Chino Basin Watermaster
Status Report No. 6

(Covering December 2002 through February 2003)

DRAFT

March 2003

OPTIMUM BASIN MANAGEMENT PROGRAM

In its Order of September 28, 2000 extending the term of the nine-member Watermaster Board, the Court ordered Watermaster to provide semiannual reports regarding the progress of OBMP implementation. By a subsequent Order of October 17, 2002, the Court added additional reporting items. In Status Report Number 4, filed with the Court on September 30, 2002, Watermaster notified the Court that Watermaster intended to voluntarily accelerate the reporting schedule due to the rapid pace of OBMP implementation. In its Annual Report that was filed with the Court on January 31, 2003, Watermaster provided its intended schedule for future reporting. (*See* Watermaster 25th Annual Report Exhibit B.)

This Status Report Number 6 is filed pursuant to this schedule and will report on the period from December 1, 2002 to February 28, 2003.

PROGRAM ELEMENT 1 – DEVELOP AND IMPLEMENT COMPREHENSIVE MONITORING PROGRAM

Groundwater Level Monitoring

Three Active Monitoring Programs. Watermaster has three active groundwater level monitoring programs operating in the Chino Basin – a semiannual Basinwide program, two semi-monthly programs associated with the Chino-I and Chino-II Desalter well fields, and an intensive water-level monitoring program associated with land-surface monitoring (see Land Surface Monitoring below) in Management Zone 1.

Semiannual Water-Level Monitoring Program. Watermaster initiated the semi-annual Basin-wide groundwater-level monitoring program in 1999. The Fall 2002 round of testing began in October and was completed in December 2002. The Spring 2003 round of testing will begin in April and will be completed in June 2003.

Chino I and Chino II Desalter Well Field Monitoring Programs. Watermaster staff continued to collect groundwater level data at about 250 wells twice per month in and around the Chino-I and Chino-II Desalter well fields during this reporting period.

Ongoing MZ-1 Interim Monitoring Program. Watermaster consultants have initiated a groundwater-level monitoring program to collect data at about 45 wells in the southern portion of MZ-1 (City of Chino area). Data is being collected manually at all wells at least once per month and by automated pressure transducers at selected wells at least once every 15 minutes.

Groundwater-Quality Monitoring

During Fall 2001 and Spring 2002, Watermaster completed a reduced-scale groundwater quality monitoring survey for wells in the capture zone of the existing and proposed desalter wells. Partial funding was provided through the California State Water Resources

Control Board under Section 205(j) of the Federal Clean Water Act, Agreement Number 00-199-250-0. The draft 205(j) Report was submitted to the SWRCB in October 2002.

Complexity of Quality Conditions, Changing Regulations Prevent Development of Key Well Program. As reported in the Status Report No. 4, a key well program was not developed for groundwater quality because of the complexity of the water-quality conditions encountered in the basin during the initial monitoring round and the constantly evolving water-quality regulations. Based on information collected during the next three-year round of sampling, Watermaster plans to review the development of a key well program.

Began Three-Year Sampling Program of All Accessible Private Wells. During this quarter, Watermaster began the first year of a second three-year sampling program in which all accessible private wells in the southern portion of Chino Basin will be sampled (about 150 wells per year). Through the end of February 2003, about 100 wells had been sampled.

Continued Cooperative Monitoring of Most Other Wells In Basin. The remaining 50 wells will be sampled before the end of the next quarter. Watermaster is continuing the cooperative monitoring program described in the Implementation Plan. Watermaster obtains data every six months from the Department of Health Services for the municipal water agencies and from the Department of Toxic Substances Control and the Regional Board for most of the other wells in the Basin. All this data is contained in a relational database.

Extensive Range Of Substances Being Tested

- All groundwater samples are being analyzed for general mineral and general physical parameters.
- Wells that were not previously sampled and analyzed for constituents that were added to the evolving groundwater quality-monitoring program (e.g., hexavalent chromium, silica, barium, etc.) in 1999-2001, are being sampled for those constituents.
- Wells within or near the two Volatile Organic Compound (VOC) plumes are being analyzed for VOCs, in addition to the other parameters.
- All wells are being analyzed for perchlorate due to its widespread presence in the 1999-2001 sampling program.
- Analysis for 1,2,3-trichloropropane has been added to the monitoring program for all wells. This chemical was detected in several wells above 50 parts per trillion (old detection limit).

