

**SPECIAL MEETING OF THE WATER RESOURCES COMMITTEE
OF THE BOARD OF DIRECTORS
WATER REPLENISHMENT DISTRICT OF SOUTHERN CALIFORNIA
4040 PARAMOUNT BOULEVARD, LAKEWOOD, CALIFORNIA 90712
2:00 P.M., WEDNESDAY, FEBRUARY 3, 2010**

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. GROUNDWATER BASIN UPDATE**
Staff Recommendation: For information.
- 4. ESR UPDATE**
Staff Recommendation: For information.
- 5. WEST COAST BASIN MASTER PLAN**
Staff Recommendation: For information and possible action.
- 6. INDUSTRIAL GROUNDWATER USE IN WEST COAST BASIN**
Staff Recommendation: For information.
- 7. STATUS ON RFP FOR THE EXPANSION OF VANDER LANS FACILITY**
Staff Recommendation: For information.
- 8. PHASE V WBMWD UPDATE**
Staff Recommendation: For information.
- 9. GROUNDWATER RELIABILITY IMPROVEMENT PROGRAM (GRIP) UPDATE**
Staff Recommendation: For information.
- 10. DEPARTMENT REPORT**
Staff Recommendation: For information.
- 11. DIRECTORS REPORTS, INQUIRIES, REVIEW OF DIRECTIONS TO STAFF**
- 12. ADJOURNMENT**

Posted by Abigail C. Andom, Deputy Secretary, February 1, 2010.

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



MEMORANDUM

ITEM NO. 3

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

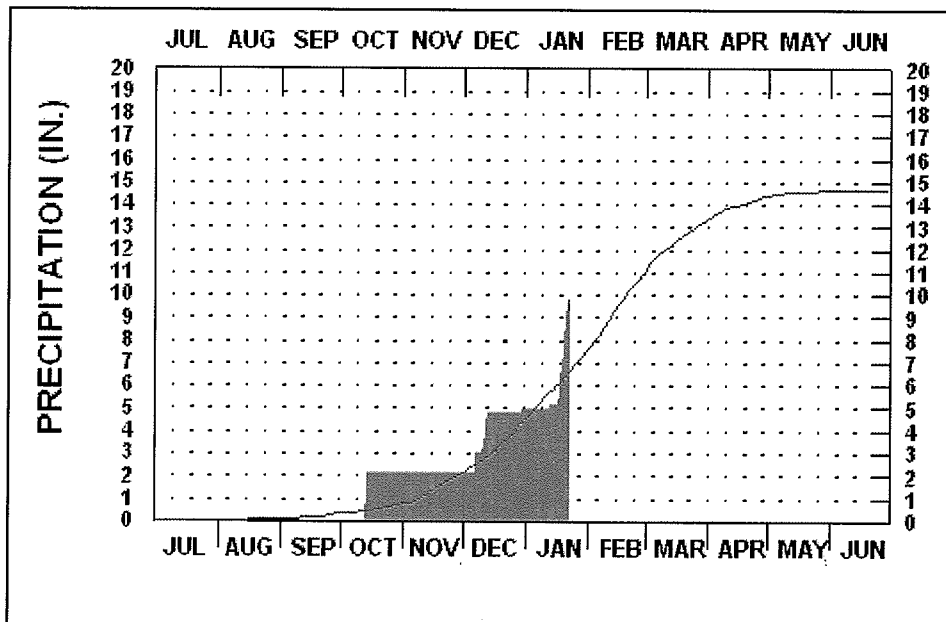
DATE: FEBRUARY 3, 2010
TO: WATER RESOURCES COMMITTEE
FROM: ROBB WHITAKER, GENERAL MANAGER
SUBJECT: GROUNDWATER BASIN UPDATE

SUMMARY

Staff monitors groundwater conditions in the Central and West Coast Basins throughout the year. A summary of the current conditions is presented below.

