

Optimum Basin Management Program

Staff Status Report 2012-2: July to December 2012



CHINO BASIN WATERMASTER

Optimum Basin Management Program

Highlighted Activities

- In 2012, the Basin Plan was amended to reduce the 2004 Surface Water Monitoring Program from bi-weekly water quality measurements at 17 sites and direct discharge measurements at six sites, to quarterly water quality sampling at two sites. A new Hydraulic Control Monitoring Program (HCMP) Work Plan including these changes was adopted by the Regional Water Quality Control Board in March 2012, and approved by the State Office of Administrative Law on December 6, 2012.
- As a requirement of Mitigation Measure 4.4-3 from the Peace II Subsequent Environmental Impact Report (EIR), Watermaster, Inland Empire Utilities Agency (IEUA) and Orange County Water District (OCWD) continued to develop a Prado Basin Habitat Sustainability Program. Included within this program will be the Prado Basin Habitat Sustainability Adaptive Management Plan, the installation of up to 17 monitoring wells at nine separate sites, and vegetative monitoring.
- Progress toward the 2013 Amendment to the 2010 Recharge Master Plan Update continues. The Chino Basin Recharge Master Plan Update Steering Committee continued to meet and to identify additional cost-effective recharge opportunities and projects that could be undertaken in the future. During this reporting period, the Board approved the Amendment schedule, as well as moving forward with the collection and development of cost and yield information for potential recharge projects on the approved list .
- Watermaster and the IEUA continue to work together toward the creation of a fifth retention facility at the Turner Basin. Following completion, anticipated in 2014, the expansion project is projected to recharge an additional 300 acre-feet of storm runoff annually.
- During the fiscal year to date, approximately 3,210 acre-feet of stormwater and 4,170 acre-feet of recycled water were recharged. No imported water was recharged.

Program Element 1: Develop and Implement a Comprehensive Monitoring Program

Groundwater Level Monitoring

Watermaster initiated a comprehensive monitoring program as part of the implementation of the OBMP. The current groundwater-level monitoring program is comprised of about 900 wells. At about 700 of these wells, water levels are measured by well owners, which include municipal water agencies, the California Department of Toxic Substance Control (DTSC), the Counties, and various private consulting firms. The measurement frequency is typically about once per month. Watermaster collects these water level data quarterly. At the remaining 200 wells, water levels are measured by Watermaster staff using manual methods once per month or by using pressure transducers that record data in 15-minute increments. These wells are mainly south of the 60 Freeway and are used to assess the state of hydraulic control, land subsidence, impacts from the desalter wells, and are monitored in support of the triennial re-computation of ambient water quality in the Chino-North Management Zone. Watermaster verifies the quality of the data, and stores them in a centralized database. The data are used to develop groundwater level contour maps, to calculate storage, and validate implementation assumptions.

Important Court Hearings and Orders

- JULY 20, 2012-
RULING (REGARDING CSI'S MOTION TO CONFIRM POST-JUDGMENT ORDERS AND ENFORCE AND CARRY OUT THE CHINO BASIN JUDGMENT)
- SEPTEMBER 27, 2012-
ORDER ADOPTING RESTATED JUDGMENT, APPROVING INTERVENTION OF TAD NAKASE (TDN LAND COMPANY) INTO THE CHINO BASIN JUDGMENT
- DECEMBER 21, 2012 -
ORDER FOR APPROVAL OF TEMPORARY SUBSTITUTE RATE

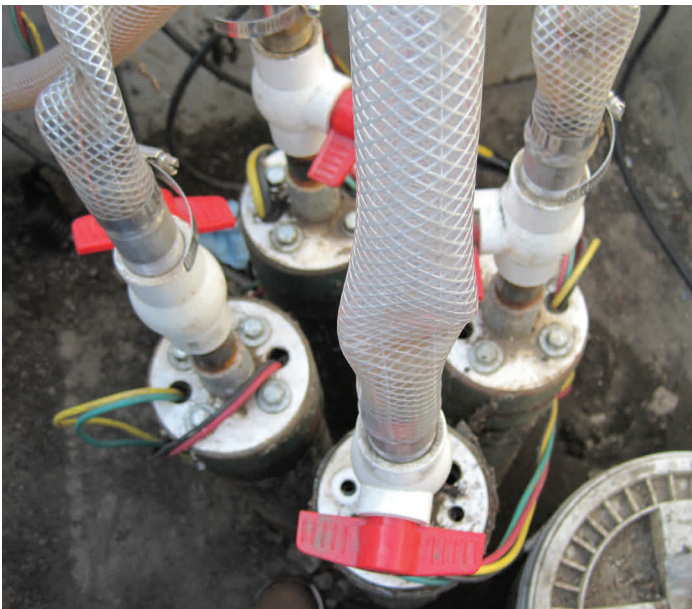
Optimum Basin Management Program

Program Element 1: Develop and Implement a Comprehensive Monitoring Program (Continued)

