletin 118, and the boundaries of the local agency subject to the plan, plus the boundaries of other local agencies that overlie the basin.

- adopt monitoring protocols designed to detect changes in groundwater levels, groundwater quality, inelastic land subsidence (for basins where subsidence has been identified as a potential problem), and flow and quality of surface water that either directly affect groundwater, or are directly affected by groundwater pumping.

Of the potential groundwater management activities listed in Water Code Section 10753.8, those already being investigated and actively implemented as part of less formal groundwater management by the purveyors include avoidance of overdraft, implementation of conjunctive use, monitoring of groundwater levels and quality, initiation of groundwater contamination control, analysis of basin yield for ongoing avoidance of overdraft, and annual analysis and reporting on basin conditions. The historic focus of informal groundwater management in the Santa Clara River Valley East groundwater subbasin has been on water supply, quantity and quality, to avoid conditions of overdraft, primarily by augmenting local groundwater supplies with a supplemental, imported surface water supply from the State Water Project. More recently, efforts have been added to include ongoing monitoring and the compilation of data into a data management system that is integrated with a comparable database system for the downstream surface water resources and groundwater basins on the Santa Clara River. Recent efforts have also included initiation of a process to develop a numerical groundwater flow model of the basin for analysis of basin response to various water supply, recharge, and conjunctive use management alternatives that might be applicable for the basin. The potential groundwater management provisions not historically implemented have been those more focused on groundwater contamination; however, very recent activities have added this component to local groundwater management as a result of impacts on several municipal water supply wells from a former munitions manufacturing site in the basin, as discussed in more detail herein.

In summary, in many respects, the local municipal water purveyors, including CLWA, have

already begun developing and implementing important parts of a formal local groundwater management program as part of developing reliable water supplies for in-basin needs. To ensure the reliability of the groundwater component of water supplies to meet existing and projected demands, those parts of local groundwater management planning already include monitoring, formulation of a data base, and integration with the database for adjoining downstream basins, analysis of groundwater conditions and annual reporting on water conditions in the basin, initiation of groundwater flow modeling, ongoing conjunctive use of local groundwater and imported SWP supplies, and initiation of investigation and control of localized groundwater contamination. The groundwater management plan described herein can be envisioned as a formalization, and some expansion, of those ongoing management efforts in the Santa Clara River Valley East groundwater subbasin.

The balance of this plan is organized to first establish a set of management objectives, or goals, for the basin; to then describe existing groundwater basin conditions, including areas of concern and identified problems; to present historical and projected water demands in the basin; and to finally present a set of groundwater management actions which, in aggregate, are the elements of this groundwater management plan.

II. Management Objectives (Goals) for the Basin

Prior to 1980, all water supplies in the Upper Santa Clara River Area were developed from local groundwater. Since 1980, the major water purveyors within the CLWA service area have developed their water supplies from a combination of local groundwater and imported supplemental surface water from the State Water Project (SWP). CLWA is the state SWP Contractor which holds the contract for SWP water. CLWA also operates the treatment and distribution system for delivery of SWP water to the local purveyors. Some imported SWP water has historically been delivered for non-municipal uses although, in aggregate, total non-municipal uses have been almost negligible (less than one percent).

A relatively small fraction of water supply in the area is still devoted to agricultural and other irrigation, and essentially all of that remains developed from groundwater. Over the last two decades, that use has been in a range between about 10,000 and 17,000 acre-feet per year.

The development and importation of a supplemental surface water supply from the State Water Project represents the first of a number of water resource and water supply management actions, all of which are formalized in this plan, aimed at what can be considered to be the overall goals or objectives for the basin. In no priority, those management objectives for the basin can be expressed as follows:

1. Development of an integrated surface water, groundwater, and recycled water supply to meet existing and projected demands for municipal, agricultural, and other water supply; since pumpage for other uses is from the same aquifer system, this objective includes agricultural, small community, non-agricultural irrigation, and individual domestic uses.

2. Assessment of groundwater basin conditions to determine a range of operational yield values that will make use of local groundwater conjunctively with SWP and recycled water to avoid groundwater overdraft and the undesirable effects associated with it. In effect, this objective equates to more detailed quantification of the yield of the basin in order to continue to avoid overdraft, consistent with what has historically been the case in the basin. In addition to avoiding the traditional overdraft symptoms

and effects, e.g. chronic water level decline, loss of groundwater storage, onset of land subsidence, groundwater quality degradation, a corresponding basin objective is to manage groundwater levels and associated groundwater discharge to the Santa Clara River at the west end of the basin, and thus not adversely impact surface and groundwater discharges to the downstream basin(s).

3. Preservation of groundwater quality for beneficial use in the basin, and for beneficial use of surface water and groundwater discharges from the basin. Included in this management goal will be the active characterization and solution of any groundwater contamination problems, through cooperation with responsible parties or through independent action if timely action by responsible parties is not forthcoming and the preceding management objectives are thereby impacted or constrained.

4. Preservation of interrelated surface water resources. Included in this management goal will be the maintenance of appropriate surface water flows and non-degradation of surface water quality as a result of managing groundwater conditions to meet the other management goals for the basin.

Quantitatively, the preceding goals translate into general preservation of groundwater levels and quality in the Alluvial aquifer system consistent with the last 30 years, including fluctuations through seasonal demands and local hydrologic variations (wet and dry periods). As discussed in more detail in the next chapter, the hydrogeologic setting in the area has resulted in smaller Alluvial groundwater level fluctuations toward the western half of the basin (generally west of Bouquet Canyon), and larger fluctuations to the east. However, largely due in part to the importation of supplemental surface water over the last 20 years, and the integrated or conjunctive use of that supplemental water with local groundwater, there has been no chronic decline in groundwater levels or storage. A continuation of such basin conditions, possibly complemented by management actions to decrease the historical water level fluctuations in the eastern part of the basin, will accomplish the second basin objective (continued avoidance of overdraft as has been the ongoing historical condition in the basin) while continuing to utilize local groundwater to meet part of projected water requirements. Corresponding management actions to sustain recharge and not overdraft groundwater storage will accomplish the third basin objective by replenishing the aquifer system with sufficient water to sustain what has been generally consistent quality of groundwater on a long-term basis.

In general, the same goals of preservation of groundwater levels and quality pertain to the Saugus Formation as well as to the Alluvium. However, while those goals are generally expected to equate to Alluvial pumping rates comparable to recent historical pumping, the Saugus Formation may be intermittently utilized at higher than historical pumping rates for dry-period and/or emergency water supply. Interpretation of historical pumping fluctuations and corresponding aquifer response suggests that such intermittent utilization of a small fraction of the Saugus' large storage capacity can successfully contribute to a firming of local water supplies while still accomplishing all the management objectives listed above, primarily via reduction in Saugus pumping during wet-normal conditions, possibly complemented by management actions to accelerate recharge of the Saugus.

III. Groundwater Basin Conditions

Occurrence of Groundwater

Groundwater in the Santa Clara River Valley East groundwater subbasin occurs in two aquifer systems, the Alluvium associated with the Santa Clara River and its tributaries, and the Saugus Formation. There are also some scattered outcrops of Terrace deposits in the basin that likely have the capacity to contain limited amounts of groundwater; however, since these deposits are located in limited areas that are situated at elevations above the regional water table and are also of limited thickness, they are of no practical significance as aquifers and have consequently not been developed for water supply.

The Alluvial aquifer system, of Quaternary to Holocene (Recent) geologic age, consists primarily of stream channel and flood plain deposits of the Santa Clara River and its tributaries. The Alluvium is deepest along the center of the present river channel, with a maximum thickness of about 200 feet near the area known as Saugus. It thins toward the flanks of the adjoining hills and toward the eastern and western boundaries of the basin and, in the tributaries, becomes a mere veneer in their upper reaches. The spatial extent of the Alluvium throughout the basin is illustrated in Figure 3-1.

The Alluvium is the most permeable of the local aquifer units. Based on well yields and aquifer testing, transmissivity values in the range of 50,000 to 500,000 gallons per day per foot (gpd/ft) have been reported for the Alluvium, with the higher values where the Alluvium is thickest in the center of the valley and generally west of Bouquet Canyon (Slade 1986 and 2002). The amount of groundwater in storage can vary considerably because of the effects of recharge, discharge and pumping from the aquifer. The maximum storage capacity of the Alluvium has been estimated to be about 240,000 acre-feet (af) (Slade, 1986 and 2002).

The Saugus Formation, of Pliocene to Pleistocene geologic age, has traditionally been divided into two stratigraphic units: the lowermost, geologically older Sunshine Ranch member, which is of mixed marine to terrestrial (non-marine) origin; and the overlying, or upper, portion of the Formation which is entirely terrestrial in origin. The Sunshine Ranch Member of the Saugus Formation has a maximum thickness of about 3,000 to 3,500 feet in the central part of the valley;

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however, due to its marine origin and fine-grained nature, it is not considered to be a viable source of groundwater for municipal or other comparable supply. Above the Sunshine Ranch Member, the Saugus Formation is coarser grained, consisting mainly of lenticular beds of sandstone and conglomerate that are interbedded with lesser amounts of sandy mudstone, which were deposited in stream channels, flood plains, and alluvial fans by one or more ancestral drainage systems in the valley. The sand and gravel units that represent aquifer materials in the upper part of the Saugus Formation are generally located between depths of about 300 and 2,500 feet. The spatial extent of the Saugus Formation throughout the basin is illustrated in Figure 3-1.

While much thicker and more spatially extensive throughout the basin when compared to the Alluvium, and while significant in terms of groundwater storage and individual well capacity, the Saugus Formation has typically lower values of transmissivity, in the range of 80,000 to 160,000 gpd/ft, with the higher values in the upper portions of the Formation (Slade, 1988 and 2002). The storage capacity of the Saugus has most recently been estimated to be 1.65 million acre-feet between depths of 300 feet and 2,500 feet (or the base of the Saugus or the base of fresh water if shallower than 2,500 ft.) (Slade, 2002).

Historical Groundwater Development

Of the two aquifer systems in the basin, the predominant development of groundwater for agricultural and municipal water supply has historically been from the Alluvium, a condition that remains the case at present. Prior to 1980, all water supply in the valley was developed from local groundwater; since 1980, local groundwater has been supplemented by imported surface water from the State Water Project. Details of historical water requirements, and water supplies to meet those requirements, are discussed and illustrated in Chapter IV of this Plan.

In general, over the last two decades, since the inception of SWP deliveries in 1980, total pumpage from the Alluvium has ranged from a low of about 20,000 afy (in 1983) to slightly more than 43,000 afy (in 1999). For comparison, agricultural pumpage from the Alluvium throughout the 1950's was consistently in the range of about 33,000 to 41,000 afy. During that same time, municipal pumpage was quite small, less than 4,000 afy. Overall, over the last two decades, there has been a change in municipal/agricultural pumping distribution, toward a slightly higher fraction for municipal water supply (from about 50% to nearly 60% of alluvial pumpage) which is indicative of the general land use changes in the area.

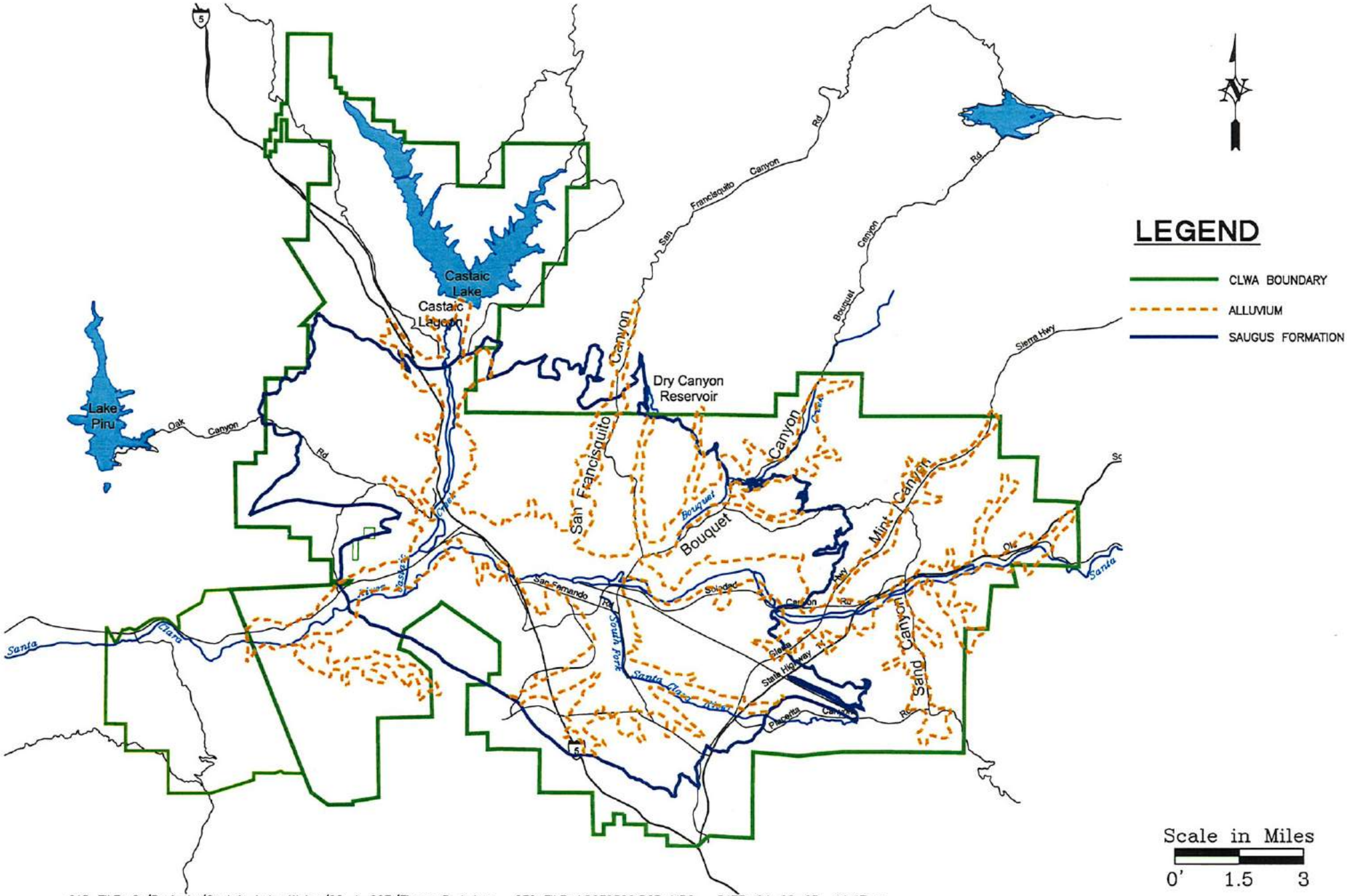

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Figure 3-1
Alluvial and Saugus Formations
Santa Clara River Valley East Groundwater Subbasin

Since 1980, total pumpage from the Saugus Formation has ranged between about 3,850 afy and nearly 15,000 afy; average pumpage over that period has been about 6,900 afy. The great majority of pumpage from the Saugus is for municipal supply (nearly 6,300 afy, or 92 percent, on average). For comparison, although historical Saugus pumping records prior to 1980 are limited, there appears to have been essentially no pumping from the Saugus prior to 1960 (on the order of about 100 af in most years, beginning in 1948), and some increased pumping for agricultural water supply beginning in about 1962 (about 900 af). The largest amount of agricultural pumping from the Saugus was during the mid-1960's, when annual Saugus pumpage was about 3,000 af. Agricultural pumping from the Saugus declined to near zero by the late 1970's, but has been generally in the 500 to 1,000 afy range since 1982. There was no Saugus pumpage for municipal supply in the early 1960's; limited data suggests that municipal pumping from the Saugus began in the 1970's, and reached nearly 5,000 afy by 1980-81. The most significant period of Saugus pumpage was 1991 through 1994, when pumpage ranged from 10,600 afy to nearly 15,000 afy and averaged over 12,000 afy, during which time SWP water deliveries were reduced at the end of extended drought conditions.

Groundwater Monitoring Network and Program

There is no formal groundwater monitoring network of wells for groundwater level measurements and/or groundwater quality sampling in the basin. Consequently, one component of this Plan is to formalize both a network of wells for groundwater monitoring and a program for water level measurements, water quality sampling, and other pertinent groundwater data collection (Primary Plan Element 1). Despite the lack of an existing formal groundwater monitoring network and program, however, there is a significant amount of historical groundwater data, some of which dates back into the 1940's, on which to base reasonable assessments of groundwater conditions in the basin. For example, groundwater level measurements have been made over varying periods of record in a total of 154 wells, mostly alluvial wells, throughout the basin. Similarly, groundwater quality data, consisting of varying numbers of constituents analyzed, are available from some wells, but a much smaller number than is the case for groundwater level data. These data, along with direct measurements or indirect estimates of pumpage, primarily from high capacity municipal and agricultural wells, allow for analysis of groundwater basin conditions, as discussed in this Plan, and also provide the bases on which a groundwater model can be developed (Primary Plan Element 3) and on which various management criteria such as operational yield, baseline groundwater quality, etc. can be determined (Primary Plan Elements 3, 6, etc.).

Groundwater Levels and Storage

Groundwater level data in various parts of the basin illustrate basin response to the historical pumpage from the Alluvium. Organized into hydrograph form (depth to groundwater or groundwater elevation vs. time), historical groundwater levels were lower in the 1950's and 60's than current levels in the middle to western part of the basin, logically in response to the higher pumpage of the 1950's before the importation of SWP water and the associated increase in return flows to the river that have augmented groundwater recharge in that part of the basin. Groundwater levels in those areas notably recovered as pumpage declined through the 1960's and 1970's. They have subsequently sustained generally high levels for much of the last 30 years, with two dry-period exceptions: mid-1970's and late 1980's - early 1990's; recoveries to previous high groundwater levels have followed both of those dry-period declines. Based on this data, there is no evidence of any historic or recent trend toward permanent water level or storage decline. In general, throughout the Alluvium, groundwater levels have been generally higher over the last 30 years than was consistently the case for the preceding 20 years (1950's - 60's).

During the last 20 to 30 years, in essentially all the alluvial portions of the basin, groundwater levels have fluctuated from near the ground surface when the basin is full, to as much as 100 feet lower during intermittent dry periods of reduced recharge. Selected hydrographs of groundwater elevations illustrate the above described conditions throughout the basin. Figure 3-2 illustrates groundwater level conditions and trends at multiple locations in the Alluvium along the main channel of the Santa Clara River, from east near the mouth of Sand Canyon, to the area between Mint Canyon and Bouquet Canyon, to farther west immediately below the mouth of Bouquet Canyon. Similar long-term conditions are evident in the tributary canyons.

A comment about some of the groundwater fluctuations illustrated in Figure 3-2 is appropriate since they are illustrative of the most substantial intermittent changes in the basin. As noted above, the Alluvium has historically experienced a number of alternating wet and dry hydrologic conditions as illustrated in Figure 3-2. Since the Alluvium is thinner to the east, the fluctuations in water levels of 75 to 100 feet impact well yields and pumping capacities when water levels are occasionally lower. When that occurs, as is currently the case due to locally dry hydrologic conditions, the affected purveyors shift a portion of their water demands to imported SWP water, thus reducing pumpage and reducing drawdown of water levels. Recovery of groundwater levels

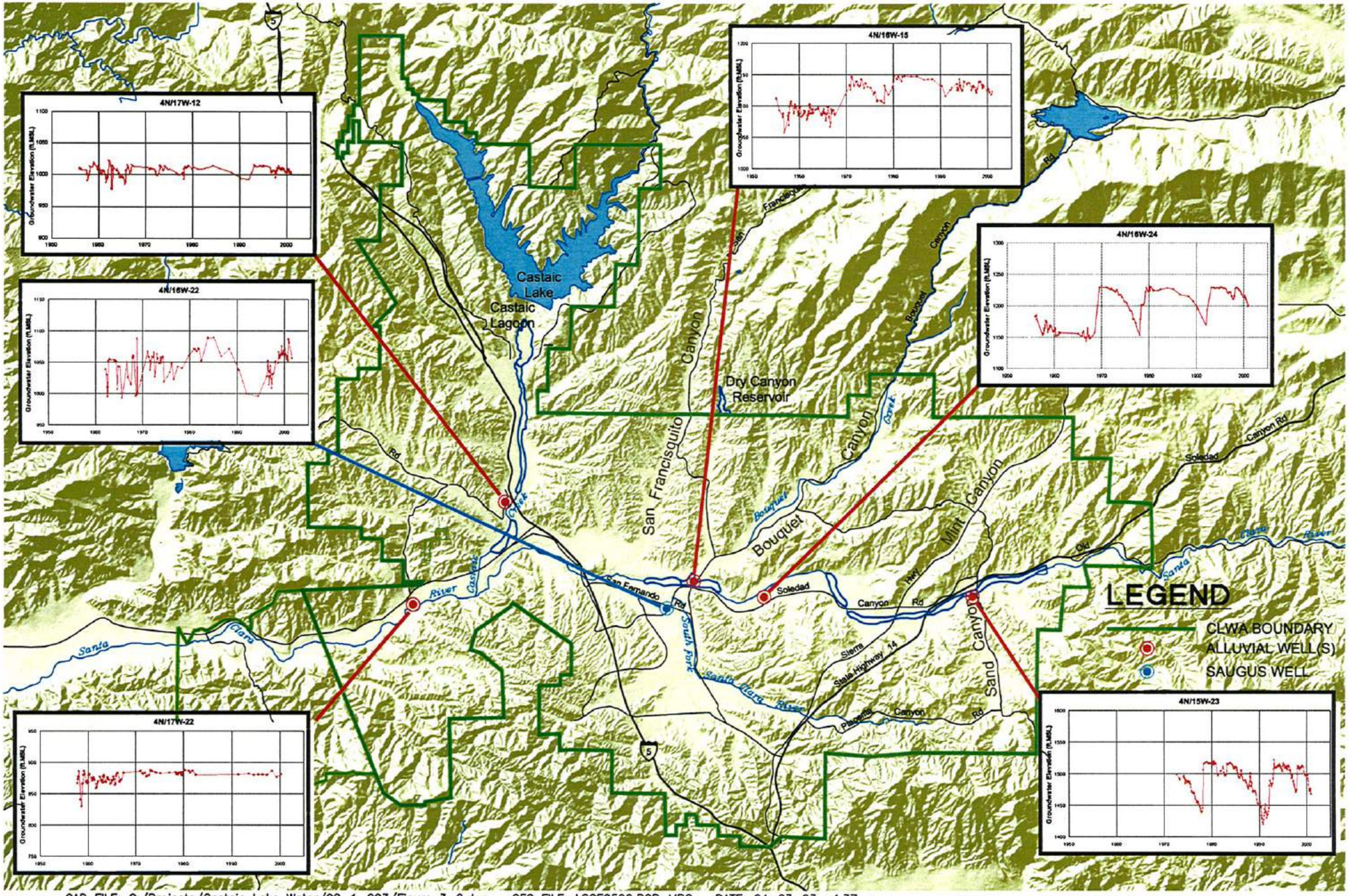

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Figure 3-2
Historical Groundwater Elevations
Santa Clara River Valley East Groundwater Subbasin

and storage occurs upon a return of stream flow to contribute to natural recharge.

Depending on the period of available data, all the hydrographs of alluvial groundwater levels show the same general picture: recent (last 30 years) groundwater levels are generally higher than over the preceding 20 years. In some locations, there are intermittent dry-period declines (and an associated use of some groundwater from storage) followed by wet-period recoveries (and associated refilling of storage space). On a long-term basis, whether over the last 20 years since the inception of conjunctive use via importation of SWP water, or over the last 40 to 50 years, the Alluvium shows no signs of water level-related overdraft, i.e., no trend toward decreasing groundwater levels and storage, a condition that is intended to be maintained via implementation of this Plan, e.g. via Primary Plan Elements 3 and 5.

Unlike the Alluvium, there are limited Saugus water level data; however, the limited data indicate that, although there have been seasonal water level changes in response to pumpage, the long-term trend in the Saugus (over the last 35 to 40 years) has been one of relative groundwater level stability (see, for example, Figure 3-2). There is no trend toward a sustained decline in Saugus water levels or storage that would be indicative of overdraft.

Land subsidence as a result of groundwater extractions is a concern in a number of groundwater basins in California. The potential for land subsidence caused by groundwater extractions derives from a combination of the geologic makeup of the aquifer materials and the history of groundwater level fluctuations. In the Santa Clara Valley East Subbasin, the most notable groundwater level fluctuations have occurred in the Alluvium to the east of Bouquet Canyon, with the greatest fluctuations (up to nearly 100 feet) recorded in the vicinity of Sand Canyon. Fortunately, those fluctuations have been intermittent, and have varied directly with local wet and dry conditions. From a subsidence perspective, they have also fluctuated in an unconfined aquifer that is comprised of essentially all coarse-grained material. The lack of any significant fine-grained material in the aquifer where groundwater levels have fluctuated results in two notable local conditions in regards to subsidence: there is no recorded historical subsidence or indirect evidence of its occurrence, i.e. subsidence-related impacts on surface structures, drainage facilities, etc.; and there is minimal potential for inelastic subsidence to occur in response to ongoing groundwater level fluctuations in the Alluvium.

The Saugus Formation contains a greater fraction of fine-grained material interbedded with the coarser aquifer materials that yield water to wells. Consequently, the Saugus has a greater

potential to undergo consolidation, with attenuant subsidence impacts at the ground surface, if groundwater levels are substantially lowered for long time periods. Historical Saugus pumping has not caused such conditions to occur. Current water supply planning, as described in this Plan, is to rely on the Saugus Formation for a relatively small component of water supply on an ongoing basis, with intermittent increased pumping during dry periods.

The long-term objective for groundwater management, as described in this Plan, is to not overdraft either the Alluvium or the Saugus, i.e. to not chronically lower groundwater levels. Satisfaction of the latter objective will have the correlative impact of minimizing the potential for inelastic land subsidence attributable to pumping from the Saugus Formation; combined with the lack of fine-grained material in the Alluvium, satisfaction of that objective will also have the correlative impact of ensuring the improbability of any subsidence attributable to pumping from that aquifer.

Groundwater Quality

Groundwater quality is, or course, a key factor in assessing both the Alluvial aquifer and the Saugus Formation as municipal and agricultural water supplies. At present, however, there is no convenient long-term record of water quality, i.e. water quality data in one or more wells that span several decades and continue to the present. Thus, in order to examine a long-term record of water quality in the Alluvium, an integration of individual records from several wells, completed in the same aquifer materials and in close proximity to each other, can be used to generally show long-term trends in groundwater quality. Figure 3-3 illustrates groundwater quality conditions and trends at multiple locations in the Alluvium along the main channel of the Santa Clara River from the area near the mouth of Mint Canyon, to areas immediately above and near the mouth of Bouquet Canyon, to the area below San Francisquito Canyon. Based on these records of groundwater quality, there have been historical fluctuations in concentrations of total dissolved solids (TDS), as well as corresponding fluctuations of individual constituents of TDS. In general, however, and similar to groundwater levels, there has been no long-term trend toward groundwater quality degradation.

Groundwater quality variations are common throughout the Alluvium and generally correlate inversely with precipitation and stream flow: wet periods have produced substantial recharge of higher quality (low TDS) water and dry periods have resulted in the notable declines in water levels described above, with a corresponding increase in TDS (and individual component

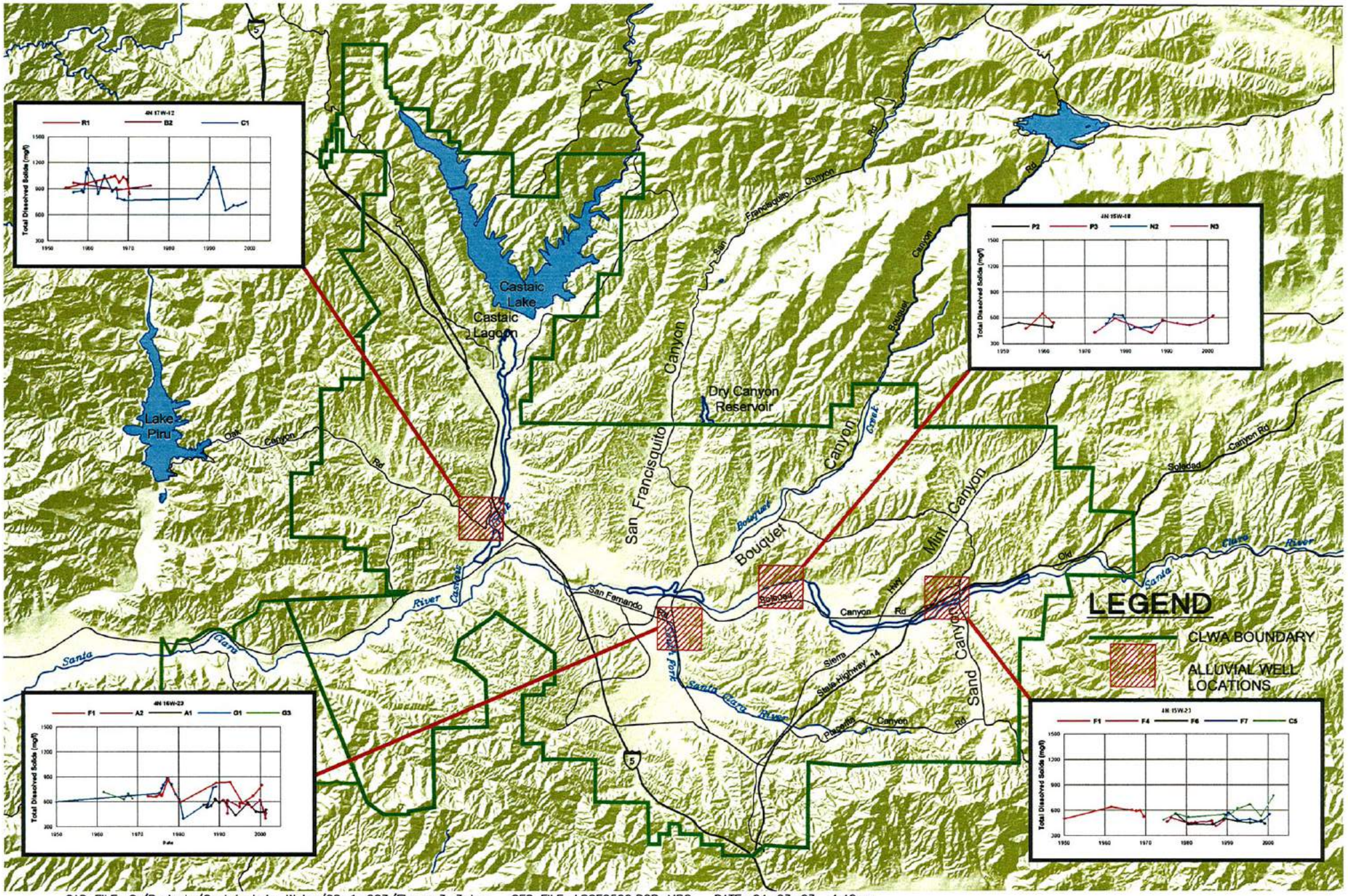

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Figure 3-3
Historical Groundwater Quality by Section
Santa Clara River Valley East Groundwater Subbasin

constituents) in the deeper parts of the Alluvium.

Due to a much more limited number of wells and the limited spatial extent of groundwater development in the Saugus Formation, long-term Saugus groundwater quality data are not sufficiently extensive to permit any sort of basin-wide analysis or assessment of pumping-related impacts on quality. Based on the most complete historical record, over the last 35 years, however, groundwater quality in the Saugus has remained generally constant. The Saugus Formation is, on a groundwater quality basis, a viable agricultural and municipal water supply.

The most notable groundwater quality issue in the basin centers around the detection and impact of perchlorate on several Saugus wells and one Alluvial well in the central part of the basin near the location of the former Whittaker Bermite facility, which is immediately southeast of the confluence of the main Santa Clara River and its South Fork tributary. In 1997, routine water quality sampling detected the presence of perchlorate in four municipal wells completed in the Saugus Formation (CLWA Santa Clarita Water Division Saugus Wells 1 and 2, Newhall County Water District Well 11, and Valencia Water Company Well 157). While there remains no primary or secondary drinking water standard for perchlorate, and although only some of the detected concentrations of perchlorate in the Saugus wells exceeded the Action Level established by the State Department of Health Services at that time (18 ug/l), all those wells were inactivated by their respective owners after detection of perchlorate; those wells remain out of municipal water supply service since then.

More recently, in late 2002, routine water quality sampling of Alluvial wells detected perchlorate in one of them (CLWA Santa Clarita Water Division Stadium Well) at a concentration which slightly exceeds the current Action Level (4 ug/l). This well has also been voluntarily inactivated, and remains removed from municipal water supply service.

This Plan, notably through Primary Plan Elements 1, 6 and 8, is intended to incorporate both short-term and long-term groundwater quality considerations in the management of the groundwater basin in order to formalize groundwater quality monitoring and assessment, to investigate and correct groundwater contamination problems, and to preserve or improve groundwater quality for ongoing water supply as well as for avoiding adverse water quality impacts on interconnected surface waters.

Areas of Concern and Identified Problems

A number of concerns have been expressed about groundwater conditions in the basin. While not all of the expressed concerns have been substantiated, they are listed and briefly discussed here, and they are addressed in the management objectives for the basin, intended to be achieved via implementation of the various primary and secondary elements in this Plan.

At present, the most notable concern in the basin is the impact of perchlorate contamination on a number of municipal water supply wells, thus affecting the available pumping capacity from some municipal wells. While perchlorate impacts on a few wells do not preclude the ability to pump groundwater in accordance with existing water supply plans, activities to characterize the contamination, and ultimately to control it and treat it, have been initiated in order to return the impacted wells' pumping capacity to water supply service. Primary Element 8 is included in this Plan to formalize the addressing of groundwater contamination issues in the basin.

Concern has also been expressed that groundwater development in the basin will adversely impact the quantity and/or quality of surface flows leaving the basin via the Santa Clara River. Such concern extends to the potential impact on groundwater in the next downstream basin, the Piru Basin in Ventura County. While there are no established provisions regarding surface flows out of the Santa Clara River Valley East subbasin, Primary Element 2 is included in this Plan to formally address the monitoring and management of surface water flows and quality within, and flowing out of, the basin. Some work is already ongoing related to this area of concern via a Memorandum of Understanding (MOU) among CLWA, other retail water purveyors within CLWA's service area, and United Water Conservation District, which manages surface water and groundwater in the downstream basins on the Santa Clara River in Ventura County. That cooperative effort, which is incorporated into this Plan via Primary Element 9, includes integration of databases, development of a numerical groundwater flow model, and interpretation and reporting on surface water and groundwater conditions.

A third expressed concern in the basin, is that groundwater is already overdrafted. Associated with that expressed concern is a related issue that reliance on overdrafted groundwater results in an overstated water supply in the basin. As discussed earlier in this section, long-term groundwater levels, storage, and quality all indicate the basin is in balance (i.e., no overdraft exists). As also discussed above, the importation of supplemental surface water over the last 23 years, and the associated initiation of conjunctive use operations have directly resulted in an

overall adequacy of water supplies while sustaining an undepleted groundwater supply. Primary Elements 3, 4 and 5 are key parts of this Plan to more formally quantify the yield of the groundwater basin, and to continue to meet overall water requirements via continuation of conjunctive use of local groundwater with imported supplemental surface water, ultimately complemented by integration of recycled water for non-potable water supply (Primary Element 7).

Finally with regard to areas of concern in the basin, the historically larger fluctuations in the eastern part of the basin have been highlighted for their impacts on private wells in that area. Some focused study has been done to address whether certain pumping directly affects private wells in Sand Canyon; its conclusions were that such direct effects were not occurring. Subsequently, a nearby development contracted for delivery of up to 120 acre-feet of imported SWP water from CLWA in order to reduce its use of groundwater for domestic and irrigation water supply. Primary Element 1 is partly intended to acquire site-specific data regarding private wells, their locations, the aquifers in which they are completed, their yields and pumping capacities as well as their quality, and their water level records. Primary Element 3 is partly intended to analyze such data in order to assess whether local aquifer depletion is occurring and, if so, what remedy is appropriate.

IV. Historical and Projected Water Requirements and Supplies

Historical Water Requirements

The initial development of water supplies in the Santa Clarita area began in the 1800's for irrigation on the San Francisquito Ranch after its purchase by Henry Mayo Newhall. While there are some records in the form of waterworks drawings that show early diversion and distribution facilities on the ranch in 1911 and some mapping of well locations in the 1930's, the earliest complete records of water use date from shortly after the end of World War II. From 1947 through the mid 1960's, groundwater pumping for agriculture ranged from about 27,000 to about 42,000 acre-feet per year (afy). For most of the same period, until 1960, there are no detailed records of water use for municipal supply. The first records of municipal water use begin in 1960, when municipal water requirements were about 5,000 afy; by the mid-1960's, municipal water requirements had increased to about 10,000 afy. Throughout that time, all municipal water supply was from local groundwater.

From the mid-1960's through about 1980, groundwater pumping for agricultural water supply declined into the range of about 10,000 to 15,000 afy. In the late 1980's through the early 1990's, agricultural groundwater pumping further declined into the range of about 8,000 to 10,000 afy; over about the last ten years, agricultural water requirements, which continue to be fully met by local groundwater pumping, have been in the range of about 12,000 to 15,000 afy. The history and trends of agricultural water use in the basin are illustrated in Figure 4-1.

Detailed records of municipal water use are not available from the mid-1960's through 1980, when imported surface water was first used in the basin for municipal water supply. However, the available municipal water use data at the beginning and at the end of that period, combined with estimated declining agricultural water use for the same period, suggest there was a generally steady increase in municipal water use from about 11,000 af in 1966 to about 22,000 af in 1980. Since then, municipal water use has increased to about 68,000 afy. With the addition of imported surface water from the State Water Project beginning in 1980, however, groundwater pumping for municipal supply declined in the early 1980's. Throughout the 1990's, municipal

pumping fluctuated between about 27,000 and 32,000 afy. The history and trend of municipal groundwater use in the basin are illustrated in Figure 4-1.

As noted above, until 1980, all water supply in the basin was from local groundwater. Imported surface water was first available from the State Water Project (SWP) in 1980, when a total of 1,125 af were imported into the basin. Since then, importations of SWP water have increased in two separate steady trends, interrupted by a notable decrease at the end of, and following, the 1987-1992 drought period: a steady increase beginning in 1980, to about 21,600 afy in each of 1989 and 1990, followed by a substantial decrease, to less than 8,000 af in 1991, and then a steady increase back to about 21,000 afy in 1997 and 1998, followed by further increases to nearly 42,000 af in 2002. The history and trends in importation of SWP water to the basin are illustrated in Figure 4-2, which also illustrates the historical trends in groundwater pumping and total water use in the basin since the importation of SWP water.

In the context of this groundwater management plan, the historical utilization of imported SWP water to augment local groundwater represents the initiation of conjunctive use of surface water and groundwater supplies, a groundwater management principle which is intended to be continued via adoption of Primary Element 5 of this plan.

Projected Water Requirements

Detailed projections of municipal water requirements were most recently completed as part of the Urban Water Management Plan prepared by CLWA and the municipal water purveyors (Newhall County Water District, Santa Clarita Water Company, and Valencia Water Company) in 2000. Those projections, which are forecast for a 20-year period, also recognize an ongoing but decreasing agricultural water demand over the same period, from about 15,000 afy in 2005 to about 7,000 afy by 2020. The municipal water demand projections in the Urban Water Management Plan are derived from utilization and interpretation of multiple projection methods, including per-capita water-use applied to population projections; extrapolation of number of service connections (using two different projection techniques, an average rate and an accelerated rate projection) applied to the rate of service connection additions since 1990; and land use projections combined with unit water use factors on multiple land use categories (urban, including residential, commercial, industrial and recreational; irrigated agricultural; and vacant and open space). The water demand projections in the Urban Water Management Plan also consider weather effects (variations due to hot-dry years vs. cool-wet years) and conservation

Historical Groundwater Production
Upper Santa Clara Valley Groundwater Basin
East Subbasin

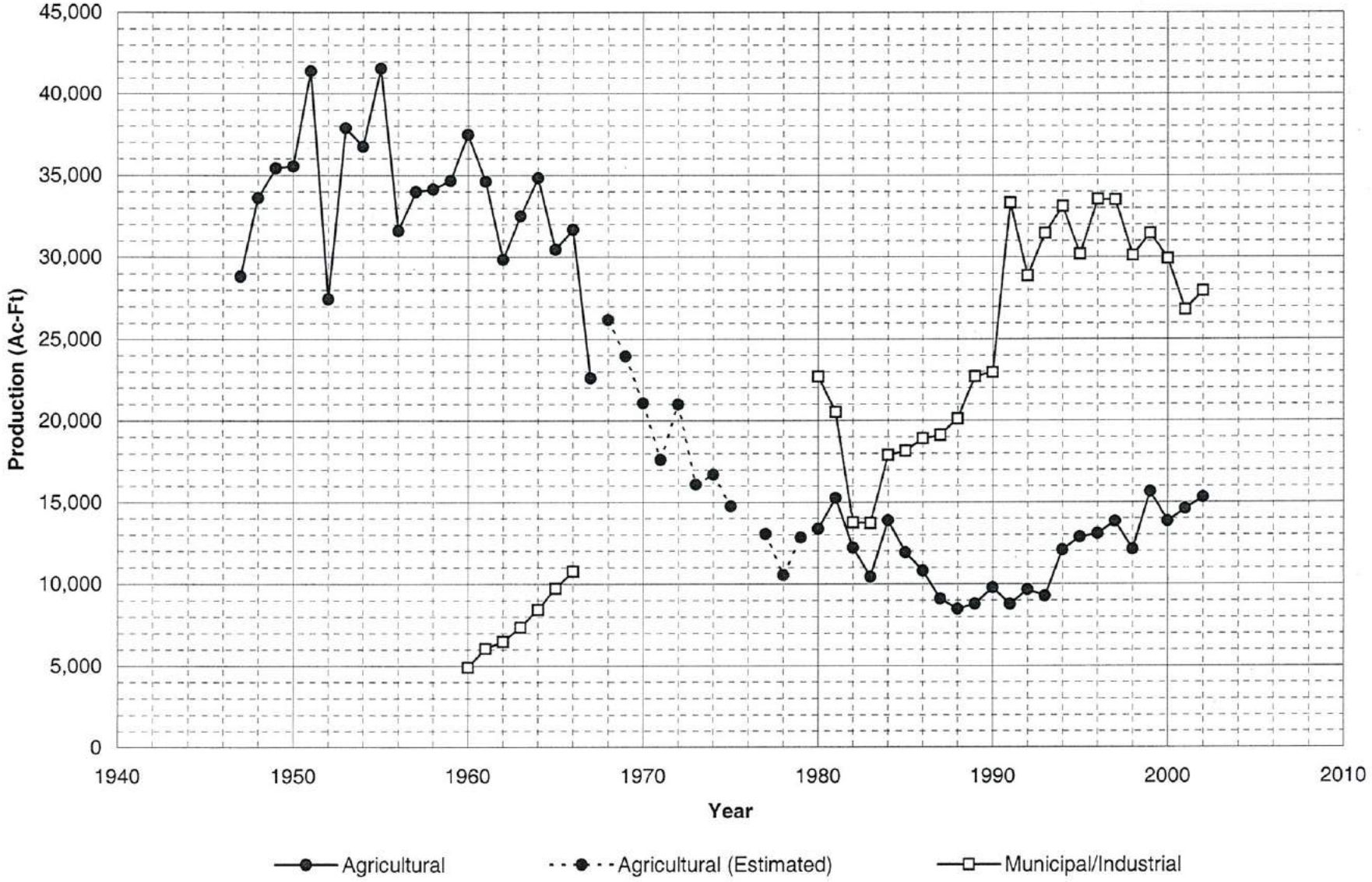


Figure 4-1

effects on water usage.

The net result of application and interpretation of the various water demand projection methods in the 2000 Urban Water Management Plan is summarized in Figure 4-2, which reflects projected urban and agricultural water demand through 2020, absent potential increased conservation savings, which are estimated to be ten percent of urban water demand. Numerically, urban water use without increased conservation savings is projected to increase to nearly 67,000 afy by 2005, and then continue to increase to 106,000 afy by 2020. As noted above, agricultural water use over the same period is projected to decrease to 15,000 afy by 2005, followed by an ongoing decrease to 7,100 afy by 2020. In addition to the graphical presentation of projected water demands in the basin through 2020 in Figure 4-2, projected water demands are tabulated, both with and without potential increased conservation savings, in Table 4-1.

Table 4-1
Projected Normal/Average Year Water Demands
(acre-feet per year)

	2005	**2010**	**2015**	**2020**
Urban	66,600	77,700	90,900	106,000
Agriculture	15,100	12,400	9,800	7,100
Total Projected Demand	**81,700**	**90,100**	**100,700**	**113,100**
Increased Conservation Savings	6,600	7,700	9,100	10,600
Total Projected Demand *(with increased conservation)*	**75,100**	**82,400**	**91,600**	**102,500**

Existing and Projected Water Supplies

As noted above, existing water supplies to meet current water demands are comprised of local groundwater and imported SWP surface water. In 2001, for example, to meet a total water demand of nearly 76,800 af, local groundwater pumping amounted to 41,400 af, (about 54% of total demand) and imported SWP water amounted to 35,400 af (about 46% of total demand).

Water supplies to meet projected water demands are expected to continue to be primarily a combination of local groundwater and imported SWP surface water, augmented by local recycled

Historical and Projected Water Use
Upper Santa Clara Valley Groundwater Basin
East Subbasin

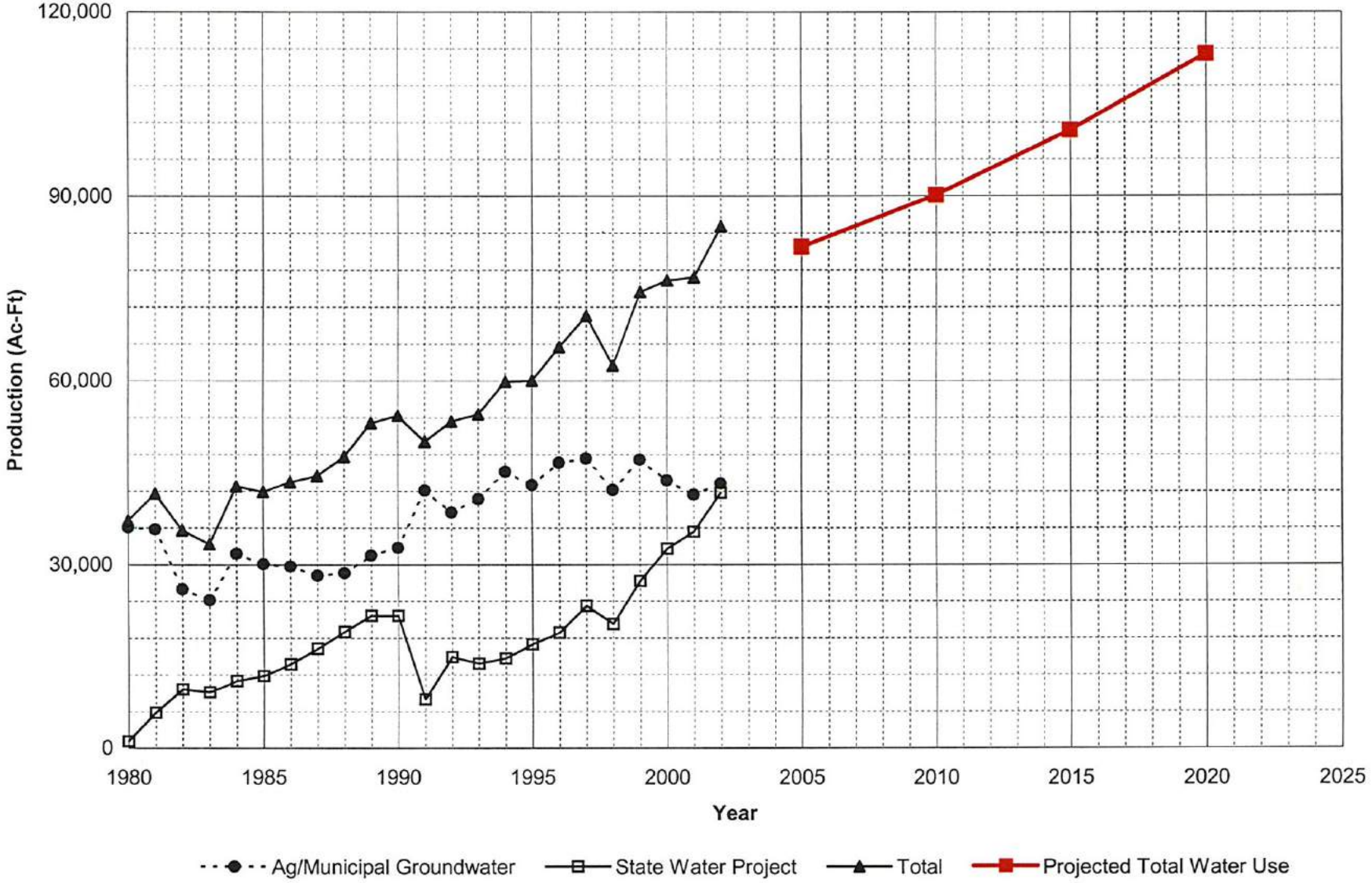


Figure 4-2

water and possibly some water supply derived from water transfers and desalination outside the basin.

Local Groundwater - Local groundwater has historically been developed from the two aquifers that comprise the groundwater basin, the Alluvium that underlies the Santa Clara River and its tributaries, and the Saugus Formation that underlies much of the CLWA service area. Those two aquifers, and the groundwater basin they comprise, are the focus of this groundwater management plan. Based on historical experience and observation of groundwater conditions, it is currently expected that ongoing utilization of local groundwater will continue to be in amounts that are generally comparable to what has historically been pumped, 30,000 to 40,000 afy from the Alluvium and 7,500 to 15,000 afy from the Saugus Formation. It is also expected that there is some additional development potential in the Saugus Formation, in the range of 10,000 to 20,000 af which might be intermittently extracted during one or more dry years when supplemental imported water supplies might be reduced. Ultimately, it is expected that local groundwater will continue to be a component of water supply in the basin at appropriate production levels from both aquifers. The intent of this groundwater management plan is to ensure that ongoing utilization of local groundwater continues to result in acceptable aquifer conditions, i.e. avoidance of overdraft (Primary Plan Element 3), no degradation of quality (Primary Plan Element 6), no adverse impacts to surface waters (Primary Plan Element 2), all via continuation of conjunctive use operations that have been ongoing since the initial importation of supplemental surface water in 1980 (Primary Plan Element 5) and via monitoring and interpretation of surface water and groundwater conditions on an ongoing basis (Primary Plan Elements 1 and 2).

Supplemental (SWP) Surface Water - CLWA has a Table A contract amount of 95,200 af of water from the SWP. CLWA's original contract, signed in 1963, was for 23,000 af; that Table A amount was later increased to 41,500 af. In 1988, CLWA purchased a Table A amount of 12,700 af from Devil's Den Water District, and it acquired another 41,000 af of Table A amount in 1999 from Kern County Water Agency and its member district, the Wheeler Ridge-Maricopa Water Storage District. There is ongoing CEQA-related litigation over the most recent acquisition of the 41,000 af Table A amount. However, there has been no invalidation of the completed agreement to transfer the 41,000 af Table A amount to CLWA and current water supply planning includes that Table A amount as CLWA corrects the CEQA technicality by preparing a new EIR to address the environmental consequences of the transfer.

Recycled Water - In 1993, CLWA prepared a draft Recycled Water System Master Plan that outlined a multi-phase program to integrate recycled water into the overall water supply system in the basin. Phase I of that project, which will deliver approximately 1,700 afy, began deliveries of recycled water for golf course irrigation in mid-2003. Overall, by 2020, recycled water is expected to ultimately reclaim up to 17,000 afy of treated waste water suitable for irrigation of golf courses, landscaping, and other non-potable uses.

V. Elements of the Groundwater Management Plan

As part of long-term water supply planning in the Santa Clara River Valley East groundwater subbasin, Castaic Lake Water Agency (CLWA) and the municipal water purveyors in the basin, in concert with other groundwater pumpers in the basin, began conjunctive use operations in 1980 by importing supplemental surface water from the State Water Project and integrating it with local groundwater to meet all the water requirements in the basin. Prior to that time, and continuing to the present, various groundwater pumpers and other entities in the basin, including CLWA, have collected groundwater and related data on which historical and ongoing analyses of groundwater basin conditions have been made. Those monitoring efforts and basin analyses have allowed CLWA and other entities in the basin to progressively define and understand basin conditions, and to continue to meet increasing water demands over the last 23 years. Information derived from the monitoring and management efforts to date has allowed the various public and private pumpers in the basin to continue to rely on the groundwater basin for some or all of their water supply without significant concern that the resource was either overdrafted or otherwise negatively impacted.

In light of the preceding, complemented most recently by the Memorandum of Understanding process that has initiated integrated management with United Water Conservation District, which serves as the manager of adjacent downstream basins on the Santa Clara River (as described in Primary Element 9), local groundwater management has already been initiated consistent with the opportunity provided by Water Code Section 10753. However, despite those ongoing accomplishments, CLWA recognizes the concerns and issues that are discussed herein relative to groundwater and the adequacy of water supplies in the basin. With that recognition, and in part prompted by the requirements of AB 134, CLWA has prepared this broader-based groundwater management plan.

To continue historical groundwater management activities and to address identified concerns and issues related to groundwater and water supply in the area, this Groundwater Management Plan has been developed to provide a framework for present and future actions. As has been the case for the groundwater management activities by CLWA and other local entities over the past 23 years, it is expected that this plan will be updated as new data are developed, particularly in light

of the key role that groundwater monitoring (water levels and quality) has played, and will continue to play, in defining groundwater conditions and aquifer response to management actions.

The management objectives, or goals, for the Santa Clara River East groundwater basin include the following:

Goal 1: Development of Local Groundwater for Water Supply
Goal 2: Avoidance of Overdraft and Associated Undesirable Effects
Goal 3: Preservation of Groundwater Quality
Goal 4: Preservation of Interrelated Surface Water Resources

To accomplish those goals, with recognition of the opportunities encouraged by Water Code Section 10750 et seq. for local agency management of groundwater resources, this plan incorporates a number of components which are divided into primary, or essential, elements and secondary, or potential, elements. In both categories, the elements formally recognize the effectiveness of a number of ongoing water resource management activities. They recognize the need for additional activity, such as expanded conjunctive use of supplemental surface water, and recycled water, with local groundwater. They also reflect the wider focus on local groundwater management, such as continuing cooperation with the municipal water purveyors and other pumpers in the basin, and with other water resource management entities on the Santa Clara River, most notably United Water Conservation District, to address the impacts of regional resource opportunities and/or challenges. In summary, this Groundwater Management Plan will enable CLWA, the retail water purveyors, and their neighbors to continue use of local groundwater for regular water supply, to expand their use of local groundwater during dry periods or emergencies, and to work with other agencies via implementation of the following management plan elements.

Primary (Essential) Plan Elements

1. Monitoring of Groundwater Levels, Quality, Production and Subsidence
2. Monitoring and Management of Surface Water Flows and Quality
3. Determination of Basin Yield and Avoidance of Overdraft
    - wet and dry period pumping
    - control of well field drawdown

4. Development of Regular and Dry Year/Emergency Water Supply
5. Continuation of Conjunctive Use Operations
6. Long Term Salinity Management
7. Integration of Recycled Water
8. Identification and Mitigation of Soil and Groundwater Contamination
    - involvement with other local agencies in investigation, cleanup, and closure
9. Development and Continuation of Local, State and Federal Agency Relationships
10. Groundwater Management Reports

Secondary (Potential) Elements

1. Continuation of Public Education and Water Conservation Programs
2. Identification and Management of Recharge Areas and Wellhead Protection Areas
    - involvement in land use planning process
3. Identification of Well Construction, Abandonment, and Destruction Policies
    - water quality protection
    - manage vertical distribution of pumpage
4. Provisions to Update the Groundwater Management Plan

Primary Element 1 - Monitoring of Groundwater Levels, Quality, Production, and Subsidence

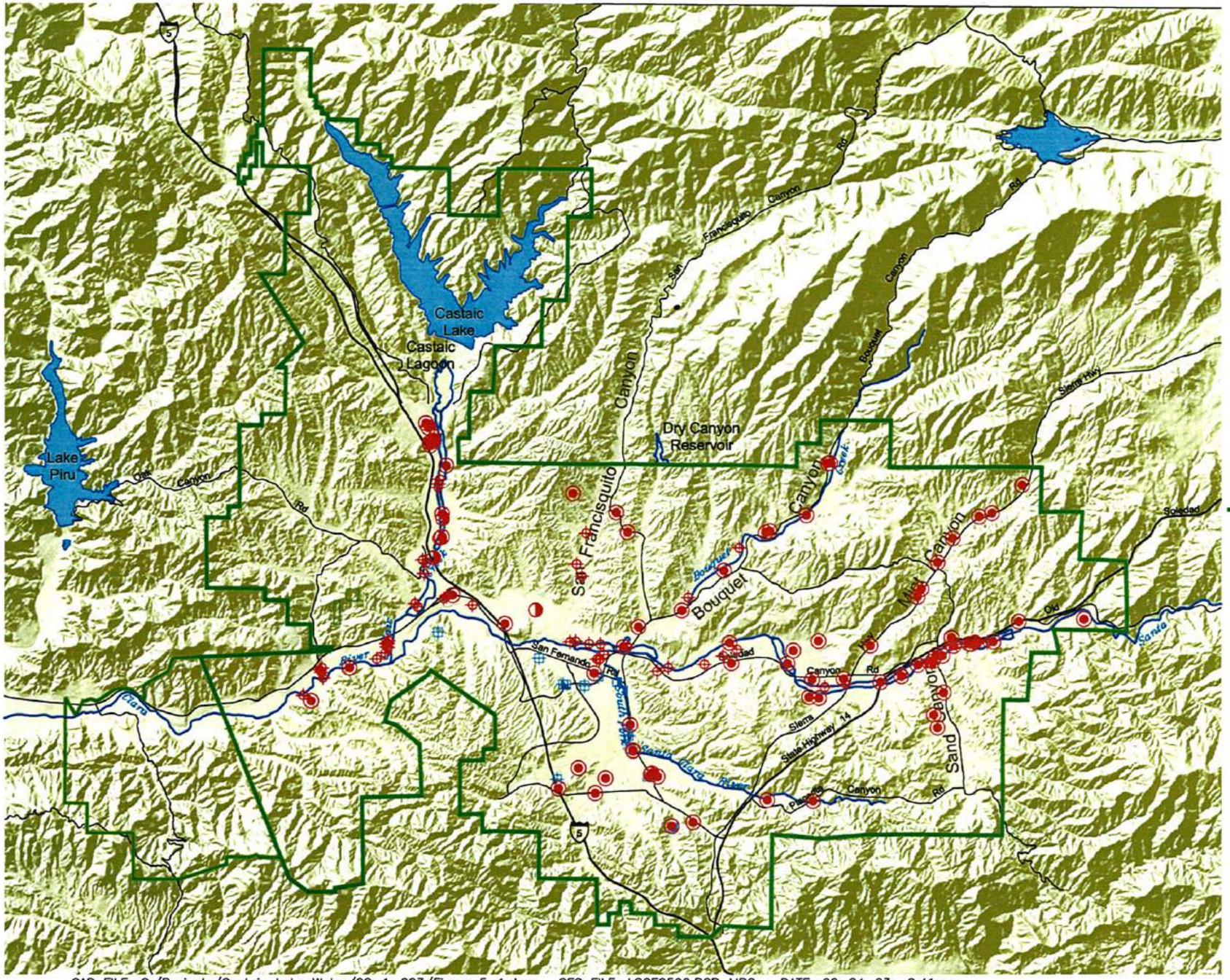
Prior to 1980, all water supply in the Upper Santa Clara River Area was developed from local groundwater; since 1980, imported surface water has become an increasing component of overall water supply in the area, but groundwater continues to meet all agricultural water demand and a significant part of municipal water demand. As a result of the long term development and use of groundwater in the area, there is a fairly substantial amount of historical groundwater level data, and a useful amount of groundwater quality data and groundwater pumping data that has been collected in the basin. All the available historical groundwater level, quality, and pumping data have been organized into a computerized data base for the Upper Santa Clara River Area. That data base, while separate, has been coordinated with an equivalent data base maintained by United Water Conservation District for the downstream basins on the Santa Clara River. The intent of database coordination has been to facilitate interpretation and reporting on groundwater and other water resource related issues by the respective agencies overlying the various basins along the river.

The networks of wells from which groundwater level and groundwater quality data have been collected are illustrated in Figures 5-1 and 5-2. The networks are comprised of a combination of active production wells, inactive production wells, and dedicated monitoring wells, shown on Figures 5-1 and 5-2. Data collection has historically varied from randomly infrequent to regularly scheduled but infrequent (e.g. semi-annual). The historical data collection efforts cannot be classified as an organized area-wide program of groundwater data collection, there are generally sufficient data available on which to interpret basin conditions. Ultimately, it is recognized that monitoring of existing wells, and expansion of the network of both production and monitoring wells, are key to accomplishing all the goals for the basin in this management plan. Monitored groundwater levels, quality, and pumping will collectively provide the basis for defining basin conditions and developing operational protocols that allow conjunctive use to support ongoing groundwater supply while avoiding undesirable conditions such as chronically depressed groundwater levels or degraded groundwater quality. Thus, a primary element of this plan is to develop and implement a groundwater monitoring program that is comprised of a network of wells, mostly as illustrated in Figures 5-1 and 5-2, but possibly expanded to include some dedicated monitoring wells as well as some potential new production wells. The frequencies and types of groundwater data collection will vary as a function of specific monitoring objectives in various parts of the basin. For initial implementation purposes , basin-wide groundwater monitoring protocols (locations and types of measurements, frequencies, etc.) are included in the Appendix to this Plan.

It should be noted, in light of the lack of historical subsidence and the low potential for it to occur as discussed in Section III above, that no formal subsidence monitoring is planned, i.e. no extensometers, fixed-point ground surveys or remote sensing. However, if the analysis of planned additional dry-year pumping indicates the potential for subsidence attributable to lower groundwater levels, monitoring or other appropriate action (e.g. re-distributed or reduced pumping) will be undertaken.

