MEETING OF THE WATER RESOURCES COMMITTEE
OF THE BOARD OF DIRECTORS
WATER REPLENISHMENT DISTRICT OF SOUTHERN CALIFORNIA
4040 PARAMOUNT BOULEVARD, LAKEWOOD, CALIFORNIA 90712
5:30 P.M., TUESDAY, OCTOBER 18, 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
   Pursuant to Government Code Section 54954.3

3. APPROVAL OF MINUTES OF THE SPECIAL MEETING OF AUGUST 22, 2016
   Staff Recommendation: Approve as submitted.

4. OPERATIONS UPDATE
   Staff Recommendation: For information.

5. NO-COST TIME EXTENSION WITH SEPARATION PROCESSES INC. FOR
   SUPPORTING THE VANDER LANS FACILITY OPERATIONS
   Staff Recommendation: The Water Resources Committee recommends that the
   Board of Directors authorize the General Manager to execute Amendment No. 3
   with Separation Processes Inc., subject to District Counsel approval as to form,
   for technical support to the Vander Lans Facility operations to extend the contract
   expiration date to December 31, 2018.

6. GROUNDWATER BASIN UPDATE
   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 November 22, 2016 at 5:30 P.M.

Agenda posted by Sherri Brown, Senior Administrative Specialist on October 13, 2016. 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 Board meeting, please contact Senior Administrative Specialist
Sherri Brown 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.

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 District office 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 special meeting of the Water Resources Committee of the Board of Directors of the Water Replenishment District of Southern California was held on Monday, August 22, 2016 at 6:24 p.m., at the District Office, 4040 Paramount Boulevard, Lakewood, California 90712. Committee Chair Robert Katherman called the meeting to order and presided thereafter. Acting Deputy Secretary Sherri Brown recorded the minutes.

7. CLOSED SESSION
   
   A. Conference with Legal Counsel – Anticipated Litigation, pursuant to Government Code §54956.9 (b), One Case

This item was taken out of order.

1. DETERMINATION OF A QUORUM

A quorum was present. Attendees at the meeting were as follows:

Committee: Committee Chair Robert Katherman; Director John D.S. Allen

Staff: Robb Whitaker, Ken Ortega, Jason Weeks, Paul Fu and Everett Ferguson

2. PUBLIC COMMENT

   Pursuant to Government Code Section 54954.3

None.

3. OPERATIONS UPDATE

   Assistant General Manager Ken Ortega provided a summary of activities and progress to date at the Terminal Island Water Reclamation Plant. Completion of construction is scheduled for December 2016. He reported that January/February 2017 they are looking at starting the facility, and in late winter/early spring 2017 they will be running some compliance testing. Discussion followed.

   Mr. Ortega reported that regarding the Dominguez Gap Water purchase agreement negotiations are still ongoing. He said a meeting with their staff is tentatively planned for next week, and he anticipates an update will be available within the next couple of months.

   Mr. Ortega said the Turnout Structures are operable, and only have a few issues to finalize. He reported that the final notice of completion will be filed in order to get it under the Integrated Regional Water Management (IRWM) grant that WRD
received, and the notice will be on the September 27th Capital Improvement Projects agenda.

Senior Engineer Dr. Paul Fu reported that the Goldsworthy Desalter is temporarily offline for expansion related construction activities. He said staff is working with the District’s on-call engineering consultant to develop a scope of work to perform an MTBE treatability study that is required by the Division of Drinking Water (DDW). He said the scope requirement is that WRD does screening to select the most appropriate technology, size of facility, and possibly operational schemes/alternatives.

Dr. Fu explained that the Desalter levels of MTBE are currently at 12 micrograms per liter, with 13 being the primary standard. He said that the secondary standard of 5 micrograms per liter has already been exceeded. Discussion followed.

Mr. Ortega said the feasibility study was due to be performed by the end of this year, and the cost is approximately $60,000. He stated that if treatment is necessary, it will fall under WRD’s grant program.

Dr. Fu provided the staff report for the Leo J. Vander Lans Facility. He stated that the most recent water leak was repaired in July. He said operations were interrupted for a couple of weeks due to SCADA control communication interruptions between the UV treatment system and the plant’s main control computer; however, the majority of the SCADA issues were resolved and the plant resumed normal activity August 8th.

Dr. Fu reported that progress is being made regarding the engineering study to optimize Barrier/LVL operations. He stated that a field tour of LACSD’s Long Beach Water Reclamation Plant (LBWRP) was held on August 1, 2016, and that staff discussed with LACSD the District’s plan to maximize recovery of LBWRP’s reclaimed water (i.e., the source water for LVL) that is still being discharged to the river. He said a meeting was held on July 21, 2016 with LBWD staff to discuss the hydraulic modeling of Long Beach’s recycled water system in association with LVL operations. Mr. Ortega said there were also preliminary discussions regarding alternatives for the low-flow bypass meter assembly with Metropolitan Water District.