Precipitation:

The National Weather Service reports that precipitation in downtown Los Angeles (USC Campus) has been 9.71 inches this year compared to a normal by this date of 6.26 inches. This means the region is 3.45 inches above normal or 155% of normal. Total average rainfall for the entire water year is 14.41 inches, so there is still 4.7 inches needed to reach an average year. The following chart shows the rainfall amounts to date (green shading) compared to a normal water year (blue line). As of January 23, the green is above the blue, indicating an above normal year to date.



Replenishment:

WRD uses the Rio Hondo and San Gabriel River Spreading Grounds in the Montebello Forebay and the Alamitos Barrier (AB), Dominguez Gap Barrier (DG), and West Coast Barrier (WC) along the coast to recharge the groundwater basins. WRD manages the groundwater basins and purchases the recycled and imported waters that go into these facilities for groundwater replenishment. WRD works cooperatively with the Los Angeles County Department of Public Works (LADPW) which owns and operates these spreading and barrier facilities. The following table summarizes replenishment activities for the current water year:

| Water Year 2009/2010 Oct 1 - Sept 30 | Planned (af) | Actual to Date (af) | Through | Difference (af) |
|---|-----------------|------------------------|----------|--------------------|
| Spreading Imported | 21,000 | 9,932.4 | January | 11,067.6 |
| Spreading Recycled ¹ | 50,000 | 5,118 | October | 44,882.0 |
| Spreading Local | 54,000 | 797 | October | 53,203.0 |
| Barrier Imported (WCB) | 3,800 | 1,357 | November | 2,443.0 |
| Barrier Recycled (WCB) | 11,400 | 1,310 | November | 10,090.0 |
| Barrier Imported (DG) | 4,000 | 1,571 | November | 2,429.0 |
| Barrier Recycled (DG) | 4,000 | 534 | November | 3,466.0 |
| Barrier Imported (AB) ² | 2,100 | 466 | November | 1,634.0 |
| Barrier Recycled (AB) ² | 2,100 | 380 | November | 1,720.0 |
| TOTAL | 152,400 | 21,465.4 | | 130,934.6 |

¹ Recycled includes both purchased water (from Whittier Narrows & San Jose Creek) and incidental from Pomona Plant.

² Alamitos Barrier Water purchased by WRD for LA County side of barrier. Does not include Orange County.

Seasonal imported water for spreading has not been available from the Metropolitan Water District (MWD) since May 2007 due to continued drought conditions and environmental issues on the Bay Delta. MWD's latest information is that in the future this water may only be available every three years out of 10 versus the old policy of every seven years out of 10. Furthermore, there is no guarantee for this water or indication as to when the first year of availability will be. Therefore, WRD has purchased 3,001.8 af of Tier 1 untreated water for spreading from the City of Long Beach and 6,930.6 af to date from Central Basin Municipal Water District.

Recycled water for spreading is being maximized in light of new permit requirements that were enacted in 2009. Modifications have been made to a discharge point to allow additional recycled water to be captured and recharged that previously was being wasted to the ocean. Progress is being made on the interconnection pipeline and the Groundwater Reliability Improvement Program (GRIP) to increase recycled water usage in the future.