Groundwater Quality Monitoring

Watermaster initiated a comprehensive monitoring program as part of the implementation of the OBMP. The groundwater quality monitoring program consists of the following four components:

1. An Annual Key Well Water Quality Monitoring Program consisting of 120 wells which are mostly privately-owned agricultural wells in the southern portion of Chino Basin that are otherwise not included in an established sampling program. Twenty of these wells are sampled every year, and the remaining wells are sampled every three years. The wells sampled annually are for the continuous monitoring of areas of concern associated with the southern edge of the Archibald South (formerly OIA) volatile organic compound (VOC) plume, the southern region of the Chino Airport Plume, and the Kaiser Steel Plume which includes two multi-port MZ-3 monitoring wells. Data obtained for the Key Well Quality Monitoring Program are used for the triennial ambient water quality analysis, hydraulic control assessment, the biennial State of the Basin Report, and to assess the overall health of the Basin.



Monitoring wells

2. Annual sampling at nine HCMP multi-port monitoring wells strategically placed between the Chino Basin Desalter well fields and the Santa Ana River. Results of the annual sampling are used to analyze the effect of desalter pumping over time by comparing water quality of the native groundwater and the Santa Ana River.

3. Quarterly sampling at four near-river wells to characterize the interaction between the Santa Ana River and nearby groundwater. These shallow monitoring wells along the Santa Ana River consist of two former United States Geologic Survey (USGS) National Water Quality Assessment Program (NAWQA) wells (Archibald 1 and Archibald 2), and two wells (Well 9 and Well 11) owned by the Santa Ana River Water Company (SARWC).

4. A cooperative basin-wide data collection effort known as the Chino Basin Data Collection (CBDC) program which relies on municipal producers and other government agencies to supply groundwater quality data on a cooperative basis. These sources include the Appropriators, Department of Toxic Substance Control (DTSC), Regional Water Quality Control Board (RWQCB), US Geological Survey (USGS), the Counties, and other cooperators. All water quality data are routinely collected, checked verified for quality, and stored into Watermaster's centralized database.

Groundwater quality data collected by Watermaster are used to access the overall state basin water quality, the triennial ambient water quality update mandated by the Water Quality Control Plan for the Santa Ana River Basin (Region 8) (Basin Plan), the demonstration of hydraulic control, a maximum benefit commitment in the Basin Plan, and for monitoring nonpoint source groundwater contamination and plumes associated with point source discharges and to assess the overall health of the groundwater basin.

Groundwater Production Monitoring

All active wells (except for minimum user wells) are now metered. Watermaster reads the agricultural production data from the meters on a quarterly basis and enters these data into Watermaster's relational database.

Surface Water Monitoring

Water Quality and Quantity in Recharge Basins. Cooperatively with IEUA, Watermaster measures the quantity of storm and supplemental water entering the recharge basins. Pressure transducers or staff gauges are used to measure water levels during recharge operations. In addition to these quantity measurements, imported water quality data for State Water Project water are obtained from the Metropolitan Water District of Southern California (MWDSC) and recycled water quality data for the RP-1 and RP-4 treatment plant effluents are obtained from IEUA. Combining the measured flow data with the respective water qualities enables

Optimum Basin Management Program

Program Element 1: Develop and Implement a Comprehensive Monitoring Program (Continued)

the calculation of the blended water quality in each recharge basin, the New Yield to the Chino Basin, and the adequate dilution of recycled water.

Surface Water Monitoring in the Santa Ana River (SAR). Watermaster measures the discharge of the River and selected water quality parameters to determine those reaches of the SAR that are gaining flow from the Chino Basin and/or, conversely, those reaches that are losing flow into the Chino Basin. These bi-weekly flow and water quality measurements are combined with discharge data from permanent USGS stream gauges and discharge data from publicly owned treatment works (POTWs). These data are used along with groundwater modeling to assess the extent of hydraulic control.