Primary Element 2 - Monitoring and Management of Surface Water Flows and Quality

The geologic and hydrologic configuration of the groundwater basin and the Santa Clara River system that overlies the aquifers in the basin is such that the River and the Alluvial aquifer can directly interact. Further, although the Saugus Formation has hydraulic characteristics that indicate it to be locally confined, groundwater can move between the Alluvium and the Saugus. The net result of the overall river-aquifer configuration is that groundwater is readily recharged



LEGEND

- ACTIVE ALLUVIAL WELL
- INACTIVE ALLUVIAL WELL
- ACTIVE SAUGUS WELL
- INACTIVE SAUGUS WELL
- SAUGUS MONITORING WEL
- UNKNOWN ALLUVIAL WELL
- CLWA BOUNDARY

Scale in Miles

0' 1.5 3

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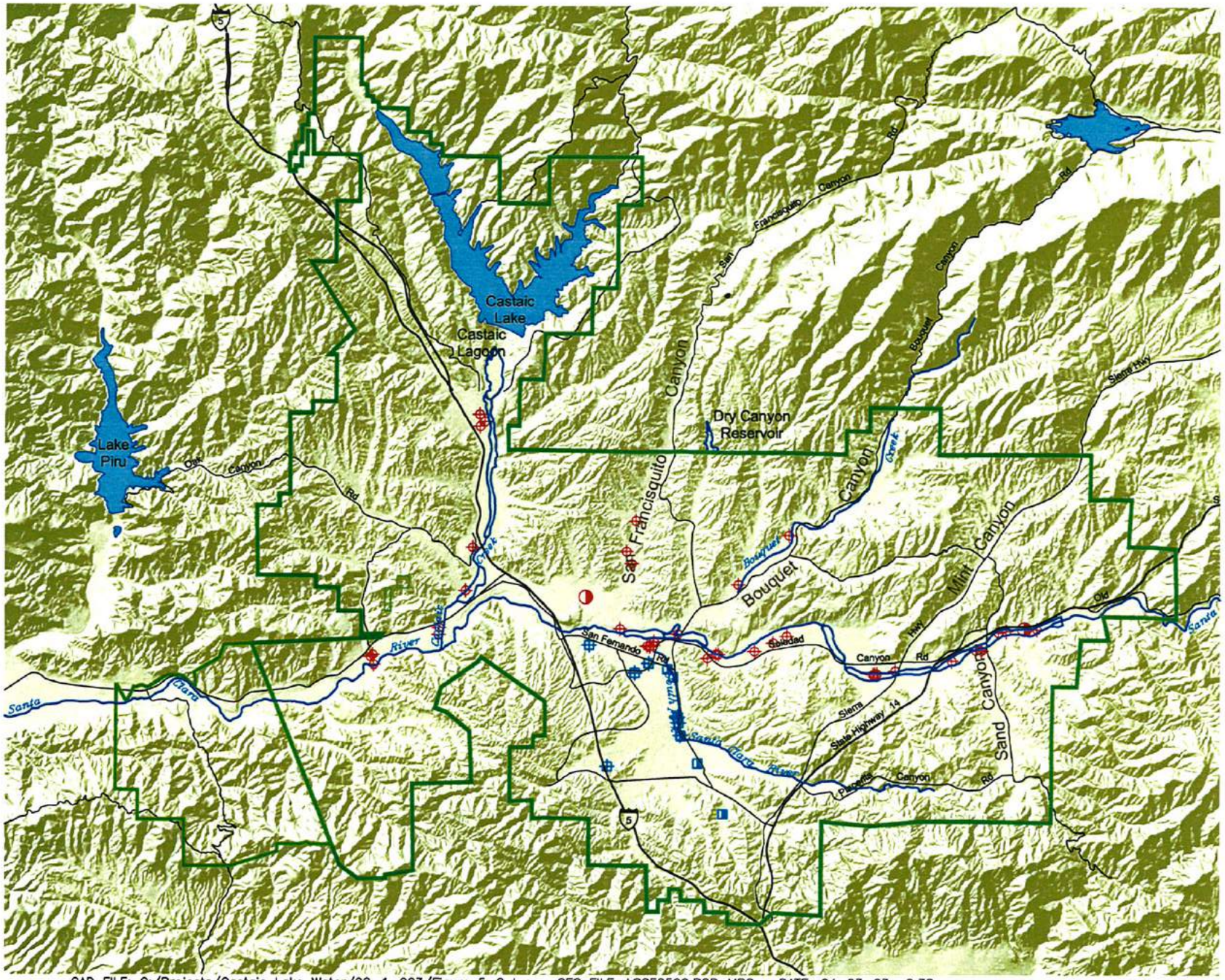
Figure 5-1
Water Level Monitoring Well Network
Santa Clara River Valley East Groundwater Subbasin



LEGEND

- ACTIVE ALLUVIAL WELL
- INACTIVE ALLUVIAL WELL
- ACTIVE SAUGUS WELL
- INACTIVE SAUGUS WELL
- CLWA BOUNDARY

Scale in Miles

0' 1.5 3

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Figure 5-2
Water Quality Monitoring Network
Santa Clara River Valley East Groundwater Subbasin

by periodic natural surface water flows in parts of the basin, generally to the east of Bouquet Canyon; and groundwater discharges to the river in other parts of the basin, generally to the west of Bouquet Canyon. As a result of the latter groundwater discharges to the river, in combination with treated waste water discharges from the two local regional treatment plants, there is a significant surface water outflow from the basin in the Santa Clara River. That surface water flow to the west across the County line has increased over the last 20 years (Figure 5-3).

When considered in concert with the other elements of this groundwater management plan, a number of challenges related to surface water flow and quality are evident. First, knowledge of surface flow rates and quality, and variations in both, will be essential to incorporating surface water considerations into management of the interconnected aquifer system. Thus, monitoring of surface water flows and quality will be part of this plan; and the resultant data will be incorporated in the database of groundwater data that results from implementation of this element and Primary Element 1.

Secondly, continuation of some surface flow and non-degradation of surface water quality would appear to be appropriate objectives, particularly as recycled water use is integrated into the overall water supply in the basin, and as dry-year dependence on groundwater increases. Those issues have begun to be addressed in the MOU process with neighboring United Water Conservation District, as described in Primary Element 9 of this Plan, but they will be addressed on a more comprehensive basis as monitored data is collected, as a numerical groundwater flow model is developed and utilized (Primary Element 3), and as recycled water becomes part of the integrated water supply (Primary Element 7). Basin management of surface water flows and quality will also relate to potential groundwater management actions intended to augment yield, e.g. artificial groundwater recharge (Primary Elements 3 and 5), and groundwater management actions intended to preserve groundwater quality (Primary Element 6). For initial implementation purposes, surface water monitoring protocols (locations and types of measurements, frequencies, etc.) are included in the Appendix to this Plan.

In light of the preceding, this plan element is included in the overall groundwater management plan to address surface water flows and quality in concert with analysis and management of groundwater levels and quality. The implementation of this plan element will be essential to accomplishment of the fourth management objective (goal) for the basin.

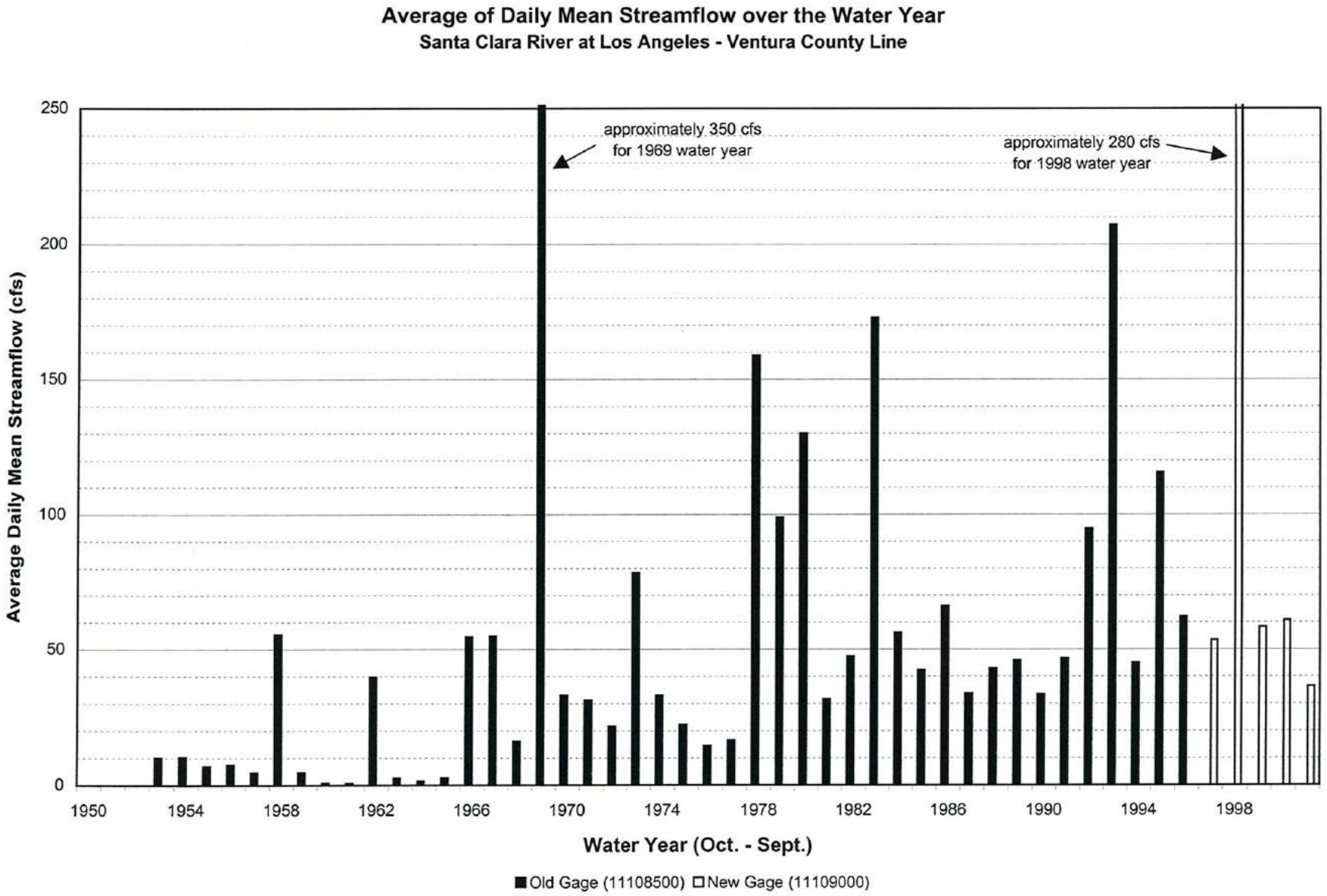

Average of Daily Mean Streamflow over the Water Year
Santa Clara River at Los Angeles - Ventura County Line
approximately 350 cfs
for 1969 water year
approximately 280 cfs
for 1998 water year
Average Daily Mean Streamflow (cfs)
250
200
150
100
50
0
1950
1954
1958
1962
1966
1970
1974
1978
1982
1986
1990
1994
1998
Water Year (Oct. - Sept.)
Old Gage (11108500)
New Gage (11109000)

Figure 5-3

Primary Element 3 - Determination of Basin Yield and Avoidance of Overdraft

In order to accomplish all the goals for the basin, it will be essential to determine what yield can be developed on both a regular and an intermittent (dry period or emergency) basis. Such a determination of basin yield will be made to accomplish the main objective of operating within the yield of the groundwater basin, avoidance of overdraft.

On a long-term basis, there has not been any widespread, steady degradation of groundwater conditions that might be indicative of overdraft, i.e. decrease in groundwater levels or storage as a result of pumping in excess of the yield of the basin. There have been, and continue to be, short-term fluctuations in groundwater levels that are basically related to variations in local hydrological conditions, alternating increases and decreases in storage in response to wet and dry conditions (and associated fluctuations in recharge and pumping). Such fluctuations are typical of groundwater basin conditions in any conjunctive use setting, such as in this basin; groundwater is utilized from storage during dry years, or dry periods, and that storage is replenished during alternate wet years, or periods. The observation of these historical groundwater conditions, in combination with knowledge of pumpage from both the Alluvial and Saugus Aquifers, has led to current operational practices as well as general expectations regarding the approximate yield of the local groundwater system.

While historical operating experience, complemented by observed groundwater conditions, is an appropriate basis for generally planning for available groundwater supplies, it is possible and appropriate to more precisely analyze the basin to determine values or ranges of yield under varying hydrologic conditions, and to assess the impacts of various management actions that might be implemented in the basin. The MOU process described in Primary Element 9 of this Plan includes the development of a numerical groundwater flow model which is intended to be utilized for determination of the yield of the basin under existing land use and under existing groundwater and surface water development conditions. It is also expected to be used for implementation of this Plan Element to assess the yield of the basin under future land use conditions as well as future ranges of surface water importation, groundwater development, and recycled water use through varying hydrologic conditions, i.e. wet and dry periods that affect the availability of imported surface water.

The ultimate intent of this Plan Element is to develop an understanding and quantification of the yield of the basin, under varying hydrologic conditions and developing local cultural conditions,

so that groundwater development and use can be managed in such a way to meet an appropriate fraction of total water demand while avoiding levels of groundwater use that would result in overdraft conditions. Thus, implementation of this Plan Element is essential to accomplishing the first and second management objectives (goals) for the basin.

Primary Element 4 - Development of Regular and Dry Year/Emergency Water Supply

The most recent updated Urban Water Management Plan (UWMP, December 2000) prepared by CLWA and the retail water purveyors in the basin (Newhall County Water District, Santa Clarita Water Company and Valencia Water Company) includes plans to develop 30,000 to 40,000 acre-feet per year (afy) from the Alluvial aquifer and 7,500 to 15,000 afy from the Saugus Formation in average/normal years. Both ranges of numbers are consistent with recent historical pumping that has not resulted in any indication of overdraft or other undesirable conditions. The UWMP also includes plans to slightly reduce Alluvial pumping in dry years (in recognition of historical experience with decreased groundwater levels in the eastern part of the basin during dry periods) to 30,000 to 35,000 afy, while potentially increasing dry-period Saugus pumping to 21,000 to 35,000 afy depending on the duration of dry conditions.

A major consideration in this plan is the accomplishing ~~of~~ this element in concert with Primary Element 3, i.e. development of both regular and dry year/emergency groundwater supply within the yield of the basin in order to avoid overdraft. Toward that goal, the model described in Primary Element 3 will be used to analyze projected results, i.e. groundwater levels, storage and stream flow impacts, in order to design the optimal distribution of pumpage or to refine the ranges of regular or dry period/emergency pumping volumes. The result will facilitate a water transmission and distribution design, and will also facilitate planning for supplemental water supplies and planning for proactive recharge activities to augment basin yield as necessary to meet water supply requirements. Thus, implementation of this Plan Element, within the confines of Primary Element 3, will be essential to accomplishment of the first management objective (goal) for the basin.

Primary Element 5 - Continuation of Conjunctive Use Operations

Beginning with the initial delivery of imported surface water from the State Water Project (SWP) in 1980, CLWA and the retail water purveyors in the basin have been practicing the conjunctive

use of imported surface water and local groundwater. Conjunctive use in this setting has consisted of meeting water demands with a combination of imported surface water and local groundwater. Groundwater pumping has remained within a range that has not caused any evidence of overdraft, or associated undesirable impacts, and has fluctuated within that range to meet a larger fraction of water demand during periods of reduced surface water availability, such as at the end of the 1987-1992 drought and for several years immediately thereafter. Imported surface water use, on the other hand, progressively increased from 1980 through 1990, substantially decreased in the early 1990's due to extended drought conditions in Northern California, returned slowly to pre-drought levels over about a five year period, and has progressively increased again since 1996. The historical trend in water demand and the trends in groundwater and imported (SWP) surface water use to meet that demand are illustrated in Figure 5-4.

Conjunctive use of local groundwater and imported surface water will continue to be a key element in meeting all the goals for the basin, most notably utilizing groundwater for water supply without overdrafting the basin. Historical experience with groundwater pumping and aquifer response to varying hydrologic conditions has shown that the groundwater basin can support notable variations in pumping during wet and dry periods, but it cannot support continuous pumping at rates high enough to meet total local water demand. Thus, utilization of imported surface water in conjunction with local groundwater is essential to the management of groundwater for water supply without overdrafting that resource.

As part of conjunctively using surface water and groundwater, it is recognized that, particularly when the surface water supply is imported from the State Water Project, there will be variations in the amount of available surface water supply from year to year. Similarly, there are expected to be variations in local groundwater conditions as a function of local hydrologic conditions which affect, among other things, the natural recharge to the groundwater basin from year to year. In the case of this basin, local (Southern California) hydrology which affects local groundwater conditions may not necessarily be the same as the hydrology in a distant (i.e., northern California) location that directly affects the availability of supplemental, imported surface water in any given year. Thus, conjunctive use management is necessary to ensure that the groundwater basin is maintained to meet a regular component of water supply and to also provide a larger component of water supply during "dry periods" that affect supplemental surface water availability. Conjunctive use management is similarly important to ensure that local groundwater can be replenished, via reduced pumping and/or as a result of wetter local

Historical and Projected Water Use
Upper Santa Clara Valley Groundwater Basin
East Subbasin

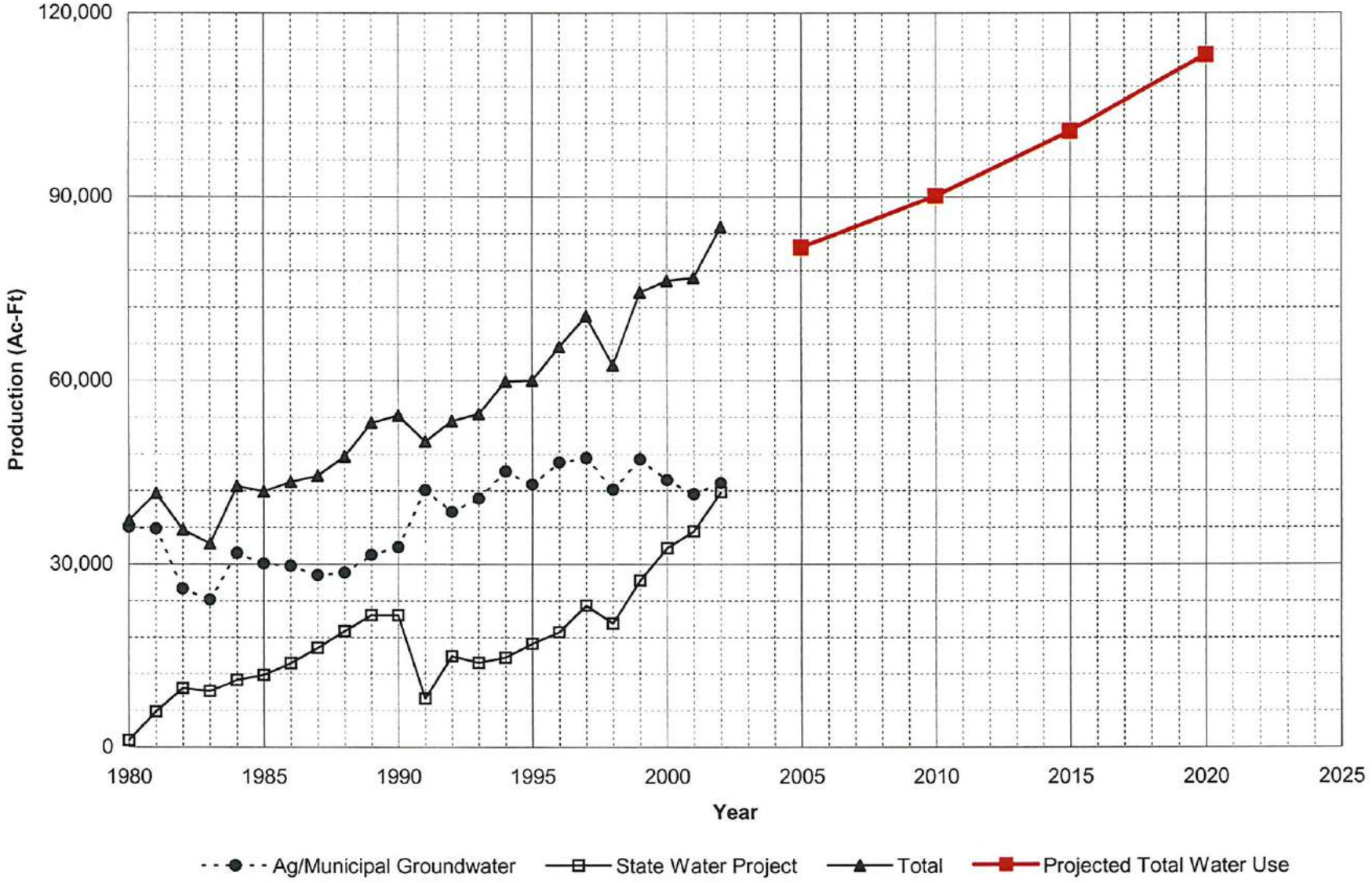


Figure 5-4

hydrologic conditions, during periods of wet/normal surface water availability. In light of all the preceding, implementation of this Plan Element is essential to accomplishing all the management objectives (goals) for the basin.

Primary Element 6 - Long Term Salinity Management

In general, groundwater quality in the basin is such that groundwater supplies meet standards for beneficial use in the basin, most of which is for municipal (domestic) use but some of which remains for agricultural and some other irrigation (non-domestic) use. There also have been no notable historical trends of groundwater quality degradation in the basin over time. However, a number of geologic and hydrologic factors suggest that observations and interpretation of groundwater quality warrant attention to ensure long-term preservation of groundwater quality. Notable among those geologic and hydrologic factors are: 1) the largely "closed" geologic nature of the aquifer system at the western limit of the basin (other than a thin section of Alluvium beneath the Santa Clara River, there is no continuity of aquifer materials between the Santa Clara River Valley East groundwater subbasin and the next downstream groundwater basin on the Santa Clara River, the Piru Basin in Ventura County); 2) the predominant groundwater flow direction in the basin toward the west, where there is the lack of continuity of aquifer materials for groundwater outflow; 3) a certain amount of rising groundwater discharge into the Santa Clara River; and 4) an increasing discharge of treated waste water into the Santa Clara River toward the western end of the basin which, when accounting for the planned use of a substantial amount of recycled water in the Basin (Primary Element 7) will result in higher salt concentrations than other sources of water supply in the Basin. The combination of the preceding factors suggests that, on a long-term basis, there could be an accumulation of dissolved minerals in the aquifer system if salinity is not managed in a way to avoid undesirable groundwater quality degradation. Consequently, this primary element is included in the overall groundwater management plan to include the interpretation of groundwater quality data (Primary Element 1) and to incorporate groundwater quality as an important consideration in the implementation of the other elements of the plan, most notably Continuation of Conjunctive Use Operations (Primary Element 5), Integration of Recycled Water (Primary Element 7), and Identification and Cleanup of Contaminated Groundwater (Primary Element 8). The Long Term Salinity Management element of the plan is essential to accomplishing the third management objective (goal) of preserving groundwater quality in the basin.

Primary Element 7 - Integration of Recycled Water

In 1993, CLWA prepared a Reclaimed Water System Master Plan that outlined a multi-phase program to deliver highly treated, recycled water in the Valley. At that time, potential recycled water uses in excess of 10,000 afy, of which about 9,000 afy were located within the CLWA service area, were identified. The first phase of the Reclaimed Water System Master Plan to deliver 1,700 afy has been environmentally reviewed and is being implemented, with initial deliveries having commenced in August 2003.

The 1993 recycled water plan expected to reclaim up to 10,000 afy. CLWA has been updating that plan to ultimately provide up to about 17,000 afy for irrigation and other non-potable uses. It has also been recognized that, if the Newhall Ranch project is approved, total annual demands for recycled water in the area could ultimately approach 20,000 afy.

This plan element is included in the groundwater management plan primarily because recycled water use in the Valley will supplant a substantial fraction of fresh water demand that would otherwise be met with potable water from some combination of pumped groundwater and imported surface (SWP) water. With total municipal, agricultural and other water demands projected to increase from about 75,000 afy at present to slightly more than 100,000 afy by 2020, the progressive increase in recycled water use from 1,700 afy to as much as 17,000 to 20,000 afy, recycled water use would reduce demands on potable sources (groundwater and imported SWP water) by up to nearly 20 percent. Accomplishment of this Plan Element will benefit the accomplishment of Elements 3 and 4, and will also contribute to the accomplishment of all four of the Basin Goals.

Primary Element 8 - Identification and Mitigation of Soil and Groundwater Contamination

As in numerous other groundwater basins in California, there have been a number of leaking underground storage tanks or other similar situations which have released organic constituents into soil, and possibly into groundwater, in the basin. None of those has impacted municipal or other water supply wells and, consequently, there has been no adverse impact on groundwater supply in municipal or other water supply systems in the basin. However, the detection of perchlorate in the discharge from four Saugus wells (CLWA Santa Clarita Water Division Saugus Wells 1 and 2, Newhall County Water District Well 11, and Valencia Water Company Well 157) in 1997, followed by the detection of perchlorate in one Alluvial well (CLWA Santa Clarita Water Division Stadium Well) in 2002, has led to the inactivation of all those wells.

They remain out of municipal water supply service to date.

Experts retained by CLWA have opined that the cause of perchlorate contamination in the Saugus Formation is former operations associated with munitions manufacturing on property formerly owned by Whittaker-Bermite Corporation, which is immediately adjacent to all the impacted wells. Investigation and characterization of the perchlorate contamination, and initiation of control and cleanup are ongoing; however, remediation actions have not yet commenced. Consequently, the municipal water purveyors continue to be impacted by the loss of water supply capacity of the impacted wells. Associated with that loss is a concern about the migration of perchlorate contamination in a generally downgradient direction, toward other active wells completed in the Saugus Formation and the Alluvium and toward other potential well sites. In light of both the inactivation of wells and the potential downgradient impact on the aquifers, CLWA and the other retail water purveyors had initiated both legal action against responsible parties and technical investigation of the contamination. Recently the parties have entered into an interim settlement agreement which is intended to complete investigation and characterization of the contamination in a collaborative effort. This effort will facilitate and expedite remediation actions.

The primary purpose for technical investigation of the perchlorate contamination by CLWA and the other municipal purveyors is to ultimately recover the currently unavailable water supply capacity that has resulted from the inactivation of impacted wells. Conceptually, that may be accomplished by some combination of reactivation of impacted wells and new well construction. CLWA has joined with the U.S. Army Corps of Engineers in a study to develop information about the contamination. CLWA and the retail water purveyors have also independently commissioned an assessment to conclude what treatment technology is appropriate for removal of perchlorate from pumped groundwater; they have also independently commissioned the application of a numerical groundwater flow and quality model to determine an optimal pumping program for 1) perchlorate removal from the aquifer, 2) control of its migration in the aquifer, and 3) restoration of impacted pumping capacity for water supply. With data derived from that work, CLWA and the other purveyors are preparing to submit an application to the State Department of Health Services, by late 2004, for a permit to return to pumping from the locally impaired Saugus Formation. The proposed pumping would be combined with approved wellhead treatment to render the treated water suitable for municipal supply. In addition to the latter objective to recover currently inactivated water supply, the proposed pumping would be designed and operated to remove contaminated groundwater and to control any further migration

of contaminated groundwater toward other Saugus wells to the west. CLWA and the retail water purveyors then expect to be able to design and implement, alone or in concert with responsible parties, a contamination control and treatment program at or near their impacted wells that can, in part, make groundwater available for municipal or other beneficial use. They also expect that such a program will provide some hydraulic and associated water quality protection for other parts of the aquifer system to keep contamination from impacting other wells or other parts of the aquifers in which water supply wells might be completed.

Regarding the balance of the aquifer system, water supply planning to date (i.e. the current Urban Water Management Plan) includes expanded development of the Saugus Formation for dry-period and emergency water supply. Data development and control and treatment of groundwater contamination in the Saugus Formation will be critical to accomplishing that water supply plan. In terms of this groundwater management plan, accomplishment of this plan element will contribute to the accomplishment of all four management objectives (goals) for the basin.

Primary Element 9 - Development and Continuation of Local, State and Federal Agency Relationships

As the local SWP contractor, CLWA has long-established working relationships with local and state agencies that will continue on an ongoing basis. By nature of its primary function, CLWA will continue to interact with state agencies, most notably the Department of Water Resources, on the operation of the State Water Project. The latter, of course, has been the source of supplemental imported surface water that has made the initiation and continuation of conjunctive use operations possible since 1980. It will also be the primary component, with local groundwater, in continuation of conjunctive use operations in the future (Primary Element 5 of this Plan).

CLWA is the treated surface water provider to all the retail water purveyors, including Newhall County Water District, Los Angeles County Waterworks District No. 36, Valencia Water Company, and its own Santa Clarita Water Division. CLWA has a historical and ongoing working relationship with all those local agencies, as well as with other local groundwater pumpers, to manage water supplies to effectively meet water demands within the available yields of imported surface water and local groundwater. In fact, the Advisory Council convened to assist in the preparation of this Plan is comprised representatives of all the local water purveyors

and significant groundwater pumpers.

A local Memorandum of Understanding (MOU) process among CLWA, other purveyors within CLWA's service area, and United Water Conservation District (UWCD) in neighboring Ventura County is a classic illustration of a local agency relationship that has produced the beginnings of local groundwater management, now embodied in this comprehensive plan, most notably in Primary Elements 1 through 5. In 2001, out of a willingness to seek opportunities to work together and develop programs that mutually benefit the region as well as their individual communities, those agencies prepared and executed the MOU that initiated a collaborative and integrated approach to several of the aspects of water resource management that are now included in this Plan. UWCD manages surface water and groundwater resources in seven groundwater basins, all located in Ventura County, downstream of the East Subbasin of the Santa Clara River Valley that is the focus of this Plan. United is thus a logical partner in the cooperation of management efforts to accomplish the objectives (goals) for this basin, particularly as they relate to preservation of surface water resources that flow through the respective basins. As a result of that MOU, the cooperating agencies have integrated their database management efforts (part of Primary Elements 1 and 2 of this Plan), have initiated the development of a numerical groundwater flow model (for utilization in Primary Elements 3, 4 and 5 of this Plan), and are continuing to prepare reports on the status of basin conditions, as well as on geologic and hydrologic aspects of the overall stream-aquifer system.

A local extension of the interaction among CLWA, the retail water purveyors, and UWCD is an ongoing working relationship with the City of Santa Clarita. CLWA and the retail water purveyors meet regularly with City staff and also present water supply conditions via study sessions with the City Council on a routine basis. It is expected that the implementation of this Plan will result in the availability of a broader range of information transfer with the City relative to the existing and future water supply to its residents. An additional expectation of this Plan with respect to the relationship among CLWA, the retail water purveyors, and the City is the intent of CLWA and the purveyors to provide input to the City as a reviewer of proposed development relative to any potential contamination of groundwater associated with such proposed development. CLWA provides input to the City, as suggested in Water Code Section 10753.8, via review of land use plans and coordination with the City Planning Department to identify and assess any development-related activities which might pose a risk of groundwater contamination. By expressing this expectation of its groundwater management plan, CLWA is not intending to insert itself into the jurisdiction or authorization of any other land use permitting

agency; rather, CLWA is intending to provide review and input to the land use permitting process to protect the groundwater supply against any potential contamination that might occur as a result of any given development project.

This Primary Element is included in this Plan to formalize the historical local and state agency working relationships as part of comprehensively managing local groundwater, in concert with imported surface water and local recycled water, to accomplish all the management objectives (goals) for the basin.

Primary Element 10 - Groundwater Management Reports

As briefly described in the Introduction of this Plan, local groundwater management planning already includes, among several other activities, analysis of groundwater conditions and preparation of annual reports on groundwater and all other aspects of water resources and water supplies in the Santa Clara River Valley East groundwater basin. In addition, recently formalized cooperative work with neighboring UWCD includes both regular reporting on the status of groundwater conditions and specific reporting on geologic and hydrologic aspects of the overall stream-aquifer system. For example, documentation of the numerical groundwater modeling work currently in progress is expected to be the first of the latter reports in the next year.

Beginning in 1998, CLWA and the retail water purveyors in the basin have prepared a series of annual reports, known locally as the Santa Clarita Valley Water Report, to describe all aspects of water supply and water resource conditions in the basin. That report provides current information to local City and County land use agencies, and to other interested parties, about current water requirements, use of groundwater and treated imported surface water to meet those water requirements, groundwater conditions (pumping, groundwater levels and quality, etc.), local surface water conditions, the status of imported surface water supplies including details of delivered SWP water in the reported year as well as an up-to-date summary of available imported SWP water for the next year, a short-term projection of water requirements in the next year, and other appropriate details about water requirements and supplies such as, for example, the status of introducing recycled water as a component of non-potable water supply.

In light of the frequency and comprehensive nature of the annual Water Reports, and also in light of the planned preparation of more detailed technical reports on various aspects of the basin as appropriate, the continued preparation of those reports will serve as regular and

complete reporting on all aspects of this groundwater management plan.

Secondary Element 1 - Continuation of Public Education and Water Conservation Programs

CLWA has provided water conservation and public education programs that will continue and will be expanded as a complement to and an element of this groundwater management plan. The expansion of water conservation will largely stem from CLWA's having signed the "Memorandum of Understanding Regarding Water Conservation in California" (Urban MOU) in 2001, which made CLWA a wholesaler member of the California Urban Water Conservation Council. CLWA has thus committed to implementation of cost-effective water conservation measures known as Best Management Practices (BMPs) that are included in the Urban MOU and are intended to reduce California's long-term urban water demands. The BMPs have been incorporated into the water demand management measures section of the Urban Water Management Planning Act.

Water conservation and related public education measures have generally been developed in California to achieve the following goals:

- meet legal mandates
- reduce average annual potable water demands
- reduce sewer flows
- reduce water demands during peak seasons
- meet drought restrictions.

As a wholesaler of imported surface water CLWA has implemented the following BMPs for several years prior to signing the MOU:

- distribution system water audits, leak detection and repair
- public information
- school education
- wholesale agency assistance
- conservation pricing
- conservation coordinator.

As a signatory to the MOU, CLWA's water conservation and public education program will expand to include the following BMPs found to be locally cost-effective, as detailed in the 2000 Urban Water Management Plan for CLWA and the Santa Clarita Valley retail purveyors.

- water survey programs for single-family residential and multi-family residential programs
- residential plumbing retrofits
- metering with commodity rates for all new connections and retrofit of existing connections
- large landscape conservation programs and incentives
- high-efficiency washing machine rebate programs (when also provided by local energy providers or wastewater utilities)
- conservation programs for commercial, industrial, and institutional accounts
- wholesale agency programs to financially or otherwise support water conservation efforts by retailers (this measure will be expanded)
- residential ultra-low-flow toilet replacement program.

This Secondary Element, while identical to independent CLWA efforts in water conservation and public education, is incorporated in this Plan to complement other Plan elements, and to move toward accomplishment of all management objectives (goals) for the groundwater basin.

Secondary Element 2 - Identification and Management of Recharge Areas and Wellhead Protection Areas

The 1986 Amendments to the federal Safe Drinking Water Act (SDWA) established a new Wellhead Protection Program (WPP) to protect groundwater that supplies drinking water wells for public water systems. Each state was required to prepare a WPP and submit it to the USEPA by June 19, 1989. However, California did not develop an active state-wide Wellhead Protection Program at that time. Subsequently, in 1996, reauthorization of the SDWA established a related program called the Source Water Assessment Program. In 1999, the California Department of Health Services (DHS) Division of Drinking Water and Environmental Management developed its Drinking Water Source Assessment Program (DWSAP), and EPA approved it. The overall objective of the DWSAP is to ensure that the quality of drinking water sources is protected.

As discussed in Section 1 of this Plan, the potential groundwater management plan component

"identification and management of wellhead protection areas and recharge areas" is stated, even in the most recently amended version of Water Code Section 10753.8, as one that "may" be included. However, the wellhead protection aspect of this component, which was optional when AB 3030 was adopted, is now essentially required as a result of the 1996 SDWA reauthorization. In California, the DWSAP satisfies the mandates of both the 1986 and 1996 SDWA amendments. The California DWSAP includes delineation of the areas (i.e., protection areas or Groundwater Protection Zones) surrounding an existing or proposed drinking water source where contaminants have the potential to migrate and reach that source. The program includes preparation of an inventory of activities that may lead to the release of contaminants within these zones. The activities, referred to in the DWSAP as Potentially Contaminating Activities, include such land uses as gas stations and dry cleaners, as well as many other land uses. The activities also include known contaminant plumes regulated by local, state, and federal agencies. The zones, which are calculated based on local hydrogeological conditions and also well operation and construction parameters, represent the approximate area from which groundwater may be withdrawn during 2, 5, and 10 year time periods. These zones also represent the area in which contaminants released to groundwater could migrate and potentially affect the groundwater extracted by wells located within the designated zones. The DWSAP assessment also includes a risk or vulnerability ranking based on a combined numerical score that results from points assigned to various evaluations conducted as part of the DWSAP process. This ranking provides a relative indication of the potential susceptibility of drinking water sources to contamination.

Although DHS is responsible for conducting drinking water source assessments for systems existing prior to the adoption of the California program, DHS has encouraged purveyors to perform their own assessments. Assessments for existing systems were due at the end of 2002; however, DHS received an extension allowing its assessment work to be completed by May 2003. Permitting of a new water supply well requires that a DWSAP be completed as part of the permit process, and this is responsibility of the applicant. Within CLWA, DWSAP assessments have been completed for the three municipal water purveyors who utilize groundwater for some of their water supply, including 15 for the CLWA Santa Clarita Water Division, 20 for Valencia Water Company, and 13 for Newhall County Water District.

The results of the DWSAPs can be used as a planning tool to guide land use development in the vicinity of water sources. The DWSAPs prepared for water sources in the basin should, in some fashion, be reviewed every five years and updated more frequently as appropriate. The collective DWSAP information can also be integrated with other management activities (e.g., the

geographical position of potential or existing contaminating activities can be incorporated in the monitoring program database; plume extents, as available, can be graphically displayed by aquifer and isoconcentrations) to aid siting of new wells, particularly when contaminant migration problems are also evaluated with respect to local hydrogeological conditions and the potential influence of nearby wells on plume migration.

In addition to the wellhead protection program that is focused on wells that are sources of drinking water, a broader aspect of this Plan Element is protection of the overall recharge areas of the aquifer system in the basin. As discussed in Section III, the most developed aquifer, the Alluvium, has experienced historical fluctuations in groundwater levels in the eastern portion of the basin, but has had essentially constant groundwater levels in the western portion of the basin. The characteristic difference between the two portions of the basin, generally divided at the confluence of the Santa Clara River and its Bouquet Canyon tributary, is the perennial flow in the Santa Clara River to the west of that location versus the intermittent flow in the river to the east. The intermittent fluctuations in groundwater levels east of Bouquet Canyon are indicative of rapid response, i.e. recharge, from streamflow when it is present. Similarly, the relatively constant groundwater levels west of Bouquet Canyon are indicative of ongoing response, i.e. recharge, from the perennial flow in the river. In light of those conditions, part of this Plan Element is intended to protect the overall channel system of the Santa Clara River and its tributary system, notably where they overlie Alluvial aquifer materials of significant extent. Protection in this case is intended to mean preservation of the infiltration capacity of the stream channel so that both intermittent and perennial flows can continue to recharge the aquifer as has historically occurred.

Finally, with regard to protection of recharge areas, it is expected that additional exploration and development of the Saugus Formation, for additional water supply as described in this Plan, will lead to further understanding of the locations and mechanisms for recharge of that aquifer, which is exposed at the surface throughout much of the area of this Plan. As that understanding evolves, part of this Plan Element will be to identify means of ensuring that significant portions of Saugus recharge are not compromised by land development activities.

This Plan Element is included to incorporate the DWSAP efforts and the overall protection of groundwater recharge into the local groundwater management plan. Completion of DWSAP efforts to comply with state DHS requirements and preservation of overall aquifer recharge are key parts of accomplishing the first and third management objectives (goals) for the basin.

Secondary Element 3 - Identification of Well Construction, Abandonment, and Destruction Policies

Well construction permitting in the basin is administered by the Los Angeles County Health Department, which effectively implements the State Well Standards for water wells, monitoring wells, and cathodic protection wells. Permitting of municipal supply wells is also within the purview of the State Department of Health Services. One goal of this management plan for the area, protection and preservation of groundwater quality requires that all wells be properly constructed and maintained during their operational lives, and properly destroyed after their useful lives, so that they not adversely affect groundwater quality by, for example, serving as conduits for movement of contaminants from the ground surface and/or from a poor quality aquifer to one of good quality. Toward that end, this element is included in the overall plan to support well construction and destruction policies, and to participate in their implementation in the Basin, particularly with regard to surface and inter-aquifer well sealing and proper well destruction, which are critical in the management of a multiple aquifer system that has some connection with the Santa Clara River and its tributaries.

Secondary Element 4 - Provisions to Update the Groundwater Management Plan

The primary and secondary elements of this local area groundwater management plan reflect the current understanding of the occurrence of groundwater in the Santa Clara River East Valley groundwater subbasin, and specific problems or areas of concern about that resource. Those management elements are designed to achieve specified goals to develop local groundwater for regular and dry year/emergency water supply while protecting and preserving groundwater quantity and quality for overlying beneficial use into the foreseeable future, and while also protecting and preserving valuable surface water resources that are directly related or connected to groundwater. While the groundwater management plan provides a framework for present and future actions, new data will be developed as a result of implementing the plan. That new data could define conditions which will require modifications to currently definable management actions. As a result, this plan is intended to be a flexible document which will be reviewed and updated to modify existing elements and/or incorporate new elements as appropriate in order to recognize and respond to future groundwater and surface water conditions. Although not intended to be a rigid schedule, review and updating of this plan will initially be conducted in five years, with subsequent future updates scheduled as appropriate at that time. In accordance with Primary Element 10, the retail purveyors and CLWA will continue to produce the Santa

Clarita Valley Water Report on an annual basis. Data and information from these reports will be compiled and utilized as part of the review and updating of this plan.

Appendix I

Groundwater and Surface Water Monitoring Protocols

The CLWA Groundwater Management Plan includes two Elements (Primary Elements 1 and 2) that relate directly to ongoing, and expanded as appropriate, monitoring of key hydrologic quantities associated with the implementation of the Plan. Notable among the data to be collected are groundwater levels, groundwater quality, pumpage from water supply wells, and surface water flows and quality. Other hydrologic data such as precipitation are intended to be measured and maintained in accordance with the standards in place for the respective precipitation gage stations in the Valley; consequently, this Appendix does not address the specific establishment of protocols for precipitation gaging. On another matter of hydrologic data, land subsidence, the Plan discusses the low probability for subsidence in the Valley, particularly as related to historical groundwater pumping from both the Alluvial and Saugus Formation aquifers. Consequently, the Appendix does not address the establishment of protocols for measuring land subsidence. As noted in the Plan, if future analysis of increased pumping from the Saugus Formation, as currently planned, suggests changes in groundwater levels that might be conducive to inelastic subsidence, the need for subsidence monitoring will be reconsidered at that time; and some combination of land surface elevation surveying, remote sensing of land surface deformation, and measurement of earth consolidation via extensometers would be considered as part of establishing protocols for monitoring subsidence.

Groundwater Monitoring

For purposes of Plan implementation, the most essential groundwater-related data are water levels, water quality, and pumpage. Consequently, the following discussion of monitoring protocols focuses on those hydrologic parameters.

Groundwater Levels - The distribution and frequency of current groundwater level measurements in Alluvial wells and in Saugus Formation wells are illustrated in Figures A1 and A2, respectively. Tables A1, A1a and A2 show the dates that groundwater level measurements were made in Alluvial and Saugus Formation wells. As discussed in the Plan, for the Alluvium, the distribution of monitoring is sufficient to interpret water level and groundwater storage trends. Thus, it is intended that the fundamental distribution and frequency of Alluvial groundwater level measurements remain generally as illustrated in Figure A1: general semi-annual measurements complemented by some quarterly measurements disbursed throughout the Alluvial aquifer. The only exception to the preceding intention is in the western-most portion of the Alluvium, where agricultural pumping remains the water supply objective and water level measurements are primarily annual. In part to conform to the balance of Alluvial groundwater

level measurements, and more importantly to monitor stream-aquifer connection near the western, or downgradient, end of the Alluvium in the basin, it is the intent of Plan implementation to increase that water level monitoring to semi-annual to quarterly frequency.

In the Saugus Formation, the distribution of groundwater level measurements is limited by the number and location of wells; the locations in Figure A2 reflect where the Saugus has been developed for water supply. Ultimately, as future exploration and development of the Saugus expand, it is expected that the distribution of groundwater level measurements will expand to those future well locations. For Plan implementation purposes, the existing monthly frequency of water level monitoring is intended to continue.

Water level measurement methodology, which is dominated by utilization of electric sounders, is expected to remain largely unchanged. Some calibrated airlines and possibly some dedicated electro-hydraulic transducers are expected to complement electric sounders in certain wells. All those water level measurement methods are sufficiently accurate to satisfy the needs to which the resultant data is to be put.

Groundwater Quality - The distribution and frequency of current groundwater quality monitoring in Alluvial wells and in Saugus Formation wells are illustrated in Figures A3 and A4, respectively. Tables A3 and A4 show the dates that groundwater quality (total dissolved solids) was monitored in Alluvial and Saugus wells. For the most part, the distribution and frequency of water quality sampling are sufficient to interpret general quality trends. One notable constraint in the Alluvium, however, is the discontinuation of water quality data collection in some wells since 1988, mostly toward the western, or downgradient, end of the basin. In order to restore an ongoing historical record, part of Plan implementation will be to attempt to re-establish regular, i.e. yearly to triennial, water quality sampling and analyses in those wells with some form of historical water quality record. In the same vein, part of Plan implementation will include selection of a number of wells in key locations, e.g. near the mouths of canyons, for semi-annual analysis of indicator parameters as a basis for assessing seasonal or other variations in groundwater quality.

Finally with regard to groundwater quality, the spatial limitations on Saugus water quality data are comparable to the limitations related to Saugus groundwater levels, but as a result of the limited, localized development of the Saugus for water supply. While the regular monitoring of quality will continue via Plan implementation, the expansion of Saugus water quality data is expected to follow the expanded exploration and development of that aquifer as described for

groundwater levels above.

Production (Pumpage) - The great majority of water supply wells in the basin are now dedicated to municipal supply; consequently, those wells are equipped with production meters which allow direct monitoring of pumpage on any desired frequency, e.g. instantaneous flow rate, or cumulative volumes on a daily, monthly, or other frequency. A few wells remain dedicated to agricultural water supply, and those wells are not equipped with flow meters. However, long-standing practice at all those wells has been to meter power consumption for each well and to combine that data with the results of annual pump performance testing in order to indirectly compute approximate pumpage from each agricultural well. That methodology is sufficiently accurate for ongoing documentation of pumpage and interpretation of basin response to pumping; it is also sufficiently accurate for groundwater flow model input as part of assessing basin yield, all as part of this Plan. Consequently, implementation of this Plan includes regular reading of flow meters on municipal supply wells and continued indirect computation of agricultural pumpage from the remaining agricultural water supply wells in the basin.

Surface Water Monitoring

Part of Plan implementation is the development of a surface water quality monitoring network. Of particular concern is establishing a surface water quality data set that, combined with groundwater data, will allow for a more detailed analysis of stream-aquifer interactions. The data of primary interest for this and other Plan purposes are surface water flow and surface water quality, discussed below.

Surface Water Flow - The existing surface water flow monitoring network within the basin consists of stream flow gaging stations along the Santa Clara River and its tributaries, and measurements of discharge to the River from the Saugus and Valencia Water Reclamation Plants. Monitoring of stream flow gages along the River and its tributaries has been mostly sporadic and limited to times prior to 1977, although measurements at some gages resumed in 2002. One exception is the gage at the Los Angeles-Ventura County line, where the daily mean stream flow was monitored from 1953 to 1996; the gage was replaced with one downstream near Piru in 1996. The Los Angeles County Sanitation Districts monitors the average discharge flow of treated wastewater from the Saugus and Valencia Water Reclamation Plants to the Santa Clara River.

Plan implementation will include evaluating the distribution, future accessibility and

configuration of the existing stream flow gaging stations to determine if they will be suitable for inclusion in the ongoing surface water flow monitoring network. Plan implementation will further include installation and operation of gage station modifications, as well as installation and operation of additional dedicated gaging stations as determined to be required.

Surface Water Quality - Surface water quality has been analyzed at many locations along the Santa Clara River and its tributaries but, with few exceptions, the data is limited to several measurements at each location. Water quality in the Santa Clara River at the Los Angeles-Ventura County line was analyzed on a semi-annual basis from 1951 to 1988, and is currently measured quarterly by United Water Conservation District. Since 2002, the Los Angeles County Department of Public Works has monitored water quality in the Santa Clara River near Interstate 5 during four wet weather events and at two other times each year to comply with the requirements of a National Pollution Discharge Elimination System (NPDES) permit that covers the County and 84 incorporated cities. The Saugus and Valencia Water Reclamation Plants also monitor the quality of the treated wastewater they discharge to the Santa Clara River as part of compliance with the requirements of their NPDES permits.

Plan implementation will include identifying key locations for future surface water quality monitoring, identification of constituents of concern and monitoring frequency for each location, and implementation of appropriate sampling and analytical methodology at the selected key sites.

Table A1
Dates of Historic Water Level Measurements in Alluvial Wells
Santa Clara River Valley Groundwater Basin, East Subbbasin

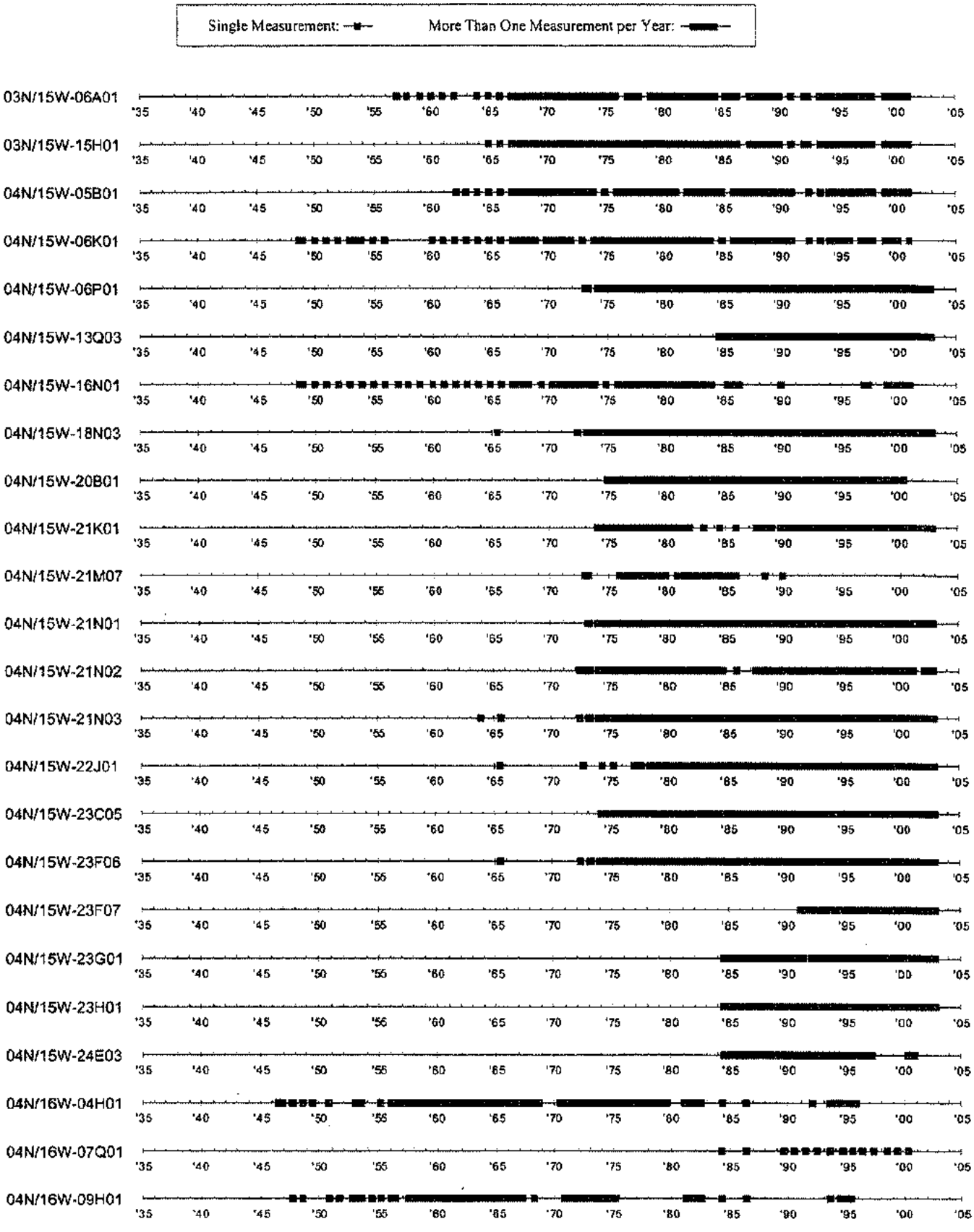


Table A1 - Continued
Dates of Historic Water Level Measurements in Alluvial Wells
Santa Clara River Valley Groundwater Basin, East Subbbasin

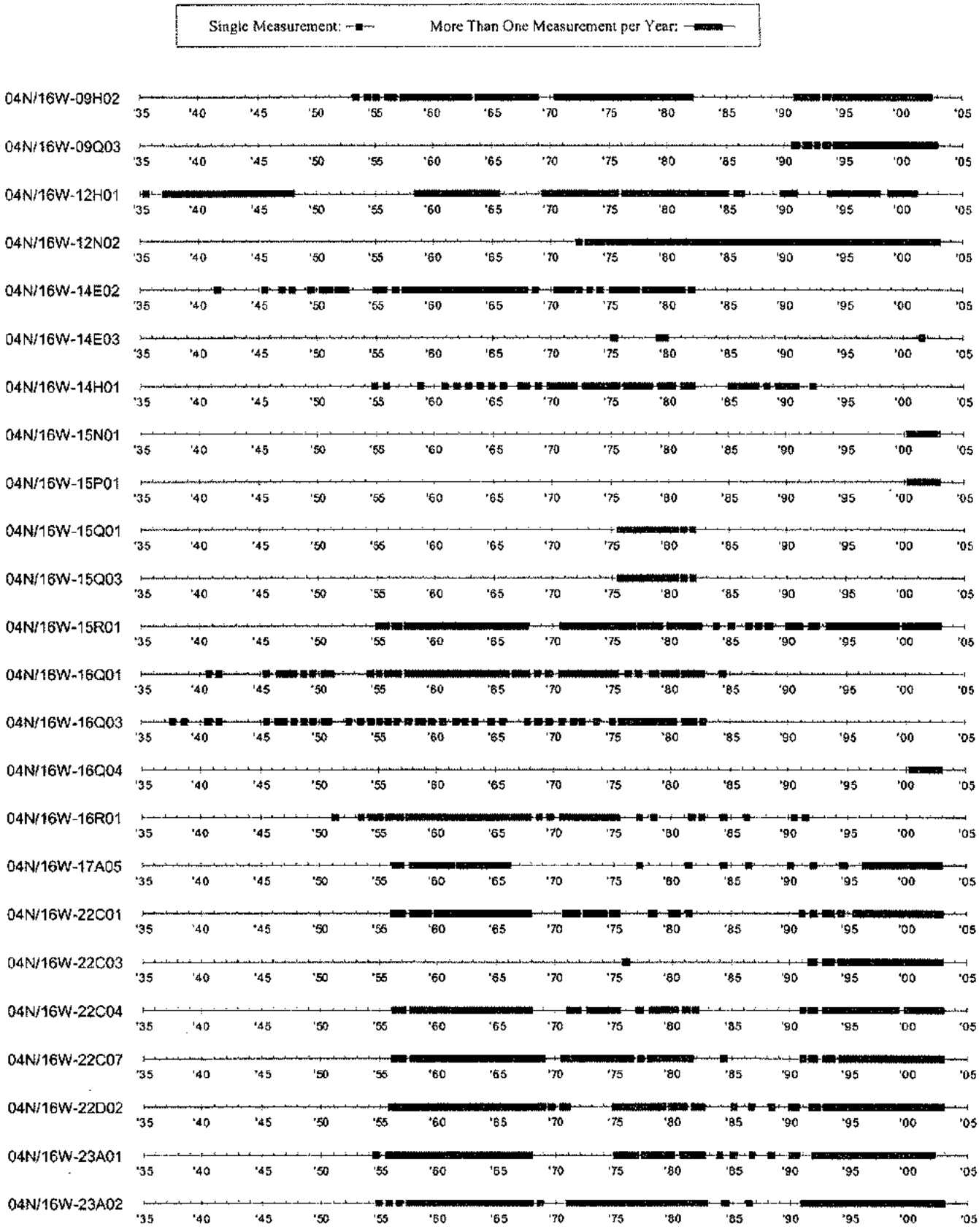


Table A1 - Continued
Dates of Historic Water Level Measurements in Alluvial Wells
Santa Clara River Valley Groundwater Basin, East Subbbasin

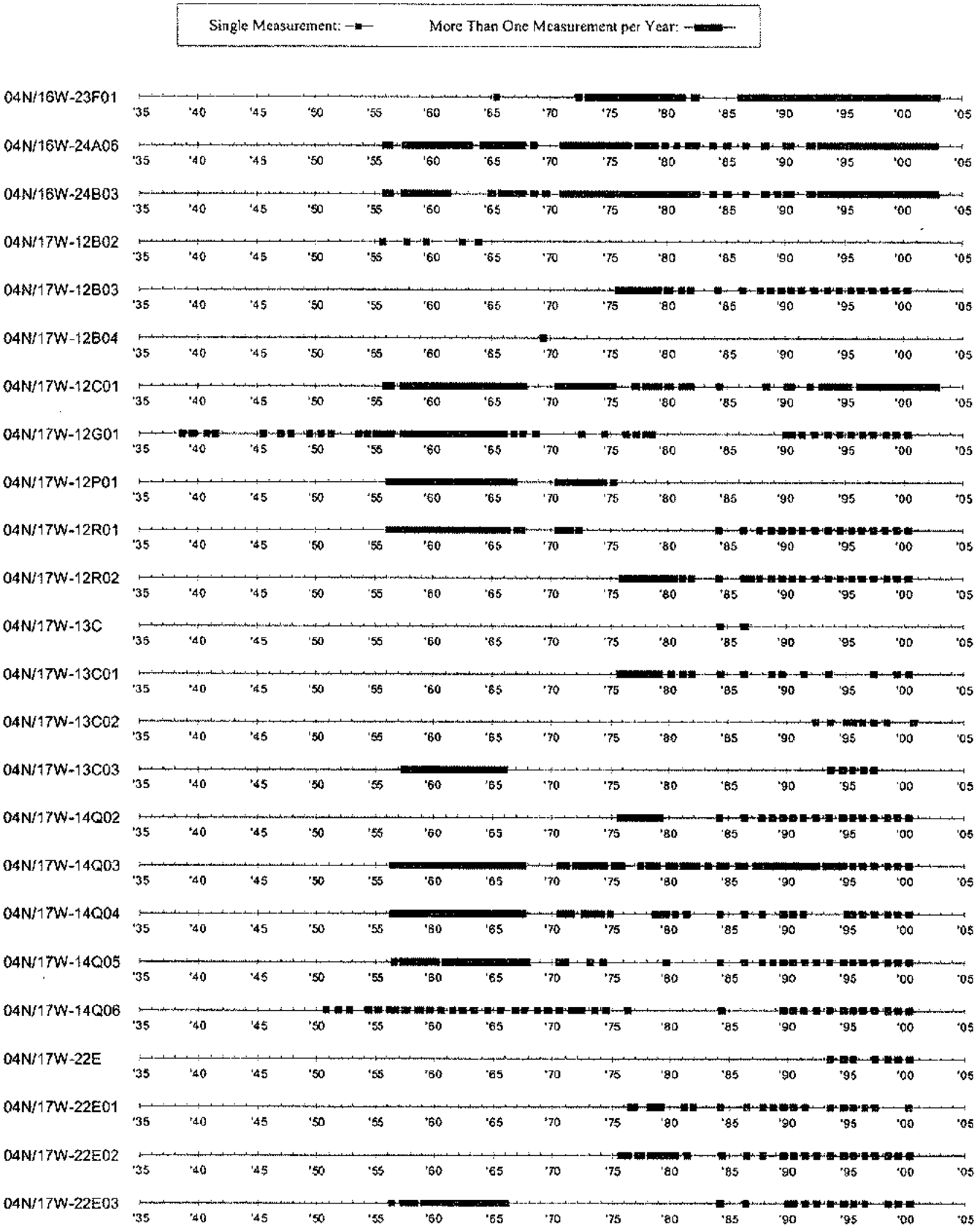


Table A1 - Continued
Dates of Historic Water Level Measurements in Alluvial Wells
Santa Clara River Valley Groundwater Basin, East Subbbasin

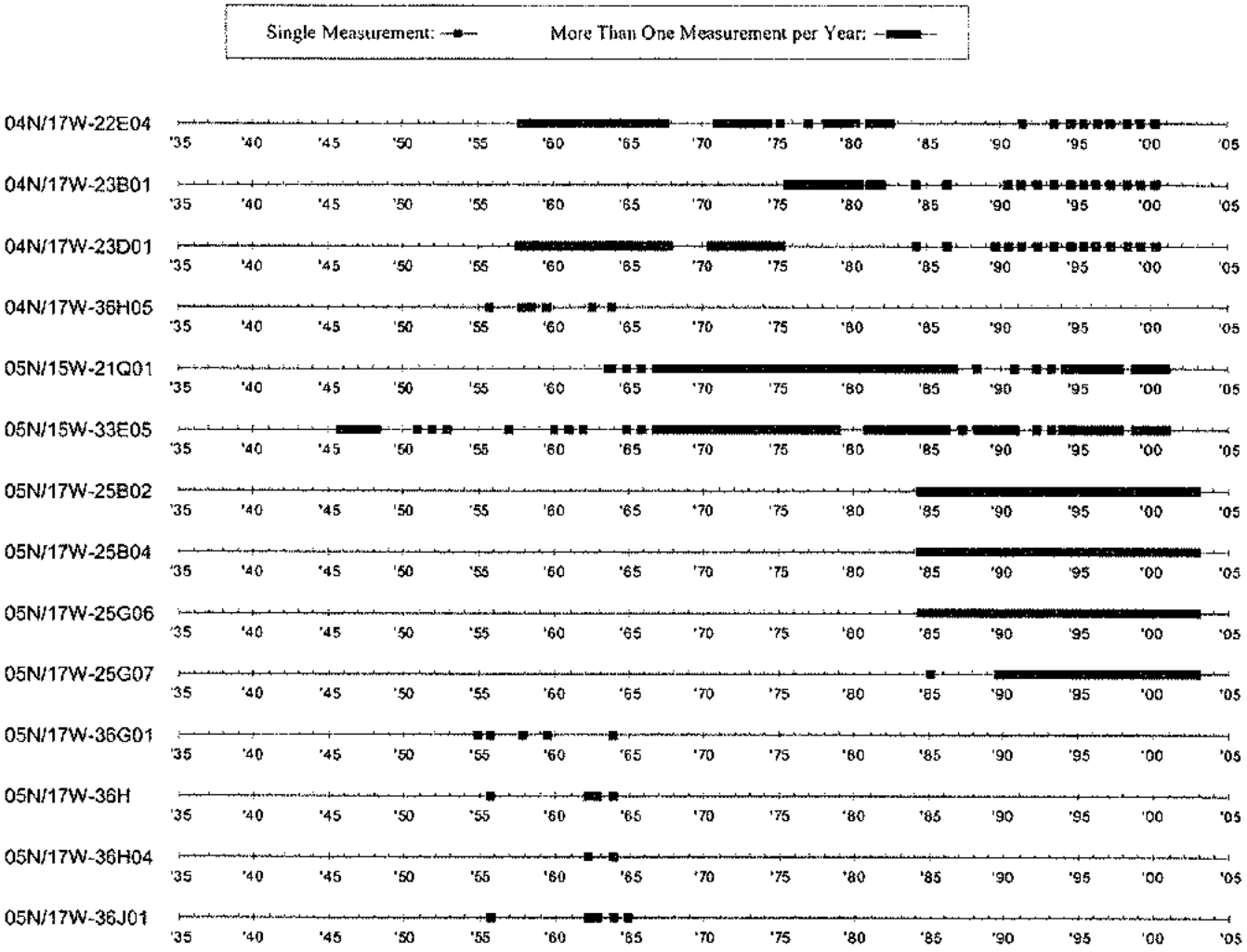


Table A1a
Dates of Historic Water Level Measurements in LACFCD Alluvial Wells
Santa Clara River Valley Groundwater Basin, East Subbbasin

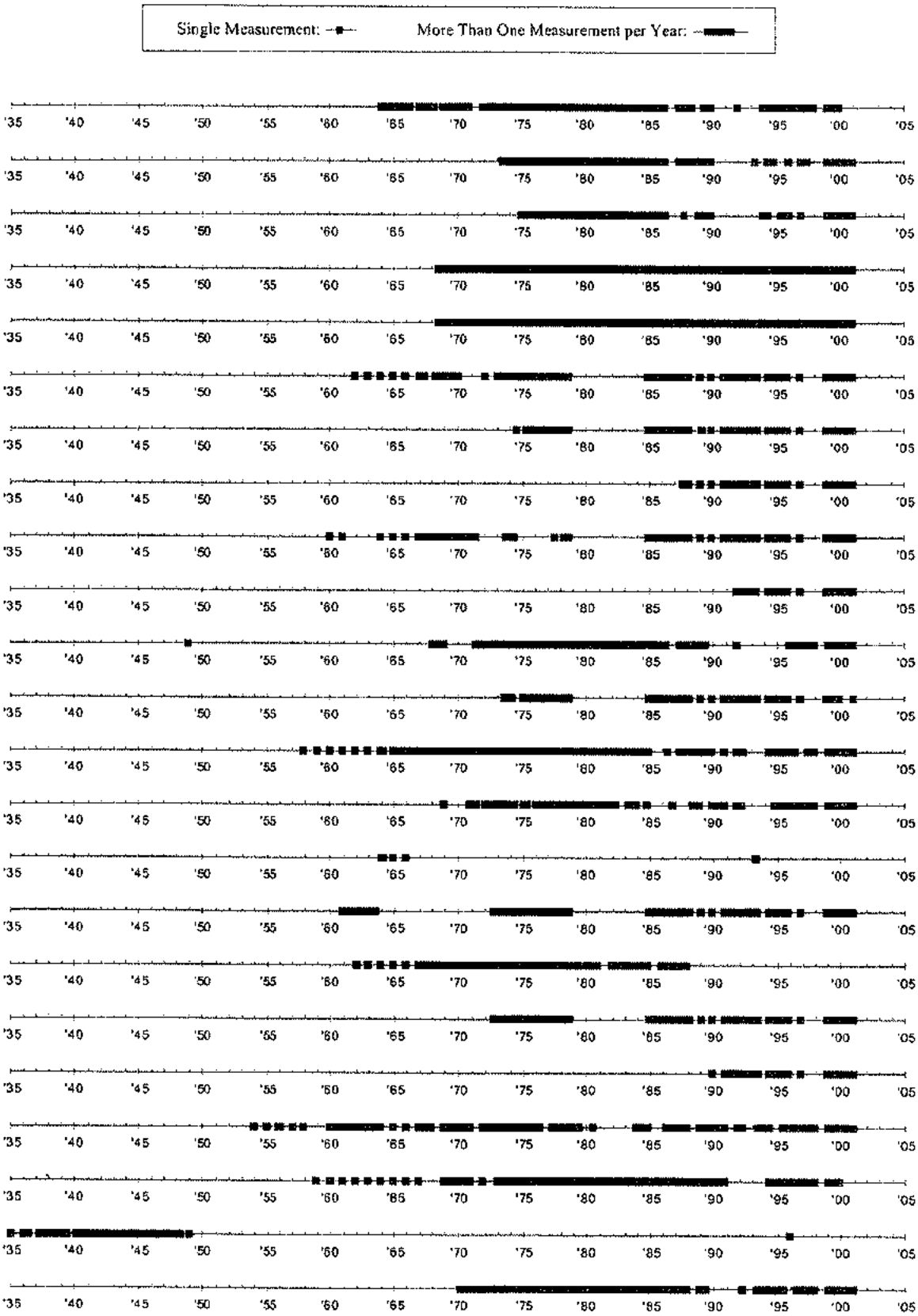


Table A1a - Continued
Dates of Historic Water Level Measurements in LACFCD Alluvial Wells
Santa Clara River Valley Groundwater Basin, East Subbbasin

