

Objective LS2: Legislative Committee Recommend to the Board a MPWMD Position on the Draft CDO

Highlights in 2007-2008: The Legislative Advocacy Committee met throughout the spring of 2008 to address a policy recommendation regarding the CDO. The committee recommended that the Board adopt Resolution No. 2008-08 in opposition to the Draft CDO, which was approved at the May 19, 2008 Board meeting.

Background: Information about the adopted resolution opposed to the CDO may be viewed at: <http://www.mpwmd.dst.ca.us/asd/board/boardpacket/2008/20080519/16/item16.htm>.

Objective LS3: Lobby Local, State and Federal Legislators and Boards Regarding the MPWMD Position on the Draft CDO

Highlights in 2007-2008: Legislative Advocacy Committee members contacted elected representatives and SWRCB Board members, as allowed. Notably, then-Assemblymember John Laird wrote the SWRCB on March 25, 2008 to request that the SWRCB defer action on the CDO until after the CPUC issues the EIR on the Coastal Water Project and evaluates alternatives to the Moss Landing desalination site. The Board approved a contract with a government relations consultant, JEA and Associates, at its April 19, 2008 meeting. District staff and the consultant met with elected officials in Sacramento on May 14, 2008.

Background: Information on the consultant contract with JEA and Associates may be viewed at: <http://www.mpwmd.dst.ca.us/asd/board/boardpacket/2008/20080421/03/item3.htm>.

Objective LS4: Prepare and Coordinate Testimony for the Draft CDO Hearing Based on Board Policy and Direction

Highlights in 2007-2008: At the direction of the Board and led by General Counsel, several members of District technical staff fully participated in all phases of the CDO hearing process, including prepared written testimony, oral testimony, cross examination and post-hearing briefs.

Background: Participation in the SWRCB hearing process is an intensive effort led by District Counsel. The District submitted a witness list to the SWRCB on March 14, 2008. Counsel attended the March 19, 2008 Pre-Hearing Conference in Sacramento, where the SWRCB identified the key issues, testimony deadlines and other hearing logistics. As directed by the Board, General Manager Darby Fuerst prepared written testimony for the June 19-20, 2008 Part 1 hearings; Fuerst also testified orally at the hearings, accompanied by the District Engineer and District Counsel. A major effort by staff and General Counsel in June through early July 2008 was preparation of written testimony and many exhibits for the July 23-25 hearing, which must be distributed to all parties. A related task is review of all written testimony and exhibits received from other parties.

The CDO hearings straddled two reporting periods for the Mitigation Program Annual Report. Briefly, the July 2008 hearings were extended to August 8 and 9, 2008. Several District staff

members provided direct testimony and were cross examined at length at these hearings. As directed by the Board, General Counsel and the General Manager participated in initial settlement negotiations, and prepared final and response briefs in Fall 2008. The SWRCB did not act on the CDO in 2008.

GOAL: COMPLETE ASR PHASE 1 AND EXPANDED ASR PROJECT(S)

ASR entails diverting excess water flows (typically in Winter/Spring) from the Carmel Valley Alluvial Aquifer through existing CAW facilities and injecting the water into the Seaside Groundwater Basin for later recovery in dry periods. The ASR water supply efforts in 2007-2008 were: (1) pursue the permanent Phase 1 ASR Project at the Santa Margarita test site as well as future expanded ASR projects; and (2) continue testing of the existing full-scale Santa Margarita Test Injection Well (see Section VI-B below). The primary goal of the MPWMD Phase 1 ASR Project is better management of existing water resources to help reduce current impacts to the Carmel River, especially during the dry season. The project is viewed as being complementary to other larger, long-term water augmentation projects that are currently being explored by various entities. The project entails a maximum diversion of 2,426 AFY from the Carmel River for injection, a maximum extraction of 1,500 AFY from the ASR wells in the Seaside Basin, and an average yield of about 920 AFY. The proposed operation of the Phase 1 ASR Project would result in reduced pumping of the Carmel River in Summer/Fall and increased storage in the Seaside Basin, which are both considered to be environmentally beneficial.

