

**SPECIAL 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, MARCH 2, 2011**

**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 MEETING OF JANUARY 5, 2011**  
*Staff Recommendation:* Approve as submitted.
- 4. GROUNDWATER BASIN UPDATE**  
*Staff Recommendation:* For information.
- 5. GROUNDWATER BASINS MASTER PLAN UPDATE**  
*Staff Recommendation:* For information.
- 6. RECEIVE AND FILE ENGINEERING SURVEY AND REPORT; ADOPT RESOLUTION TO SET A REPLENISHMENT ASSESSMENT IN 2011-12**  
*Staff Recommendation:* Receive and file the 2011 Engineering Survey and Report and adopt Resolution No. 11-898.
- 7. WEST COAST BARRIER FOLLOW-UP CONDITION ASSESSMENT MOU**  
*Staff Recommendation:* Enter into a Memorandum of Understanding with the Los Angeles County Department of Public Works and the West Basin Municipal Water District, subject to approval to form by District Counsel, to perform a Follow-Up Condition Assessment of the West Coast Barrier for a cost to WRD not to exceed \$66,800.
- 8. DOMINGUEZ GAP BARRIER CONDITION ASSESSMENT MOU**  
*Staff Recommendation:* Enter into a Memorandum of Understanding with the Los Angeles County Department of Public Works and the Los Angeles Department of Water and Power, subject to approval to form by District Counsel, to perform a Condition Assessment of the Dominguez Gap Barrier for a cost to WRD not to exceed \$333,000.
- 9. NO-COST TIME EXTENSION; U.C.SANTA BARBARA GROUNDWATER TRACER RESEARCH PROJECT**  
*Staff Recommendation:* Extend the termination date of the Tracer Test Research Agreement with The Regents of the University of California, University of California, Santa Barbara, to February 29, 2012, with no additional cost to the District.

10. **GROUNDWATER RELIABILITY IMPROVEMENT PROGRAM (GRIP) UPDATE**  
*Staff Recommendation:* For information.
11. **CLOSED SESSION**  
Conference with Legal Counsel – Existing Litigation  
Pursuant to Government Code §54956.9  
Name of Case: City of Cerritos, City of Downey and City of Signal Hill v.  
Water Replenishment District of Southern California  
Case No.: Los Angeles County Superior Court BS128136
12. **DIRECTORS REPORTS, INQUIRIES, AND FOLLOW-UP OF DIRECTIONS TO STAFF**
13. **ADJOURNMENT**

Posted by Abigail C. Andom, Deputy Secretary, February 25, 2011.

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](http://www.wrd.org).

UNAPPROVED  
MINUTES

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MINUTES

**MINUTES OF JANUARY 5, 2011  
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 Water Replenishment District of Southern California was held on Wednesday, January 5, 2011, 11:50 a.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 Albert Robles and Rob Katherman

Staff: Ted Johnson, Jason Weeks, Jim McDavid, Paul Fu

**2. PUBLIC COMMENT**

None.

**3. MINUTES OF THE MEETING OF NOVEMBER 3, 2010**

The minutes were approved as submitted.

**4. GROUNDWATER BASIN UPDATE**

Chief Hydrogeologist Ted Johnson provided an update on the groundwater conditions in the Central and West Coast Basins. Mr. Johnson reported that precipitation from October – December 2010 represented 81% of the full year average of 14.73 inches. He noted that although historically the high rainfall months are from January through April, a La Nina pattern is expected in the region which could mean a drier than normal year.

Mr. Johnson stated that WRD ordered 18,000 acre feet of untreated Tier 1 water from Central Basin MWD for replenishment spreading of which 9,643 acre feet has been delivered and an additional 8,357 acre feet remaining.

Mr. Johnson stated that groundwater levels responded to the above rainfall received in December and key wells are experiencing the normal water level rise during the winter months and is expected to continue until early April unless a drier than normal January – March causes water levels to drop sooner.

Lastly, Mr. Johnson stated that pumping remained close to projections in the previous water year.

**5. GROUNDWATER BASINS MASTER PLAN UPDATE**

Senior Engineer Jason Weeks provided an update on the development of the Groundwater Basins Master Plan. Mr. Weeks stated that the development and groundwater modeling of conceptual alternative management scenarios in the West Coast Basin are currently on-going.

In the Central Basin, he reported that two workshops were held in November for the Central Basin water rights holders and the third and final workshop will be held tomorrow. Mr. Weeks proceeded with a presentation on the initial concepts for the Central Basin portion of the master plan for discussion at tomorrow's workshop.