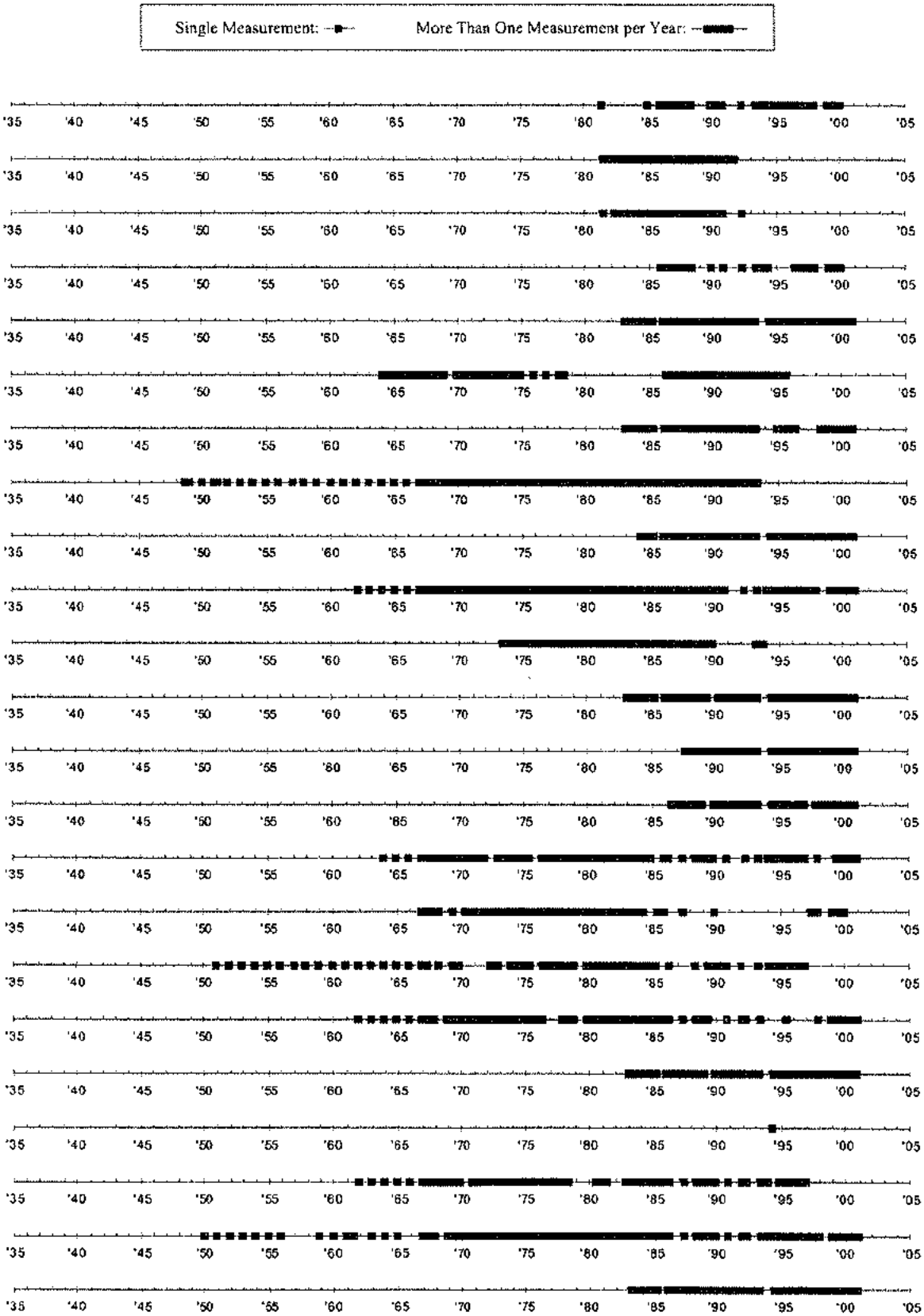


Table A1a - Continued
Dates of Historic Water Level Measurements in LACFCD Alluvial Wells
Santa Clara River Valley Groundwater Basin, East Subbbasin

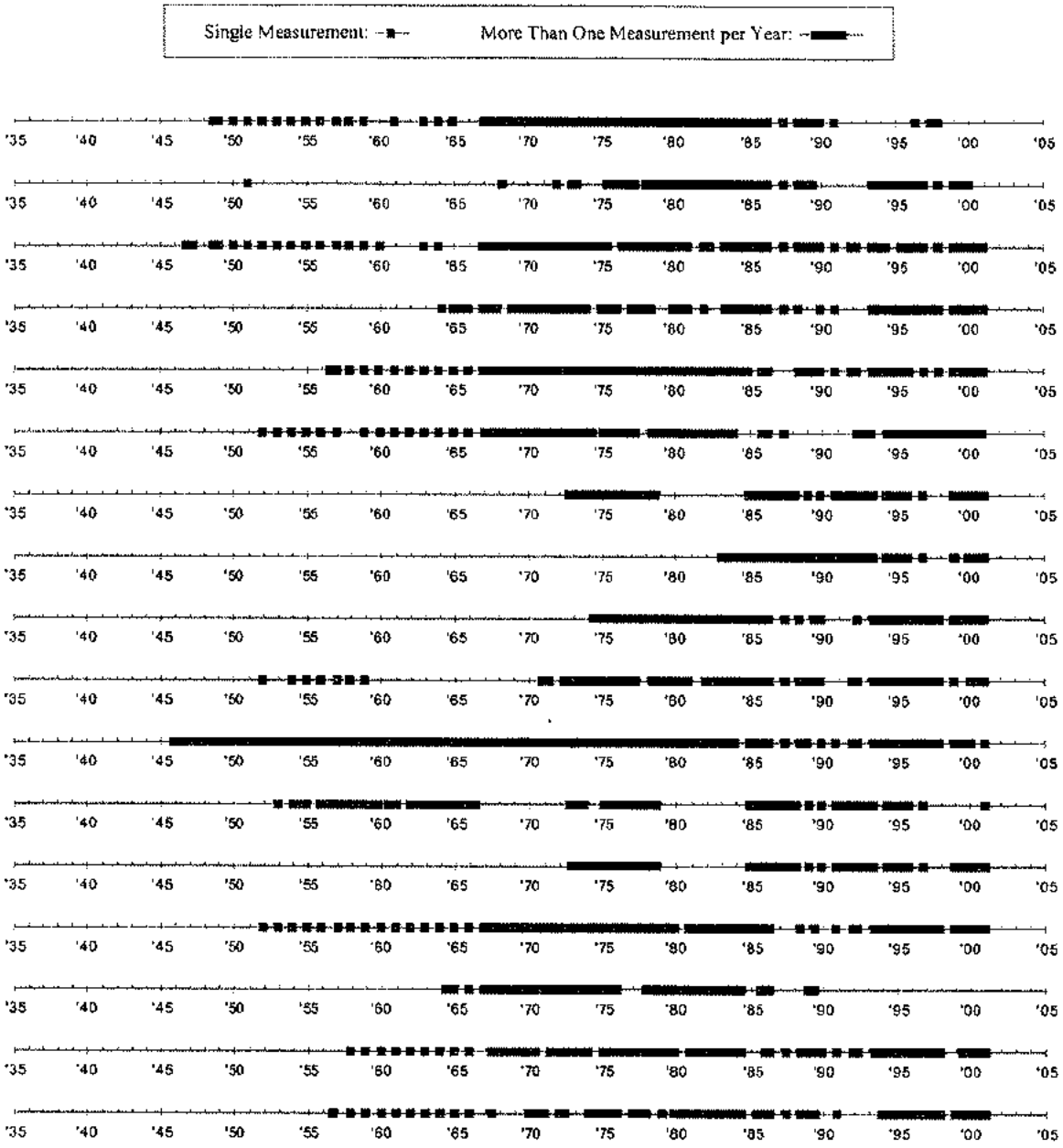


Table A2
Dates of Historic Water Level Measurements in Saugus Wells
Santa Clara River Valley Groundwater Basin, East Subbbasin

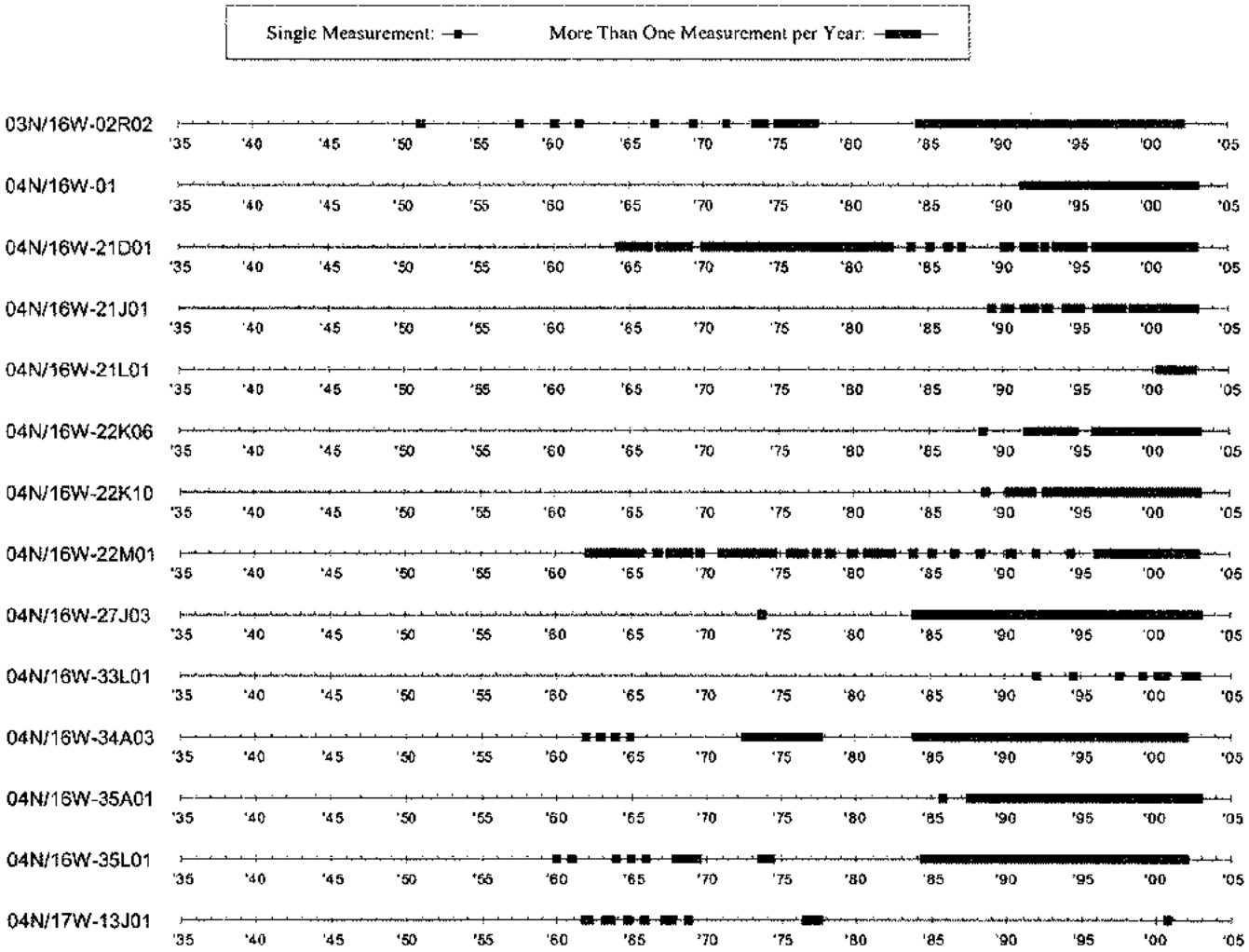


Table A3
Dates of Historic Water Quality Measurements (TDS) in Alluvial Wells
Santa Clara River Valley Groundwater Basin, East Subbbasin

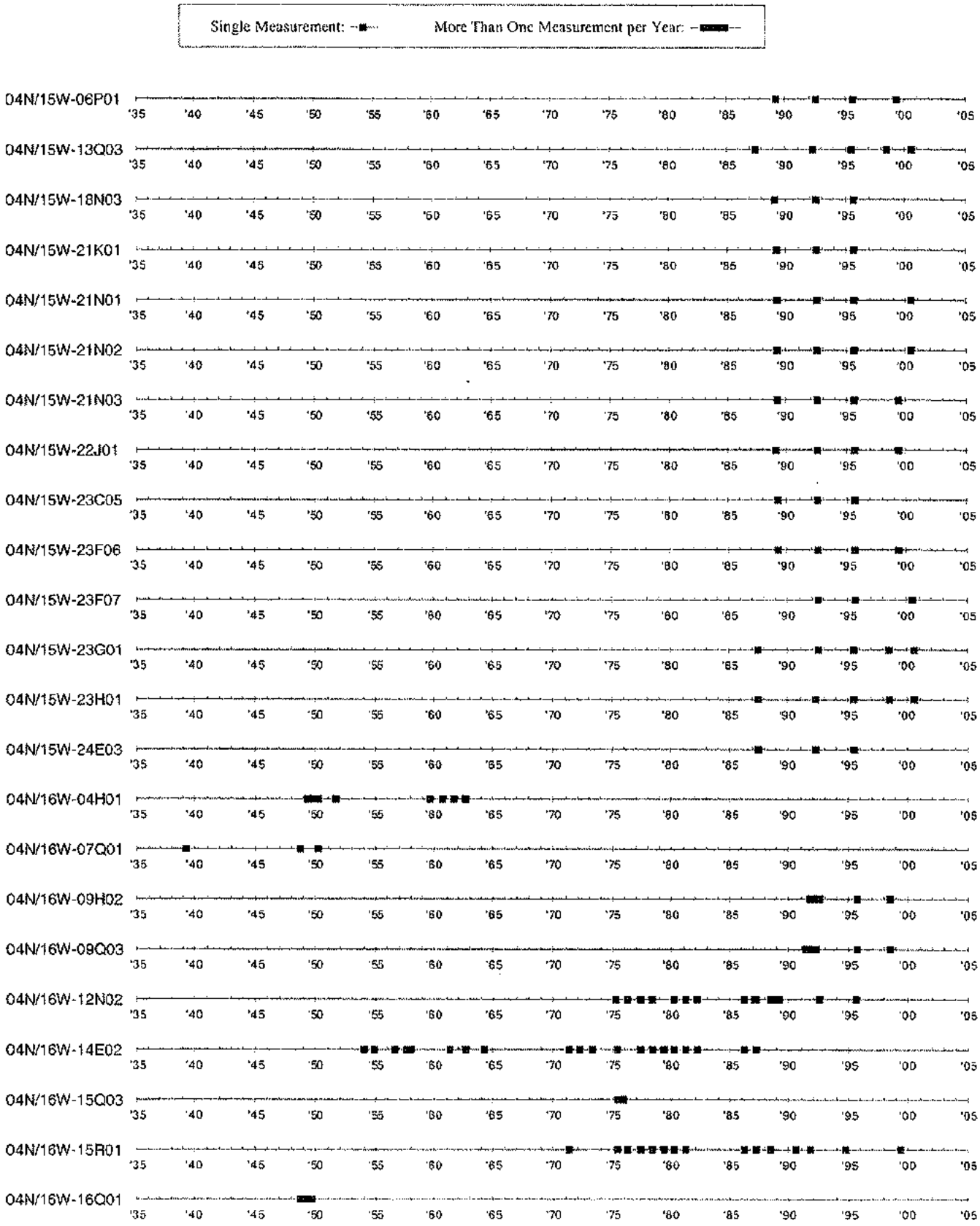


Table A3 - Continued
Dates of Historic Water Quality Measurements (TDS) in Alluvial Wells
Santa Clara River Valley Groundwater Basin, East Subbbasin

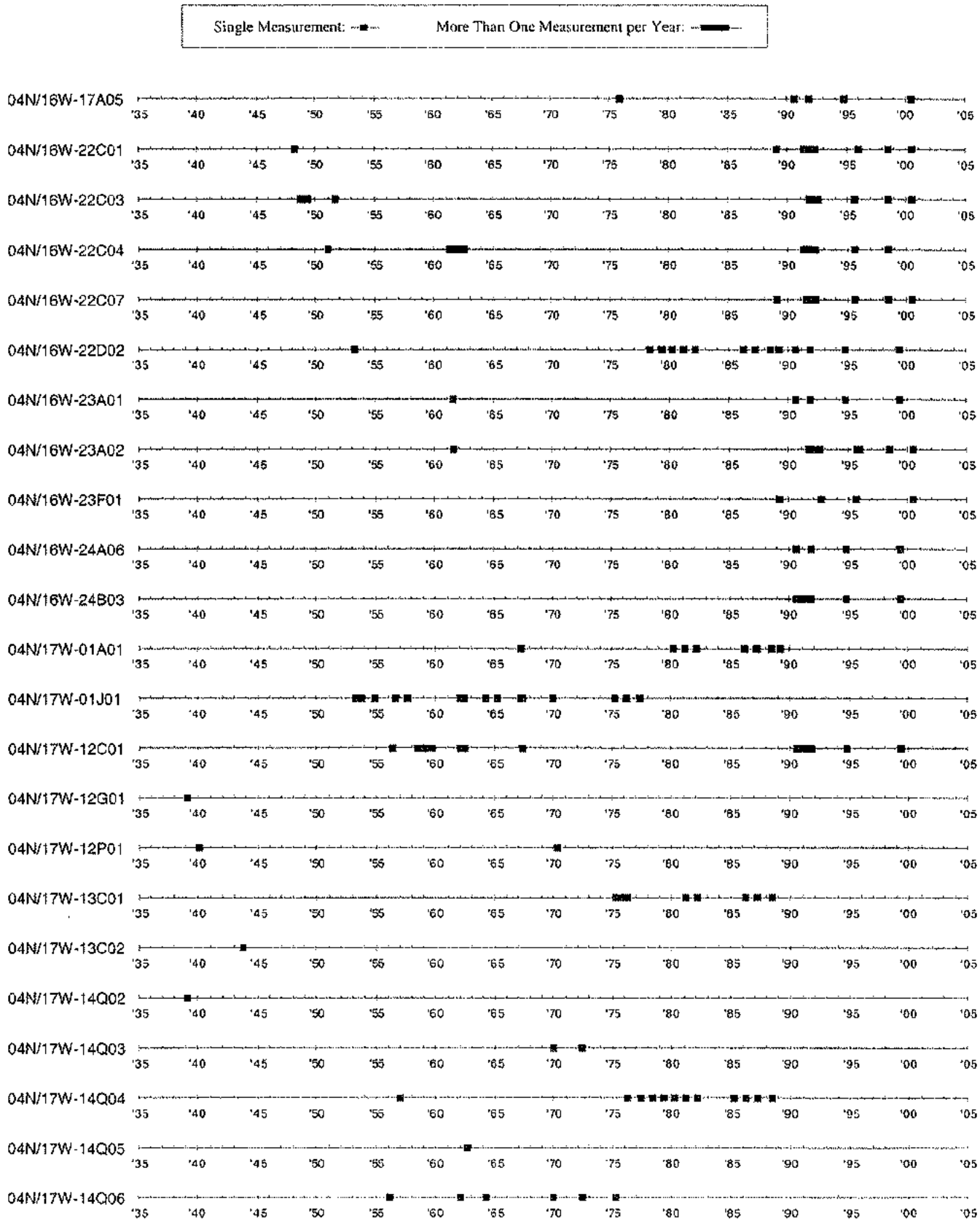


Table A3 - Continued
Dates of Historic Water Quality Measurements (TDS) in Alluvial Wells
Santa Clara River Valley Groundwater Basin, East Subbbasin

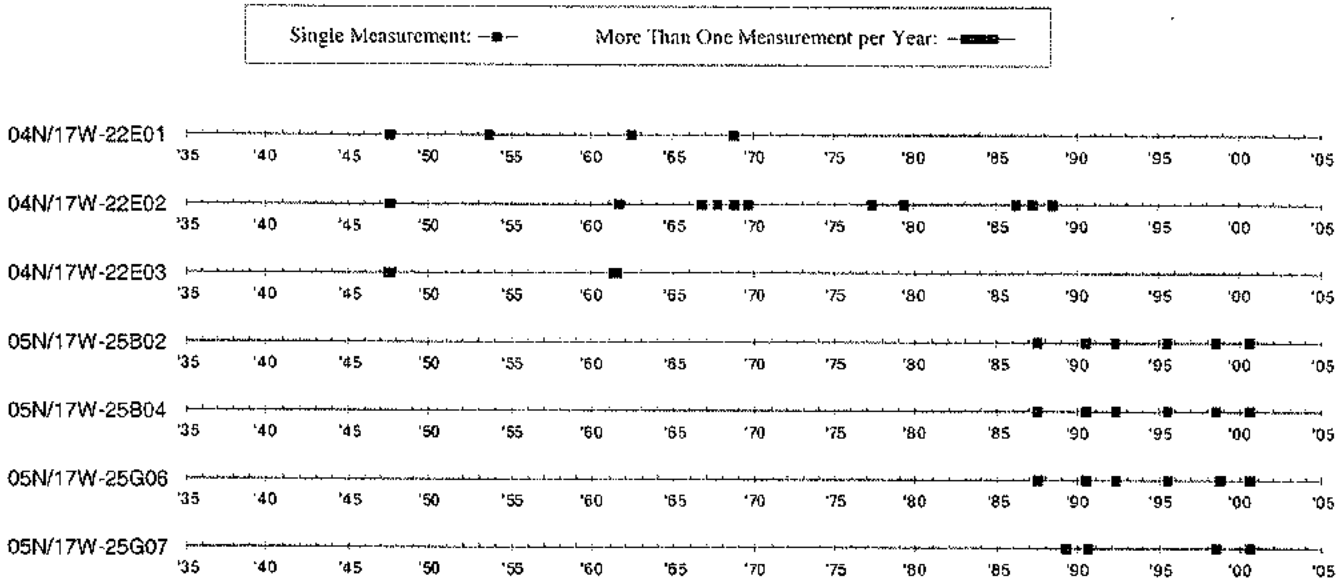
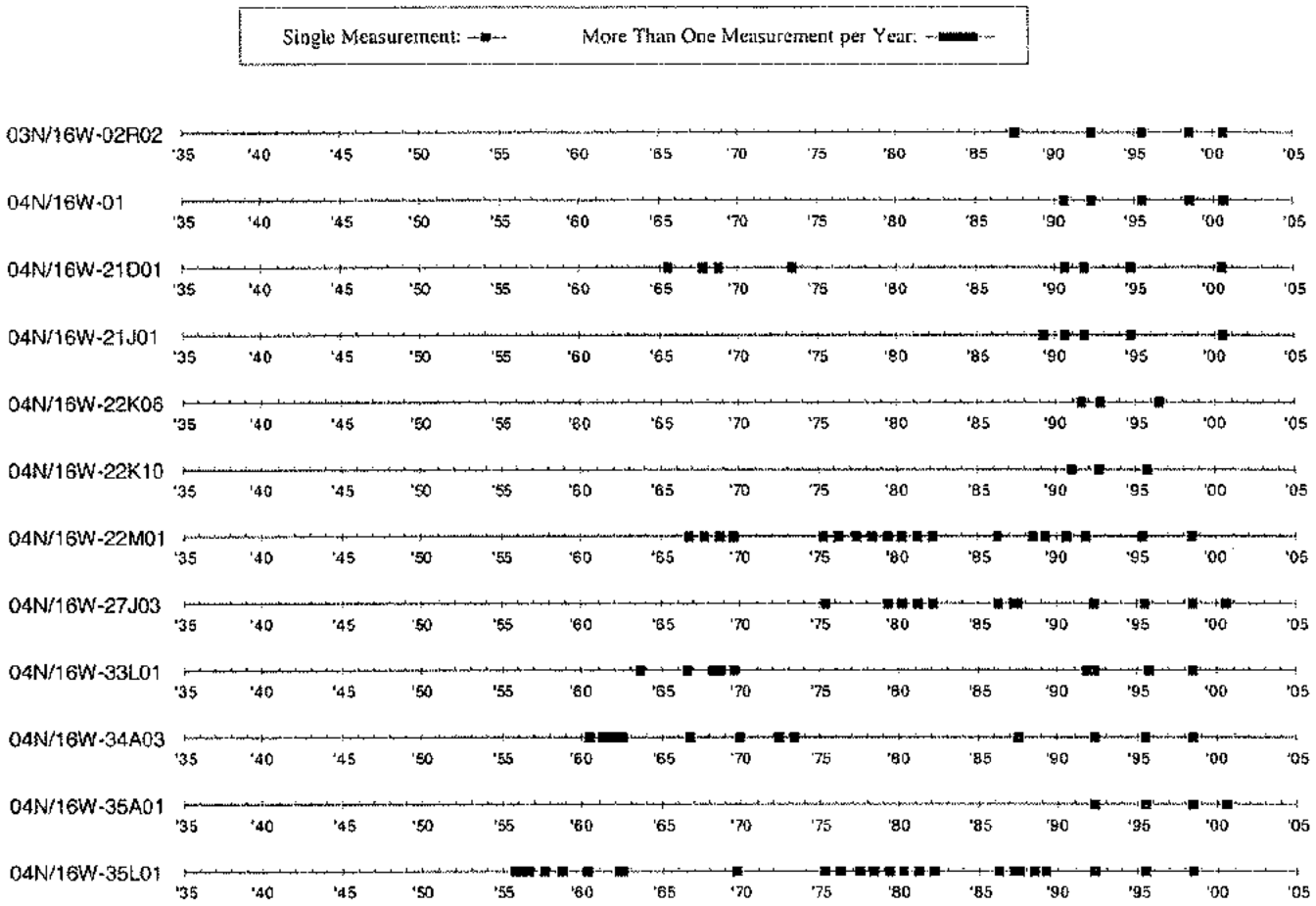
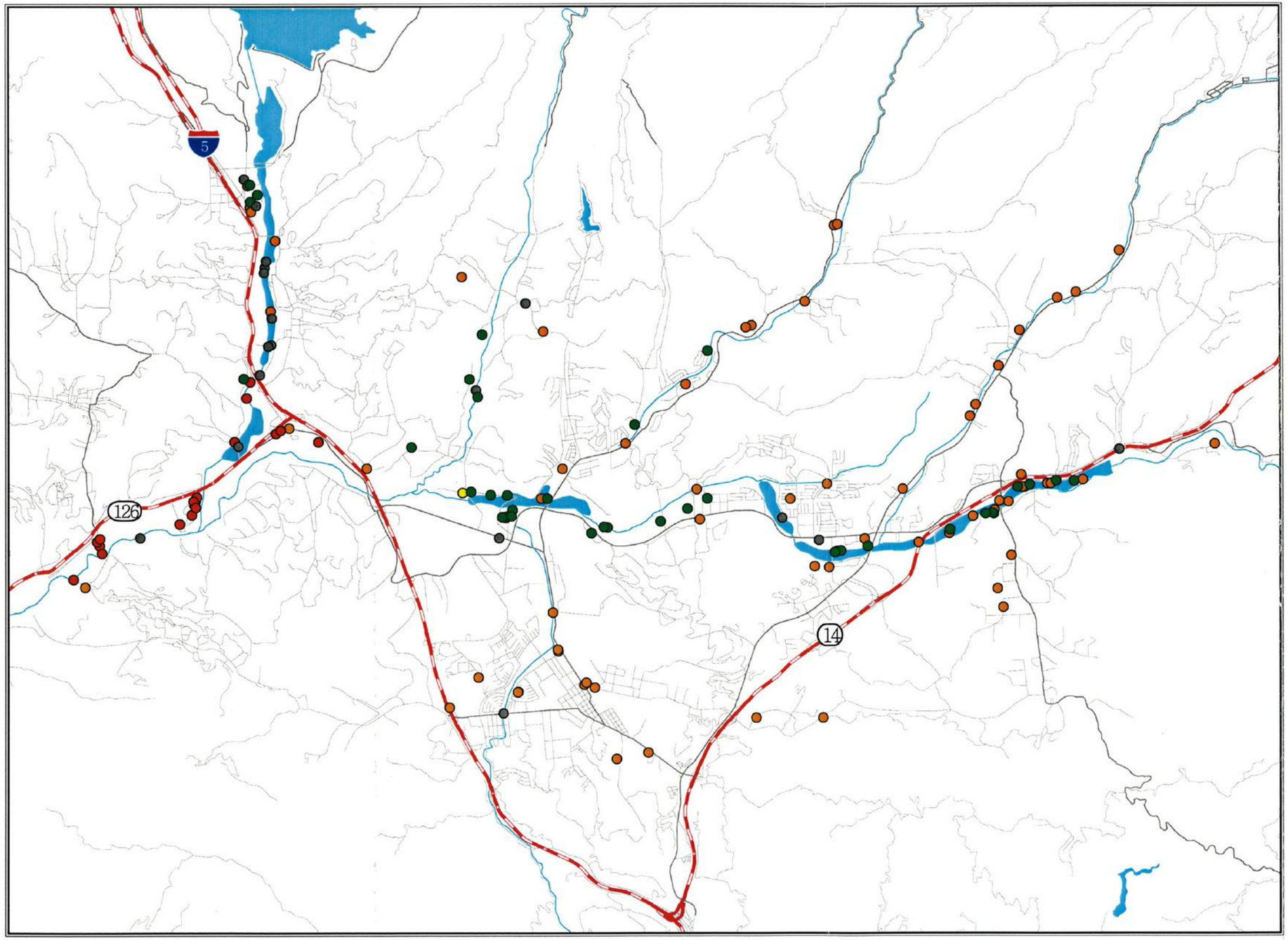


Table A4
Dates of Historic Water Quality Measurements (TDS) in Saugus Wells
Santa Clara River Valley Groundwater Basin, East Subbbasin





LEGEND

- Monthly
- Quarterly
- Twice Yearly
- Yearly
- Unknown Status

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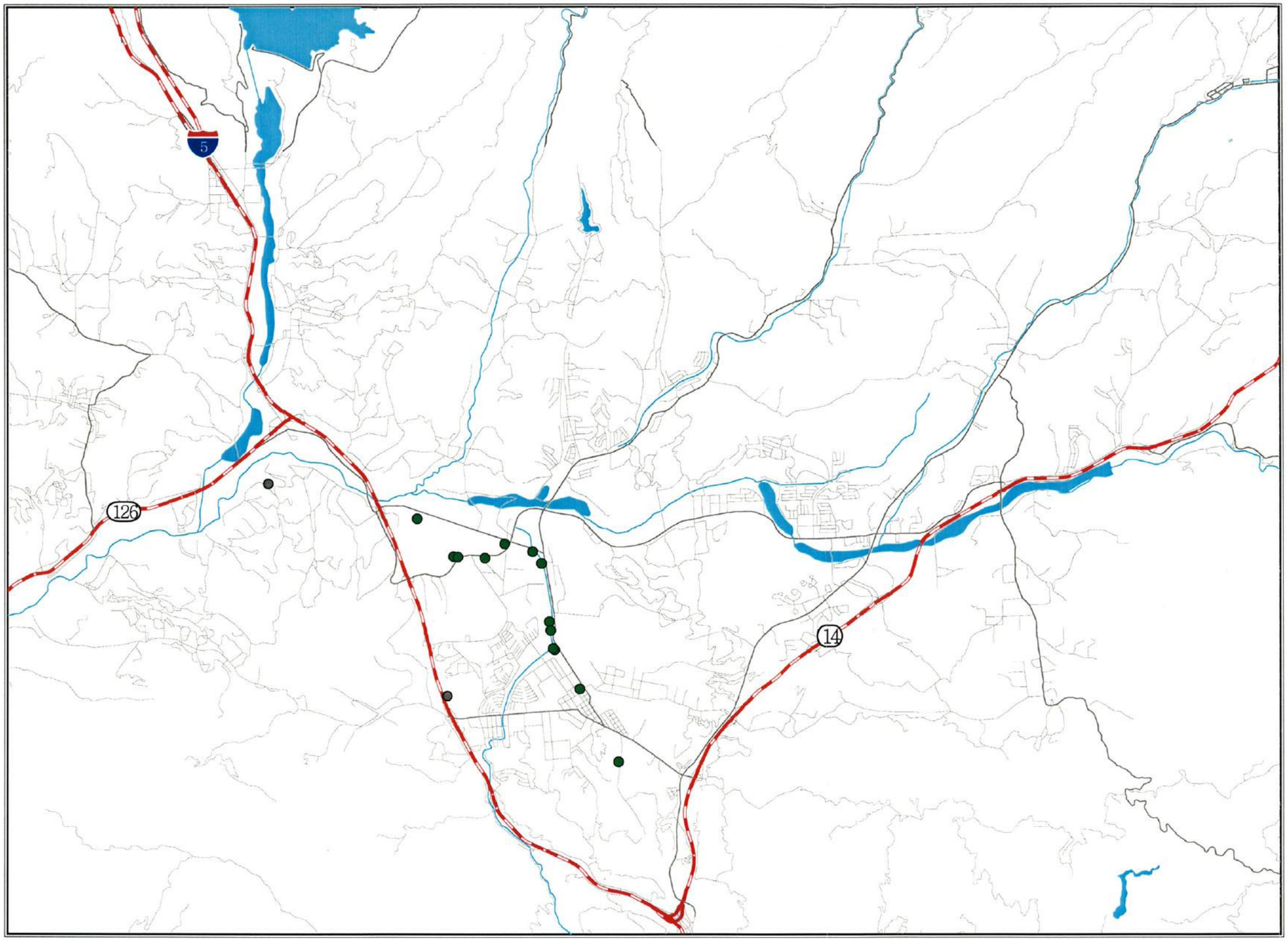
CONSULTING ENGINEERS

Figure A1
Frequency of Water Level Measurements in Alluvial Wells
Santa Clara River Valley Groundwater Basin, East Subbasin



LEGEND

- Monthly
- Unknown Status

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Figure A2
Frequency of Water Level Measurements in Saugus Wells
Santa Clara River Valley Groundwater Basin, East Subbasin

LEGEND

- Every 1 to 3 Years
- Every 1 to 3 Years (through 1988)
- Every 3 Years
- Every 3 Years (through 1988)
- Some Historic

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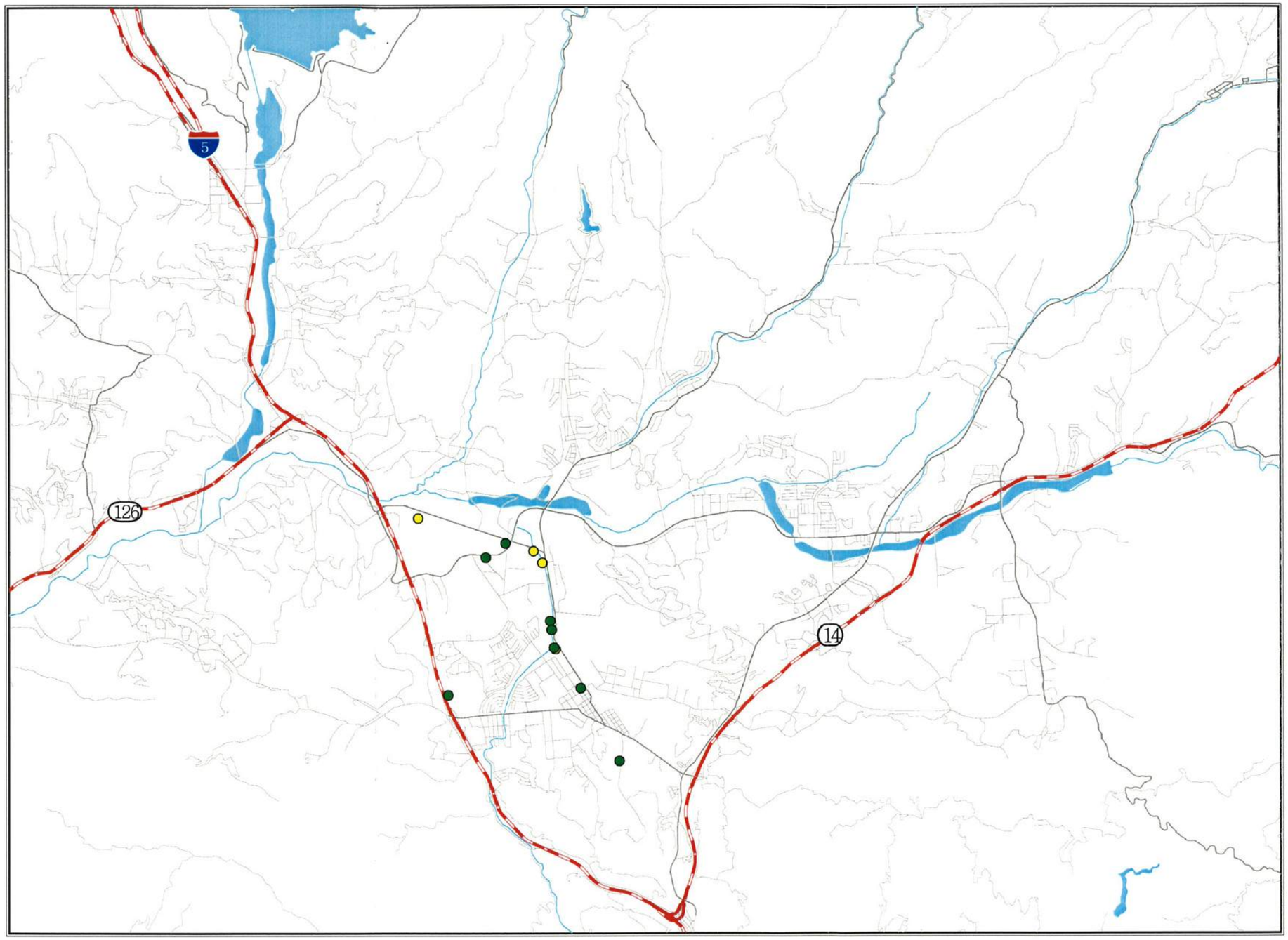
Figure A3
Frequency of Water Quality Measurements in Alluvial Wells
Santa Clara River Valley Groundwater Basin, East Subbasin



LEGEND

- Every 1 to 3 Years
- Every 3 Years

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CONSULTING ENGINEERS

Figure A4
Frequency of Water Quality Measurements in Saugus Wells
Santa Clara River Valley Groundwater Basin, East Subbasin

Appendix II

Groundwater Management Plan
Public Comments

PARTY	COMMENT	APPLICABLE GWMP SECTION/ COMPLIANCE[1]	RESPONSE
UWCD #5	Under Primary Element 2 related to surface flows, in addition to SWP water contributing to the increased flow of the Santa Clara River, other considerations should be noted (hydrologic cycle, Alluvial pumping).	Primary Element 2	As noted above, discussion of groundwater–related conditions is included in the Plan as a frame of reference for the Plan objectives and elements. Future interpretation and reporting will take such details as the impacts of the hydrologic cycle and Alluvial pumping into account.
Santa Clarita Organization for Planning and the Environment #1	Extensive pumping and lack of protection of recharge areas have resulted in almost complete elimination of surface flows and summer ponding necessary to wildlife as well as causing water level drops in wells that have resulted in water quality and availability problems for small users.	Section III (Groundwater Levels and Storage) and (Groundwater Quality) and Primary Elements 1, 2 and 3	See responses to SCOPE Comments 5, 6 and 9, Sand Canyon Comments 1 and 7, and Sierra Club Comment 3 regarding pumping within basin yield, avoidance of overdraft, preservation of recharge areas, and consideration of riparian conditions.
SCOPE #2	Concern that environmental organizations, small well owners, City of Santa Clarita, LA County, and others were not included on the Advisory Board.	Water Code Appendix § 103-15.1(e)(2)	CLWA legal counsel has confirmed that CLWA complied with the requirements of AB 134 regarding the composition of the Advisory Council. LA County was represented by LA Co. WWD #36 and LA County Sheriff's Department
SCOPE #3	The GWMP should include a timeline for completion of the plan components.	AB 3030[2] and AB 134[3]	AB 3030 and AB 134 do not require the inclusion of a timeline.
SCOPE #4	The GWMP is lacking in the review of land use plans and coordination with land use agencies. Land use issues should be given higher priority. This may include a wellhead protection plan.	Water Code § 10753.8(l); Primary Element 9 and Secondary Element 2	Primary Element 9 and Secondary Element 2 have been expanded to further address general preservation of recharge areas and appropriate review of land use plans to protect against potential groundwater contamination.
SCOPE #5	GWMP should address maintaining tributaries in a natural state to enhance water recharge and quality.	This is not explicitly required by AB 3030 but does relate to Secondary Element 2.	Secondary Element 2 has been expanded to address preservation of in-channel recharge areas in both the Santa Clara River and its tributaries.

[2] Stats. 1992, Ch. 947.
[3] Stats. 2001, Ch. 929.

PARTY	COMMENT	APPLICABLE GWMP SECTION/ COMPLIANCE[1]	RESPONSE
SCOPE #6	GWMP should find ways to increase water recharge. Water agencies should also coordinate to prevent paving of prime recharge areas.	This is not explicitly required by AB 3030 but relates to Primary Elements 3, 4 and 5 and Secondary Element 2.	Potentially increasing groundwater recharge will be part of Primary Elements 3, 4 and 5. Prevention of paving prime recharge areas is included in the expanded Secondary Element 2.
SCOPE #7	Number One Goal should not be "Development of Local Groundwater for Water Supply" because groundwater has many other important uses (recreational, biological, etc…)	This is not required by AB 3030 or AB 134. See Section II of GWMP.	The text of Section II, Management Objectives (Goals) for the Basin does not indicate a preference of any one objective over the others. The listing is not intended to indicate that any objective will not be attempted; all objectives are intended to be achieved.
SCOPE #8	Agricultural water usage in the GWMP is overestimated with the perennial yield (40,000 afy) estimate higher than that in a Richard Slade report; less agricultural runoff water is available for recharge today.	Section IV (Existing and Projected Water Supplies)	Reported historical agricultural pumping is consistent with all available records. A perennial yield of 40,000 afy is not included or implied in the GWMP. Rather, estimated ranges of 30,000 to 40,000 afy, depending on hydrologic conditions, are included as expected yield from the Alluvium. That range is consistent with historical reports, and with observations of actual Alluvial aquifer response to pumping in that range for at least the last 50 years.
SCOPE #9	Disappearance of year round Santa Clara River flow is indication of overdraft. "There are numerous records and observations by long-time residents indicating that surface flow usually occurred year round."	Section III (Areas of Concern and Identified Problems); Water Code § 10753.8(e).	Disappearance of year round stream flow does not necessarily indicate groundwater overdraft. In fact, stream flow west of Bouquet Canyon is now perennial. Part of implementing Primary Element 1 will be to obtain the "numerous records" of year round stream flow that are noted to have usually occurred.
SCOPE #10	GWMP should disclose the reduction in production capability because of perchlorate contamination.	Primary Element 8; § 10753.8(j).	The GWMP notes the inactivation of wells that have been impacted by perchlorate contamination.
Sand Canyon Area Well Owners Assoc. #1	Groundwater is extensively pumped and recharge areas are not adequately protected; water level in four wells has dropped from 12 ft in 1997 to 93 ft currently.	This relates to Primary Elements 1 and 3, and Secondary Element 2.	The noted groundwater level fluctuations are consistent with those described in Section III and illustrated in Figure 3-2 for the Sand Canyon area. Section III also describes and illustrates the historical recovery from such declines. Avoidance of overdraft, i.e. continuous lowering of water levels, and protection of recharge areas are included in Primary Element 3 and Secondary Element 2, respectively.

PARTY	COMMENT	APPLICABLE GWMP SECTION/ COMPLIANCE[1]	RESPONSE
Sand Canyon #2	Advisory board lacks representation by rural well owners.	Water Code Appendix § 103-15.1(e)(2)	CLWA complied with the requirements of AB 134 regarding the composition of the Advisory Council.
Sand Canyon #3	GWMP should include timelines for completing its phases.	AB 3030 and AB 134.	Timelines are not required by AB 3030 or AB 134.
Sand Canyon #4	GWMP is lacking in its review of land use plans and coordination with land use agencies.	Water Code §10753.8(l)	See response to SCOPE Comment 4 above.
Sand Canyon #5	Perennial yield estimates for the Santa Clara River are higher than that provided in a Richard Slade report. Agricultural runoff is no longer a factor; agricultural usage was not metered historically, and former recharge areas have been paved.	Section IV (Existing and Projected Water Supplies)	See response to SCOPE Comment 8 above.
Sand Canyon #6	Santa Clara River should not be defined in terms of percolating groundwater. GWMP should clarify relationship between river and Saugus formation.	Section III	The GWMP is not an appropriate document in which to define the legal classification of groundwater, whether in the Alluvium or the Saugus Formation; consequently, there is no expression in the GWMP to describe the legal classification of groundwater in the basin. The entire focus of the GWMP is management of groundwater toward long-term preservation of both the quantity and quality of the resource.
Sand Canyon #7	GWMP's assertions against existence of overdraft or other undesirable conditions are incorrect since water levels in wells have reached historic lows. In addition, riparian conditions on the Santa Clara River and tributaries show signs of water deprivation.	Section III (Areas of Concern and Identified Problems)	See response to Sand Canyon Comment 1. Further, intermittent fluctuations reaching the equivalent of historic low levels is not overdraft. Primary Elements 1 and 3 are included to monitor groundwater levels throughout the basin, and to operate in an ongoing manner to avoid overdraft. Finally, the statement that riparian conditions show signs of water deprivation is non-specific as to location and is otherwise unsubstantiated. Primary Elements 1 and 2 are included in the Plan to quantify the existence and extent of such conditions, if they occur; Primary Element 3 is included to avoid overdraft- related conditions of the type noted.

PARTY	COMMENT	APPLICABLE GWMP SECTION/ COMPLIANCE[1]	RESPONSE
Sand Canyon #8	GWMP should include reports regarding water contamination from Robinson Ranch. City of Santa Clarita had stipulated that water quality adjacent to the golf course be monitored with results published in a report.	Primary Element 1	See response to UWCD Comment 1 regarding extent of detail regarding occurrence of groundwater as framework for understanding the objectives and elements of the GWMP. As regards this comment, there is no documented groundwater contamination from Robinson Ranch, including that golf course. Required reports on Robinson Ranch have not shown any contamination as alleged in this comment. Monitoring in accordance with Primary Element 1 is intended to detect any groundwater contamination of the nature alleged in this comment.
Friends of the Santa Clara River #1	Disappointed that GWMP's primary goal is "Development of Local Groundwater for Water Supply" because other objectives should include protection of groundwater resources.	AB 3030 and AB 134. Section II of GWMP.	See response to SCOPE Comment 7 above regarding lack of priority for all management objectives, and lack of "primary" status for "Development of Local Groundwater for Water Supply".
Friends #2	GWMP should emphasize that paving of streams reduces recharge and should be avoided. Buffer zones around streams should be discussed.	This is not explicitly required by AB 3030 but relates to Primary Elements 3, 4 and 5 and Secondary Element 2.	See response to SCOPE Comments 4, 5 and 6. Further, given the importance of in-channel recharge to the yield of the Alluvium, a priority in implementation of the Plan can logically be expected to be avoidance of paving stream channels.
Friends #3	Advisory Board should include representatives from environmental groups and county agencies.	Water Code Appendix § 103-15.1(e)(2)	CLWA complied with the requirements of AB 134 regarding the composition of the Advisory Council.
Santa Clarita Sierra Club Group #1	GWMP should include timelines for completion of components.	AB 3030 and AB 134.	Timelines are not required by AB 3030 or AB 134

PARTY	COMMENT	APPLICABLE GWMP SECTION/ COMPLIANCE[1]	RESPONSE
Sierra Club #2	GWMP does not account for loss of groundwater from perchlorate contamination. "The numbers do not adequately represent the real water supply."	Primary Element 8; Water Code §10753.8(j)	See response to SCOPE Comment 10 regarding the inactivation of wells impacted by perchlorate contamination. The inactivation of certain wells impacts pumping capacity until the wells can be reactivated, with treatment if necessary, or replaced. However, perchlorate contamination does not reduce the available yield of the aquifer system; hence, the numbers included in the GWMP accurately reflect the current state of water supply.
Sierra Club #3	Loss of groundwater due to development and pavement is not considered. GWMP must address coordination of land use with water necessities.	This is not explicitly required by AB 3030 but relates to Primary Elements 3, 4 and 5 and Secondary Element 2.	See responses to SCOPE Comments 4 and 6. Further, there has been no "loss" of groundwater due to development or pavement; groundwater conditions remain as generally described in Section III, with nearly constant water levels to the west and repetitive fluctuations to the east (see response to Sand Canyon Comment 1).
Sierra Club #4	Drought planning is inadequate as it fails to take account of loss of primary water sources and reclaimed water.	Primary Element 3, 4, 5 and 7.	Drought planning is embedded in the GWMP in that the Plan is intended to result in groundwater management that ensures adequacy of groundwater supplies through both wet and dry (drought) hydrologic cycles. While "drought planning", per se, relates more specifically to overall water supply planning, of which groundwater is only one component, this Plan is intended to manage groundwater in such a way that it will be a reliable component of overall water supply through dry periods without being overdrafted on a long-term basis, e.g. through wet/normal periods that follow dry periods. Primary Elements 3, 4, 5 and 7 in the Plan relate to drought planning as well as parts of groundwater management through long-term fluctuations in hydrologic conditions.
Sierra Club #5	GWMP does not adequately discuss maintaining river and tributary habitats. Sierra Club supports a citizen monitoring program for water quality.	This is not explicitly required by AB 3030 but does relate to Secondary Element 2.	See response to SCOPE Comment 5 and Friends Comment 2.

PARTY	COMMENT	APPLICABLE GWMP SECTION/ COMPLIANCE[1]	RESPONSE
Sierra Club #6	CLWA should involve the public and other government and private entities in its water supply planning.	Water Code Appendix § 103-15.1(e)(2)	CLWA complied with the requirements of AB 134 regarding the composition of the Advisory Council.
Ed & Joan Dunn #1	Concern because CLWA did not hold more public meetings before release of draft. Concern whether CLWA has regularly met with Advisory Board.	Water Code § 10753 et seq.	CLWA has complied with all requirements thus far regarding public meetings and gone beyond that legally required.
Dunn #2	Doubt regarding replenishment of water in the Alluvial Aquifer.	Primary Elements 3, 4 and 5	Fundamentally, as discussed in the Plan, the long-term objectives for the basin include utilizing groundwater for water supply while not overdrafting the basin. As also discussed in the Plan, historically, in the western part of the basin there has been sufficient water for recharge to maintain an essentially full basin throughout both wet and dry hydrologic periods. Part of the reference to "sustain recharge" relates to that historical condition. Whether or not additional artificial recharge will be implemented in other parts of the basin, and what water sources might be used for such recharge, are to be addressed via implementation of the Plan, particularly Primary Elements 3, 4 and 5.
Dunn #3	Doubt over Richard Slade's assertion as to Alluvial Aquifer capacity.	This challenges evidence which the GWMP cites.	The analysis and determination of the storage capacity of the Alluvium has been exhaustively described in Slade's reports. The comment conveys no specific aspect of its "question"; the commentors are referred to Slade's reports, which address the storage calculations in proper technical detail.
Dunn #4	GWMP should state that SWP water was interrupted for 6 months in 1991. Newspaper clipping is provided for this point.	Primary Elements 3, 4 and 5	Primary Elements 3, 4 and 5 are included in the GWMP to ensure the maximum reliability of local groundwater in order to endure any future drought-related impacts on SWP deliveries, such as occurred in 1991.

PARTY	COMMENT	APPLICABLE GWMP SECTION/ COMPLIANCE[1]	RESPONSE
Dunn #5	Statement in GWMP that no wells exceeded DHS action level for perchlorate is false. Newspaper clippings provided.	Section III (Groundwater Quality)	The Plan has been revised to reflect that, while there remains no primary or secondary drinking water standard for perchlorate, and although only some of the detected concentrations of perchlorate in the Saugus wells exceeded the Action Level established by the State Department of Health Services at that time (18 ug/l), all those wells were inactivated by their respective owners after detection of perchlorate; those wells remain out of municipal water supply service since then.
Dunn #6	Statement that perchlorate contamination has not reduced groundwater capacity is misleading.	Primary Element 8	See response to SCOPE Comment 10 and Sierra Club Comment 2.
Dunn #7	The Urban Water Management Plan should not be referred to because it is under legal attack.	While it has been challenged, the UWMP is still a valid document.	While it has been challenged, the UWMP is still a valid document and represents the current plan for urban water supply through its 20 year planning horizon. The Kern County Superior Court in February 2003 ruled completely in favor of the water suppliers in their defense of the UWMP litigation. The remaining petitioners have appealed.
Dunn #8	The Saugus Formation does NOT underlie the entire CLWA service area.	Section I (Santa Clara River Valley Groundwater Basin)	The text of the Plan has been revised to reflect that the Saugus Formation underlies much of the CLWA service area.
Dunn #9	GWMP should state CLWA's inability to transport additional SWP to Santa Clarita Valley.	Section IV (Existing and Projected Water Supplies)	CLWA does not have an inability to transport additional SWP water to the Santa Clarita Valley. Fundamentally, the comment is erroneous since the State conveys SWP water to CLWA's diversion points from Castaic Lake; from there CLWA has sufficient treatment and conveyance capacity for its current water demands, and is in the process of designing additional treatment plant capacity to treat and distribute additional water to accommodate projected increased demand.

PARTY	COMMENT	APPLICABLE GWMP SECTION/ COMPLIANCE[1]	RESPONSE
Dunn #10	CLWA's recycled water program is for private business only, not public agencies.	Primary Element 7	The recycled water program has no restrictions against use by public agencies. As described in Primary Element 7, the integration of recycled water to meet some non-potable demand is expected to decrease overall demand for potable water by up to 17,000 afy. As public agencies develop capabilities to utilize recycled water for non-potable uses, they are expected to reduce potable water demands by integrating recycled water into their overall water delivery systems. Finally, recycled water service to a specific user or area frees up potable water supplies for other users or areas, thus enhancing the reliability of the overall water supply of the Valley.
Dunn #11	Groundwater production from both the Alluvium and Saugus Formation is overstated.	Section IV (Existing and Projected Water Supplies)	The comment is unsubstantiated and includes no support in the form of records or other data to validate it. The historical use of groundwater reported in the Plan is based on a combination of metered pumping and indirect estimation of pumping based on metered power consumption and pump performance testing. There is no basis for claiming that reported groundwater production is "overstated".
Dunn #12	CLWA should develop an emergency plan.	Primary Elements 3, 4 and 5	Development of an emergency plan, presumably an emergency water supply plan, is beyond the scope of a GWMP. However, Primary Elements 3, 4 and 5 are intended to further develop both a regular and a dry year/emergency component of water supply from local groundwater.
Dunn #13	Chart depicting SWP water received in 1991 is erroneous. Newspaper clipping provided.	Figure 4-1	The final 1991 M&I allocation was 30% (October 1991). CLWA's M&I entitlement at that time was 41,500 af. The total amount made available to CLWA by DWR was 13,050 af. Since by October, CLWA and the retail purveyors had already instituted emergency operations, the entire amount was not used.

PARTY	COMMENT	APPLICABLE GWMP SECTION/ COMPLIANCE[1]	RESPONSE
Dunn #14	Claim that CLWA meetings with retail water purveyors, the City, and UWCD have not occurred.	Primary Element 9	The Commentors' lack of knowledge of such meetings does not mean they have not occurred. Appropriate documentation of such meetings, including presentation materials, discussion topics, and resultant work assignments, are maintained by meeting participants.
Dunn #15	Secret meetings and secret reports related to Primary Element 10 should not be included as part of the GWMP.	Primary Element 10	The preparation of the annual Water Reports does not indicate that any secret meetings have taken place. Previous Water Reports have been prepared, and future Water Reports are envisioned to be prepared with few, if any, meetings of any type; both public and private meetings have been convened to present and discuss the findings of the various Water Reports, and such meetings are intended to occur in the future for the same purpose.
Dunn #16	CLWA should provide an accounting of water conserved.	N/A	Providing an accounting of water conserved is beyond the scope of the GWMP. More water sales are occurring through time due to increasing demand in the Valley. Water conservation measures result in water savings even though demand is increasing.
Diane Trautman (City Planning Commissioner) #1	What percentage of water demand will be drawn from local groundwater?	Primary Element 5	In terms of groundwater management planning, projected urban water demand (the 106,000 afy projected urban demand in 2020) does not represent total valley-wide demand; total projected demand is 113,100 afy, including both urban and agricultural. In that light, on an average basis, local groundwater is expected to be utilized to meet about 40 percent of total water demand.

PARTY	COMMENT	APPLICABLE GWMP SECTION/ COMPLIANCE[1]	RESPONSE
Trautman #2	Will pumping of the Alluvial Aquifer reduce recharge of the Saugus Formation and reduce water that can be produced from the Saugus Formation during dry periods?	Primary Elements 3, 4 and 5	No. Since the Saugus Formation is recharged over a much larger area, beyond the spatial extent of the Alluvium, there is a limited relationship between Alluvial pumping and recharge to the Saugus Formation. The fundamental tenet of the GWMP is to utilize groundwater for water supply within its sustainable yield (see the Management Objectives, or Goals, for the Basin, GWMP Section II; see also the various GWMP Elements intended to achieve those objectives, GWMP Section V). In that light, it is expected and intended to operate in such a way that recharge to the Saugus Formation will not be "reduced" by pumping from the Alluvial Aquifer and that groundwater will be available in varying amounts, as needed depending on weather year-types, within the sustainable yields of the respective aquifers (i.e. without overdrafting them).
Trautman #3	Does CLWA have sufficient data regarding the Alluvial Aquifer and Saugus Formation; if not, how will it obtain such data?	Section III and Primary Element 1.	The reference to "useful amount of groundwater quality data" in the GWMP includes both Alluvial and Saugus data. However, due to the historically greater development and use of groundwater from the Alluvium (number and distribution of wells, volume of pumping), and due to the historically smaller development and use of the Saugus Formation (fewer wells, smaller geographical distribution of wells, smaller pumpage), there is comparatively limited ability to examine relationships among pumping, recharge, and quality in the Saugus Formation. CLWA and the other purveyors intend to expand the overall knowledge of the Saugus Formation as that resource is further explored and developed (number of wells, additional sampling as new wells are added, etc.). All that data will be included in ongoing implementation of GWMP Primary Element 1, Monitoring of Groundwater Levels, Quality and Production.
Trautman #4	The 2002 Water Report indicates that "there are limited Saugus (Formation) water level data." Does CLWA plan to collect more comprehensive data on the Saugus Formation?	Section III and Primary Element 1	The "limited nature of Saugus water level data" is a result of the same smaller extent of historical Saugus development described in the preceding answer. Acquisition of additional data on the Saugus Formation is planned as also described in the preceding answer.

PARTY	COMMENT	APPLICABLE GWMP SECTION/ COMPLIANCE[1]	RESPONSE
Trautman #5	Is CLWA sharing detailed information with the City of Santa Clarita regarding contamination risks in relation to existing closed wells?	Primary Element 9	All publicly available information regarding the investigation of perchlorate contamination, its extent, its impact on water supply, and plans for cleanup, control of migration, etc. is available to the City. Representatives of CLWA and the purveyors meet routinely with City representatives to review the status of perchlorate cleanup and remediation activities. CLWA and the impacted water purveyors will continue to pursue control and cleanup of perchlorate contamination in order to restore impacted groundwater pumping capacity and to ensure the long-term quantity and quality of groundwater in accordance with the GWMP. As a practical matter, there are no surface contamination risks relating to perchlorate that would affect land use development adjacent to the impacted wells.
Trautman #6	Where is the Stadium Well located?	Section IV (Groundwater Quality)	The Stadium Well is located on the south side of the Santa Clara River, approximately two miles upstream (east) of its confluence with the South Fork tributary, or about 4,000 feet east of the Bouquet Canyon Road crossing of the Santa Clara River.
Trautman #7	Why isn't conservation a primary element (instead of secondary) since it may reduce water demand by 10%?	Secondary Element 1	The assignment of "primary" or "secondary" status to any GWMP element is discretionary and certainly not absolute. Secondary status is not intended to indicate that any element of the GWMP will not be implemented; all elements are intended to be implemented. Final status of all GWMP elements will be reviewed by the Advisory Council and the CLWA Board.

PARTY	COMMENT	APPLICABLE GWMP SECTION/ COMPLIANCE[1]	RESPONSE
Trautman #8	How is CLWA delivering recycled water?	Primary Element 7	Recycled water is being delivered to the TPC golf course, the first customer of the system, via the dedicated, recycled water distribution system, which is also capable of delivering water to other non-potable water users, and which will be expanded in accordance with the Draft Recycled Water Master Plan. The costs and time frame for expanding recycled water distribution and use are included in the Draft Recycled Water Master Plan, which is complementary to, but beyond the scope of the Groundwater Management Plan. The intent is to develop 17,000 afy of recycled water use by 2020. The capital cost of the complete system is estimated to be $68 million, and will be funded through CLWA's connection fee program.
Trautman #9	How is recycled water reprocessed?	Primary Element 7	Recycled water is not "reprocessed" at points of use such at the TPC golf course. In general, recycled water is highly treated (tertiary treated) waste water. In the case of the Santa Clarita Valley, treatment already occurs at the Valencia Reclamation Plant operated by the Sanitation Districts of Los Angeles County. The treated water, ready for non-potable use, is distributed from the plant site in a dedicated transmission pipeline system to end users such as the TPC. Pesticide and fertilizer uses, as part of cultural practices at end-user locations such as golf courses, are discretionary actions of the respective end users of recycled water.
Trautman #10	What is the average per capita water usage?	N/A	Most water agencies no longer use "per capita" water use as a standard because it is not an accurate representation of actual per person water use, mainly due to the effects of landscape and commercial/industrial water use. (It is also expressed in "gallons per day," rather than "acre-feet per year," since it refers to individual water usage.) In general for the South Coast hydrologic region of California, water use is approximately 200 gallons per person per day (DWR Bulletin 160-98). Per capita use for the Santa Clarita Valley is slightly higher due to landscape irrigation demands caused by local climatic conditions.

PARTY	COMMENT	APPLICABLE GWMP SECTION/ COMPLIANCE[1]	RESPONSE
Trautman #11	The Semitropic Water Bank/Transfer is not mentioned in discussion of the Supplemental (SWP) Surface Water on page 21. Is that because it is a relatively short-term water supply? Are any of the other water transfers – Kern Water Bank, Kern Delta Water, North Las Posas Water Bank – as listed on UWMP p. 2-16, of limited duration? And if the Semitropic Water Bank Transfer is short term, how can it be included in the 105,000 – 106,000 afy need projected for the next 20 years? What will take its place?	Section IV (Existing and Projected Supplies)	The SWP is referred to as "supplemental" water because that is the original purpose of the SWP: to serve as a supply that would "supplement" local supplies (whether groundwater or local surface water or both). The specific amounts referred to in the GWMP are from the contractual terms between CLWA and the California Department of Water Resources. The water banked in the Semitropic Water Storage Program during 2002 is a short-term, dry period supply. The program has a term of ten years (i.e., the water must be returned to CLWA for use in its service area within that time period). Thus it is not included as a supply for long-term needs. However, the other programs listed in the UWMP (most of which, by the way, are not water "transfers," but are instead groundwater banking programs) are long-term sources of supply. CLWA is in the process of designing and implementing a Long-Term Reliability Plan to begin bringing such long-term programs on line as a means to store water available in wet years, for use in later dry years. CEQA analysis, with its accompanying public comment opportunities, will be part of the long-term reliability program approval process.
Trautman #12	What specific efforts will be made to manage salinity?	Primary Element 6	Primary Element 6 – Long Term Salinity Management is included in the GWMP for the reasons presented in the text discussion of that element. The element recognizes the need to plan for salinity management but also recognizes that, to the present, there has been no extraordinary trend of salinity increase. Hence, there are no specific efforts currently in place to "manage" salinity. It is envisioned that specific efforts will be developed over time in response to implementation of the GWMP and, in particular, its Primary Element 6. CLWA is participating in efforts by the Sanitation Districts of Los Angeles County to address the Los Angeles Regional Water Quality Control Board's proposed TMDL standard for chloride in the Santa Clara River. This effort is separate from and beyond the scope of the Groundwater Management Plan.