On March 23, 2006, the District issued the Draft Environmental Impact Report and Environmental Assessment (EIR/EA) on the MPWMD Phase 1 ASR Project, including information on a CAW temporary pipeline associated with the ASR Project. On August 21, 2006, the MPWMD Board certified the Final EIR/EA, including responses to comments, adoption of formal Findings of Approval, and adoption of a Mitigation Monitoring Plan to address project impacts, with emphasis on comments submitted by California Department of Fish and Game (CDFG), and National Marine Fisheries Service (NMFS, also known as NOAA Fisheries). Notably, both CDFG and NMFS had previously filed water rights protests (see ASR1 below), so the EIR/EA responses and refinements were made with the intent to also resolve water rights concerns. Additional information on the Final EIR/EA is available on the District website at:

<http://www.mpwmd.dst.ca.us/asd/board/boardpacket/2006/20060821/10/item10.htm>

In Fall 2006, the certified EIR/EA was used a primary decision-making tool by several permitting entities. On September 19, 2006, the U.S. Army transmitted a signed Right-of-Entry permit, a key approval needed to construct the Phase 1 ASR Project. The City of Seaside Planning Commission approved a Conditional Use Permit for the Phase 1 ASR well on October 11, 2006. The Monterey County Health Department issued a well construction permit on December 13, 2006. Construction on Well #2 began in December 2006 and the well itself was completed in February 2007. However, a few set-backs were encountered and several ancillary facilities are needed to enable production at maximum capacity, as described below in Objective ASR3.

Objective ASR (2007): Secure SWRCB Water Rights Permit for Phase 1 ASR Project

2007-2008 Highlights: An extensive multi-year water rights effort resulted in the SWRCB issuing Orders WR 2007-0041-DWR and WR 2007-0042-DWR and Amended Permits 20808A and 20808B on November 30, 2007. These Orders approve, in part, the District's Petitions for Change to allow some of the water rights from the New Los Padres Dam and Reservoir Project in 1995 to be applied to the ASR Project. District staff performed follow-up activities for various permit conditions, including Condition #28 of Amended Permit 20808A relating to the need for a CDFG stream alteration agreement or waiver equivalent. This effort continued into early January 2008. Please see Objective ASR5 below for related information on water rights.

Background: Water rights for the Phase 1 ASR Project are based on two Petitions for Change, originally submitted by the District to the SWRCB in October 2001 and revised in September 2003. The SWRCB noticed the District's Petitions on April 15, 2005. The District prepared formal responses to NMFS and CDFG protests in mid-June and July 2005, respectively. The District worked extensively with NOAA and CDFG through September 2007 to resolve water rights issues and also address CAW concerns (CAW and MPWMD had previously agreed to share water rights for the Phase 1 ASR Project). These efforts included extensive meetings, telephone conferences, computer modeling and formal correspondence. The SWRCB also hosted several meetings of all water rights participants. A mutually satisfactory resolution of agency and CAW concerns finally occurred in mid-September 2007, just before the scheduled September 24, 2007 SWRCB hearing, which was cancelled when the protests by CDFG and NMFS were withdrawn. This delay did not affect ASR water diversions in Spring 2007 due to the limited opportunity to use the water rights permit, had it been issued. Except for a few days, Carmel River flow did not meet minimum flow rates needed to divert water to the existing ASR well. Approximately 12 AF were diverted in 2007 under a temporary urgency permit

In related action, District staff continues to coordinate with SWRCB staff regarding water rights associated with the New Los Padres Reservoir Project (issued in 1995). The reservoir water rights are relevant as they are the basis for the Petitions for Change described in Objective ASR1 above. The District transmitted a July 2006 letter requesting an extension of time for the reservoir permits to maintain the water rights associated with them. Five objections were filed from entities including: CAW, CDFG, Carmel River Steelhead Association, Esselen Tribe of Monterey County and NMFS. Copies of the objections were provided to the District in December 2006, and responses were provided. The parties have not yet met to come to agreement on terms and conditions for approval to extend the permit; outstanding issues would become the subject of SWRCB decisions.

Objective ASR1 (continued in 2008): Notify and Make a Presentation to the Watermaster, Informing Them of MPWMD's Water Storage Rights

2007-2008 Highlights: This objective relates to the fact that the Seaside Basin Watermaster is the Court-appointed entity with authority over storage and extraction rights of water in the Seaside Basin. District General Counsel prepared a legal opinion on MPWMD and CAW's right to store water injected into the Seaside Basin via the Phase 1 ASR Project and potential

future projects in 2007. This information was provided to Watermaster staff and the Technical Committee, but was not scheduled as a Watermaster Board agenda item.

