

**MEETING OF THE WATER RESOURCES COMMITTEE
OF THE BOARD OF DIRECTORS
WATER REPLENISHMENT DISTRICT OF SOUTHERN CALIFORNIA
4040 PARAMOUNT BOULEVARD, LAKEWOOD, CALIFORNIA 90712
1:00 P.M. WEDNESDAY, MAY 6, 2009**

AGENDA

EACH ITEM ON THE AGENDA, NO MATTER HOW DESCRIBED, SHALL BE DEEMED TO INCLUDE ANY APPROPRIATE MOTION, WHETHER TO ADOPT A MINUTE MOTION, RESOLUTION, PAYMNET OF ANY BILL, APPROVAL OF ANY MATTER OR ACTION, OR ANY OTHER ACTION. ITEMS LISTED AS "FOR INFORMATION" MAY ALSO BE THE SUBJECT OF ANY "ACTION" TAKEN BY THE BOARD OR A COMMITTEE AT THE SAME MEETING.

- 1. DETERMINATION OF A QUORUM**
- 2. PUBLIC COMMENT**
- 3. RECEIVE AND FILE REGIONAL GROUNDWATER MONITORING REPORT – WATER YEAR 2007-2008**
Staff Recommendation: Receive and file the 2007-2008 Regional Groundwater Monitoring Report.
- 4. GROUNDWATER RELIABILITY IMPROVEMENT PROGRAM UPDATE (GRIP)**
Staff Recommendation: For information.
- 5. RIO HONDO AND SAN GABRIEL RIVER SPREADING GROUNDS INTERCONNECTION PIPELINE UPDATE**
Staff Recommendation: For information.
- 6. BASIN OPERATIONAL PLAN UPDATE**
Staff Recommendation: For information.
- 7. APPROVAL OF MINUTES OF MARCH 12, 2009**
Staff Recommendation: Approve the minutes of March 12, 2009 as submitted.
- 8. DIRECTORS REPORTS, INQUIRIES, REVIEW OF DIRECTIONS TO STAFF**
- 9. ADJOURNMENT**

Posted by Abigail C. Andom, Deputy Secretary, April 30, 2009.

In compliance with the Americans with Disabilities Act (ADA), if special assistance is needed to participate in the Board meeting, please contact Deputy Secretary Abigail Andom at (562) 921-5521 for assistance to enable the District to make reasonable accommodations.

All public records relating to an agenda item on this agenda are available for public inspection at the time the record is distributed to all, or a majority of all, members of the Board. Such records shall be available at the District office located at 4040 Paramount Boulevard, Lakewood, California 90712.

Agendas and minutes are available at the District's website, www.wrd.org.



MEMORANDUM

ITEM NO. 3

Prepared by:	Tony Kirk
Reviewed by:	Ted Johnson
Approved by:	Robb Whitaker

DATE: MAY 6, 2009

TO: WATER RESOURCES COMMITTEE

FROM: ROBB WHITAKER, GENERAL MANAGER

SUBJECT: RECEIVE AND FILE REGIONAL GROUNDWATER MONITORING REPORT – WATER YEAR 2007- 2008

SUMMARY

WRD Staff is in the final stages of preparation of the 2007/2008 Regional Groundwater Monitoring Report, which describes the groundwater levels, groundwater quality and replenishment water quality for the Central and West Coast Basins (CWCB) for the previous water year. The purpose of the Regional Groundwater Monitoring Program is to perform the basic District function of tracking groundwater levels and groundwater quality. This information is utilized to determine the health of the groundwater basins and to assist in development of concepts to optimize the use of our local groundwater resource. The major components of the staff-implemented program include the following:

- Establish a network of monitoring wells throughout the District.
- Collect water levels from these wells at regular (daily) intervals using automated data loggers.
- Collect water quality samples from these wells twice per year using the Districts' sampling vehicles.
- Collect water quality data for the different types of replenishment waters recharging the CWCB.
- Analyze the water level and water quality data to establish first hand knowledge of current basin conditions.
- Incorporate the information into WRD's Geographic Information System (GIS) database that can be accessed by Staff, Stakeholders, and the public.
- Prepare Annual Reports on the Program findings.