Hydraulic Control

In January 2004, the RWQCB amended the Water Quality Control Plan (Basin Plan) for the Santa Ana River Basin to incorporate an updated total dissolved solids (TDS) and nitrogen (N) management plan. The Basin Plan Amendment includes both "antidegradation" and "maximum benefit" objectives for TDS and nitrate-nitrogen for the Chino-North and Cucamonga groundwater management zones. The application of the "maximum benefit" objectives relies on Watermaster and IEUA's implementation of a specific program of projects and requirements, which are an integral part of the OBMP. On April 15, 2005, the RWQCB adopted resolution R8-2005-0064, thus approving the Surface Water Monitoring Program and Groundwater Monitoring Program in support of maximum benefit commitments in the Chino-North and Cucamonga Basins.

Pursuant to the 2004 Basin Plan Amendment, and the Watermaster/IEUA permit to recharge recycled water, Watermaster and IEUA have conducted groundwater and surface water monitoring programs since 2004. During this reporting period, Watermaster measured 455 manual water levels at private wells throughout the Chino Basin, conducted two quarterly downloads at the 107 wells containing pressure transducers, collected 29 groundwater quality samples, 181 surface water quality samples, and 61 direct discharge stream measurements. Quarterly Surface Water Monitoring Program Reports that summarize data collection efforts were submitted to the RWQCB in July and October of 2012.

In 2012, the Basin Plan was amended to reduce the 2004 Surface Water Monitoring Program from bi-weekly water quality measurements at 17 sites and direct discharge measurements at six sites, to quarterly water quality sampling at two sites. A new HCMP Work Plan including these changes was adopted by the RWQCB in March 2012, and approved by the State Office of Administrative Law on December 6, 2012.

During this reporting period, as a requirement of Mitigation Measure 4.4-3 from the Peace II Subsequent EIR, Watermaster, IEUA and OCWD continued to develop a Prado Basin Habitat Sustainability Program (PBHSP). Included within this program will be the Prado Basin Habitat Sustainability Adaptive Management Plan, the installation of up to 17 monitoring wells at nine separate sites, and vegetative monitoring. The initial PBHSP Committee meeting to develop the Adaptive Management Plan was held on November 27, 2012.

Chino Basin Groundwater Recharge Program

Watermaster, IEUA, the Chino Basin Water Conservation District (CBWCD), and the San Bernardino County Flood Control District (SBCFCD) jointly sponsor the Chino Basin Groundwater Recharge Program. This is a comprehensive water supply program to enhance water supply reliability and improve the groundwater quality in local drinking water wells throughout the Chino Basin by increasing the recharge of storm water, imported water, and recycled water. The recharge program is regulated under RWQCB Order No. R8-2007-0039 and Monitoring and Reporting Program No. R8-2007-0039.

Recharge Activities. On-going recycled water recharge occurred in the Brooks, 7th Street, 8th Street, Turner, Victoria, San Sevaine, Ely, Hickory, RP-3, and Banana Basins this reporting period. Stormwater was recharged at 19 recharge basins across all management zones of the Chino Basin during this reporting period. No imported water was recharged this reporting period.

Monitoring Activities. Watermaster and IEUA collect weekly water quality samples from recharge basins that are actively recharging recycled water and from lysimeters installed within those recharge basins. During this reporting period, approximately 187 recharge basin and lysimeter samples were collected and 27 recycled water samples were collected for alternative monitoring plans that include the application of a correction factor for soil-aquifer treatment determined from each recharge basin's start-up period. Monitoring wells located down-gradient of the recharge basins were sampled quarterly at a minimum; however, some monitoring wells were sampled more frequently during the reporting period for a total of 88 samples.