New Testing Method Measures Parts Per Trillion of TCP. In the 2002-03 monitoring program, a new analytical methodology is being used to achieve a detection limit of 5 ppt for 1,2,3-TCP, which is its California Action Level. The wells chosen for the 2002-03 monitoring program are primarily located between the Chino I Desalter well field and the Santa Ana River.

Prioritizing Wells to Serve Multiple Purposes

These wells were prioritized for 2002-03 to aid in the development of a monitoring program to demonstrate hydraulic control in the southern portion of Chino Basin. (See the hydraulic control discussion in Program Elements 6 and 7 below.)

Groundwater Production Monitoring

Two Additional Meter Vendors Retained. All Meters Scheduled for Installation Before July 2003. The primary activity with regard to production monitoring continues to be the installation of meters on wells operated by members of the Agricultural Pool. Initially, Watermaster counted about 570 active agricultural wells. Watermaster intends to equip 420 of these wells with operating meters. The other 150 wells were forecasted to be inactive or destroyed within two years. As of January 31, 2003, 295 of these wells are metered with the remainder to be metered by June 30, 2003. Four vendors are installing the remaining meters.

All Producing Wells Are Monitored Quarterly. Watermaster staff reads private wells with meters. A method appropriate to the Chino Basin area is used to estimate production at privately owned wells that do not have meters.

Need For Water Use Disposal Form To Be Reviewed. The OBMP Implementation Plan includes a provision that requires the producers to submit a water use and disposal form describing the sources of water used by each producer and how that water is disposed of after each use. The water use and disposal form and reporting has not been implemented, because much of the information that would have been collected using this form is being collected as part of other monitoring activities and analyses. In the second half of fiscal 2003-2004, Watermaster anticipates discussions regarding the need for this form.

Surface Water Monitoring

Measure Water Quality and Water Levels In Recharge Basins. Watermaster conducts a surface water-monitoring program to measure the water quality of water in recharge basins and the water levels in some of these basins. The purpose of this program is to estimate the volume and quality of recharge. This information will be used in subsequent years to estimate the safe yield of the basin and for other management purposes. During this period, water level transducers with integrated data loggers have been recording water levels in the Montclair Basins and the Brooks Street Basin. The data collected at these recharge basins will be analyzed this summer to estimate inflow and recharge. Also during this reporting period, Watermaster staff has collected water quality samples at selected recharge basins following rainstorms if storm water is stored in the basins. Thirty-two (32) composite samples (including repeat sampling) have been collected from November 8, 2002 through March 3, 2003. Sampling will continue through the remainder of the 2002-03 storm season.

Hydraulic Control Monitoring

One of the goals of the OBMP is to maximize Chino Basin yield. One of the key ways to maximize yield is to minimize groundwater discharge to the Santa Ana River and, in some reaches of the River, to maximize recharge of the Santa Ana River into the Chino Basin. Watermaster refers to this as hydraulic control. A conceptual monitoring plan entitled *Conceptual Work Plan, Investigation of Hydraulic Control in the Lower Chino Basin*

involving the Inland Empire Utilities Agency, Orange County Water District, Regional Water Quality Control Board, and Watermaster was finalized in January 2003. This workplan involves surface water monitoring and piezometric monitoring program for the southern part of the basin.

Surface Water Monitoring For Santa Ana River To Begin In May 2003. Watermaster developed a surface-water monitoring program concept for the Santa Ana River that, in conjunction with Watermaster groundwater-monitoring programs, will be used to characterize what reaches of the River are gaining water from, or losing water to, the Basin, and to determine if significant discharge of Chino Basin groundwater to the Santa Ana River is occurring. Surface water monitoring for the Santa Ana River is scheduled to begin in May 2003. IEUA, OCWD, Regional Board and Watermaster determined that the conceptual monitoring plan was adequate and determined to move forward with the development of a detailed workplan to implement a surface water and groundwater-monitoring program. The surface water monitoring part of the workplan was projected to be completed in February 2003. It is currently in preparation and should be completed by the end of March 2003.