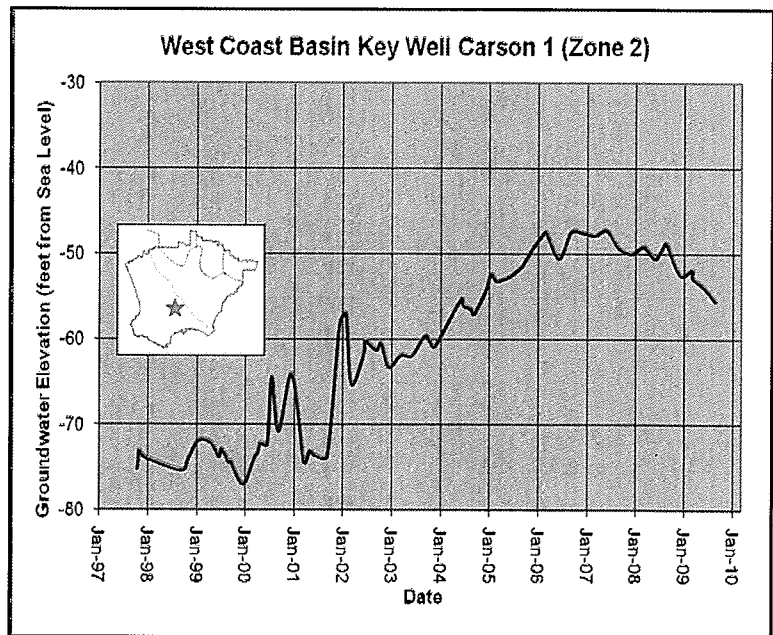
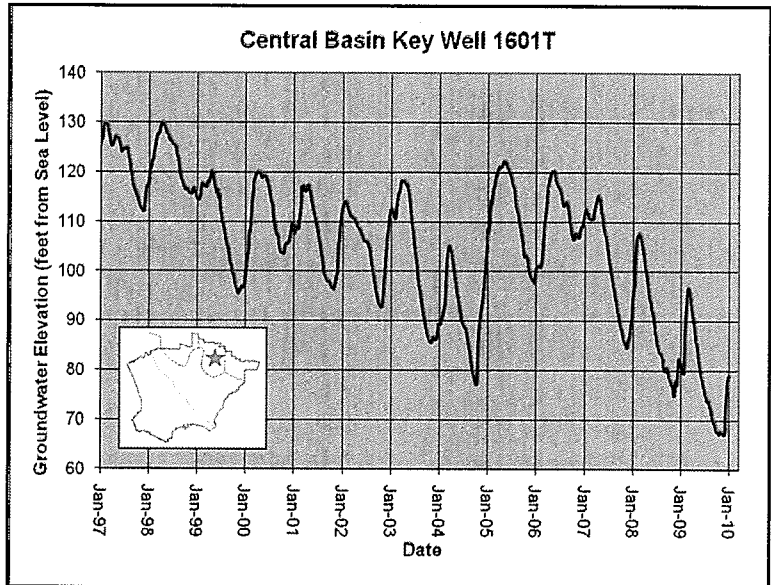
Local water recharge (stormwater and river baseflow) is captured at the spreading grounds by LADPW. Recent rainfall in January has exceeded 4-inches which resulted in significant capture of stormwater. However, LADPW has not yet calculated the amount of water captured. Therefore, WRD estimates that January's storms provided about 15,000 acre feet of spreading water.

At the seawater barrier injection wells, both Tier 1 potable imported water and advanced treated recycled water are being injected to control seawater intrusion and to replenish the aquifers. The table above shows the injection amounts to date for the current water year.

Groundwater Levels:

Groundwater levels in Central and West Coast Basin Key Wells are shown to the right. In the Central Basin, key well 1601T shows that water levels in the unconfined aquifer rise and fall sharply over the seasons as winter and spring precipitation cause water levels to rise whereas summer and autumn pumping and lack of rainfall cause water levels to drop. Over the past 4 years, water levels have fallen over 40 feet due to lower-than-normal precipitation and lack of imported water for replenishment. Water levels are at a 32-year low. Recent rains in December and January have caused water levels to start their normal winter climb.

In the West Coast Basin, seasonal water level fluctuations in the confined aquifers are not as pronounced as in the Central Basin because recharge is relatively stable from the seawater barrier injection wells and because pumping is also relatively steady throughout the year. But long term seasonal trends can occur based on recharge and discharge amounts. In this Key Well, Water levels generally rose between 1997 and 2006 then leveled off and are now on the decline.



Pumping:

The amount of pumping in the District in the current water year versus the previous water year is shown on the table below. Central Basin pumping has started off the water year 12% below the previous year. West Coast Basin pumping has started off pumping 4% more than the previous year.

| BASIN | October - November | | Difference (af) | Difference (%) | Total Planned for Water Year |
|------------|--------------------|-------------|-----------------|----------------|------------------------------|
| | Current WY | Previous WY | | | |
| Central | 29,169.30 | 33,209.07 | (4,039.77) | (12.16%) | 201,500 |
| West Coast | 7,564.25 | 7,248.87 | 315.38 | 4.35% | 38,700 |
| TOTAL | 36,733.55 | 40,457.94 | (3,724.39) | (9.21%) | 240,200 |

Other Items:

The strong winter storms during the week of January 18 – 22 have filled the spreading grounds to capacity. This has provided the opportunity to initiate the groundwater tracer test to determine travel time of recharge water to nearby monitoring wells and production wells. Staff has coordinated with the University of Santa Barbara and DPW to start the test on January 28. Staff will collect groundwater samples from designated wells over the course of the next year and submit the samples to UCSB for analysis. Results of the test will be reported to the committee.