Staff will provide an overview of the report at the Committee meeting. The Executive Summary is presented below:

Executive Summary

The Water Replenishment District of Southern California (WRD or the District) was formed in 1959 to manage the groundwater replenishment and groundwater quality activities for 4 million people in 43 cities that overlie the Central and West Coast Basins (CWCB) in southern Los Angeles County. These basins currently supply about 40 percent of the water used by the population in the region. Our mission is to protect and preserve high-quality groundwater in the basins through innovative, cost-effective, and environmentally sensitive management practices for the benefit of residents and businesses of the CWCB.

To that end, WRD has a dedicated Board and staff that engage in year-round activities to closely monitor groundwater conditions. The District performs extensive collection, analysis, and reporting of groundwater data to ensure proper resource management. The publication of this Regional Groundwater Monitoring Report is one result of these efforts, which presents information on groundwater production, groundwater replenishment, groundwater levels, and groundwater quality for the previous Water Year (WY) which runs from October 1 – September 30 of each year. This current report is for WY 2007/08. Detailed information is presented in the body of the report with a summary below:

Groundwater Production

Groundwater is pumped from the CWCB aquifers to help meet municipal, industrial, and agricultural demands. The maximum allowable pumping from the basins has been set through court adjudications at 281,835 acre feet per year (AFY). Actual pumping is normally less than this due to factors such as the District's In-Lieu program, which provides incentives not to pump to decrease basin overdraft, or because numerous water wells are inoperative for maintenance, water quality, or permitting reasons.

In WY 2007/08, total production was 244,732 AF which is 37,103 AF (13.2%) below the adjudicated amount. Last year's pumping was a 3.7% increase from the previous year's pumping of 235,770 AF and a 3.0% increase from previous 5-year average of 237,344 AF.

Groundwater Replenishment

WRD supplements natural groundwater recharge with artificial replenishment to make up the pumping overdraft. These replenishment activities combined with controlled adjudicated pumping have ensured a sustainable, reliable supply of groundwater in the CWCB. Artificial replenishment water sources used by WRD include imported surface water from northern California and the Colorado River and reclaimed municipal wastewater (recycled water) from local wastewater treatment plants.

Artificial replenishment occurs at the Montebello Forebay Spreading Grounds, the seawater barrier injection wells, and the In-Lieu program. In WY 2007/08, a total of 95,795 AF was replenished at the spreading grounds, including 54,518 AF of local water (storm water), 1,510 AF of imported water, and 39,767 AF of recycled water. This is only 77% of normal due to the general unavailability of imported water and lower than planned recycled water. As a result, water levels fell and storage decreased as described in the next section.

At the seawater barrier injection wells, a total of 28,045 AF were injected including 12,880 AF of imported water and 15,165 AF of recycled water. This is a 5.4% increase from the previous 5-year average. There was no In-Lieu replenishment in WY 2007/08 due to the Metropolitan Water District of Southern California's (MWD) suspension of the In-Lieu water due to drought and water shortage.

Groundwater Levels

In the Central Basin, groundwater levels decreased up to 15 feet in WY 2007/08 due primarily to the lack of replenishment water and increased pumping as described in the previous two sections. Water levels in the West Coast Basin, however, remained relatively stable with small localized increases as pumping was generally balanced by recharge. Groundwater in

storage decreased over 44,000 AF basin-wide, mostly in the Central Basin in the Montebello Forebay and Los Angeles Forebay areas.

Groundwater Quality

WRD has taken an active role in monitoring and protecting the groundwater and replenishment water quality in the CWCB. We have established the Regional Groundwater Monitoring Program which consists of a network of nearly 250 monitoring wells at over 50 locations throughout the District. WRD collects nearly 500 groundwater samples from these wells on an annual basis and analyzes them for over 100 water quality constituents to produce nearly 50,000 individual data points to help track the water quality in the basins. By analyzing and reviewing the results on a regular basis, any new or growing water quality concerns can be identified and dealt with in an expedited manner.