4. UPDATE ON SUSTAINABLE GROUNDWATER MANAGEMENT ACT

Hydrogeologist Brian Partington provided an update of the Sustainable Groundwater Management Act (SGMA). He reported that the act was signed into law September 2014, and basically provided the framework for managing groundwater in a sustainable way in the basin. He said that the basin in WRD’s service area is under the adjudication with very minimum requirements as part of SGMA. He explained that adjudicated basins including the Central Basin and the West Coast Basin are mostly exempt from SGMA requirements. He said, however, there are two small areas outside of the Central Basin adjudicated boundary that
are still within the geologic basin boundary as described by the Department of Water Resources (DWR), and these areas are referred to as “fringe areas” and must be addressed per SGMA.

Mr. Partington reported that a working group was formed to conduct a groundwater sustainability analysis of these “fringe areas” with various interested stakeholders including representatives of the City of Beverly Hills, City of Culver City, Los Angeles County Department of Public Works (LACDPW), City of Los Angeles Department Water and Power (LADWP), Golden State Water Company (GSWC), and Water Replenishment District of Southern California (WRD). He said the stakeholder group is in the process of preparing a SGMA-allowed Alternative Analysis for the entire Central Basin, including the “fringe areas” and submittal due date is January 1, 2017. He stated that there have already been conversations with the Department of Water Resources, and they fully back the idea and are willing to help along the process. Mr. Partington explained that the Alternative Analysis will demonstrate how the entire Central Basin meets the groundwater sustainability requirements and that simple monitoring and future reporting will be all that is required. Discussion followed.

Mr. Partington stated that staff will provide an update to the committee on the development of the alternative analysis at the upcoming Committee meeting.

5. GROUNDWATER BASIN UPDATE

Senior Hydrogeologist Everett Ferguson presented highlights of his written report. He reported that water levels in the West Coast and Central Basin are down. He also said that recycled water at Leo J. Vander Lans is up to 666 acre-feet. He confirmed that pumping is up this year, over last year.

Discussion followed.

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

Committee Chair Katherman requested that the subject of Grant Funding Application – Rivers and Mountains be agendized for the September Water Resources meeting. He would also like to add for discussion the Whittier Narrows Feasibility Study.

Due to schedule conflicts, the Committee unanimously agreed to change the dates and times of the Water Resources and Groundwater Quality Committee meetings. It was resolved that the Groundwater Quality Committee meetings would be held on each second Tuesday at 5:30 P.M. of each month; and the Water Resources Committee meetings will be held on each third Tuesday at 5:30 P.M. of each month going forward.

Committee Chair Katherman requested that a discussion be agendized for Groundwater Planning for the October Water Resources Committee meeting.
8. ADJOURNMENT

With no further business to come before the Committee, the meeting was adjourned at 6:53 P.M.

___________________________
Chair

ATTEST:

___________________________
Member

Approved in minutes of:

___________________________
MEMORANDUM
ITEM NO. 4

DATE: OCTOBER 18, 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 Los Angeles Terminal Island Water Reclamation Plant, the Turnout Structures, the Leo J. Vander Lans Facility, and the Goldsworthy Desalter.

Terminal Island Water Reclamation Plant (TIWRP)
The Los Angeles Department of Water and Power (LADWP) TIWRP expansion revised schedule estimates the final completed in May/June 2017. Currently the AWTF is off-line while the County completes scheduled maintenance. The surge tank installation was completed in July and the City is working with the County in getting the level signals sent to the County. Once this work is completed the barrier will resume receiving recycled water from TITP up to 6 MDG. The RWQCB issued the new barrier project WDR/WRR Permit on 10/13/16 allowing the Barrier to go to 100% recycled water. Upcoming TIWRP expansion schedule:

- February 2017 (1 month shutdown) – software migration
- March/April 2017 – performance testing

Turnout Structures
A final notice of completion is being prepared by staff for both CIP Committee and Board review, and approval, respectively.

Robert W. Goldsworthy Desalter Update
The Desalter was offline in September to facilitate various expansion related construction activities. A kickoff meeting was held on September 29th for the MTBE treatability study to review scope of work, project assumptions and approach, and schedule.
Leo J. Vander Lans Facility (LVL) Update

LVL Operations. Regular LVL operations were partially affected in early September by repairs of a chemical carrier water piping. The Barrier injection quantity in September was approximately 537 AF, including 151 AF of recycled water and 386 AF of imported water.

Conduct an Engineering Study to Optimize Barrier/LVL Operations. Staff is working with the Consultant and the project stakeholders to analyze historical flow data, develop the hydraulic model, and perform alternatives analysis to optimize the Barrier/LVL operations.

