SPECIAL MEETING OF THE WATER RESOURCES COMMITTEE
OF THE BOARD OF DIRECTORS
WATER REPLENISHMENT DISTRICT OF SOUTHERN CALIFORNIA
4040 PARAMOUNT BOULEVARD, LAKEWOOD, CALIFORNIA 90712
8:30 A.M., FRIDAY, JANUARY 19, 2018

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
   Pursuant to Government Code Section 54954.3

3. APPROVE MINUTES OF MEETING OF OCTOBER 18, 2017
   Staff Recommendation: The Water Resources Committee approve the minutes as submitted.

4. APPROVE MINUTES OF MEETING OF DECEMBER 20, 2017
   Staff Recommendation: The Water Resources Committee approve the minutes as submitted.

5. DISCUSS DEVELOPMENT OF A WELL CONSTRUCTION AND
   REHABILITATION LOAN PROGRAM
   Staff Recommendation: The Water Resources Committee receive and file the report.

6. UPDATE ON THE CARLSBAD DESALINATION PROJECT
   Staff Recommendation: The Water Resources Committee receive and file the report.

7. OPERATIONS UPDATE
   Staff Recommendation: The Water Resources Committee receive and file the report.

8. GROUNDWATER BASIN UPDATE
   Staff Recommendation: The Water Resources receive and file the report.

9. DIRECTORS REPORTS, INQUIRIES, AND FOLLOW-UP OF DIRECTIONS TO STAFF
10. ADJOURNMENT

The Water Resources Committee will adjourn to the next regular meeting currently scheduled for February 21, 2018, at 8:30 A.M.

Agenda posted by Senior Administrative Specialist Sherri Brown on January 18, 2018. In compliance with ADA requirements, this document can be made available in alternative formats upon request.

In compliance with the Americans with Disabilities Act (ADA), if special assistance is needed to participate in the meeting, please contact the Manager of Internal Services 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 Manager of Internal Services at, or prior to, the public hearing. Any written correspondence delivered to the District office before the District’s final action on a matter will become a part of the administrative record.
A meeting of the Water Resources Committee of the Board of Directors of the Water Replenishment District of Southern California was held on October 18, 2017 at 8:38 a.m., at the District Office, 4040 Paramount Boulevard, Lakewood, California 90712. Committee Chair Robert Katherman called the meeting to order and presided thereafter. Senior Administrative Specialist Sherri Brown recorded the minutes.

1. **DETERMINATION OF A QUORUM**
   A quorum was present, which included:
   Committee: Committee Chair Robert Katherman; Director John D.S. Allen
   Staff: Ken Ortega; Ted Johnson; Tom Knoell; Everett Ferguson; Brian Partington; Diane Gatza; Lyndsey Bloxom; Phuong Watson

2. **PUBLIC COMMENT**
   *Pursuant to Government Code Section 54954.3*
   None.

3. **CLOSED SESSION**
   Conference with Legal Counsel – Anticipated Litigation, pursuant to Government Code §54956.9 (b), One Matter
   This item was tabled to a future meeting.

4. **APPROVE MINUTES OF THE SPECIAL MEETING OF SEPTEMBER 21, 2017**
   The Water Resources Committee unanimously approved the minutes as submitted.
5. APPROVAL OF A MEMORANDUM OF UNDERSTANDING FOR IMPLEMENTATION OF THE SUSTAINABLE GROUNDWATER MANAGEMENT ACT IN AN UNADJUDICATED PORTION OF THE CENTRAL BASIN

Senior Hydrogeologist Brian Partington provided the status update of the Sustainable Groundwater Management Act

Upon a motion duly made by Director Allen, seconded by President Katherman and unanimously approved, it was

RESOLVED: That Water Resources Committee recommends the Board of Directors authorized the General Manager to enter into a Memorandum of Understanding with the City of Los Angeles Department of Water and Power, the City of Beverly Hills, the City of Culver City, and the Golden State Water Company for Implementation of the Sustainable Groundwater Management Act in an unadjudicated portion of the Central Basin, subject to approval as to form by District Counsel.