The results of all the monitoring and detailed analysis is presented in Chapters 2 and 4 of this report. But in summary, the waters that the District uses for groundwater replenishment continue to meet our high standards for quality. And overall, the groundwater in the CWCB continues to be of high quality and suitable for potable and non-potable uses. There are localized areas of marginal to poor water quality that may require treatment prior to use. The causes of these lesser quality areas are from natural or human sources. But, WRD will continue to focus on these areas to monitor trends and look for ways to cleanup any contamination that makes the groundwater unsuitable for use.

Upcoming Activities and Challenges Ahead

WRD remains committed to its statutory charge to protect and preserve the groundwater resources in the CWCB. To that end, WRD will be installing additional monitoring wells in the upcoming year to enhance its monitoring well network and will perform other projects and programs to meet this charge. One of the biggest challenges currently facing the District is the rising cost of imported water and the shortage of imported water for replenishment. The District has gone nearly 2 years without imported water for the spreading grounds resulting in falling water levels and loss from storage. The District seeks to eliminate this reliance on imported water for replenishment and looks to expand its use of local sources including storm water and recycled water. We call this initiative our Water Independence Now (WIN) program – a program designed to ensure a reliable source of replenishment water to keep the groundwater basins useable and of high quality for all the groundwater users in the WRD service area.

FISCAL IMPACT

None at this time.

STAFF RECOMMENDATION

Receive and file the 2007-2008 Regional Groundwater Monitoring Report.



MEMORANDUM

ITEM NO. 4

Prepared by: Jim McDavid

Reviewed by: Bob Slemak

Approved by: Robb Whitaker

DATE: MAY 6, 2009

TO: WATER RESOURCES COMMITTEE

FROM: ROBB WHITAKER, GENERAL MANAGER

**SUBJECT: GROUNDWATER RELIABILITY IMPROVEMENT PROGRAM (GRIP)
UPDATE**

SUMMARY

GRIP is a partnership of WRD, Upper San Gabriel Valley Municipal Water District (USGVMWD) and Los Angeles County Sanitation Districts (LACSD) to develop a project that would replace unreliable imported replenishment water with a locally sustainable supply (i.e. advanced treated reclaimed water). GRIP is part of our Water Independence Now (WIN) initiative.

The primary goals of the GRIP are to:

- Protect groundwater quality and quality of life
- Provide a sustainable and reliable supply for replenishing the basins
- Minimize the environmental/energy footprint of any option or options selected
- Minimize cost to agencies using groundwater
- Engage stakeholders in the decision making process

The key tasks that lay ahead include:

- Conceptual Design Report
 - Staff has been working with project partners and MWH to complete a Preliminary Development Plan which involves the performance of a feasibility level assessment for providing advanced treated wastewater as a new source of replenishment water. This report has been completed and will be distributed to the committee.
- Stakeholders meetings
 - Pumpers and relevant stakeholders to share information and solicit input within WRD service area.
- Governance Agreement
 - A draft of a proposed Joint Powers Agreement (JPA) has been distributed to the managers of the project partners. The managers will be meeting in the immediate future to discuss the draft and provide staff direction of completing the JPA.

- Public Outreach Program
 - A Request For Qualifications (RFQ) was released in January 2009 and 8 submittals were received in February. Staff from each of the project partners have reviewed and evaluated the RFQ submittals in preparation for release of the Request For Proposals (RFP) in the future.
- Facilities Plan / Alternatives Analysis
 - Upon completion of the Conceptual Design Report staff is preparing a RFP to solicit consultants to perform an assessment of any and all alternative projects for developing a local, sustainable source of replenishment water for the Montebello Forebay. This report will serve as the basis for the EIR/EIS to be performed early next year to submit to regulatory agencies in order to obtain the necessary permits for the project.