**6. CONSIDERATION OF RESOLUTION NO. 11-895 – A RESOLUTION OF THE BOARD OF DIRECTORS OF THE WATER REPLENISHMENT DISTRICT OF SOUTHERN CALIFORNIA ORDERING AN ENGINEERING SURVEY AND REPORT REGARDING THE GROUNDWATER SUPPLIES OF THE DISTRICT PURSUANT TO WATER CODE §60300**

Chief Hydrogeologist Ted Johnson presented the proposed schedule in the preparation of the District's annual Environmental Survey and Report (ESR), which determines the replenishment water needs and water costs of the District for the ensuing water year.

The Committee recommended the Board adopt Resolution No. 11-895.

**6. TIME EXTENSION FOR PROFESSIONAL SERVICES AGREEMENT WITH WORLEY PARSONS FOR ASSISTANCE WITH CONTAMINATED SITE INVESTIGATION AND EXPEDITED CLEANUP**

The Committee recommended the Board extend the termination date of the professional services agreement with WorleyParsons to June 30, 2011, with no additional cost to the District.

**7. USBR WATERSMART GRANT APPLICATION FOR GOLDSWORTHY DESALTER EXPANSION FEASIBILITY STUDY**

Senior Engineer Jason Weeks stated that staff is applying for grant funding for the development of a feasibility study for the expansion of the Goldsworthy Desalter under the USBR's Title XVI Water Reclamation and Reuse Program.

The Committee recommended the Board authorize the General Manager to submit a grant application for a feasibility study for the expansion of the Goldsworthy Desalter under the USBR's WaterSMART: Development of Feasibility Studies under the Title XVI Water Reclamation and Reuse Program and adopt a resolution to commit WRD to the financial and legal obligations associated with receipt of financial assistance.

**8. RESEARCH OF HIGH-RECOVERY NANOFILTRATION/ REVERSE OSMOSIS INTEGRATED MEMBRANE TREATMENT SYSTEM FOR THE GROUNDWATER RELIABILITY IMPROVEMENT PROGRAM (GRIP)**

Senior Engineer Jim McDavid stated that the GRIP partnership continues to conduct research into new and innovative technologies for possible implementation of any proposed advanced water treatment facility that may be constructed as part of the GRIP. Mr. McDavid explained that the most recent collaborative undertaking is to evaluate a high-recovery nanofiltration / reverse osmosis (NF/RO) integrated treatment system at the Los Angeles County Sanitation Districts' (LACSD) San Jose Creek

Water Reclamation Plant. He stated that the research project will expand on a recently completed study at the Leo J. Vander Lans Water Treatment Facility by determining the viability and potential application of the integrated treatment system which can achieve an overall product water recovery greater than 90%.

Mr. McDavid stated that the project team is recommending the following contributions: WRD \$30,000; Upper San Gabriel Valley MWD \$30,000; and LACSD \$30,000 of in-kind services. He noted that the U.S. Bureau of Reclamation (USBR) has agreed to participate in the effort by contributing \$50,000. The total NF/RO research project budget is \$140,000 with the WRD share at \$30,000, or 21% of the total budget.

The Committee recommended the Board authorize the General Manager to enter into a letter agreement with the LACSD, subject to approval of form by District Counsel, to conduct a NF/RO research project for an amount by WRD not to exceed \$30,000.

**9. UPDATE ON MEMBRANE RESEARCH PROJECTS**

Senior Engineer Paul Fu provided a presentation on a comparison of nanofiltration and reverse osmosis membranes to produce high quality water for indirect potable use. Dr. Fu also provided a summary of WRD's membrane treatment research projects.

The Committee recommended a similar presentation be made to the Board.

**10. FIVE-YEAR CAPITAL IMPROVEMENT PLAN UPDATE**

The Committee deferred the item to a special committee meeting scheduled January 25, 2011.

**11. GROUNDWATER RELIABILITY IMPROVEMENT PROGRAM (GRIP) UPDATE**

Senior Engineer Jim McDavid provided an update on the Groundwater Reliability Improvement Program (GRIP) project. Mr. McDavid stated that the Joint Ad Hoc Committees is scheduled to meet to develop the policies and procedures of the Joint Powers Agreement (JPA), establish the composition of the JPA Board, and approve the work plan for the current and ensuing fiscal year.

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

Liona Fan Chiang, Joseph Elkins and Samuel Dixon IV of LaRouche PAC provided a presentation on the North American Water Power Alliance.