UNITED WATER CONSERVATION DISTRICT

"Conserving Water Since 1927"

August 7, 2003

Dan Masnada
Castaic Lake Water Agency
27234 Bouquet Canyon Road
Santa Clarita, CA 91350

Re: Response on Draft Groundwater Management Plan, Santa Clara River Valley Groundwater Basin, East Sub-basin

Thank you for giving us the opportunity to review and comment on your *Draft Groundwater Management Plan, Santa Clara River Valley Groundwater Basin, East Sub-basin*. United Water considers this plan as one piece of a broader effort at groundwater management that is being accomplished as part of the Memorandum of Understanding between United Water and water purveyors in the Santa Clarita area. We offer some specific comments and suggestions for your consideration.

Comments include:

Figure 3-2. The vertical and horizontal scales associated with the hydrographs are very difficult to read. The T4N/R17W, Section 22 well, in the western arm of the Alluvial Aquifer does not show data from approximately 1983 through 1991. In previous reports and analyses, the NLF #C5 well was used for this area. This well depicted variable groundwater levels for the period from the mid-1980s to the early 1990s. Because this is the discharge area of the Alluvial Aquifer to the Santa Clara River, we need to understand the response of the system to the onset of agricultural pumping in this area in the mid-1980s. The T4N/R17W, Section 22 well does not possess the data needed to show that response;

Page 15. The comment near the top of the page that "*over the last 35 years, groundwater quality in the Saugus has remained generally constant*" would be more supportable if it was accompanied by a groundwater quality map similar to Figure 3-3, with a few groundwater quality time-series specific to the Saugus Formation;

Figure 5-3. The average daily mean streamflow data appears to be shifted one year on the histogram graph. As an example to show the error, the histograms suggest that there were high flow years in 1968 and 1997. The high flow years were actually 1969 and 1998;

UNITED WATER CONSERVATION DISTRICT

Page 21. Local Groundwater. The planned production of 30,000 to 40,000 acre-feet per year from the Alluvial Aquifer and 7,500 to 15,000 acre-feet per year from the Saugus Formation, along with 10,000 to 20,000 acre-feet per year from the Saugus in dry years, has yet to be implemented. The current development of a regional transient groundwater flow model for the East Sub-basin is for the expressed purpose of evaluating the potential impacts to the basin and surface water outflow into Ventura County, to this increased pumping. Irrespective of the modeling results, only real groundwater and surrface water data can verify the influence of significantly increased pumping within the sub-basin; and

Page 26, Primary Element 2 – Monitoring and Management of Surface Water Flows and Quality. While imported SWP water no doubt contributes to the observed increased flow in the Santa Clara River at the Ventura County line, there exist additional explanations for a portion of the increased flow. Other considerations include:

1. Influence of the hydrologic cycle. The cumulative departure for precipitation was declining during the 1950s and first half of the 1960s. The cumulative departure improved significantly during the period of 1978 through 1986; and
2. The amount of Alluvial Aquifer pumping may influence flow at the Ventura County line. During the latter half of the 1960s and through the 1970s, groundwater pumping of the Alluvial Aquifer declined by 70%. Pumping during the 1980s was 30% lower than during the 1950s and early 1960s.

In this particular case, it would be very difficult to differentiate between the influence on streamflow from changes to groundwater pumping and the hydrologic changes.

If you have any questions about United Water's comments, please contact Steve Bachman at (805) 525-4431.

Sincerely,

Dana L. Wisehart

Dana L. Wisehart
General Manager

cc: BRRF
Lowell Preston, Ph.D., Ventura County Water Resources Division

File: Castaic Lake Water Agency
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SCOPE

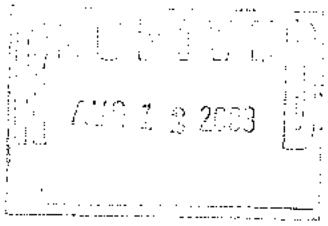
Santa Clarita Organization for Planning and the Environment

TO PROMOTE, PROTECT AND PRESERVE THE ENVIRONMENT, ECOLOGY AND QUALITY OF LIFE IN THE SANTA CLARITA VALLEY

POST OFFICE BOX 1182, SANTA CLARITA, CA 91386

8-6-03

Castaic Lake Water Agency
27234 Bouquet Cyn Rd.
Santa Clarita, Ca. 91350
Faxed to 661 297 1611 Hard copy to follow via regular mail



Re: Comments on Ground Water Management Plan

Dear Sirs:

Thank-you for the opportunity to comment on your plan. We are pleased that your agency has begun a ground water management plan in response to the community's concerns over the excessive use of ground water. This extensive pumping and lack of protection of re-charge areas has resulted in almost complete elimination of surface flows and summer ponding necessary to wildlife as well as causing water level drops in wells that have resulted in water quality and availability problems for small users.

General Areas of Concern

We regret that environmental organizations, small well owners, the City of Santa Clarita, the County of Los Angeles (watershed and flood control divisions), Regional Water Quality Control and other members of the community interested in water issues in our valley were not included on your advisory board. We believe that inclusion of these groups early on would have helped resolved some of the issues with your plan at an earlier stage. Including only the water companies, Newhall Land and Robinson Ranch effectively excluded many of the groups and individuals that have voiced strong concerns over your present actions. The water agencies have consistently excluded these groups from all water planning, including water supply reports and the Urban Water Management Plan process. We strongly suggest that a more inclusive committee be formed to include representatives of the environmental community and rural well owners who are now being affected by overdraft of the Santa Clara River.

We also note that there are no timelines for completion of any of the components of the plan. Without such timelines, it would seem that there is little real intention or commitment to follow through on the various parts of the plan.

The Land Use/Wellhead Protection Component of the Groundwater Management Plan

Perhaps the most significant out come of a ground water management plan in the Santa Clarita Valley would be implementation of the portion of Section 10753 which requires review of land use plans and coordination with land use agencies. Your plan assigns this area to

"secondary element 2", an indication that you do not intend to pay much attention to this important component.

The coordination of land use and water planning has been sadly lacking in the Santa Clarita Valley. A simple wellhead protection plan would help decision makers understand the potentially polluting impacts of certain land uses such as gas stations, auto repair shops, etc. and how they could negatively affect our water supply. Instead, these uses are routinely permitted next to water supply wells.

Paving over of prime re-charge areas is allowed without a word of protest from the water agencies, even though such loss of recharge capacity will severely affect water availability. Recreational uses should be encouraged in recharge areas that will accommodate and perhaps even enhance water re-charge and thus increase water availability.

Newhall County Water District began a well head protection program and educational presentations with its ground water management plan in the mid 90's, but efforts to both educate the planners and protect re-charge and water supply wells have been stifled by the strong developer involvement with water agency decisions. This involvement has precluded advocacy of long term decisions that would protect water availability and water quality in favor of short term profits for development companies.

The ground water management plan should stress the importance of avoiding the concreting of tributaries when approving new land uses and require adequate set back from natural water courses to allow those blue line streams to remain in a natural state. This will enhance water re-charge (and thus, ensure water availability). It will also aid water quality because riparian vegetation absorbs many pollutants before they can enter the ground water system.

It is an indication of the myopic view of the water agencies that this plan states its number one goal to be "Development of Local Groundwater for Water Supply". There are many other uses of ground water and surface water which are important to the community. These include recreational and aesthetic values, biological value and the quality of the water supply. More pumping will result in diminution of all these other aspects of our ground water resource and ignore the strong protests and demands for their protection which are already being heard from many voices in the community.

Monitoring of Ground Water and Surface to Establish Safe Yield

Agricultural Water Usage is Overestimated

In its presentation, Luhdroff and Scalmanini revise the previous perennial yield estimate of the Santa Clara River by Richard Slade (perennial yield 32,000 AF, Hydrology of the Alluvial Sediments of the Santa Clara River, 1988, page 109) to approximately 40,000 AF. This revision is based in part on an average agricultural usage from the 1940s to the 1960s. We believe that these calculations are incorrect for three reasons.

1. No inclusion of recharge from agricultural run off was included in the usage calculations as was included in previous reports. Agricultural run-off was a substantial source of re-charge to the river that no longer exists, therefore not as much water is available for extraction.

2. Agricultural withdrawal was not metered, so water usage is merely an estimate based on crops and weather. It appears that estimates of withdrawals may have been over-stated.
3. Agricultural lands provided a source of re-charge during wet years. Urbanization has paved over most of this area, so re-charge is no longer occurring. This will reduce that amount of recharge to the river alluvium and thus reduce the amount available for extraction. (Slade, 1988, Hydrological Investigation of the Perennial Yield of the Alluvial Aquifer, page 88)

These evaluation errors have caused the water companies to believe that they can withdraw a higher amount of water than can actually occur without causing impacts to public trust matters and small well users

Monitoring and Managing Surface Water Flows

Visual Historical Evidence has been ignored

There are numerous records and observations by long-time residents indicating that surface flow usually occurred year round. Ponding that harbored fish and amphibians (many of which are listed as threatened or endangered) in areas that did not support year round flow has also been attested to by local residents. The disappearance of year-round flows and ponding is an indication of overdraft of the alluvial system. The impacts to riparian life and water quality are substantial. A goal of returning or replacing these summer surface waters should be incorporated in your plan. Such replacement may help to avoid potential future litigation brought to enforce the Endangered Species Act.

Water Quality Monitoring

Water Pollution

We appreciate that the water agencies have finally admitted that 5 municipal wells are closed and that there is a concern that the pollution plume is moving in a westerly direction (Plan at page 32). It is very regrettable that these facts were not disclosed to decision makers over the past several years and, further, were even denied by representatives of the water agencies.

However, we believe it is imperative that this plan additionally include a disclosure of the current reduction in production capability due to pollution of the Saugus and alluvial aquifer by ammonium perchlorate. Continued pumping may extend the pollution plume and increase clean-up costs. It is important that the extent of the problem be honestly outlined for the public so that alternative remedies may be devised and discussed. Failure to disclose the extent of the pollution problem and its real impact may lead to serious water quality problems if the Saugus aquifer is relied upon for drought supply.

Conclusion

We submit the following recommendations

1. We encourage CLWA to re-form its advisory committee to be inclusive of the community and other local agencies.

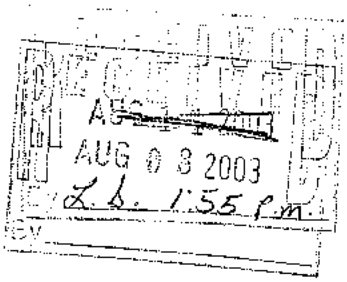
2. We suggest that the goals of the plan be re-ordered to place land use issues in a position of significance, and include recommendations from other agencies, organizations and individuals that might enhance water availability and water quality.
3. A time line must be established, financial commitment discussed and responsibility assigned so that the water management goals will actually be attained.

Sincerely

Pat Saletore

Pat Saletore

Cc: City of Santa Clarita
County of Los Angeles
Regional Water Quality Control Board
Local Newspapers



Sand Canyon Area Well Owners Association
c/o 27363 Sand Canyon Road
Santa Clarita, CA 91387-3632

August 8, 2003

Castaic Lake Water Agency
27234 Bouquet Canyon Road
Santa Clarita, CA 91350-2173

RE: Groundwater Management Plan ("AB 3030 Plan")

Gentlemen:

This letter is in response to your letter of June 16, 2003 which solicited comments about the above plan to ensure that the general public has had the opportunity to provide input on this local effort to manage our community's groundwater resources.

We are pleased to respond to your request for public participation. As well using residents of the Sand Canyon area who are affected by ground water use and plans for future use of it, we feel that our interests are very much at stake in determining how our river and ground water is to be used.

Our first and foremost concerns are that both river and ground water is being extensively pumped and that recharge areas are not being adequately protected. Surface flows and summer ponds have virtually vanished from our vicinity. In 1997, the water level in four wells adjacent to Sand Canyon Creek stood at twelve feet. As of last month, those same wells' water level now stands at ninety-three feet.

Other general concerns include the lack of representation on your advisory board by rural well owners. While water companies and the Robinson Ranch Golf Course have their own interests in how our community's water resources are used, many small well users have an equally valid interest in seeing that our area's water resources are managed in an equitable fashion that ensures no entity's use will result in the deprivation of others.

Also, none of we Sand Canyon area small well users have been consulted during the creation of water supply reports or the Urban Water Management Plan, despite the fact we are being affected by an increasingly serious overdraft of the Santa Clara River. Including members of our group in a groundwater management committee will bring important stakeholders to the planning process. We have important data to present.

It is disappointing to note that the ground water management plan specifies no timelines or dates for executing and completing its phases. We question whether there is sincere intent to carry out the plan given the lack of work plan.

On a broader scale, we are deeply concerned about the plan's land use and wellhead protection sections. Section 10753 calls for a review of land us plans and coordination with land use agencies, as stipulated in secondary element 2 of the plan. A critically important aspect of effective ground water management, such coordination has not taken place to any meaningful extent in the Santa Clarita Valley, and more specifically, in the Sand Canyon area. We have noted with dismay that vital recharge areas have been built upon and paved over with no comment from any water agencies, despite an obvious impact on water availability for all water users, particularly small well holders.

While intelligently planned development is meant to result in well designed, livable communities where all inhabitants are assured of fair access to resources, we note that ongoing strong developer involvement with water agency decisions has led to the potential compromise of water availability and quality in exchange for near term profits for developers and increased tax revenues for local governments.

In the draft plan's sections that deal with ground water monitoring to establish a safe yield, we believe that estimates of agricultural water consumption are not accurate. In Richard Slade's 1988 perennial yield estimate of the Santa Clara River, he stated on page 109 that it was approximately 32,000 acre-feet. Yet Luhdroff and Scalmanini raise this estimate to 40,000 acre-feet. They base their calculations on data measured for agricultural operations between the 1940's and 1960's.

Since our membership includes individuals who have farmed a large parcel in the Sand Canyon area from 1951, we feel qualified to comment on the above figures.

First, agricultural usage during the reference years was never metered. Usage during this period is estimated based on available crop reports (when they were recorded) and available weather data. A reading of withdrawal estimates raises a suspicion that they are overstated.

Second, the upward revision of Slade does not include agricultural runoff. Since agriculture in our area has virtually disappeared, it is no longer a contributing factor to aquifer recharge. Yet earlier estimates included agricultural runoff, a significant source of recharge.

Third, land in our area that previously was planted in both irrigated and dry land crops has now been paved over. During rainy years, farm fields were an important component of recharge, since rain soaked into them. Slade specifically mentions this reduction of extractable water on page 88 of his 1988 report.

Flawed calculations like these have caused water companies and other institutional users to think that they can extract more water than they can and should without adversely affecting small well users.

Primary element number two gives the appearance of an attempt to establish a commingled inter-relationship between the Saugus Formation and the Santa Clara River. With a clearly defined bed and banks, the Santa Clara River has historically behaved as a river, and despite severe depletion from over pumping, still exhibits the dynamics of a river during episodes of precipitation. With our members holding rights of diversion from the State Water Resources Board, we strongly feel that any attempt to define the river in terms of percolating groundwater defies logic and the laws of physics.

Also, in the "Existing and Projected Water Supplies" section, the draft report states that "...it is currently expected that ongoing utilization of local groundwater will continue to be in amounts that have historically been pumped, 30,000 to 40,000 afy from the Alluvium..."

As stated above, Slade's 1988 report clearly and unequivocally sets the upper pumping limit of the Santa Clara flow at 32,000 afy. By relying on generous overstatements and exaggerated potentials, a plan will go forward that will have serious negative impacts for small well users in the Sand Canyon area.

In primary element three, Determination of Basin Yield and Avoidance of Overdraft, we are concerned with the second paragraph's first sentence that states "...there has not been any widespread, steady degradation of groundwater conditions that might be indicative of overdraft..."

Again in Primary Element 4, the second sentence asserts..."Both ranges of numbers are consistent with recent historical pumping that has not resulted in any indication of overdraft or other undesirable conditions." And in Primary Element 5, the third sentence further posits that ..."Groundwater pumping has remained within a range that has not caused any evidence of overdraft, or associated undesirable impacts..."

It is the direct and incontrovertible evidence of water levels in our own wells that presents us with a clear contradiction to this assertion. Based on members' records that cover a fifty-year span, the current water levels in our wells have reached an unprecedented low. We are left with inescapable evidence that large users pumping from the Santa Clara River have contributed to a cone of depression that is negatively affecting our small wells.

In addition, riparian conditions along the tributaries and main channel of the Santa Clara River reflect highly stressed, water deprived environments. In areas away from river feeder creeks, some heritage California Coastal Oaks (Quericus Agrifolia) have begun showing signs of water deprivation.

In a related matter, the proposed plan calls for identification of potential sources of contamination to assure water quality. When Robinson Ranch Golf Course was granted permission to open and operate, the city stipulated that water quality adjacent to and on the golf course be monitored and that regular reports about it be published. These reports have not been included in the draft plan, despite the fact that Robinson Ranch is a participant on the advisory committee for this draft plan. Pesticide, insecticide, fertilizer, and other volatile organic compounds are all possible runoff and plume contaminants that may be leaching from the golf course.

As members of your advisory committee, we would be glad to share with others the data from five decades of small well usage. We believe that recent developments, specifically in our area, have seriously lowered both the alluvial water levels to historic levels.

While modeling, projection, and prediction can yield abstract theories, we small well users must live with the consequences of miscalculation, however unintentional or inadvertent.

Small well holders are franchised, integral, entitled members of the water using community, and as such, must be included in the planning process associated with any groundwater management plan that is to be implemented in the Santa Clarita Valley.

Primary element nine specifies a MOU (Memorandum of Understanding) executed between the United Water Conservation District in Ventura County as an example of..."a local agency relationship that has produced the beginnings of local groundwater management, now embodied in this comprehensive (sic) plan..." While we laud all attempts to widen the base of data and participation in the planning process for water resources, we are disappointed that as stakeholders in the Eastern Sub-basin of the Santa Clara River Valley, our interests are not being represented on the advisory committee that has been created to direct the groundwater management plan.

We ask to be included in the planning committee that is helping to shape the future of water use in our community.

Respectfully,

The Sand Canyon Area Well Owners Association
Robert and Jane Fleck
Eugene and Marylou Ruddell
Richard and Leslie Christensen
Shawn Clement
Joan Waldman

Friends of the Santa Clara River

660 Randy Drive, Newbury Park, California 91320-3036 • (805) 498-4323

August 7, 2003

Castaic Lake Water Agency
27234 Bouquet Canyon Road
Santa Clarita, CA 91350

Re: Groundwater Management Plan

Dear Sirs,

Friends of the Santa Clara River submits the following comments on the June 2003 Draft Groundwater Management Plan (Plan).

We are disappointed and dismayed that the Plan sets as its primary goal the "Development of Local Groundwater for Water Supply". While providing adequate water supplies is an important objective, it would seem to us that the primary goal should be the long-term protection of local groundwater resources, including groundwater quality. Groundwater resources provide many benefits to the community, including those related to the biological and environmental health of the river corridor. Long-term protection, if implemented, should curtail the over-pumping of local aquifers which is currently occuring.

We are also concerned that water agencies, in general, have failed to weigh-in on the paving over of recharge areas in the Santa Clarita Valley. Loss of recharge could have very substantial impacts on future water availability. The Plan should emphasize that concreting of ephemeral tributary streams reduces recharge, and thus should be avoided. Adequate setbacks, or buffer zones, around major streams should be stressed - an item that is rarely adequately addressed in development projects.

The Plan advisory board is too narrowly constituted. The Regional Water Quality Control Board should be represented, as should environmental groups and county agencies working on watershed protection.

Thank you for the opportunity to comment.

Sincerely,

Ron Bottorff

Ron Bottorff, Chair

Attention: CLWA Directors August 8, 2003
RE: Comments on Ground Water Management Plan

FAX: (661) – 297-1611

From: Henry Schultz
Phone: (661) 284-5613 or (805) 447-2863 (work) or FAX at (805) 480-1333
Email: hschultz@amgen.com, henry50@pacbell.net
Three pages total:

There follow 2 pages of comments on the water plan. If there are any questions I can be contacted at the above locations.

Henry Schultz
Chair, Santa Clarita Sierra Club Group

8/7/03

Castaic Lake Water Agency
272234 Bouquet Canyon Rd
Santa Clarita, CA 91350
FAX: 661-297-1611

RE: Ground Water Management Plan Comments

Dear Directors:

We appreciate the chance to comment on the ground water management plan. This plan has been a long time in the making. We hope that your response to concerned public input will make it a viable document. A few comments follow.

1. Based on the (too) long history of this plan, it is essential to include deadlines (with penalties for failure) for completion of the various components of the plan. Otherwise our water will just slip away.

2. There is no accounting for loss of groundwater from pollution such as perchlorates. As soon as the magnitude of the problem has been adequately determined, a realistic plan can then be implemented. As it stands right now, the numbers do not adequately represent the real water supply.

3. Loss of groundwater due to loss of percolation due to extensive development, which paves over permeable soil, is not considered. It is a continuous and cumulative impact on the water supply. More generally, the water plan must address coordination of land use with water necessities such as the preservation of water percolation basins and similar amenities.

4. Drought planning is inadequate in the plan. For example, if a water treatment plant is built, then a certain number of acre/ft of water can be reclaimed. Current planning would say that this is real water, which can be counted on. In a drought, not only do you lose primary water sources, but also the corresponding amount of reclaimed water, a double hit which must be accounted for in any realistic water plan.

5. The Sierra Club strongly supports an active river-monitoring program so that potential and existing water quality issues can be addressed in a timely manner. This must be an integral part of the plan. In lieu of the water agency producing reliable data, a citizen-monitoring program will have to be undertaken to assure the quality of our water.

6. The plan does not adequately discuss maintaining river and tributary habitats such as the biological unhealthy zones created from the Rio Vista Plant's outflow into the Santa Clara River. While there are green plants growing in the area, UCLA researchers have shown that it is barren of many insects, which would normally be present in such an environment. This engenders a ripple effect in the biota.

7. Just as the City of Santa Clarita involves the public and other government and private agencies in its long range planning, CLWA should do the same with its water planning. People in the Santa Clarita Valley are just beginning to realize the importance and the fragility of their water supply. The time to start REAL planning is now.

Thanks for your kind attention.

Henry Schultz
Chair, Santa Clarita Sierra Club Group
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Santa Clarita, CA 91350
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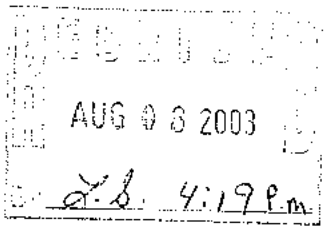
661-284-5613



Ed & Joan Dunn
15414 Rhododendron Dr.
Canyon Country, CA 91387
August 8, 2003

Castaic Lake Water Agency
27234 Bouquet Canyon Road
Santa Clarita, CA 91350-2173

RE: Groundwater Management Plan (AB 3030)

Dear Sirs:

We are pleased to have the opportunity to comment on your draft AB 3030 Plan. Enclosed please find copies of individual pages of this plan and associated comments for these pages.

We are disappointed that the writing of this plan appears to be following the same path of the UWMP. We are also displeased there has not been an attempt to hold more public meetings prior to this draft release. As required in AB 134, when has the agency met regularly with the advisory council to consult on this plan? What was the frequency of the meetings and how many were there?

We are quite interested in an AB 3030 Plan and would appreciated this draft be made into an honest and truthful document, allowing it to go ahead on a timely schedule without challenges and delays.

Respectly submitted,

Ed and Joan Dunn

Enclosures: 3 Exhibits, 16 draft groundwater pages and 16 associated comment pages

Top of page:
Basin objective "manage groundwater levels and discharge to the Santa Clara River, at the west end of the basin"?
Wording should include "the entire basin".

Bottom paragraph, last sentence:
The plan is replenishing the aquifer with WHAT sufficient water?

and effects, e.g. chronic water level decline, loss of groundwater storage, onset of land subsidence, groundwater quality degradation, a corresponding basin objective is to manage groundwater levels and associated groundwater discharge to the Santa Clara River at the west end of the basin, and thus not adversely impact surface and groundwater discharges to the downstream basin(s).

3. Preservation of groundwater quality for beneficial use in the basin, and for beneficial use of surface water and groundwater discharges from the basin. Included in this management goal will be the active characterization and solution of any groundwater contamination problems, through cooperation with responsible parties or through independent action if timely action by responsible parties is not forthcoming and the preceding management objectives are thereby impacted or constrained.

4. Preservation of interrelated surface water resources. Included in this management goal will be the maintenance of appropriate surface water flows and non-degradation of surface water quality as a result of managing groundwater conditions to meet the other management goals for the basin.

Quantitatively, the preceding goals translate into general preservation of groundwater levels and quality in the Alluvial aquifer system consistent with the last 30 years, including fluctuations through seasonal demands and local hydrologic variations (wet and dry periods). As discussed in more detail in the next chapter, the hydrogeologic setting in the area has resulted in smaller Alluvial groundwater level fluctuations toward the western half of the basin (generally west of Bouquet Canyon), and larger fluctuations to the east. However, largely due in part to the importation of supplemental surface water over the last 20 years, and the integrated or conjunctive use of that supplemental water with local groundwater, there has been no chronic decline in groundwater levels or storage. A continuation of such basin conditions, possibly complemented by management actions to decrease the historical water level fluctuations in the eastern part of the basin, will accomplish the second basin objective, continued avoidance of overdraft as has been the ongoing historical condition in the basin, while continuing to utilize local groundwater to meet part of projected water requirements, the latter being the first management objective for the basin. Corresponding management actions to sustain recharge and not overdraft groundwater storage will accomplish the third basin objective by replenishing the aquifer system with sufficient water to sustain what has been generally consistent quality of groundwater on a long-term basis.

We question Slades 1986 and 2002 Report stating the alluvium has the capacity of 240,000 acre feet.

III. Groundwater Basin Conditions

Occurrence of Groundwater

Groundwater in the Santa Clara River Valley East groundwater subbasin occurs in two aquifer systems, the Alluvium associated with the Santa Clara River and its tributaries, and the Saugus Formation. There are also some scattered outcrops of Terrace deposits in the basin that likely have the capacity to contain limited amounts of groundwater; however, since these deposits are located in limited areas that are situated at elevations above the regional water table and are also of limited thickness, they are of no practical significance as aquifers and have consequently not been developed for water supply.

The Alluvial aquifer system, of Quaternary to Holocene (Recent) geologic age, consists primarily of stream channel and flood plain deposits of the Santa Clara River and its tributaries. The Alluvium is deepest along the center of the present river channel, with a maximum thickness of about 200 feet near the area known as Saugus. It thins toward the flanks of the adjoining hills and toward the eastern and western boundaries of the basin and, in the tributaries, becomes a mere veneer in their upper reaches. The spatial extent of the Alluvium throughout the basin is illustrated in Figure 3-1.

The Alluvium is the most permeable of the local aquifer units. Based on well yields and aquifer testing, transmissivity values in the range of 50,000 to 500,000 gallons per day per foot (gpd/ft) have been reported for the Alluvium, with the higher values where the Alluvium is thickest in the center of the valley and generally west of Bouquet Canyon (Slade 1986 & 2002). The amount of groundwater in storage can vary considerably because of the effects of recharge, discharge, and pumping from the aquifer. The maximum storage capacity of the Alluvium has been estimated to be about 240,000 acre-feet (af) (Slade, 1986 & 2002).

The Saugus Formation, of Pliocene to Pleistocene geologic age, has traditionally been divided into two stratigraphic units: the lowermost, geologically older Sunshine Ranch member, which is of mixed marine to terrestrial (non-marine) origin; and the overlying, of upper, portion of the Formation which is entirely terrestrial in origin. The Sunshine Ranch Member of the Saugus Formation has a maximum thickness of about 3,000 to 3,500 feet in the central part of the valley;

Top, bottom of first paragraph:
The plan states "the most significant period of Saugus pumpage was 1991 through 1994, when pumpage ranged from 10,600 afy to nearly 15,000 afy and averaged over 12,000 afy, during which time SWP water deliveries were reduced at the end of extended drought conditions".

It should be stated that the SWP water was INTERRUPTED for approximately 6 months. See Feb. 27,1991 Daily News newspaper article " Santa Clarita will turn to wells as state water supplies dry up". As stated in the article, the SWP water processing plant was shut down. Exhibit A.

"Officials say state's water delivery system inadequate". See Exhibit B

Since 1980, total pumpage from the Saugus Formation has ranged between about 3,850 afy and nearly 15,000 afy; average pumpage over that period has been about 6,900 afy. The great majority of pumpage from the Saugus is for municipal supply (nearly 6,300 afy, or 92 percent, on average). For comparison, although historical Saugus pumping records prior to 1980 are limited, there appears to have been essentially no pumping from the Saugus prior to 1960 (on the order of about 100 af in most years, beginning in 1948), and some increased pumping for agricultural water supply beginning in about 1962 (about 900 af). The largest amount of agricultural pumping from the Saugus was during the mid-1960's, when annual Saugus pumpage was about 3,000 af. Agricultural pumping from the Saugus declined to near zero by the late 1970's, but has been generally in the 500 to 1,000 afy range since 1982. There was no Saugus pumpage for municipal supply in the early 1960's; limited data suggests that municipal pumping from the Saugus began in the 1970's, and reached nearly 5,000 afy by 1980-81. The most significant period of Saugus pumpage was 1991 through 1994, when pumpage ranged from 10,600 afy to nearly 15,000 afy and averaged over 12,000 afy, during which time SWP water deliveries were reduced at the end of extended drought conditions.

Groundwater Monitoring Network and Program

There is no formal groundwater monitoring network of wells for groundwater level measurements and/or groundwater quality sampling in the basin. Consequently, one component of this Plan is to formalize both a network of wells for groundwater monitoring and a program for water level measurements, water quality sampling, and other pertinent groundwater data collection (Primary Plan Element 1). Despite the lack of an existing formal groundwater monitoring network and program, however, there is a significant amount of historical groundwater data, some of which dates back into the 1940's, on which to base reasonable assessments of groundwater conditions in the basin. For example, groundwater level measurements have been made over varying periods of record in a total of 154 wells, mostly alluvial wells, throughout the basin. Similarly, groundwater quality data, consisting of varying numbers of constituents analyzed, are available from some wells, but a much smaller number than is the case for groundwater level data. These data, along with direct measurements or indirect estimates of pumpage, primarily from high capacity municipal and agricultural wells, allow for analysis of groundwater basin conditions, as discussed in this Plan, and also provide the bases on which a groundwater model can be developed (Primary Plan Element 3) and on which various management criteria such as operational yield, baseline groundwater quality, etc. can be determined (Primary Plan Elements 3, 6 etc.).

Middle paragraph:
"Exceedence of action level of perchlorate".
Newhall County Water District perchlorate level was 19 micro-grams per liter and Santa Clarita Water Co. was 24 or more micro-grams per liter.
The statement that none (no wells) exceeded 18 micro-grams per liter is false. See Exhibit C

higher quality (low TDS) water and dry periods have resulted in the notable declines in water levels described above, with a corresponding increase in TDS (and individual component constituents) in the deeper parts of the Alluvium.

Due to a much more limited number of wells and the limited spatial extent of groundwater development in the Saugus Formation, long-term Saugus groundwater quality data are not sufficiently extensive to permit any sort of basin-wide analysis or assessment of pumping-related impacts on quality. Based on the most complete historical record, over the last 35 years, however, groundwater quality in the Saugus has remained generally constant, and the Saugus Formation is, on a groundwater quality basis, a viable agricultural and municipal water supply.

The most notable groundwater quality issue in the basin centers around the detection and impact of perchlorate on several Saugus wells and one Alluvial well in the central part of the basin near the location of the former Whittaker Bermite facility, which is immediately southeast of the confluence of the main Santa Clara River and its South Fork tributary. In 1997, routine water quality sampling detected the presence of perchlorate in four municipal wells completed in the Saugus Formation (CLWA Santa Clarita Water Division Saugus Wells 1 and 2, Newhall County Water District Well 11, and Valencia Water Company Well 157). While there remains no primary or secondary drinking water standard for perchlorate, and although the detected concentrations of perchlorate in the Saugus wells did not exceed the Action Level established by the State Department of Health Services at that time (18 ug/l), all those wells were inactivated by their respective owners after detection of perchlorate; those wells remain out of municipal water supply service to date.

More recently, in late 2002, routine water quality sampling of Alluvial wells detected perchlorate in one of them (CLWA Santa Clarita Water Division Stadium Well) at a concentration which slightly exceeds the current Action Level (4 ug/l). This well has also been voluntarily inactivated, and thus remains removed from municipal water supply service.

This Plan, notably through Primary Plan Elements 1, 6 and 8, is intended to incorporate both short-term and long-term groundwater quality considerations in the management of the groundwater basin in order to formalize groundwater quality monitoring and assessment, to investigate and correct groundwater contamination problems, and to preserve or improve groundwater quality for ongoing water supply as well as for avoiding adverse water quality impacts on interconnected surface waters.

Paragraph #2:
The statement of this paragraph is misleading. The correction should show "out of service wells significantly reduced groundwater capacity for existing groundwater supplies, so much so, that a substantial increase of state water use, has been initiated".

Areas of Concern and Identified Problems

A number of concerns have been expressed about groundwater conditions in the basin. While not all of the expressed concerns have been substantiated, they are listed and briefly discussed here, and they are addressed in the management objectives for the basin, intended to be achieved via implementation of the various primary and secondary elements in this Plan.

The most notable concern in the basin, at least at present, is the impact of perchlorate contamination on a number of municipal water supply wells, thus affecting the available pumping capacity from some municipal wells. While perchlorate impacts on a few wells do not preclude the ability to pump groundwater in accordance with existing water supply plans, activities to characterize the contamination, and ultimately to control it and treat it, have been initiated in order to return the impacted wells' pumping capacity to water supply service. Primary Element 8 is included in this Plan to formalize the addressing of groundwater contamination issues in the basin.

Concern has also been expressed that groundwater development in the basin will adversely impact the quantity and/or quality of surface flows leaving the basin via the Santa Clara River. Such concern extends to the potential impact on groundwater in the next downstream basin, the Piru Basin in Ventura County. While there are no established provisions regarding surface flows out of the Santa Clara River Valley East subbasin, Primary Element 2 is included in this Plan to formally address the monitoring and management of surface water flows and quality within, and flowing out of, the basin. Some work is already ongoing related to this area of concern via a Memorandum of Understanding (MOU) among CLWA, other purveyors within CLWA's service area, and United Water Conservation District, which manages surface water and groundwater in the downstream basins on the Santa Clara River in Ventura County. That cooperative effort, which is incorporated into this Plan via Primary Element 9, includes integration of databases, development of a numerical groundwater flow model, and interpretation and reporting on surface water and groundwater conditions.

A third expressed concern in the basin, although never substantiated, is that groundwater is already overdrafted. Associated with that expressed concern is a related issue that reliance on overdrafted groundwater results in an overstated water supply in the basin. As discussed earlier in this Section, long-term groundwater levels, storage, and quality all indicate a lack of overdraft. As also discussed above, the importation of supplemental surface water over the last 23 years,

References to the Urban Water Management Plan (UWMP).
The UWMP of 2000 contains incorrect information and is under legal attack for correction. The UWMP does not address the total interruption of the state water supply in the event of drought, earthquake, or Delta problems. It is suggested that the UWMP not be utilized or referred to until its contents have been corrected to reflect accurate and truthful information.

32,000 afy. The history and trend of municipal groundwater use in the basin are illustrated in Figure 4-1.

As noted above, until 1980, all water supply in the basin was from local groundwater. Imported surface water was first available from the State Water Project (SWP) in 1980, when a total of 1,125 af were imported into the basin. Since then, importations of SWP water have increased in two separate steady trends, interrupted by a notable decrease at the end of, and following, the 1987-1992 drought period: a steady increase beginning in 1980, to about 21,600 afy in each of 1989 and 1990, followed by a substantial decrease, to less than 8,000 af in 1991, and then a steady increase back to about 21,000 afy in 1997 and 1998, followed by further increases to about 35,000 af in 2001. The history and trends in importation of SWP water to the basin are illustrated in Figure 4-2, which also illustrates the historical trends in groundwater pumping and total water use in the basin since the importation of SWP water.

In the context of this groundwater management plan, the historical utilization of imported SWP water to augment local groundwater represents the initiation of conjunctive use of surface water and groundwater supplies, a groundwater management principle which is intended to be continued via adoption of Primary Element 5 of this plan.

Projected Water Requirements

Detailed projections of municipal water requirements were most recently completed as part of the Urban Water Management Plan prepared by CLWA and the municipal water purveyors (Newhall County Water District, Santa Clarita Water Company, and Valencia Water Company) in 2000. Those projections, which are forecast for a 20 year period, also recognize an ongoing but decreasing agricultural water demand over the same period, from about 15,000 afy in 2005 to about 7,000 afy by 2020. The municipal water demand projections in the Urban Water Management Plan were derived from utilization and interpretation of multiple projection methods, including Per-Capita Water-Use applied to population projections; extrapolation of number of service connections (using two different projection techniques, an average rate and an accelerated rate projection) applied to the rate of service connection additions since 1990; and land use projections combined with unit water use factors on multiple land use categories (urban, including residential, commercial, industrial and recreational; irrigated agricultural; and vacant and open space). The water demand projections in the Urban Water Management Plan also considered weather effects (variations due to hot-dry years vs. cool-wet years) and conservation

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Top
"Local Groundwater" The statement is made: "That for all practical purposes the Saugus Aquifer underlies the entire CLWA service area". That statement is absolutely false! It does not!
Please correct.

Bottom paragraph:
Supplemental (SWP) Surface Water

CLWA's SWP Water Entitlement
The CLWA, indeed, has purchased water in addition to the original Table A entitlement, but cannot obtain contractual agreement to transport the additional water to the Santa Clarita Valley.

water and possibly some water supply derived from water transfers and desalination outside the basin.

Local Groundwater - Local groundwater has historically been developed from the two aquifers that comprise the groundwater basin, the Alluvium that underlies the Santa Clara River and its tributaries, and the Saugus Formation that underlies, for all practical purposes, the entire CLWA service area. Those two aquifers, and the groundwater basin they comprise, are the focus of this groundwater management plan. Based on historical experience and observation of groundwater conditions, it is currently expected that ongoing utilization of local groundwater will continue to be in amounts that are generally comparable to what has historically been pumped, 30,000 to 40,000 afy from the Alluvium and 7,500 to 15,000 afy from the Saugus Formation. It is also expected that there is some additional development potential in the Saugus Formation, in the range of 10,000 to 20,000 af which might be intermittently extracted during one or more dry years when supplemental imported water might be reduced. Ultimately, it is expected that local groundwater will continue to be a component of water supply, at appropriate production levels in both aquifers, in the basin. The intent of this groundwater management plan is to ensure that ongoing utilization of local groundwater continues to result in acceptable aquifer conditions, i.e. avoidance of overdraft (Primary Plan Element 3), no degradation of quality (Primary Plan Element 6), no adverse impacts to surface waters (Primary Plan Element 2), all via continuation of conjunctive use operations that have been ongoing since the initial importation of supplemental surface water in 1980 (Primary Plan Element 5) and via monitoring and interpretation of surface water and groundwater conditions on an ongoing basis (Primary Plan Elements 1 and 2).

Supplemental (SWP) Surface Water - CLWA has a contractual Table A amount of 95,200 af of water from the SWP. CLWA's original contract, signed in 1963, was for 23,000 af; that Table A amount was later increased to 41,500 af. In 1988, CLWA purchased a Table A amount of 12,700 af from Devil's Den Water District, and it acquired another Table A amount of 41,000 af in 1999 from Kern County Water Agency and its member district, the Wheeler Ridge-Maricopa Water Storage District. There is ongoing CEQA-related litigation over the most recent acquisition of the additional SWP Table A amount, the 41,000 af acquired from Kern County Water Agency and Wheeler Ridge-Maricopa WSD. However, there has been no invalidation of the completed agreement to transfer the 41,000 af Table A amount to CLWA; and current water supply planning includes that Table A amount as CLWA corrects the CEQA technicality by preparing a new EIR to address the environmental consequences of the transfer.

Top:
Recycled Water

It should be noted CLWA's planned recycle water program is and has been for one private business only. No public agency is receiving or is planned to receive recycled water from CLWA.

Recycled Water - In 1993, CLWA prepared a draft Recycled Water System Master Plan that outlined a multi-phase program to integrate recycled water into the overall water supply system in the basin. Construction has begun on Phase I of that project, which will deliver approximately 1,700 afy, and deliveries are expected to begin in 2003. Overall, recycled water is expected to ultimately reclaim up to 17,000 afy of treated waste water suitable for irrigation use on golf courses, landscaping, and other non-potable uses.

Top:
Number 7 should read: Valleywide integration of recycled water.

Middle:
Secondary (Potential Elements) Item #2 Change to: involvement in land use planning per Water Code 10753.7 (l).

4. Development of Regular and Dry Year/Emergency Water Supply
5. Continuation of Conjunctive Use Operations
    - active and passive groundwater recharge
6. Long Term Salinity Management
7. Integration of Recycled Water
8. Identification and Mitigation of Soil and Groundwater Contamination
    - involvement with other local agencies in investigation, cleanup, and closure
9. Development and Continuation of Local, State and Federal Agency Relationships
10. Groundwater Management Reports

Secondary (Potential) Elements

1. Continuation of Public Education and Water Conservation Programs
2. Identification and Management of Recharge Areas and Wellhead Protection Areas
    - involvement in land use planning process
3. Identification of Well Construction Abandonment, and Destruction Policies
    - water quality protection
    - manage vertical distribution of pumpage
4. Provisions to Update the Groundwater Management Plan

Primary Element 1 - Monitoring of Groundwater Levels, Quality, and Production

Prior to 1980, all water supply in the Upper Santa Clara River Area was developed from local groundwater; since 1980, imported surface water has become an increasing component of overall water supply in the area, but groundwater continues to meet all agricultural water demand and a significant part of municipal water demand. As a result of the long term development and use of groundwater in the area, there is a fairly substantial amount of historical groundwater level data, and a useful amount of groundwater quality data, and groundwater pumping data that has been collected in the basin. All the available historical groundwater level, quality, and pumping data have been organized into a computerized data base for the Upper Santa Clara River Area. That data base, while separate, has been coordinated with an equivalent data base maintained by United Water Conservation District for the downstream basins on the Santa Clara River. The intent of database coordination has been to facilitate interpretation and reporting on groundwater and other water resource related issues by the respective agencies overlying the various basins along the River.

Bottom:
As stated earlier the UWMP is inacurate and under legal attack-and not certified by the courts.
Primary Element 4 – Development of Regular and Dry Year/Emergency Water Supply

40,000 acre feet from the aluvium and 15,000 a/f from the Saugus is optimistic.
We strongly suggest developing an emergency plan for an extended interruption of the state water project. How many times must we ask for such an obvious safeguard?

conditions (and associated fluctuations in recharge and pumping). Such fluctuations are typical of groundwater basin conditions in any conjunctive use setting, such as in this basin: groundwater is utilized from storage during dry years, or dry periods, and that storage is replenished during alternate wet years, or periods. The observation of these historical groundwater conditions, in combination with knowledge of pumpage from both the Alluvial and Saugus Aquifers, has led to current operational practices as well as general expectations regarding the approximate yield of the local groundwater system as discussed in this plan.

While historical operating experience, complemented by observed groundwater conditions, is an appropriate basis for generally planning for available groundwater supplies, it is possible and appropriate to more precisely analyze the basin to determine values or ranges of yield under varying hydrologic conditions, and to assess the impacts of various management actions that might be implemented in the basin. The MOU process described in Primary Element 9 of this Plan includes the development of a numerical groundwater flow model which is intended to be utilized for determination of the yield of the basin under existing land use and under existing groundwater and surface water development conditions. It is also expected to be used for implementation of this Plan Element in order to assess the yield of the basin under future land use conditions as well as future ranges of surface water importation, groundwater development, and recycled water use through varying hydrologic conditions, i.e. wet and dry periods that affect the availability of imported surface water.

The ultimate intent of this Plan Element is to develop an understanding and quantification of the yield of the basin, under varying hydrologic conditions and developing local cultural conditions, in order that groundwater development and use be managed in such a way to meet an appropriate fraction of total water demand while avoiding levels of groundwater use that would result in overdraft conditions. Thus, implementation of this Plan Element is essential to accomplishing the first and second management objectives (goals) for the basin.

Primary Element 4 - Development of Regular and Dry Year/Emergency Water Supply

The most recent updated Urban Water Management Plan (UWMP, December 2000) prepared by CLWA and the other purveyors in the basin (Newhall County Water District, Santa Clarita Water Company, and Valencia Water Company) includes plans to develop 30,000 to 40,000 acre-feet per year (afy) from the Alluvial aquifer and 7,500 to 15,000 afy from the Saugus Formation in average/normal years. Both ranges of numbers are consistent with recent historical pumping that

The SWP water received in 1991 is erroneous. The chart indicates 8,000 a/f. It is incorrect. CLWA only received 10% of its then allocation 54, 200 a/f. The 10% was received in January and the plant shut down in March. See Exhibit A. It should be noted that this is a state water project interruption for months, not a reduction.

Historical and Projected Water Use
Upper Santa Clara Valley Groundwater Basin
East Subbasin

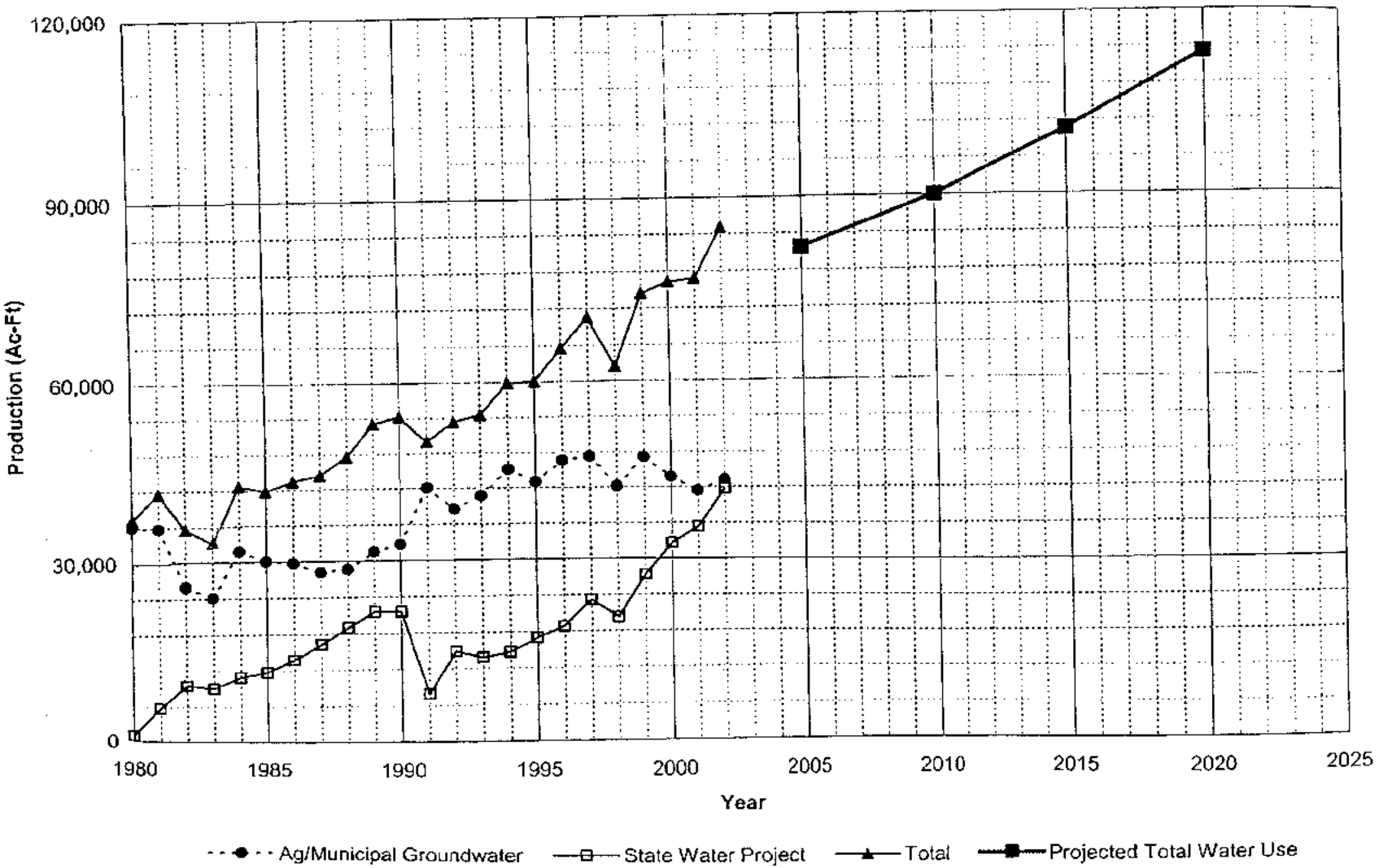


Figure 5-4

Plan, page #30 Dunn, page 13

Top paragraph:

There is no mention what the folks can do if groundwater cannot meet demand and the supplemental water is not there for an extended period of time. Please develop a plan to solve this most serious occurance.

Conjunctive use of local groundwater and imported surface water will continue to be a key element in meeting all the goals for the basin, most notably utilizing groundwater for water supply without overdrafting the basin. Historical experience with groundwater pumping and aquifer response to varying hydrologic conditions has shown that the groundwater basin can support notable variations in pumping during wet and dry periods, but it cannot support continuous pumping at rates high enough to meet total local water demand. Thus, utilization of imported surface water in conjunction with local groundwater will be essential to the management of groundwater for water supply without overdrafting that resource.

As part of conjunctively using surface water and groundwater, it is recognized that, particularly when the surface water supply is imported from the State Water Project, there will be variations in the amount of available surface water supply from year to year. Similarly, there are expected to be variations in local groundwater conditions as a function of local hydrologic conditions which affect, among other things, the natural recharge to the groundwater basin from year to year. In the case of this basin, local (Southern California) hydrology which affects local groundwater conditions may not necessarily be the same as the hydrology in a distant (Northern California) location that directly affects the availability of supplemental, imported surface water in any given year. Thus, conjunctive use management is challenging, but is notably important to ensure that the groundwater basin is maintained to meet a regular component of water supply and to also be able to meet a larger component of water supply during "dry periods" that affect supplemental surface water availability. Conjunctive use management is similarly important to ensure that local groundwater can be replenished, via reduced pumping and/or as a result of wetter local hydrologic conditions, during periods of wet/normal surface water availability. In light of all the preceding, implementation of this Plan Element is essential to accomplishing all the management objectives (goals) for the basin.

Primary Element 6 - Long Term Salinity Management

In general, groundwater quality in the basin is such that groundwater supplies meet standards for beneficial use in the basin, most of which now is for municipal (domestic) use but some of which remains for agricultural and some other irrigation (non-domestic) use. There also have been no notable historical trends of groundwater quality degradation in the basin over time. However, a number of geologic and hydrologic factors suggest that observations and interpretation of groundwater quality warrant some focus to ensure long-term preservation of groundwater quality. Notable among those geologic and hydrologic factors are: 1) the largely "closed" geologic nature

Bottom of page:

Is appears the entire paragraph is false. There is no knowledge of such meetings occurring.

Newhall County Water District, Los Angeles County Waterworks District No. 36, Valencia Water Company, and its own Santa Clarita Water Division. As such, CLWA has a historical and ongoing working relationship with all those local agencies, as well as with other local groundwater pumpers, to manage water supplies in order to effectively meet water demands within the available yields of imported surface water and local groundwater. In fact, the Advisory Council convened to assist in the preparation of this Plan is comprised representatives of all the local water purveyors and significant groundwater pumpers.

A local MOU process among CLWA, other purveyors within CLWA's service area, and United Water Conservation District in neighboring Ventura County is a classic illustration of a local agency relationship that has produced the beginnings of local groundwater management, now embodied in this comprehensive plan, most notably in Primary Elements 1 through 5. In 2001, out of a willingness to seek opportunities to work together and develop programs that mutually benefit the region as well as their individual communities, those agencies prepared and executed a Memorandum of Understanding (the MOU) that initiated a collaborative and integrated approach to several of the aspects of water resource management that are now included in this Plan. United WCD manages surface water and groundwater resources in seven groundwater basins, all located in Ventura County, downstream of the East Subbasin of the Santa Clara River Valley that is the focus of this Plan. United is thus a logical partner in the cooperation of management efforts to accomplish the objectives (goals) for this basin, particularly as they relate to preservation of surface water resources that flow through the respective basins. As a result of that MOU, the cooperating agencies have integrated their database management efforts (part of Primary Elements 1 and 2 of this Plan), have initiated the development of a numerical groundwater flow model (for utilization in Primary Elements 3, 4 and 5 of this Plan), and are continuing to prepare reports on the status of basin conditions, as well as on geologic and hydrologic aspects of the overall stream-aquifer system.

A local extension of the interaction among CLWA, the retail water purveyors, and United is an ongoing working relationship with the City of Santa Clarita. CLWA and the municipal purveyors meet regularly with City staff and also present water supply conditions via study sessions with the City Council on a regular basis. It is expected that the implementation of this Plan will result in the availability of a broader range of information transfer with the City relative to the existing and future water supply to its residents. OH?

This Primary Element is included in this Plan to formalize the historical local and state agency

Middle:

Primary Element 10-Groundwater Management Reports
These secretly created reports contain erroneous numbers to overstate supply and understate demand. The creators meet secretly, allow no public participation or oversight and meet without authority or sanction from any public agency. The meetings are held secretly and without benefit of the Brown Act. Since these reports are created with no public oversight, do not appear to have credibility, and usually are not signed by anyone, they should not be included as part of an AB3030 groundwater management plan. It is time to form an official joint powers authority between the purveyors and other participating parties.

working relationships as part of comprehensively managing local groundwater, in concert with imported surface water and local recycled water, to accomplish all the management objectives (goals) for the basin.

Primary Element 10 - Groundwater Management Reports

As briefly described in the Introduction of this Plan, local groundwater management planning already includes, among several other activities, analysis of groundwater conditions and preparation of annual reports on groundwater and all other aspects of water resources and water supplies in the Santa Clara River Valley East ground water basin. In addition, recently formalized cooperative work with neighboring United Water Conservation District includes both regular reporting on the status of groundwater conditions and specific reporting on geologic and hydrologic aspects of the overall stream-aquifer system. For example, documentation of the numerical groundwater modeling work currently in progress is expected to be the first of the latter reports in the next year.

Beginning in 1998, CLWA and the retail water purveyors in the basin have prepared a series of annual reports, known locally as the Water Report, to describe all aspects of water supply and water resource conditions in the basin. That report provides current information to local City and County land use agencies, and to other interested parties, about current water requirements, use of groundwater and treated imported surface water to meet those water requirements, groundwater conditions (pumping, groundwater levels and quality, etc.), local surface water conditions, the status of imported surface water supplies including details of delivered SWP water in the reported year as well as an up-to-date summary of available imported SWP water for the next year, a short-term projection of water requirements in the next year, and other appropriate details about water requirements and supplies such as, for example, the status of introducing recycled water as a component of non-potable water supply.

In light of the frequency and comprehensive nature of the annual Water Reports, and also in light of the planned preparation of more detailed technical reports on various aspects of the basin as appropriate, the continued preparation of those reports will serve as regular and complete reporting on all aspects of this groundwater management plan.

(Not much truth on this page.) CLWA constantly preaches conservation but continually sells more and more water. CLWA should provide the public with an accounting of the water CLWA is conserving.

Secondary Element 1 - Continuation of Public Education and Water Conservation Programs

CLWA has provided water conservation and public education programs that will continue and expand as a complement to and an element of this groundwater management plan. The expansion of water conservation will largely stem from CLWA's having signed the "Memorandum of Understanding Regarding Water Conservation in California" (Urban MOU) in 2001, which made CLWA a wholesaler member of the California Urban Water Conservation Council. CLWA has thus committed to implementation of cost-effective water conservation measures known as Best Management Practices (BMPs) that are included in the Urban MOU and are intended to reduce California's long-term urban water demands. The BMPs have been incorporated into the water demand management measures section of the Urban Water Management Planning Act.

Water conservation and related public education measures have generally been developed in California to achieve the following goals:

- meet legal mandates
- reduce average annual potable water demands
- reduce sewer flows
- reduce water demands during peak seasons
- meet drought restrictions.

As a wholesaler of imported surface water CLWA has implemented the following BMPs for several years prior to signing the MOU:

- distribution system water audits, leak detection and repair
- public information
- school education
- wholesale agency assistance ?
- conservation pricing ?
- conservation coordinator. ?

Top:

(Not much truth here either.) Mostly deception. The UWMP doesn't exist for the reasons mentioned earlier. The UWMP must not be considered here.

As a signatory to the MOU, CLWA's water conservation and public education program will expand to include the following BMPs found to be locally cost-effective, as detailed in the 2000 Urban Water Management Plan for CLWA and the Santa Clarita Valley retail purveyors.

- water survey programs for single-family residential and multi-family residential programs
- residential plumbing retrofits
- metering with commodity rates for all new connections and retrofit of existing connections
- large landscape conservation programs and incentives
- high-efficiency washing machine rebate programs (when also provided by local energy providers or wastewater utilities)
- conservation programs for commercial, industrial, and institutional accounts
- wholesale agency programs to financially or otherwise support water conservation efforts by retailers (this measure will be expanded)
- residential ultra-low-flow toilet replacement program.

This Primary Element, while identical to independent CLWA efforts in water conservation and public education, is incorporated in this Plan to complement other Plan elements, and to move toward accomplishment of all management objectives (goals) for the groundwater basin.

Secondary Element 2 - Identification and Management of Recharge Areas and Wellhead Protection Areas

The 1986 Amendments to the federal Safe Drinking Water Act (SDWA) established a new Wellhead Protection Program (WPP) to protect groundwater that supplies drinking water wells for public water systems. Each state was required to prepare a WPP and submit it to the USEPA by June 19, 1989. However, California did not develop an active state-wide Wellhead Protection Program at that time. Subsequently, in 1996, reauthorization of the SDWA established a related program called the Source Water Assessment Program. In 1999, the California Department of Health Services (DHS) Division of Drinking Water and Environmental Management developed its Drinking Water Source Assessment Program (DWSAP), and EPA approved it. The overall objective of the DWSAP is to ensure that the quality of drinking water sources is protected.

As discussed in Section I of this Plan, the potential groundwater management plan component

EXHIBIT A

Suppliers driven into the ground

Drought forces area to rely on well water

2-27-91

By Kimberly Heinrichs
Daily News Staff Writer

SANTA CLARITA — The state is expected to stop water deliveries March 15 to the Santa Clarita Valley, forcing the area to rely on ground water as California's worst drought on record continues, officials said Tuesday.

The Castaic Lake Water Agency, which treats, stores and distributes state water to local purveyors, will close its plant after the last of the imported water arrives, agency General Manager Robert Sagehorn said.

Related story:
■ Conservation law gets OK.
Page 4

"For all substantial purposes we're shutting the plant down on March 15," he said, adding, "No one's going to go bone dry over this."

Local water suppliers still will pump water from the Santa Clarita Valley's extensive network of wells, he said.

The state Department of Water Resources told Sagehorn on Saturday that the expected cut of 50 percent of the agency's water supply has been increased to 90 percent as the drought continues its fifth year. The agency will have received 10 percent of this year's water allocation by the middle of March, Sagehorn said.

Of the four purveyors receiving state water from the Castaic Lake agency, only the Los Angeles County Waterworks District No. 36 — which serves Val Verde

See WATER / Pg. 2

Santa Clarita will turn to wells as state water supplies dry up

2-27-91 D.N.

WATER / From Page 1

and Hasley Canyon — does not have a ground-water supply.

The county agency has drilled a well about 1,000 feet northwest of the intersection of Hasley Canyon and Del Valle roads that it had planned on using in about a year after building a 250,000-gallon storage tank, Assistant Deputy Director Gary Hartley said. However, with the new cutback, the county is hurriedly seeking permission from several property owners to run a temporary pipeline from that well to customers, Hartley said.

County officials hope to have the pipeline operating in about six weeks, he said. Meanwhile, the county is working on agreements with the three other purveyors in the valley — the public Newhall County Water District and the private Valencia Water Co. and Santa Clarita Water Co., Hartley said.

If the county cannot set aside enough well water from the other purveyors, there is a chance the state would send emergency supplies through the Castaic agency, he said.

While the city considers a law that would restrict wasteful practices in the hopes of achieving a 25 percent reduction in water use, Hartley said that county water officials are drafting a conservation proposal that would require different levels of participation in different areas. Because of the severity of the water cuts in the Val Verde and Hasley Canyon areas, he said he would expect a 20 percent to 30 percent mandatory cutback in water use.

Although the plant near Castaic Lake will be closed, the agency most likely will lay off just a temporary maintenance worker, Sagehorn said. The worker was hired when one of the two permanent maintenance workers was on medical leave and was kept on.

FOR PG. 17 + FIG. 5-4

EXHIBIT B

Officials say state's water delivery system inadequate

By Laura Myers
Associated Press

MONTEREY, Calif. — The tap has run dry too often and for too many years in California because of an inadequate water delivery system, representatives of the three main groups vying for the precious commodity complained Thursday.

The 5-year-old drought that saw everybody suffer when supplies were drastically cut only magnified the problem this year, said representatives of the urban, agriculture and wildlife interests.

"The biggest problem we have is that the reliability of the water supply is grossly inadequate," said Tim Quinn, conservation director for the urban Metropolitan Water District of Southern California. "The way the system works now, you just can't count on a steady water supply because the water delivery system just doesn't work like it should."

Quinn's comments came at the annual spring conference of the California Association of Water Agencies, which attracted more than 2,000 of the state's top water officials.

Stephen Hall, representing agriculture, and Charles Hanson, representing wildlife and the environment, agreed with Quinn that the State Water Project and the federal Central Valley Water Project can't satisfy competing supply needs.

All three men presented dire pictures of what would happen if they weren't the first in line for water if the drought continues — the quality of urban life will decline, farms will go under, workers will be jobless and wildlife will dwindle, with some species becoming extinct.

But beyond the growing instant competition for scarce supplies, they said water officials must improve the delivery and storage system that essentially hasn't developed for decades.

"We shouldn't have to continue to fight one another for resources," said Hall, executive director of the California Farm Water Coalition.

The Sacramento-San Joaquin Delta, the cornerstone of the delivery system, is a bottleneck even in non-drought years, Quinn and Hall said.

Part of the problem, according to Hanson, who has an environmental consulting business, is the growing importance on protecting endangered and threatened species while making water transfers in the delta.

The winter-run chinook salmon already is listed by state and federal wildlife officials as threatened and the delta smelt also is expected to make the U.S. Fish and Wildlife Service list soon.

Certain water flow rates from the river must be met when those fish spawn, under wildlife protection rules, he said.

"We need to manage the allocations to provide adequate water throughout the year," Hanson said.

PG. 12

EXHIBIT C

A boost for toxic cleanup in state

Feds back state on perchlorate

By Heather MacDonald
Staff Writer 8-8-03 D.N.

SANTA CLARITA — The Department of Defense agreed Thursday to obey California's drinking water standards for perchlorate and not try to avoid paying for cleanup of the toxic rocket fuel byproduct.

The agreement, announced by U.S. Sen. Barbara Boxer and Pentagon officials during a visit to a contaminated site in Rialto, could help speed the cleanup of the defunct Bermite explosives factory in the center of Santa Clarita, and dozens of other polluted sites all over California, officials said.

"This is an important breakthrough," said Boxer, a California Democrat. "Defense Department activities have been a major source of perchlorate contamination in California. This kind of active cooperation will help us find and fix perchlorate problems throughout the state."

The agreement also appeared to put to rest concerns expressed by Santa Clarita leaders that legislation introduced by President George W. Bush would exempt some defense contractors from having to pay for environmental cleanups in the name of military readiness.

The Newhall County Water District Board of Directors was afraid the language of the bill could be used to let Whittaker Corp., which operated the site until 1987 and has recently begun studying the best ways to clean up the pollution, off the hook.

"The well-being of millions of Californians depends on this agreement," Boxer said.

More than 7 million Californians drink water with at least traces of perchlorate, which can damage the thyroid gland and be risky for pregnant women, whose fetuses can be affected, according to the U.S. Environmental Protection Agency.

A provisional standard set by the EPA recommends that drinking water have no more than 1 part per billion of perchlorate. The old standard considered water with 32 parts per billion of perchlorate safe.

Although the EPA is not expected to set a final standard

See **WATER** / Page 2

Help on the way for toxic cleanups

8-8-03 D.N.

WATER / From Page 1

until at least 2008, Boxer has called for the agency to act next year because of the threat perchlorate poses to California residents.