FISCAL IMPACT

None

STAFF RECOMMENDATION

For information



MEMORANDUM

ITEM NO. 5

<i>Prepared by:</i>	Bob Siemak
<i>Reviewed by:</i>	Nancy Matsumoto
<i>Approved by:</i>	Robb Whitaker

DATE: MAY 6, 2009

TO: WATER RESOURCES COMMITTEE

FROM: ROBB WHITAKER, GENERAL MANAGER

**SUBJECT: RIO HONDO AND SAN GABRIEL RIVER SPREADING GROUNDS
INTERCONNECTION PIPELINE UPDATE**

SUMMARY

The proposed Interconnection Pipeline project is a new, dedicated pipeline that will be constructed between the Rio Hondo and San Gabriel River Spreading Grounds to transfer replenishment water in either direction (via gravity flow from the Rio Hondo to San Gabriel or pumping in the reverse direction). When completed, this project will provide additional conservation of stormwater of approximately 1,300 AF/year, will increase conservation of recycled water by approximately 5,700 AF/year, and will provide operational flexibility to mitigate increasing obstacles to performing replenishment at the spreading grounds. The project is part of our Water Independence Now (WIN) initiative.

The project is a Los Angeles County Flood Control District (LACFCD)-lead project, with WRD providing supporting funding and some assistance with design review. The total cost of the project is expected to be \$7.6 million with WRD's share capped at \$3.8 million. Physically, the project will consist of a pumping station at the San Gabriel River Spreading Grounds, and 6,500 feet of dedicated underground transmission pipeline between the Rio Hondo and San Gabriel River Spreading Grounds.

- A Cooperative Agreement between LACFCD and WRD for cost-sharing of this project was executed in March 2008, while design work commenced by that time. The original schedule called for start of construction in October 2008 with completion of construction by October 2009, thus having the facilities available for the 2009-2010 storm season. However, during the course of design, CBMWD approached LACFCD to include a CBMWD recycled water pipeline in the same excavation ditch as the interconnection pipeline, thereby minimizing traffic issues and construction costs by using a common right-of-way. LACFCD considered the request and agreed to include the CBMWD pipeline in the same excavation, which ultimately resulted in a delay to the completion of the project by about 4.5 months. (Additional delays occurred due to redesigns and negotiations required to accommodate existing pipelines located along the proposed interconnection pipeline alignment; pipeline owners did not identify their pipes during LACFCD's project stakeholder survey and comment process, so LACFCD was required

to complete potholing to verify their locations and depths, verify the pipeline owners, and create revised designs acceptable to all parties.)

. The current schedule is as follows:

- Bid opening – May 2009
- Award of contract and issuance of notice-to-proceed to contractor – June 2009
- Site Mobilization of Contractor and Groundbreaking – September 2009
- Completion of construction – September 2010

As evident in this revised schedule, the interconnection pipeline will not be completed in time for the 2009-10 rain season. WRD staff requested from LACFCD an estimate of cost to accelerate construction in order to meet a November 1, 2009 completion and their response was that the project could not be completed by that time, regardless of cost. Reasons cited include the lead time to order and manufacture the pipe (at least 90 days). Similar lead time is required for the pumps. Staff will continue to work with LACFCD on other schedule shortening measures.

FISCAL IMPACT

None at this time

STAFF RECOMMENDATION

For information.



MEMORANDUM

ITEM NO. 6

Prepared by: Jason Weeks
Reviewed by: Bob Siemak
Approved by: Robb Whitaker

DATE: MAY 6, 2009
TO: WATER RESOURCES COMMITTEE
FROM: ROBB WHITAKER, GENERAL MANAGER
SUBJECT: BASIN OPERATIONAL PLAN UPDATE

SUMMARY

In late 2007, the District and its consultant CH2MHill finalized the West Coast Basin Operating Plan Study (Study). This study evaluated potential alternative operational scenarios for the West Coast basin based on a primary assumption that MWD would have surplus replenishment water available 7 out of 10 years. MWD now estimates that replenishment water will be available only 3 out of 10 years as a result of the reduced availability of imported water supplies to southern California for various hydrologic, legal and regulatory reasons.