**13. ADJOURNMENT**

With no further business for the Committee, the meeting was adjourned at 1:40 p.m.

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Chair

ATTEST:

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Member



## MEMORANDUM

ITEM NO. 4

*Prepared by:* Ted Johnson

*Reviewed by:* Jason Weeks

*Approved by:* Robb Whitaker

**DATE:** MARCH 2, 2011  
**TO:** WATER RESOURCES COMMITTEE  
**FROM:** ROBB WHITAKER, GENERAL MANAGER  
**SUBJECT:** GROUNDWATER BASIN UPDATE

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### SUMMARY

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

#### Precipitation:

December was one of the wettest months on record in Los Angeles but January was one of the driest. February was about average. For the water year so far, there has been 14.58 inches (downtown Los Angeles precipitation station) versus a normal year of 15.14 inches. Therefore, the region is still over a half inch below normal. But if it rains in March or April, then it is expected to be a slightly above-average year.

#### Imported Water:

WRD has completed its purchase of 18,000 acre-feet of untreated Tier 1 water from Central Basin MWD for spreading in the Montebello Forebay. This is the amount of water they offered to sell WRD in their letter dated October 26, 2010. In that letter, they state that if additional untreated Tier 1 water beyond the 18,000 acre-feet is available, they will notify the District for our consideration. As of this writing, WRD has not received a written offer for additional water, but any offers made will be brought to the Committee for review.

#### Pumping:

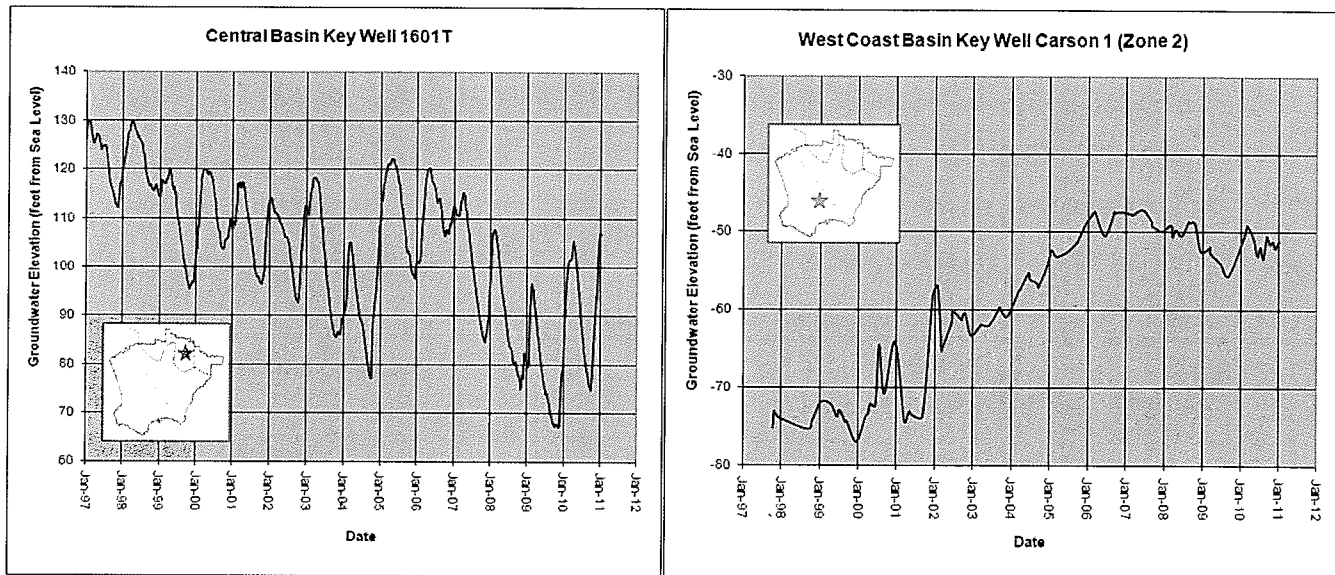
The new water year began October 1, 2010. During that month, a total of 19,898 acre-feet of pumping occurred in the District; 16,457 acre-feet in the Central Basin (17.7% increase from the previous year) and 3,441 acre-feet in the West Coast Basin (10% decrease from the previous year). Due to the District's declared water emergency on November 19, 2010, which encourages pumpers not to pump in fiscal year 10-11 to help restore groundwater levels, it is anticipated that pumping may end up lower than the previous year, but the District will be tracking pumping as it occurs throughout the year and report to the Committee.