Optimum Basin Management Program

Program Element 1: Develop and Implement a Comprehensive Monitoring Program (Continued)

Reporting. Watermaster and IEUA completed the following required reports concerning the recharge program during the reporting period:

- 2Q-2012 Quarterly Report, submitted to the RWQCB – August 2012
- 3Q-2012 Quarterly Report, submitted to the RWQCB – November 2012

Land Surface Monitoring

In response to the occurrence of land subsidence in the City of Chino, the Watermaster prepared and submitted the MZ-1 Subsidence Management (MZ-1 Plan) to the Court for approval and, in November 2007, the Court ordered its implementation (see Program Element 4: Develop and Implement a Comprehensive Groundwater Management Plan for Management Zone 1). The MZ-1 Plan calls for several monitoring and mitigation measures to minimize or abate the future occurrence of land subsidence and ground fissuring in the western Chino Basin. These measures and activities include:

- Continuing the scope and frequency of monitoring within the so-called Managed Area (southwest MZ-1) that was conducted during the period when the MZ-1 Plan was being developed.
- Expanding the monitoring of the aquifer system and land subsidence into other areas of MZ-1 and Chino Basin where the data indicate concern for future subsidence and ground fissuring.
- Monitoring of horizontal strain across the historical zone of ground fissuring.
- Evaluating the potential contribution of groundwater production in northern MZ-1 on conditions in southern MZ-1.
- Conducting additional testing and monitoring to refine the MZ-1 Guidance Criteria.
- Developing alternative pumping plans for the MZ-1 producers that are impacted by the MZ-1 Plan.
- Constructing and testing a lower-cost cable extensometer facility at Ayala Park.
- Evaluating and comparing ground-level surveying and Interferometric Synthetic Aperture Radar (InSAR), and recommending future monitoring protocols for both techniques.
- Conducting an ASR (aquifer storage recovery) feasibility study at a City of Chino Hills production well within the MZ-1 Managed Area (Well 16).
- Providing for recovery of groundwater levels in the MZ-1 Managed Area.

During the reporting period, Watermaster undertook the following activities called for in the MZ-1 Plan:

- The continuation of detailed water-level monitoring at wells within the Managed Area and across much of the western portion of Chino Basin. All monitoring equipment is inspected at least quarterly and is repaired and/or replaced as necessary. The data collected were checked and analyzed to assess the functionality of the monitoring equipment and for compliance with MZ-1 Plan.
- The continuation of monitoring and maintenance at the extensometer facilities including: Ayala Park, Chino Creek, and Daniels sites.
- The collection of InSAR data from radar satellites during all six months of the reporting period, which will be analyzed for ground motion in early 2013.
- The conducting of a ground-level survey at established benchmarks in the area surrounding the Chino Creek Well Field. This was the second survey in this area. These initial surveys are establishing a ground-level “baseline” prior to the start-up of the Chino Creek Well Field.
- Assisted the City of Chino Hills in required quarterly reporting for its DWR grant to support the ASR pilot test.

Optimum Basin Management Program

Program Element 2: Develop and Implement a Comprehensive Recharge Program

The theoretical average stormwater recharge capacity of the Chino Basin Facilities Improvement Program (CBFIP) facilities is approximately 14,000 acre-feet/yr (AFY) and the theoretical supplemental water recharge capacity is 99,000 AFY. Stormwater recharge during this period was approximately 3,210 acre-feet. Recycled water recharge during this period was approximately 4,170 acre-feet. The IEUA and Watermaster recharge permit was amended in fiscal year 2009/10 to allow for underflow dilution and extended the dilution period from a running 60 months to a running 120 months. The significance of this permit amendment was to reduce the amount of imported and storm waters required for dilution. IEUA projects that dilution requirements will likely be met through 2019/20, even if no imported water were available for dilution.

The total amount of supplemental water recharged in MZ-1 since the Peace II Agreement through December 31, 2012 is approximately 38,988 acre-feet, which is on-target for the 39,000 acre-feet required by June 30, 2013 (average annual requirement of 6,500 acre-feet).

In December 2011 Watermaster committed to IEUA up to \$162,236 towards the projected \$664,712 Turner Basins/Guasti Park Recharge Expansion Project in MZ-2. In a commendable example of inter-agency cooperation, this supplemental project became feasible through coordinated materials extraction for the Milliken Avenue Grade Separation project, supported by the City of Ontario, SanBAG, and San Bernardino County. Following completion, anticipated in 2014, the expansion project is projected to recharge an addition 300 acre-feet of storm runoff annually.

