SPECIAL MEETING OF THE WATER RESOURCES COMMITTEE
OF THE BOARD OF DIRECTORS
WATER REPLENISHMENT DISTRICT OF SOUTHERN CALIFORNIA
4040 PARAMOUNT BOULEVARD, LAKEWOOD, CALIFORNIA 90712
10:00 A.M., WEDNESDAY, MARCH 30, 2016

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, PAYMENT 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. MINUTES OF THE SPECIAL MEETING FEBRUARY 10, 2016
   Staff Recommendation: Approve as submitted.

4. OPERATIONS UPDATE
   Staff Recommendation: For discussion.

5. GROUNDWATER BASIN UPDATE
   Staff Recommendation: For information.

6. 2016-17 BUDGET
   Staff Recommendation: For information

7. DIRECTORS REPORTS, INQUIRIES, AND FOLLOW-UP OF DIRECTIONS TO
   STAFF

8. ADJOURNMENT
The Water Resources Committee will adjourn to its next regular meeting
currently scheduled for April 13, 2016 at 11:00 a.m.

Agenda posted by Chief Financial Officer Scott Ota on March 29, 2016.

In compliance with the Americans with Disabilities Act (ADA), if special assistance is needed to participate in the Board meeting, please contact Chief Financial Officer Scott Ota 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.

EXHAUSTION OF ADMINISTRATIVE REMEDIES – If you challenge a District action in court, you may be limited to raising only those issues you or someone else raised at the public hearing described in this notice, or in written correspondence delivered to the Deputy Secretary at, or prior to, the public hearing. Any written correspondence delivered to the Chief Financial Officer before the District’s final action on a matter will become a part of the administrative record.
MINUTES OF FEBRUARY 10, 2016
MEETING OF THE WATER RESOURCES COMMITTEE
OF THE BOARD OF DIRECTORS
WATER REPLENISHMENT DISTRICT OF SOUTHERN CALIFORNIA

A meeting of the Water Resources Committee of the Board of Directors of the Water Replenishment District of Southern California was held on Wednesday, February 10, 2016 at 10:48 a.m., at the District Office, 4040 Paramount Boulevard, Lakewood, California 90712. 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 John D. S. Allen
   Staff: Robb Whitaker, Ken Ortega, Ted Johnson, Jim McDavid, Paul Fu

2. PUBLIC COMMENT
   None.

   The minutes were approved as submitted.

4. OPERATIONS UPDATE
   The Committee received and filed staff’s report.

5. RECEIVE AND FILE ENGINEERING SURVEY AND REPORT; ADOPT RESOLUTION NO. 16-1026
   Chief Hydrogeologist Ted Johnson stated that Water Code §60300 requires the District to prepare an annual Engineering Survey and Report (ESR) to document the groundwater supplies of the District, including the annual overdraft, accumulated overdraft, groundwater production, groundwater levels, an estimate of the quantity, source, and cost of replenishment water, and projects and programs related to groundwater replenishment and groundwater quality. Mr. Johnson noted that the ESR must be completed on or before the second Tuesday in March of each year. He stated that information from the ESR, combined with the upcoming fiscal year proposed budget, provides the Board with the necessary information to determine the replenishment assessment, and adoption of Resolution No. 16-1026 would give notice that the Board intends to adopt a replenishment assessment for the ensuing fiscal year.

   The Committee unanimously recommended the Board adopt Resolution No. 16-1026 and receive and file the 2016 ESR.
6. **2016 CALIFORNIA GROUNDWATER COALITION (CGC) MEMBERSHIP**  
The Committee unanimously recommended the Board approve the 2016 membership dues for the CGC in the amount of $9,500.

7. **AMENDMENT TO OPERATIONS AGREEMENT FOR THE EXPANDED LEO J. VANDER LANS WATER TREATMENT FACILITY**  
The Committee unanimously recommended the Board authorize the General Manager to execute the First Amendment to the 2009 Amended and Restated Operating Agreement for the Leo J. Vander Lans Water Treatment Facility.