Objective ASR2 (continued in 2008): Conduct a Dual-Well Injection Test and Report Results to the Board

2007-2008 Highlights: MPWMD staff continued to work with MCWD and MCWRA to facilitate use of water from the MCWD system for roughly two weeks to test the ASR project, particularly the use of Well #1 and the new Well #2 together, if sources from the Carmel River and/or main CAW system are not available. A three-party agreement was finalized and approved by the respective agencies. Engineering work continued to tie the MCWD and ASR pipelines to enable the two wells to function at full capacity. The completion date was revised to October 31, 2008 due to additional review requested by the Regional Water Quality Control Board and a materials shortage associated with the motor for Well #2. Additional delays in conducting the injection test will likely occur due to MCWD information requests and service interruptions associated with planned road grading and water pipeline installation for the General Jim Moore Boulevard realignment in the area of the test site.

Background: Typically, the Phase 1 ASR well testing would be based on waters from the Carmel River, as allowed by the water rights permits issued by the SWRCB, which consider the needs of the Carmel River steelhead. Lack of flow in the Carmel River or access to flow during certain periods, combined with the current operational constraints in the CAW system, has resulted in loss of the ability to test the Phase 1 ASR project at full capacity to date (i.e., Well #1 and #2 operating together). Thus, District staff has been working with MCWD and MCWRA since 2007 to potentially use treated water from the MCWD distribution system to support a "dual-well" injection test for roughly two weeks at the ASR site. District Counsel drafted an agreement for consideration by participating entities in order to enable this proposal to proceed, which would define objectives and responsibilities regarding the planned injection testing using MCWD system water. The MCWD Board approved this agreement at its November 14, 2007 meeting, and the MPWMD Board approved the agreement at its December 10, 2007 meeting. A revised version of a three-party agreement was submitted to MCWRA on March 10, 2008, and was signed by MCWRA on March 14, 2008.

The actual dual-well test is subject to completion of several required actions. If water from MCWD is to be used, prior to initiating the dual-well injection test (assuming 3,000 gallons per minute for up to three weeks), the following tasks must be completed: (1) make a temporary physical connection between the MCWD system and the ASR site; (2) complete the ASR Well #1 rehabilitation work and Well #2 development work that are underway; and (3) provide geochemical modeling results for review and approval by the RWQCB.

Objective ASR3 (continued in 2008): Achieve Consensus with CAW on Final MPWMD and CAW Phase 1 ASR Facilities Design, Including a Schedule

2007-2008 Highlights: District staff and consultants continued to meet with CAW representatives to coordinate on future ASR well sites, and to continue design work on CAW infrastructure to ensure delivery of adequate water volume to the Phase 1 ASR site. Design and construction tasks were completed or are underway for ASR Wells #1 and #2. MPWMD continued geochemical analyses of injected and native aquifer waters to satisfy concerns expressed by the Regional Water Quality Control Board (RWQCB). The MPWMD Board approved a funding mechanism for new components of the Phase 1 ASR Project.

Background: The Phase 1 ASR Project is comprised of the existing full-scale test well at the Santa Margarita site in addition to a new, second ASR well immediately adjacent to the site. The two wells would be operated in tandem during the injection season. The District began construction mobilization for the second well the week of December 4, 2006, as scheduled. A temporary sound wall was constructed and drilling began in early January 2007. The well was completed in early February 2007 and formal production testing subsequently occurred. In early April, while preparations were being made for the final well inspection video, it was discovered that rock formation materials from the aquifer system had entered the well, indicating a continuing problem with the integrity of the well casing, apparently due to failure of pipe threads on the contractor's drill bit that allowed the well development pump to drop to the bottom of the well. Repair of the casing was completed in early May, and included a new bottom "swage" plate for the well, plus a concrete plug to ensure that the plate remains in place for the life of the well. The District was not charged for the repair, which was conducted by the well drilling contractor, under supervision from the District's construction management consultant. A final acceptance video of the well construction was conducted in mid-May 2007. The U.S. Army executed a *Supplemental Agreement No. 1 to Department of Army Easement for Injection Test Well* to enable the long-term Phase 1 ASR Project on September 21, 2007.