Five wells in Santa Clarita have been shut down because of high levels of perchlorate, with tests showing as much as 40 parts per billion of the toxin in the water, officials said. The wells draw on the Saugus Aquifer, which serves as a backup water supply for the Santa Clarita Valley in times of drought.

State officials believe the pollution is coming from the Bermite property near the Santa Clarita Metrolink Station on Soledad Canyon Road. From World War II to the end of the Cold War, several companies manufactured and tested munitions and explosives for the U.S. military on the 996-acre site.

While the California Department of Health Services requires that wells with more than 4 parts per billion of perchlorate be shut down, the state Office of Environmental Health Hazard Assessment has found that water with as much as 6 parts per billion is safe to drink.

Heather MacDonald, (661) 257-5257
heather.macdonald@dailynews.com

FOR PG. 15

-----Original Message-----
From: Diane Trautman [mailto:dianetrautman@comcast.net]
Sent: Friday, August 08, 2003 2:41 PM
To: Dan Masnada
Cc: Marsha McLean; Vince Bertoni
Subject: Draft Groundwater Management Plan

TO: Dan Masnada

RE: Draft Groundwater Management Plan

Following are my questions and comments related to the Agency's Draft Groundwater Management Plan:

1. What percentage of the 106,000 afy (needed over the next 20 years) will be drawn from local groundwater sources? Does the Agency expect to maintain roughly the same 60% SWP/40% local groundwater mix in most years?

2. If the Saugus Formation absorbs recharge much more slowly than the Alluvial Aquifer, won't pumping of the Alluvial Aquifer at the high end of the scale over a sustained period of time reduce recharge of the Formation and reduce the amount of potable water that can be drawn from the Formation in dry periods?

3. Both this report (p. 15) and the 2002 Water Report (p. 19) state that the Agency does not have sufficient groundwater quality data on the Saugus Formation to perform an analysis of "pumping related inpacts on quality." On page 25 of this report under Primary Element 1, the Agency states that it has "a useful amount of groundwater quality data." Is the latter in reference only to the Alluvial and not the Saugus? And if the Agency does not have sufficient data on quality of water from the Saugus Formation, how does the agency propose to collect that data to ensure quality in order to maintain the current pumpage level and to increase the yield as proposed on page 21?

4. Looking back at the 2002 Water Report, the Agency indicates (on page 19) that "there are limited Saugus (Formation) water level data." Does the Agency plan to collect more comprehensive data on the Saugus Formation general groundwater stability to determine reliability of projected yields and "artificial groundwater recharge" (p. 27) capacity?

5. Regarding Secondary Element 2,the Agency states: "The results of the DWSAPs can be used as a planning tool to guide land use development in the vicinity of water sources." Is the Agency currently sharing more recent, detailed information with the City regarding contamination risks in relation to the existing closed wells?

6. Where is the SCWC Stadium Well located?

7. Why is "Continuation of Public Education and Water Conservation listed as a Secondary (Potential) Element" when increased conservation savings are projected to reduce water demand by 10%? Shouldn't conservation be one of the primary elements of water management?

8. How is the Agency delivering recycled water to the TPC? Is it being run through a parallel piping system? Is so, what is the estimated cost and time frame for constructing such a system to carry the estimated 17,000afy? And how does the Agency propose to pay for this system?

9. How is the recycled water in locations, such as the golf course, reprocessed to remove pesticides and fertilizers?

10. What is the current average per capita water usage in afy?

11. The Semitropic Water Bank/Transfer is not mentioned in discussion of the Supplemental (SWP) Surface Water on page 21. Is that because it is a relatively short-term water supply? Are any of the other water transfers – Kern Water Bank, Kern Delta Water, North Las Posas Water Bank – as listed on UWMP p. 2-16, of limited duration? And if the Semitropic Water Bank Transfer is short term, how can it be included in the 105,000-106,000 afy need projected for the next 20 years? What will take its place?

12. What specific efforts will be made to manage salinity?

Thank you for giving me an opportunity to respond.

Diane Trautman

Responses to Trautman

1. In terms of groundwater management planning, projected urban water demand (the 106,000 afy projected urban demand in 2020) does not represent total valley-wide demand; total projected demand is 113,100 afy, including both urban and agricultural. In that light, on an average basis, local ground water is expected to be utilized to meet about 40 percent of total water demand.

   In regards to maintaining "roughly the same 60% SWP/40% local groundwater mix in most years", please refer to page 20 of the draft GWMP for a more complete response to your question. For example, about 54 percent of water demand in 2001 was supplied by local groundwater, and about 46 percent was supplied by imported SWP water. Also please refer to Table II-5 in the 2002 Santa Clarita Valley Water Report, which displays the build up of SWP water use through time, and the relative percentages of groundwater and SWP water used in a given year. As noted above, it is expected that, over time, again on an average basis, the annual amount of local groundwater pumping will not appreciably change but its fraction of total water supply will decrease. Conversely, over time, and once again on an average basis, both the annual volume of imported SWP water and its fraction of total water supply will increase.

2. No. Since the Saugus Formation is recharged over a much larger area, beyond the spatial extent of the Alluvium. There is a limited relationship between Alluvial pumping and recharge to the Saugus Formation.

   The fundamental tenet of the GWMP is to utilize groundwater for water supply within its sustainable yield (see the Management Objectives, or Goals, for the Basin, GWMP Section II; see also the various GWMP Elements intended to achieve those objectives, GWMP Section V). In that light, it is expected and intended to operate in such a way that recharge to the Saugus Formation will not be "reduced" by pumping from the Alluvial Aquifer and that groundwater will be available in varying amounts, as needed depending on weather year-types, within the sustainable yields of the respective aquifers (i.e. without overdrafting them).

3. The reference to "useful amount of groundwater quality data" in the GWMP includes both Alluvial and Saugus data. However, due to the historically greater development and use of groundwater from the Alluvium (number and distribution of wells, volume of pumping), and due to the historically smaller development and use of the Saugus Formation (fewer wells, smaller geographical distribution of wells, smaller pumpage), there is a comparatively limited ability to examine relationships among pumping, recharge, and quality in the Saugus. CLWA and the other purveyors intend to expand the overall knowledge of the Saugus Formation as that resource is further explored and

developed (number of wells, additional sampling as new wells are added, etc.). All that data will be included in ongoing implementation of GWMP Primary Element 1, Monitoring of Groundwater Levels, Quality, and Production.

4. The "limited nature of Saugus water level data" is a result of the same smaller extent of historical Saugus development described in the preceding answer. Acquisition of additional data on the Saugus Formation is planned as also described in the preceding answer.

5. All publicly available information regarding the investigation of perchlorate contamination, its extent, its impact on water supply, and plans for cleanup, control of migration, etc. is available to the City. Representatives of CLWA and the purveyors meet routinely with City representatives to review the status of perchlorate cleanup and remediation activities. CLWA and the impacted water purveyors will continue to pursue control and cleanup of perchlorate contamination in order to restore impacted groundwater pumping capacity and to ensure the long-term quantity and quality of groundwater in accordance with the GWMP. As a practical matter, there are no surface contamination risks relating to perchlorate that would affect land use development adjacent to the wells.

6. The stadium well is located on the south side of the Santa Clara River, approximately two miles upstream (east) of its confluence with the South Fork tributary, or about 4,000 feet east of the Bouquet Canyon Road crossing of the Santa Clara River.

7. The assignment of "primary" or "secondary" status to any GWMP element is discretionary and certainly not absolute. Secondary status is not intended to indicate that any element of the GWMP will not be implemented; all elements are intended to be implemented. Final status of all GWMP elements will be reviewed by the Advisory Council and decided by the CLWA Board.

8. Recycled water is being delivered to the TPC via the dedicated, recycled water distribution system, which is also capable of delivering water to other non-potable water users, and which will be expanded in accordance with the Draft Recycled Water Master Plan. The costs and time frame for expanding recycled water distribution and use are included in the Draft Recycled Water Master Plan, which is complementary to, but beyond the scope of the Groundwater Management Plan. The intent is to develop the 17,000 AFY of use by 2020. The capital cost of the complete system is estimated to be $68 million, and will be funded through CLWA's connection fee program.

9. Recycled water is not "reprocessed" at points of use such as the TPC golf course. In general, recycled water is highly treated (tertiary treated) waste water. In the case of the Santa Clarita Valley, treatment already occurs at the Valencia Reclamation Plant operated by the Sanitation Districts of Los Angeles County. The treated water, ready for non-potable use, is distributed from the plant site in a dedicated transmission pipeline system to end users such as the TPC. Pesticide and fertilizer uses, as part of cultural practices at end-user locations such as golf courses, are discretionary actions of the respective end users of recycled water.

10. Most water agencies no longer use "per capita" water use as a standard because it is not an accurate representation of actual per person water use, mainly due to the effects of landscape and commercial/industrial water use. (It is also expressed in "gallons per day," rather than "acre-feet per year, since it refers to individual water usage.") In general for the South Coast hydrologic region of California, water use is approximately 200 gallons per person per day (DWR Bulletin 160-98). Per capita use for the Santa Clarita Valley is slightly higher than this due to landscape irrigation demands caused by local climatic conditions.

11. The SWP is referred to as "supplemental" water because that is the original purpose of the SWP: to serve as a supply that would "supplement" local supplies (whether groundwater or local surface water or both). The specific amounts referred to in the GWMP are from the contractual terms between CLWA and the California Department of Water Resources.

    The water banked in the Semitropic Water Storage Program during 2002 is a short-term, dry period supply. The program has a term of ten years (i.e., the water must be returned to CLWA for use in its service area within that time period). Thus it is not included as a supply for long-term needs. However, the other programs listed in the UWMP (most of which, by the way, are not water "transfers," but are instead groundwater banking programs) are long-term sources of supply. As of this writing, the Agency is in the process of designing and implementing a Long-Term Reliability Plan to begin bringing such long-term programs on line as a means to store water available in wet years, for use in later dry years. CEQA analysis, with its accompanying public comment opportunities, will be part of the long-term reliability program approval process.

12. Primary Element 6 – Long Term Salinity Management is included in the GWMP for the reasons presented in the text discussion of that element. The element recognizes the need to plan for salinity management but also recognizes that, to the present, there has been no extraordinary trend of salinity increase. Hence, there are no specific efforts currently in place to "manage" salinity. It is envisioned that specific efforts will be developed over

time in response to implementation of the GWMP and, in particular, its Primary Element 6.

CLWA is participating in efforts by the Sanitation Districts of Los Angeles County to address the Los Angeles Regional Water Quality Control Board's proposed TMDL standard for chloride in the Santa Clara River. This effort is separate from and beyond the scope of the Groundwater Management Plan.

Additional Comments

Ed and Joan Dunn
15414 Rhododendron Dr.
Canyon Country, CA 91387
November 25, 2003

Castaic Lake Water Agency
President Peter Kavounas and Board of Directors
27234 Bouquet Canyon Road
Santa Clarita, CA 91350-2173

Re: Groundwater Management Plan (AB 3030) Nov. 2003 Draft

Dear President Kavounas and Directors:

We would like to comment on some statements of your new draft plan. On page 38 there is a bullet - Conservation pricing. Since we have never seen any conservation pricing locally, this should be explained or removed. We seriously question this being presently implemented.

On page 41, we ask why you are stating that only the eastern portion of the alluvium has experienced historical fluctuations in groundwater levels. How can there be constant groundwater levels in the western portion of the basin, when the western basin is supposed to receive its re-charge primarily from the eastern portion of the river? You imply that tributaries in the Bouquet Canyon area are the source of water in that area. We believe you are avoiding the real source of water to the area. That source appears to be the large amount of effluent from Sanitation District #26, and is maintaining the water level. Why is this not explained?

As usual, there is no explanation for a total extended interrupt of the state wholesale water system or the CLWA facilities!

We are disappointed that of the numerous comments of August 8, 2003 that we supplied, only a few were considered. We spent our time and efforts to supply comments and suggestions to make the water plan a good plan. So much for that!

Sincerely,

Ed and Joan Dunn

November 25, 2003

Mary Lou Cotton
Water Resources Manager
CLWA
via fax only

Subject: November 25, 2003 Groundwater Management Plan Protest Hearing

I will not be attending the protest hearing this evening, but I do have three comments on the materials you provided to me.

First, I commented previously on the proposed network of monitoring wells and the public availability of data. The monitoring wells in figures 5-1 and 5-2 appear to cover a wide range of the valley. However, the text on p. 27 states the network will be "mostly as illustrated in figures 5-1 and 5-2, but possibly expanded...." I hope the final network is extensive and covers all areas of the valley. Further expansion of the network would add valuable data points and should be encouraged.

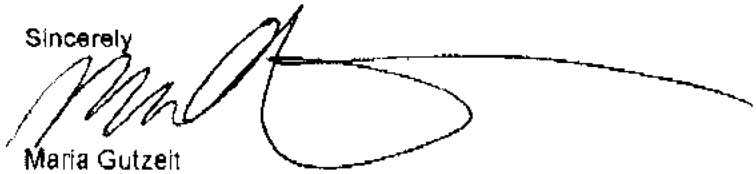
I did not see any indication of whether the collected monitoring data would be publicly available. I have heard comments from others that some well data is not being released to the public, even upon request. I think that concerned citizens and groups should be allowed access to the monitoring database.

Second, I have one new comment on the wording on page 34, regarding perchlorate cleanup. The last paragraph states "the proposed pumping would be combined with approved wellhead treatment to render the treated water suitable for municipal supply." This may be a wording issue, but my understanding is that wellhead treatment is not always approved or allowed by the permitting agencies. This wording implies that wellhead treatment is already an approved scenario, while it may be determined that treatment followed by re-injection or non-potable usage makes more sense. I think it would be more accurate to not specify the final treatment scenario until the plume characterization is complete and the pilot studies are finished and accepted.

Finally, the plan is clearly an overview that will have to be expanded upon with supporting policies and target dates. Some commenters requested this information go in the groundwater plan. If the agency does not add implementation strategies and target dates to the plan, they should be prepared separately, updated annually, and made available to the public upon request.

I understand the time for commenting may have past, but if you are able to address these concerns in the final draft it would be appreciated.

Sincerely



Maria Gutzeit
24463 Shadeland Dr
Newhall, CA 91321

Appendix G: Water Shortage Contingency Plan (WSCP) Resolution/Ordinance

RESOLUTION NO._____
A RESOLUTION OF THE BOARD OP DIRECTORS
OF THE CASTAIC LAKE WATER AGENCY
ADOPTING A WHOLESALE WATER SHORTAGE CONTINGENCY PLAN

WHEREAS, the Castaic Lake Water Agency (Agency) is a public entity organized and operating pursuant to the California Water Code, Appendix, Chapter 103, and is authorized to, among other things, supply water on a wholesale basis to the retail water suppliers within the Santa Clarita Valley, namely the Santa Clarita Water Division, the Newhall County Water District, the Valencia Water Company, and the Los Angeles County Waterworks District No. 36 (collectively, the Retail Agencies); and

WHEREAS, the Agency is a wholesale urban water supplier for purposes of the Urban Water Management Planning Act (Water Code section 10610 et seq.) and the Water Conservation Act of 2009 (Water Code section 10608 et seq.), commonly referred to as SBX7-7; and

WHEREAS, the Agency has rights and access to multiple sources of water that it may treat and deliver on a wholesale basis to the Retail Agencies in the Santa Clarita Valley, which sources of water include, but are not limited to: annual contractual supplies from the State Water Project (SWP), including Flexible Storage Account water; annual contractual supplies from the Buena Vista Water Storage District and Rosedale Rio Bravo Water Storage District (Buena Vista-Rosedale); contractual supplies through several banking and exchange programs; and other supplies; and

WHEREAS, the State of California recently experienced record multiple-dry year conditions and many portions of the state continue to face ongoing drought conditions, wherein such conditions have affected the availability and reliability of the Agency's wholesale water supplies and water supplies throughout the Santa Clarita Valley, and wherein future drought conditions will continue to affect the availability and reliability of water supplies available to the Agency and the Retail Agencies; and

WHEREAS, in addition to being subject to drought conditions, water supplies available to the Agency and the Retail Agencies are subject to environmental, regulatory, legal, and other constraints, and are further subject to shortages and reductions caused by catastrophic conditions such as regional power outages, earthquakes, or other disasters; and

WHEREAS, in response to California's recurring drought conditions, Governor Jerry Brown and the prior Governor have issued various emergency drought declarations requiring immediate actions by state agencies and calling upon local agencies and all Californians to take aggressive and immediate actions to reduce water consumption statewide, regionally, and locally, and to prevent the waste of water; and

WHEREAS, pursuant to the Governor's recent emergency drought declarations, the State Water Resources Control Board has adopted statewide emergency water conservation regulations declaring certain uses of water to be wasteful and prohibiting such uses, and imposing certain water conservation requirements on retail urban water suppliers throughout the State; and

WHEREAS, the Agency is authorized by law, including but not limited to, Water Code section 350 et seq., Water Code section 370 et seq., Water Code section 375 et seq., and the Castaic Lake Water Agency Act to take various actions in response to reductions in water supply, including but not limited to: declaring a water shortage emergency; adopting regulations and restrictions regarding the delivery, distribution and allocation of water; establishing allocation-based conservation water pricing; and adopting, implementing, and enforcing a water conservation program; and

WHEREAS, in light of the conditions and circumstances mentioned in the foregoing Recitals and other prevailing factors, in 2014 the Agency and the Retail Agencies each adopted the Santa Clarita Valley Water Committee Water Conservation Action Plan, which is aimed to increase awareness of the critical water supply conditions throughout California and in the Santa Clarita Valley, and establishes various voluntary and potentially mandatory water conservation measures to be followed by residents and business throughout the Valley with regard to outdoor and indoor water uses; and

WHEREAS, in accordance with the Urban Water Management Planning Act, the Agency and the Retail Agencies are required to provide a water shortage contingency analysis as part of their regional Urban Water Management Plan, which must include, among other things, a final or draft water shortage contingency resolution or ordinance for each agency; and

WHEREAS, in response to the current and future variability of water supply conditions throughout the State and within the Santa Clarita Valley, the Agency desires to establish its Water Shortage Contingency Plan for purposes of the 2015 Regional Urban Water Management Plan being prepared by the Agency and the Retail Agencies, and further desires to coordinate any implementation of its Water Shortage Contingency Plan with the Retail Agencies.

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Castaic Lake Water Agency as follows:

Section 1. Incorporation of Recitals. All of the Recitals set forth above are true and correct and the Board of Directors so finds and determines. Said Recitals are incorporated herein and made an operative part of this Resolution.

Section 2. Purpose and Scope. The Urban Water Management Planning Act requires, among other things, that an Urban Water Management Plan provide an urban water shortage contingency analysis that includes various elements that are within the authority of the urban water supplier, including but not limited to, the stages of action to be undertaken by the urban water supplier in response to water supply conditions such as shortages, including up to a 50 percent reduction in water supply. The Agency has developed and the Board of Directors adopts the Water Shortage Contingency Plan (WSCP) as set forth herein to respond to potential water supply shortages or reductions in water supply in accordance with the requirements of the Urban Water Management Planning Act.

Section 3. Notice and Public Hearing. The Agency's Board of Directors has conducted a noticed public hearing on (INSERT DATE) to allow public agencies, members of the public, and other interested stakeholders to review this Resolution and the Agency's WSCP, and to submit comments, be heard, or protest the Resolution or WSCP prior to being adopted by the Board of Directors.

Section 4. Water Use Prohibitions. Consistent with the Santa Clarita Water Committee Water Conservation Action Plan and pursuant to the State Water Resources Control Board emergency regulation for statewide urban water conservation (California Code of Regulations, title 23, article 22.5, section 864), the Agency finds and determines that to prevent the waste and unreasonable use of water and to promote water conservation, each of the following actions should be prohibited, except where necessary to address an immediate health and safety need or to comply with a term or condition in a permit issued by a state or federal agency:

(a) The application of potable water to outdoor landscapes in a manner that causes runoff such that water flows onto adjacent property, non-irrigated areas, private and public walkways, roadways, parking lots, or structures;

(b) The use of a hose that dispenses potable water to wash a motor vehicle, except where the hose is fitted with a shut-off nozzle or device attached to it that causes it to cease dispensing water immediately when not in use;

(c) The application of potable water to driveways and sidewalks;

(d) The use of potable water in a fountain or other decorative water feature, except where the water is part of a recirculating system;

(e) The application of potable water to outdoor landscapes during and within 48 hours after measurable rainfall;

(f) The irrigation with potable water of ornamental turf on public street medians; and

(g) The irrigation with potable water of landscapes outside of newly constructed homes and buildings in a manner inconsistent with regulations or other requirements established by the California Building Standards Commission and the Department of Housing and Community Development.

Section 5. WSCP Principles. In addition to the scope and purpose of the WSCP as described in Section 2, above, a guiding principle of the WSCP is to manage the Agency's water resources and water supply planning efforts to minimize the effects of water shortages or water supply reductions. Additional supporting principles include:

(a) Encourage and promote efficient water use and local water resource programs.

(b) Coordinate water supply planning efforts and water supply operations with the Retail Agencies to the greatest extent practicable.

(c) Pursue innovative transfer and banking programs to secure additional imported water supplies for use in dry years and during water shortage conditions.

(d) Increase public awareness about water supply issues.

Section 6. Implementation. On an ongoing basis, the Agency evaluates its water supply conditions to determine the appropriate management stage. Each stage is associated with specific water resource management considerations designed to: (1) avoid shortages to the maximum extent practicable; and (2) coordinate with the Retail Agencies to minimize the effects of reductions in water supply or water shortage conditions.

Section 7. Stage 0 Water Supply Condition.

a. A Stage 0 Water Supply Condition exists when the Agency determines in its sole discretion that its imported water supplies are greater than demand from the Retail Agencies. Together, the Agency's average year SWP Table A allotment (58,800 acre-feet) plus its annual contractual entitlement to Buena Vista-Rosedale water (11,000 acre-feet) are referred to for purposes of this Resolution as the Agency's "Normal Year Wholesale Imported Supply." When the Agency determines in its sole discretion that at least 65 percent of its Normal Year Wholesale Imported Supply is available to the Agency, the Agency is considered to be in a Stage 0 Water Supply Condition, where the Agency's Normal Year Wholesale Imported Supply is considered to exceed demands for such supply in that year, and extraordinary water supply management actions are not required. Notwithstanding, the following actions may continue to be undertaken by the Agency during a Stage 0 Water Supply Condition:

1. Wholesale and Retail Coordination. The Agency meets and coordinates with the Retail Agencies regarding current and projected water supplies and demands, and the Agency recommends that the Retail Agencies implement the appropriate stages and actions under their respective WSCPs.

2. Public Messaging. Encourage the public to avoid water waste and increase water use efficiency through participation in programs offered by the Agency and the Retail Agencies under the Santa Clarita Valley Water Use Efficiency Strategic Plan, the Santa Clarita Valley Water Committee Water Conservation Action Plan, and other available water conservation programs and projects.

3. Manage Water Supplies in Excess of Demands. Water available to the Agency in excess of demands will be managed to the maximum extent practicable, including but not limited to, placing such water in water banking or water exchange programs, or in available SWP surface storage.

Section 8. Stage 1 Water Supply Condition.

a. A Stage 1 Water Supply Condition exists when the Agency determines in its sole discretion that due to drought, regulatory, legal, catastrophic, or other conditions, the Agency's Normal Year Wholesale Imported Supply is subject to a 35 to 39 percent reduction. Under a Stage 1 Water Supply Condition, the Agency has sufficient SWP surface storage to meet the reduction in supply. A Stage 1 Water Supply Condition will trigger the following water management actions by the Agency:

1. Wholesale and Retail Coordination. The Agency meets and coordinates with the Retail Agencies regarding current and projected water supplies and demands, and the Agency recommends that the Retail Agencies implement the appropriate stages and actions under their respective WSCPs.

2. Take Water from SWP Surface Storage. The Agency will take water supplies it has previously stored in SWP surface reservoirs, including but not limited to water stored in San Luis Reservoir under Article 56c of the Agency's SWP water supply contract.

3. Stage 0 Actions. The Agency will continue to undertake other actions identified above under a Stage 0 Water Supply Condition.

Section 9. Stage 2 Water Shortage Condition.

a. A Stage 2 Water Supply Condition exists when the Agency determines in its sole discretion that due to drought, regulatory, legal, catastrophic, or other conditions, the Agency's Normal Year Wholesale Imported Supply is subject to a 40 to 44 percent reduction. Under a Stage 2 Water Supply Condition, the Agency has sufficient SWP surface storage plus other low-cost water resources to meet the reduction in supply. A Stage 2 Water Supply Condition will trigger the following water management actions by the Agency:

1. Wholesale and Retail Coordination. The Agency meets and coordinates with the Retail Agencies regarding current and projected water supplies and demands, and the Agency recommends that the Retail Agencies implement the appropriate stages and actions under their respective WSCPs.

2. Shift and Increase in Public Messaging. The Agency will call on all residents and businesses throughout the Santa Clarita Valley to adhere to dry-year conservation measures identified in the Santa Clarita Valley Water Use Efficiency Strategic Plan, the Santa Clarita Valley Water Committee Water Conservation Action Plan.

3. Take Water from Low-Cost Water Exchange Programs. As needed, the Agency will call on water supplies held in its contractual exchange programs such as those with West Kern Water District and Rosedale Rio-Bravo Water Storage District.

4. Take Water from Low-Cost Water Transfers. As needed, the Agency will call on water supplies held through its contractual participation in water transfer programs such as the Yuba Accord Water Purchase program.

Section 10. Stage 3 Water Shortage Condition.

a. A Stage 3 Water Supply Condition exists when the Agency determines in its sole discretion that due to drought, regulatory, legal, catastrophic, or other conditions, the Agency's Normal Year Wholesale Imported Supply is subject to a 45 to 75 percent reduction. Under a Stage 3 Water Supply Condition, the Agency has sufficient SWP surface storage plus other low-cost water resources plus other potential actions to meet the reduction in supply. A Stage 3 Water Supply Condition will trigger the following water management actions by the Agency:

1. Wholesale and Retail Coordination. The Agency meets and coordinates with the Retail Agencies regarding current and projected water supplies and demands, and the Agency recommends that the Retail Agencies implement the appropriate stages and actions under their respective WSCPs.

2. Shift and Increase in Public Messaging. In coordination with the Retail Agencies, the Agency will engage an aggressive media campaign that emphasizes prohibited water use activities and the urgent need to conserve water. The Agency will continue to call on all residents and businesses throughout the Santa Clarita Valley to adhere to dry-year conservation measures identified in the Santa Clarita Valley Water Use Efficiency Strategic Plan, the Santa Clarita Valley Water Committee Water Conservation Action Plan

3. Take from Water Banking Programs. As needed, the Agency will call on water supplies held in its contractual banking programs such as those with Semitropic Water Storage District (Semitropic) and Rosedale Rio-Bravo Water Storage District.

4. Take Water from DWR Flexible Storage. As needed, the Agency will take water from its Flexible Storage Account from Castaic Lake.

5. Utilize Newhall Land Semitropic Extraction Rights. In addition to the Agency's extraction rights under its contract with Semitropic, As needed, the Agency will seek to utilize the contractual extraction capacity and rights held by Newhall Land to recover water supplies held in the Semitropic water banking program.

7. Participate in Additional Water Purchases. As needed, the Agency may consider and execute additional water purchases individually or as part of a pool of buyers.

Section 11. Exemption from the California Environmental Quality Act. The Board of Directors determines that the adoption of this Resolution and the Water Supply Allocation Plan set forth herein, for the purpose of addressing potential reductions in water supply or water supply shortages, are exempt from the requirements are exempt from the requirements of the California Environmental Quality Act (CEQA).

Section 12. Effective Date. This Resolution shall be effective immediately upon adoption and shall be presumed to continue in effect unless or until a contrary finding is made by applicable action by the Board of Directors.

ORDINANCE NO. 43

AN ORDINANCE OF THE BOARD OF DIRECTORS OF THE CASTAIC LAKE WATER AGENCY TO ESTABLISH WATER CONSERVATION AND WATER SUPPLY SHORTAGE RESTRICTIONS AND REGULATIONS FOR THE SANTA CLARITA WATER DIVISION

WHEREAS, the State of California is entering its fourth year of severe dry conditions with much of the state in a condition of extreme drought and such dry conditions may impact the long-term reliability of water supply in the Santa Clarita Valley; and

WHEREAS, on January 17, 2014, Governor Jerry Brown issued a statewide drought declaration and called upon local agencies to take aggressive, immediate action to reduce water consumption locally and statewide by 20 percent; and

WHEREAS, on July 15, 2014, the State Water Resources Control Board (State Board) approved an emergency regulation to ensure water agencies, their customers and state residents increase water conservation in urban settings or face possible fines or other enforcement measures; and

WHEREAS, despite these actions, voluntary conservation did not result in a 20 percent reduction in water demand; and

WHEREAS, on April 1, 2015, the Governor issued another drought declaration requiring an immediate reduction in overall potable urban water use statewide in response to continued dry conditions, which has resulted in water supplies that are drastically below normal, and called for a 25 percent statewide reduction in water use; and

WHEREAS, on May 5, 2015, the State Board approved an emergency regulation that places each urban water supplier into conservation tiers and mandates a certain percentage of water use reduction based upon tier placement to ensure compliance with the Governor's call for a 25 percent reduction; and

WHEREAS, the State Board placed the Santa Clarita Water Division (SCWD), which is a retail division within the Castaic Lake Water Agency (Agency), and is responsible for enforcing this Ordinance, in Tier 8, which requires a 32 percent water use reduction for the period of June 2015 through February 2016 compared to the same time period in 2013; and

WHEREAS, California Constitution article X, section 2 and California Water Code section 100 provide that because of conditions prevailing in the state of California (State), it is the declared policy of the State that the general welfare requires that the water resources of the State shall be put to beneficial use to the fullest extent of which they are capable, the waste or unreasonable use or unreasonable method of use of water shall be prevented, and the conservation of such waters is to be exercised with a view to the reasonable and beneficial use thereof in the interest of the people and the public welfare; and

WHEREAS, in addition to Article X, Section 2, the Agency has the authority to adopt and enforce water conservation restrictions pursuant to Water Code sections 375 and 31026, and the Castaic Lake Water Agency Act section 103-15(k); and

WHEREAS, pursuant to California Water Code section 350, the Board of Directors is authorized to declare a water shortage emergency to prevail within its jurisdiction when it finds and determines that the Agency will not be able to or cannot satisfy the ordinary demands and requirements of water consumers without depleting the water supplies of the Santa Clarita Valley to the extent that there would be insufficient water for human consumption, sanitation, and fire protection; and

WHEREAS, because of the prevailing conditions in the State, the current statewide drought, the mandatory water conservation requirements imposed by the State Board, and the declared policy of the State, the Agency hereby finds and determines that it is necessary and appropriate for SCWD to adopt, implement, and enforce a water conservation program with stages of water shortage restrictions, including an emergency stage, to reduce the quantity of water used by consumers within SCWD, to preserve water supplies, to prevent the waste or unreasonable use or unreasonable method of use of water, and to ensure that there is sufficient water for human consumption, sanitation, and fire protection.

NOW, THEREFORE, BE IT RESOLVED AS FOLLOWS:

Section 1. Findings and Determinations. The Agency hereby finds and determines that the above recitals are true and correct and incorporated herein.

Section 2. Rescission of Ordinance No. 41. Ordinance No. 41 is hereby rescinding in its entirety and is replaced by this Ordinance.

Section 3. Outdoor Watering Restrictions.

a. To promote water conservation and prevent the waste, unreasonable use or unreasonable method of use of water, each of the following actions is prohibited at all times:

1. The application of potable water to outdoor lawns, turf and landscapes in a manner that causes runoff such that water flows onto adjacent property, non-irrigated areas, private and public walkways, roadways, parking lots, and/or structures.

2. The use of a hose that dispenses potable water to wash a motor vehicle, except where the hose is fitted with an automatic shut-off nozzle or device attached to it that causes it to cease dispensing water immediately when not in use.

3. The application of potable water to driveways, sidewalks, and other hardscape.

4. The use of potable water in a fountain or other decorative water feature, except where the water is part of a recirculating system.

5. Irrigating outdoor lawns, turf, or vegetated area of landscape during and within 48 hours following measurable precipitation.

6. Irrigation with potable water of landscapes outside of newly constructed homes and buildings in a manner inconsistent with regulations or other requirements established by the California Building Standards Commission and the Department of Housing and Community Development.

7. Watering or irrigating of outdoor lawns, turf, landscape or other vegetated area with potable water during the hours of 9:00 a.m. to 5:00 p.m. Pacific Standard Time on all days, except by use of a hand-held bucket or similar container or for very short periods of time for the purpose of adjusting or repairing an irrigation system.

8. Watering or irrigating outdoor lawns, turf, landscape, or other vegetated area with potable water using a landscape irrigation system or a watering device that is not continuously attended for more than ten (10) minutes watering per day per station. This subsection does not apply to landscape irrigation systems that exclusively use low-flow drip type irrigation systems when no emitter produces more than two gallons of water per hour and weather based controllers or stream rotator sprinklers that meet a 70% efficiency standard.

9. The irrigation with potable water of turf on public street medians.

Section 4. Additional Water Use Restrictions. Additional water use restrictions include:

a. Restaurants and other food service establishments may not serve water to customers unless requested.

b. Operators of hotels and motels must provide customers with the option of not having towels and linen laundered daily and must prominently display notice of such.

c. All water system leaks must be repaired within 24 hours of detection or notification of such.

Section 5. Exemptions.

a. The restrictions in this Ordinance do not apply to the following:

1. The use of water where necessary to address an immediate health and safety need or for essential government services, such as police, fire or other similar emergency services.

2. The use of water where necessary to comply with a term or condition in a permit issued by a state or federal agency or to comply with fire mitigation requirements of a government agency.

3. The maintenance of vegetation, including trees and shrubs, that are watered using a hand-held bucket or similar container.

4. The use of water to maintain existing landscape for soil erosion control if required or approved by a local agency.

b. Maintenance of landscape within active public parks and playing fields, day care centers, golf course greens, and school grounds may be exempt from the watering days restrictions in Sections 7, 8 and 9, but only if a written request is submitted to SCWD for a variance that sets forth the reasons for the requested exemption and such variance is granted by SCWD.

c. Customers who have participated in the removal of turf or high water use plants and have installed drought tolerant landscaping, including through the Santa Clarita Valley's rebate program, may not have to comply with the restrictions on watering days in Sections 6, 7 and 8 if SCWD determines that additional watering is required to plant and maintain new drought resistant landscaping for a limited amount of time. If such a determination is made, SCWD will provide the customer with an allowable watering schedule, including when such exception will expire. Any violation of the schedule will be punishable as described in this Ordinance.

Section 6. Level 1 Water Shortage

a. A Level 1 Water Shortage condition exists when the Agency determines in its sole discretion that due to drought, state regulations, or other water supply conditions, a reduction in water use is necessary to make the most efficient use of water and appropriately respond to existing water and regulatory conditions. The water use reduction goal during a Level 1 Water Shortage condition is 25%. Upon declaration by the Agency of a Level 1 Water Shortage condition, the following water conservation restrictions go into effect.

b. Additional Water Conservation Measures. In addition to the prohibited uses of water in Sections 3 and 4, including the limit of watering times and duration in Sections 3(a)(7) and (8), the following water conservation requirements apply during a declared Level 1 Water Shortage condition:

1. Limits on Watering Days: During the months of April, May, June, July, August, September and October, outdoor irrigation of ornamental landscapes or turf with potable water is restricted to three (3) days per week. Customers with street addresses ending in an odd number (1,3,5,7,9) may only water on Monday, Wednesday and Friday. Customers with street addresses ending in an even number (0,2,4,6,8) may only water Tuesday, Thursday and Sunday. Outdoor irrigation of ornamental landscapes or turf with potable water is prohibited on Saturdays.

2. Limits on Water Days: During the months of November, December, January, February and March, outdoor irrigation of ornamental landscapes or turf with potable water is restricted to two (2) days per week. Customers with street addresses ending in an odd number (1,3,5,7,9) may only water on Monday and Thursday. Customers with street addresses ending in an even number (0,2,4,6,8) may only water Tuesday and Friday. Outdoor irrigation of ornamental landscapes or turf with potable water is prohibited on Wednesdays, Saturdays, and Sundays.

Section 7. Level 2 Water Shortage

a. A Level 2 Water Shortage exists when the Agency determines in its sole discretion that due to drought, state regulations, or other water supply conditions, a reduction in water use is necessary to make the most efficient use of water and appropriately respond to existing water and regulatory conditions. The water use reduction goal during a Level 2 Water Shortage condition is 32%. Upon declaration by the Agency of a Level 2 Water Shortage condition, the following water conservation restrictions go into effect.

b. Additional Water Conservation Measures. In addition to the prohibited uses of water in Sections 3 and 4, including the limit of watering times and duration in Sections 3(a)(7) and

(8), the following water conservation requirements apply during a declared Level 2 Water Shortage:

1. Limits on Watering Days: Outdoor irrigation of ornamental landscapes or turf with potable water is restricted to two (2) days per week. Customers with street addresses ending in an odd number (1,3,5,7,9) may only water on Monday and Thursday. Customers with street addresses ending in an even number (0,2,4,6,8) may only water Tuesday and Friday. Outdoor irrigation of ornamental landscapes or turf with potable water is prohibited on Wednesdays, Saturdays, and Sundays.

Section 8. Level 3 Water Shortage

a. A Level 3 Water Shortage exists when the Agency determines in its sole discretion that due to drought, state regulations, or other water supply conditions, a reduction in water use is necessary to make the most efficient use of water and appropriately respond to existing water and regulatory conditions. The water use reduction goal during a Level 3 Water Shortage condition is 40%. Upon declaration by the Agency of a Level 3 Water Shortage condition, the following water conservation restrictions go into effect.

b. Additional Water Conservation Measures. In addition to the prohibited uses of water in Sections 3 and 4, including the limit of watering times and duration in Sections 3(a)(7) and (8), the following water conservation requirements apply during a declared Level 3 Water Shortage:

1. Limits on Watering Days: Outdoor irrigation of ornamental landscapes or turf with potable water is restricted to one (1) day per week. Customers with street addresses ending in an odd number (1,3,5,7,9) may only water on Monday. Customers with street addresses ending in an even number (0,2,4,6,8) may only water Thursday. Outdoor irrigation of ornamental landscapes or turf with potable water is prohibited on Tuesdays, Wednesdays, Fridays, Saturdays, and Sundays.

Section 9. Level 4 Water Shortage Emergency

a. A Level 4 Water Shortage Emergency exists when the Agency determines in its sole discretion that due to drought, state regulations, or other water supply conditions, an emergency situation exists that requires a significant reduction in water use is necessary to maintain sufficient water supplies for public health and safety. The water use reduction goal during a Level 4 Water Shortage Emergency is more than 50%. Upon declaration by the Agency of a Level 4 Water Shortage Emergency condition, the following restrictions go into effect.

b. Additional Water Conservation Measures. In addition to the prohibited uses of water in Sections 3 and 4, the following water conservation requirements apply during a declared Level 4 Water Shortage Emergency:

1. No Watering or Irrigating: Watering or irrigating of outdoor lawns, landscape, or other vegetated area with potable water is prohibited. This prohibition does not apply to the following categories of use, unless the Agency has determined that recycled water is available and may be applied to the use:

2. No New Potable Water Service: Upon declaration of a Level 4 Water Shortage Emergency condition, no new potable water service will be provided, no new temporary meters or permanent meters will be provided, and no statements of immediate ability to serve or provide potable water service will be issued, except under the following circumstances:

i. A valid, unexpired building permit has been issued for the project; or

ii. The project is necessary to protect the public health, safety, and welfare; or

iii. The applicant provides substantial evidence of an enforceable commitment that water demands for the project will be offset prior to the provision of a new water meter(s) to the satisfaction of SCWD.

This subsection (b)(2) does not preclude the resetting or turn-on of meters to provide continuation of water service or the restoration of service that has been interrupted for a period of one year or less.

Section 10. Penalties.

a. Penalties. Penalties for failure to comply with any provision of this Ordinance are as follows:

1. First Violation. A written notice provided to the customer by mail or personal delivery.

2. Second Violation. For a second violation within twelve (12) calendar months of the first violation, a written notice of non-compliance and a fine of $50 per violation.

3. Third and Subsequent Violations. For a third violation within twelve (12) calendar months of the first violation, a written notice of non-compliance, a fine of $100 per violation and an increase of $100 for each subsequent violation up to a maximum of $500 per day. At the third violation and beyond, a flow restrictor may be installed and fire flow requirements are the sole responsibility of the customer. If a flow restrictor is installed pursuant to this Section 10, the cost of installation and removal of any such flow restrictor is the responsibility of the violating customer and SCWD may collect such costs from customer. SCWD is under no obligation to provide sufficient fire flow requirements after the third notice of violation.

b. Additional Penalties. In addition to any fines and the installation of a water flow restrictor imposed pursuant to this Section, SCWD may shut off a customer's water service for willful violations of mandatory restrictions in this Ordinance.

c. Leak Shut Off – Irrigation Meters. In instances where a leak is observed on the customer's side of a dedicated irrigation system or water meter, SCWD may immediately shut off such system and/or meter and may issue a notice of violation as provided for in this Ordinance. Water service will not be reinstated until such leak is repaired.

d. Separate Violations. Each violation of this Ordinance is a separate offense.

e. Appeals. SCWD will issue a Notice of Violation by mail or personal delivery. Customers may appeal a Notice of Violation by filing a written appeal with SCWD within ten (10) days of the date of the Notice of Violation. Any Notice of Violation not timely appealed will be final. Upon receipt of a timely appeal, a hearing on the appeal will be scheduled, and SCWD will mail written notice of the hearing date to the customer at least ten (10) days before the date of the hearing. The Retail Manager of SCWD, or a person designated by such, shall serve as the hearing officer and make any and all decisions regarding any appeals. SCWD shall promptly send written notification of any decision and all decisions are final.

Section 11. Hardship Waiver.

a. Undue and Disproportionate Hardship. If, due to unique circumstances, a specific requirement of this Ordinance would result in undue hardship to a person using water or to property upon which water is used, that is disproportionate to the impacts to water users generally or to similar property or classes of water users, then the person may apply for a waiver to the requirements as provided in this section.

b. Application. A person wishing to receive a hardship waiver pursuant to this section must submit a written application to SCWD, which should include a statement describing the reasons for the request and any other relevant information to support the request, including but not limited to any photographs, drawings, or maps.

c. Written Finding. The waiver may be granted or conditionally granted only upon a written finding of the existence of unique circumstances and facts demonstrating an undue hardship to a person using water or to property upon which water is used, that is disproportionate to the impacts to water users generally or to similar property or classes of water use due to specific and unique circumstances of the user or the user's property. The findings must also include a determination that, based on the information in the application and any other relevant information, a waiver does not constitute a grant of special privilege inconsistent with the limitations upon other residents and businesses.

d. Approval Authority. The Retail Manager of SCWD must act on any completed application no later than ten (10) business days after submittal and may approve, conditionally approve, or deny the waiver. The applicant requesting the waiver must be promptly notified in writing of any action taken. The decision of the Retail Manager will be final.

Section 12. CEQA Exemption. The adoption of this Ordinance is exempt from the requirements of the California Environmental Quality Act ("CEQA"). The adoption of this Ordinance does not commit the Agency to any action that may have a significant effect on the environment because the water conservation that would result from the implementation of the Ordinance's provisions would not result in any significant environmental effects. As a result, these actions do not constitute a project subject to the requirements of CEQA. See State CEQA Guidelines, § 15378. Also, there are no circumstances concerning the project that would result in a significant adverse impact on the environment because the project would actually result in the conservation of water, a limited and currently scarce natural resource, and would, therefore, have a beneficial effect on the environment. On this basis and the information contained in the whole of the administrative record, the adoption of this

Ordinance is exempt from CEQA and no further analysis is required. State CEQA /Guidelines, § 15061(b)(3).

Section 13. Severability. If any provision of this ordinance or the application thereof to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications of the ordinance which can be given effect without the invalid provision or application, and to this end the provisions of this ordinance are severable. The Board hereby declares that it would have adopted this ordinance irrespective of the invalidity of any particular portion thereof.

Section 14. Effective Date. This Ordinance shall become effective immediately upon adoption.

President of the Board

Board Secretary

I, the undersigned, hereby certify: That I am the duly appointed and acting Secretary of the Castaic Lake Water Agency, and that at a regular meeting of the Board of Directors of said Agency held on Wednesday, June 10, 2015, the foregoing Ordinance No. 43 was duly and regularly adopted by said Board, and that said ordinance has not been rescinded or amended since the date of its adoption, and that it is now in full force and effect.

DATED: June 10, 2015

April Jacobs, Secretary

ORDINANCE NO. 116
AN ORDINANCE AMENDING ORDINANCE 112 WATER CONSERVATION, SHORTAGE, DROUGHT AND EMERGENCY RESPONSE ORDINANCE OF NEWHALL COUNTY WATER DISTRICT

Be it ordained by The Board of Directors of Newhall County Water District, Los Angeles County, California, Ordinance No. 112 is amended to read as follows:

Section 1.0 PURPOSE:

The specific provisions of this Ordinance are necessary and proper to conserve water resources for the District and its customers. The District requires that water resources available to the District be put to the maximum beneficial use, and that water efficient practices be used to reach this objective. The District further finds that its water supplies may be reduced because of drought, failure of facilities, or catastrophic events such as earthquakes and regional power failures. Anti-waste and water conservation requirements are necessary to achieve demand reduction without unneeded hardship. This ordinance is adopted pursuant to Water Code Section 375.

Section 2.0 DEFINITIONS AND TERMS:

A. ***Water efficient practices:*** Cost-effective practices that require the least amount of water to generate the greatest benefit (water and cost savings) to the customer.

B. ***Water Waste:*** To use or expend water carelessly or needlessly.

C. ***Water User:*** Business or residential customer of the District.

D. ***Water Conservation Stages:*** The Board shall determine any conservation stage by resolution. A water shortage occurs when the current or near-term water demand exceeds the current or near- term water supply or when the state has deemed a conservation emergency exists.

Stage 1: Water shortage conditions exist due to drought, state regulations, or other water supply conditions requiring a reduction in water use. The water use reduction goal is 10 to 20% and voluntary unless regulations stipulate otherwise.

Stage 2: Water shortage conditions exist due to drought, state regulations, or other water supply conditions requiring a reduction in water use. The water use reduction goal is 20 to 30% and mandatory unless regulations stipulate otherwise.

Stage 3: Water shortage conditions exist due to drought, state regulations, or other water supply conditions requiring a reduction in water use. The water use reduction goal is 30 to 40% and mandatory unless regulations stipulate otherwise.

Stage 4: Water shortage conditions exist due to drought, state regulations, or other water supply conditions requiring a reduction in water use. The water use reduction goal is 40 to 50% and mandatory unless regulations stipulate otherwise.

Stage 5: Water shortage conditions exist due to drought, state regulations, or other water supply conditions requiring a reduction in water use. The water use reduction goal is 50% or greater and mandatory unless regulations stipulate otherwise.

Section 3.0 WATER CONSERVATION ACTION PLAN:

This plan establishes water conservation measures to be taken in response to current and anticipated levels of water shortages in State and/or local water supplies. No Water User shall waste water or make, cause, or permit the use of water for any purpose contrary to any provision of this Ordinance, or in quantities in excess of the use permitted by the conservation stage in effect pursuant to this Ordinance.

Efficient Water Use: Because more severe effects of a water shortage are often brought about due to wasteful water use habits carried over from times of sufficient supply, certain voluntary water-use practices are encouraged at all times.

3.1 ***General Outdoor Water Use Efficiency Guidelines and Recommendations:***

a) Sprinklers should be maintained and adjusted so that overspray, runoff, and water waste is avoided. The most effective and water-efficient irrigation should be used, and drip irrigation should be considered where appropriate.

b) All leaks in plumbing and irrigation systems should be repaired promptly.

c) Vehicles should be washed using a hose equipped with automatic shutoff nozzle.

d) Sidewalks, walkways, driveways, parking lots or any other hard-surfaced areas should not be washed down, except for health and safety purposes.

e) Low-water-use native or drought-tolerant vegetation should be used to minimize the need for irrigation. Plants and trees with similar water needs should be grouped together for most efficient irrigation. (Please see our website ncwd.org for more information and links to other websites listing drought tolerant plants.)

f) Landscape should be installed in a manner that will reduce the amount of water needed for irrigation. For example, the use of mulches and watering basins is encouraged where appropriate.

g) Irrigation should occur during optimal watering hours, avoiding wind and heat. The following hours are considered the most efficient hours for NCWD customers to effectively irrigate lawns and landscaped areas:

Winter/Fall (November through April) – 6 PM to 1 0 AM
Spring/Summer (May through October) – 8 PM to 9 AM

h) Water usage on any decorative fountains, ponds or other types of water streams should be minimized by incorporating a water recycling system so the water is continually recovered and reused.

i) Pool and spa safety covers or evaporation-reducing water treatments should be considered if safe and appropriate for the situation. These will help minimize water

loss due to evaporation. Pool and spa chemistry should be balanced and maintained to help reduce the frequency of pool/spa draining and refilling.

3.2 ***General Indoor Water Use Efficiency Guidelines and Recommendations:***

a) All leaks and/or damage to faucets, toilets, and indoor pipes should be repaired immediately.

b) Low flow devices for indoor plumbing fixtures including faucets, kitchen spray nozzles, toilets, and showers should be used where possible.

c) Install 1.0 gallon per flush (gpf) ultra-low-flow toilets or dual-flush toilets.

d) Water-efficient Energy Star® approved appliances including, but not limited to, clothes washers and dishwashers should be used.

e) Clothes washers and dishwashers should be run using full loads to maximize water efficiency.

f) A source specific hot water dispenser or a whole house hot water recirculation system should be considered. These devices generate hot water within seconds, minimizing running the water until it is hot.

g) All commercial establishments where food or beverages are provided should encourage the serving of water to their customers only when specifically requested by the customer.

3.3 ***New Construction Water Efficiency Guideline:***

As new technology advances, builders of new structures or persons retrofitting existing facilities should consider options such as evapotranspiration-controlled sprinkler systems, grey water or non-potable water systems (where legally acceptable), storm water cisterns, and landscape designs minimizing the use of turf and water- intensive plants. Businesses should review industry-specific guidance for ways to reduce water usage and should consider programs such as multi-pass cooling towers and process water recycling. Additionally, new construction must comply with landscape efficiency measures of the updated Model Water Efficient Landscape Ordinance updated by the State as required by AB 1881 and Executive Order B-29-15 issued by Governor Jerry Brown on April 1, 2015.

3.4 ***Water Conservation Stage 1:*** At this stage of water shortage, a 10 to 20% reduction in use is voluntary, and water users are strongly encouraged to adhere to all the guidelines in section 3.1 and 3.2, General Outdoor and Indoor Water Use Efficiency Guidelines and Recommendations. The following practice is also strongly suggested during Stage 1 water shortages:

Outdoor irrigation of all vegetation including lawns and landscaping should be limited to three times per week and no more than 10 minutes per watering station. Irrigation should occur during the following hours:

Winter/Fall (November through April) **– 6 PM to 10 AM**
Spring/Summer (May through October) **– 8 PM to 9 AM**

3.5 ***Water Conservation Stage 2:*** At this stage of water shortage, a 20 to 30% water reduction is mandatory, and water users are strongly encouraged to adhere to all the guidelines in section 3.1 and 3.2 General Outdoor and Indoor Water Use Efficiency Guidelines and Recommendations. In addition to any state mandated conservation regulations, further mandatory practices during Stage 2 are as follows:

During the months of April, May, June, July, August, September, and October, outdoor irrigation of ornamental landscapes or turf with potable water is restricted to three (3) days per week. Customers with addresses ending in an odd number (1, 3, 5, 7, 9) may only water on Monday, Wednesday, and Friday. Customers with addresses ending in an even number (2, 4, 6, 8) may only water on Tuesday, Thursday, and Sunday. Outdoor irrigation of ornamental landscapes or turf with potable water is prohibited on Saturdays.

During the months of November, December, January, February, and March, outdoor irrigation of ornamental landscapes or turf with potable water is restricted to two (2) days per week. Customers with addresses ending in an odd number (1, 3, 5, 7, 9) may only water on Monday and Thursday. Customers with addresses ending in an even number (2, 4, 6, 8) may only water on Tuesday and Friday. Outdoor irrigation of ornamental landscapes or turf with potable water is prohibited on Wednesdays, Saturdays, and Sundays.

3.6 ***Water Conservation Stage 3:*** At this stage of water shortage, a 30 to 40% water reduction is mandatory, and water users are strongly encouraged to adhere to all the guidelines in section 3.1 and 3.2 General Outdoor and Indoor Water Use Efficiency Guidelines and Recommendations. In addition to any state mandated conservation regulations, mandatory practices during Stage 3 are as follows:

Outdoor irrigation of ornamental landscapes or turf with potable water is restricted to two (2) days per week. Customers with addresses ending in an odd number (1, 3, 5, 7, 9) may only water on Monday and Thursday. Customers with addresses ending in an even number (2, 4, 6, 8) may only water on Tuesday and Friday. Outdoor irrigation of ornamental landscapes or turf with potable water is prohibited on Wednesdays, Saturdays, and Sundays. Outdoor irrigation of ornamental landscapes or turf with potable water is prohibited on Wednesdays, Saturdays, and Sundays.

3.7 ***Water Conservation Stage 4:*** At this stage of water shortage, a 40 – 50% water reduction is mandatory, and water users are strongly encouraged to adhere to all the guidelines in Section 3.1 and 3.2 General Outdoor and Indoor Water Use Efficiency Guidelines and Recommendations. In addition to any state mandated conservation regulations, mandatory practices during Stage 4 are as follows:

Outdoor irrigation of ornamental landscapes or turf with potable water is restricted to one (1) day per week. Customers with addresses ending in an odd number (1, 3, 5, 7, 9) may only water on Monday. Customers with addresses ending in an even number (2, 4, 6, 8) may only water on Thursday. Outdoor irrigation of ornamental landscapes or turf with potable water is prohibited on Tuesdays, Wednesdays, Fridays, Saturdays,

and Sundays.

a) All new landscaping shall be limited to drought-tolerant plants requiring less than typical water requirements.

b) No new lawns, whether by seed or sod, shall be installed.

c) No filling of pools or spas. Water levels may be maintained.

d) No new applications for service will be accepted.

e) No water for grading will be allowed.

f) Washing vehicles is prohibited, except at commercial facilities that recycle water.

g) Street cleaning with potable water is prohibited.

3.8 ***Water Conservation Stage 5:*** At this stage of water shortage, more than 50% water reduction is mandatory, Stage 4 restrictions are in place, and water users are strongly encouraged to adhere to all the guidelines in Section 3.1 and 3.2 General Outdoor and Indoor Water Use Efficiency Guidelines and Recommendations. In addition to any state mandated conservation regulations, mandatory practices during Stage 5 are as follows:

Outdoor irrigation of ornamental landscapes or turf is prohibited. Health and Safety water use only is allowed.

Section 4.0 ENFORCEMENT:

4.1 ***Stage 1:***

a) Any notification to the District of signs or indications of water leaks or water waste will be documented. The District will confirm the water waste prior to any further action and if appropriate, provide education material regarding the conservation stage. Any confirmed leaks must be repaired within (48) hours after receiving notice.

b) The District shall determine if additional action is to be taken to inform the Water User of the guidelines in this Ordinance and to encourage more efficient water use.

4.2 The General Manager and other District authorized representatives have the duty to enforce provisions of Stage 2, 3, 4, and 5 of this Ordinance. If a violation is ongoing, the District may disconnect service until the violation is corrected.

a) ***Courtesy Notice.*** A written warning delivered to the customer along with water conservation materials.

b) ***First Violation.*** For a second complaint within twelve (12) calendar months of the notice, a written warning in the form of a non-compliance, corrective-action letter sent to the customer.

c) ***Second and Subsequent Violations.*** For a third violation, a fine of $50 per day and increase of $50 for each subsequent violation up to a maximum of $500 per day. Any single fine of more than $500 shall first be approved by the General Manager.

d) ***Separate Violations.*** Each day a violation of this Ordinance occurs is a separate

violation.

Section 5.0 ADMINISTRATION:

5.1 ***General.*** The provisions of this Ordinance shall be administered and enforced by the District through the General Manager, who may delegate such enforcement to one or more employees of the District. The District may implement additional demand reduction practices, including surcharges, rationing, and specific water allocations, in times of severe shortage or emergency situations.

5.1.1 ***Water Utility Accounts.*** Accounts shall not be established for new customers, including the transfer of accounts upon change of ownership, until the customer agrees to comply with the provisions of this Ordinance.

5.1.2 ***Appeals.*** The District will issue a Notice of Violation by mail or personal delivery. Customers may appeal a Notice of Violation by filing a written appeal with the District within ten (10) days of the date of the Notice of Violation. The customer may request a hearing before the General Manager. Any Notice of Violation not timely appealed will be final. Upon receipt of a timely appeal, a review on the appeal will be completed, and a hearing shall be held if requested by the customer. The General Manager or a person designated by such shall make any and all decisions regarding any appeals. The District shall promptly send written notification of any decision and all decisions are final.

5.1.3 ***Discretionary Exemptions***. The General Manager may exempt water users and individual facilities of water users from the provisions of this Ordinance, or impose reasonable conditions in lieu of compliance with this Ordinance, if the Board finds that any of the following conditions exist:

a) Hardship. If, due to unique circumstances, a specific requirement of this Ordinance would result in undue hardship to a person using water or to property upon which water is used is disproportionate to the impacts to water users generally or to similar property or classes of water users, then the person may apply for a waiver to the requirements as provided in this section.

b) Health and Safety. Strict compliance with the requirements of this Ordinance would create an emergency condition, as determined by the Board or other governmental entity with appropriate jurisdiction, affecting the health, protection or safety of the water user or the public.

c) No Impact on water use. The granting of the exemption or imposition of reasonable conditions in lieu of compliance with this Ordinance would not increase the quantity of water consumed by the Water User or otherwise adversely affect service to other Water Users. In other words, the Water User will create an offset. In granting any such relief, the departure from the requirements of this Ordinance shall be limited to the minimum necessary

to address the circumstances upon which such departure is required by a Water User.

d) Water Efficiency Target (WET). Customers within the WET program and who have achieved a WET target of "Super-Efficient" or "Efficient" are exempt from the outdoor watering restrictions within Water Conservation Stages 1 – 4 as stated above.

e) Customers achieving required water use reduction in any Water Conservation Stage and/or mandated state targets are exempt from the outdoor watering restrictions within Water Conservation Stages 1 – 4 as stated above.

f) Outdoor watering restriction requirements of Water Conservation Stages 1 – 4 do not apply to the application of potable water to trees in medians or parkways by water trucks if no permanent irrigation system is connected.

g) Outdoor watering restriction requirements of Water Conservation Stages 1 – 4 do not apply to the application of potable water to trees and gardens grown for personal food consumption or spot watering by hand using a hose fitted with a shut off nozzle.

h) Outdoor watering restriction requirements of Water Conservation Stages 1 – 4 do not apply to customers who have removed turf and/or high water use plants, and have installed drought tolerant landscaping, including those participating in the Santa Clarita Valley's water conservation rebate program, if additional watering is required to plant and maintain the new drought tolerant landscaping for a limited period of time.

i) Application – A person wishing to receive a hardship waiver pursuant to this section must submit a written application to the District, which should include a statement describing the reasons for the request and any other relevant information to support the request, including but not limited to any photographs, drawings, or maps.

j) Written Finding – The waiver may be granted or conditionally granted only upon a written finding of the existence of unique circumstances and facts demonstrating an undue hardship to a person using water or to property upon which water is used, that is disproportionate to the impacts to water users generally or to similar property or classes of water use due to specific and unique circumstances of the user or the user's property. The findings must also include a determination based on the information in the application and any other relevant information, a waiver does not constitute a grant of special privilege inconsistent with the limitations upon other customers of any class.

k) Approval Authority – The General Manager must act on any completed application no later than ten (10) days after submittal and may approve, conditionally approve, or deny the waiver. The applicant requesting the waiver

must be promptly notified in writing of any action taken. The decision of the General Manager will be final

Section 6.0: ***SEVERABILITY:***

6.1 If any provision of this **Ordinance** or the application thereof to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications of the **Ordinance** which can be given effect without the invalid provision or application, and to this end the provisions of this **Ordinance** are severable. The Board hereby declares it would have adopted this **Ordinance** irrespective of the invalidity of any particular portion thereof.

Section 7.0: ***PUBLICATION:***

7.1 This **Ordinance** shall be published within 10 days after its adoption, pursuant to Water Code section 376.

Ordinance No. 116 was Duly Passed, Approved, and Adopted by the Board of Directors of Newhall County Water District at its Regular Meeting of May 12, 2016.

B. J. ATKINS, President of the
Board of Directors of
NEWHALL COUNTY WATER DISTRICT

ATTEST:

Karin J. Russell, Secretary of the
Board of Directors of the
NEWHALL COUNTY WATER DISTRICT

State of California)
) ss.
County of Los Angeles)

I, Karin J. Russell, Secretary of the Board of Directors of the Newhall County Water District, do hereby certify that the foregoing Ordinance 116 of the Board of Directors of Newhall County Water District Amending Ordinance No. 112 titled "Ordinance No. 112 an Ordinance Amending Ordinance 101 Water Use Efficiency Ordinance of Newhall County Water District"; is a true copy of said ordinance as adopted by the Board of Directors on May 12, 2016.

Karin J. Russell, Secretary of the
Board of Directors of the
Newhall County Water District

Dated: May 12, 2016

RESOLUTION BY UNANIMOUS WRITTEN CONSENT OF THE BOARD OF DIRECTORS OF VALENCIA WATER COMPANY AMENDING THE WATER CONSERVATION AND RATIONING PLAN TO COMPLY WITH THE URBAN WATER MANAGEMENT PLANNING ACT

WHEREAS, the California Urban Water Management Planning Act, Water Code Section 10610, *et seq*., (the "Act") mandates that every urban water supplier providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre feet of water annually, prepare and adopt an urban water management plan ("UWMP") at least once every five years in years ending in five and zero;

WHEREAS, Valencia Water Company ("VWC") is an urban water supplier for purposes of the Act, and on June 27, 2011 approved and adopted its most recent UWMP ("2010 UWMP"), prepared with Castaic Lake Water Agency ("CLWA"), CLWA Santa Clarita Water Division, Newhall County Water District, and with Los Angeles County Waterworks District 36 acting as a cooperating agency (collectively the "UWMP Agencies");

WHEREAS, pursuant to the requirements of the Act, the UWMP Agencies have prepared a document entitled A Public Draft 2015 Urban Water Management Plan for Santa Clarita Valley ("Draft 2015 UWMP"). In preparing the Draft 2015 UWMP, the UWMP Agencies utilized and relied on the California Department of Water Resources' ("DWR") Urban Water Management Plans Guidebook for Urban Water Suppliers (March, 2016) ("Guidebook");

WHEREAS, the Draft 2015 UWMP is currently undergoing the public review and amendment process required by the Act prior to final approval by the UWMP Agencies and DWR. The UWMP Agencies' current schedule contemplates adoption of the final Draft 2015 UWMP for submittal to DWR in late June, 2016;

WHEREAS, the Act requires an UWMP to include, among other things, an urban water shortage contingency analysis. The urban water shortage contingency analysis is required to include various elements relating to water supply availability during water shortages and interruptions, including mandatory use restrictions and enforcement mechanisms for non-compliance where water service shortages and interruptions occur;

WHEREAS, on August 15, 2014, the VWC Board approved the "Water Conservation Action Plan" prepared by the Santa Clarita Valley Water Committee, which is intended to comply with the Act's water shortage contingency planning requirements and state law requirements related to the state's ongoing drought. As part of the implementation of the Water Conservation Action Plan, VWC adopted Rule 14.1, the Water Conservation and Rationing Plan ("VWC Rule 14.1"), which has subsequently been amended to comply with state drought regulations. VWC Rule 14.1 includes mandatory use restrictions and enforcement mechanisms for noncompliance when a water shortage emergency is declared by the VWC Board or other appropriate authority;

WHEREAS, VWC, in consultation with staff, other UWMP Agencies and a hired expert consultant, has determined that certain amendments to VWC Rule 14.1 should be implemented to ensure full compliance with the Act and the Guidelines applicable to the 2015 Draft UWMP. The required amendments are included in Attachments A and B to this Resolution, which are hereby fully incorporated by reference into this Resolution.

NOW, THEREFORE, BE IT RESOLVED BY UNANIMOUS WRITTEN CONSENT AS FOLLOWS:

Section 1. Water Conservation and Rationing Plan. The Valencia Water Company Board of Directors finds the proposed attached amendments are necessary to comply with the Urban Water Management Planning Act, and hereby adopts and approves the attached amendments to VWC Rule 14.1, Water Conservation and Rationing Plan. The General Manager is directed to take all actions necessary to support and successfully implement this amendment to VWC Rule 14.1. **Attachment A** is a clean copy of the amended VWC Rule 14.1, and **Attachment B** is a redline showing the amendments to VWC Rule 14.1. Attachments A and B are fully incorporated by reference into this Resolution.