8. **GROUNDWATER BASIN UPDATE**  
Mr. Johnson highlighted the following:

- Precipitation – precipitation as of February 1, 2016 has been 4.5 inches. Normal for this time of year is 7.4 inches, so the District is 60% of normal.
- Groundwater levels - groundwater levels in Central Basin Key Well 1601T increased 11.2 feet in January; West Coast Basin Key Well Carson #1 decreased 1.2 feet this past month.
- Montebello Forebay Spreading Grounds – Delivery of WRD’s current imported water order of 19,635 acre-feet with Central Basin MWD began on December 2, 2015 and 11,546 acre-feet has been received through the end of December. For the first three months of the water year, 16,402 acre-feet of recycled water has been recharged.
- Seawater Barrier – West Coast Barrier did not use any imported water and 3,394 acre-feet of recycled water was used or 100% recycled water; Dominguez Gap Barrier used 582 acre-feet of imported water and 1,164 acre-feet of recycled water or 67% recycled water; Alamitos Barrier used 1,023 acre-feet of imported water and 78 acre-feet of recycled water or 7% recycled water.
- In-Lieu Replenishment – no in-lieu replenishment water has been delivered to date in the current water year
- Pumping – preliminary numbers for groundwater production through November indicate that 34,871 acre-feet were pumped compared to 38,646 acre-feet the year previous or a decrease of 3,776 acre-feet or -9.8%.

9. **DIRECTORS REPORTS, INQUIRIES, AND FOLLOW-UP OF DIRECTIONS TO STAFF**  
The Committee requested discussion of anticipated replenishment needs and pumping estimates for the ensuing year at the next Committee meeting.
10. **ADJOURNMENT**
The next Water Resources Committee meeting is scheduled for March 9, 2016 at 11:00 a.m. With no further business for the Committee, the meeting was adjourned at 1:25 p.m.

____________________________________
Chair

ATTEST:

____________________________________
Member
MEMORANDUM
ITEM NO. 4

DATE: MARCH 30, 2016
TO: WATER RESOURCES COMMITTEE
FROM: ROBB WHITAKER, GENERAL MANAGER
SUBJECT: OPERATIONS UPDATE

SUMMARY
The intent of the Operations Update staff report/agenda item is to inform and update members of the Water Resources Committee on a regular and reoccurring basis about operational matters, technical issues, engineering plans, and various multi-agency strategies in regards to all of the District’s current and planned operational facilities. This report includes current updates on the Turnout Structures, the Leo J. Vander Lans Facility, and the Goldsworthy Desalter.

Turnout Structures

Construction on the two new turnout structures continues to move forward. Recent work has been focused on the electrical and instrumentation aspects of the project. Electrical power connections to SCE are being finalized and power conductors are being installed to prepare for the delivery of the remaining valves in the next couple of weeks. Staff is working with the instrumentation vendor to finalize the programming of the control system prior to its being delivered to the site for installation. The project remains on schedule for completion by the end of March.

Robert W. Goldsworthy Desalter Update

The Desalter was operated in a 24/7 mode for February 2016. A total of 118 acre feet (AF) of treated potable water was supplied to City of Torrance during the month. The Desalter will continue to operate until such time as is necessary to facilitate expansion construction activities.

Leo J. Vander Lans Facility (LVL) Update

LVL Operations. The LVL facility was operated in a 24/7 mode for February 2016 except for 4 days offline for maintenance, repairs, and interruptions by power outages. The Barrier injection quantity in February is 504 AF, including 230 AF of recycled water and 274 AF of imported water.
Conduct an Engineering Study to Optimize Barrier/LVL Operations. The goals of this study are to (1) increase the recycled water injection flowrate to close to 100% while allowing a small portion of imported water to flow without incurring MWD’s low-flow penalties; and (2) optimize operational and flow equalization strategies to allow consistent and stable 24/7 operations with minimum shutdowns.

On February 3rd, District released a request for qualifications (RFQ) for soliciting a qualified consultant to perform the engineering study. A mandatory pre-submittal meeting for the consultants was held on February 22nd with 4 firms attended the meeting. Statement of Qualifications is due on March 22nd.

**FISCAL IMPACT**
None.

**STAFF RECOMMENDATION**
For discussion.
DATE: MARCH 30, 2016
TO: WATER RESOURCES COMMITTEE
FROM: ROBB WHITAKER, GENERAL MANAGER
SUBJECT: GROUNDWATER BASIN UPDATE

SUMMARY
Staff monitors groundwater conditions in its service area throughout the year. A summary of the latest information is presented below.