6. REGIONAL BRACKISHWATER RECLAMATION PROGRAM UPDATE

The Committee previously requested an update on the project and some ongoing activities involving the program. WRD Engineer Diane Gatza provided the report. Discussion followed.

Senior Engineer Phuong Watson reported on Goldsworthy. Discussion followed.

The Water Resources Committee received and filed the report.

7. LOS ANGELES RIVER INJECTION WELL DEMONSTRATION PROJECT

Assistant General Manager Ken Ortega provided the report. Discussion followed.

Chair Katherman suggested that WRD join forces with Mayor Eric Garcetti on the L.A. River Beautification Project to offer support and gain project advocates.

The Water Resources Committee received and filed the report.

8. OPERATIONS UPDATE

Senior Hydrogeologist Everett Ferguson provided the update on the Montebello Forebay operations and the Turnout Structures. He will provide an update on if there is a relationship between how WRD data is reporting flow versus the Rio Hondo and Puente Hills pump stations at the next Water Resources Committee meeting.

Mr. Ferguson also updated the Committee on the Terminal Island Water Reclamation Plant. Discussion followed.

Water Operations Superintendent Tom Knoell reported on the status of Leo J. Vander Lans. Discussion followed.
9. **GROUNDWATER BASIN UPDATE**
Mr. Ferguson presented the update. Discussion followed.

10. **DIRECTORS REPORTS, INQUIRIES, AND FOLLOW-UP OF DIRECTIONS TO STAFF**
None.

11. **ADJOURNMENT**
There being no further business to come before the Committee, the meeting was adjourned at 9:31 A.M.

______________________________
Chair

ATTEST:

______________________________
Member

Approved in minutes of:

______________________________
MINUTES OF WEDNESDAY, DECEMBER 20, 2017
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, December 20, 2017 at 8:39 a.m., at the District Office, 4040 Paramount Boulevard, Lakewood, California 90712. Committee Chair Robert Katherman called the meeting to order and presided thereafter. Senior Administrative Specialist Sherri Brown recorded the minutes.

1. DETERMINATION OF A QUORUM
   A quorum was present, which included:
   Committee: Committee Chair Robert Katherman; Director John D.S. Allen
   Staff: Robb Whitaker; Ken Ortega; Ted Johnson; Tom Knoell; Pete Brown; Everett Ferguson; Phuong Watson

2. PUBLIC COMMENT
   Pursuant to Government Code Section 54954.3
   None.

3. APPROVE MINUTES OF THE SPECIAL MEETING OF NOVEMBER 16, 2017
   The Water Resources Committee unanimously approved the minutes as submitted.

4. CONSIDERATION OF RESOLUTION NO. 17-1070 - ORDERING THE PREPARATION OF THE ANNUAL ENGINEERING SURVEY AND REPORT (ESR) PURSUANT TO WATER CODE §60300
   Upon a motion duly made by Director Allen, seconded by President Katherman and unanimously approved, it was
RESOLVED: That Water Resources Committee recommends the Board of Directors adopt Resolution No. 17-1070 ordering the preparation of the 2018 Engineering Survey and Report per the requirements of the Water Code §60300.

Chief Hydrogeologist Ted Johnson provided a brief overview of the report. Discussion followed.

5. OPERATIONS UPDATE
Senior Hydrogeologist Everett Ferguson provided the updates on the Turnout Structures and the Montebello Forebay. Discussion followed.

Assistant General Manager Ken Ortega presented an overview of Goldsworthy’s status. Water Operations Superintendent Tom Knoell and Senior Engineer Phuong Watson provided reports on the Goldsworthy Desalter. Discussion followed.

Mr. Knoell provided an update on the Leo J. Vander Lans facility. Discussion followed.

No action was taken.

6. GROUNDWATER BASIN UPDATE
Mr. Ferguson provided the update of the groundwater basin. Discussion followed.

The Committee asked that a report be brought back to the next Water Resources Committee meeting that details the cost of water in regard to San Diego’s Carlsbad Desalination Plant, what it’s costing them to operate and how it is affecting imported water purchases.

No action was taken.