STAFF RECOMMENDATION

For information.
MEMORANDUM
ITEM NO. 5

DATE: OCTOBER 18, 2016
TO: WATER RESOURCES COMMITTEE
FROM: ROBB WHITAKER, GENERAL MANAGER
SUBJECT: NO-COST TIME EXTENSION WITH SEPARATION PROCESSES INC. FOR SUPPORTING THE VANDER LANS FACILITY OPERATIONS

SUMMARY
The Leo J. Vander Lans Water Treatment Facility (LVLWTF) currently supplies advance-treated recycled water to the Alamitos Seawater Barrier. The District Board previously approved an agreement with the Separation Processes Inc. (SPI) in December 2014 followed by amendments in April 2015 and October 2015 to provide the expanded facility startup support, operator training, assist with plant optimization, and troubleshoot facility operational issues.

The aforementioned agreement will expire at the end of 2016; however, approximately $54,000 of budget is currently available. The current operations at the LVLWTF still requires technical support by SPI on an as-needed basis. Therefore, staff recommends that the agreement with SPI be amended to extend, with no cost increases, the contract expiration date to December 31, 2018.

FISCAL IMPACT
Sufficient funds remain in the LVLWTF operational budget to cover this contract time extension.

STAFF RECOMMENDATION
The Water Resources Committee recommend that the Board of Directors authorize the General Manager to execute Amendment No. 3 with Separation Processes Inc., subject to District Counsel approval as to form, for technical support to the Vander Lans Facility operations to extend the contract expiration date to December 31, 2018.

Attachment: Draft Amendment No. 3 with SPI
AMENDMENT NO. 3

TO CONTRACT NO. 796
AGREEMENT FOR PROFESSIONAL SERVICES
BETWEEN
WATER REPLENISHMENT DISTRICT OF SOUTHERN CALIFORNIA
AND
SEPARATION PROCESSES, INC.

This Amendment No. 3 is made and entered into this third day of November 2016 by and between the Water Replenishment District of Southern California ("DISTRICT") and Separation Processes, Inc. ("CONSULTANT"), collectively the ("PARTIES").

RECITALS

WHEREAS, on the 18th day of December 2014, a certain agreement, hereinafter referred to as Contract No. 796 ("Agreement"), was executed between DISTRICT and CONSULTANT for providing technical support to DISTRICT’s Leo J. Vander Lans Water Treatment Facility to optimize operations efficiency, troubleshoot facility operations, train operators, and develop standard operating procedures ("Project"); and

WHEREAS, on the 16th day of April 2015, Amendment No. 1 was executed to provide additional technical support by the CONSULTANT until June 30, 2016; and

WHEREAS, on the first day of October 2015, Amendment No. 2 was executed to provide additional technical support by the CONSULTANT until the end of 2016; and

WHEREAS, as of October 2016, there are remaining budget for the Project; and

WHEREAS, the Project still requires technical support by the CONSULTANT on an as-needed basis; and

WHEREAS, the PARTIES now desire to enter into this Amendment No. 3, in order to amend the terms of the Agreement as set forth below:

AMENDMENT

NOW, THEREFORE, in consideration of the mutual covenants, promises, and agreements set forth herein, it is agreed that Contract No. 796 shall remain in full force and effect, except as otherwise hereinafter provided.

The Agreement is hereby amended as follows:

1. Section 2 "Term" The Expiration Date is hereby extended to December 31, 2018.
2. Remaining Portions of the Agreement: Except as otherwise expressly amended herein, all other provisions of the Agreement shall remain unchanged and in full force and effect.

IN WITNESS WHEREOF, the PARTIES have caused this Amendment No. 3 to the Agreement to be executed the day and year first above written.

WATER REPLENISHMENT DISTRICT OF SOUTHERN CALIFORNIA

________________________
Signature
Robb Whitaker
Print Name
General Manager
Title

SEPARATION PROCESSES, INC. ("CONSULTANT")

________________________
Signature
Alex E. Wesner
Print Name
Vice President
Title

Approved As To Form
LEAL, TREJO APC

________________________
H. Francisco Leal
Attorneys for the Water Replenishment District of Southern California
DATE: OCTOBER 18, 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 October 11, 2016, there had been no rainfall since the start of the Water Year on October 1, 2016. Normal for this time of year is 0.15 inches, so the District is 0% of normal. Approximately 62% of the State continues to be under severe to exceptional drought conditions as reported by the U.S. Drought Monitor (as of October 6, 2016).