Watermaster staff convened a Recharge Master Plan Update Steering Committee (Steering Committee) in 2011 to develop the 2013 Amendment to the 2010 Recharge Master Plan (RMP) Update. The Steering Committee was reformed in January 2012 to include all stakeholders and met eight times during this period. The Steering Committee developed and approved a scope of work and report outline and commenced with the execution of the work. The scope of work was responsive to the October 2010 and December 2011 Court Orders and the December 2011 Board direction. The final report will include nine sections with technical appendices.

Using updated estimates of stakeholders' groundwater production and projections of replenishment obligations, Watermaster and the parties have evaluated changed circumstances (legislative, regulatory, etc.) that were not addressed in the 2010 RMP Update and how these changes affect the RMP. Based on this evaluation, the Committee has selected agreed upon bookend projected future scenarios for recharge planning.

Modeling analyses were performed, predicated on the updated pumping and replenishment projections, estimates of the locations and amounts of recharge required for sustainability, and potential production forbearance. The Committee also conducted an inventory of existing recharge facilities, which included the characterization of recharge basins, recharge capacities and the factors controlling recharge performance. These components comprise the Final Draft of Sections One through Four of the Report, which was completed and approved by the Watermaster Board on May 24, 2012. These four sections fulfill the requirements for the June Status Report deadline to the Court, which was filed on May 31, 2012.

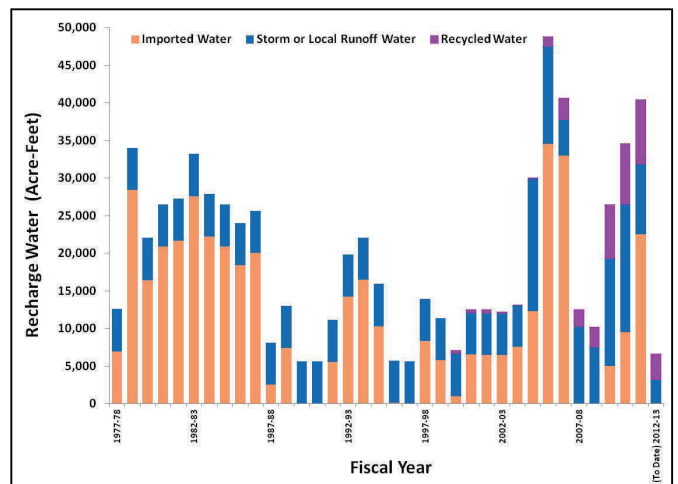
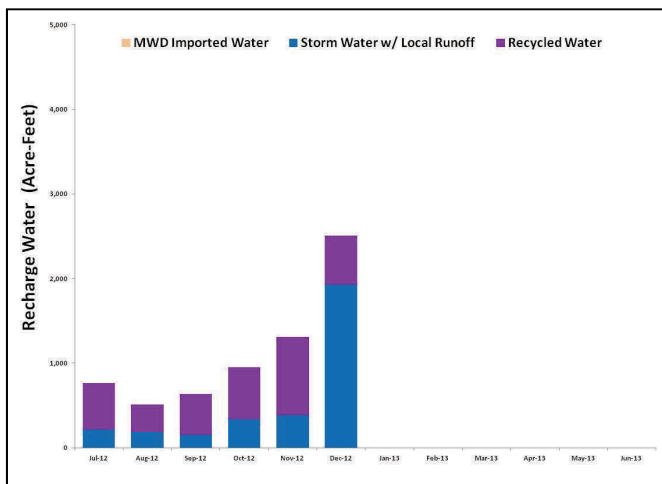


Recharging the Chino Basin at San Sevaine Recharge Basin

Optimum Basin Management Program

Program Element 2: Develop and Implement a Comprehensive Recharge Program (Continued)

During this reporting period, the Board approved the Amendment schedule, as well as moving forward with the collection and development of cost and yield information for potential recharge projects on the approved list. The Amendment is proceeding on schedule with completion by October 2013, as anticipated by the Court. In order to finalize the RMP Update Amendment, the parties will next identify the possible recharge mechanisms available to meet current and projected recharge and replenishment needs. This will include the analysis of potential recharge associated with Municipal Separate Storm Sewer Systems (MS4) permits, the identification of areas within the Basin with the potential for production sustainability challenges (including imbalance in Management Zone 3) and other water management challenges that can be addressed by recharge or production management, and the identification of options ensuring production sustainability through the term of Peace Agreements, including increased recharge at existing facilities, new recharge facilities, new recharge sources, adjustment in production patterns, etc. After the identification of the potential recharge options, the Parties will agree upon the methods and criteria that will be used to evaluate each of them. Using these agreed upon methods and criteria, Watermaster's consultants and IEUA will conduct engineering and economic analyses of each. Based on these analyses, the Parties will review and recommend implementation of the selected options, and develop recommended financing and implementation plans for these options.