Additional Basin Update information may be provided at the Committee meeting.

FISCAL IMPACT

For information.

STAFF RECOMMENDATION

For information.



MEMORANDUM

ITEM NO. 4

Prepared by: Ted Johnson

Reviewed by: Jason Weeks

Approved by: Robb Whitaker

DATE: FEBRUARY 3, 2010
TO: WATER RESOURCES COMMITTEE
FROM: ROBB WHITAKER, GENERAL MANAGER
SUBJECT: ESR UPDATE

SUMMARY

On January 15, 2010, the Board of Directors adopted Resolution No. 10-869 ordering Staff to prepare an engineering survey and report pursuant to Water Code Section 60300. This is an annual process for the District to determine, among other things, the amount of replenishment water needed in the ensuing water year and the anticipated cost for that water.

At the January 6, 2010 Water Resources Committee meeting, the Directors requested Staff to research and present at a future Committee meeting possible options for water purchases in the ensuing years. The following lists the potential options for consideration and discussion:

Imported Water Price Increases: The District purchases imported replenishment water for spreading, in-lieu, and the seawater barriers from MWD member agencies. As MWD and their member agencies increase their prices for the water, it directly affects the cost of water to WRD. Current information (subject to change) is that MWD may increase their prices in 2011 by 12.6% in aggregate (higher for spreading water and lower for barrier water).

For example, seasonal spreading imported water, purchased from CBMWD, may go up from \$428/af to \$510/af (19% increase). Central Basin seawater barrier imported water, purchased from Long Beach, may go up from \$706/af to \$780/af (10.5% increase). West Coast Basin seawater barrier imported water, purchased from WBMWD, may go up from \$846/af to \$943/af (11.5% increase). These increases will directly impact WRD's cost for water.

Imported Spreading Water: Seasonal vs. Tier 1 or other: The District normally plans on purchasing 21,000 acre feet of untreated seasonal imported water for spreading each year. Since May 2007 however, the Metropolitan Water District (MWD) has not made this water available and there is no indication that it will available anytime soon. Therefore, the District is evaluating whether to budget instead for untreated Tier 1 water which is more expensive but possibly more available than seasonal water.

The anticipated price difference (subject to change) between seasonal water and Tier 1 water in 2011 is expected to be \$139/af (\$510/af vs \$649/af). The Tier 1 water, if available, can only be purchased between October 2010 and April 2011 or the District would also have to pay expensive MWD capacity charges.

West Coast Basin Barrier Water (recycled vs. imported): The District has anticipated receiving 75% recycled water and 25% imported water at the West Coast Basin Barrier Project for injection. The price for recycled water is currently \$501/af versus \$846/af for imported water, a difference of \$345/af. It is expected that in 2011 the recycled water will cost \$540/af and the imported water \$943/af, a difference of \$403/af (subject to change).

However, the West Basin Municipal Water District has not been able to provide more than about 40% to 60% of recycled water this past year. Therefore WRD is evaluating whether to budget for more imported water and less recycled water in the ensuing year to cover expenses should the 75% recycled water be unavailable.

In-Lieu Water:

The District's In-Lieu program provides groundwater replenishment by reducing the pumping demands in the basins by encouraging pumpers to take MWD In-Lieu water instead of pumping their wells. This program works as long as MWD has In-Lieu water available. Since May 2007, MWD has discontinued In-Lieu water and there is no date announced for resumption of the program. The District would normally budget approximately \$1.6 million for the 2011 In-Lieu program and put the money into reserves if the water is not available. The District could also consider suspending the In-Lieu program for 2011.