#### Groundwater Levels:

Groundwater levels in two Central and West Coast Basin key wells are shown in the hydrographs below. In the Central Basin Key Well, water levels have been generally declining over the past 14 years. Overlying this general trend are seasonal water level rises and drops in response to winter and storm water recharge (rise) and summer pumping and reduced

recharge (drops). The well is currently experiencing the normal water level rise during winter which is expected to continue until early April unless a drier-than-normal January through March causes water levels to drop sooner.

In the West Coast Basin Key Well, water levels generally were rising from 2000 through 2007, when they began to drop until mid 2009, and have lately remained relatively stable.



**FISCAL IMPACT**

For information.

**STAFF RECOMMENDATION**

For information.



## MEMORANDUM

ITEM NO. 5

*Prepared by: Jason Weeks*

*Reviewed by: Ted Johnson*

*Approved by: Robb Whitaker*

**DATE: MARCH 2, 2011**

**TO: WATER RESOURCES COMMITTEE**

**FROM: ROBB WHITAKER, GENERAL MANAGER**

**SUBJECT: GROUNDWATER BASINS MASTER PLAN UPDATE**

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### SUMMARY

District staff and its consultants, CH2MHILL and RMC Water and Environment, are continuing work on the development of a Groundwater Basins Master Plan for the West Coast and Central Basins (Plan).

As part of the development of this plan, alternative management scenarios for both basins have been developed and are currently being analyzed in further detail. Scenarios developed with input from West Coast Basin stakeholders are currently being modeled and cost estimates of various scenario components are being developed. Broad conceptual scenarios for the Central Basin are currently being refined and will be brought back to Central Basin stakeholders for review and concurrence prior to proceeding with further analysis.

District staff and its consultant will provide the Committee with an overview of the alternative management scenarios and the results of the modeling and analysis that has been completed to date.

### FISCAL IMPACT

None.

### STAFF RECOMMENDATION

For information.



**MEMORANDUM**

**ITEM NO. 6**

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

**DATE: MARCH 2, 2011**  
**TO: WATER RESOURCES COMMITTEE**  
**FROM: ROBB WHITAKER, GENERAL MANAGER**  
**SUBJECT: RECEIVE AND FILE ENGINEERING SURVEY AND REPORT; ADOPT RESOLUTION TO SET A REPLENISHMENT ASSESSMENT IN 2011-2012**

**SUMMARY**

On January 21, 2011, the Board of Directors adopted Resolution No. 11-895 ordering the preparation of the annual Engineering Survey and Report (ESR). This report determines, among other things, the replenishment water needs and costs of the District for the ensuing water year October 1, 2011 – September 30, 2012 (water year 11-12).

This information, combined with the upcoming fiscal year 11-12 proposed budget, provides the Board with the necessary information to determine the Replenishment Assessment (RA) for the ensuing fiscal year which extends from July 1, 2011 through June 30, 2012 (fiscal year 11-12). The current schedule for the ESR and RA is as follows:

<b>Date</b>	<b>Item</b>	<b>Board action</b>
01/21/11	Order preparation of ESR	Adopt Resolution to order preparation of ESR
03/04/11	Complete the ESR	Receive and File ESR. Adopt Resolution giving notice of plan to adopt a RA for fiscal year 11-12
04/01/11	Open Public Hearing	Conduct public hearing on ESR and RA
05/06/11	Close Public Hearing	Close public hearing on ESR and RA
05/06/11	Set the RA	Adopt RA for fiscal year 11-12

Staff is finalizing the draft ESR and will present it to the Committee for review and comment. A summary of the preliminary findings is presented below:

- Total groundwater production in the previous water year 09-10 was 241,329 acre-feet. In the current year 10-11 it is estimated that production will equal 241,000 acre-feet. For the ensuing year 11-12, total production is estimated at 243,000 acre-feet.
- In water year 09-10 a total of 27,000 acre-feet were added to storage and groundwater levels rose on average 5 feet in the Montebello Forebay and 1 foot or less over the rest of the District. In the past 10 years, groundwater in storage has declined by 114,400 acre-feet, including the gain observed in 09-10.