Program Element 3: Develop and Implement Water Supply Plan for the Impaired Areas of the Basin; and Program Element 5: Develop and Implement Regional Supplemental Water Program

Construction of the Chino I Desalter Expansion and the Chino II Desalter facilities was completed in February 2006. As currently configured, the Chino I Desalter provides 2.6 million gallons per day (MGD) of treated (air stripping for VOC removal) water from Well Nos. 1-4, 4.9 MGD of treated (ion exchange for nitrate removal) water from Well Nos. 5-15, and 6.7 MGD of treated (reverse osmosis for nitrate and TDS removal) water from Well Nos. 5-15 for a total of 14.2 MGD (15,900 AFY). The Chino II Desalter provides 4.0 MGD of ion exchange treated water and 6.0 MGD of reverse osmosis treated water from eight additional wells for a total of 10.0 MGD (11,200 AFY).

Planning continued between the Chino Desalter Authority (CDA) and Western Municipal Water District (WMWD) to expand the Chino II Desalter by 10.5 MGD (11,800 AFY). Raw water will be drawn from existing CDA II wells, and possible additional new wells, if needed. In addition, a new Chino Creek Desalter Well Field, required for the hydraulic control commitment associated with Maximum Benefit, will provide additional raw water to the Chino I Desalter, enabling some existing wells to direct production to the expanded Chino II Desalter facility. Watermaster and the CDA demonstrated continued progress on the project schedule RWQCB approved by the RWQCB in June 2010, which calls for completion of the expansion in 2015. Existing design contracts for pipeline, well and pump facilities continue to lead toward task and eventual project completion.

In June 2012, the WMWD was awarded a \$51 million state grant from the California Department of Health for the desalter expansion project. To date, more than \$70 million in grant funds have been secured toward this expansion project.

Optimum Basin Management Program

Program Element 4: Develop and Implement a Comprehensive Groundwater Management Plan for Management Zone 1

MZ-1 Management Plan

Because of the historical occurrence of pumping-induced land subsidence and ground fissuring in southwestern Chino Basin (southern MZ-1), the OBMP called for the development and implementation of an Interim Management Plan (IMP) for MZ-1 that would:

- Minimize subsidence and fissuring in the short-term,
- Collect information necessary to understand the extent, rate, and mechanisms of subsidence and fissuring, and
- Formulate a management plan to reduce to tolerable levels or abate future subsidence and fissuring.

From 2001-2005, Watermaster developed, coordinated, and conducted an Interim Monitoring Program (IMP) under the guidance of the MZ-1 Technical Committee. The investigation provided enough information for Watermaster to develop Guidance Criteria for the MZ-1 producers in the investigation area that, if followed, would minimize the potential for subsidence and fissuring during the completion of the MZ-1 Plan. The Guidance Criteria included a listing of Managed Wells and their owners subject to the criteria, a map of the so-called Managed Area, and an initial threshold water level (Guidance Level) of 245 feet below the top of the PA-7 well casing. The MZ-1 Summary Report and the Guidance Criteria were adopted by the Watermaster Board in May 2006. The Guidance Criteria formed the basis for the MZ-1 Plan, which was approved by Watermaster in October 2007. The Court approved the MZ-1 Plan in November 2007 and ordered its implementation.

During this reporting period, Watermaster continued implementation of the MZ-1 Plan. Drawdown at the PA-7 piezometer stayed above the Guidance Level during the reporting period, and very little, if any, permanent compaction was recorded at the Ayala Park Extensometer. The ongoing monitoring program called for by the MZ-1 Plan continues to be implemented.

The MZ-1 Technical Committee has been renamed the Land Subsidence Committee (LSC) and now includes all Watermaster Parties. The LSC met in October 2012. Watermaster staff and consultants provided an update on the ongoing monitoring and testing program in the MZ-1 Managed Area, on the ASR pilot test at Chino Hills Well 16, and on the recent data collected from the newly-installed extensometer at the Chino Creek Well Field.