Precipitation
The WRD precipitation index reports that as of February 18, 2016, there had been 5.22 inches of rainfall since the start of the Water Year on October 1, 2015. Normal for this time of year is 9.72 inches, so the District is 54% of normal. Approximately 82% of the State continues to be under severe to exceptional drought conditions as reported by the U.S. Drought Monitor (as of February 23, 2016).

Reservoirs (as of February 28, 2016)

<table>
<thead>
<tr>
<th>Reservoir</th>
<th>Storage in Million Acre Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trinity Lake</td>
<td>0.85</td>
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<tr>
<td>Lake Shasta</td>
<td>2.76</td>
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<tr>
<td>Lake Oroville</td>
<td>1.86</td>
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<tr>
<td>Folsom Lake</td>
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<tr>
<td>New Melones</td>
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<tr>
<td>Don Pedro</td>
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<tr>
<td>Exchequer</td>
<td>0.18</td>
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<tr>
<td>San Luis</td>
<td>0.87</td>
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<tr>
<td>Millerton Lake</td>
<td>0.27</td>
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<tr>
<td>Pine Flat</td>
<td>0.27</td>
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<tr>
<td>Castaic Lake</td>
<td>0.08</td>
</tr>
<tr>
<td>Lake Perris</td>
<td>0.05</td>
</tr>
<tr>
<td>Silverwood</td>
<td>0.07</td>
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</tbody>
</table>

CA DWR Reservoirs (SWP)

<table>
<thead>
<tr>
<th>Reservoir</th>
<th>Storage in Million Acre Feet</th>
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<tbody>
<tr>
<td>Trinity Lake</td>
<td>4.25</td>
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<tr>
<td>Lake Shasta</td>
<td>10.38</td>
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<tr>
<td>Lake Oroville</td>
<td>3.54</td>
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<tr>
<td>Folsom Lake</td>
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<td>San Luis</td>
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<td>Pine Flat</td>
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<td>Castaic Lake</td>
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<tr>
<td>Lake Perris</td>
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<tr>
<td>Silverwood</td>
<td>0.08</td>
</tr>
</tbody>
</table>

MWD Reservoirs (CRA)

<table>
<thead>
<tr>
<th>Reservoir</th>
<th>Storage in Million Acre Feet</th>
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</thead>
<tbody>
<tr>
<td>Powell</td>
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<tr>
<td>Mead</td>
<td>10.38</td>
</tr>
<tr>
<td>DVL</td>
<td>0.32</td>
</tr>
</tbody>
</table>

Legend
- Blue Bar: Storage level for date
- Gold Bar: Total reservoir capacity.
- Red Line: Historic level for date.
- % of Capacity: % Historical Avg Mark
- Click reservoir name for details

Blue - Increase in storage since the last report.
**Snowpack (Snow Water Content [SWE] as of February 29, 2016)**

Northern Sierra Nevada – 23.2 inches, 90% of average to date, and 80% of April 1\textsuperscript{st} average

Central Sierra Nevada – 21.9 inches, 87% of average to date), and 76% of April 1\textsuperscript{st} average

Southern Sierra Nevada – 16.8 inches, 74% of average to date), and 63% of April 1\textsuperscript{st} average

<table>
<thead>
<tr>
<th>Snowpack Data</th>
<th>NORTH</th>
<th>CENTRAL</th>
<th>SOUTH</th>
<th>STATEWIDE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average snow water equivalent</td>
<td>20.8”</td>
<td>20.1”</td>
<td>15.9”</td>
<td>20.8”</td>
</tr>
<tr>
<td>Percent of April 1 Average</td>
<td>74%</td>
<td>70%</td>
<td>64%</td>
<td>74%</td>
</tr>
<tr>
<td>Percent of normal for this date</td>
<td>85%</td>
<td>80%</td>
<td>74%</td>
<td>85%</td>
</tr>
</tbody>
</table>