Section 2. Severability. If any provision of this Resolution or the application thereof to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications of the Resolution which can be given effect without the invalid provision or application, and to this end the provisions of this Resolution are severable. The Board hereby declares that it would have adopted this Resolution irrespective of the invalidity of any particular portion thereof.

Section 3. Effective Date. This Resolution shall become effective immediately upon adoption.

RESOLVED FURTHER that any and all actions taken in furtherance of the matters authorized or contemplated in this Resolution by each member of the Board or any authorized employee or agent of VWC be, and hereby are, ratified, approved and confirmed.

IN WITNESS WHEREOF, the undersigned have executed this Resolution by Unanimous Written Consent of the Board of Directors as of this ____ day of June, 2016.

_____

Beverly Johnson

_____

Keith Abercrombie

_____
Valerie Pryor

_____

Dan Masnada

_____
Cris Perez

ATTACHMENT A

VALENCIA WATER COMPANY RULE NO. 14.1

WATER CONSERVATION AND RATIONING PLAN

GENERAL INFORMATION

1. If water supplies are projected to be insufficient to meet normal customer demand under normal conditions, and are beyond the control of Valencia Water Company (VWC), VWC may elect to implement voluntary conservation using the portion of this plan set forth in Section A of this Rule.

2. Prior to declaration of mandatory rationing, VWC may prepare a written memorandum setting forth the basis for the action and then activate Schedule 14.1 – Staged Mandatory Water Conservation and Rationing.

3. If, in the opinion of VWC, more stringent water measures are required, VWC may implement the staged mandatory conservation and rationing measures set forth in Sections B through E.

4. VWC may activate a particular stage of Schedule 14.1 – Staged Mandatory Water Conservation and Rationing:

    a. If a Declaration of Mandatory Rationing is made by VWC accompanied by a written memorandum setting forth the basis for the action or by a state oversight agency, or

    b. If VWC is unable to address voluntary conservation levels set by itself, its supplier, or a state oversight agency, or

    c. If VWC chooses to subsequently activate a different stage.

5. When Schedule 14.1 is in effect and VWC determines that water supplies are again sufficient to meet normal demands, and mandatory conservation and rationing measures are no longer necessary, VWC shall prepare a written memorandum setting forth the basis for the action and de-activate the particular stage of mandatory rationing that had been authorized.

6. In the event of a water supply shortage requiring a voluntary or mandatory program, VWC shall make available to its customers water conservation information, materials and devices that may include, but are not limited to, conservation kits as required by its version of Rule 20. VWC shall notify all customers of the availability of conservation kits via a bill insert or direct mailers.

7. Definitions and Terms

    a. **Tier Width –** tier widths refer to the amount of water within each tiered rate, as identified by the WaterSMART Allocation and Tiered Rates Program. For VWC customers, the tier widths are:

        i. Residential Customers
            1. Tier 1 – Indoor Water Allocation
            2. Tier 2 – Outdoor Water Allocation
            3. Tier 3 – 101-150% of Tier 1 + Tier 2
            4. Tier 4 – 151-200% of Tier 1 + Tier 2

5. Tier 5 - >200% of Tier 1 + Tier 2

ii. Irrigation Customers
    1. Tier 1 – 1-35% of Outdoor Water Allocation
    2. Tier 2 – 36-100% of Outdoor Water Allocation
    3. Tier 3 – 101-150% of Tier 1 + Tier 2
    4. Tier 4 – 151-200% of Tier 1 + Tier 2
    5. Tier 5 - >200% of Tier 1 + Tier 2

b. **Water waste –** the use of water, intentionally or unintentionally, in a manner that provides no benefit.

c. **Customer –** includes all residential (single family and multi-family individually metered), multi-family master metered, commercial, industrial, institutional, public authority, irrigation, special residential, and other VWC customers.

A. CONSERVATION – NON-ESSENTIAL OR UNAUTHORIZED WATER USE

No customer shall use VWC-supplied water for non-essential or unauthorized uses, including but not limited to:

1. Permanent Prohibited Water Waste Actions
    a. Use of potable water which results in flooding or runoff in gutters or streets;
    b. Individual private washing of cars with a hose except with the use of a positive action shut-off nozzle. Use of potable water for washing commercial aircraft, cars, buses, boats, trailers, or other commercial vehicles at any time, except at commercial or fleet vehicle or boat washing facilities operated at a fixed location where equipment using water is properly maintained to avoid wasteful use;
    c. Use of potable water washing buildings, structures, , driveways, patios, parking lots, tennis courts, or other hard-surfaced areas, except in the cases where health and safety are at risk;
    d. Use of potable water for decorative fountains or the filling or topping off of decorative lakes or ponds. Exceptions are made for those decorative fountains, lakes, or ponds which utilize recycled water;
    e. The application of potable water to outdoor landscapes during and within 48 hours of measureable rainfall.

2. General Water Conservation Actions and Guidelines
    a. Use of potable water for more than minimal landscaping, as defined in the landscaping regulated of the jurisdiction or as described in Article 10.8 of the California Government Code in connection with new construction;

b. Use through any meter when the company has notified the customer in writing to repair a broken or defective plumbing, sprinkler, watering or irrigation system and the customer has failed to effect such repairs within five business days;

c. Use of potable water to irrigate turf, lawns, gardens, or ornamental landscaping by means other than drip irrigation, or hand watering without quick acting positive action shut-off nozzles, on a specific schedule, for example: 1) before 9:00 a.m. and after 5:00 p.m.; 2) every other day; or 3) selected days of the week;

d. Use of potable water for watering streets with trucks, except for initial wash-down for construction purposes (if street sweeping is not feasible), or to protect the health and safety of the public;

e. Use of potable water for construction purposes, such as consolidation of backfill, dust control, or other uses unless no other source of water or other method can be used.

f. Use of potable water for construction purposes unless no other source of water or other method can be used;

g. Use of potable water for street cleaning;

h. Operation of commercial car washes without recycling at least 50% of the potable water used per cycle;

i. Use of potable water for watering outside plants, lawn, landscape and turf areas during certain hours if and when specified in Schedule No. 14.1 when the schedule is in effect;

j. Use of potable water for the filling or refilling of swimming pools.

k. Service of water by any restaurant except upon the request of a patron; and

l. Use of potable water to flush hydrants, except where required for public health or safety.

B. STAGED VOLUNTARY AND MANDATORY RATIONING OF WATER USAGE

1. Upon VWC's declaration of mandatory rationing and the preparation of a written memorandum setting forth the reasons therefor, VWC may authorize Schedule 14.1 – Staged Mandatory Water Conservation and Rationing.

a. VWC shall comply with all requirements of Sections 350-358 of the California Water Code.

b. Proposed Schedule 14.1, which shall include but not be limited to:

1. Applicability,
2. Territory applicable to,
3. A detailed description of each Stage of Rationing,
4. A detailed description of the Trigger that Activates each Stage of Rationing,
5. A detailed description of each water use restriction for each Stage of Rationing.
6. Water use violation levels, written warning levels, associated fines, Drought Smart Allocation reduction(s) and step(s), and exception procedures,
7. Conditions for installation of a flow restrictor,

8. Charges for removal of flow restrictors, and
9. Special Conditions

c. VWC's conservation stages include:

Stage 1 – Voluntary Conservation 10-20%

1. Water shortage conditions exist due to drought, state regulations, or other water supply conditions requiring a reduction in water use. The water use reduction goal is 10-20% and voluntary unless regulations stipulate otherwise.

Stage 2 – Mandatory Conservation 21-35%

1. Water shortage conditions exist due to drought, state regulations, or other water supply conditions requiring a reduction in water use. The water use reduction goal is 21-35% and mandatory unless regulations stipulate otherwise.

Stage 3 – Mandatory Conservation 36-50%

1. Water shortage conditions exist due to drought, state regulations, or other water supply conditions requiring a reduction in water use. The water use reduction goal is 36-50% and mandatory unless regulations stipulate otherwise.

Stage 4 – Mandatory Conservation Greater than 50%

1. Water shortage conditions exist due to drought, state regulations, or other water supply conditions requiring a reduction in water use. The water use reduction goal is greater than 50% and mandatory unless regulations stipulate otherwise.

d. Conservation Stage 1

i. For Conservation Stage 1, a reduction in water use is voluntary, unless stipulated otherwise, and customers are encouraged to conserve up to 20% by adhering to the permanent prohibited actions and guidelines outlined in Section A. CONSERVATION – NON-ESSENTIAL OR UNAUTHORIZED WATER USE. In addition to any state mandated water conservation regulations, the following practice is also strongly suggested during Stage 1 water shortages:

1. To avoid the irrigation with potable water of outdoor lawns, turf, landscape or other vegetated area with potable water during the hours of 9:00 a.m. to 5:00 p.m. Pacific Standard Time on all days, except by use of a hand-held bucket or similar container or for very short periods of time for the purpose of evaluating, adjusting or repairing an irrigation system.

2. The irrigation with potable water of outdoor landscapes to (3) three days per week. Customers with addresses ending in an odd number (1,3,5,7,9) may only water on Monday, Wednesday and Friday. Customers with addresses ending in an even number (0,2,4,6,8) may only water on Tuesday, Thursday or Sunday. Irrigation with potable water of outdoor landscapes is prohibited on Saturdays.

e. Conservation Stage 2

i. For Conservation Stage 2, a reduction in water use between 21-35% is mandatory, unless stipulated otherwise, and customers are encouraged to adhere to the permanent prohibited actions and guidelines in Section A. CONSERVATION – NON-ESSENTIAL OR UNAUTHORIZED WATER USE. In addition to any state mandated water conservation regulations, further mandatory practices during Stage 2 are as follows, but not limited to:

1. The irrigation with potable water of outdoor lawns, turf, landscape or other vegetated area with potable water is prohibited during the hours of 9:00 a.m. to 5:00 p.m. Pacific Standard Time on all days, except by use of a hand-held bucket or similar container or for very short periods of time for the purpose of evaluating, adjusting or repairing an irrigation system.

2. During the months of April, May, June, July, August, September and October, the irrigation with potable water of outdoor landscapes is restricted to (3) three days per week. Customers with addresses ending in an odd number (1,3,5,7,9) may only water on Monday, Wednesday and Friday. Customers with addresses ending in an even number (0,2,4,6,8) may only water on Tuesday, Thursday or Sunday. Irrigation with potable water of outdoor landscapes is prohibited on Saturdays.

3. During the months of November, December, January, February, and March, the irrigation with potable water of outdoor landscapes is restricted to (2) two days per week. Customers with addresses ending in an odd number (1,3,5,7,9) may only water on Monday and Thursday. Customers with addresses ending in an even number (0,2,4,6,8) may only water on Tuesday and Friday. Irrigation with potable water of outdoor landscapes is prohibited on Wednesdays, Saturdays and Sundays.

f. Conservation Stage 3

i. For Conservation Stage 3, a reduction in water use between 36-50% is mandatory, unless stipulated otherwise, and customers are encouraged to adhere to the permanent prohibited actions and guidelines in Section A. CONSERVATION – NON-ESSENTIAL OR UNAUTHORIZED WATER USE. In addition to any state mandated water conservation regulations, further mandatory practices during Stage 3 are as follows, but not limited to:

1. The irrigation with potable water of outdoor lawns, turf, landscape or other vegetated area with potable water is prohibited during the hours of 9:00 a.m. to 5:00 p.m. Pacific Standard Time on all days, except by use of a hand-held bucket or similar container or for very short periods of time for the purpose of evaluating, adjusting or repairing an irrigation system.

2. During the months of April, May, June, July, August, September and October, the irrigation with potable water of outdoor landscapes is restricted to (2) two days per week. Customers with addresses ending in an even number (0,2,4,6,8) may only water on Tuesday and Friday. Irrigation with potable water of outdoor landscapes is prohibited on Wednesdays, Saturdays and Sundays.

3. During the months of April, May, June, July, August, September and October, The irrigation with potable water of outdoor landscapes is restricted to (1) one day per week. Customers with addresses ending in an odd number (1,3,5,7,9) may only water on Monday. Customers with addresses ending in an even number (0,2,4,6,8) may only water on Thursday. Irrigation with potable water of outdoor landscapes is prohibited on Tuesdays, Wednesdays, Fridays, Saturdays and Sundays.

g. Conservation Stage 4

i. For Conservation Stage 4, a reduction in water use equal to or greater than 50% is mandatory, unless stipulated otherwise, and customers are encouraged to adhere to the permanent prohibited actions and guidelines in Section A. CONSERVATION – NON-ESSENTIAL OR UNAUTHORIZED WATER USE.

1. The irrigation with potable water of outdoor landscapes is restricted to (1) one day per week. Customers with addresses ending in an odd number (1,3,5,7,9) may only water on Monday. Customers with addresses ending in an even number (0,2,4,6,8) may only water on Thursday. Irrigation with potable water of outdoor landscapes is prohibited on Tuesdays, Wednesdays, Fridays, Saturdays and Sundays.

2. All new landscaping shall be limited to drought-tolerant plants requiring less than typical water requirements.

3. No new lawns, whether by seed or sod, shall be installed.

4. No filling of pools or spas. Water levels may be maintained.

5. No new applications for service will be processed.

6. No potable water for grading will be allowed.

7. Washing vehicles is prohibited, except at commercial facilities that recycle water.

8. Street cleaning with potable water is prohibited.

9. VWC shall:
   a. Provide justification for activating this particular stage of mandatory rationing in a written memorandum, as well as the period during which this particular stage of mandatory conservation and rationing measures will be in effect.
   b. Notify its customers as detailed in Section E, below.

10. All monies collected by VWC through water use violation fines shall be tracked.

11. All expenses incurred VWC to implement Rule 14.1 and Schedule 14.1 that have not been considered in a Rate Case or other proceeding, shall be tracked and are recoverable by VWC.

C. ENFORCEMENT OF STAGED MANDATORY CONSERVATION AND RATIONING

1. The water use restrictions of the conservation program, in Section A of this rule, become mandatory when the authorized Schedule 14.1-Staged Mandatory Rationing Program is triggered. If this occurs, VWC will prepare a written memorandum setting forth the reasons why mandatory rationing is triggered.

   a. In the event a customer is observed to be using water for any nonessential or unauthorized use as defined in Section A of this rule, VWC may charge a water use violation fine in accordance with Schedule No. 14.1.

2. VWC may, after one verbal and one written warning, install a flow-restricting device on the service line of any customer observed by VWC personnel to be using water for any non-essential or unauthorized use as defined in Section A above.

3. A flow restrictor shall not restrict water delivery by greater than 50% of normal flow and shall provide the premise with a minimum of 3 Ccf/person/month. The restricting device may be removed only by VWC, only after a three-day period has elapsed, and only upon payment of the appropriate removal charge as set forth in Schedule No. 14.1.

4. Drought Smart Allocation – VWC may authorize Schedule 14.1 – Staged Mandatory Water Conservation and Rationing at any stage, in combination with, or in lieu of, the enforcement components outlined in this section, by amending the water waste and outdoor water use parameters established by the Water Smart Allocation and Tiered Rates Program. The amended parameters include;

   a. Mandatory Water Waste Reduction

      Step 1: Reduce Tier 3 and Tier 4 widths by 20%

      Step 2: Reduce Tier 3 and Tier 4 widths by 50%

      Step 3: Reduce Tier 3 and Tier 4 widths by 100%

   b. Mandatory Outdoor Water Use Reduction

      Step 1: Reduce Tier 2 budget by 10%

      Step 2: Reduce Tier 2 budget by 20%

      Step 3: Reduce Tier 2 budget by 50%

      Step 4: Reduce Tier 2 budget by 100%

5. VWC shall prepare a written memorandum setting forth the basis for the action and activate a Particular stage of Schedule 14.1 – Staged Mandatory Water Conservation and Rationing.

   a. If a Declaration of Mandatory Rationing is made by VWC or a state oversight agency,

   b. If VWC is unable to address voluntary conservation levels, or

   c. If VWC chooses to subsequently activate a different stage.

After the removal of the restricting device, if any non-essential or unauthorized use of water shall continue, VWC may install another flow-restricting device. This device shall remain in place until water supply conditions warrant its removal and until the appropriate charge for removal has been paid to VWC.

6. Any tampering with flow restricting device by customer can result in fines or discontinuation of water use at the VWC's discretion.

7. If, despite installation of such flow-restricting device pursuant to the provisions of the previous enforcement conditions, any such non-essential or unauthorized use of water shall continue, then VWC may discontinue water service to such customer. In such latter event, a charge as provided in Rule No. 11 shall be paid to VWC as a condition to restoration of service.

8. All monies collected by VWC through water use violation fines shall be tracked. All expenses incurred by VWC to implement Rule 14.1 and Schedule 14.1 that have not been considered in a Rate Case or other proceeding, shall be tracked and are recoverable by the VWC.

9. The charge for removal of a flow-restricting device shall be in accordance with Schedule No. 14.1.

D. APPEAL PROCEDURE

1. Any customer who seeks a variance from any of the provisions of this water conservation and rationing plan shall notify VWC in writing, explaining in detail the reason for such a variation. VWC shall respond to each such request in writing.

2. Any customer not satisfied with VWC's response may file an appeal as described in Schedule 14.1-with VWC's Board of Directors. The customer will be notified of the disposition of such appeal by letter from the Board of Directors.

E. PUBLICITY

1. When VWC requests authorization of Schedule 14.1 – Staged Mandatory Water Conservation and Rationing, it shall provide notice of the Schedule to customers, and shall comply with all requirements of Sections 350-358 of the California Water Code (CWC), including but not limited to the following:
    a. VWC shall provide notice via both newspaper and bill insert/direct mailing.
    b. VWC shall file one notice for each mandatory conservation stage activated.

ATTACHMENT B

VALENCIA WATER COMPANY RULE NO~~0~~. 14.1

WATER CONSERVATION AND RATIONING PLAN

GENERAL INFORMATION

(C)

1. If water supplies are projected to be insufficient to meet normal customer demand under normal conditions, and are beyond the control of Valencia Water Company (VWC), VWC may elect to implement voluntary conservation using the portion of this plan set forth in Section A of this Rule.

2. Prior to declaration of mandatory rationing, VWC may prepare a written memorandum setting forth the basis for the action and then activate Schedule 14.1 – Staged Mandatory Water Conservation and Rationing.

3. If, in the opinion of VWC, more stringent water measures are required, VWC may implement the staged mandatory conservation and rationing measures set forth in Sections B through E.

4. VWC may activate a particular stage of Schedule 14.1 – Staged Mandatory Water Conservation and Rationing:

   a. If a Declaration of Mandatory Rationing is made by VWC accompanied by a written memorandum setting forth the basis for the action or by a state oversight agency, or

   b. If VWC is unable to address voluntary conservation levels set by itself, its supplier, or a state oversight agency, or

   c. If VWC chooses to subsequently activate a different stage.

5. When Schedule 14.1 is in effect and VWC determines that water supplies are again sufficient to meet normal demands, and mandatory conservation and rationing measures are no longer necessary, VWC shall prepare a written memorandum setting forth the basis for the action and de-activate the particular stage of mandatory rationing that had been authorized.

6. In the event of a water supply shortage requiring a voluntary or mandatory program, VWC shall make available to its customers water conservation information, materials and devices that may include, but are not limited to, conservation kits as required by its version of Rule 20. VWC shall notify all customers of the availability of conservation kits via a bill insert or direct mailers.

7. Definitions and Terms

   a. **Tier Width –** tier widths refer to the ~~percentages, ratios, or calculations,~~amount of water within each tiered rate, as identified by the WaterSMART Allocation and Tiered Rates Program. For VWC customers, the tier widths are:

      i. Residential Customers
         1. Tier 1 – Indoor Water Allocation
         2. Tier 2 – Outdoor Water Allocation
         3. Tier 3 – 101-150% of Tier 1 + Tier 2
         4. Tier 4 – 151-200% of Tier 1 + Tier 2

5. Tier 5 - >200% of Tier 1 + Tier 2

ii. Irrigation Customers

1. Tier 1 – 1-35% of Outdoor Water Allocation
2. Tier 2 – 36-100% of Outdoor Water Allocation
3. Tier 3 – 101-150% of Tier 1 + Tier 2
4. Tier 4 – 151-200% of Tier 1 + Tier 2
5. Tier 5 - >200% of Tier 1 + Tier 2

b. **Water waste –** the use of water, intentionally or unintentionally, in a manner that provides no benefit.

c. ~~**Water c**~~**Customer –** includes all residential (single family and multi-family individually metered), multi-family master metered, commercial, industrial, institutional, public authority, irrigation, special residential, and other VWC customers.

A. CONSERVATION – NON-ESSENTIAL OR UNAUTHORIZED WATER USE

No customer shall use VWC-supplied water for non-essential or unauthorized uses, including but not limited to:

1. Permanent Prohibited Water Waste Actions

a. ~~Use of potable water for more than minimal landscaping, as defined in the landscaping regulated of the jurisdiction or as described in Article 10.8 of the California Government Code in connection with new construction;~~Use of potable water which results in flooding or runoff in gutters or streets;

b. Individual private washing of cars with a hose except with the use of a positive action shut-off nozzle. Use of potable water for washing commercial aircraft, cars, buses, boats, trailers, or other commercial vehicles at any time, except at commercial or fleet vehicle or boat washing facilities operated at a fixed location where equipment using water is properly maintained to avoid wasteful use;

c. Use of potable water washing buildings, structures, , driveways, patios, parking lots, tennis courts, or other hard-surfaced areas, except in the cases where health and safety are at risk;

d. Use of potable water for decorative fountains or the filling or topping off of decorative lakes or ponds. Exceptions are made for those decorative fountains, lakes, or ponds which utilize recycled water;

e. The application of potable water to outdoor landscapes during and within 48 hours of measureable rainfall.

~~a.~~

2. General Water Conservation Actions and Guidelines

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a. Use of potable water for more than minimal landscaping, as defined in the landscaping regulated of the jurisdiction or as described in Article 10.8 of the California Government Code in connection with new construction;

b. Use through any meter when the company has notified the customer in writing to repair a broken or defective plumbing, sprinkler, watering or irrigation system and the customer has failed to effect such repairs within five business days;

~~2.~~1. ~~Use of potable water which results in flooding or runoff in gutters or streets;~~

~~3.~~1. ~~Individual private washing of cars with a hose except with the use of a positive action shut-off nozzle.~~ ~~Use of potable water for washing commercial aircraft, cars, buses, boats, trailers, or other commercial vehicles at any time, except at commercial or fleet vehicle or boat washing facilities operated at a fixed location where equipment using water is properly maintained to avoid wasteful use;~~

~~4.~~1. ~~Use of potable water washing buildings, structures, , driveways, patios, parking lots, tennis courts, or other hard-surfaced areas, except in the cases where health and safety are at risk;~~

~~a.~~c. Use of potable water to irrigate turf, lawns, gardens, or ornamental landscaping by means other than drip irrigation, or hand watering without quick acting positive action shut-off nozzles, on a specific schedule, for example: 1) before 9:00 a.m. and after 5:00 p.m.; 2) every other day; or 3) selected days of the week;

d. Use of potable water for watering streets with trucks, except for initial wash-down for construction purposes (if street sweeping is not feasible), or to protect the health and safety of the public;

~~b.~~e. Use of potable water for construction purposes, such as consolidation of backfill, dust control, or other uses unless no other source of water or other method can be used.

~~c.~~f. Use of potable water for construction purposes unless no other source of water or other method can be used;

~~d.~~g. Use of potable water for street cleaning;

~~e.~~h. Operation of commercial car washes without recycling at least 50% of the potable water used per cycle;

~~f.~~i. Use of potable water for watering outside plants, lawn, landscape and turf areas during certain hours if and when specified in Schedule No. 14.1 when the schedule is in effect;

~~g.~~j. Use of potable water for the filling or refilling of swimming pools.

~~h.~~k. Service of water by any restaurant except upon the request of a patron; and

~~i.~~l. Use of potable water to flush hydrants, except where required for public health or safety.

~~Use of potable water for decorative fountains or the filling or topping off of decorative lakes or ponds. Exceptions are made for those decorative fountains, lakes, or ponds which utilize recycled water;~~

B. STAGED VOLUNTARY AND MANDATORY RATIONING OF WATER USAGE

1. Upon VWC's declaration of mandatory rationing and the preparation of a written memorandum setting forth the reasons therefor, VWC may authorize Schedule 14.1 – Staged Mandatory Water Conservation and Rationing.

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a. VWC shall comply with all requirements of Sections 350-358 of the California Water Code.

b. Proposed Schedule 14.1, which shall include but not be limited to:

1. Applicability,
2. Territory applicable to,
3. A detailed description of each Stage of Rationing,
4. A detailed description of the Trigger that Activates each Stage of Rationing,
5. A detailed description of each water use restriction for each S~~s~~tage of ~~r~~Rationing.
6. Water use violation levels, written warning levels, associated fines, Drought Smart Allocation reduction(s) and step(s), and exception procedures,
7. Conditions for installation of a flow restrictor,
8. Charges for removal of flow restrictors, and
9. Special Conditions

c. VWC's conservation stages include:

Stage 1 – Voluntary Conservation 10-20%

1. Water shortage conditions exist due to drought, state regulations, or other water supply conditions requiring a reduction in water use. The water use reduction goal is 10-20% and voluntary unless regulations stipulate otherwise.

Stage 2 – Mandatory Conservation 2~~0~~1-35%

1. Water shortage conditions exist due to drought, state regulations, or other water supply conditions requiring a reduction in water use. The water use reduction goal is 2~~0~~1-35% and mandatory unless regulations stipulate otherwise.

Stage 3 – Mandatory Conservation 3~~5~~6-50%

1. Water shortage conditions exist due to drought, state regulations, or other water supply conditions requiring a reduction in water use. The water use reduction goal is 3~~5~~6-50% and mandatory unless regulations stipulate otherwise.

Stage 4 – Mandatory Conservation ~~50% or~~ Greater than 50%

1. Water shortage conditions exist due to drought, state regulations, or other water supply conditions requiring a reduction in water use. The water use reduction goal is ~~50% or~~ greater than 50% and mandatory unless regulations stipulate otherwise.

(N)

d. Conservation Stage 1

i. For Conservation Stage 1, a reduction in water use is voluntary, unless stipulated otherwise, and customers are encouraged to conserve up to 20% by adhering to the permanent prohibited actions and guidelines outlined in Section ~~C~~A. CONSERVATION

– NON-ESSENTIAL OR UNAUTHORIZED WATER USE. In addition to any state mandated water conservation regulations, the following practice is also strongly suggested during Stage 1 water shortages:

1. To avoid the irrigation with potable water of outdoor lawns, turf, landscape or other vegetated area with potable water during the hours of 9:~~oo~~00 a.m. to 5:00 p.m. Pacific Standard Time on all days, except by use of a hand-held bucket or similar container or for very short periods of time for the purpose of evaluating, adjusting or repairing an irrigation system.

2. The irrigation with potable water of outdoor landscapes to (3) three days per week. Customers with addresses ending in an odd number (1,3,5,7,9) may only water on Monday, Wednesday and Friday. Customers with addresses ending in an even number (0,2,4,6,8) may only water on Tuesday, Thursday or Sunday. Irrigation with potable water of outdoor landscapes is prohibited on Saturdays.

~~(~~

e. Conservation Stage 2

i. For Conservation Stage 2, a reduction in water use between 2~~0~~1-35% is mandatory, unless stipulated otherwise, and customers are encouraged to adhere to the permanent prohibited actions and guidelines in Section ~~C~~A. CONSERVATION – NON-ESSENTIAL OR UNAUTHORIZED WATER USE. In addition to any state mandated water conservation regulations, further mandatory practices during Stage 2 are as follows, but not limited to:~~C)~~

1. The irrigation with potable water of outdoor lawns, turf, landscape or other vegetated area with potable water is prohibited during the hours of 9:00 a.m. to 5:00 p.m. Pacific Standard Time on all days, except by use of a hand-held bucket or similar container or for very short periods of time for the purpose of evaluating, adjusting or repairing an irrigation system.

2. During the months of April, May, June, July, August, September and October, the irrigation with potable water of outdoor landscapes is restricted to (3) three days per week. Customers with addresses ending in an odd number (1,3,5,7,9) may only water on Monday, Wednesday and Friday. Customers with addresses ending in an even number (0,2,4,6,8) may only water on Tuesday, Thursday or Sunday. Irrigation with potable water of outdoor landscapes is prohibited on Saturdays.

3. During the months of November, December, January, February, and March, the irrigation with potable water of outdoor landscapes is restricted to (2) two days per week. Customers with addresses ending in an odd number (1,3,5,7,9) may only water on Monday and Thursday. Customers with addresses ending in an even number (0,2,4,6,8) may only water on Tuesday and Friday. Irrigation with potable water of outdoor landscapes is prohibited on Wednesdays, Saturdays and Sundays.

f. Conservation Stage 3

i. For Conservation Stage 3, a reduction in water use between 3~~5~~6-50% is mandatory, unless stipulated otherwise, and customers are encouraged to adhere to the permanent prohibited actions and guidelines in Section ~~C~~A. CONSERVATION – NON-ESSENTIAL OR UNAUTHORIZED WATER USE. In addition to any state mandated water conservation regulations, further mandatory practices during Stage 3 are as follows, but not limited to:

1. The irrigation with potable water of outdoor lawns, turf, landscape or other vegetated area with potable water is prohibited during the hours of 9:00 a.m. to 5:00 p.m. Pacific Standard Time on all days, except by use of a hand-held bucket or similar container or for very short periods of time for the purpose of evaluating, adjusting or repairing an irrigation system.

2. During the months of April, May, June, July, August, September and October, the irrigation with potable water of outdoor landscapes is restricted to (2) two days per week. Customers with addresses ending in an even number (0,2,4,6,8) may only water on Tuesday and Friday. Irrigation with potable water of outdoor landscapes is prohibited on Wednesdays, Saturdays and Sundays.

3. During the months of April, May, June, July, August, September and October, The irrigation with potable water of outdoor landscapes is restricted to (1) one day per week. Customers with addresses ending in an odd number (1,3,5,7,9) may only water on Monday. Customers with addresses ending in an even number (0,2,4,6,8) may only water on Thursday. Irrigation with potable water of outdoor landscapes is prohibited on Tuesdays, Wednesdays, Fridays, Saturdays and Sundays.

g. Conservation Stage 4

i. For Conservation Stage 4, a reduction in water use equal to or greater than 50% is mandatory, unless stipulated otherwise, and customers are encouraged to adhere to the permanent prohibited actions and guidelines in Section ~~C~~A. CONSERVATION – NON-ESSENTIAL OR UNAUTHORIZED WATER USE.

1. The irrigation with potable water of outdoor landscapes is restricted to (1) one day per week. Customers with addresses ending in an odd number (1,3,5,7,9) may only water on Monday. Customers with addresses ending in an even number (0,2,4,6,8) may only water on Thursday. Irrigation with potable water of outdoor landscapes is prohibited on Tuesdays, Wednesdays, Fridays, Saturdays and Sundays.

2. All new landscaping shall be limited to drought-tolerant plants requiring less than typical water requirements.

3. No new lawns, whether by seed or sod, shall be installed.

4. No filling of pools or spas. Water levels may be maintained.

5. No new applications for service will be processed.

6. No potable water for grading will be allowed.

7. Washing vehicles is prohibited, except at commercial facilities that recycle water.

~~1.~~8.Street cleaning with potable water is prohibited.

~~2.~~9.VWC shall:

a. Provide justification for activating this particular stage of mandatory rationing in a written memorandum, as well as the period during which this particular stage of mandatory conservation and rationing measures will be in effect.

b. Notify its customers as detailed in Section E, below.

10. All monies collected by VWC through water use violation fines shall be tracked.

11. All expenses incurred VWC to implement Rule 14.1 and Schedule 14.1 that have not been considered in a Rate Case or other proceeding, shall be tracked and are recoverable by VWC.

C. ENFORCEMENT OF STAGED MANDATORY CONSERVATION AND RATIONING

1. The water use restrictions of the conservation program, in Section A of this rule, become mandatory when the authorized Schedule 14.1-Staged Mandatory Rationing Program is triggered. If this occurs, VWC will prepare a written memorandum setting forth the reasons why mandatory rationing is triggered.

   a. In the event a customer is observed to be using water for any nonessential or unauthorized use as defined in Section A of this rule, VWC may charge a water use violation fine in accordance with Schedule No. 14.1.

2. VWC may, after one verbal and one written warning, install a flow-restricting device on the service line of any customer observed by VWC personnel to be using water for any non-essential or unauthorized use as defined in Section A above.

3. A flow restrictor shall not restrict water delivery by greater than 50% of normal flow and shall provide the premise with a minimum of 3 Ccf/person/month. The restricting device may be removed only by VWC, only after a three-day period has elapsed, and only upon payment of the appropriate removal charge as set forth in Schedule No. 14.1.

~~3.~~4. Drought Smart Allocation – VWC may authorize Schedule 14.1 – Staged Mandatory Water Conservation and Rationing at any stage, in combination with, or in lieu of, the enforcement components outlined in this section, by amending the water waste and outdoor water use parameters established by the Water Smart Allocation and Tiered Rates Program. The amended parameters include;

a. Mandatory Water Waste Reduction

Step 1: Reduce Tier 3 and Tier 4 widths by 20%

Step 2: Reduce Tier 3 and Tier 4 widths by 50%

Step 3: Reduce Tier 3 and Tier 4 widths by 100%

b. Mandatory Outdoor Water Use Reduction

Step 1: Reduce Tier 2 budget by 10%

Step 2: Reduce Tier 2 budget by 20%

Step 3: Reduce Tier 2 budget by 50%

Step 4: Reduce Tier 2 budget by 100%

~~4.~~5. VWC shall prepare a written memorandum setting forth the basis for the action and activate a ~~particular~~Particular stage of Schedule 14.1 – Staged Mandatory Water Conservation and Rationing.

a. If a Declaration of Mandatory Rationing is made by VWC or a state oversight agency,

b. If VWC is unable to address voluntary conservation levels, or

c. If VWC chooses to subsequently activate a different stage.

After the removal of the restricting device, if any non-essential or unauthorized use of water shall continue, VWC may install another flow-restricting device. This device shall remain in place until water supply conditions warrant its removal and until the appropriate charge for removal has been paid to VWC.

~~5.~~6. Any tampering with flow restricting device by customer can result in fines or discontinuation of water use at the VWC's discretion.

~~6.~~7. If, despite installation of such flow-restricting device pursuant to the provisions of the previous enforcement conditions, any such non-essential or unauthorized use of water shall continue, then VWC may discontinue water service to such customer. In such latter event, a charge as provided in Rule No. 11 shall be paid to VWC as a condition to restoration of service.

~~7.~~8.All monies collected by VWC through water use violation fines shall be tracked. All expenses incurred by VWC to implement Rule 14.1 and Schedule 14.1 that have not been considered in a Rate Case or other proceeding, shall be tracked and are recoverable by the VWC.

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~~8.~~9.The charge for removal of a flow-restricting device shall be in accordance with Schedule No. 14.1.

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D. APPEAL PROCEDURE

1. Any customer who seeks a variance from any of the provisions of this water conservation and rationing plan shall notify VWC in writing, explaining in detail the reason for such a variation. VWC shall respond to each such request in writing.

2. Any customer not satisfied with VWC's response may file an appeal as described in Schedule 14.1-with VWC's Board of Directors. The customer will be notified of the disposition of such appeal by letter from the Board of Directors.

E. PUBLICITY

1. When VWC requests authorization of Schedule 14.1 – Staged Mandatory Water Conservation and Rationing, it shall provide notice of the Schedule to customers, and shall comply with all requirements of Sections 350-358 of the California Water Code (CWC), including but not limited to the following:
    a. VWC shall provide notice via both newspaper and bill insert/direct mailing.
    b. VWC shall file one notice for each mandatory conservation stage activated.

Appendix H: California Urban Water Conservation Council (CUWCC) BMP Reports

CASTAIC LAKE WATER AGENCY

CUWCC BMP Wholesale Coverage Report 2013

Foundational Best Managemant Practices for Urban Water Efficiency

BMP 1.1 Wholesale Agency Assistance Programs

ON TRACK

6278 **Castaic Lake Water Agency**

Name: Stephanie Anagnoson Email: sanagnoson@clwa.org

a) Financial Investments and Building Partnerships

BMP Section	Monetary Amount for Financial Incentives	Monetary Amount for Equivalent Resources	
BMP 3 Residential	450000	150000	
BMP 4 CII	200000		
BMP 5 Landscape	200000		
BMP 2.1 Public Outreach		265000	
BMP 2.2 School Education Program		65000	

b) Technical Support

c) Retail Agency

Retail Agency Name	Program Description
Valencia Water Company	HET Rebates
Santa Clarita Water Division	HET Rebates
Newhall County Water District	HET Rebates
Los Angeles County Waterworks District 36 - Val Verde	HET Rebates
Valencia Water Company	HECW Rebates
Santa Clarita Water Division	HECW Rebates
Newhall County Water District	HECW Rebates
Los Angeles County Waterworks District 36 - Val Verde	HECW Rebates
Valencia Water Company	Residential Landscape Program (WBIC class and distribution)
Santa Clarita Water Division	Residential Landscape Program (WBIC class and distribution)
Newhall County Water District	Residential Landscape Program (WBIC class and distribution)
Los Angeles County Waterworks District 36 - Val Verde	Residential Landscape Program (WBIC class and distribution)
Valencia Water Company	Large Landscape Program
Santa Clarita Water Division	Large Landscape Program
Newhall County Water District	Large Landscape Program
Los Angeles County Waterworks District 36 - Val Verde	Large Landscape Program
Valencia Water Company	CII Program
Santa Clarita Water Division	CII Program
Newhall County Water District	CII Program

CUWCC BMP Wholesale Coverage Report 2013

Foundational Best Managemant Practices for Urban Water Efficiency

BMP 1.1 Wholesale Agency Assistance Programs

ON TRACK

Retail Agency Name	Program Description
Los Angeles County Waterworks District 36 - Val Verde	CII Program

d) Water Shortage Allocation

Adoption Date:

File Name: Included in 2010 UWMP and will be included in 2015 UWMP.

e) Non signatory Reporting of BMP implementation by non-signatory Agencies

N/A

f) Encourage CUWCC Membership List Efforts to Recuit Retailers

Encouraged SCWD to join CUWCC and to comply with BMP reporting.

At Least As effective As Yes

N/A

Exemption No

Comments:

N/A

CUWCC BMP Coverage Report 2013

Foundational Best Management Practices For Urban Water Efficiency

BMP 1.2 Water Loss Control **ON TRACK**

6278 Castaic Lake Water Agency

Completed Standard Water Audit Using AWWA Software?	Yes
AWWA File provided to CUWCC?	Yes
AWWA-M36-v5-sf BMP 1314.xls	
AWWA Water Audit Validity Score?	82
Complete Training in AWWA Audit Method	Yes
Complete Training in Component Analysis Process?	Yes
Component Analysis?	Yes
Repaired all leaks and breaks to the extent cost effective?	Yes
Locate and Repar unreported leaks to the extent cost effective?	Yes
Maintain a record keeping system for the repair of reported leaks, including time of report, leak location, type of leaking pipe segment or fitting, and leak running time from report to repair.	Yes

Provided 7 Types of Water Loss Control Info

Leaks Repairs	Value Real Losses	Value Apparent Losses	Miles Surveyed	Press Reduction	Cost Of Interventions	Water Saved (AF)
0	0	0	41	True	0	0

At Least As effective As No

Exemption No

Comments:

The customer retail unit cost is the cost applied to the retail agencies from CLWA as a wholesale agency. The variable rate is listed and there is a fixed cost associated as well which is not listed.

CUWCC BMP Coverage Report 2013

Foundational Best Management Practices For Urban Water Efficiency

BMP 1.3 Metering With Commodity

Exempt

6278 Castaic Lake Water Agency

Numbered Unmetered Accounts	No
Metered Accounts billed by volume of use	Yes
Number of CII Accounts with Mixed Use Meters	
Conducted a feasibility study to assess merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters?	No
Feasibility Study provided to CUWCC?	No
Date:	
Uploaded file name:	
Completed a written plan, policy or program to test, repair and replace meters	No

At Least As effective As Yes

We do not have a formal meter testing policy, but test and replace meters in accordance with AWWA guidelines.

Exemption Yes Cost Effectiveness

Comments:

CUWCC BMP Coverage Report 2013

Foundational Best Management Practices For Urban Water Efficiency

BMP 2.1 Public Outreach

ON TRACK

6278 **Castaic Lake Water Agency** **Wholesale**

Does your agency perform Public Outreach programs? Yes

The list of retail agencies your agency assists with public outreach

Los Angeles County Waterworks District 36 - Val Verde,Newhall County Water District,Santa Clarita Water Division,Valencia Water Company

The name of agency, contact name and email address if not CUWCC Group 1 members

Did at least one contact take place during each quater of the reporting year? Yes

Public Outreach Program List	Number
Newsletter articles on conservation	12
Website	52
Flyers and/or brochures (total copies), bill stuffers, messages printed on bill, information packets	8
Landscape water conservation media campaigns	1
General water conservation information	12
Total	**85**

Did at least one contact take place during each quater of the reporting year? Yes

Number Media Contacts	Number
Articles or stories resulting from outreach	96
News releases	20
Written editorials	2
Television contacts	1
Total	**119**

Did at least one website update take place during each quater of the reporting year? Yes

Public Information Program Annual Budget

Annual Budget Category	Annual Budget Amount
Public Relations Consulting	200000
Public Outreach	40000
Publications	25000
BMP Implementation	1000000
Total Amount:	**1265000**

Public Outreah Additional Programs
Attendance at 35 public events

CUWCC BMP Coverage Report 2013

Foundational Best Management Practices For Urban Water Efficiency

BMP 2.1 Public Outreach

ON TRACK

Description of all other Public Outreach programs

Comments:

N/A

At Least As effective As	Yes

N/A

Exemption	No	0

CUWCC BMP Coverage Report 2013

Foundational Best Management Practices For Urban Water Efficiency

BMP 2.2 School Education Programs

ON TRACK

6278 Castaic Lake Water Agency **Wholesale**

Does your agency implement School Education programs? Yes

The list of retail agencies your agency assists with public outreach

Los Angeles County Waterworks District 36 - Val Verde,Newhall County Water District,Santa Clarita Water Division,Valencia Water Company

Agencies Name	ID number
Los Angeles County Waterworks District 36 - Val Verde	5027
Newhall County Water District	6273
Santa Clarita Water Division	6300
Valencia Water Company	6301

Materials meet state education framework requirements? Yes

Curricula covers science, social studies, and math standards mandated by the state of California

Materials distributed to K-6? Yes

Water conservation books, pencils, sports bottles, rulers and seeds

Materials distributed to 7-12 students? Yes (Info Only)

pens and worksheets

Annual budget for school education program: 88000.00

Description of all other water supplier education programs

N/A

Comments:

N/A

At Least As effective As Yes

N/A

Exemption No 0

CUWCC BMP Wholesale Coverage Report 2014

Foundational Best Managemant Practices for Urban Water Efficiency

BMP 1.1 Wholesale Agency Assistance Programs

ON TRACK

6278 **Castaic Lake Water Agency**

Name: Stephanie Anagnoson Email: sanagnoson@clwa.org

a) Financial Investments and Building Partnerships

BMP Section	Monetary Amount for Financial Incentives	Monetary Amount for Equivalent Resources	
BMP 3 Residential	800000		
BMP 4 CII	150000		
BMP 5 Landscape	150000		
BMP 2.1 Public Outreach	350000		
BMP 2.2 School Education Program	66500		

b) Technical Support

c) Retail Agency

Retail Agency Name	Program Description
Valencia Water Company	HECW Program
Santa Clarita Water Division	HECW Program
Newhall County Water District	HECW Program
Los Angeles County Waterworks District 36 - Val Verde	HECW Program
Valencia Water Company	Residential Landscape Program (WBIC class and distribution)
Santa Clarita Water Division	Residential Landscape Program (WBIC class and distribution)
Newhall County Water District	Residential Landscape Program (WBIC class and distribution)
Los Angeles County Waterworks District 36 - Val Verde	Residential Landscape Program (WBIC class and distribution)
Valencia Water Company	Large Landscape Program
Santa Clarita Water Division	Large Landscape Program
Newhall County Water District	Large Landscape Program
Los Angeles County Waterworks District 36 - Val Verde	Large Landscape Program
Valencia Water Company	CII Program
Santa Clarita Water Division	CII Program
Newhall County Water District	CII Program
Los Angeles County Waterworks District 36 - Val Verde	CII Program

d) Water Shortage Allocation

Adoption Date:

CUWCC BMP Wholesale Coverage Report 2014

Foundational Best Managemant Practices for Urban Water Efficiency

BMP 1.1 Wholesale Agency Assistance Programs

ON TRACK

File Name:

e) Non signatory Reporting of BMP implementation by non-signatory Agencies

N/A

f) Encourage CUWCC Membership List Efforts to Recuit Retailers

Encouraged Santa Clarita Water Division to join CUWCC.

At Least As effective As	Yes	
N/A		
Exemption	No	
Comments:		
N/A		

CUWCC BMP Coverage Report 2014

Foundational Best Management Practices For Urban Water Efficiency

BMP 1.2 Water Loss Control **ON TRACK**

6278 Castaic Lake Water Agency

Completed Standard Water Audit Using AWWA Software?	Yes
AWWA File provided to CUWCC?	Yes
AWWA-M36 sf BMP 1415.xls	
AWWA Water Audit Validity Score?	82
Complete Training in AWWA Audit Method	Yes
Complete Training in Component Analysis Process?	Yes
Component Analysis?	Yes
Repaired all leaks and breaks to the extent cost effective?	Yes
Locate and Repar unreported leaks to the extent cost effective?	Yes
Maintain a record keeping system for the repair of reported leaks, including time of report, leak location, type of leaking pipe segment or fitting, and leak running time from report to repair.	Yes

Provided 7 Types of Water Loss Control Info

Leaks Repairs	Value Real Losses	Value Apparent Losses	Miles Surveyed	Press Reduction	Cost Of Interventions	Water Saved (AF)
0	0	0	45	True	0	0

At Least As effective As No

Exemption No

Comments:

The customer retail unit cost is the cost applied to the retail agencies from CLWA as a wholesale agency. The variable rate is listed and there is a fixed cost associated as well which is not listed.

CUWCC BMP Coverage Report 2014

Foundational Best Management Practices For Urban Water Efficiency

BMP 1.3 Metering With Commodity

ON TRACK

6278 Castaic Lake Water Agency

Numbered Unmetered Accounts	No
Metered Accounts billed by volume of use	Yes
Number of CII Accounts with Mixed Use Meters	
Conducted a feasibility study to assess merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters?	No
Feasibility Study provided to CUWCC?	No
Date:	
Uploaded file name:	
Completed a written plan, policy or program to test, repair and replace meters	No

At Least As effective As Yes

We do not have a formal meter testing policy, but test and replace meters in accordance with AWWA guidelines.

Exemption No

Comments:

CUWCC BMP Coverage Report 2014

Foundational Best Management Practices For Urban Water Efficiency

BMP 2.1 Public Outreach

ON TRACK

6278 **Castaic Lake Water Agency** **Wholesale**

Does your agency perform Public Outreach programs? Yes

The list of retail agencies your agency assists with public outreach

Los Angeles County Waterworks District 36 - Val Verde,Newhall County Water District,Santa Clarita Water Division,Valencia Water Company

The name of agency, contact name and email address if not CUWCC Group 1 members

Did at least one contact take place during each quater of the reporting year? Yes

Public Outreach Program List	Number
Newsletter articles on conservation	12
Website	52
Flyers and/or brochures (total copies), bill stuffers, messages printed on bill, information packets	12
Landscape water conservation media campaigns	1
General water conservation information	12
Total	**89**

Did at least one contact take place during each quater of the reporting year? Yes

Number Media Contacts	Number
Articles or stories resulting from outreach	134
News releases	5
Written editorials	3
Television contacts	1
Total	**143**

Did at least one website update take place during each quater of the reporting year? Yes

Public Information Program Annual Budget

Annual Budget Category	Annual Budget Amount
Public Relations Consulting	100000
Public Outreach	40000
Publications	15000
BMP Implementation	1200000
Total Amount:	**1355000**

Public Outreah Additional Programs
Attendance at 34 public events

CUWCC BMP Coverage Report 2014

Foundational Best Management Practices For Urban Water Efficiency

BMP 2.1 Public Outreach

ON TRACK

Description of all other Public Outreach programs

Comments:

N/A

At Least As effective As	Yes

N/A

Exemption	No	0

CUWCC BMP Coverage Report 2014

Foundational Best Management Practices For Urban Water Efficiency

BMP 2.2 School Education Programs

ON TRACK

6278 Castaic Lake Water Agency **Wholesale**

Does your agency implement School Education programs? Yes

The list of retail agencies your agency assists with public outreach

Los Angeles County Waterworks District 36 - Val Verde,Newhall County Water District,Santa Clarita Water Division,Valencia Water Company

Materials meet state education framework requirements? Yes

Curricula covers science, social studies, and math standards mandated by the state of California

Materials distributed to K-6? Yes

Water conservation books, pencils, sports bottles, rulers and seeds

Materials distributed to 7-12 students? Yes (Info Only)

pens and worksheets

Annual budget for school education program: 66500.00

Description of all other water supplier education programs

N/A

Comments:

N/A

At Least As effective As Yes

N/A

Exemption No 0

NEWHALL COUNTY WATER DISTRICT

CUWCC BMP Retail Coverage Report **2013**

Foundational Best Manegemant Practices for Urban Water Efficiency

Foundational BMPs

BMP 1.1 Operation Practices

6273 Newhall County Water District

1. Conservation Coordinator provided with necessary resources to implement BMPs?

Name:	Robert McLaughlan
Title:	Customer Service & Water Efficiency Coordinator
Email:	robertm@ncwd.org

On Track

2. Water Waste Prevention Documents

WW Document Name	WWP File Name	WW Prevention URL	WW Prevention Ordinance Terms Description
Option A Describe the ordinances or terms of service adopted by your agency to meet the water waste prevention requirements of this BMP.			
Option B Describe any water waste prevention ordinances or requirements adopted by your local jurisdiction or regulatory agencies within your service area.	Ordinance 112.pdf		
Option C Describe any documentation of support for legislation or regulations that prohibit water waste.			
Option D Describe your agency efforts to cooperate with other entities in the adoption or enforcement of local requirements consistent with this BMP.			
Option E Describe your agency support positions with respect to adoption of legislation or regulations that are consistent with this BMP.			
Option F Describe your agency efforts to support local ordinances that establish permits requirements for water efficient design in new development.			

On Track

BMP1.1 Operation Practices - Retail Only 2013

Agency name:	Newhall County Water District	Reporting unit number:	
Reporting unit name (District name)	Newhall County Water District	6273	

Conservation Coordinator: **Yes**

Contact Information

First Name:	Robert
Last Name:	McLaughlan
Title:	Customer Service & Water Efficiency Coordinator
Phone:	661-259-3610
Email:	robertm@ncwd.org

Water Waste Prevention

Option A Describe the ordinances or terms of service adopted by your agency to meet the water waste prevention requirements of this BMP.

File Name:	
URL:	

Description:

Comments:

BMP1.1 Operation Practices - Retail Only 2013

Agency name:	Newhall County Water District	Reporting unit number:	
Reporting unit name (District name)	Newhall County Water District	6273	

Conservation Coordinator: **Yes**

Contact Information

First Name:	Robert
Last Name:	McLaughlan
Title:	Customer Service & Water Efficiency Coordinator
Phone:	661-259-3610
Email:	robertm@ncwd.org

Water Waste Prevention

Option B Describe any water waste prevention ordinances or requirements adopted by your local jurisdiction or regulatory agencies within your service area.

File Name:	Ordinance 112.pdf
URL:	

Description:

Comments:

BMP1.1 Operation Practices - Retail Only 2013

Agency name:	Newhall County Water District	Reporting unit number:	
Reporting unit name (District name)	Newhall County Water District	6273	

Conservation Coordinator: **Yes**

Contact Information

First Name:	Robert
Last Name:	McLaughlan
Title:	Customer Service & Water Efficiency Coordinator
Phone:	661-259-3610
Email:	robertm@ncwd.org

Water Waste Prevention

Option C Describe any documentation of support for legislation or regulations that prohibit water waste.

File Name:	
URL:	

Description:

Comments:

BMP1.1 Operation Practices - Retail Only 2013

Agency name:	Newhall County Water District	Reporting unit number:	
Reporting unit name (District name)	Newhall County Water District	6273	

Conservation Coordinator: **Yes**

Contact Information

First Name:	Robert
Last Name:	McLaughlan
Title:	Customer Service & Water Efficiency Coordinator
Phone:	661-259-3610
Email:	robertm@ncwd.org

Water Waste Prevention

Option D Describe your agency efforts to cooperate with other entities in the adoption or enforcement of local requirements consistent with this BMP.

File Name:	
URL:	

Description:

Comments:

BMP1.1 Operation Practices - Retail Only 2013

Agency name:	Newhall County Water District	Reporting unit number:	
Reporting unit name (District name)	Newhall County Water District	6273	

Conservation Coordinator: **Yes**

Contact Information

First Name:	Robert
Last Name:	McLaughlan
Title:	Customer Service & Water Efficiency Coordinator
Phone:	661-259-3610
Email:	robertm@ncwd.org

Water Waste Prevention

Option E Describe your agency support positions with respect to adoption of legislation or regulations that are consistent with this BMP.

File Name:	
URL:	

Description:

Comments:

BMP1.1 Operation Practices - Retail Only 2013

Agency name:	Newhall County Water District	Reporting unit number:	
Reporting unit name (District name)	Newhall County Water District	6273	

Conservation Coordinator: **Yes**

Contact Information

First Name:	Robert
Last Name:	McLaughlan
Title:	Customer Service & Water Efficiency Coordinator
Phone:	661-259-3610
Email:	robertm@ncwd.org

Water Waste Prevention

Option F Describe your agency efforts to support local ordinances that establish permits requirements for water efficient design in new development.

File Name:	
URL:	

Description:

Comments:

CUWCC BMP Coverage Report 2013

Foundational Best Management Practices For Urban Water Efficiency

Foundational BMPs

BMP 1.2 Water Loss Control

6273 Newhall County Water District

Completed Standard Water Audit Using AWWA Software?	**Yes**	**On Track**
AWWA File provided to CUWCC?	**No**	

Newhall County Water District BMP1.2 FY13

AWWA Water Audit Validity Score?	
Complete Training in AWWA Audit Method	
Complete Training in Component Analysis Process?	
CompComponent Analysis?	
Repaired all leaks and breaks to the extent cost effective?	
Locate and Repar unreported leaks to the extent cost effective?	
Maintain a record keeping system for the repair of reported leaks, including time of report, leak location, type of leaking pipe segment or fitting, and leak running time from report to repair.	

Provided 7 Types of Water Loss Control Info

Leaks Repars	Value Real Losses	Value Apparent Losses	Miles Surveyed	Press Reduction	Cost Of Interventions	Water Saved (AF)
35			147			10

On Track

At Least As Effective As

In lieau of an active leak detection program, the City has opted to replace 1% of distribution system lines each year. Lines are replaced based on age and other asset management factors. Attached documentation shows the reduction in main breaks due to 6273 Newhall County Water District BMP 1.2 Results from Main Replacement Program.

We encourage them every year to join.

BMP 1.2 Water Loss Control

2013

Agency name: Newhall County Water District

Reporting unit number: 6273

Reporting unit name (District name): Newhall County Water District

AWWA Water Audit

Agency to complete a Water Audit & Balance Using The AWWA Software: Yes

Water Audit Validity Score from AWWA spreadsheet: 76

Email to office@cuwcc.org - Worksheets (AWWA Water Audit). Enter the name of the file below:

Agency Completed Training In The AWWA Water Audit Method: Yes

Agency Completed Training In The Component Analysis Process: Yes

Completed/Updated the Component Analysis (at least every 4 years)? Yes

Component Analysis Completed/Updated Date: 8/27/2015 12:00:00 AM

Water Loss Performance

Agency Repaired All Reported Leaks & Breaks To The Extent Cost Effective: No

Recording Keeping Requirements:

- Date/Time Leak Reported
- Type of Leaking Pipe Segment or Fitting
- Leak Volume Estimate
- Leak Location
- Leak Running Time From Report to Repair
- Cost of Repair

Agency Located and Repaired Unreported Leaks to the Extent Cost Effective: Yes

Type of Program Activities Used to Detect Unreported Leaks

The district's maintenance program consists of daily inspections of water wells and pumping equipment, weekly inspections of water tanks and exercising system valves.

Does your agency maintain in-house records of audit results or the completed AWWA worksheet for the completed audit which could be forwarded to CUWCC? No

Does your agency keeps records of each component analysis performed, and incorporates results into future annual standard water balances? Yes

Annual Summary Information

Complete the following table with annual summary information (required for reporting years 2-5 only)

Total Leak Repaired	Economic Value Of Real Loss	Economic Value Of Apparent Loss	Miles Of System Surveyed For Leaks	Pressure Reduction Undertaken For Loss Reduction	Cost Of Interventions	Water Saved (AF/Year)
35			147			10

Comments:

CUWCC BMP Coverage Report 2013

Foundational Best Manegemant Practices for Urban Water Efficiency

Foundational BMPs

BMP 1.3 Metering With Commodity

6273	Newhall County Water District

Numbered Unmetered Accounts	No	**On Track**
Metered Accounts billed by volume of use	Yes	**On Track**
Number of CII Accounts with Mixed Use Meters	217	
Conducted a feasibility study to assess merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters?	No	**Not On Track**
Feasibility Study provided to CUWCC?	No	**Not On Track**
Completed a written plan, policy or program to test, repair and replace meters	Yes	**On Track**

At Least As Effective As **No**

BMP 1.3 Metering With Commodity

2013

Agency name:	Newhall County Water District	Reporting unit number:	
Reporting unit name (District name)	Newhall County Water District		6273

Implementation

Does your agency have any unmetered service connections?	No
If YES, has your agency completed a meter retrofit plan?	No
Enter the number of previously unmetered accounts fitted with meters during reporting year:	
Are all new service connections being metered?	Yes
Are all new service connections being billed volumetrically?	Yes
Has your agency completed and submitted electronically to the Council a written plan, policy or program to test, repair and replace meters?	Yes

Meters Matrix

Error: Subreport could not be shown.

Number of CII Accounts with Mixed-use Meters	217	Number of CII Accounts with Mixed-use Meters Retrofitted with Dedicated Irrigation Meters during Reporting Period	0

Feasibility Study

Has your agency conducted a feasibility study to assess the merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters? No

If YES, please fill in the following information:

A. When was the Feasibility Study conducted		B. Describe,	
1/1/0001 12:00:00 AM		upload or provide an electronic link to the Feasibility Study Upload File	

Comments:

CUWCC BMP Coverage Report 2013

Foundational Best Manegemant Practices for Urban Water Efficiency

Foundational BMPs

BMP 1.4 Retail Consrvation Pricing

6273 Newhall County Water District

Implementation (Water Rate Structure)

Customer Class	Water Rate Type	Conserving Rate?
Single-Family	Increasing Block	Yes
Multi-Family	Uniform	Yes
Commercial	Uniform	Yes
Industrial	Uniform	Yes
Institutional	Uniform	Yes
Dedicated Irrigation	Uniform	Yes
Other	Uniform	Yes

On Track

	Customer Class	Water Rate Type	(V) Total Revenue Comodity Charges	(M) Total Revenue Fixed Carges
	Single-Family	Increasing Block	4486097.45	2017720.85
	Multi-Family	Uniform	1134574.45	322099.24
	Commercial	Uniform	394890.51	256666.98
	Industrial	Uniform	16147.12	8210.27
	Institutional	Uniform	355133.63	107209.55
	Dedicated Irrigation	Uniform	1540498.53	315578.63
	Other	Uniform	50945.89	135555.3
			7978287.58	**3163040.82**

Calculate: V / (V + M) **72 %**

Implementation Option: Use Annual Revenue As Reported

Agency Provide Sewer Service: No

At Least As Effective As **No**

BMP 1.4 Retail Conservation Pricing

2013

Agency name: Newhall County Water District

Reporting unit number: 6273

Reporting unit name (District name): Newhall County Water District

Implementation (Water Rate Structure)

Enter the Water Rate Structures that are assigned to the majority of your customers, by customer class

Water Rate Name	Customer Class Name	Total Revenue Commodity Charges	Total Revenue Customer Meter/Service (Fixed Charges)	
Increasing Block	Single-Family	4486097.45	2017720.85	
Uniform	Multi-Family	1134574.45	322099.24	
Uniform	Commercial	394890.51	256666.98	
Uniform	Industrial	16147.12	8210.27	
Uniform	Institutional	355133.63	107209.55	
Uniform	Dedicated Irrigation	1540498.53	315578.63	
Uniform	Other	50945.89	135555.3	

Implementation (Conservation Pricing Option)

[V] Use Annual Revenue As Reported

[ ] Use CWWA Rate Design Model

[ ] Use 3 years average instead of most recent year

Retail Waste Water (Sewer) Rate Structure by Customer Class

Agency Provide Sewer Service: No

Select the Retail Waste Water (Sewer) Rate Structure assigned to the majority of your customers within a specific customer class.

Comments:

CUWCC BMP Coverage Report 2013

Foundational Best Manegemant Practices for Urban Water Efficiency

Foundational BMPs

BMP 2.1 Public Outreach

6273 Newhall County Water District Retail Only

Does a wholesale Agency implement Public Outreach Programs? Yes

List of wholesale Agencies

	Agency Name	ID number
	Castaic Lake Water Agency	6278

	Public Outreach Program List	**Number**
	Newsletter articles on conservation	4
	Flyers and/or brochures (total copies), bill stuffers, messages printed on bill, information packets	12
	Total	**16**
		On Track

An actively maintained website that is updated regularly (minimum = 4 times per year, i.e., at least quarterly) Yes

Description of all other Public Outreach programs

1. Drought Information 2. Watering Schedule 3. Rebate Programs 4. Water Efficiency Target

On Track

At Least As Effective As **No**

BMP 2.1 Public Outreach

2013

Agency name:	Newhall County Water District	Reporting unit #	6273
Reporting unit name (District name)	Newhall County Water District	/	Retail Only

Does a wholesale Agency implement Public Outreach Programs? Yes

List of wholesale Agencies — Please provide the name of Agency if not CUWCC Group1 members

Is your agency performing public outreach?

Report a minimum of 4 water conservation related contacts your agency had with the public during the year.

Did at least one contact take place duringeach quarter of the reporting year? No

Public Information Programs List

Number of Public Contacts	Public Information Programs Name	
4	Newsletter articles on conservation	
12	Flyers and/or brochures (total copies), bill stuffers, messages printed on bill, information packets	

Contact with the Media

Does a wholesale Agency implement Public Outreach Programs? No

List of wholesale Agencies — Please provide the name of Agency if not CUWCC Group1 members

OR Retail Agency (Contacts with the Media)

Did at least one contact take place during each quarter of the reporting year? No

Media Contacts List

Does a wholesale Agency implement Public Outreach Programs? No

List of wholesale Agencies — Please provide the name of Agency if not CUWCC Group1 members

Is Your Agency Performing Website Updates?

Enter your agency's URL (website address):	www.ncwd.org
Describe a minimum of four water conservationrelated updates to your agency's website thattook place during the year:	1. Drought Information 2. Watering Schedule 3. Rebate Programs 4. Water Efficiency Target

Did at least one Website Update take place duringeach quarter of the reporting year? Yes

Public Outreach Annual Budget

Enter budget for public outreach programs. You may enter total budget in a single line or brake the budget into discretecategories by entering many rows. Please indicate if personnel costs are included in the entry.

Public Outreach Expenses

Enter expenses for public outreach programs. Please include the same kind of expenses you included in the question relatedto your budget (Section 2.1.7, above). For example, if you included personnel costs in the budget entered above, be sure to include them here as well.

BMP 2.1 Public Outreach

2013

Additional Public Information Program

Please report additional public information contacts. List these additional contacts in order of howyour agency views their importance / effectiveness with respect to conserving water, with the mostimportant/ effective listed first (where 1 = most important).

Were there additional Public Outreach efforts? Yes

Public Outreach Additional Information

Social Marketing Programs

Branding

Does your agency have a water conservation"brand," "theme" or mascot? No

Describe the brand, theme or mascot.