7. DIRECTORS REPORTS, INQUIRIES, AND FOLLOW-UP OF DIRECTIONS TO STAFF
None.

8. ADJOURNMENT
There being no further business to come before the Committee, the meeting was adjourned at 9:36 A.M. to the next scheduled meeting of January 17, 2018.

______________________________  Chair

ATTEST:

______________________________  Member

Approved in minutes of:

______________________________  

Page 2 of 2
MEMORANDUM
ITEM NO. 5

DATE: JANUARY 19, 2018
TO: WATER RESOURCES COMMITTEE
FROM: ROBB WHITAKER, GENERAL MANAGER
SUBJECT: DISCUSS DEVELOPMENT OF A WELL CONSTRUCTION AND REHABILITATION LOAN PROGRAM

SUMMARY
The Water Replenishment District of Southern California ("WRD" or "District") is developing a new Well Construction and Rehabilitation Loan Program (Program) to assist groundwater producers within its service area to increase their groundwater pumping capabilities, with the goal of reaching full pumping rights by 2040. This Program will improve the producers’ ability to utilize their full groundwater extraction rights and reduce their need for imported water that they are purchasing instead of producing groundwater.

The Program still needs in-depth discussions regarding seed money requirements, Program guidelines, and feedback from interested stakeholders. Following the Board’s recommendation, staff will provide an update on draft Program criteria and stakeholder feedback to the Committee.

FISCAL IMPACT
None at this time.

STAFF RECOMMENDATION
The Water Resources Committee will receive and file the report.
MEMORANDUM
ITEM NO. 6

DATE:      JANUARY 19, 2018
TO:        WATER RESOURCES COMMITTEE
FROM:      ROBB WHITAKER, GENERAL MANAGER
SUBJECT:   UPDATE ON THE CARLSBAD DESALINATION PROJECT

SUMMARY
Staff will provide an oral update on the status of the Carlsbad Ocean Water Desalination Facility.

FISCAL IMPACT
None.

STAFF RECOMMENDATION
The Water Resources Committee will receive and file the report.
MEMORANDUM
ITEM NO. 7

DATE: JANUARY 19, 2018
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.

Terminal Island Water Reclamation Plant (TIWRP) Update
The Los Angeles Sanitation Department (LASAN) TIWRP expansion is delivering 5.63 mgd to the DGBP and the current barrier demand is ~7.7 mgd (11.95 cfs). TIWRP has increased the delivery with approval from the County. LASAN is in discussions with DDW & RWQCB to get approval of the TIWRP’s AOP operation and plant expansion in order to be able to go above 6.0 mgd and meet the full barrier demand.

Robert W. Goldsworthy Desalter Update
The Desalter was offline in December 2017 to conduct plant performance testing. Upon completion of plant commissioning, substantial completion for the construction project was issued on December 22, 2017. The contractor, Shimmick Construction Company Inc., has begun working on punchlist items and is expected to be completed in February 2018.

Leo J. Vander Lans Facility (LVL) Update
LVL continues to remain offline due to reduced source availability from the Long Beach Water Reclamation Plant (LBWRP). The resumption of full operations at the LBWRP is now anticipated to be late December. All LVL membrane systems, including microfiltration (MF) and reverse osmosis (RO) were cleaned, preserved and the plant completely secured. During the month of December 2017, 385.4 AF of imported water from the LB07A connection was used to satisfy the barrier demand.

FISCAL IMPACT
None.

STAFF RECOMMENDATION
The Water Resources Committee will receive and file the report.
DATE: JANUARY 19, 2018
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 (as of January 2, 2018)
The WRD precipitation index reports that for the 2017-18 Water Year, there has been 0.15 inch of rainfall. The normal rainfall for this time period is 4.09 inches, so the District is 4% of normal. The U.S. Drought Monitor is reporting 0% of the State is under severe drought conditions (as of December 28, 2017). However, in southern California, areas of moderate drought are continuing to expand. Staff will continue to monitor these conditions as we progress through the Water Year.