Piezometric Monitoring Program for Hydraulic Control. Watermaster is collaborating with OCWD and IEUA, in an investigation to select existing wells and to site new multi-piezometer wells that will be used to monitor and assess the state of hydraulic control. This collaboration is unprecedented. The conceptual workplan includes a process that will start in April 2003 that involves the review of existing wells and siting at least four new wells that should be constructed in fiscal year 2003/04. Watermaster and IEUA have committed to the construction of a total of ten new multi-piezometer wells during fiscal years 2003/04 and 2004/05. Watermaster filed an application for $250,000 from the Local Groundwater Assistance Fund, sponsored by the California Department of Water Resources (DWR). This funding would supports construction of piezometric monitoring wells that, in addition to some existing wells, would be used for monitoring and assessing the state of hydraulic control. Watermaster expects to hear from the DWR before the end of April 2003.

Land Surface Monitoring

Watermaster staff is developing a multifaceted land-surface monitoring program to develop data that will assist in the development of a long-term management plan for Management Zone 1. The monitoring program consists of three main elements:

1. An aquifer-system monitoring facility located in the southern portion of Management Zone 1 – an area that has experienced concentrated and differential land subsidence and ground fissuring. One major component of the aquifer-system monitoring facility is multiple-depth piezometers that measure water level and pressure changes at 11 different depths. Another major component will be a dual borehole extensometer that measures deformation within the aquifer-system at deep and shallow levels. The extensometer is expected to be completed by the end of June of 2003 which is one month later than expected but prior to the end of the forbearance period of the MZ1 Interim Management Plan. Together, the two

devices will correlate the hydraulic and mechanical responses of the aquifer system to different aquifer-stresses, such as pumping at wells.

2. Synthetic aperture radar interferometry (InSAR) that will measure land surface deformation across the entire Chino Basin.

3. Benchmark surveys along selected profiles of Chino Basin. The benchmark surveys will (1) establish a datum from which to measure future land surface deformation, (2) "ground-truth" the InSAR data, (3) allow determination of historical subsidence at any historical benchmarks that can be recovered, and (4) evaluate the effectiveness of the long-term management plan. During the current period, the MZ-1 Technical Committee approved the proposed selected profiles for benchmark surveys.

New Monitoring Equipment Installed at Piezometers and Nearby Wells. Permanent transducers and data logging equipment were installed at the piezometers and are recording depth-specific groundwater-level data. Where possible, transducers were installed in wells owned by the cities of Chino and Chino Hills, and are recording groundwater-level data and "on/off" pumping cycles at production wells. There were some delays in completing access agreements with some well owners that have caused a delay in the installation of the monitoring equipment. The State of California (CIM) has yet to approve an access agreement, and as a result, water level and production monitoring have not begun at CIM wells. Monitoring piezometric levels and production at CIM wells is important to this program as CIM wells are within the area of subsidence and ground fissuring, and may be contributing to subsidence. The type of equipment to be installed at CIM is identical to that installed at wells owned by the Cities of Chino and Chino Hills.

Alternative Monitoring Equipment Installed At Other Wells Where Necessary. Some wells owned by the cities of Chino and Chino Hills cannot be equipped with transducers. In these cases, alternative equipment that monitors parameters within the discharge pipe or pump motor electrical system will be used to record "on/off" pumping cycles at such production wells. This equipment will be tested in March 2003. It is anticipated that all monitoring equipment be installed by April 2003 assuming an access agreement is executed with CIM.

Reconnaissance-level pumping tests are planned for April 2003 and are being discussed at the MZ-1 Technical Committee meetings (see Program Element 4 below). These pumping tests will reveal the effects of nearby pumping on water-levels at the piezometers, and will assist in the final design of the extensometer and the design of a comprehensive aquifer-system testing program that will follow the completion of the extensometer.

No significant activity occurred with regard to InSAR monitoring during this period.

Benchmark Survey Approved. The MZ-1 Technical Committee approved the final design of the benchmark survey profiles and monument distribution during this period. A sub-consultant is being contracted to install the monuments beginning in March 2003. The initial ground-level survey is planned for April 2003 by same sub-consultant.

Watermaster Approves Monitoring Work Plan and Budget. At the February 27, 2003 meetings of the Advisory Committee and Watermaster Board, the Land Surface Monitoring plan and related $178,000 budget were approved.

Well Construction, Abandonment and Destruction Monitoring

Watermaster staff monitors the condition of wells on a regular basis. Wells that may be improperly destroyed or abandoned are reported to Riverside and San Bernardino Counties as they are discovered.