Market Research

Have you sponsored or participated inmarket research to refine your message? No

Market Research Topic

Brand Message

Brand Mission Statement

Community Committees

Do you have a community conservationcommittee? No

Enter the names of the community committees:

Training

Social Marketing Expenditures

Public Outreach Social Marketing Expenses

Partnering Programs - Partners

Name	Type of Program
CLCA?	
Green Building Programs?	
Master Gardeners?	
Cooperative Extension?	
Local Colleges?	
Other	

Retail and wholesale outlet; name(s) and type(s) of programs:

BMP 2.1 Public Outreach

2013

Partnering Programs - Newsletters

Number of newsletters per year	
Number of customers per year	

Partnering with Other Utilities

Describe other utilities your agency partners with, including electrical utilities	

Conservation Gardens

Describe water conservation gardens at your agency or other high traffic areas or new homes	

Landscape contests or awards

Describe water wise landscape contest or awards program conducted by your agency	
Additional Programs supported by Agency but not mentioned above:	

Comments

CUWCC BMP Coverage Report 2013

Foundational Best Manegemant Practices for Urban Water Efficiency

Foundational BMPs

BMP 2.2 School Education Programs

6273 Newhall County Water District — Retail Only

Does a wholesale Agency implement School Education Programs? Yes

List of wholesale Agencies

Castaic Lake Water Agency

	Agencies Name	ID number
	Castaic Lake Water Agency	6278

Materials meet state education framework requirements and are grade-level appropriate? Yes

Curriculum materials developed and/or provided by Agency:

This educational program features interactive student activities that present interesting and age appropriate water treatment and conservation topics. The curriculum is regularly updated to ensure that it meets state education criteria.

Materials Distributed to K-6? Yes

Describe K-6 Materials

Age appropriate materials cover science, social studies, and math as they relate to water, water quality, water use efficiency and water supply issues by means of in-class presentations and hands-on field trips.

Materials distributed to 7-12 students? No (Info Only)

Annual budget for school education program: 0.00

Description of all other water supplier education programs

This educational program features interactive student activities that present interesting and age appropriate water treatment and conservation topics. The curriculum is regularly updated to ensure that it meets state education criteria. Age appropriate materials cover science, social studies, and math as they relate to water, water quality, water use efficiency and water supply issues by means of in-class presentations and hands-on field trips. This educational program features interactive student activities that present interesting and age appropriate water treatment and conservation topics. The curriculum is regularly updated to ensure that it meets state education criteria.

On Track

At Least As Effective As **No**

WMP 2.2 School Education Programs

2013

School Education Programs

6273 Newhall County Water District

Does a wholesale Agency implement School Education Programs? Yes

List of wholesale Agencies

Castaic Lake Water Agency

	Agencies Name	ID number
	Castaic Lake Water Agency	6278

V Materials meet state education framework requirements? Description: This educational program features interactive student activities that present interesting and age appropriate water treatment and conservation topics. The curriculum is regularly updated to ensure that it meets state education criteria.

V Materials distributed to K-6 Students? Description: Age appropriate materials cover science, social studies, and math as they relate to water, water quality, water use efficiency and water supply issues by means of in-class presentations and hands-on field trips.

Number of students reached: 3286

☐ Materials distributed to 7-12 Students? (optional) Description:

Annual budget for school education program: 0.00

Description of all other water supplier educationprograms: This educational program features interactive student activities that present interesting and age appropriate water treatment and conservation topics. The curriculum is regularly updated to ensure that it meets state education criteria.

School Programs Activities

Classroom Presentation:

Number of presentation: Number of attendees:

Describe the topics covered in your classroom presentations:

Large group assemblies:

Number of presentation: Number of attendees:

Children's water festivals or other events:

Number of presentation: Number of attendees:

Cooperative efforts with existing science/water education programs (various workshops, science fair awardsor judging) and follow-up:

Number of presentation: Number of attendees:

Other methods of disseminating information (i.e. themed age-appropriate classroom loaner kits):

Description:

Staffing children's booths at events & festivals:

WMP 2.2 School Education Programs

2013

Retail Only

Please provide the name of Agency
if not FORTECH Group1 members

Number distributed

WMP 2.2 School Education Programs

2013

Number of booths [ ] Number of attendees [ ]

Water conservation contests such as poster and photo:

Description [ ] Number of participants [ ]

Offer monetary awards/funding or scholarships to students:

Number offered [ ] Total funding [ ]

Teacher training workshops:

Number of presentation [ ] Number of attendees [ ]

Fund and/or staff student field trips to treatment facilities, recycling facilities, water conservation gardens,etc.:

Number of tours or fieldtrips [ ] Number of participants [ ]

College internships in water conservation offered:

Number of internship [ ] Total funding [ ]

Career Fairs / Workshops:

Number of presentation [ ] Number of attendees [ ]

Additional program(s) supported by agency but not mentioned above:

Description	Number of events	Number of participants

Comments

[ ]

CUWCC BMP Coverage Report 2013

6273 Newhall County Water District

GPCD in 2006: 240.66

GPCD in 2013

GPCD Target for 2018: 229.20

Biennial GPCD Compliance Table

ON TRACK

		Target		Highest Acceptable Bound	
Year	Report	% Base	GPCD	% Base	GPCD
2010	1	96.4%	**233.50**	100%	**242.20**
2012	2	92.8%	**224.80**	96.4%	**233.50**
2014	3	89.2%	**216.10**	92.8%	**224.80**
2016	4	85.6%	**207.40**	89.2%	**216.10**
2018	5	82.0%	**229.20**	82.0%	**198.60**

6273 Newhall County Water District

GPCD in 2006:

GPCD in 2013

GPCD Target for 2018:

Biennial GPCD Compliance Table

ON TRACK

		Target		Highest Acceptable Bound	
Year	Report	% Base	GPCD	% Base	GPCD
2010	1	96.4%		100%	
2012	2	92.8%		96.4%	
2014	3	89.2%		92.8%	
2016	4	85.6%		89.2%	
2018	5	82.0%		82.0%	

CUWCC BMP Coverage Report 2013

6273 Newhall County Water District

GPCD in 2006:

GPCD in 2013

GPCD Target for 2018:

Biennial GPCD Compliance Table **ON TRACK**

		Target		Highest Acceptable Bound	
Year	Report	% Base	GPCD	% Base	GPCD
2010	1	96.4%		100%	
2012	2	92.8%		96.4%	
2014	3	89.2%		92.8%	
2016	4	85.6%		89.2%	
2018	5	82.0%		82.0%	

6273 Newhall County Water District

GPCD in 2006:

GPCD in 2013

GPCD Target for 2018:

Biennial GPCD Compliance Table **ON TRACK**

		Target		Highest Acceptable Bound	
Year	Report	% Base	GPCD	% Base	GPCD
2010	1	96.4%		100%	
2012	2	92.8%		96.4%	
2014	3	89.2%		92.8%	
2016	4	85.6%		89.2%	
2018	5	82.0%		82.0%	

CUWCC BMP Coverage Report 2013

6273 Newhall County Water District

GPCD in 2006:

GPCD in 2013

GPCD Target for 2018:

Biennial GPCD Compliance Table **ON TRACK**

		Target		Highest Acceptable Bound	
Year	Report	% Base	GPCD	% Base	GPCD
2010	1	96.4%		100%	
2012	2	92.8%		96.4%	
2014	3	89.2%		92.8%	
2016	4	85.6%		89.2%	
2018	5	82.0%		82.0%	

6273 Newhall County Water District

GPCD in 2006:

GPCD in 2013

GPCD Target for 2018:

Biennial GPCD Compliance Table **ON TRACK**

		Target		Highest Acceptable Bound	
Year	Report	% Base	GPCD	% Base	GPCD
2010	1	96.4%		100%	
2012	2	92.8%		96.4%	
2014	3	89.2%		92.8%	
2016	4	85.6%		89.2%	
2018	5	82.0%		82.0%	

CUWCC BMP Coverage Report 2013

6273 Newhall County Water District

GPCD in 2006:

GPCD in 2013

GPCD Target for 2018:

Biennial GPCD Compliance Table

ON TRACK

		Target		Highest Acceptable Bound	
Year	Report	% Base	GPCD	% Base	GPCD
2010	1	96.4%		100%	
2012	2	92.8%		96.4%	
2014	3	89.2%		92.8%	
2016	4	85.6%		89.2%	
2018	5	82.0%		82.0%	

CUWCC BMP Retail Coverage Report 2014

Foundational Best Manegemant Practices for Urban Water Efficiency

Foundational BMPs

BMP 1.1 Operation Practices

6273 Newhall County Water District

1. Conservation Coordinator provided with necessary resources to implement BMPs?

Name:	Robert McLaughlan
Title:	Customer Service & Water Efficiency Coordinator
Email:	robertm@ncwd.org

On Track

2. Water Waste Prevention Documents

WW Document Name	WWP File Name	WW Prevention URL	WW Prevention Ordinance Terms Description
Option A Describe the ordinances or terms of service adopted by your agency to meet the water waste prevention requirements of this BMP.			
Option B Describe any water waste prevention ordinances or requirements adopted by your local jurisdiction or regulatory agencies within your service area.	Ordinance 112.pdf		
Option C Describe any documentation of support for legislation or regulations that prohibit water waste.			
Option D Describe your agency efforts to cooperate with other entities in the adoption or enforcement of local requirements consistent with this BMP.			
Option E Describe your agency support positions with respect to adoption of legislation or regulations that are consistent with this BMP.			
Option F Describe your agency efforts to support local ordinances that establish permits requirements for water efficient design in new development.			

On Track

BMP1.1 Operation Practices - Retail Only 2014

Agency name:	Newhall County Water District	Reporting unit number:	
Reporting unit name (District name)	Newhall County Water District	6273	

Conservation Coordinator: **Yes**

Contact Information

First Name:	Robert
Last Name:	McLaughlan
Title:	Customer Service & Water Efficiency Coordinator
Phone:	661-259-3610
Email:	robertm@ncwd.org

Water Waste Prevention

Option A Describe the ordinances or terms of service adopted by your agency to meet the water waste prevention requirements of this BMP.

File Name:	
URL:	

Description:

Comments:

BMP1.1 Operation Practices - Retail Only 2014

Agency name:	Newhall County Water District	Reporting unit number:	
Reporting unit name (District name)	Newhall County Water District	6273	

Conservation Coordinator: **Yes**

Contact Information

First Name:	Robert
Last Name:	McLaughlan
Title:	Customer Service & Water Efficiency Coordinator
Phone:	661-259-3610
Email:	robertm@ncwd.org

Water Waste Prevention

Option B Describe any water waste prevention ordinances or requirements adopted by your local jurisdiction or regulatory agencies within your service area.

File Name:	Ordinance 112.pdf
URL:	

Description:

Comments:

BMP1.1 Operation Practices - Retail Only 2014

Agency name:	Newhall County Water District	Reporting unit number:	
Reporting unit name (District name)	Newhall County Water District	6273	

Conservation Coordinator: **Yes**

Contact Information

First Name:	Robert
Last Name:	McLaughlan
Title:	Customer Service & Water Efficiency Coordinator
Phone:	661-259-3610
Email:	robertm@ncwd.org

Water Waste Prevention

Option C Describe any documentation of support for legislation or regulations that prohibit water waste.

File Name:	
URL:	

Description:

Comments:

BMP1.1 Operation Practices - Retail Only 2014

Agency name:	Newhall County Water District	Reporting unit number:	
Reporting unit name (District name)	Newhall County Water District	6273	

Conservation Coordinator: **Yes**

Contact Information

First Name:	Robert
Last Name:	McLaughlan
Title:	Customer Service & Water Efficiency Coordinator
Phone:	661-259-3610
Email:	robertm@ncwd.org

Water Waste Prevention

Option D Describe your agency efforts to cooperate with other entities in the adoption or enforcement of local requirements consistent with this BMP.

File Name:	
URL:	

Description:

Comments:

BMP1.1 Operation Practices - Retail Only 2014

Agency name:	Newhall County Water District	Reporting unit number:	
Reporting unit name (District name)	Newhall County Water District	6273	

Conservation Coordinator: **Yes**

Contact Information

First Name:	Robert
Last Name:	McLaughlan
Title:	Customer Service & Water Efficiency Coordinator
Phone:	661-259-3610
Email:	robertm@ncwd.org

Water Waste Prevention

Option E Describe your agency support positions with respect to adoption of legislation or regulations that are consistent with this BMP.

File Name:	
URL:	

Description:

Comments:

BMP1.1 Operation Practices - Retail Only 2014

Agency name:	Newhall County Water District	Reporting unit number:	
Reporting unit name (District name)	Newhall County Water District	6273	

Conservation Coordinator: **Yes**

Contact Information

First Name:	Robert
Last Name:	McLaughlan
Title:	Customer Service & Water Efficiency Coordinator
Phone:	661-259-3610
Email:	robertm@ncwd.org

Water Waste Prevention

Option F Describe your agency efforts to support local ordinances that establish permits requirements for water efficient design in new development.

File Name:	
URL:	

Description:

Comments:

CUWCC BMP Coverage Report 2014

Foundational Best Management Practices For Urban Water Efficiency

Foundational BMPs

BMP 1.2 Water Loss Control

6273 Newhall County Water District

Completed Standard Water Audit Using AWWA Software?	**Yes**	**On Track**
AWWA File provided to CUWCC?	**No**	

Newhall County Water District BMP1.2 FY14

AWWA Water Audit Validity Score?	
Complete Training in AWWA Audit Method	
Complete Training in Component Analysis Process?	
CompComponent Analysis?	
Repaired all leaks and breaks to the extent cost effective?	
Locate and Repar unreported leaks to the extent cost effective?	
Maintain a record keeping system for the repair of reported leaks, including time of report, leak location, type of leaking pipe segment or fitting, and leak running time from report to repair.	

Provided 7 Types of Water Loss Control Info

Leaks Repars	Value Real Losses	Value Apparent Losses	Miles Surveyed	Press Reduction	Cost Of Interventions	Water Saved (AF)
24	0	0	147		0	5

On Track

At Least As Effective As

In lieau of an active leak detection program, the City has opted to replace 1% of distribution system lines each year. Lines are replaced based on age and other asset management factors. Attached documentation shows the reduction in main breaks due to 6273 Newhall County Water District BMP 1.2 Results from Main Replacement Program.

We encourage them every year to join.

BMP 1.2 Water Loss Control

2014

Agency name: Newhall County Water District

Reporting unit number: 6273

Reporting unit name (District name): Newhall County Water District

AWWA Water Audit

Agency to complete a Water Audit & Balance Using The AWWA Software: Yes

Water Audit Validity Score from AWWA spreadsheet: 76

Email to office@cuwcc.org - Worksheets (AWWA Water Audit). Enter the name of the file below:

Agency Completed Training In The AWWA Water Audit Method: Yes

Agency Completed Training In The Component Analysis Process: Yes

Completed/Updated the Component Analysis (at least every 4 years)? Yes

Component Analysis Completed/Updated Date: 8/27/2015 12:00:00 AM

Water Loss Performance

Agency Repaired All Reported Leaks & Breaks To The Extent Cost Effective: No

Recording Keeping Requirements:

- Date/Time Leak Reported
- Type of Leaking Pipe Segment or Fitting
- Leak Volume Estimate
- Leak Location
- Leak Running Time From Report to Repair
- Cost of Repair

Agency Located and Repaired Unreported Leaks to the Extent Cost Effective: Yes

Type of Program Activities Used to Detect Unreported Leaks

The district's maintenance program consists of daily inspections of water wells and pumping equipment, weekly inspections of water tanks and exercising system valves.

Does your agency maintain in-house records of audit results or the completed AWWA worksheet for the completed audit which could be forwarded to CUWCC? No

Does your agency keeps records of each component analysis performed, and incorporates results into future annual standard water balances? Yes

Annual Summary Information

Complete the following table with annual summary information (required for reporting years 2-5 only)

Total Leak Repaired	Economic Value Of Real Loss	Economic Value Of Apparent Loss	Miles Of System Surveyed For Leaks	Pressure Reduction Undertaken For Loss Reduction	Cost Of Interventions	Water Saved (AF/Year)
24	0	0	147		0	5

Comments:

CUWCC BMP Coverage Report 2014

Foundational Best Manegemant Practices for Urban Water Efficiency

Foundational BMPs

BMP 1.3 Metering With Commodity

6273	Newhall County Water District

Numbered Unmetered Accounts	No	**On Track**
Metered Accounts billed by volume of use	Yes	**On Track**
Number of CII Accounts with Mixed Use Meters	217	
Conducted a feasibility study to assess merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters?	No	**Not On Track**
Feasibility Study provided to CUWCC?	No	**Not On Track**
Completed a written plan, policy or program to test, repair and replace meters	Yes	**On Track**

At Least As Effective As **No**

BMP 1.3 Metering With Commodity

2014

Agency name:	Newhall County Water District	Reporting unit number:	
Reporting unit name (District name)	Newhall County Water District		6273

Implementation

Does your agency have any unmetered service connections?	No
If YES, has your agency completed a meter retrofit plan?	No
Enter the number of previously unmetered accounts fitted with meters during reporting year:	
Are all new service connections being metered?	Yes
Are all new service connections being billed volumetrically?	Yes
Has your agency completed and submitted electronically to the Council a written plan, policy or program to test, repair and replace meters?	Yes

Meters Matrix

Error: Subreport could not be shown.

Number of CII Accounts with Mixed-use Meters	217	Number of CII Accounts with Mixed-use Meters Retrofitted with Dedicated Irrigation Meters during Reporting Period	0

Feasibility Study

Has your agency conducted a feasibility study to assess the merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters? No

If YES, please fill in the following information:

A. When was the Feasibility Study conducted		B. Describe,	
1/1/0001 12:00:00 AM		upload or provide an electronic link to the Feasibility Study Upload File	

Comments:

CUWCC BMP Coverage Report 2014

Foundational Best Manegemant Practices for Urban Water Efficiency

Foundational BMPs

BMP 1.4 Retail Consrvation Pricing

6273 Newhall County Water District

Implementation (Water Rate Structure)

Customer Class	Water Rate Type	Conserving Rate?
Single-Family	Increasing Block	Yes
Multi-Family	Uniform	Yes
Commercial	Uniform	Yes
Industrial	Uniform	Yes
Institutional	Uniform	Yes
Dedicated Irrigation	Uniform	Yes
Other	Uniform	Yes

On Track

	Customer Class	Water Rate Type	(V) Total Revenue Comodity Charges	(M) Total Revenue Fixed Carges
	Single-Family	Increasing Block	5267822.76	2070149.53
	Multi-Family	Uniform	1349615.24	332017.09
	Commercial	Uniform	489378.95	265935.87
	Industrial	Uniform	17858.05	9223.85
	Institutional	Uniform	392839.68	109850.77
	Dedicated Irrigation	Uniform	1844955.48	328576.82
	Other	Uniform	68700.77	138070.88
			9431170.93	**3253824.81**

Calculate: V / (V + M) **74 %**

Implementation Option: Use Annual Revenue As Reported

Agency Provide Sewer Service: No

At Least As Effective As **No**

BMP 1.4 Retail Conservation Pricing

2014

Agency name: Newhall County Water District

Reporting unit number: 6273

Reporting unit name (District name): Newhall County Water District

Implementation (Water Rate Structure)

Enter the Water Rate Structures that are assigned to the majority of your customers, by customer class

Water Rate Name	Customer Class Name	Total Revenue Commodity Charges	Total Revenue Customer Meter/Service (Fixed Charges)	
Increasing Block	Single-Family	5267822.76	2070149.53	
Uniform	Multi-Family	1349615.24	332017.09	
Uniform	Commercial	489378.95	265935.87	
Uniform	Industrial	17858.05	9223.85	
Uniform	Institutional	392839.68	109850.77	
Uniform	Dedicated Irrigation	1844955.48	328576.82	
Uniform	Other	68700.77	138070.88	

Implementation (Conservation Pricing Option)

[V] Use Annual Revenue As Reported

[ ] Use CWWA Rate Design Model

[ ] Use 3 years average instead of most recent year

Retail Waste Water (Sewer) Rate Structure by Customer Class

Agency Provide Sewer Service: No

Select the Retail Waste Water (Sewer) Rate Structure assigned to the majority of your customers within a specific customer class.

Comments:

CUWCC BMP Coverage Report 2014

Foundational Best Manegemant Practices for Urban Water Efficiency

Foundational BMPs

BMP 2.1 Public Outreach

6273 Newhall County Water District Retail Only

Does a wholesale Agency implement Public Outreach Programs? Yes

List of wholesale Agencies

	Agency Name	ID number
	Castaic Lake Water Agency	6278

	Public Outreach Program List	**Number**
	Newsletter articles on conservation	4
	Flyers and/or brochures (total copies), bill stuffers, messages printed on bill, information packets	16
	Total	**20**
		On Track

An actively maintained website that is updated regularly (minimum = 4 times per year, i.e., at least quarterly) Yes

Description of all other Public Outreach programs

1. Drought Information. 2. Watering Schedule. 3. Rebate Programs. 4. Water Efficiency Target

On Track

At Least As Effective As **No**

BMP 2.1 Public Outreach

2014

Agency name:	Newhall County Water District	Reporting unit #	6273
Reporting unit name (District name)	Newhall County Water District	/	Retail Only

Does a wholesale Agency implement Public Outreach Programs? Yes

List of wholesale Agencies — Please provide the name of Agency if not CUWCC Group1 members

Is your agency performing public outreach?

Report a minimum of 4 water conservation related contacts your agency had with the public during the year.

Did at least one contact take place duringeach quarter of the reporting year? No

Public Information Programs List

Number of Public Contacts	Public Information Programs Name	
4	Newsletter articles on conservation	
16	Flyers and/or brochures (total copies), bill stuffers, messages printed on bill, information packets	

Contact with the Media

Does a wholesale Agency implement Public Outreach Programs? No

List of wholesale Agencies — Please provide the name of Agency if not CUWCC Group1 members

OR Retail Agency (Contacts with the Media)

Did at least one contact take place during each quarter of the reporting year? No

Media Contacts List

Does a wholesale Agency implement Public Outreach Programs? No

List of wholesale Agencies — Please provide the name of Agency if not CUWCC Group1 members

Is Your Agency Performing Website Updates?

Enter your agency's URL (website address):	www.ncwd.org
Describe a minimum of four water conservationrelated updates to your agency's website thattook place during the year:	1. Drought Information. 2. Watering Schedule. 3. Rebate Programs. 4. Water Efficiency Target

Did at least one Website Update take place duringeach quarter of the reporting year? Yes

Public Outreach Annual Budget

Enter budget for public outreach programs. You may enter total budget in a single line or brake the budget into discretecategories by entering many rows. Please indicate if personnel costs are included in the entry.

Public Outreach Expenses

Enter expenses for public outreach programs. Please include the same kind of expenses you included in the question relatedto your budget (Section 2.1.7, above). For example, if you included personnel costs in the budget entered above, be sure to include them here as well.

BMP 2.1 Public Outreach

2014

Additional Public Information Program

Please report additional public information contacts. List these additional contacts in order of howyour agency views their importance / effectiveness with respect to conserving water, with the mostimportant/ effective listed first (where 1 = most important).

Were there additional Public Outreach efforts? Yes

Public Outreach Additional Information

Social Marketing Programs

Branding

Does your agency have a water conservation"brand," "theme" or mascot? No

Describe the brand, theme or mascot.

Market Research

Have you sponsored or participated inmarket research to refine your message? No

Market Research Topic

Brand Message

Brand Mission Statement

Community Committees

Do you have a community conservationcommittee? No

Enter the names of the community committees:

Training

Social Marketing Expenditures

Public Outreach Social Marketing Expenses

Partnering Programs - Partners

Name	Type of Program
☐ CLCA?	
☐ Green Building Programs?	
☐ Master Gardeners?	
☐ Cooperative Extension?	
☐ Local Colleges?	
☐ Other	

☐ Retail and wholesale outlet; name(s) and type(s) of programs:

BMP 2.1 Public Outreach

2014

Partnering Programs - Newsletters

Number of newsletters per year	
Number of customers per year	

Partnering with Other Utilities

Describe other utilities your agency partners with, including electrical utilities	

Conservation Gardens

Describe water conservation gardens at your agency or other high traffic areas or new homes	

Landscape contests or awards

Describe water wise landscape contest or awards program conducted by your agency	
Additional Programs supported by Agency but not mentioned above:	

Comments

CUWCC BMP Coverage Report 2014

Foundational Best Manegemant Practices for Urban Water Efficiency

Foundational BMPs

BMP 2.2 School Education Programs

6273 Newhall County Water District — Retail Only

Does a wholesale Agency implement School Education Programs? Yes

List of wholesale Agencies

Castaic Lake Water Agency

	Agencies Name	ID number
	Castaic Lake Water Agency	6278

Materials meet state education framework requirements and are grade-level appropriate? Yes

Curriculum materials developed and/or provided by Agency:

This educational program features interactive student activities that present interesting and age appropriate water treatment and conservation topics. The curriculum is regularly updated to ensure that it meets state education criteria.

Materials Distributed to K-6? Yes

Describe K-6 Materials

Age appropriate materials cover science, social studies, and math as they relate to water, water quality, water use efficiency and water supply issues by means of in-class presentations and hands-on field trips.

Materials distributed to 7-12 students? No (Info Only)

Annual budget for school education program: 0.00

Description of all other water supplier education programs

This educational program features interactive student activities that present interesting and age appropriate water treatment and conservation topics. The curriculum is regularly updated to ensure that it meets state education criteria. Age appropriate materials cover science, social studies, and math as they relate to water, water quality, water use efficiency and water supply issues by means of in-class presentations and hands-on field trips. This educational program features interactive student activities that present interesting and age appropriate water treatment and conservation topics. The curriculum is regularly updated to ensure that it meets state education criteria.

On Track

At Least As Effective As **No**

WMP 2.2 School Education Programs

2014

School Education Programs

6273 Newhall County Water District

Does a wholesale Agency implement School Education Programs? Yes

List of wholesale Agencies

Castaic Lake Water Agency

	Agencies Name	ID number
	Castaic Lake Water Agency	6278

V Materials meet state education framework requirements? Description: This educational program features interactive student activities that present interesting and age appropriate water treatment and conservation topics. The curriculum is regularly updated to ensure that it meets state education criteria.

V Materials distributed to K-6 Students? Description: Age appropriate materials cover science, social studies, and math as they relate to water, water quality, water use efficiency and water supply issues by means of in-class presentations and hands-on field trips.

Number of students reached: 2408

☐ Materials distributed to 7-12 Students? (optional) Description:

Annual budget for school education program: 0.00

Description of all other water supplier educationprograms: This educational program features interactive student activities that present interesting and age appropriate water treatment and conservation topics. The curriculum is regularly updated to ensure that it meets state education criteria.

School Programs Activities

Classroom Presentation:

Number of presentation: Number of attendees:

Describe the topics covered in your classroom presentations:

Large group assemblies:

Number of presentation: Number of attendees:

Children's water festivals or other events:

Number of presentation: Number of attendees:

Cooperative efforts with existing science/water education programs (various workshops, science fair awardsor judging) and follow-up:

Number of presentation: Number of attendees:

Other methods of disseminating information (i.e. themed age-appropriate classroom loaner kits):

Description:

Staffing children's booths at events & festivals:

WMP 2.2 School Education Programs

2014

Retail Only

Please provide the name of Agency
if not FORTECH Group1 members

Number distributed

WMP 2.2 School Education Programs

2014

Number of booths | Number of attendees

Water conservation contests such as poster and photo:

Description | Number of participants

Offer monetary awards/funding or scholarships to students:

Number offered | Total funding

Teacher training workshops:

Number of presentation | Number of attendees

Fund and/or staff student field trips to treatment facilities, recycling facilities, water conservation gardens,etc.:

Number of tours or fieldtrips | Number of participants

College internships in water conservation offered:

Number of internship | Total funding

Career Fairs / Workshops:

Number of presentation | Number of attendees

Additional program(s) supported by agency but not mentioned above:

Description	Number of events	Number of participants

Comments

CUWCC BMP Coverage Report 2014

6273 Newhall County Water District

GPCD in 2006: 240.66

GPCD in 2014

GPCD Target for 2018: 229.20

Biennial GPCD Compliance Table

ON TRACK

		Target		Highest Acceptable Bound	
Year	Report	% Base	GPCD	% Base	GPCD
2010	1	96.4%	**233.50**	100%	**242.20**
2012	2	92.8%	**224.80**	96.4%	**233.50**
2014	3	89.2%	**216.10**	92.8%	**224.80**
2016	4	85.6%	**207.40**	89.2%	**216.10**
2018	5	82.0%	**229.20**	82.0%	**198.60**

6273 Newhall County Water District

GPCD in 2006:

GPCD in 2014

GPCD Target for 2018:

Biennial GPCD Compliance Table

ON TRACK

		Target		Highest Acceptable Bound	
Year	Report	% Base	GPCD	% Base	GPCD
2010	1	96.4%		100%	
2012	2	92.8%		96.4%	
2014	3	89.2%		92.8%	
2016	4	85.6%		89.2%	
2018	5	82.0%		82.0%	

CUWCC BMP Coverage Report 2014

6273 Newhall County Water District

GPCD in 2006:

GPCD in 2014

GPCD Target for 2018:

Biennial GPCD Compliance Table

ON TRACK

		Target		Highest Acceptable Bound	
Year	Report	% Base	GPCD	% Base	GPCD
2010	1	96.4%		100%	
2012	2	92.8%		96.4%	
2014	3	89.2%		92.8%	
2016	4	85.6%		89.2%	
2018	5	82.0%		82.0%	

SANTA CLARITA WATER DIVISION

CUWCC BMP Retail Coverage Report **2013**

Foundational Best Manegemant Practices for Urban Water Efficiency

Foundational BMPs

BMP 1.1 Operation Practices

6300 Santa Clarita Water Division

1. Conservation Coordinator provided with necessary resources to implement BMPs?

Name:	Quashaun Vallery
Title:	Water Conservation Technician
Email:	sccontemp@scwater.org

On Track

2. Water Waste Prevention Documents

WW Document Name	WWP File Name	WW Prevention URL	WW Prevention Ordinance Terms Description
Option A Describe the ordinances or terms of service adopted by your agency to meet the water waste prevention requirements of this BMP.			
Option B Describe any water waste prevention ordinances or requirements adopted by your local jurisdiction or regulatory agencies within your service area.			The City of Santa Clarita has a water waste ordinance.
Option C Describe any documentation of support for legislation or regulations that prohibit water waste.			
Option D Describe your agency efforts to cooperate with other entities in the adoption or enforcement of local requirements consistent with this BMP.			SCWD works with the City of Santa Clarita to implement the MS4 Permit, which requires reduce water waste (in particular run-off).
Option E Describe your agency support positions with respect to adoption of legislation or regulations that are consistent with this BMP.			
Option F Describe your agency efforts to support local ordinances that establish permits requirements for water efficient design in new development.			SCWD works with the City of Santa Clarita to implement AB 1881, which includes requirements for water efficient design in new development.

On Track

BMP1.1 Operation Practices - Retail Only 2013

Agency name:	Santa Clarita Water Division	Reporting unit number:	
Reporting unit name (District name)	Santa Clarita Water Division	6300	

Conservation Coordinator: **Yes**

Contact Information

First Name:	Quashaun
Last Name:	Vallery
Title:	Water Conservation Technician
Phone:	661.705.7213
Email:	sccontemp@scwater.org

Water Waste Prevention

Option A Describe the ordinances or terms of service adopted by your agency to meet the water waste prevention requirements of this BMP.

File Name:	
URL:	

Description:

Comments:

BMP1.1 Operation Practices - Retail Only 2013

Agency name:	Santa Clarita Water Division	Reporting unit number:	
Reporting unit name (District name)	Santa Clarita Water Division	6300	

Conservation Coordinator: **Yes**

Contact Information

First Name:	Quashaun
Last Name:	Vallery
Title:	Water Conservation Technician
Phone:	661.705.7213
Email:	sccontemp@scwater.org

Water Waste Prevention

Option B Describe any water waste prevention ordinances or requirements adopted by your local jurisdiction or regulatory agencies within your service area.

File Name:	
URL:	

Description:

The City of Santa Clarita has a water waste ordinance.

Comments:

BMP1.1 Operation Practices - Retail Only 2013

Agency name:	Santa Clarita Water Division	Reporting unit number:	
Reporting unit name (District name)	Santa Clarita Water Division	6300	

Conservation Coordinator: **Yes**

Contact Information

First Name:	Quashaun
Last Name:	Vallery
Title:	Water Conservation Technician
Phone:	661.705.7213
Email:	sccontemp@scwater.org

Water Waste Prevention

Option C Describe any documentation of support for legislation or regulations that prohibit water waste.

File Name:	
URL:	

Description:

Comments:

BMP1.1 Operation Practices - Retail Only 2013

Agency name:	Santa Clarita Water Division	Reporting unit number:	
Reporting unit name (District name)	Santa Clarita Water Division	6300	

Conservation Coordinator: **Yes**

Contact Information

First Name:	Quashaun
Last Name:	Vallery
Title:	Water Conservation Technician
Phone:	661.705.7213
Email:	sccontemp@scwater.org

Water Waste Prevention

Option D Describe your agency efforts to cooperate with other entities in the adoption or enforcement of local requirements consistent with this BMP.

File Name:	
URL:	

Description:

SCWD works with the City of Santa Clarita to implement the MS4 Permit, which requires reduce water waste (in particular run-off).

Comments:

BMP1.1 Operation Practices - Retail Only 2013

Agency name:	Santa Clarita Water Division	Reporting unit number:	
Reporting unit name (District name)	Santa Clarita Water Division	6300	

Conservation Coordinator: **Yes**

Contact Information

First Name:	Quashaun
Last Name:	Vallery
Title:	Water Conservation Technician
Phone:	661.705.7213
Email:	sccontemp@scwater.org

Water Waste Prevention

Option E Describe your agency support positions with respect to adoption of legislation or regulations that are consistent with this BMP.

File Name:	
URL:	

Description:

Comments:

BMP1.1 Operation Practices - Retail Only 2013

Agency name:	Santa Clarita Water Division	Reporting unit number:	
Reporting unit name (District name)	Santa Clarita Water Division	6300	

Conservation Coordinator: **Yes**

Contact Information

First Name:	Quashaun
Last Name:	Vallery
Title:	Water Conservation Technician
Phone:	661.705.7213
Email:	sccontemp@scwater.org

Water Waste Prevention

Option F Describe your agency efforts to support local ordinances that establish permits requirements for water efficient design in new development.

File Name:	
URL:	

Description:

SCWD works with the City of Santa Clarita to implement AB 1881, which includes requirements for water efficient design in new development.

Comments:

CUWCC BMP Coverage Report 2013

Foundational Best Management Practices For Urban Water Efficiency

Foundational BMPs

BMP 1.2 Water Loss Control

6300 Santa Clarita Water Division

Completed Standard Water Audit Using AWWA Software?	**Yes**	**On Track**
AWWA File provided to CUWCC?	**No**	

Santa Clarita Water Division BMP1.2 FY13

AWWA Water Audit Validity Score?

Complete Training in AWWA Audit Method

Complete Training in Component Analysis Process?

CompComponent Analysis?

Repaired all leaks and breaks to the extent cost effective?

Locate and Repar unreported leaks to the extent cost effective?

Maintain a record keeping system for the repair of reported leaks, including time of report, leak location, type of leaking pipe segment or fitting, and leak running time from report to repair.

Provided 7 Types of Water Loss Control Info

Leaks Repars	Value Real Losses	Value Apparent Losses	Miles Surveyed	Press Reduction	Cost Of Interventions	Water Saved (AF)
178						

On Track

At Least As Effective As

In lieau of an active leak detection program, the City has opted to replace 1% of distribution system lines each year. Lines are replaced based on age and other asset management factors. Attached documentation shows the reduction in main breaks due to 6300 Santa Clarita Water Division BMP 1.2 Results from Main Replacement Program.

We encourage them every year to join.

BMP 1.2 Water Loss Control

2013

Agency name: Santa Clarita Water Division

Reporting unit number: 6300

Reporting unit name (District name): Santa Clarita Water Division

AWWA Water Audit

Agency to complete a Water Audit & Balance Using The AWWA Software: Yes

Water Audit Validity Score from AWWA spreadsheet: 81

Email to office@cuwcc.org - Worksheets (AWWA Water Audit). Enter the name of the file below:

Agency Completed Training In The AWWA Water Audit Method: Yes

Agency Completed Training In The Component Analysis Process: Yes

Completed/Updated the Component Analysis (at least every 4 years)? No

Component Analysis Completed/Updated Date:

Water Loss Performance

Agency Repaired All Reported Leaks & Breaks To The Extent Cost Effective: No

Recording Keeping Requirements:

- Date/Time Leak Reported
- Type of Leaking Pipe Segment or Fitting
- Leak Volume Estimate
- Leak Location
- Leak Running Time From Report to Repair
- Cost of Repair

Agency Located and Repaired Unreported Leaks to the Extent Cost Effective: Yes

Type of Program Activities Used to Detect Unreported Leaks

Customer service software flags unusual (abnormally high) usage and customer is contacted (and meter is checked).

Meter readers also call in potential unreported leaks.

Does your agency maintain in-house records of audit results or the completed AWWA worksheet for the completed audit which could be forwarded to CUWCC? No

Does your agency keeps records of each component analysis performed, and incorporates results into future annual standard water balances? Yes

Annual Summary Information

Complete the following table with annual summary information (required for reporting years 2-5 only)

Total Leak Repaired	Economic Value Of Real Loss	Economic Value Of Apparent Loss	Miles Of System Surveyed For Leaks	Pressure Reduction Undertaken For Loss Reduction	Cost Of Interventions	Water Saved (AF/Year)
178				V		

Comments:

CUWCC BMP Coverage Report 2013

Foundational Best Manegemant Practices for Urban Water Efficiency

Foundational BMPs

BMP 1.3 Metering With Commodity

6300	Santa Clarita Water Division

Numbered Unmetered Accounts	No	**On Track**
Metered Accounts billed by volume of use	Yes	**On Track**
Number of CII Accounts with Mixed Use Meters	40	
Conducted a feasibility study to assess merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters?	No	**Not On Track**
Feasibility Study provided to CUWCC?	No	**Not On Track**
Completed a written plan, policy or program to test, repair and replace meters	Yes	**On Track**

At Least As Effective As **No**

BMP 1.3 Metering With Commodity

2013

Agency name:	Santa Clarita Water Division	Reporting unit number:	
Reporting unit name (District name)	Santa Clarita Water Division		6300

Implementation

Does your agency have any unmetered service connections?	No
If YES, has your agency completed a meter retrofit plan?	No
Enter the number of previously unmetered accounts fitted with meters during reporting year:	
Are all new service connections being metered?	Yes
Are all new service connections being billed volumetrically?	Yes
Has your agency completed and submitted electronically to the Council a written plan, policy or program to test, repair and replace meters?	Yes

Meters Matrix

Error: Subreport could not be shown.

Number of CII Accounts with Mixed-use Meters	40	Number of CII Accounts with Mixed-use Meters Retrofitted with Dedicated Irrigation Meters during Reporting Period	

Feasibility Study

Has your agency conducted a feasibility study to assess the merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters? No

If YES, please fill in the following information:

A. When was the Feasibility Study conducted		B. Describe,	
1/1/0001 12:00:00 AM		upload or provide an electronic link to the Feasibility Study Upload File	

Comments:

CUWCC BMP Coverage Report 2013

Foundational Best Manegemant Practices for Urban Water Efficiency

Foundational BMPs

BMP 1.4 Retail Consrvation Pricing

6300 Santa Clarita Water Division

Implementation (Water Rate Structure)

Customer Class	Water Rate Type	Conserving Rate?
Single-Family	Increasing Block	Yes
Multi-Family	Uniform	Yes
Dedicated Irrigation	Uniform	Yes
Commercial	Uniform	Yes
Institutional	Uniform	Yes
Industrial	Uniform	Yes
Other	Other	No

On Track

	Customer Class	Water Rate Type	(V) Total Revenue Comodity Charges	(M) Total Revenue Fixed Carges
	Single-Family	Increasing Block	12952131.18	5862519.29
	Multi-Family	Uniform	2176125.43	984979.01
	Dedicated Irrigation	Uniform	4038386.62	1827893.74
	Commercial	Uniform	857895.6	388309.03
	Institutional	Uniform	690501.34	312541.42
	Industrial	Uniform	83697.13	37883.81
	Other	Other	125545.7	56825.71
			20924283	**9470952.01**

Calculate: V / (V + M) **69 %**

Implementation Option: Use Annual Revenue As Reported

Agency Provide Sewer Service: No

At Least As Effective As **No**

BMP 1.4 Retail Conservation Pricing

2013

Agency name: Santa Clarita Water Division

Reporting unit number: 6300

Reporting unit name (District name): Santa Clarita Water Division

Implementation (Water Rate Structure)

Enter the Water Rate Structures that are assigned to the majority of your customers, by customer class

Water Rate Name	Customer Class Name	Total Revenue Commodity Charges	Total Revenue Customer Meter/Service (Fixed Charges)	
Increasing Block	Single-Family	12952131.18	5862519.29	
Uniform	Multi-Family	2176125.43	984979.01	
Uniform	Dedicated Irrigation	4038386.62	1827893.74	
Uniform	Commercial	857895.6	388309.03	
Uniform	Institutional	690501.34	312541.42	
Uniform	Industrial	83697.13	37883.81	
Other	Other	125545.7	56825.71	

Implementation (Conservation Pricing Option)

[V] Use Annual Revenue As Reported

[ ] Use CWWA Rate Design Model

[ ] Use 3 years average instead of most recent year

Retail Waste Water (Sewer) Rate Structure by Customer Class

Agency Provide Sewer Service: No

Select the Retail Waste Water (Sewer) Rate Structure assigned to the majority of your customers within a specific customer class.

Comments:

CUWCC BMP Coverage Report 2013

Foundational Best Manegemant Practices for Urban Water Efficiency

Foundational BMPs

BMP 2.1 Public Outreach

6300 Santa Clarita Water Division Retail Only

Does a wholesale Agency implement Public Outreach Programs? Yes

List of wholesale Agencies

	Public Outreach Program List	Number
	Newsletter articles on conservation	12
	Flyers and/or brochures (total copies), bill stuffers, messages printed on bill, information packets	14
	General water conservation information	52
	Website	4
	Total	**82**

On Track

	Number Media Contacts	Number
	Newspaper contacts	4
	Total	**4**

On Track

An actively maintained website that is updated regularly (minimum = 4 times per year, i.e., at least quarterly) Yes

	Annual Budget Category	Annual Budget Amount
	Public Outreach	40750
	Total Amount:	**40750**

On Track

Description of all other Public Outreach programs

1) Availability of pressure compensating sprinkler nozzles
2) HET rebates
3) SCV H2O Programs announcement
4) Free Sprinkler Nozzles

On Track

At Least As Effective As **No**

BMP 2.1 Public Outreach

2013

Agency name:	Santa Clarita Water Division	Reporting unit #	6300
Reporting unit name (District name)	Santa Clarita Water Division	/	Retail Only

Does a wholesale Agency implement Public Outreach Programs? Yes

List of wholesale Agencies — Please provide the name of Agency if not CUWCC Group1 members

Castaic Lake Water Agency

Is your agency performing public outreach?

Report a minimum of 4 water conservation related contacts your agency had with the public during the year.

Did at least one contact take place duringeach quarter of the reporting year? No

Public Information Programs List

Number of Public Contacts	Public Information Programs Name	
12	Newsletter articles on conservation	
14	Flyers and/or brochures (total copies), bill stuffers, messages printed on bill, information packets	
52	General water conservation information	
4	Website	

Contact with the Media

Does a wholesale Agency implement Public Outreach Programs? Yes

List of wholesale Agencies — Please provide the name of Agency if not CUWCC Group1 members

Castaic Lake Water Agency

OR Retail Agency (Contacts with the Media)

Did at least one contact take place during each quarter of the reporting year? Yes

Media Contacts List

Number of Media Contacts	Public Outreach Media Contact Name List	
4	Newspaper contacts	

Does a wholesale Agency implement Public Outreach Programs? No

List of wholesale Agencies — Please provide the name of Agency if not CUWCC Group1 members

Castaic Lake Water Agency

Is Your Agency Performing Website Updates?

Enter your agency's URL (website address):	www.scwater.org
Describe a minimum of four water conservationrelated updates to your agency's website thattook place during the year:	1) Availability of pressure compensating sprinkler nozzles 2) HET rebates 3) SCV H2O Programs announcement 4) Free Sprinkler Nozzles

Did at least one Website Update take place duringeach quarter of the reporting year? Yes

BMP 2.1 Public Outreach

2013

Public Outreach Annual Budget

Enter budget for public outreach programs. You may enter total budget in a single line or brake the budget into discretecategories by entering many rows. Please indicate if personnel costs are included in the entry.

Annual Budget Category	Annual Budget Amount	Personal Cost Included?	Comments	
Public Outreach	40750			

Public Outreach Expenses

Enter expenses for public outreach programs. Please include the same kind of expenses you included in the question relatedto your budget (Section 2.1.7, above). For example, if you included personnel costs in the budget entered above, be sure to include them here as well.

Public Outreach Expense Category	Expense Amount	Personal Cost Included?	
Public Outreach	21320		

Additional Public Information Program

Please report additional public information contacts. List these additional contacts in order of howyour agency views their importance / effectiveness with respect to conserving water, with the mostimportant/ effective listed first (where 1 = most important).

Were there additional Public Outreach efforts? Yes

Public Outreach Additional Information

Social Marketing Programs

Branding

Does your agency have a water conservation"brand," "theme" or mascot? No

Describe the brand, theme or mascot.

Market Research

Have you sponsored or participated inmarket research to refine your message? No

Market Research Topic

Brand Message

Brand Mission Statement

Community Committees

Do you have a community conservationcommittee? No

Enter the names of the community committees:

Training

Social Marketing Expenditures

Public Outreach Social Marketing Expenses

BMP 2.1 Public Outreach

2013

Partnering Programs - Partners

	Name	Type of Program
☐	CLCA?	
☐	Green Building Programs?	
☐	Master Gardeners?	
☐	Cooperative Extension?	
☐	Local Colleges?	
☐	Other	

☐ Retail and wholesale outlet; name(s) and type(s) of programs:

Partnering Programs - Newsletters

Number of newsletters per year	
Number of customers per year	

Partnering with Other Utilities

Describe other utilities your agency partners with, including electrical utilities	City of Santa Clarita Castaic Lake Water Agency Valencia Water Company

Conservation Gardens

Describe water conservation gardens at your agency or other high traffic areas or new homes	Castaic Lake Water Agency was a large conservation garden open to the public.

Landscape contests or awards

Describe water wise landscape contest or awards program conducted by your agency	
Additional Programs supported by Agency but not mentioned above:	

Comments

CUWCC BMP Coverage Report 2013

Foundational Best Manegemant Practices for Urban Water Efficiency

Foundational BMPs

BMP 2.2 School Education Programs

6300 Santa Clarita Water Division — Retail Only

Does a wholesale Agency implement School Education Programs? No

List of wholesale Agencies

Castaic Lake Water Agency

Materials meet state education framework requirements and are grade-level appropriate? Yes

Curriculum materials developed and/or provided by Agency:

Curricula is tailored to state education guidelines in math, science and social studies

Materials Distributed to K-6? Yes

Describe K-6 Materials

Curricula is tailored to state education guidelines in math, science and social studies

Materials distributed to 7-12 students? Yes (Info Only)

Annual budget for school education program: 80000.00

Description of all other water supplier education programs

Curricula is tailored to state education guidelines in math, science and social studies Curricula is tailored to state education guidelines in math, science and social studies There are no school educational programs above and beyond the activities described above. N/A N/A N/A

On Track

At Least As Effective As **No**

WMP 2.2 School Education Programs

2013

School Education Programs

6300 Santa Clarita Water Division

Retail Only

Does a wholesale Agency implement School Education Programs? No

List of wholesale Agencies

Please provide the name of Agency if not FORTECH Group1 members

Castaic Lake Water Agency

V Materials meet state education framework requirements? Description: Curricula is tailored to state education guidelines in math, science and social studies

V Materials distributed to K-6 Students? Description: Curricula is tailored to state education guidelines in math, science and social studies

Number of students reached: 6634

V Materials distributed to 7-12 Students? (optional) Description: Pens, worksheets

Annual budget for school education program: 80000.00

Description of all other water supplier educationprograms: There are no school educational programs above and beyond the activities described above.

School Programs Activities

Classroom Presentation:

Number of presentation: 221 Number of attendees: 6634

Describe the topics covered in your classroom presentations: water conservation, water quality, water treatment

Large group assemblies:

Number of presentation: 0 Number of attendees: 0

Children's water festivals or other events:

Number of presentation: 0 Number of attendees: 0

Cooperative efforts with existing science/water education programs (various workshops, science fair awardsor judging) and follow-up:

Number of presentation: 0 Number of attendees: 0

Other methods of disseminating information (i.e. themed age-appropriate classroom loaner kits):

Description: 0 Number distributed: 0

Staffing children's booths at events & festivals:

Number of booths: 0 Number of attendees: 0

Water conservation contests such as poster and photo:

Description: 0 Number of participants: 0

Offer monetary awards/funding or scholarships to students:

WMP 2.2 School Education Programs

2013

Number offered	0	Total funding	0.00

Teacher training workshops:

Number of presentation	0	Number of attendees	0

Fund and/or staff student field trips to treatment facilities, recycling facilities, water conservation gardens,etc.:

Number of tours or fieldtrips	0	Number of participants	0

College internships in water conservation offered:

Number of internship	0	Total funding	0.00

Career Fairs / Workshops:

Number of presentation	0	Number of attendees	0

Additional program(s) supported by agency but not mentioned above:

Description	Number of events	Number of participants
N/A	0	0

Comments

CUWCC BMP Retail Coverage Report **2014**

Foundational Best Manegemant Practices for Urban Water Efficiency

Foundational BMPs

BMP 1.1 Operation Practices

6300 Santa Clarita Water Division

1. Conservation Coordinator provided with necessary resources to implement BMPs?

Name:	Quashaun Vallery
Title:	Water Conservation Technician
Email:	sccontemp@scwater.org

On Track

2. Water Waste Prevention Documents

WW Document Name	WWP File Name	WW Prevention URL	WW Prevention Ordinance Terms Description
Option A Describe the ordinances or terms of service adopted by your agency to meet the water waste prevention requirements of this BMP.			On July 14, 2015, the Castaic Lake Water Agency Board of Directors approved the Santa Clarita Water Division Ordinance No. 41 establishing Water Conservation and Water Supply Shortage Restrictions and Regulations.
Option B Describe any water waste prevention ordinances or requirements adopted by your local jurisdiction or regulatory agencies within your service area.			The City of Santa Clarita has a water waste ordinance.
Option C Describe any documentation of support for legislation or regulations that prohibit water waste.			
Option D Describe your agency efforts to cooperate with other entities in the adoption or enforcement of local requirements consistent with this BMP.			SCWD works with the City of Santa Clarita to implement the MS4 permit, which requires reduce water waste (in particular run-off).
Option E Describe your agency support positions with respect to adoption of legislation or regulations that are consistent with this BMP.			
Option F Describe your agency efforts to support local ordinances that establish permits requirements for water efficient design in new development.			SCWD works with the City of Santa Clarita to implement AB 1881, which includes requirements for water efficient design in new development.

On Track

CUWCC BMP Retail Coverage Report **2013**

Foundational Best Manegemant Practices for Urban Water Efficiency

Foundational BMPs

BMP 1.1 Operation Practices

6300 Santa Clarita Water Division

1. Conservation Coordinator provided with necessary resources to implement BMPs?

Name:	Quashaun Vallery
Title:	Water Conservation Technician
Email:	sccontemp@scwater.org

On Track

2. Water Waste Prevention Documents

WW Document Name	WWP File Name	WW Prevention URL	WW Prevention Ordinance Terms Description
Option A Describe the ordinances or terms of service adopted by your agency to meet the water waste prevention requirements of this BMP.			
Option B Describe any water waste prevention ordinances or requirements adopted by your local jurisdiction or regulatory agencies within your service area.			The City of Santa Clarita has a water waste ordinance.
Option C Describe any documentation of support for legislation or regulations that prohibit water waste.			
Option D Describe your agency efforts to cooperate with other entities in the adoption or enforcement of local requirements consistent with this BMP.			SCWD works with the City of Santa Clarita to implement the MS4 Permit, which requires reduce water waste (in particular run-off).
Option E Describe your agency support positions with respect to adoption of legislation or regulations that are consistent with this BMP.			
Option F Describe your agency efforts to support local ordinances that establish permits requirements for water efficient design in new development.			SCWD works with the City of Santa Clarita to implement AB 1881, which includes requirements for water efficient design in new development.

On Track

BMP1.1 Operation Practices - Retail Only 2014

Agency name:	Santa Clarita Water Division	Reporting unit number:	
Reporting unit name (District name)	Santa Clarita Water Division	6300	

Conservation Coordinator: **Yes**

Contact Information

First Name:	Quashaun
Last Name:	Vallery
Title:	Water Conservation Technician
Phone:	661-259-2737
Email:	sccontemp@scwater.org

Water Waste Prevention

Option A Describe the ordinances or terms of service adopted by your agency to meet the water waste prevention requirements of this BMP.

File Name:

URL:

Description:

On July 14, 2015, the Castaic Lake Water Agency Board of Directors approved the Santa Clarita Water Division Ordinance No. 41 establishing Water Conservation and Water Supply Shortage Restrictions and Regulations.

Comments:

BMP1.1 Operation Practices - Retail Only 2014

Agency name:	Santa Clarita Water Division	Reporting unit number:	
Reporting unit name (District name)	Santa Clarita Water Division		6300

Conservation Coordinator: **Yes**

Contact Information

First Name:	Quashaun
Last Name:	Vallery
Title:	Water Conservation Technician
Phone:	661-259-2737
Email:	sccontemp@scwater.org

Water Waste Prevention

Option B Describe any water waste prevention ordinances or requirements adopted by your local jurisdiction or regulatory agencies within your service area.

File Name:	
URL:	

Description:

The City of Santa Clarita has a water waste ordinance.

Comments:

BMP1.1 Operation Practices - Retail Only 2014

Agency name:	Santa Clarita Water Division	Reporting unit number:	
Reporting unit name (District name)	Santa Clarita Water Division	6300	

Conservation Coordinator: **Yes**

Contact Information

First Name:	Quashaun
Last Name:	Vallery
Title:	Water Conservation Technician
Phone:	661-259-2737
Email:	sccontemp@scwater.org

Water Waste Prevention

Option C Describe any documentation of support for legislation or regulations that prohibit water waste.

File Name:	
URL:	

Description:

Comments:

BMP1.1 Operation Practices - Retail Only 2014

Agency name:	Santa Clarita Water Division	Reporting unit number:	
Reporting unit name (District name)	Santa Clarita Water Division	6300	

Conservation Coordinator: **Yes**

Contact Information

First Name:	Quashaun
Last Name:	Vallery
Title:	Water Conservation Technician
Phone:	661-259-2737
Email:	sccontemp@scwater.org

Water Waste Prevention

Option D Describe your agency efforts to cooperate with other entities in the adoption or enforcement of local requirements consistent with this BMP.

File Name:

URL:

Description:

SCWD works with the City of Santa Clarita to implement the MS4 permit, which requires reduce water waste (in particular run-off).

Comments:

BMP1.1 Operation Practices - Retail Only 2014

Agency name:	Santa Clarita Water Division	Reporting unit number:	
Reporting unit name (District name)	Santa Clarita Water Division	6300	

Conservation Coordinator: **Yes**

Contact Information

First Name:	Quashaun
Last Name:	Vallery
Title:	Water Conservation Technician
Phone:	661-259-2737
Email:	sccontemp@scwater.org

Water Waste Prevention

Option E Describe your agency support positions with respect to adoption of legislation or regulations that are consistent with this BMP.

File Name:	
URL:	

Description:

Comments:

BMP1.1 Operation Practices - Retail Only 2014

Agency name:	Santa Clarita Water Division	Reporting unit number:	
Reporting unit name (District name)	Santa Clarita Water Division	6300	

Conservation Coordinator: **Yes**

Contact Information

First Name:	Quashaun
Last Name:	Vallery
Title:	Water Conservation Technician
Phone:	661-259-2737
Email:	sccontemp@scwater.org

Water Waste Prevention

Option F Describe your agency efforts to support local ordinances that establish permits requirements for water efficient design in new development.

File Name:

URL:

Description:

SCWD works with the City of Santa Clarita to implement AB 1881, which includes requirements for water efficient design in new development.

Comments:

CUWCC BMP Coverage Report 2014

Foundational Best Management Practices For Urban Water Efficiency

Foundational BMPs

BMP 1.2 Water Loss Control

6300 Santa Clarita Water Division

Completed Standard Water Audit Using AWWA Software?	**Yes**	**On Track**
AWWA File provided to CUWCC?	**No**	

Santa Clarita Water Division BMP1.2 FY14

AWWA Water Audit Validity Score?

Complete Training in AWWA Audit Method

Complete Training in Component Analysis Process?

CompComponent Analysis?

Repaired all leaks and breaks to the extent cost effective?

Locate and Repar unreported leaks to the extent cost effective?

Maintain a record keeping system for the repair of reported leaks, including time of report, leak location, type of leaking pipe segment or fitting, and leak running time from report to repair.

Provided 7 Types of Water Loss Control Info

Leaks Repars	Value Real Losses	Value Apparent Losses	Miles Surveyed	Press Reduction	Cost Of Interventions	Water Saved (AF)
153						

On Track

At Least As Effective As

In lieau of an active leak detection program, the City has opted to replace 1% of distribution system lines each year. Lines are replaced based on age and other asset management factors. Attached documentation shows the reduction in main breaks due to 6300 Santa Clarita Water Division BMP 1.2 Results from Main Replacement Program.

We encourage them every year to join.

BMP 1.2 Water Loss Control

2014

Agency name: Santa Clarita Water Division

Reporting unit number: 6300

Reporting unit name (District name): Santa Clarita Water Division

AWWA Water Audit

Agency to complete a Water Audit & Balance Using The AWWA Software: Yes

Water Audit Validity Score from AWWA spreadsheet: 81

Email to office@cuwcc.org - Worksheets (AWWA Water Audit). Enter the name of the file below:

Agency Completed Training In The AWWA Water Audit Method: Yes

Agency Completed Training In The Component Analysis Process: Yes

Completed/Updated the Component Analysis (at least every 4 years)? No

Component Analysis Completed/Updated Date:

Water Loss Performance

Agency Repaired All Reported Leaks & Breaks To The Extent Cost Effective: No

Recording Keeping Requirements:

- Date/Time Leak Reported
- Type of Leaking Pipe Segment or Fitting
- Leak Volume Estimate
- Leak Location
- Leak Running Time From Report to Repair
- Cost of Repair

Agency Located and Repaired Unreported Leaks to the Extent Cost Effective: Yes

Type of Program Activities Used to Detect Unreported Leaks

Customer service software flags unusual (abnormally high) usage and customer is contacted (and meter is checked).

Meter readers also call in potential unreported leaks.

Does your agency maintain in-house records of audit results or the completed AWWA worksheet for the completed audit which could be forwarded to CUWCC? No

Does your agency keeps records of each component analysis performed, and incorporates results into future annual standard water balances? Yes

Annual Summary Information

Complete the following table with annual summary information (required for reporting years 2-5 only)

Total Leak Repaired	Economic Value Of Real Loss	Economic Value Of Apparent Loss	Miles Of System Surveyed For Leaks	Pressure Reduction Undertaken For Loss Reduction	Cost Of Interventions	Water Saved (AF/Year)
153				V		

Comments:

CUWCC BMP Coverage Report 2014

Foundational Best Manegemant Practices for Urban Water Efficiency

Foundational BMPs

BMP 1.3 Metering With Commodity

6300	Santa Clarita Water Division

Numbered Unmetered Accounts	No	**On Track**
Metered Accounts billed by volume of use	Yes	**On Track**
Number of CII Accounts with Mixed Use Meters	40	
Conducted a feasibility study to assess merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters?	No	**Not On Track**
Feasibility Study provided to CUWCC?	No	**Not On Track**
Completed a written plan, policy or program to test, repair and replace meters	Yes	**On Track**

At Least As Effective As **No**

BMP 1.3 Metering With Commodity

2014

Agency name: Santa Clarita Water Division

Reporting unit number: 6300

Reporting unit name (District name): Santa Clarita Water Division

Implementation

Does your agency have any unmetered service connections? No

If YES, has your agency completed a meter retrofit plan? No

Enter the number of previously unmetered accounts fitted with meters during reporting year:

Are all new service connections being metered? Yes

Are all new service connections being billed volumetrically? Yes

Has your agency completed and submitted electronically to the Council a written plan, policy or program to test, repair and replace meters? Yes

Meters Matrix

Error: Subreport could not be shown.

Number of CII Accounts with Mixed-use Meters: 40

Number of CII Accounts with Mixed-use Meters Retrofitted with Dedicated Irrigation Meters during Reporting Period:

Feasibility Study

Has your agency conducted a feasibility study to assess the merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters? No

If YES, please fill in the following information:

A. When was the Feasibility Study conducted: 1/1/0001 12:00:00 AM

B. Describe, There are not many mixed-use meters within SCWD's service area. As such, conducting a study to assess the merits of a program to provide incentives to switch dual-use accounts to dedicated landscape meters is not feasible due to budgetary constraints

upload or provide an electronic link to the Feasibility Study Upload File

Comments:

CUWCC BMP Coverage Report 2014

Foundational Best Manegemant Practices for Urban Water Efficiency

Foundational BMPs

BMP 1.4 Retail Consrvation Pricing

6300 Santa Clarita Water Division

Implementation (Water Rate Structure)

Customer Class	Water Rate Type	Conserving Rate?
Single-Family	Increasing Block	Yes
Multi-Family	Uniform	Yes
Commercial	Uniform	Yes
Industrial	Uniform	Yes
Dedicated Irrigation	Uniform	Yes
Institutional	Uniform	Yes
Fire Lines	Other	No

On Track

	Customer Class	Water Rate Type	(V) Total Revenue Comodity Charges	(M) Total Revenue Fixed Carges
	Single-Family	Increasing Block	13519655.31	5725544.99
	Multi-Family	Uniform	2252821.04	954064.87
	Commercial	Uniform	867032.23	367186.29
	Industrial	Uniform	72706.59	30791.09
	Dedicated Irrigation	Uniform	4423981.65	1873546.73
	Institutional	Uniform	763974.05	323541.37
	Fire Lines	Other	251011.13	106302.67
			22151182	**9380978.01**

Calculate: V / (V + M) **70 %**

Implementation Option: Use Annual Revenue As Reported

Agency Provide Sewer Service: No

At Least As Effective As **No**

BMP 1.4 Retail Conservation Pricing

2014

Agency name: Santa Clarita Water Division

Reporting unit number: 6300

Reporting unit name (District name): Santa Clarita Water Division

Implementation (Water Rate Structure)

Enter the Water Rate Structures that are assigned to the majority of your customers, by customer class

Water Rate Name	Customer Class Name	Total Revenue Commodity Charges	Total Revenue Customer Meter/Service (Fixed Charges)	
Increasing Block	Single-Family	13519655.31	5725544.99	
Uniform	Multi-Family	2252821.04	954064.87	
Uniform	Commercial	867032.23	367186.29	
Uniform	Industrial	72706.59	30791.09	
Uniform	Dedicated Irrigation	4423981.65	1873546.73	
Uniform	Institutional	763974.05	323541.37	
Other	Fire Lines	251011.13	106302.67	

Implementation (Conservation Pricing Option)

- [V] Use Annual Revenue As Reported
- [ ] Use CWWA Rate Design Model
- [ ] Use 3 years average instead of most recent year

Retail Waste Water (Sewer) Rate Structure by Customer Class

Agency Provide Sewer Service: No

Select the Retail Waste Water (Sewer) Rate Structure assigned to the majority of your customers within a specific customer class.

Comments:

CUWCC BMP Coverage Report 2014

Foundational Best Manegemant Practices for Urban Water Efficiency

Foundational BMPs

BMP 2.1 Public Outreach

6300 Santa Clarita Water Division Retail Only

Does a wholesale Agency implement Public Outreach Programs? Yes

List of wholesale Agencies

	Agency Name	ID number
	Castaic Lake Water Agency	6278

	Public Outreach Program List	Number
	Newsletter articles on conservation	12
	Website	3
	Landscape water conservation media campaigns	5
	General water conservation information	60
	Total	**80**
		On Track

	Number Media Contacts	Number
	Written editorials	43
	Radio contacts	1
	Television contacts	1
	Total	**45**
		On Track

An actively maintained website that is updated regularly (minimum = 4 times per year, i.e., at least quarterly) Yes

	Annual Budget Category	Annual Budget Amount
	Drought Campaign	55000
	Total Amount:	**55000**
		On Track

Description of all other Public Outreach programs

1) Adoption of Ordinance No. 42 2) Report Water Waste Form 3)Conservation FAQs 4) Indoor and Outdoor water conservation tips

On Track

At Least As Effective As No

BMP 2.1 Public Outreach

2014

Agency name: Santa Clarita Water Division Reporting unit #: 6300

Reporting unit name (District name): Santa Clarita Water Division / Retail Only

Does a wholesale Agency implement Public Outreach Programs? Yes

List of wholesale Agencies — Please provide the name of Agency if not CUWCC Group1 members

Is your agency performing public outreach?

Report a minimum of 4 water conservation related contacts your agency had with the public during the year.