Reservoirs (as of January 2, 2018)

<table>
<thead>
<tr>
<th>Reservoir</th>
<th>Capacity</th>
<th>Storage</th>
<th>% Full</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trinity Lake</td>
<td>2.45</td>
<td>1.75</td>
<td>71%</td>
<td>-0.02</td>
</tr>
<tr>
<td>Lake Shasta</td>
<td>4.55</td>
<td>3.20</td>
<td>70%</td>
<td>-0.02</td>
</tr>
<tr>
<td>Lake Oroville</td>
<td>3.54</td>
<td>1.23</td>
<td>35%</td>
<td>-0.04</td>
</tr>
<tr>
<td>Folsom Lake</td>
<td>0.98</td>
<td>0.54</td>
<td>55%</td>
<td>-0.07</td>
</tr>
<tr>
<td>New Melones</td>
<td>2.40</td>
<td>1.98</td>
<td>82%</td>
<td>-0.01</td>
</tr>
<tr>
<td>Don Pedro</td>
<td>2.03</td>
<td>1.64</td>
<td>81%</td>
<td>0.01</td>
</tr>
<tr>
<td>Lake McClure</td>
<td>1.02</td>
<td>0.66</td>
<td>65%</td>
<td>0.00</td>
</tr>
<tr>
<td>San Luis</td>
<td>2.04</td>
<td>1.65</td>
<td>81%</td>
<td>0.09</td>
</tr>
<tr>
<td>Millerton Lake</td>
<td>0.52</td>
<td>0.36</td>
<td>68%</td>
<td>0.01</td>
</tr>
<tr>
<td>Pine Flat</td>
<td>1.00</td>
<td>0.49</td>
<td>49%</td>
<td>0.02</td>
</tr>
<tr>
<td>Castaic Lake</td>
<td>0.33</td>
<td>0.26</td>
<td>79%</td>
<td>-0.01</td>
</tr>
<tr>
<td>Lake Perris</td>
<td>0.13</td>
<td>0.06</td>
<td>47%</td>
<td>0.00</td>
</tr>
<tr>
<td>Silverwood</td>
<td>0.08</td>
<td>0.07</td>
<td>87%</td>
<td>0.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reservoir</th>
<th>Capacity</th>
<th>Storage</th>
<th>% Full</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Powell</td>
<td>24.30</td>
<td>14.05</td>
<td>58%</td>
<td>-0.24</td>
</tr>
<tr>
<td>Mead</td>
<td>26.12</td>
<td>10.83</td>
<td>41%</td>
<td>0.01</td>
</tr>
<tr>
<td>DVL</td>
<td>0.81</td>
<td>0.75</td>
<td>92%</td>
<td>0.02</td>
</tr>
</tbody>
</table>

Black Text - Decrease or no change in storage since the last report.
Green Text - Increase in storage since the last report.
Snowpack (Snow Water Content [SWE] as of January 4, 2018)

In 1929, the State established the California Cooperative Snow Surveys Program with the California Department of Water Resources as the coordinator. Today, over 50 state, national, and private agencies collaborate in collecting snow data from over 300 snow courses with more than 60 of the course being the original courses established in the early 1900’s. The average snow course is 1,000 feet long and consist of about 10 sample points. Anywhere from two to six courses are measured per day depending on weather and access method.

The snow survey is completed using a snow sampling tube equipped with a cutter on the end that is driven through the snow measuring the depth and obtaining a snow core. The snow core is then weighed and the snow water content (or snow water equivalent) calculated. The surveys are completed throughout the winter by returning to the same sample points throughout the season to observe the changing conditions. From February through May the data is used by the State to forecast snow melt runoff. Many snow courses are only measured on or around April 1st, and since it is presumed that the snow accumulates up to April 1st and melts thereafter, April 1st is the benchmark for historic data comparisons.

Northern Sierra Nevada – 2.4 inches, 20% of normal to date and 8% of April 1st average
Central Sierra Nevada – 3.2 inches, 28% of normal to date and 11% of April 1st average
Southern Sierra Nevada – 1.8 inches, 20% of normal to date and 9% of April 1st average
Statewide – 2.6 inches, 24% of normal to date and 9% of April 1st average
Groundwater Levels (through December 29, 2017)

Groundwater levels in key monitoring wells are shown in the hydrographs below.