Optimum Groundwater Quantity: In 2006 the Board of Directors established the Optimum Quantity of groundwater in the basins at an accumulated overdraft of 612,000 acre feet. This was established to ensure adequate groundwater supplies for the normal pumping needs of the groundwater providers and for drought protection. At the same time the Board adopted a policy to make up any deficits to this Optimum Quantity over a 20 year period should levels fall below this Optimum Quantity.

Since 2006 there have been successive dry years and lack of imported replenishment water resulting in a current accumulated overdraft of approximately 750,000 acre feet, or 138,000 acre feet below the optimum quantity. To make up this deficit over a 20 year period would require the purchase of 6,900 acre feet per year for 20 years. At \$509/af for seasonal water or \$649/af for Tier 1 untreated water, the District would need to raise between \$3.5 million and \$4.5 million to purchase the 6,900 af in the ensuing year.

FISCAL IMPACT

Expected 12.6% price increases in MWD and member agency water rates will impact WRD's cost for replenishment water in the ensuing year. In addition, the District is evaluating purchasing untreated Tier 1 water for spreading instead of untreated seasonal water, more imported water at the West Coast Barrier, In-Lieu water, and makeup water for the Optimum Quantity. Fiscal Impact for these water purchases will be refined more during the rate setting process.

STAFF RECOMMENDATION

For information.



MEMORANDUM

ITEM NO. 5

*Prepared by: Jason Weeks
Reviewed by: Ted Johnson
Approved by: Robb Whitaker*

DATE: FEBRUARY 3, 2010
TO: WATER RESOURCES COMMITTEE
FROM: ROBB WHITAKER, GENERAL MANAGER
SUBJECT: WEST COAST BASIN MASTER PLAN

SUMMARY

District staff and consultants CH2MHILL and RMC Water and Environment have been working on the development of a scope of work, budget and schedule for the development of a West Coast Basin Master Plan (Plan). The need for the development of this Plan arose out of recent changes in MWD's projections of surplus water supplies, significant rate increases for Tier 1 imported water, and proposed amendments to the West Coast Basin judgment.

Early in the development of the scope of work, a small group of basin stakeholders met to identify specific areas of focus that should be included in the Plan. Those areas of focus include:

1. Physical Condition of the Barriers
2. Saline Plume Remediation
3. Water Supply Alternatives to the Dominguez Gap Barrier
4. Water Supply Alternatives for Industrial Users
5. Maximize Existing Groundwater Rights
6. Development of Water Supply Augmentation Projects

District staff will provide the Committee with an overview of the scope of work, budget and schedule that CH2MHILL and RMC are proposing for development of the West Coast Basin Master Plan.

FISCAL IMPACT

Cost estimate will be provided at Committee meeting. Funds for this study were included in the FY09/10 Budget.

STAFF RECOMMENDATION

For information and possible action.



MEMORANDUM

ITEM NO. 6

Prepared by: Jason Weeks
Reviewed by: Ted Johnson
Approved by: Robb Whitaker

DATE: FEBRUARY 3, 2010
TO: WATER RESOURCES COMMITTEE
FROM: ROBB WHITAKER, GENERAL MANAGER
SUBJECT: INDUSTRIAL GROUNDWATER USE IN WEST COAST BASIN

SUMMARY

In recent years, industrial water use in the West Coast Basin has accounted for nearly 25% of the total groundwater extraction from the basin.

WRD and other basin stakeholders have been working with these industrial users to identify opportunities to replace these industrial groundwater demands with non-potable recycled water.

District staff will discuss with the Committee current industrial groundwater demands and opportunities to reduce this demands through increased use of alternative water sources.

FISCAL IMPACT

None.

STAFF RECOMMENDATION

For information.