At the January 7, 2009 meeting of the Water Resources Committee, staff provided an overview of the study and discussed the need for an update to that study. This update is necessary given the change in projected availability of replenishment water and the proposed Central and West Coast Basin Judgment amendments that have recently been filed.

Prior to proceeding further with the development of the scope of work, it was decided that District staff would work closely with the West Basin Water Association and MWD member agencies on its development to ensure all water resource issues are properly considered.

District staff will provide the Committee with an update on the development of the scope of work for study.

FISCAL IMPACT

None.

STAFF RECOMMENDATION

For information.

UNAPPROVED
MINUTES

UNAPPROVED
MINUTES

**MINUTES OF MARCH 12, 2009
SPECIAL MEETING OF THE WATER RESOURCES COMMITTEE
OF THE BOARD OF DIRECTORS
WATER REPLENISHMENT DISTRICT OF SOUTHERN CALIFORNIA**

A special meeting of the Water Resources Committee of the Board of Directors of the Water Replenishment District of Southern California was held on Thursday, March 12, 2009, 12:20 p.m. at the District Office, 4040 Paramount Boulevard, Lakewood, California. Director Rob Katherman called the meeting to order and presided thereafter. Deputy Secretary Abigail C. Andom recorded the minutes.

1. DETERMINATION OF A QUORUM

Attendees at the meeting were as follows:

Committee: Directors Rob Katherman and Albert Robles

Staff: Robb Whitaker, Bob Siemak, Phuong Ly, Jason Weeks

2. PUBLIC COMMENT

None.

**3. MINUTES OF THE MEETINGS OF JANUARY 7, 2009 AND
FEBRUARY 4, 2009**

The Committee recommended the minutes be received and filed.

The agenda items were taken out of order.

6. WRD DROUGHT MANAGEMENT PLAN

WRD Consultant Dick Rhone stated that staff has been working on the Drought Management Plan and based on research of past hydrology of the basins, staff had come to the conclusion that it would not be prudent to overpump the basin. Mr. Rhone explained that the current water supply situation would not make it feasible to refill the basins.

Director Katherman asked that staff continue to report on the proposed steps to help replace imported water in times of drought. He asked that the staff provide an update to the Committee at its May meeting.

8. GROUNDWATER RELIABILITY IMPROVEMENT PROGRAM (GRIP) UPDATE

General Manager Robb Whitaker stated that he is pleased to inform the Committee that the Los Angeles Regional Water Quality Control Board would be considering a change in the recycled water permit amendment for the Montebello Forebay on April 2, 2009.

Chief of Engineering and Planning Bob Siemak provided the Committee with an update on the Groundwater Reliability Improvement Program (GRIP), a partnership of WRD, Upper San Gabriel Valley Municipal Water District (USGVMWD) and the Los Angeles County Sanitation Districts (LACSD) to develop a project that would replace unreliable imported

replenishment water with a locally sustainable supply. Mr. Siemak explained that staff is in the process of finalizing the conceptual design study which involves a series of technical memos that should be posted by this coming Friday. He stated that the report is expected to be completed by the end of March. Mr. Siemak added that staff is moving forward with its public outreach activities which USGVMWD is administratively overseeing.

Jim Stahl of Montgomery Watson Harza (MWH), USGVMWD consultant to GRIP), stated that he is encouraged by the actions of the RWQCB in considering lifting the cap on recycled water. Mr. Stahl provided an update on the project and stated that the next step would be to try to secure a site for the project. He stressed the importance of performing an environmental impact report (EIR) on the site selected.

Mr. Siemak also informed the Committee that staff is preparing a change in the scope of work of MWH and informed the Committee that there may be a need to schedule a special Committee meeting or Special Board Meeting. The Committee concurred.