In related action, beginning in October 2007, ASR Well #1 underwent planned remediation, and repair of the well components are more extensive than originally anticipated. Also, unforeseen regulatory issues related to water quality and investigation of possible unexploded ordnance in the former Fort Ord Military Reservation have posed challenges that have delayed progress.

In coordination with CAW, District staff and consultants continued design of Phase 1 ASR support facilities such as a new well pump and motor in addition to electrical conduits, percolation basin, pipes and valving. Bids for initial facilities construction were received on November 13, 2007 to install permanent underground plumbing and electrical piping for ASR Well #2. The goal date for installation of these ASR well facilities was delayed to March 31, 2008, due in part to delays stemming from ordnance removal requirements and water quality concerns conveyed in Fall 2007. District staff coordinated with the Fort Ord Reuse Authority (FORA), U.S. Army and RWQCB to help address these issues. As of April 15, 2008, all of the underground utilities to the second ASR well have been installed.

Regarding water quality issues, in late November 2007, MPWMD and CAW staff met with RWQCB Executive Officer Roger Briggs to discuss questions about disinfection byproducts in CAW treated potable water, the injection source water for the Phase 1 ASR Project. These questions were raised due to concerns about ASR projects in other regions of the state, which triggered the Central Coast

RWQCB's need for consistent review of such projects. During the meeting, District technical staff presented the results of rigorous and detailed ASR water quality testing analyses we have conducted over the past several years. The consensus conclusion among representatives of all three entities present in the meeting was that the District's ASR project source water conditions, Seaside Basin water use considerations, and aquifer characteristics are significantly different, and in large part not directly comparable, to the other ASR projects that raised the issue. It is anticipated that RWQCB staff will consider the Phase 1 Seaside Basin ASR project separately, and not require additional permit-related requirements that would adversely affect the project's viability.

During the meeting, Mr. Briggs assured District staff that their written waiver of discharge requirements, which was issued for the MPWMD Phase 1 Project in 2007, enables commencement of ASR operations in 2008. RWQCB staff also indicated that they would be developing formal criteria and guidelines to ensure that all ASR and similar projects in the Central Coast Region are reviewed for consistency with RWQCB policy. District staff intends to closely monitor this process to assist the RWQCB, and in order to ensure the long-term nature of RWQCB's authorization or exemption determination for the Seaside Basin ASR operations.

Regarding unexploded ordnance, in late 2007, the District was advised by FORA that there are additional required ordnance investigation activities that affect the Phase 1 ASR Project site that must be completed prior to property transfer to the City of Seaside. In December 2007, the U.S. Army indicated it would assist with these activities, which commenced in January 2008. Accordingly, the underground facilities installation work was conducted with this support being provided by the U.S. Army.

Regarding ASR Project financing, on June 18, 2007, the Board adopted the required resolutions for participation in the California Statewide Communities Development Authority (CSCDA) Water/Wastewater pooled bond program to finance the District's Phase 1 ASR Project. Subsequently, a tax law attorney with the bond counsel firm that represents the CSCDA program determined that the ASR project is not eligible for regular tax-exempt financing because CAW, which is a private for-profit entity, will use water injected and recovered by the District-owned ASR wells in CAW's distribution system. With the assistance of a financial advisor, District staff also pursued a financing alternative that would involve issuance of tax-exempt "private activity" bonds. However, due to two additional time-consuming and costly processes the District would have to complete in order to issue this type of debt, other alternatives were re-evaluated. Staff determined that delays in completing the ASR project in 2007 meant that a significant portion of the required funding would not be required until Fiscal Year 2008-09, and that the project could be funded on a pay-as-you-go basis. That alternative was approved by the Board at its November 19, 2007 meeting.

Regarding CAW infrastructure, in 2006, District staff worked closely with CAW to help obtain permits and other approvals to construct a temporary pipeline along the west side of General Jim Moore Boulevard. This pipeline is needed for existing CAW system operational flexibility as well as to provide water to enable full capacity of the Phase 1 ASR Project. CAW mobilized the temporary pipeline segments in December 2006, and the pipeline assembly was completed as of late March 2007. However, the District was advised by CAW consultants on April 18, 2007 that additional CAW distribution facilities are needed to support water diversion to both Phase 1 ASR wells in

addition to existing CAW wells. Since then, District and CAW staff and consultants continue to meet to address current and future demands on the CAW system from a hydraulic and engineering perspective. A related task is to balance near-term operations and ASR needs with longer-term plans by CAW to construct the Coastal Water Project. CAW submitted a basis-of-design report for needed facilities to the CPUC on November 30, 2007, but additional work is needed.