Reservoirs (as of October 10, 2016)

CA DWR Reservoirs (SWP)
Storage in Million Acre Feet

<table>
<thead>
<tr>
<th>Reservoir</th>
<th>Storage</th>
<th>Capacity</th>
<th>% Full</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trinity Lake</td>
<td>0.96</td>
<td>2.45</td>
<td>39%</td>
</tr>
<tr>
<td>Lake Shasta</td>
<td>2.73</td>
<td>4.55</td>
<td>60%</td>
</tr>
<tr>
<td>Lake Oroville</td>
<td>1.57</td>
<td>3.54</td>
<td>44%</td>
</tr>
<tr>
<td>Folsom Lake</td>
<td>0.30</td>
<td>0.98</td>
<td>30%</td>
</tr>
<tr>
<td>New Melones</td>
<td>0.53</td>
<td>2.40</td>
<td>22%</td>
</tr>
<tr>
<td>Don Pedro</td>
<td>1.31</td>
<td>2.03</td>
<td>65%</td>
</tr>
<tr>
<td>Exchequer</td>
<td>0.37</td>
<td>1.02</td>
<td>36%</td>
</tr>
<tr>
<td>San Luis</td>
<td>0.52</td>
<td>2.04</td>
<td>25%</td>
</tr>
<tr>
<td>Millerton Lake</td>
<td>0.23</td>
<td>0.52</td>
<td>43%</td>
</tr>
<tr>
<td>Pine Flat</td>
<td>0.17</td>
<td>1.00</td>
<td>17%</td>
</tr>
<tr>
<td>Castaic Lake</td>
<td>0.23</td>
<td>0.33</td>
<td>70%</td>
</tr>
<tr>
<td>Lake Perris</td>
<td>0.05</td>
<td>0.13</td>
<td>37%</td>
</tr>
<tr>
<td>Silverwood</td>
<td>0.07</td>
<td>0.08</td>
<td>88%</td>
</tr>
</tbody>
</table>

MWD Reservoirs (CRA)
Storage in Million Acre Feet

<table>
<thead>
<tr>
<th>Reservoir</th>
<th>Storage</th>
<th>Capacity</th>
<th>% Full</th>
</tr>
</thead>
<tbody>
<tr>
<td>Powell</td>
<td>12.80</td>
<td>24.30</td>
<td>53%</td>
</tr>
<tr>
<td>Mead</td>
<td>9.65</td>
<td>26.12</td>
<td>37%</td>
</tr>
<tr>
<td>DVL</td>
<td>0.56</td>
<td>0.81</td>
<td>69%</td>
</tr>
</tbody>
</table>

Blue - Increase in storage since the last report.
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 1.1 feet since the last report, and are 6.3 feet higher than this time last year.

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 increased 0.2 foot since the last report, and are 0.6 foot lower than this time last year.
Montebello Forebay Spreading Grounds

The following Chart shows the preliminary spreading grounds replenishment water from October 1, 2015, through August 31, 2016:

The District purchased 23,961 acre-feet of imported water for replenishment this water year. A new order for 38,000 acre-feet commenced on October 7th.

Preliminary numbers for the water year through August 31, 2016, show that 55,885 acre-feet of recycled water has been recharged, which is above the YTD target amount of 50,417 acre-feet. The 120-month running average of recycled water contribution in the Montebello Forebay is 37.7% and the regulatory maximum is 45%.
Local water (stormwater plus dry weather urban runoff) is captured by the Los Angeles County Department of Public Works (DPW) at the spreading grounds for recharge. The low amounts this year due to a dry winter have been offset by the combined purchases and deliveries of imported and recycled water by WRD. Local water amounts are determined as the sum of the total waters conserved at the spreading grounds less the imported and recycled water deliveries. Local water received through the end of August is 11,749 acre-feet based on this analysis.

Seawater Barrier Well Injection and Replenishment
The following Chart shows the barrier water injection from October 1, 2015, through August 31, 2016:

Preliminary numbers for the water year through August 31, 2016 show that the West Coast Barrier used 1,356 acre-feet of imported water and 11,646 acre-feet of recycled water, or 90% recycled water. The Dominguez Gap Barrier used 2,893 acre-feet of imported water and 3,187 acre-feet of recycled water, or 54% recycled water. The Alamitos Barrier on the WRD side used an estimated 3,187 acre-feet of imported water and 865 acre-feet of recycled water, or 21% 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 – August 31, 2016)
Preliminary numbers for groundwater production in the District through August 2016 indicate that 195,872 acre-feet were pumped compared to 191,652 acre-feet the year previous, or an increase of 4,221 acre-feet (2.2%). In the Central Basin, pumping was 9,904 acre-feet higher than the previous water year (6.3%) and the West Coast Basin was down 5,683 acre-feet from the previous water year (-16.9%). The Chart below shows the 2015/16 Water Year pumping versus the 2014/15 Water Year.

![Groundwater Extractions Chart]

FISCAL IMPACT
For information.

STAFF RECOMMENDATION
For information.