- The accumulated overdraft at the end of water year 09-10 was 726,300 acre-feet. The basins are 114,300 acre-feet below the optimum quantity established by the Board in 2006. There will be an annual overdraft in the ensuing year estimated at 97,800 acre-feet which will be made up by WRD purchasing replenishment water.
- In water year 09-10, the District purchased 26,286 acre-feet of untreated Tier 1 water for spreading and 50,970 acre-feet of recycled water and received an additional 4,761 acre-feet of incidental recycled water from the Pomona Plant and 35,398 acre-feet of local water from river base flow and storm water capture. For the seawater barriers, the District purchased 17,752 acre-feet of treated Tier 1 water and 11,432 acre-feet of recycled water.
- For the ensuing water year 11-12, the District intends to purchase for spreading 21,000 acre-feet of untreated Tier 1 water (since the discounted replenishment water remains unavailable from MWD) and 50,000 acre-feet of recycled water. For the seawater barrier, the District intends to purchase 16,800 acre-feet of imported water and 14,800 acre-feet of recycled water. In addition, the District intends to budget for 10,303 acre-feet of In-Lieu water as it has done previously. The total amount of water the District intends to purchase is 112,903 acre-feet to help reduce the Annual Overdraft and protect the basins for use as a future groundwater supply.
- The price for these water sources has not yet been determined by the suppliers to WRD. However, it is anticipated that there will be an approximate 7% increase in MWD's rates based on their 2-year budget adopted last year. For the surcharges to the MWD water applied by the MWD-member agencies to WRD, it is assumed a 5% increase will occur. These values are subject to change as these agencies adopt their rates over the next few months. In addition, the volume of water being injected into the West Coast Barrier has increased by at least 2,000 acre-feet per year due to the well-redevelopment activities of Los Angeles County. These increases will better protect the aquifers from seawater intrusion but will also add to the cost of barrier operations. Based on these assumptions, the District estimates that the cost of replenishment water will be approximately \$42,124,000.
- Important replenishment and water quality projects and programs are being pursued to ensure the current and future reliability of the two groundwater basins. One of the main initiatives is the District's Water Independence Now (WIN) program, which seeks to offset and eliminate the use of imported water for replenishment and instead utilize more storm water and recycled water, or other sources. The rising cost and uncertain reliability of imported water has forced the District to pursue alternative sources for replenishment to help manage the basins in the most cost-effective manner available. These projects and programs are discussed in detail in the ESR.

Upon the Board's acceptance of the ESR, under Water Code Section 60305 the Board must declare by Resolution whether funds will be raised to purchase replenishment water for the ensuing fiscal year and how those funds will be raised. The Resolution will also declare whether funds will be raised to remove contaminants from groundwater supplies during the ensuing fiscal year or to exercise any other power under Section 60224 of the Water Code. Attached is Resolution No. 11-898 for the Committee to consider recommending to the Board.

**FISCAL IMPACT**

None at this time.

**STAFF RECOMMENDATION**

Receive and file the 2011 Engineering Survey and Report and adopt Resolution No. 11-898.

**RESOLUTION NO. 11-898**

**A RESOLUTION OF THE BOARD OF DIRECTORS OF THE WATER REPLENISHMENT DISTRICT OF SOUTHERN CALIFORNIA ORDERING ACCEPTANCE AND FILING OF THE ENGINEERING SURVEY AND REPORT SUBMITTED PURSUANT TO SECTIONS 60300 AND 60301 OF THE WATER CODE, DECLARING THAT FUNDS SHALL BE RAISED FOR THE PURCHASE OF WATER FOR REPLENISHMENT AND FOR GROUNDWATER REPLENISHMENT AND QUALITY PROGRAMS AND PROJECTS DURING THE ENSUING FISCAL YEAR, THAT SUCH FUNDS SHALL BE RAISED BY A REPLENISHMENT ASSESSMENT AS PROVIDED IN SAID WATER CODE, DECLARING THAT THE FUNDS TO BE RAISED BY SAID REPLENISHMENT ASSESSMENT WILL BENEFIT, EITHER DIRECTLY OR INDIRECTLY, ALL OF THE PERSONS, REAL PROPERTY AND/OR IMPROVEMENTS WITHIN THE DISTRICT, AND ORDERING THE PUBLICATION OF A NOTICE OF PUBLIC HEARING IN ACCORDANCE WITH SECTION 60306 OF THE WATER CODE**

**WHEREAS**, there has been submitted to the Secretary of the Board of the Water Replenishment District of Southern California ("District") the engineering survey and report heretofore ordered pursuant to Sections 60300 and 60301 of the California Water Code; and

**WHEREAS**, the Board of Directors of the District ("Board") has received said report;

**NOW, THEREFORE, BE IT RESOLVED AND DECLARED BY THE BOARD OF THE WATER REPLENISHMENT DISTRICT OF SOUTHERN CALIFORNIA:**

Section 1. That the said engineering survey and report be received and filed in the records of the District;