**Groundwater Levels**

Groundwater levels in key monitoring wells are shown in the hydrographs below. Central Basin Key Well 1601T is between the two spreading grounds and rises rapidly with rainfall and replenishment but falls sharply during dry spells and lack of replenishment. Groundwater levels in the well decreased 0.2 feet this past month. West Coast Basin Key Well Carson #1 is in the confined aquifers and does not respond readily to rainfall but instead to changes in pumping patterns and barrier recharge. Water levels decreased 1.0 foot this past month.
Montebello Forebay Spreading Grounds (October 1, 2015 - January 31, 2016)
The following Chart shows the preliminary spreading grounds replenishment water to date:

![Chart showing spreading grounds recharge](image)

- **Central Basin Key Well 1601T**
- **West Coast Basin Key Well Carson 1 (Zone 2)**

The chart illustrates the groundwater elevation (feet from sea level) against date. The spreading grounds recharge is 61,000 acre feet.

- **Imported**: 3,598 acre feet (Recharged to Date), 12,402 acre feet (Amount Remaining), 5,518 acre feet (YTD Target)
- **Recycled**: 21,906 acre feet
- **Local**: 33,094 acre feet (Recharged to Date), 48,482 acre feet (Amount Remaining), 18,000 acre feet (YTD Target)
Delivery of the District’s current import water order of 19,635 acre-feet with Central Basin Municipal Water District began on December 2, 2015, and through the end of January, 12,402 acre-feet have been received. The imported water delivery was shut off during the January rain events and when a leak was observed in the State Water Project Aqueduct. Metropolitan Water District (MET) isolated the area of the leak and made repairs. Import water deliveries resumed on March 1st.

Preliminary numbers for the first four months of the water year show that 21,906 acre-feet of recycled water has been recharged, which is above the target amount of 18,333 acre-feet. The 120-month running average of recycled water contribution in the Montebello Forebay is 36.0% and the regulatory maximum is 45%.

Stormwater capture by the Los Angeles County Department of Public Works (DPW) has been offset by the combined deliveries of imported and recycled water. Local water is the sum of stormwater, precipitation, and urban runoff captured at the spreading grounds minus the imported and recycled water deliveries. Local water received through the end of January is 5,518 acre-feet based on this analysis.
Preliminary numbers for the first four months of the water year show that the West Coast Barrier used 84 acre-feet of imported water and 4,476 acre-feet of recycled water, or 98% recycled water. The Dominguez Gap Barrier used 787 acre-feet of imported water and 1,513 acre-feet of recycled water, or 66% recycled water. The Alamitos Barrier on the WRD side used 1,269 acre-feet of imported water and 177 acre-feet of recycled water, or 12% recycled water.

**In-Lieu Replenishment Water**
No In-Lieu replenishment water has been delivered to date in the current water year.
Pumping (October 1, 2015 - December 31, 2015)

Preliminary numbers for groundwater production in the District in December 2015 indicate that 52,302 acre-feet were pumped compared to 53,376 acre-feet the year previous, or a decrease of 1,074 acre-feet (-2.0%). In the Central Basin, pumping was 185 acre-feet lower than the previous water year (-0.4%) and the West Coast Basin was down 889 acre-feet from the previous water year (-9.6%). The Chart below shows the 2015/16 Water Year pumping versus the 2014/15 Water Year.

At the request of the Committee from last month’s meeting, the anticipated replenishment needs and pumping estimates for the ensuing year will be discussed at the March 9 meeting.

FISCAL IMPACT
For information.

STAFF RECOMMENDATION
For information.
DATE: MARCH 30, 2016

TO: WATER RESOURCES COMMITTEE

FROM: ROBB WHITAKER, GENERAL MANAGER

SUBJECT: 2016-17 DRAFT BUDGET

Draft 2016-17 budget presentations have been given at the following public meetings:

1. February 23, 2016 – Finance Committee
2. February 25, 2016 – Budget Advisory Committee
3. March 3, 2016 – Board of Directors
4. March 8, 2016 – Budget Advisory Committee
5. March 22, 2016 – Budget Advisory Committee

Staff will be prepared to answer any questions the Committee may have related to the 2016-17 draft budget.

FISCAL IMPACT
The budget and replenishment assessment has a direct fiscal impact to the District’s operations in the ensuing fiscal year.

STAFF RECOMMENDATION
For discussion and possible action.