Watermaster staff inspected 107 abandoned wells during a 2002-03 field inspection. It was determined that 72 of the wells were properly abandoned and 35 wells would require some modification to meet the standard for a properly abandoned well. A repair program was prepared and approved by Watermaster. Prior to startup of repair, a review of currently abandoned wells has been initiated and an additional 25 wells have been identified as abandoned. Field inspection of these is under way. Upon completion of inspection, the wells needing "repair" will be added to the 35 wells previously identified. Because of continued development in the agricultural area (additional abandoned and destroyed wells), the number of abandoned wells in need of "repair" may change. A repair program contract is being prepared. Field repair is expected to begin in April 2003, with completion in three to six months. Riverside and San Bernardino Counties will be advised of the results. Ongoing land development will require continued well abandonment activity by Watermaster.

PROGRAM ELEMENT 2 – DEVELOP AND IMPLEMENT COMPREHENSIVE RECHARGE PROGRAM

The recharge element of the OBMP is one of the centerpieces of the OBMP since it is through the enhancement of the recharge capacity of the Basin that water in the Basin that is available for use can be maximized.

Recharge of 6,500 Acre-Feet of Supplemental Water in Management Zone 1

Through the end of December, approximately 6,500 acre-feet of Supplemental Water had been spread at the Montclair Basins in Management Zone 1.

A Management Zone 3 technical committee had been established to address issues regarding recycled water recharge in Management Zone 3. Representatives participating on the Committee are from Jurupa Community Services District, Inland Empire Utilities Agency, Watermaster, Fontana Water Company, Ontario and Western Municipal Water District. In addition, IEUA and JCSD have executed an MOU regarding the recycled water recharge that resolved their concerns. Concerns expressed by the Western Representative have not yet been resolved but are anticipated to be resolved both by the maximum benefit demonstration that has been submitted to the RWQCB and through the MZ3 committee process.

Recharge Facilities Improvement Project

The project will be constructed by way of six construction elements. The first bid package has been advertised, bids were received, and a construction contract has been awarded by IEUA. L.T. Excavating was the low bidder and has been awarded a contract for $6,996,640. This amount compares favorably to the engineers estimate for this work of $7,000,000. Work is expected to begin starting the week of March 24, 2003. The contractor has 270 calendar days to complete the work. Bid package one includes general civil work for the Banana, College Heights, Lower Day, RP-3, and Turner 1 through 4 basins.

The Watermaster and IEUA are working with the Santa Ana Regional Water Quality Control Board and the Army Corp. of Engineers to finalize the issuance of permits related to bid packages two through six. Bid package two is expected to be advertised sometime in April 2003.

Prop. 13 Grant Funding – Potential Funding Reduction:

SAWPA has notified IEUA and the Watermaster that the State of California may reduce some of the Prop. 13 grant funding. The potential exists that state costs to handle the funds my increase from 3% to 6%, and that the State Department of Finance may exact a "Pro-Rata Charge" of $1.5 million. The Watermaster has communicated to the SAWPA Commission the potential ramifications this funding reduction could have on the Recharge Facilities Improvement Project as well as funding for the CDA's Desalter construction

project. SAWPA is considering several alternatives to avoid short-funding these projects, however, the resolution of the matter is still outstanding.

Santa Ana River Fully Appropriated Stream (FAS) Petition and Application:

On January 31, 2003 the State Water Resources Control Board provided public notice of Watermaster's Application to Appropriate Water number A31369. A protest period of sixty days was designated for the Application. To date one protest has been filed against Watermaster's Application be the United States Forest Service (USFS). However, Watermaster counsel has been in contact with the attorney for the USFS and it was determined that this protest was filed in error. Accordingly, USFS intends to withdraw the protest.

In addition, on January 24, 2003 the State Water Resources Control Board issued an order to the effect that all applications that have been filed on the Santa Ana River will be processed as part of the same process. In order to accomplish this procedurally, the SWRCB reopened the protest period on the application by OCWD and the application by Western/Muni, which protest period otherwise expired a number of months ago.

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

Status Report on Desalters

These program elements focus on the shift of production in the Southern end of the Basin away from agricultural uses toward urban uses. Without the OBMP, this land use conversion would have resulted in a decrease in production in the Southern end of the Basin, which would ultimately have led to rising water levels. If groundwater levels in the Southern end of the Basin rise too high, then water may "spill" out of the Basin and into the Santa Ana River. Such uncontrolled spillage could reduce the overall Safe Yield of the Basin. The basin will be managed to avoid this possibility.