Section 2. That funds shall be raised to purchase water for replenishment of the groundwater supplies within the District during the next ensuring fiscal year of the District, Fiscal Year 2011-2012, and to accomplish all acts reasonably necessary to said replenishment, including but not limited to the development and operation of capital projects, and that such funds shall be raised by a replenishment assessment, as provided in California Water Code Sections 60300 et seq;

Section 3. That funds shall be raised to remove contaminants from groundwater supplies and to exercise any other power under California Water Code Section 60224, including but not limited to developing and operating capital projects, and that such funds shall be raised by a replenishment assessment as provided by California Water Code Section 60300 et seq;

Section 4. That funds shall be raised to pay for the District's operating and administrative expenses and such funds shall be raised by a replenishment assessment pursuant to California Water Code Section 60300 et seq;

Section 5. A Public Hearing shall be held in accordance with the California Water Code Section 60043 for the purpose of determining whether and to what extent the estimated cost of the actions described in Sections 2, 3, and 4, above for the ensuing fiscal year shall be paid for by a replenishment assessment;

Section 6. That the funds so raised to accomplish the actions described in Sections 2, 3 and 4, above during the next ensuing fiscal year, 2011-2012, will benefit, directly or indirectly, all of the persons and/or real property and improvements within the District;

Section 7. That the General Manager of the District shall cause to be published on behalf of the Board a notice that a public hearing will be held for the purposes described in Section 5, above. Such notice shall be published once in the Los Angeles Bulletin, an adjudicated paper of general circulation in Los Angeles County, at least ten (10) days before said hearing. Such notice shall contain a copy of said Board's resolution, the time and place of said hearing, and an invitation to all interested parties to attend and be heard in support of or in opposition to said proposed assessment, and shall invite inspection of the engineering survey and report upon which the Board acted.

PASSED, APPROVED AND ADOPTED this 4<sup>th</sup> day of March, 2011.

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Board President

ATTEST:

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Board Secretary



## MEMORANDUM

ITEM NO. 7

*Prepared by:* Nancy Matsumoto

*Reviewed by:* Ted Johnson

*Approved by:* Robb Whitaker

**DATE: MARCH 2, 2011**

**TO: WATER RESOURCES COMMITTEE**

**FROM: ROBB WHITAKER, GENERAL MANAGER**

**SUBJECT: WEST COAST BARRIER FOLLOW-UP CONDITION ASSESSMENT MOU**

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The Los Angeles County Department of Public Works (LACDPW) owns and operates the West Coast Barrier, with WRD purchasing the recycled and imported injection water for the barrier from West Basin Municipal Water District (WBMWD). Proper functioning of the West Coast Barrier is critical to the health of the West Coast Basin by preventing seawater intrusion.

In fiscal year 07-08, LACDPW, WRD and WBMWD entered into a Memorandum of Understanding (MOU) to share costs for a West Coast Barrier Condition Assessment focused on evaluating the condition of the water supply lines of the barrier. The Condition Assessment was completed in 2009.

The Condition Assessment found no leaks in the supply lines, but recommended that the 2,400-foot length of supply line located on the Raytheon property in El Segundo be further field-evaluated to verify pipe conditions and assess if further action is necessary or appropriate. Accordingly, LACDPW proposed a Follow-Up Condition Assessment and requested that WRD and WBMWD share the costs for this work.

Initially, LACDPW, WRD and WBMWD cooperatively sought grant funding for this Follow-Up Condition Assessment. However, given that this segment of supply pipeline runs partially beneath the Metro Rail Green Line, the parties have agreed that it is important to move forward with this project rather than to wait for grant funding to become available.

LACDPW will be the lead agency for the work, will issue the Request for Proposals and will manage the consulting contract. Both WRD and WBMWD will provide review and input on the entire project. The MOU for this work was drafted and is being reviewed by each of the agencies' legal counsel. The final MOU will be submitted by LACDPW to WRD and WBMWD for approval and signature, upon which WRD and WBMWD are anticipated to approve and execute the MOU. A copy of the draft MOU is attached for reference.

### **FISCAL IMPACT**

Based on LACDPW's experience with barrier condition assessments, the total cost of the West Coast Barrier Follow-Up Condition Assessment is estimated at an amount not to exceed \$200,000. Under the terms of the MOU, WRD would reimburse LACDPW for approximately one-third of the cost of the Condition Assessment, up to a maximum of \$66,800. This is not a

budgeted item but funding opportunities are being explored during the current mid-year budget review process.