Did at least one contact take place duringeach quarter of the reporting year? No

Public Information Programs List

Number of Public Contacts	Public Information Programs Name	
12	Newsletter articles on conservation	
3	Website	
5	Landscape water conservation media campaigns	
60	General water conservation information	

Contact with the Media

Does a wholesale Agency implement Public Outreach Programs? Yes

List of wholesale Agencies — Please provide the name of Agency if not CUWCC Group1 members

OR Retail Agency (Contacts with the Media)

Did at least one contact take place during each quarter of the reporting year? No

Media Contacts List

Number of Media Contacts	Public Outreach Media Contact Name List	
43	Written editorials	
1	Radio contacts	
1	Television contacts	

Does a wholesale Agency implement Public Outreach Programs? No

List of wholesale Agencies — Please provide the name of Agency if not CUWCC Group1 members

Is Your Agency Performing Website Updates?

Enter your agency's URL (website address): www.scwater.org

BMP 2.1 Public Outreach

2014

Describe a minimum of four water conservationrelated updates to your agency's website thattook place during the year:	1) Adoption of Ordinance No. 42 2) Report Water Waste Form 3) Conservation FAQs 4) Indoor and Outdoor water conservation tips

Did at least one Website Update take place duringeach quarter of the reporting year? Yes

Public Outreach Annual Budget

Enter budget for public outreach programs. You may enter total budget in a single line or brake the budget into discretecategories by entering many rows. Please indicate if personnel costs are included in the entry.

Annual Budget Category	Annual Budget Amount	Personal Cost Included?	Comments	
Drought Campaign	55000			

Public Outreach Expenses

Enter expenses for public outreach programs. Please include the same kind of expenses you included in the question relatedto your budget (Section 2.1.7, above). For example, if you included personnel costs in the budget entered above, be sure to include them here as well.

Public Outreach Expense Category	Expense Amount	Personal Cost Included?	
Drought Campaign	97282		

Additional Public Information Program

Please report additional public information contacts. List these additional contacts in order of howyour agency views their importance / effectiveness with respect to conserving water, with the mostimportant/ effective listed first (where 1 = most important).

Were there additional Public Outreach efforts? Yes

Public Outreach Additional Information

Social Marketing Programs

Branding

Does your agency have a water conservation"brand," "theme" or mascot? No

Describe the brand, theme or mascot.

Market Research

Have you sponsored or participated inmarket research to refine your message? No

Market Research Topic

Brand Message

Brand Mission Statement

Community Committees

Do you have a community conservationcommittee? No

Enter the names of the community committees:

BMP 2.1 Public Outreach

2014

Training

Social Marketing Expenditures

Public Outreach Social Marketing Expenses

Partnering Programs - Partners

	Name	**Type of Program**
☐	CLCA?	
☐	Green Building Programs?	
☐	Master Gardeners?	
☐	Cooperative Extension?	
☐	Local Colleges?	
☐	Other	

☐ Retail and wholesale outlet; name(s) and type(s) of programs:

Partnering Programs - Newsletters

Number of newsletters per year	
Number of customers per year	

Partnering with Other Utilities

Describe other utilities your agency partners with, including electrical utilities	

Conservation Gardens

Describe water conservation gardens at your agency or other high traffic areas or new homes	

Landscape contests or awards

Describe water wise landscape contest or awards program conducted by your agency	
Additional Programs supported by Agency but not mentioned above:	

Comments

CUWCC BMP Coverage Report 2014

Foundational Best Manegemant Practices for Urban Water Efficiency

Foundational BMPs

BMP 2.2 School Education Programs

6300 Santa Clarita Water Division — Retail Only

Does a wholesale Agency implement School Education Programs? No

List of wholesale Agencies

Castaic Lake Water Agency

	Agencies Name	ID number
	Castaic Lake Water Agency	6278

Materials meet state education framework requirements and are grade-level appropriate? Yes

Curriculum materials developed and/or provided by Agency:

Curricula is tailored to state education guidelines in math, science and social studies.

Materials Distributed to K-6? Yes

Describe K-6 Materials

Curricula is tailored to state education guidelines in math, science and social studies.

Materials distributed to 7-12 students? Yes (Info Only)

Annual budget for school education program: 66500.00

Description of all other water supplier education programs

Curricula is tailored to state education guidelines in math, science and social studies. Curricula is tailored to state education guidelines in math, science and social studies. There are no school education programs above and beyond the activities described above. N/A N/A N/A

On Track

At Least As Effective As **No**

WMP 2.2 School Education Programs

2014

School Education Programs

6300 Santa Clarita Water Division

Does a wholesale Agency implement School Education Programs? No

List of wholesale Agencies

Castaic Lake Water Agency

	Agencies Name	ID number
	Castaic Lake Water Agency	6278

V Materials meet state education framework requirements? Description: Curricula is tailored to state education guidelines in math, science and social studies.

V Materials distributed to K-6 Students? Description: Curricula is tailored to state education guidelines in math, science and social studies.

Number of students reached: 4025

V Materials distributed to 7-12 Students? (optional) Description: Pens, Worksheets

Annual budget for school education program: 66500.00

Description of all other water supplier educationprograms: There are no school education programs above and beyond the activities described above.

School Programs Activities

Classroom Presentation:

Number of presentation: 220 Number of attendees: 4025

Describe the topics covered in your classroom presentations: water conservation, water quality, water treatment

Large group assemblies:

Number of presentation: 0 Number of attendees: 0

Children's water festivals or other events:

Number of presentation: 0 Number of attendees: 0

Cooperative efforts with existing science/water education programs (various workshops, science fair awardsor judging) and follow-up:

Number of presentation: 0 Number of attendees: 0

Other methods of disseminating information (i.e. themed age-appropriate classroom loaner kits):

Description: 0

Staffing children's booths at events & festivals:

Number of booths: 0 Number of attendees: 0

Water conservation contests such as poster and photo:

Description

WMP 2.2 School Education Programs

2014

Retail Only

Please provide the name of Agency
if not FORTECH Group1 members

Number distributed 0

Number of participants

WMP 2.2 School Education Programs

2014

0	0

Offer monetary awards/funding or scholarships to students:

Number offered	0	Total funding	0.00

Teacher training workshops:

Number of presentation	0	Number of attendees	0

Fund and/or staff student field trips to treatment facilities, recycling facilities, water conservation gardens,etc.:

Number of tours or fieldtrips	0	Number of participants	0

College internships in water conservation offered:

Number of internship	0	Total funding	0.00

Career Fairs / Workshops:

Number of presentation	0	Number of attendees	0

Additional program(s) supported by agency but not mentioned above:

Description	Number of events	Number of participants
N/A	0	0

Comments

VALENCIA WATER COMPANY

CUWCC BMP Retail Coverage Report **2013**

Foundational Best Manegemant Practices for Urban Water Efficiency

Foundational BMPs

BMP 1.1 Operation Practices

6301 Valencia Water Company

1. Conservation Coordinator provided with necessary resources to implement BMPs?

Name:	Matthew Dickens
Title:	Resource Conservation Manager
Email:	mdickens@valenciawater.com

On Track

2. Water Waste Prevention Documents

WW Document Name	WWP File Name	WW Prevention URL	WW Prevention Ordinance Terms Description
Option A Describe the ordinances or terms of service adopted by your agency to meet the water waste prevention requirements of this BMP.		http://www.valenciawater.com/service/tariffs.asp	Valencia Water Tariff #20, #14.1, and #11B(3)
Option B Describe any water waste prevention ordinances or requirements adopted by your local jurisdiction or regulatory agencies within your service area.		http://www.codepublishing.com/CA/SantaClarita/	City of Santa Clarita Municipal Code Chapter 9.38 - Water Conservation
Option C Describe any documentation of support for legislation or regulations that prohibit water waste.			
Option D Describe your agency efforts to cooperate with other entities in the adoption or enforcement of local requirements consistent with this BMP.			
Option E Describe your agency support positions with respect to adoption of legislation or regulations that are consistent with this BMP.			
Option F Describe your agency efforts to support local ordinances that establish permits requirements for water efficient design in new development.			

On Track

CUWCC BMP Retail Coverage Report **2014**

Foundational Best Manegemant Practices for Urban Water Efficiency

Foundational BMPs

BMP 1.1 Operation Practices

6301 Valencia Water Company

1. Conservation Coordinator provided with necessary resources to implement BMPs?

Name:	Matthew Dickens
Title:	Resource Conservation Manager
Email:	mdickens@valenciawater.com

On Track

2. Water Waste Prevention Documents

WW Document Name	WWP File Name	WW Prevention URL	WW Prevention Ordinance Terms Description
Option A Describe the ordinances or terms of service adopted by your agency to meet the water waste prevention requirements of this BMP.		http://www.valenciawater.com/service/tariffs.asp	Valencia Water Tariff #20, #14.1, and #11B(3)
Option B Describe any water waste prevention ordinances or requirements adopted by your local jurisdiction or regulatory agencies within your service area.		http://www.codepublishing.com/CA/SantaClarita/	City of Santa Clarita Municipal Code Chapter 9.38 - Water Conservation
Option C Describe any documentation of support for legislation or regulations that prohibit water waste.			
Option D Describe your agency efforts to cooperate with other entities in the adoption or enforcement of local requirements consistent with this BMP.			
Option E Describe your agency support positions with respect to adoption of legislation or regulations that are consistent with this BMP.			
Option F Describe your agency efforts to support local ordinances that establish permits requirements for water efficient design in new development.			

On Track

BMP1.1 Operation Practices - Retail Only 2013

Agency name:	Valencia Water Company	Reporting unit number:	
Reporting unit name (District name)	Valencia Water Company	6301	

Conservation Coordinator: **Yes**

Contact Information

First Name:	Matthew
Last Name:	Dickens
Title:	Resource Conservation Manager
Phone:	661-295-6543
Email:	mdickens@valenciawater.com

Water Waste Prevention

Option A Describe the ordinances or terms of service adopted by your agency to meet the water waste prevention requirements of this BMP.

File Name:	
URL:	http://www.valenciawater.com/service/tariffs.asp

Description:

Valencia Water Tariff #20, #14.1, and #11B(3)

Comments:

BMP1.1 Operation Practices - Retail Only 2013

Agency name:	Valencia Water Company	Reporting unit number:	
Reporting unit name (District name)	Valencia Water Company	6301	

Conservation Coordinator: **Yes**

Contact Information

First Name:	Matthew
Last Name:	Dickens
Title:	Resource Conservation Manager
Phone:	661-295-6543
Email:	mdickens@valenciawater.com

Water Waste Prevention

Option B Describe any water waste prevention ordinances or requirements adopted by your local jurisdiction or regulatory agencies within your service area.

File Name:	
URL:	http://www.codepublishing.com/CA/SantaClarita/

Description:

City of Santa Clarita Municipal Code Chapter 9.38 - Water Conservation

Comments:

BMP1.1 Operation Practices - Retail Only 2013

Agency name:	Valencia Water Company	Reporting unit number:	
Reporting unit name (District name)	Valencia Water Company	6301	

Conservation Coordinator: **Yes**

Contact Information

First Name:	Matthew
Last Name:	Dickens
Title:	Resource Conservation Manager
Phone:	661-295-6543
Email:	mdickens@valenciawater.com

Water Waste Prevention

Option C Describe any documentation of support for legislation or regulations that prohibit water waste.

File Name:	
URL:	

Description:

Comments:

BMP1.1 Operation Practices - Retail Only 2013

Agency name:	Valencia Water Company	Reporting unit number:	
Reporting unit name (District name)	Valencia Water Company	6301	

Conservation Coordinator: **Yes**

Contact Information

First Name:	Matthew
Last Name:	Dickens
Title:	Resource Conservation Manager
Phone:	661-295-6543
Email:	mdickens@valenciawater.com

Water Waste Prevention

Option D Describe your agency efforts to cooperate with other entities in the adoption or enforcement of local requirements consistent with this BMP.

File Name:	
URL:	

Description:

Comments:

BMP1.1 Operation Practices - Retail Only 2013

Agency name:	Valencia Water Company	Reporting unit number:	
Reporting unit name (District name)	Valencia Water Company	6301	

Conservation Coordinator: **Yes**

Contact Information

First Name:	Matthew
Last Name:	Dickens
Title:	Resource Conservation Manager
Phone:	661-295-6543
Email:	mdickens@valenciawater.com

Water Waste Prevention

Option E Describe your agency support positions with respect to adoption of legislation or regulations that are consistent with this BMP.

File Name:	
URL:	

Description:

Comments:

BMP1.1 Operation Practices - Retail Only 2013

Agency name:	Valencia Water Company	Reporting unit number:	
Reporting unit name (District name)	Valencia Water Company	6301	

Conservation Coordinator: **Yes**

Contact Information

First Name:	Matthew
Last Name:	Dickens
Title:	Resource Conservation Manager
Phone:	661-295-6543
Email:	mdickens@valenciawater.com

Water Waste Prevention

Option F Describe your agency efforts to support local ordinances that establish permits requirements for water efficient design in new development.

File Name:	
URL:	

Description:

Comments:

CUWCC BMP Coverage Report 2013

Foundational Best Management Practices For Urban Water Efficiency

Foundational BMPs

BMP 1.2 Water Loss Control

6301 Valencia Water Company

Completed Standard Water Audit Using AWWA Software?	**Yes**	**On Track**
AWWA File provided to CUWCC?	**No**	

Valencia Water Company BMP1.2 FY13

AWWA Water Audit Validity Score?

Complete Training in AWWA Audit Method

Complete Training in Component Analysis Process?

CompComponent Analysis?

Repaired all leaks and breaks to the extent cost effective?

Locate and Repar unreported leaks to the extent cost effective?

Maintain a record keeping system for the repair of reported leaks, including time of report, leak location, type of leaking pipe segment or fitting, and leak running time from report to repair.

Provided 7 Types of Water Loss Control Info

Leaks Repars	Value Real Losses	Value Apparent Losses	Miles Surveyed	Press Reduction	Cost Of Interventions	Water Saved (AF)
182	391987	111973	0			60

On Track

At Least As Effective As

In lieau of an active leak detection program, the City has opted to replace 1% of distribution system lines each year. Lines are replaced based on age and other asset management factors. Attached documentation shows the reduction in main breaks due to 6301 Valencia Water Company BMP 1.2 Results from Main Replacement Program.

We encourage them every year to join.

BMP 1.2 Water Loss Control

2013

Agency name: Valencia Water Company

Reporting unit number: 6301

Reporting unit name (District name): Valencia Water Company

AWWA Water Audit

Agency to complete a Water Audit & Balance Using The AWWA Software: Yes

Water Audit Validity Score from AWWA spreadsheet: 89

Email to office@cuwcc.org - Worksheets (AWWA Water Audit). Enter the name of the file below:

Agency Completed Training In The AWWA Water Audit Method: Yes

Agency Completed Training In The Component Analysis Process: Yes

Completed/Updated the Component Analysis (at least every 4 years)? Yes

Component Analysis Completed/Updated Date: 10/10/2014 12:00:00 AM

Water Loss Performance

Agency Repaired All Reported Leaks & Breaks To The Extent Cost Effective: No

Recording Keeping Requirements:

- Date/Time Leak Reported
- Type of Leaking Pipe Segment or Fitting
- Leak Volume Estimate
- Leak Location
- Leak Running Time From Report to Repair
- Cost of Repair

Agency Located and Repaired Unreported Leaks to the Extent Cost Effective: Yes

Type of Program Activities Used to Detect Unreported Leaks

VWC's overall water dlivery system is relatively new with a weighted average plant in service life of 11 years. A newer system, VWC does not have a high number of leak events. We conduct daily inspections of wells, pumps, tanks and critical valves.

Does your agency maintain in-house records of audit results or the completed AWWA worksheet for the completed audit which could be forwarded to CUWCC? No

Does your agency keeps records of each component analysis performed, and incorporates results into future annual standard water balances? Yes

Annual Summary Information

Complete the following table with annual summary information (required for reporting years 2-5 only)

Total Leak Repaired	Economic Value Of Real Loss	Economic Value Of Apparent Loss	Miles Of System Surveyed For Leaks	Pressure Reduction Undertaken For Loss Reduction	Cost Of Interventions	Water Saved (AF/Year)
182	391987	111973	0			60

Comments:

CUWCC BMP Coverage Report 2013

Foundational Best Manegemant Practices for Urban Water Efficiency

Foundational BMPs

BMP 1.3 Metering With Commodity

6301	Valencia Water Company

Numbered Unmetered Accounts	No	**On Track**
Metered Accounts billed by volume of use	Yes	**On Track**
Number of CII Accounts with Mixed Use Meters	1278	
Conducted a feasibility study to assess merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters?	No	**Not On Track**
Feasibility Study provided to CUWCC?	No	**Not On Track**
Completed a written plan, policy or program to test, repair and replace meters	Yes	**On Track**

At Least As Effective As **No**

BMP 1.3 Metering With Commodity

2013

Agency name:	Valencia Water Company	Reporting unit number:	
Reporting unit name (District name)	Valencia Water Company	6301	

Implementation

Does your agency have any unmetered service connections?	No
If YES, has your agency completed a meter retrofit plan?	No
Enter the number of previously unmetered accounts fitted with meters during reporting year:	
Are all new service connections being metered?	Yes
Are all new service connections being billed volumetrically?	Yes
Has your agency completed and submitted electronically to the Council a written plan, policy or program to test, repair and replace meters?	Yes

Meters Matrix

Error: Subreport could not be shown.

Number of CII Accounts with Mixed-use Meters	1278	Number of CII Accounts with Mixed-use Meters Retrofitted with Dedicated Irrigation Meters during Reporting Period	7

Feasibility Study

Has your agency conducted a feasibility study to assess the merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters? No

If YES, please fill in the following information:

A. When was the Feasibility Study conducted	3/31/2008 12:00:00 AM	B. Describe,	VWC found that the installation of an irrigation sub-meter on mixed use accounts is usually less costly (no pavement cuts) and still enables the customer to monitor their irrigation usage.
		upload or provide an electronic link to the Feasibility Study Upload File	

Comments:

#MR/Y: SF:321,504; MF:4,032; COM:10,068; IND: 4,536; INS: 732; DED: 15,456; OTHER: 528; RECYC: 168

CUWCC BMP Coverage Report 2013

Foundational Best Manegemant Practices for Urban Water Efficiency

Foundational BMPs

BMP 1.4 Retail Consrvation Pricing

6301 Valencia Water Company

Implementation (Water Rate Structure)

Customer Class	Water Rate Type	Conserving Rate?
Single-Family	Allocation Based	Yes
Dedicated Irrigation	Allocation Based	Yes
Commercial	Uniform	Yes
Industrial	Uniform	Yes
Institutional	Uniform	Yes
Multi-Family	Uniform	Yes
Other	Uniform	Yes

On Track

	Customer Class	Water Rate Type	(V) Total Revenue Comodity Charges	(M) Total Revenue Fixed Carges
	Single-Family	Allocation Based	9255499.82	3811875.26
	Dedicated Irrigation	Allocation Based	6001101.57	1002428.87
	Commercial	Uniform	2484587.35	636772.52
	Industrial	Uniform	996706.15	302015.86
	Institutional	Uniform	434687.68	98476.4
	Multi-Family	Uniform	975148.33	363448.67
	Other	Uniform	60677.37	41235.57
			20208408.27	**6256253.15**

Calculate: V / (V + M) **76 %**

Implementation Option: Use Annual Revenue As Reported

Agency Provide Sewer Service: No

At Least As Effective As **No**

BMP 1.4 Retail Conservation Pricing

2013

Agency name: Valencia Water Company

Reporting unit number: 6301

Reporting unit name (District name): Valencia Water Company

Implementation (Water Rate Structure)

Enter the Water Rate Structures that are assigned to the majority of your customers, by customer class

Water Rate Name	Customer Class Name	Total Revenue Commodity Charges	Total Revenue Customer Meter/Service (Fixed Charges)	
Allocation Based	Single-Family	9255499.82	3811875.26	
Allocation Based	Dedicated Irrigation	6001101.57	1002428.87	
Uniform	Commercial	2484587.35	636772.52	
Uniform	Industrial	996706.15	302015.86	
Uniform	Institutional	434687.68	98476.4	
Uniform	Multi-Family	975148.33	363448.67	
Uniform	Other	60677.37	41235.57	

Implementation (Conservation Pricing Option)

[V] Use Annual Revenue As Reported

[ ] Use CWWA Rate Design Model

[ ] Use 3 years average instead of most recent year

Retail Waste Water (Sewer) Rate Structure by Customer Class

Agency Provide Sewer Service: No

Select the Retail Waste Water (Sewer) Rate Structure assigned to the majority of your customers within a specific customer class.

Comments:

CUWCC BMP Coverage Report 2013

Foundational Best Manegemant Practices for Urban Water Efficiency

Foundational BMPs

BMP 2.1 Public Outreach

6301 Valencia Water Company Retail Only

Does a wholesale Agency implement Public Outreach Programs? Yes

List of wholesale Agencies

	Agency Name	ID number
	Castaic Lake Water Agency	6278

	Public Outreach Program List	Number
	Flyers and/or brochures (total copies), bill stuffers, messages printed on bill, information packets	8
	Website	5
	General water conservation information	3
	Total	**16**
		On Track

	Number Media Contacts	Number
	News releases	2
	Newspaper contacts	4
	Total	**6**
		On Track

An actively maintained website that is updated regularly (minimum = 4 times per year, i.e., at least quarterly) Yes

	Annual Budget Category	Annual Budget Amount
	Public Information Programs	26000
	Total Amount:	**26000**
		On Track

Description of all other Public Outreach programs

Irrigation Solutions/HELIUM Rebates
High Efficiency Toilet Rebates
High Efficiency Washer Rebates
Conservation Workshops

On Track

Public Outreah Additional Programs
Letters to High Consumption Customers

At Least As Effective As **No**

CUWCC BMP Coverage Report 2013

Foundational Best Manegemant Practices for Urban Water Efficiency

Foundational BMPs

BMP 2.1 Public Outreach

BMP 2.1 Public Outreach

2013

Agency name: Valencia Water Company | Reporting unit # 6301

Reporting unit name (District name): Valencia Water Company / Retail Only

Does a wholesale Agency implement Public Outreach Programs? Yes

List of wholesale Agencies — Please provide the name of Agency if not CUWCC Group1 members

Castaic Lake Water Agency

Is your agency performing public outreach?

Report a minimum of 4 water conservation related contacts your agency had with the public during the year.

Did at least one contact take place duringeach quarter of the reporting year? Yes

Public Information Programs List

Number of Public Contacts	Public Information Programs Name	
8	Flyers and/or brochures (total copies), bill stuffers, messages printed on bill, information packets	
5	Website	
3	General water conservation information	

Contact with the Media

Does a wholesale Agency implement Public Outreach Programs? Yes

List of wholesale Agencies — Please provide the name of Agency if not CUWCC Group1 members

Castaic Lake Water Agency

OR Retail Agency (Contacts with the Media)

Did at least one contact take place during each quarter of the reporting year? Yes

Media Contacts List

Number of Media Contacts	Public Outreach Media Contact Name List	
2	News releases	
4	Newspaper contacts	

Does a wholesale Agency implement Public Outreach Programs? No

List of wholesale Agencies — Please provide the name of Agency if not CUWCC Group1 members

Castaic Lake Water Agency

Is Your Agency Performing Website Updates?

Enter your agency's URL (website address): www.valenciawater.com

Describe a minimum of four water conservationrelated updates to your agency's website thattook place during the year:

Irrigation Solutions/HELIUM Rebates
High Efficiency Toilet Rebates
High Efficiency Washer Rebates
Conservation Workshops

BMP 2.1 Public Outreach

2013

Did at least one Website Update take place duringeach quarter of the reporting year? Yes

Public Outreach Annual Budget

Enter budget for public outreach programs. You may enter total budget in a single line or brake the budget into discretecategories by entering many rows. Please indicate if personnel costs are included in the entry.

Annual Budget Category	Annual Budget Amount	Personal Cost Included?	Comments	
Public Information Programs	26000			

Public Outreach Expenses

Enter expenses for public outreach programs. Please include the same kind of expenses you included in the question relatedto your budget (Section 2.1.7, above). For example, if you included personnel costs in the budget entered above, be sure to include them here as well.

Public Outreach Expense Category	Expense Amount	Personal Cost Included?	
Promotional Materials	22702		

Additional Public Information Program

Please report additional public information contacts. List these additional contacts in order of howyour agency views their importance / effectiveness with respect to conserving water, with the mostimportant/ effective listed first (where 1 = most important).

Were there additional Public Outreach efforts? Yes

Public Outreach Additional Information

Public Information Additional Programs	Importance	
Letters to High Consumption Customers	1	

Social Marketing Programs

Branding

Does your agency have a water conservation"brand," "theme" or mascot? Yes

Describe the brand, theme or mascot. The WaterSmart Allocation and Tiered Rate Program is a fair and equitable method of providing residents an amount of water calculated to efficiently meet their specific needs.

Market Research

Have you sponsored or participated inmarket research to refine your message? Yes

Market Research Topic: Focus groups to evaluate customer attitudes on water budgets and water conservation

Brand Message:

Brand Mission Statement:

Community Committees

Do you have a community conservationcommittee? Yes

BMP 2.1 Public Outreach

2013

Enter the names of the community committees: Santa Clarita Valley Family of Water Suppliers

Training

Training Type	Number of Trainings	Number of Attendees	Description of Other	
3	14	201	Irrigation & Garden Care Workshops	

Social Marketing Expenditures

Public Outreach Social Marketing Expenses

Partnering Programs - Partners

	Name	**Type of Program**
	CLCA?	
	Green Building Programs?	
	Master Gardeners?	
	Cooperative Extension?	
	Local Colleges?	
V	Other	EPA WaterSense Promotional Partner

Retail and wholesale outlet; name(s) and type(s) of programs:

Partnering Programs - Newsletters

Number of newsletters per year

Number of customers per year

Partnering with Other Utilities

Describe other utilities your agency partners with, including electrical utilities: Santa Clarita Valley Family of Water Suppliers includes 4 local water retailers, the water wholesaler, and the City of Santa Clarita

Conservation Gardens

Describe water conservation gardens at your agency or other high traffic areas or new homes: Castaic Lake Water Agency Demonstration Garden is a seven acre garden demonstrating irrigation systems, plants and plant groupings that are appropriate to water-conserving landscapes in the local community.

Landscape contests or awards

Describe water wise landscape contest or awards program conducted by your agency

Additional Programs supported by Agency but not mentioned above:

Comments

BMP 2.1 Public Outreach

2013

CUWCC BMP Coverage Report 2013

Foundational Best Manegemant Practices for Urban Water Efficiency

Foundational BMPs

BMP 2.2 School Education Programs

6301 Valencia Water Company — Retail Only

Does a wholesale Agency implement School Education Programs? No

List of wholesale Agencies

Castaic Lake Water Agency

	Agencies Name	ID number
	Castaic Lake Water Agency	6278

Materials meet state education framework requirements and are grade-level appropriate? Yes

Curriculum materials developed and/or provided by Agency:

This educational program features interactive student activities that present interesting and age appropriate water treatment and conservation topics. The curriculum is regularly updated to ensure that it meets state education criteria.

Materials Distributed to K-6? Yes

Describe K-6 Materials

Age appropriate materials cover science, social studies, and math as they relate to water, water quality, water use efficiency and water supply issues by means of in-class presentations and hands-on field trips.

Materials distributed to 7-12 students? Yes (Info Only)

Annual budget for school education program: 0.00

Description of all other water supplier education programs

This educational program features interactive student activities that present interesting and age appropriate water treatment and conservation topics. The curriculum is regularly updated to ensure that it meets state education criteria. Age appropriate materials cover science, social studies, and math as they relate to water, water quality, water use efficiency and water supply issues by means of in-class presentations and hands-on field trips. In 2013, 201 customers participated in the Irrigation and Garden Care Workshops.

On Track

At Least As Effective As **No**

WMP 2.2 School Education Programs

2013

School Education Programs

6301 Valencia Water Company

Does a wholesale Agency implement School Education Programs? No

List of wholesale Agencies

Castaic Lake Water Agency

	Agencies Name	ID number
	Castaic Lake Water Agency	6278

V Materials meet state education framework requirements? Description: This educational program features interactive student activities that present interesting and age appropriate water treatment and conservation topics. The curriculum is regularly updated to ensure that it meets state education criteria.

V Materials distributed to K-6 Students? Description: Age appropriate materials cover science, social studies, and math as they relate to water, water quality, water use efficiency and water supply issues by means of in-class presentations and hands-on field trips.

Number of students reached: 5141

V Materials distributed to 7-12 Students? (optional) Description: Age appropriate materials cover science, social studies, and math as they relate to water, water quality, water use efficiency and water supply issues by means of in-class presentations and hands-on field trips.

Annual budget for school education program: 0.00

Description of all other water supplier educationprograms: In 2013, 201 customers participated in the Irrigation and Garden Care Workshops.

School Programs Activities

Classroom Presentation:

Number of presentation: Number of attendees:

Describe the topics covered in your classroom presentations:

Large group assemblies:

Number of presentation: Number of attendees:

Children's water festivals or other events:

Number of presentation: Number of attendees:

Cooperative efforts with existing science/water education programs (various workshops, science fair awardsor judging) and follow-up:

Number of presentation: Number of attendees:

Other methods of disseminating information (i.e. themed age-appropriate classroom loaner kits):

Description:

Staffing children's booths at events & festivals:

WMP 2.2 School Education Programs

2013

Retail Only

Please provide the name of Agency
if not FORTECH Group1 members

Number distributed

WMP 2.2 School Education Programs

2013

Number of booths | Number of attendees

Water conservation contests such as poster and photo:

Description | Number of participants

Offer monetary awards/funding or scholarships to students:

Number offered | Total funding

Teacher training workshops:

Number of presentation | Number of attendees

Fund and/or staff student field trips to treatment facilities, recycling facilities, water conservation gardens,etc.:

Number of tours or fieldtrips | Number of participants

College internships in water conservation offered:

Number of internship | Total funding

Career Fairs / Workshops:

Number of presentation | Number of attendees

Additional program(s) supported by agency but not mentioned above:

Description	Number of events	Number of participants

Comments

CUWCC BMP Retail Coverage Report 2013

Foundational Best Managemant Practices for Urban Water Efficiency

BMP 1.1 Operation Practices

ON TRACK

6301 Valencia Water Company

1. Conservation Coordinator provided with necessary resources to implement BMPs?

Name: Matthew Dickens

Title: Resource Conservation Manager

Email: mdickens@valenciawater.com

2. Water Waste Prevention Documents

WW Document Name	WWP File Name	WW Prevention URL	WW Prevention Ordinance Terms Description
Option A Describe the ordinances or terms of service adopted by your agency to meet the water waste prevention requirements of this BMP.		http://www.valenciawater.com/service/tariffs.asp	Valencia Water Tariff #20, #14.1, and #11B(3)
Option B Describe any water waste prevention ordinances or requirements adopted by your local jurisdiction or regulatory agencies within your service area.		http://www.codepublishing.com/CA/SantaClarita/	City of Santa Clarita Municipal Code Chapter 9.38 - Water Conservation
Option C Describe any documentation of support for legislation or regulations that prohibit water waste.			
Option D Describe your agency efforts to cooperate with other entities in the adoption or enforcement of local requirements consistent with this BMP.			
Option E Describe your agency support positions with respect to adoption of legislation or regulations that are consistent with this BMP.			
Option F Describe your agency efforts to support local ordinances that establish permits requirements for water efficient design in new development.			

At Least As effective As No

Exemption No

Comments:

CUWCC BMP Retail Coverage Report 2013

Foundational Best Managemant Practices for Urban Water Efficiency

BMP 1.1 Operation Practices **ON TRACK**

CUWCC BMP Coverage Report 2013

Foundational Best Management Practices For Urban Water Efficiency

BMP 1.2 Water Loss Control **ON TRACK**

6301 Valencia Water Company

Completed Standard Water Audit Using AWWA Software?	Yes
AWWA File provided to CUWCC?	Yes
2013 AWWA M36 Software Valencia Water Company.xls	
AWWA Water Audit Validity Score?	89
Complete Training in AWWA Audit Method	Yes
Complete Training in Component Analysis Process?	Yes
Component Analysis?	Yes
Repaired all leaks and breaks to the extent cost effective?	Yes
Locate and Repar unreported leaks to the extent cost effective?	Yes
Maintain a record keeping system for the repair of reported leaks, including time of report, leak location, type of leaking pipe segment or fitting, and leak running time from report to repair.	Yes

Provided 7 Types of Water Loss Control Info

Leaks Repairs	Value Real Losses	Value Apparent Losses	Miles Surveyed	Press Reduction	Cost Of Interventions	Water Saved (AF)
182	391987	111970	0	False		60

At Least As effective As No

Exemption No

Comments:

CUWCC BMP Coverage Report 2013

Foundational Best Management Practices For Urban Water Efficiency

BMP 1.3 Metering With Commodity

ON TRACK

6301 Valencia Water Company

Numbered Unmetered Accounts	No
Metered Accounts billed by volume of use	Yes
Number of CII Accounts with Mixed Use Meters	1278
Conducted a feasibility study to assess merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters?	Yes
Feasibility Study provided to CUWCC?	Yes

Date: 3/31/2008

Uploaded file name:

Completed a written plan, policy or program to test, repair and replace meters	Yes

At Least As effective As No

Exemption No

Comments:

#MR/Y: SF:321,504; MF:4,032; COM:10,068; IND: 4,536; INS: 732; DED: 15,456; OTHER: 528; RECYC: 168

CUWCC BMP Coverage Report 2013

Foundational Best Management Practices For Urban Water Efficiency

BMP 1.4 Retail Conservation Pricing

On Track

6301 Valencia Water Company

Implementation (Water Rate Structure)

Customer Class	Water Rate Type	Conserving Rate?	(V) Total Revenue Comodity Charges	(M) Total Revenue Fixed Carges
Single-Family	Allocation Based	Yes	9255499.82	3811875.26
Dedicated Irrigation	Allocation Based	Yes	6001101.57	1002428.87
Commercial	Uniform	Yes	2484587.35	636772.52
Industrial	Uniform	Yes	996706.15	302015.86
Institutional	Uniform	Yes	434687.68	98476.4
Multi-Family	Uniform	Yes	975148.33	363448.67
Other	Uniform	Yes	60677.37	41235.57
			20208408.27	**6256253.15**

Calculate: V / (V + M) **76 %**

Implementation Option: Use Annual Revenue As Reported

☐ Use 3 years average instead of most recent year

Canadian Water and Wastewater Association

Upload file:

Agency Provide Sewer Service: No

At Least As effective As No

Exemption No

Comments:

CUWCC BMP Coverage Report 2013

Foundational Best Management Practices For Urban Water Efficiency

BMP 2.1 Public Outreach

ON TRACK

6301 Valencia Water Company **Retail**

Does your agency perform Public Outreach programs? Yes

The list of wholesale agencies performing public outreach which can be counted to help the agency comply with the BMP

Castaic Lake Water Agency

Agency Name	ID number
Castaic Lake Water Agency	6278

The name of agency, contact name and email address if not CUWCC Group 1 members

Did at least one contact take place during each quater of the reporting year? Yes

Public Outreach Program List	Number
Flyers and/or brochures (total copies), bill stuffers, messages printed on bill, information packets	8
Website	5
General water conservation information	3
Total	**16**

Did at least one contact take place during each quater of the reporting year? Yes

Number Media Contacts	Number
News releases	2
Newspaper contacts	4
Total	**6**

Did at least one website update take place during each quater of the reporting year? Yes

Public Information Program Annual Budget

Annual Budget Category	Annual Budget Amount
Public Information Programs	26000
Total Amount:	**26000**

Public Outreah Additional Programs
Letters to High Consumption Customers

Description of all other Public Outreach programs

EPA WaterSense Promotional Partner

Comments:

CUWCC BMP Coverage Report 2013

Foundational Best Management Practices For Urban Water Efficiency

BMP 2.1 Public Outreach

ON TRACK

At Least As effective As	No	
Exemption	No	0

CUWCC BMP Coverage Report 2013

Foundational Best Management Practices For Urban Water Efficiency

BMP 2.2 School Education Programs

ON TRACK

6301 Valencia Water Company **Retail**

Does your agency implement School Education programs? No

The list of wholesale agencies performing public outreach which can be counted to help the agency comply with the BMP

Castaic Lake Water Agency

Agencies Name	ID number
Castaic Lake Water Agency	6278

Materials meet state education framework requirements? Yes

This educational program features interactive student activities that present interesting and age appropriate water treatment and conservation topics. The curriculum is regularly updated to ensure that it meets state education criteria.

Materials distributed to K-6? Yes

Age appropriate materials cover science, social studies, and math as they relate to water, water quality, water use efficiency and water supply issues by means of in-class presentations and hands-on field trips.

Materials distributed to 7-12 students? Yes (Info Only)

Age appropriate materials cover science, social studies, and math as they relate to water, water quality, water use efficiency and water supply issues by means of in-class presentations and hands-on field trips.

Annual budget for school education program: 0.00

Description of all other water supplier education programs

In 2013, 201 customers participated in the Irrigation and Garden Care Workshops.

Comments:

At Least As effective As No

Exemption No 0

CUWCC BMP Retail Coverage Report **2014**

Foundational Best Manegemant Practices for Urban Water Efficiency

Foundational BMPs

BMP 1.1 Operation Practices

6301 Valencia Water Company

1. Conservation Coordinator provided with necessary resources to implement BMPs?

Name:	Matthew Dickens
Title:	Resource Conservation Manager
Email:	mdickens@valenciawater.com

On Track

2. Water Waste Prevention Documents

WW Document Name	WWP File Name	WW Prevention URL	WW Prevention Ordinance Terms Description
Option A Describe the ordinances or terms of service adopted by your agency to meet the water waste prevention requirements of this BMP.		http://www.valenciawater.com/service/tariffs.asp	Valencia Water Tariff #20, #14.1, and #11B(3)
Option B Describe any water waste prevention ordinances or requirements adopted by your local jurisdiction or regulatory agencies within your service area.		http://www.codepublishing.com/CA/SantaClarita/	City of Santa Clarita Municipal Code Chapter 9.38 - Water Conservation
Option C Describe any documentation of support for legislation or regulations that prohibit water waste.			
Option D Describe your agency efforts to cooperate with other entities in the adoption or enforcement of local requirements consistent with this BMP.			
Option E Describe your agency support positions with respect to adoption of legislation or regulations that are consistent with this BMP.			
Option F Describe your agency efforts to support local ordinances that establish permits requirements for water efficient design in new development.			

On Track

BMP1.1 Operation Practices - Retail Only 2014

Agency name:	Valencia Water Company	Reporting unit number:	
Reporting unit name (District name)	Valencia Water Company	6301	

Conservation Coordinator: **Yes**

Contact Information

First Name:	Matthew
Last Name:	Dickens
Title:	Resource Conservation Manager
Phone:	661-295-6543
Email:	mdickens@valenciawater.com

Water Waste Prevention

Option A Describe the ordinances or terms of service adopted by your agency to meet the water waste prevention requirements of this BMP.

File Name:	
URL:	http://www.valenciawater.com/service/tariffs.asp

Description:

Valencia Water Tariff #20, #14.1, and #11B(3)

Comments:

BMP1.1 Operation Practices - Retail Only 2014

Agency name:	Valencia Water Company	Reporting unit number:	
Reporting unit name (District name)	Valencia Water Company	6301	

Conservation Coordinator: **Yes**

Contact Information

First Name:	Matthew
Last Name:	Dickens
Title:	Resource Conservation Manager
Phone:	661-295-6543
Email:	mdickens@valenciawater.com

Water Waste Prevention

Option B Describe any water waste prevention ordinances or requirements adopted by your local jurisdiction or regulatory agencies within your service area.

File Name:	
URL:	http://www.codepublishing.com/CA/SantaClarita/

Description:

City of Santa Clarita Municipal Code Chapter 9.38 - Water Conservation

Comments:

BMP1.1 Operation Practices - Retail Only 2014

Agency name:	Valencia Water Company	Reporting unit number:	
Reporting unit name (District name)	Valencia Water Company	6301	

Conservation Coordinator: **Yes**

Contact Information

First Name:	Matthew
Last Name:	Dickens
Title:	Resource Conservation Manager
Phone:	661-295-6543
Email:	mdickens@valenciawater.com

Water Waste Prevention

Option C Describe any documentation of support for legislation or regulations that prohibit water waste.

File Name:	
URL:	

Description:

Comments:

BMP1.1 Operation Practices - Retail Only 2014

Agency name:	Valencia Water Company	Reporting unit number:	
Reporting unit name (District name)	Valencia Water Company	6301	

Conservation Coordinator: **Yes**

Contact Information

First Name:	Matthew
Last Name:	Dickens
Title:	Resource Conservation Manager
Phone:	661-295-6543
Email:	mdickens@valenciawater.com

Water Waste Prevention

Option D Describe your agency efforts to cooperate with other entities in the adoption or enforcement of local requirements consistent with this BMP.

File Name:	
URL:	

Description:

Comments:

BMP1.1 Operation Practices - Retail Only 2014

Agency name:	Valencia Water Company	Reporting unit number:	
Reporting unit name (District name)	Valencia Water Company	6301	

Conservation Coordinator: **Yes**

Contact Information

First Name:	Matthew
Last Name:	Dickens
Title:	Resource Conservation Manager
Phone:	661-295-6543
Email:	mdickens@valenciawater.com

Water Waste Prevention

Option E Describe your agency support positions with respect to adoption of legislation or regulations that are consistent with this BMP.

File Name:	
URL:	

Description:

Comments:

BMP1.1 Operation Practices - Retail Only 2014

Agency name:	Valencia Water Company	Reporting unit number:	
Reporting unit name (District name)	Valencia Water Company	6301	

Conservation Coordinator: **Yes**

Contact Information

First Name:	Matthew
Last Name:	Dickens
Title:	Resource Conservation Manager
Phone:	661-295-6543
Email:	mdickens@valenciawater.com

Water Waste Prevention

Option F Describe your agency efforts to support local ordinances that establish permits requirements for water efficient design in new development.

File Name:	
URL:	

Description:

Comments:

CUWCC BMP Coverage Report 2014

Foundational Best Management Practices For Urban Water Efficiency

Foundational BMPs

BMP 1.2 Water Loss Control

6301 Valencia Water Company

Completed Standard Water Audit Using AWWA Software?	**Yes**	**On Track**
AWWA File provided to CUWCC?	**No**	

Valencia Water Company BMP1.2 FY14

AWWA Water Audit Validity Score?	
Complete Training in AWWA Audit Method	
Complete Training in Component Analysis Process?	
CompComponent Analysis?	
Repaired all leaks and breaks to the extent cost effective?	
Locate and Repar unreported leaks to the extent cost effective?	
Maintain a record keeping system for the repair of reported leaks, including time of report, leak location, type of leaking pipe segment or fitting, and leak running time from report to repair.	

Provided 7 Types of Water Loss Control Info

Leaks Repars	Value Real Losses	Value Apparent Losses	Miles Surveyed	Press Reduction	Cost Of Interventions	Water Saved (AF)

On Track

At Least As Effective As

In lieau of an active leak detection program, the City has opted to replace 1% of distribution system lines each year. Lines are replaced based on age and other asset management factors. Attached documentation shows the reduction in main breaks due to 6301 Valencia Water Company BMP 1.2 Results from Main Replacement Program.

We encourage them every year to join.

CUWCC BMP Coverage Report 2014

Foundational Best Manegemant Practices for Urban Water Efficiency

Foundational BMPs

BMP 1.3 Metering With Commodity

6301	Valencia Water Company

Numbered Unmetered Accounts	No	**On Track**
Metered Accounts billed by volume of use	Yes	**On Track**
Number of CII Accounts with Mixed Use Meters	1293	
Conducted a feasibility study to assess merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters?	No	**Not On Track**
Feasibility Study provided to CUWCC?	No	**Not On Track**
Completed a written plan, policy or program to test, repair and replace meters	Yes	**On Track**

At Least As Effective As **No**

BMP 1.3 Metering With Commodity

2014

Agency name:	Valencia Water Company	Reporting unit number:	
Reporting unit name (District name)	Valencia Water Company	6301	

Implementation

Does your agency have any unmetered service connections?	No
If YES, has your agency completed a meter retrofit plan?	No
Enter the number of previously unmetered accounts fitted with meters during reporting year:	
Are all new service connections being metered?	Yes
Are all new service connections being billed volumetrically?	Yes
Has your agency completed and submitted electronically to the Council a written plan, policy or program to test, repair and replace meters?	Yes

Meters Matrix

Error: Subreport could not be shown.

Number of CII Accounts with Mixed-use Meters	1293	Number of CII Accounts with Mixed-use Meters Retrofitted with Dedicated Irrigation Meters during Reporting Period	7

Feasibility Study

Has your agency conducted a feasibility study to assess the merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters? No

If YES, please fill in the following information:

A. When was the Feasibility Study conducted	3/31/2008 12:00:00 AM	B. Describe,	VWC found that the installation of an irrigation sub-meter on mixed use accounts is usually less costly (no pavement cuts) and still enables the customer to monitor their irrigation usage.
		upload or provide an electronic link to the Feasibility Study Upload File	

Comments:

#MR/YR: SF320,364; MF: 4,032; COM: 10,212; IND: 4,536; INS: 768; DED: 15,684; OTHER: 576; RECYC: 168

CUWCC BMP Coverage Report 2014

Foundational Best Manegemant Practices for Urban Water Efficiency

Foundational BMPs

BMP 1.4 Retail Consrvation Pricing

6301 Valencia Water Company

Implementation (Water Rate Structure)

Customer Class	Water Rate Type	Conserving Rate?
Single-Family	Allocation Based	Yes
Dedicated Irrigation	Allocation Based	Yes
Multi-Family	Uniform	Yes
Commercial	Uniform	Yes
Industrial	Uniform	Yes
Institutional	Uniform	Yes
Other	Uniform	Yes
Other	Uniform	Yes

On Track

	Customer Class	Water Rate Type	(V) Total Revenue Comodity Charges	(M) Total Revenue Fixed Carges
	Single-Family	Allocation Based	8741742.9	3852879.22
	Dedicated Irrigation	Allocation Based	5737402.8	1009486.23
	Multi-Family	Uniform	972570.1	360465.33
	Commercial	Uniform	2362795.66	643253.72
	Industrial	Uniform	899575.36	294685.53
	Institutional	Uniform	441543.49	105276.98
	Other	Uniform	57717.47	47532.11
	Other	Uniform	5406.61	133.91
			19218754.39	**6313713.03**

Calculate: V / (V + M) **75 %**

Implementation Option: Use Annual Revenue As Reported

Agency Provide Sewer Service: No

At Least As Effective As **No**

BMP 1.4 Retail Conservation Pricing

2014

Agency name: Valencia Water Company

Reporting unit number: 6301

Reporting unit name (District name): Valencia Water Company

Implementation (Water Rate Structure)

Enter the Water Rate Structures that are assigned to the majority of your customers, by customer class

Water Rate Name	Customer Class Name	Total Revenue Commodity Charges	Total Revenue Customer Meter/Service (Fixed Charges)	
Allocation Based	Single-Family	8741742.9	3852879.22	
Allocation Based	Dedicated Irrigation	5737402.8	1009486.23	
Uniform	Multi-Family	972570.1	360465.33	
Uniform	Commercial	2362795.66	643253.72	
Uniform	Industrial	899575.36	294685.53	
Uniform	Institutional	441543.49	105276.98	
Uniform	Other	57717.47	47532.11	
Uniform	Other	5406.61	133.91	

Implementation (Conservation Pricing Option)

[V] Use Annual Revenue As Reported

[ ] Use CWWA Rate Design Model

[ ] Use 3 years average instead of most recent year

Retail Waste Water (Sewer) Rate Structure by Customer Class

Agency Provide Sewer Service: No

Select the Retail Waste Water (Sewer) Rate Structure assigned to the majority of your customers within a specific customer class.

Comments:

CUWCC BMP Coverage Report 2014

Foundational Best Manegemant Practices for Urban Water Efficiency

Foundational BMPs

BMP 2.1 Public Outreach

6301 Valencia Water Company Retail Only

Does a wholesale Agency implement Public Outreach Programs? Yes

List of wholesale Agencies

	Public Outreach Program List	Number
	Flyers and/or brochures (total copies), bill stuffers, messages printed on bill, information packets	14
	Website	5
	General water conservation information	4
	Total	**23**

On Track

	Number Media Contacts	Number
	News releases	5
	Newspaper contacts	6
	Radio contacts	4
	Television contacts	3
	Total	**18**

On Track

An actively maintained website that is updated regularly (minimum = 4 times per year, i.e., at least quarterly) Yes

	Annual Budget Category	Annual Budget Amount
	Public Information Programs	25000
	Drought Response	108123
	Total Amount:	**133123**

On Track

Description of all other Public Outreach programs

(1) Fix a Leak Week; (2) Personalized Drought Reports; (3) Drought Restrictions; (4) HELIUM/Drip Conversion Rebates; (5) Conservation Workshops

On Track

Public Outreah Additional Programs
Letters to High Consumption Customers

At Least As Effective As **No**

BMP 2.1 Public Outreach

2014

Agency name: Valencia Water Company Reporting unit # 6301

Reporting unit name (District name): Valencia Water Company / Retail Only

Does a wholesale Agency implement Public Outreach Programs? Yes

List of wholesale Agencies — Please provide the name of Agency if not CUWCC Group1 members

Castaic Lake Water Agency

Is your agency performing public outreach?

Report a minimum of 4 water conservation related contacts your agency had with the public during the year.

Did at least one contact take place duringeach quarter of the reporting year? Yes

Public Information Programs List

Number of Public Contacts	Public Information Programs Name	
14	Flyers and/or brochures (total copies), bill stuffers, messages printed on bill, information packets	
5	Website	
4	General water conservation information	

Contact with the Media

Does a wholesale Agency implement Public Outreach Programs? Yes

List of wholesale Agencies — Please provide the name of Agency if not CUWCC Group1 members

Castaic Lake Water Agency

OR Retail Agency (Contacts with the Media)

Did at least one contact take place during each quarter of the reporting year? Yes

Media Contacts List

Number of Media Contacts	Public Outreach Media Contact Name List	
5	News releases	
6	Newspaper contacts	
4	Radio contacts	
3	Television contacts	

Does a wholesale Agency implement Public Outreach Programs? No

List of wholesale Agencies — Please provide the name of Agency if not CUWCC Group1 members

Castaic Lake Water Agency

Is Your Agency Performing Website Updates?

BMP 2.1 Public Outreach

2014

Enter your agency's URL (website address):	www.valenciawater.com
Describe a minimum of four water conservationrelated updates to your agency's website thattook place during the year:	(1) Fix a Leak Week; (2) Personalized Drought Reports; (3) Drought Restrictions; (4) HELIUM/Drip Conversion Rebates; (5) Conservation Workshops

Did at least one Website Update take place duringeach quarter of the reporting year? Yes

Public Outreach Annual Budget

Enter budget for public outreach programs. You may enter total budget in a single line or brake the budget into discretecategories by entering many rows. Please indicate if personnel costs are included in the entry.

Annual Budget Category	Annual Budget Amount	Personal Cost Included?	Comments	
Public Information Programs	25000			
Drought Response	108123		Includes "About the Drought," Customized Drought Reports, Regional Messaging.	

Public Outreach Expenses

Enter expenses for public outreach programs. Please include the same kind of expenses you included in the question relatedto your budget (Section 2.1.7, above). For example, if you included personnel costs in the budget entered above, be sure to include them here as well.

Public Outreach Expense Category	Expense Amount	Personal Cost Included?	
Promotional Materials	4146		

Additional Public Information Program

Please report additional public information contacts. List these additional contacts in order of howyour agency views their importance / effectiveness with respect to conserving water, with the mostimportant/ effective listed first (where 1 = most important).

Were there additional Public Outreach efforts? Yes

Public Outreach Additional Information

Public Information Additional Programs	Importance	
Letters to High Consumption Customers	1	

Social Marketing Programs

Branding

Does your agency have a water conservation"brand," "theme" or mascot? Yes

Describe the brand, theme or mascot. The WaterSmart Allocation and Tiered Rate Program is a fair and equitable method of providing residents an amount of water calculated to efficiently meet their specific needs.

Market Research

Have you sponsored or participated inmarket research to refine your message? Yes

BMP 2.1 Public Outreach

2014

Market Research Topic	Focus group to evaluate customer attitudes about the Drought
Brand Message	
Brand Mission Statement	

Community Committees

Do you have a community conservationcommittee?	Yes
Enter the names of the community committees:	Santa Clarita Valley Family of Water Suppliers

Training

Training Type	Number of Trainings	Number of Attendees	Description of Other	
3	16	208	Irrigation & Garden Care Workshops	

Social Marketing Expenditures

Public Outreach Social Marketing Expenses

Partnering Programs - Partners

	Name	Type of Program
	CLCA?	
	Green Building Programs?	
	Master Gardeners?	
	Cooperative Extension?	
	Local Colleges?	
V	Other	EPA WaterSense Promotional Partner
	Retail and wholesale outlet; name(s) and type(s) of programs:	

Partnering Programs - Newsletters

Number of newsletters per year	
Number of customers per year	

Partnering with Other Utilities

Describe other utilities your agency partners with, including electrical utilities	Santa Clarita Valley Family of Water Suppliers includes 4 local water retailers, the water wholesaler, and the City of Santa Clarita

Conservation Gardens

Describe water conservation gardens at your agency or other high traffic areas or new homes	Castaic Lake Water Agency Demonstration Garden is a seven acre garden demonstrating irrigation systems, plants and plant groupings that are appropriate to water-conserving landscapes in the local community.

BMP 2.1 Public Outreach

2014

Landscape contests or awards

Describe water wise landscape contest or awards program conducted by your agency	
Additional Programs supported by Agency but not mentioned above:	

Comments

CUWCC BMP Coverage Report 2014

Foundational Best Manegemant Practices for Urban Water Efficiency

Foundational BMPs

BMP 2.2 School Education Programs

6301 Valencia Water Company — Retail Only

Does a wholesale Agency implement School Education Programs? Yes

List of wholesale Agencies

Castaic Lake Water Agency

Materials meet state education framework requirements and are grade-level appropriate? Yes

Curriculum materials developed and/or provided by Agency:

This educational program features interactive student activities that present interesting and age appropriate water treatment and conservation topics. The curriculum is regularly updated to ensure that it meets state education criteria.

Materials Distributed to K-6? Yes

Describe K-6 Materials

Age appropriate materials cover science, social studies, and math as they relate to water, water quality, water use efficiency and water supply issues by means of in-class presentations and hands-on field trips.

Materials distributed to 7-12 students? Yes (Info Only)

Annual budget for school education program: 10000.00

Description of all other water supplier education programs

This educational program features interactive student activities that present interesting and age appropriate water treatment and conservation topics. The curriculum is regularly updated to ensure that it meets state education criteria. Age appropriate materials cover science, social studies, and math as they relate to water, water quality, water use efficiency and water supply issues by means of in-class presentations and hands-on field trips. Southern California LivingWise School Education Program. 500 conservation kits were distributed to students.

On Track

At Least As Effective As **No**

WMP 2.2 School Education Programs

2014

School Education Programs

6301 Valencia Water Company

Retail Only

Does a wholesale Agency implement School Education Programs? Yes

List of wholesale Agencies

Please provide the name of Agency if not FORTECH Group1 members

Castaic Lake Water Agency

V Materials meet state education framework requirements? Description: This educational program features interactive student activities that present interesting and age appropriate water treatment and conservation topics. The curriculum is regularly updated to ensure that it meets state education criteria.

V Materials distributed to K-6 Students? Description: Age appropriate materials cover science, social studies, and math as they relate to water, water quality, water use efficiency and water supply issues by means of in-class presentations and hands-on field trips.

Number of students reached: 2579

V Materials distributed to 7-12 Students? (optional) Description: Age appropriate materials cover science, social studies, and math as they relate to water, water quality, water use efficiency and water supply issues by means of in-class presentations and hands-on field trips.

Annual budget for school education program: 10000.00

Description of all other water supplier educationprograms: Southern California LivingWise School Education Program. 500 conservation kits were distributed to students.

School Programs Activities

Classroom Presentation:

Number of presentation: Number of attendees:

Describe the topics covered in your classroom presentations:

Large group assemblies:

Number of presentation: Number of attendees:

Children's water festivals or other events:

Number of presentation: Number of attendees:

Cooperative efforts with existing science/water education programs (various workshops, science fair awardsor judging) and follow-up:

Number of presentation: Number of attendees:

Other methods of disseminating information (i.e. themed age-appropriate classroom loaner kits):

Description: Number distributed:

Staffing children's booths at events & festivals:

Number of booths: Number of attendees:

Water conservation contests such as poster and photo:

WMP 2.2 School Education Programs

2014

Description | Number of participants

Offer monetary awards/funding or scholarships to students:

Number offered | Total funding

Teacher training workshops:

Number of presentation | Number of attendees

Fund and/or staff student field trips to treatment facilities, recycling facilities, water conservation gardens,etc.:

Number of tours or fieldtrips | Number of participants

College internships in water conservation offered:

Number of internship | Total funding

Career Fairs / Workshops:

Number of presentation | Number of attendees

Additional program(s) supported by agency but not mentioned above:

Description	Number of events	Number of participants

Comments

CUWCC BMP Coverage Report 2014

6301 Valencia Water Company

GPCD in 2006: 309.62

GPCD in 2014

GPCD Target for 2018: 310.40

Biennial GPCD Compliance Table

ON TRACK

		Target		Highest Acceptable Bound	
Year	Report	% Base	GPCD	% Base	GPCD
2010	1	96.4%	**316.30**	100%	**328.10**
2012	2	92.8%	**304.50**	96.4%	**316.30**
2014	3	89.2%	**292.70**	92.8%	**304.50**
2016	4	85.6%	**280.90**	89.2%	**292.70**
2018	5	82.0%	**310.40**	82.0%	**269.10**

CUWCC BMP Retail Coverage Report 2014

Foundational Best Managemant Practices for Urban Water Efficiency

BMP 1.1 Operation Practices

ON TRACK

6301 Valencia Water Company

1. Conservation Coordinator provided with necessary resources to implement BMPs?

Name: Matthew Dickens

Title: Resource Conservation Manager

Email: mdickens@valenciawater.com

2. Water Waste Prevention Documents

WW Document Name	WWP File Name	WW Prevention URL	WW Prevention Ordinance Terms Description
Option A Describe the ordinances or terms of service adopted by your agency to meet the water waste prevention requirements of this BMP.		http://www.valenciawater.com/service/tariffs.asp	Valencia Water Tariff #20, #14.1, and #11B(3)
Option B Describe any water waste prevention ordinances or requirements adopted by your local jurisdiction or regulatory agencies within your service area.		http://www.codepublishing.com/CA/SantaClarita/	City of Santa Clarita Municipal Code Chapter 9.38 - Water Conservation
Option C Describe any documentation of support for legislation or regulations that prohibit water waste.			
Option D Describe your agency efforts to cooperate with other entities in the adoption or enforcement of local requirements consistent with this BMP.			
Option E Describe your agency support positions with respect to adoption of legislation or regulations that are consistent with this BMP.			
Option F Describe your agency efforts to support local ordinances that establish permits requirements for water efficient design in new development.			

At Least As effective As No

Exemption No

Comments:

CUWCC BMP Retail Coverage Report 2014

Foundational Best Managemant Practices for Urban Water Efficiency

BMP 1.1 Operation Practices **ON TRACK**

CUWCC BMP Coverage Report 2014

Foundational Best Management Practices For Urban Water Efficiency

BMP 1.2 Water Loss Control **ON TRACK**

6301 Valencia Water Company

Completed Standard Water Audit Using AWWA Software?	Yes
AWWA File provided to CUWCC?	Yes
2014 VWC Water Loss AWWA-WAS-v5-09152014 MASTER.xls	
AWWA Water Audit Validity Score?	88
Complete Training in AWWA Audit Method	Yes
Complete Training in Component Analysis Process?	Yes
Component Analysis?	Yes
Repaired all leaks and breaks to the extent cost effective?	Yes
Locate and Repar unreported leaks to the extent cost effective?	Yes
Maintain a record keeping system for the repair of reported leaks, including time of report, leak location, type of leaking pipe segment or fitting, and leak running time from report to repair.	Yes

Provided 7 Types of Water Loss Control Info

Leaks Repairs	Value Real Losses	Value Apparent Losses	Miles Surveyed	Press Reduction	Cost Of Interventions	Water Saved (AF)
190	7923	184402	0	False		12.8

At Least As effective As No

Exemption No

Comments:

CUWCC BMP Coverage Report 2014

Foundational Best Management Practices For Urban Water Efficiency

BMP 1.3 Metering With Commodity

ON TRACK

6301 Valencia Water Company

Numbered Unmetered Accounts	No
Metered Accounts billed by volume of use	Yes
Number of CII Accounts with Mixed Use Meters	1293
Conducted a feasibility study to assess merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters?	Yes
Feasibility Study provided to CUWCC?	Yes

Date: 3/31/2008

Uploaded file name:

Completed a written plan, policy or program to test, repair and replace meters	Yes

At Least As effective As No

Exemption No

Comments:

#MR/YR: SF320,364; MF: 4,032; COM: 10,212; IND: 4,536; INS: 768; DED: 15,684; OTHER: 576; RECYC: 168

CUWCC BMP Coverage Report 2014

Foundational Best Management Practices For Urban Water Efficiency

BMP 1.4 Retail Conservation Pricing

On Track

6301 Valencia Water Company

Implementation (Water Rate Structure)

Customer Class	Water Rate Type	Conserving Rate?	(V) Total Revenue Comodity Charges	(M) Total Revenue Fixed Carges
Single-Family	Allocation Based	Yes	8741742.9	3852879.22
Dedicated Irrigation	Allocation Based	Yes	5737402.8	1009486.23
Multi-Family	Uniform	Yes	972570.1	360465.33
Commercial	Uniform	Yes	2362795.66	643253.72
Industrial	Uniform	Yes	899575.36	294685.53
Institutional	Uniform	Yes	441543.49	105276.98
Other	Uniform	Yes	57717.47	47532.11
Other	Uniform	Yes	5406.61	133.91
			19218754.39	**6313713.03**

Calculate: V / (V + M) **75 %**

Implementation Option: Use Annual Revenue As Reported

☐ Use 3 years average instead of most recent year

Canadian Water and Wastewater Association

Upload file:

Agency Provide Sewer Service: No

At Least As effective As No

Exemption No

Comments:

CUWCC BMP Coverage Report 2014

Foundational Best Management Practices For Urban Water Efficiency

BMP 2.1 Public Outreach

ON TRACK

6301 **Valencia Water Company** **Retail**

Does your agency perform Public Outreach programs? Yes

The list of wholesale agencies performing public outreach which can be counted to help the agency comply with the BMP

Castaic Lake Water Agency

The name of agency, contact name and email address if not CUWCC Group 1 members

Did at least one contact take place during each quater of the reporting year? Yes

Public Outreach Program List	Number
Flyers and/or brochures (total copies), bill stuffers, messages printed on bill, information packets	14
Website	5
General water conservation information	4
Total	**23**

Did at least one contact take place during each quater of the reporting year? Yes

Number Media Contacts	Number
News releases	5
Newspaper contacts	6
Radio contacts	4
Television contacts	3
Total	**18**

Did at least one website update take place during each quater of the reporting year? Yes

Public Information Program Annual Budget

Annual Budget Category	Annual Budget Amount
Public Information Programs	25000
Drought Response	108123
Total Amount:	**133123**

Public Outreah Additional Programs
Letters to High Consumption Customers

Description of all other Public Outreach programs

EPA WaterSense Promotional Partner

Comments:

CUWCC BMP Coverage Report 2014

Foundational Best Management Practices For Urban Water Efficiency

BMP 2.1 Public Outreach

ON TRACK

At Least As effective As	No	
Exemption	No	0

CUWCC BMP Coverage Report 2014

Foundational Best Management Practices For Urban Water Efficiency

BMP 2.2 School Education Programs

ON TRACK

6301 Valencia Water Company **Retail**

Does your agency implement School Education programs? Yes

The list of wholesale agencies performing public outreach which can be counted to help the agency comply with the BMP

Castaic Lake Water Agency

Materials meet state education framework requirements? Yes

This educational program features interactive student activities that present interesting and age appropriate water treatment and conservation topics. The curriculum is regularly updated to ensure that it meets state education criteria.

Materials distributed to K-6? Yes

Age appropriate materials cover science, social studies, and math as they relate to water, water quality, water use efficiency and water supply issues by means of in-class presentations and hands-on field trips.

Materials distributed to 7-12 students? Yes (Info Only)

Age appropriate materials cover science, social studies, and math as they relate to water, water quality, water use efficiency and water supply issues by means of in-class presentations and hands-on field trips.

Annual budget for school education program: 10000.00

Description of all other water supplier education programs

Southern California LivingWise School Education Program. 500 conservation kits were distributed to students.

Comments:

At Least As effective As No

Exemption No 0

CUWCC BMP Coverage Report 2014

6301 Valencia Water Company

Baseline GPCD: 328.13

GPCD in 2014 269.29

GPCD Target for 2018: 269.10

Biennial GPCD Compliance Table

ON TRACK

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