Objective ASR4 (continued in 2008): Achieve Consensus with CAW on the Yield and Schedule for the Next Phase of ASR Expansion

2007-2008 Highlights: District staff continued to coordinate with CAW staff and consultants on necessary action and facilities to enable expanded ASR.

Background: As described above, efforts to date have focused on the Phase 1 ASR Project. However, meetings continue between District and CAW staff/consultants regarding future ASR phases. District staff has provided computer simulations for CAW consultant, ASR Systems, for their investigation of the ASR element of the proposed Coastal Water Project and potential expanded ASR projects. In mid-2007, District staff reviewed a CAW Technical Memorandum on a conceptual plan for expanded ASR.

Objective ASR5 (continued in 2008): Complete Negotiations with CAW for Joint Ownership of Water Rights to Obtain Future ASR and Other Water Rights Permits

2007-2008 Highlights: Initial discussions with CAW took place, but were second priority to ASR Phase 1 issues and the follow-up tasks associated with the SWRCB hearings on the draft CDO. District and CAW counsel were tasked with assessing the ability of using existing permits associated with the formerly proposed New Los Padres Dam as the basis for future ASR water rights filings. On June 30, 2008, the District submitted a petition to change its existing Permit #20808B to serve Phase 2 of the ASR Project.

Background: In late March 2006, the District and CAW finalized a Management and Operations Agreement (MOA) regarding ASR testing, mutual aid, cost-sharing, water rights and other issues. This agreement satisfied the State Department of Health Services requirement that the entities enter into a minimum 10-year agreement to operate the ASR facilities. It also includes provisions for sharing rights for the Phase 1 ASR project and to negotiate additional agreements for acquiring and sharing ownership of water rights for present and future potable water supplies for the Monterey Peninsula area. In 2007, efforts focused on securing water rights for the Phase 1 ASR Project. Efforts in 2008 were intended to focus on potential future expansion of ASR, but tasks associated with the draft CDO were of higher priority.

Water rights for ASR are based on two Petitions for Change, originally submitted by the District to the SWRCB in October 2001 and revised in September 2003. The SWRCB approved Amended Permits 20808A and 20808B on November 30, 2007 as described in Objective "ASR (2007)" above.

District staff continued to coordinate with CAW and SWRCB staff regarding water rights associated with the New Los Padres Reservoir Project (issued in 1995). The reservoir water rights are relevant

as they are the basis for the Petitions for Change described above. The District transmitted a July 2006 letter requesting an extension of time for the reservoir permits to maintain the water rights associated with them. Five objections were filed from entities including: CAW, CDFG, Carmel River Steelhead Association, Esselen Tribe of Monterey County and NMFS. Copies of the objections were provided to the District in December 2006, and responses were provided. The parties have not yet come to agreement on terms and conditions for approval to extend the permit; outstanding issues would become the subject of future SWRCB decisions.

B. Near-Term Water Supply Projects

Description and Purpose

Section VI-A above describes long-term water supply alternatives, including the MPWMD Phase 1 ASR Project. This section focuses on annual ASR testing. Since 1996, the District has evaluated the feasibility of ASR at greater levels of detail, including obtaining annual temporary water right permits from the SWRCB to divert excess water from the Carmel River Basin through existing CAW facilities and inject it into the Seaside Basin for later recovery in dry periods. To date, the District has constructed two test wells in the Seaside Basin: (1) a shallower ASR pilot test well into the Paso Robles Formation (located at Mission Memorial Park in Seaside) in 1998; and (2) a 720-foot deep, full-scale test well into the Santa Margarita Formation in March 2001. Injection now primarily occurs at the MPWMD Santa Margarita Test Injection Well (now called ASR Well #1) located on the former Fort Ord military base, just east of General Jim Moore Boulevard near Eucalyptus Avenue. MPWMD submits detailed annual reports to the SWRCB after each testing season.