**STAFF RECOMMENDATION**

Enter into a Memorandum of Understanding with the Los Angeles County Department of Public Works and the West Basin Municipal Water District, subject to approval to form by District Counsel, to perform a Follow-Up Condition Assessment of the West Coast Barrier for a cost to WRD not to exceed \$66,800.

**Agreement No. W\_\_\_\_\_**  
**to Jointly Fund a**  
**Follow-up Condition Assessment of**  
**the West Coast Basin Barrier Project**  
**Between**  
**Water Replenishment District of Southern California,**  
**West Basin Municipal Water District,**  
**and**  
**Los Angeles County Flood Control District**

THIS AGREEMENT, made and entered into by and between the Water Replenishment District of Southern California (WRD), West Basin Municipal Water District (WBMWD), and Los Angeles County Flood Control District (LACFCD) (collectively referred to as "Parties" or individually as "Party").

WHEREAS, the County of Los Angeles is home to approximately 10 million residents who depend on reliable sources of water; and

WHEREAS, approximately two-thirds of the water supply is imported from sources outside of the region; and

WHEREAS, in addition to imported water, the water supply also depends on groundwater that is recharged from a variety of sources, including injection at the West Coast Basin Barrier Project (BARRIER); and

WHEREAS, WRD is a special district created pursuant to California Water Code, Section 60000, *et seq.*, adopted by the California legislature in 1955; and

WHEREAS, WRD has operated since 1959 to protect and preserve the quantity and quality of the groundwater supplies in the Central and West Coast groundwater basins, which basins serve as the source of nearly 40 percent of the water used by the 4 million people overlying the WRD's 420-square-mile service area; and

WHEREAS, WRD's mission includes managing and safeguarding the groundwater resources of the West Coast Basin by ensuring its water quality and by maximizing the amount of groundwater in the basins; and

WHEREAS, WEST BASIN was established for the purpose of, among other things, water conservation and ensuring a reliable supply of potable water for the region; and

WHEREAS, LACFCD is a special district organized and operating under the County of Los Angeles Flood Control Act, Water Code Unified Acts, Act 4463 (hereinafter referred to as Flood Control Act); and

WHEREAS, pursuant to the Flood Control Act, the LACFCD is authorized to manage flood control and water conservation facilities within its boundaries, and said efforts include injection of water at the BARRIER to recharge the groundwater basins within the County of Los Angeles, including the subterranean regional aquifer known as the West Coast Groundwater Basin (West Coast Basin); and

WHEREAS, LACFCD owns and operates the BARRIER which consists of injection wells, observation wells, water supply lines, pressure-reduction facilities, and related appurtenances for the purpose of injecting water; including to aid in the replenishment of the water supply of the West Coast Basin, and to form a hydraulic barrier to prevent seawater from intruding into the West Coast Basin; and

WHEREAS, WEST BASIN supplies, WRD purchases, and LACFCD conveys and injects the water into the BARRIER; and

WHEREAS, WEST BASIN and WRD benefit from the efforts of LACFCD to inject water at the BARRIER to replenish the water supply of the West Coast Basin and prevent seawater from intruding into the West Coast Basin; and

WHEREAS, on April 2, 2008, WRD, WBMWD, and LACFCD entered into an agreement (i.e., agreement number W1951) to jointly fund a condition assessment of the BARRIER to determine if improvements were required to prevent future shutdowns of the BARRIER and to maintain protective groundwater elevations with a high level of efficiency; and

WHEREAS, the results of the 2008 condition assessment revealed the need to perform a follow-up condition assessment on certain portions of the water supply line, specifically that portion located on the Raytheon property near the intersection of El Segundo Boulevard and Nash Street in the City of El Segundo; and

WHEREAS, LACFCD, WRD, and WBMWD desire to perform a follow-up condition assessment as recommended by the 2008 condition assessment Final Report.

NOW, THEREFORE, in consideration of the mutual benefits to be derived by WRD, WBMWD, and LACFCD, and of the premises herein contained, it is hereby agreed by the Parties as follows:

#### **SECTION 1 – SCOPE OF WORK**

A Scope of Work to perform a follow-up condition assessment on a portion of the BARRIER water supply facilities, together with its deliverables (Scope of Work), as developed jointly by WRD, WBMWD, and LACFCD, are attached hereto as Exhibit A and incorporated herein by this reference.

## **SECTION 2 – REQUEST FOR PROPOSALS/CONSULTANT SELECTION**

LACFCD shall have the authority to hire a third-party consultant (“Consultant”) to perform the Scope of Work by means of procurement procedures that satisfy the LACFCD’s normal procurement and contract process. At the time of the selection of the Consultant to perform the Scope of Work under this AGREEMENT, LACFCD shall include WRD and WBMWD on the proposal selection committee. The selected Consultant shall be awarded a contract to perform the Scope of Work.