Program Element 6: Develop and Implement Cooperative Programs with the Regional Water Quality Control Board, Santa Ana Region (Regional Board) and Other Agencies to Improve Basin Management; and Program Element 7: Develop and Implement a Salt Management Program

Archibald South Plume

In July 2005, the RWQCB prepared draft Cleanup and Abatement Orders (CAOs) for six Ontario International Airport (OIA) parties with regard to the Archibald South (trichloroethene [TCE]) Plume. The draft CAOs required the parties to “submit a work plan and time schedule to further define the lateral and vertical extent of the TCE and related VOCs that are discharging, have been discharged, or threaten to be discharged from the site” and to “submit a detailed remedial action plan, including an implementation schedule, to cleanup or abate the effects of the TCE and related VOCs.” Four of the parties (Aerojet, Boeing, General Electric [GE], and Lockheed Martin) formed a group (known as ABGL) to work jointly on a remedial investigation. Northrop Grumman declined to participate in the group, while the US Air Force, in cooperation with the US Army Corps of Engineers, funded the installation of one of the four clusters of monitoring wells installed by the ABGL.

In 2012, the RWQCB issued a draft CAO to the City of Ontario, the City of Upland, and IEUA concerning the former Ontario-Upland Sewage Treatment Plant (Regional Recycling Plant No. 1), located in the City of Ontario. The draft CAO states that these parties are “responsible parties subject to this Order because, as the former and current owners and operators of the WWTP and disposal areas, they are responsible for discharge of wastes that resulted in the presence of trichloroethylene (TCE) in groundwater downgradient of the WWTP and disposal areas.” In part, the draft CAO requires the parties to “supply uninterrupted replacement water service...to all residences south of Riverside Drive that are served by private domestic wells at which TCE has been detected at concentrations at or exceeding 5 µg/L...” and to report this information to the RWQCB. In addition, the parties are to “prepare and submit [a] ... feasibility study” and “prepare, submit and implement the Remedial Action Plan” to mitigate the “effects of the TCE groundwater plume.”

Optimum Basin Management Program

Program Element 6: Develop and Implement Cooperative Programs with the Regional Water Quality Control Board, Santa Ana Region (Regional Board) and Other Agencies to Improve Basin Management; and Program Element 7: Develop and Implement a Salt Management Program (Continued)

Chino Airport

The County of San Bernardino, Department of Airports is working under RWQCB CAO No. R8-2008-0064. Beginning in 2007, Tetra Tech, the consultant to the County, conducted several off-site plume characterization studies to delineate the areal and vertical extent of the plume. Tetra Tech submitted the *Semiannual Groundwater Monitoring Report, Summer and Fall 2012, Chino Airport Groundwater Assessment, San Bernardino County, California*. Watermaster has collected samples from dedicated monitoring wells and private wells in and around the Chino Airport plume area. The County and Watermaster have been sharing these investigation data so that both parties can utilize a robust data set for plume characterization. Watermaster has also used its calibrated groundwater model to estimate cleanup times and contaminant concentrations in the Chino Creek Well Field. This work will be updated, given new information about the extent of contamination, subsurface hydrogeology, well performance, and the need for habitat sustainability in the Prado Basin.

Other Water Quality Issues

Watermaster continues to track monitoring programs and mitigation measures associated other point sources in the Chino Basin, including: Alumax Aluminum Recycling, the California Institute for Men, Crown Coach, GE Test Cell and Flatiron, Kaiser Steel, Milliken Landfill, Upland Landfill, and the Stringfellow National Priorities List sites.

Program Element 8: Develop and Implement a Groundwater Storage Management Program; and Program Element 9: Develop and Implement a Storage and Recovery Program

Recent events demonstrate the importance of groundwater storage to the Chino Basin. Watermaster has committed to investigate the technical and management implications of Local Storage Agreements, improve related policies and procedures, and then revisit all existing applications of Local Storage Agreements.

The existing Watermaster/IEUA/MWDSC/Three Valley Municipal Water District (TVMWD) Dry-Year Yield (DYY) program continued during the reporting period. By April 30, 2011, all DYY program construction projects and a full “put” and “take” cycle had been completed, leaving the storage account with a zero balance. Watermaster, IEUA, TVMWD, and MWDSC are negotiating potential amendments to the current contract.