Directly tied to the threat of rising water levels in the Southern area is the impaired ability of producers in the Southern end of the Basin to pump water due to water quality concerns. The ability to compensate for the loss of agricultural production with increased appropriative production is inhibited because of water quality concerns in this part of the Basin. Production in this area therefore requires water treatment. This issue is addressed through the construction of desalter facilities.

Status Report on the Chino Desalters

In May 2001, the Santa Ana Watershed Project Authority (SAWPA) completed the first Chino Basin desalter. This desalter was built to have a capacity of up to eight million gallons per day (mgd).

In the year 2000, California voters passed Proposition 13 (the Water Bond) that included significant funding opportunities to construct additional desalters in the Chino Basin. In order to take best advantage of this funding opportunity, a joint powers agency now known as the Chino Basin Desalter Authority (CDA) was formed to purchase the Chino I Desalter from SAWPA and to construct and operate the Chino I Expansion and Chino II Desalters. The formation of this entity has been described in great detail to the Court in previous progress reports.

The Chino I Desalter Expansion Project. This includes construction of 4.9 million gallons per day (mgd) of expanded treatment capacity (nitrate removal) in parallel with the existing treatment facilities, as well as associated raw water and product water delivery facilities. The Chino I Desalter was originally constructed by SAWPA to provide a total of 9,200 acre-feet per year of product water deliveries. The product water will have TDS and nitrate concentrations of 350 mg/L and 25 mg/L, respectively. The CDA authorized the drilling and awarded a contract for the Chino I Desalter Expansion wells.

Watermaster staff and consultants have been involved in reviewing the proposed well designs for new wells for the Chino I desalter. Watermaster's role has been to make sure that the well designs are consistent with the intent of the OBMP and Peace Agreement. Three of the four Desalter 1 expansion wells have been drilled. The fourth well is pending.

$1.5 million Savings Achieved. Revised product water delivery alignments were made which created approximately $1.5 million in savings.

The Chino II Desalter Project. This includes 10 mgd of new treatment capacity, as well as raw water and product water delivery facilities. The final design of the Chino II Desalter is planned for completion in May 2003. The sites for the Chino II raw water supply wells are in the final stages of acquisition. Also, the well drilling contracts are under development.

PROGRAM ELEMENT 4 – DEVELOP AND IMPLEMENT COMPREHENSIVE GROUNDWATER MANAGEMENT PLAN FOR MANAGEMENT ZONE 1

Program Element 4 details the steps to be taken by Watermaster to reduce or abate subsidence and fissuring in Management Zone 1.

Progress Made By The MZ1 Technical Committee. The MZ1 Technical Committee met twice during this reporting period. At these meetings, the MZ-1 Interim Monitoring Program, with schedule and budget, was reviewed, revised, and approved for recommendation to Watermaster Pool committees and board. Committee representatives also were informed of the status of the various efforts to implement the monitoring program.

A meeting occurred during this period with the City of Chino Hills, Monte Vista Water District, and Watermaster staff regarding the use of deep well injection as a possible element of the MZ-1 long-term management plan. This concept will be discussed in more detail at the next MZ-1 Technical Committee meeting.

Other ongoing monitoring efforts under the Interim Plan are reported above under the Land Surface Monitoring section of Program Element 1.

The Cities of Chino and Chino have begun voluntary reductions in pumping on October 1, 2002 per the Interim Agreement. Pumping reductions are expected to continue to June 30, 2003 with a total forbearance by each agency of 1,500 acre-feet.

Watermaster is not aware at this time of other legal actions pending that would cause the issue of the Court's jurisdiction over subsidence to resurface. In its October 17, 2002 Order, the Court ordered Watermaster to keep the Court apprised of any other legal actions that could cause the question of the Court's jurisdiction over subsidence to arise. Watermaster is not aware at this time of any such actions.

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 SALT MANAGEMENT PROGRAM

Cooperative Programs with Regional Board and other Entities. During the next period, (starting in March 2003) Watermaster will start a process to review water quality conditions in the Basin and to consider future water quality management activities beyond the Chino Basin desalting program. The "water quality committee" as envisioned in the OBMP Implementation Plan has not been formally constituted. Since the development of the OBMP, Watermaster has worked closely with the Regional Water Quality Control Board, the Department of Toxic Substances Control, and others to define water quality challenges and to refine the water quality management criteria in the Chino Basin.