4. RECEIVE AND FILE ENGINEERING SURVEY AND REPORT; ADOPT RESOLUTION TO SET A REPLENISHMENT ASSESSMENT IN 2009/10

Chief Hydrogeologist Ted Johnson provided an update on the 2009 Engineering Survey and Report (ESR), the report which determines the replenishment water needs and costs of the District for the ensuing water year October 1, 2009-September 30, 2010. Mr. Johnson explained that the information from the ESR combined with the 2009-10 budget forecast provides the necessary information to determine the District's replenishment assessment.

Mr. Johnson stated that staff is finalizing the ESR and presented the following highlights:

- Total groundwater production in 2007-08 was 244,732 acre feet. For the current year 2009-09, it is estimated that production will equal 240,000 acre feet and 240,200 acre feet for the ensuing year.
- There will be an annual overdraft in the ensuing year estimated at 94,800 acre feet.
- The District plans to purchase 106,703 acre feet of replenishment water in the ensuing year. It is uncertain if spreading and in-lieu water will be available in the ensuing year due to drought and Bay-Delta issues.
- The cost for the replenishment water is \$4.6 million more than previous year estimate mostly due to expected MWD increase in the cost of imported replenishment water.
- District projects and programs will be necessary for groundwater replenishment.

- Rising water costs accentuates the importance of WRD Water Independence Now (WIN) program that will eliminate the District's need for imported water to replenish the groundwater basins.

Mr. Johnson stated that the Board is being asked to receive and file the ESR, as well as adopt a Resolution declaring whether funds will be raised to purchase water for replenishment for the next ensuing year and how these funds will be raised.

The Committee recommended that the Board receive and file the 2009 Engineering Survey and Report, and adopt Resolution No. 09-848.

5. PALOS VERDES DEWATERING & GROUNDWATER REUSE STUDY AND MEMORANDUM OF UNDERSTANDING (MOU) BETWEEN WRD & WBMWD

Water Quality Specialist Phuong Ly stated that WRD and West Basin Municipal Water District (WBMWD) have finalized the draft memorandum of understanding (MOU) regarding sharing equally the costs of the Palos Verdes Dewatering and Groundwater Reuse Study. Ms. Ly also explained that WRD and WBMWD would like to retain the services of RMC Water and Environment to assist staff in its fatal flaw analysis to determine if groundwater extracted from two areas of the Palos Verdes Peninsula, specifically Abalone Cove and Malaga Cove Plaza, can be reused.

Ms. Ly stated that staff from both agencies would like their respective Boards to approve the MOU at their joint meeting scheduled April 17. The Committee reviewed the draft MOU, made amendments, and concurred with the staff recommendation.

7. STATE WATER RECYCLING POLICY ADOPTION - REPORT

Mr. Johnson stated that the State Water Resources Control Board (SWRCB) adopted a new water recycling policy on February 3, 2009. He explained that the policy was a major effort involving key stakeholders, including WRD, who had prepared and provided to the SWRCB what was to eventually become the adopted policy. He noted that this collaborative effort by all agencies involved worked well and was effective in demonstrating to the SWRCB that the stakeholders were able to work out their initial differences for the sake of promoting the increased and safe use of recycled water.

9. MWD'S INTEGRATED RESOURCE PLAN (IRP) AND FACILITATED GROUNDWATER WORKSHOPS UPDATE

Chief of Engineering and Planning Bob Siemak provided an update on the status of workshops Metropolitan Water District (MWD) has been hosting relating to the effective use of local groundwater basins. Mr. Siemak explained that discussions at the workshop included a review of existing policy principles for conjunctive use and a determination of how they can be updated, identification of

challenges to increased storage and conjunctive use, and exploration of other conjunctive use opportunities.

10. DIRECTORS REPORTS, INQUIRIES, REVIEW OF DIRECTIONS TO STAFF

The next Water Resources Committee meeting was set for Wednesday, April 1 at 4:00 p.m.

11. ADJOURNMENT

With no further business for the Committee, the meeting was adjourned at 2:05 p.m.

Chairperson

ATTEST:

Member