Implementation and Activities During 2007-2008

2007-2008 Highlights: Just over 60 AF were diverted and injected at the MPWMD ASR Well #1 test site in 2007-2008 (i.e., permitted diversion season of December 1, 2007 through May 31, 2008). Diversion and injection did not begin until February 5, 2008 and continued intermittently until March 19, 2008 due to lack of streamflow. It is notable that Water Year 2008 was the first year where Carmel River diversions were based on a long-term water rights permit rather than a temporary urgency permit. With the 2008 diversions, a total of 1,936 AF have been diverted and injected into the Seaside Basin since Water Year 1998.

Background: Between Water Years 1998 and 2007, the District injected approximately 1,875 AF of excess winter flow from the Carmel River Basin into the Seaside Basin via the two wells described above. During this period, 1,139 AF was recovered and delivered to the community via the CAW system as part of the test program.

VII. ALLOCATION OF NEW WATER SUPPLY

The Water Allocation Program requires that each new water connection or expansion in use be accounted for so that water production limitations would not be exceeded. Ordinance No. 70, adopted by the District Board on June 21, 1993, ended the moratorium on the issuance of new water connections that was imposed beginning in January 1991 as a result of the Water Allocation Program EIR. The ordinance established an allocation of new water that could be used by each jurisdiction from a total of 358 acre-feet (AF) of Cal-Am metered sales, based on 385 AF of new production capacity from the Paralta Well (see also Section V). Of this 358 AF, a 15.280 AF District Reserve Allocation for community benefit projects was subsequently apportioned. In February 1995, Ordinance No. 73 was adopted to eliminate the District Reserve and allocate the remaining water equally among the eight jurisdictions. Of the original 50 acre-feet that was allocated to the District Reserve, 34.72 acre-feet remained and was distributed equally (4.34 acre-feet) among the jurisdictions.

Implementation and Activities During 2007-2008

Since the Paralta Well allocation became available in August 1993, a total of 298.563 AF of the 342.72 AF Paralta Well allocation had been permitted for use by jurisdictions through June 30, 2008, leaving a total of 44.157 AF remaining, or 12.9 percent of the jurisdictions' Paralta well allocation (**Table VII-1**). Pre-Paralta credits from expired or canceled Water Permits ("pre-Paralta credits") are credited to the appropriate jurisdiction and may be used in addition to the Paralta allocation. Also, credits were available for public retrofit projects from March 1995 to July 1998 (Ordinance Nos. 75 and 91).

More detailed information is presented in **Table VII-1**, which provides the status of water allocations to the jurisdictions as of June 30, 2008. The "changes" columns in the table refer to the month of June 2008 only; the "remaining" columns refer to the quantities that are available for use by the jurisdictions according to District rules. A total of 119.645 AF was available from all sources for Jurisdiction use as of June 30, 2008.

As described in Section IV of this report, specific water entitlements associated with funding of the Pebble Beach Reclamation Project are identified for areas within the Del Monte Forest pursuant to Ordinance No. 109. These entitlements are not water "allocations", and are tracked separately.

Table VII-1

**MONTHLY ALLOCATION REPORT
Reported in Acre-Feet
June 30, 2008**

Jurisdiction	Paralta Allocation	Changes	Remaining	PRE-Paralta Credits	Changes	Remaining	Public Credits	Changes	Remaining	Total Available
Airport District	8.100	0.000	5.224	0.000	0.000	0.000	0.000	0.000	0.000	5.224
Carmel-by-the-Sea	19.410	0.000	1.578	1.081	0.000	1.081	0.560	0.000	0.492	3.151
Del Rey Oaks	8.100	0.000	0.000	0.440	0.000	0.000	0.000	0.000	0.000	0.000
Monterey	76.320	0.000	0.015	50.659	0.000	0.471	38.121	0.000	7.478	7.964
Monterey County	87.710	0.000	14.956	13.080	0.000	0.497	7.827	0.000	2.414	17.867
Pacific Grove	25.770	0.000	1.806	1.410	0.000	1.090	15.874	0.000	2.430	5.326
Sand City	51.860	0.000	0.000	0.838	0.000	0.000	24.717	0.000	23.599	23.599
Seaside	65.450	0.000	20.578	34.438	0.000	34.438	2.693	0.000	1.498	56.514
TOTALS	342.720	0.000	44.157	101.946	0.000	37.577	85.391	0.000	37.911	119.645