Water Quality Management. In response to the results of Regional Board and Watermaster's groundwater-quality monitoring programs (Program Element 1) Watermaster has refined its water quality monitoring to identify and characterize water-quality anomalies such as the VOC anomaly north of the Chino I Desalter well field. Watermaster staff is participating in the process to develop TMDL's for Reach 3 of the Santa Ana River and other water bodies in the lower Chino Basin. Watermaster staff is coordinating with the Regional Water Quality Control Board with regard to surface water quality and the Department of Toxic Substances Control with regarding to developing a monitoring program to track perchlorate in groundwater in the Glen Avon area.

Watermaster and Regional Board Propose TDS and Nitrogen Objectives to Promote Maximum Benefit of Waters Available to the Chino Basin

Watermaster staff has been working with the TIN/TDS Task Force to revise the subbasin boundaries, and the TIN and TDS objectives for the Chino Basin to promote maximum beneficial use of waters in the basin (as opposed to the Regional Board's current, more rigid antidegradation-based objectives). The maximum beneficial use approach will increase water supplies and lower costs over time while meeting water quality requirements. In December 2002, Watermaster proposed specific subbasin boundaries, and TIN and TDS objectives for the Chino Basin to the RWQCB at a workshop regarding the Basin Plan update. The TIN/TDS Task Force and the Regional Water Board have reacted favorably to the Watermaster proposal, have modified it slightly, and it is Watermaster's belief that the modified Watermaster proposal will be included in the Basin Plan update that will occur in 2003.

Cooperative Effort to Determine State of Hydraulic Control. One outstanding issue to resolve regarding the Basin Plan changes is to develop a monitoring plan to evaluate the state of hydraulic control in the southern end of the basin. Hydraulic control is one tool that can be used to maximize the safe yield of the basin. Watermaster staff developed a monitoring program for OBMP purposes and described this effort in the Initial State of the Basin Report (October 2002). The execution of this monitoring program is included in

Program Element 1. IEUA, OCWD and the Regional Board are very interested in the hydraulic control management concept as a means to protect the water quality of the Santa Ana River. Hydraulic control will become a commitment of Watermaster if the proposed subbasin boundaries, and TIN and TDS objectives for the Chino Basin are adopted. Watermaster, OCWD and Regional Board staffs are working to develop a monitoring program to assess the state of hydraulic control and to provide information to Watermaster to manage future production and recharge. The initial phase of the monitoring program should be initiated this fiscal year and completed by June 30, 2003. This program will change or adapt over time as new information is developed. The coordination and review of the hydraulic control monitoring data and the development of management programs to maintain hydraulic control have been added to Program Element 6 and 7.

Salt Budget Tool Was Used To Establish TDS Objectives

Watermaster has developed a salt budget tool to estimate the current and future salt loads to the Basin and the salt benefits of the OBMP. This tool was used to establish TDS objectives for the northern part of the Basin based on maximum beneficial use of water available to the region. These projections were based on the water supply plan in the Implementation Plan and include alternative recycled water and State Project water recharge scenarios. Watermaster consultants are currently preparing a letter report describing the salt budget. This letter was originally scheduled to be l be submitted to Watermaster in December 2003 but has been deferred pending discussions with the Regional Water Quality Control Board regarding methods and the ongoing Basin Plan update. A report to the Watermaster will likely be made in the next quarter. .

PROGRAM ELEMENT 8 – DEVELOP AND IMPLEMENT GROUNDWATER STORAGE MANAGEMENT PROGRAM; AND

PROGRAM ELEMENT 9 – DEVELOP AND IMPLEMENT STORAGE AND RECOVERY PROGRAM

This section summarizes the work accomplished to date and the work planned over the next few months for the Chino Basin Dry Year Yield (DYY) Program. The DYY Program is a conjunctive use program between the Metropolitan Water District of Southern California (Metropolitan) and several Basin appropriators, which would develop a maximum of 100,000 AF of storage. This Program also explores the potential for using up to 500,000 AF of storage capacity.

Conducted CEQA Coordination. Inland Empire Utilities Agency (IEUA) presented the CEQA Findings of Consistency (FOC) to its Board for certification in December 2002. Subsequent to the Board's approval of the FOC, an addendum to the FOC was prepared on behalf of Cucamonga County Water District for addition of a third well to its initially proposed DYY facilities. It is anticipated that approval of this Addendum will occur during the next few months.