Groundwater Level Changes in Key Wells

<table>
<thead>
<tr>
<th>Well Name</th>
<th>Since Last Month</th>
<th>Since Same Time the Previous Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Basin Key Well 1601T</td>
<td>Decreased 1.2 feet</td>
<td>Decreased 6.9 feet</td>
</tr>
<tr>
<td>Central Basin Key Well Long Beach #6_4</td>
<td>Increased 8.3 feet</td>
<td>Increased 13.9 feet</td>
</tr>
<tr>
<td>West Coast Basin Key Well Lawndale #1_4</td>
<td>Decreased 0.9 foot</td>
<td>Decreased 5.5 feet</td>
</tr>
<tr>
<td>West Coast Basin Key Well Carson #1_2</td>
<td>Increased 0.7 foot</td>
<td>Increased 0.6 foot</td>
</tr>
</tbody>
</table>
Montebello Forebay Spreading Grounds (October - November 2017)
The following Chart shows the preliminary spreading grounds replenishment water to date:

The District placed an order for 5,300 acre-feet of imported water for replenishment in Water Year 2017-18 to complete the 38,000 acre-feet order from earlier in 2017. The imported water delivery began on December 6th and was completed on December 17th with a total of 5,286 AF of Imported Water delivered which will be reflected in next month’s Spreading Grounds Recharge Chart.

Preliminary numbers for the first two months of the 2017-18 Water Year show that 9,257 acre-feet of recycled water has been recharged, which is above the year to date target amount of 8,100 acre-feet. The 120-month running average of recycled water contribution in the Montebello Forebay is 36.8% and the regulatory maximum is 45%, with additional studies being required once 40% is reached.
Local water (stormwater plus dry weather urban runoff) is captured by the Los Angeles County Department of Public Works (LACDPW) at the spreading grounds for recharge. Local water amounts are determined as the sum of the total waters conserved at the spreading grounds less the imported and recycled water deliveries. For October and November, no local water capture was reported by the LACDPW. Minimal December storms are not expected to add to the local water conserved.

**Seawater Barrier Well Injection and Replenishment (October - November 2017)**

The following Chart shows the barrier water injection to date:

![Seawater Barrier Recharge Chart](chart.png)

Preliminary numbers for the first two months of the 2017-18 Water Year show that the West Coast Barrier used 632 acre-feet of imported water and 2,366 acre-feet of recycled water, or 79% recycled water. The Dominguez Gap Barrier has put in less water than planned, due to TIWRP expansion activities using 1,008 acre-feet of imported water and 425 acre-feet of recycled water, or 30% recycled water. The Alamitos Barrier, on the WRD side, used an estimated 590 acre-feet of imported water and no recycled water due to the maintenance outage at the LBWRP.

**Pumping (October - November 2017* and Fiscal Year to Date)**

Preliminary numbers for groundwater production in the District for the first two months of the 2017-18 Water Year indicate that 36,268 acre-feet were pumped compared to 34,546 acre-feet
the year previous, or an increase of 1,723 acre-feet (5%). In the Central Basin, pumping was 997 acre-feet higher than the previous water year (3.3%) and the West Coast Basin pumping was up 726 acre-feet from the previous water year (17.3%). The Chart below shows Water Year 2017-18 pumping versus Water Year 2016-17.

Preliminary numbers for groundwater production in the District for the first five months of the current Fiscal Year 2017-18 (July – November 2017) indicate pumping in the Central Basin was up 1,496 acre-feet from the same time of the previous fiscal year (1.9%) and the West Coast Basin pumping was 2,388 acre-feet higher than the previous fiscal year (20.7%). The total pumping is 96,084 acre-feet compared to 92,200 acre-feet during the same time the previous year for an increase of 3,884 acre-feet, or 4.2%. The current pumping data does not include five Central Basin pumpers and four West Coast Basin pumpers totaling an estimated 232 additional acre-feet.

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**FISCAL IMPACT**

None.

**STAFF RECOMMENDATION**

The Water Resources Committee receive and file the report.