MEMORANDUM

ITEM NO. 7

Prepared by: Paul Fu
Reviewed by: Ted Johnson
Approved by: Robb Whitaker

DATE: FEBRUARY 3, 2010
TO: WATER RESOURCES COMMITTEE
FROM: ROBB WHITAKER, GENERAL MANAGER
SUBJECT: STATUS ON RFP FOR THE EXPANSION OF VANDER LANS FACILITY

SUMMARY

The District's Board on December 18, 2009 approved the issuance of a Request for Proposals (RFP) for professional services for preliminary engineering design for the expansion of the Leo J. VanderLans Water Treatment Facility. Prior to this date, the District's Technical Advisory Committee (TAC) reviewed this item and had no objections with the District proceeding with the consultant selection process. The RFP was released on January 15, 2010 via emails and followed up by regular mails to 40 consultants on the District's prequalification list. The RFP is also posted on the District's Web site for download by any interested party.

The schedule for the RFP process is as follows:

| | |
|---------------------------|--------------------------|
| Pre-proposal Meeting | Jan. 26 |
| Proposal Due Date | Feb. 24 |
| Proposal Review/Interview | Feb. 25 through March 12 |
| Update TAC | March 17 |
| Water Resources Comm. | April 7 |
| Board Approval | April 16 |

Members of the proposal review committee include Paul Fu, Jim McDavid, Marc Serna (Engineering Manager of WBMWD), and Mehul Patel (Process Manager of OCWD). The project is expected to take approximately 8 months to complete after the Board awards the contract.

FISCAL IMPACT

None at this time.

STAFF RECOMMENDATION

For information.



MEMORANDUM

ITEM NO. 8

Prepared by: Jim McDavid

Reviewed by: Ted Johnson

Approved by: Robb Whitaker

DATE: FEBRUARY 3, 2010
TO: WATER RESOURCES COMMITTEE
FROM: ROBB WHITAKER, GENERAL MANAGER
SUBJECT: PHASE V WBMWD UPDATE

SUMMARY

Since October 2006 WRD has purchased approximately 12,500 acre-feet per year (AFY) of recycled water from West Basin Municipal Water District's (WBMWD) Edward C. Little Water Recycling Facility (ECLWRF) for injection at the West Coast Barrier (WCB) to prevent sea water intrusion. This quantity of recycled water constitutes 75% of the annual requirement at the WCB. The remaining 25% of water required at the WCB is imported water also purchased from WBMWD.

As part of the WRD Water independence Now (WIN) program, regulatory permits for injection at the WCB have been modified to allow the use of 100% recycled water. In April 2009 the WRD and the WBMWD amended their recycled water purchase agreement to increase the quantity of recycled water to 17,000 AFY which will meet 100% of the annual demand at the WCB. This amendment to the recycled water purchase contract allowed the WBMWD to initiate the expansion of the ECLWRF to provide this additional quantity of water.

The amendment to the recycled water contract also created a joint committee between the WRD and WBMWD staff to jointly review and comment of the efforts to expand and operate the ECLWRF. In August 2009 WRD staff assisted WBMWD staff in conducting interviews to select an engineering consultant to produce the 30% plans and specifications for the facility expansion. To date, work is continuing on completing the 30% plans and specifications with work estimated to be complete in March 2010. Work is also continuing on pilot testing of micro-filtration membranes to develop design criteria to be used in the facility design. Following completion of the 30% design subsequent interviews will be held to select the design-build consultant to complete the plans and specifications and initiate construction of the facility expansion.

FISCAL IMPACT

None.

STAFF RECOMMENDATION

For information.



MEMORANDUM

ITEM NO. 9

*Prepared by: Jim McDavid
Reviewed by: Ted Johnson
Approved by: Robb Whitaker*

DATE: FEBRUARY 3, 2010
TO: WATER RESOURCES COMMITTEE
FROM: ROBB WHITAKER, GENERAL MANAGER
**SUBJECT: GROUNDWATER RELIABILITY IMPROVEMENT PROGRAM (GRIP)
UPDATE**

SUMMARY

The GRIP partnership, made up of the WRD, the Upper San Gabriel Valley Municipal Water District (USGVMWD), the San Gabriel Valley Municipal Water District (SGVMWD), and the Los Angeles County Sanitation Districts (LACSD), continues to move forward with developing a project that would replace unreliable imported replenishment water with a locally sustainable supply (i.e. advanced treated recycled water).

Staff will provide a verbal report of current activities during the Committee meeting.

FISCAL IMPACT

None

STAFF RECOMMENDATION

For information.