Confirm Facilities and Locations. Additional effort was made to confirm the DYY Program facilities and locations. Each participating agency was given the opportunity to review its facility preferences and make modifications, if necessary. Several agencies requested additional facilities or modifications to previously proposed facilities, and yet to finalize their facility preferences.

Develop Preliminary Design Report. The Preliminary Design Report (PDR) is under development and a draft will be prepared during the next few months. The PDR will be split into multiple volumes, one for each participating agency. Preliminary facility layout drawings and pipeline plans and profiles have been completed. Detailed descriptions of each groundwater treatment and well facility will be addressed over the next few months.

Conduct Groundwater Modeling. The groundwater model is near completion and simulations of DYY Program scenarios are being conducted. The model results will be summarized in the PDR and in detailed in a separate stand-alone report due shortly.

Other Uses of the Groundwater Model in OBMP Implementation. The groundwater model is also being used to assess the balance between recharge and discharge throughout the basin, operational storage requirement and safe storage, and the cumulative physical impact of transfers. This work started in March 2003 and will be submitted to the Watermaster in May 2003.

Develop Shift Obligation and Funding Approach. Participants in the DYY Program will be required to reduce (shift) their imported water usage by a predetermined amount during a dry year. The project participants have agreed on a funding allocation methodology and have submitted written requests for funding and shift obligation levels subject to individual agency approvals of the final contract terms.

Develop Funding and Local Agency Agreements. A draft Groundwater Storage Program Funding Agreement between Metropolitan, IEUA, Three Valleys Municipal Water District (TVMWD), and Watermaster was prepared and presented to Metropolitan. A draft Local Agency Agreement between IEUA and Watermaster was also prepared. This Local Agency Agreement includes input from all of the participating agencies. These draft agreements will be finalized over the next few months.

ADMINISTRATIVE UPDATE

Watermaster Staff Restructured

Watermaster created the new Chief Executive Officer position in November 2000, which was subsequently filled in July of 2001. The Watermaster Board, at its June 17, 2002 meeting, formed a Personnel Committee. The committee is comprised of three Board members, Terry Catlin, Mike McGraw, and Dennis Yates, the Advisory Committee Chair Ken Jeske, the Appropriative Pool Chair Ray Wellington, and the Ag Pool appointee Nathan DeBoom.

Unanimous Decision of Personnel Committee. The committee met with staff and Watermaster's employment attorney to develop a revised organizational structure to better meet the various demands on Watermaster staff. After five meetings, the Committee, staff, and counsel made a unanimous recommendation to the Board to revise the organization. The revision includes the following:

1) Creation and recruitment of Executive Asst., Secretary, and Project Engineer positions

2) Recruitment of the existing Senior Engineer position

3) Elimination of three positions

    a. Election to terminate the contract of the Chief of Watermaster Services

    b. Termination of the employment of the Water Resource Specialist

    c. The Administrative Assistant will retire in October 2003

Many factors were considered in developing the new structure. Some of the wide-ranging considerations in the restructurings include: Watermaster's ongoing responsibilities and projects, current and anticipated workload, short- and long-term needs of Watermaster, position responsibilities and requirements, supervision and delegation of work and positions, efficiencies and excesses, necessary skills and supervision, actual job duties and descriptions, current positions and their duties and descriptions, as well as the costs of the positions and the Watermaster budget.

Key Change: Non-Permanent Projects Will Rely on Consultants. The Chief Executive Officer and Committee recommended that Watermaster should utilize outside consultants for projects that are non-permanent, while defining internal staff positions that concentrate on long-term functions. Although Watermaster continues to perform duties related to the Optimum Basin Management Plan, the question will remain for a few years as to whether the current workload will be maintained or decreased as projects pass from development to operations. In any event, it is anticipated that Watermaster will have a significant role for the years to come, in implementing OBMP projects and monitoring the OBMP projects implemented by others.

Because Watermaster does not own and operate facilities, such projects as the MWD Dry Year Yield Project, the Recharge Facilities Improvement Project, and the longer term Storage and Recovery Project will consume large amounts of staff time for a limited time. Once the projects move into design and construction, the development, negotiation, and planning aspects will ebb. However, certain activities such as long-term monitoring,

accounting for basin production, recurring reporting, and court filings will continue unabated into the future and be staffed by permanent employees.

CONCLUSION

Watermaster efforts to implement the Optimum Basin Management Program continue at a rapid pace. Watermaster looks forward to continuing this trend in order to further optimize the Chino Basin as a resource to the parties to the judgment and the communities served.

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