## **SECTION 3 – PAYMENTS**

WRD and WBMWD shall each be responsible to reimburse LACFCD for Consultant services in the amount not to exceed Sixty-six Thousand Eight Hundred Dollars (\$66,800) or one-third of the total amount invoiced by the Consultant, whichever is less. LACFCD shall invoice WRD and WBMWD monthly based on invoices it receives from the Consultant. LACFCD shall be responsible for all costs of the Scope of Work in excess of said contributions by WRD and WBMWD. WRD and WBMWD will not reimburse LACFCD for any additional costs to perform or complete the Scope of Work except pursuant to a written amendment to this Agreement.

## **SECTION 4 – REPORT OF FINDINGS**

LACFCD shall provide both WRD and WBMWD with one copy each of the draft report of findings submitted by the Consultant. Comments from WRD and WBMWD on the draft report of findings must be submitted to LACFCD within fourteen (14) days of LACFCD providing the draft report of findings to be considered for incorporation into the Final Comprehensive Report of Findings. LACFCD shall also provide both WRD and WBMWD with one hard copy and one electronic copy each of the Final Comprehensive Report of Findings.

## **SECTION 5 – NOTICES**

Notices required or permitted shall be given by personal delivery or by first class mail, postage prepaid, or facsimile transmission to:

Water Replenishment District of Southern California  
Attention General Manager  
4040 Paramount Boulevard  
Lakewood, CA 90712

West Basin Municipal Water District  
Attention General Manager  
17140 South Avalon Boulevard  
Carson, CA 90746

LACFCD  
County of Los Angeles Department of Public Works  
Attention Assistant Deputy Director – Water Resources Division  
900 South Fremont Avenue, 2nd Floor  
Alhambra, CA 91803-1331

## **SECTION 6 – INDEMNIFICATION**

- a. WRD shall hold harmless, defend at its own expense, and indemnify LACFCD and WBMWD, its officers, employees, representatives and agents against any and all liability, claims, losses, damages, or expenses arising from the negligence or willful misconduct of WRD or its officers, employees, representatives or agents in rendering services under this AGREEMENT; excluding, however, such liability, claims, losses, damages, or expenses arising solely from the respective negligent or willful acts of LACFCD or WBMWD, its officers, employees, representatives and agents.
- b. WBMWD shall hold harmless, defend at its own expense, and indemnify LACFCD and WRD, its officers, employees, representatives and agents against any and all liability, claims, losses, damages, or expenses arising from the negligence or willful misconduct of WBMWD or its officers, employees, representatives or agents in rendering services under this AGREEMENT; excluding, however, such liability, claims, losses, damages, or expenses arising solely from the respective negligent or willful acts of LACFCD or WRD, its officers, employees, representatives and agents.
- c. LACFCD shall hold harmless, defend at its own expense, and indemnify WBMWD and WRD, its officers, employees, representatives and agents against any and all liability, claims, losses, damages, or expenses arising from the negligence or willful misconduct of LACFCD or its officers, employees, representatives or agents in rendering services under this AGREEMENT; excluding, however, such liability, claims, losses, damages, or expenses arising solely from the respective negligent or willful acts of WBMWD or WRD, its officers, employees, representatives and agents.

## **SECTION 7 – ASSIGNMENT**

No one party to this AGREEMENT shall assign, sell, or otherwise transfer any obligation or interest conferred in this AGREEMENT without the specific written consent of the other Parties to this AGREEMENT.

## **SECTION 8 – APPLICABLE LAW**

This AGREEMENT shall be construed in accordance with and governed by the laws of the State of California and action brought relating to this AGREEMENT shall be

brought solely in a court of competent jurisdiction in the County of Los Angeles, California.

#### **SECTION 9 – INTEGRATION**

This AGREEMENT represents the entire understanding of the parties. No prior oral or written understanding shall be of any force or effect with respect to those matters covered by this AGREEMENT.

#### **SECTION 10 – SEVERABILITY**

In the event that any provision herein is held to be invalid by any court of competent jurisdiction, the invalidity of any such provision shall not affect the validity of the remaining provisions of this AGREEMENT, which shall remain in full force and effect.

DRAFT

IN WITNESS WHEREOF, the parties thereto have caused this agreement to be executed by their duly authorized representatives.

Date: \_\_\_\_\_

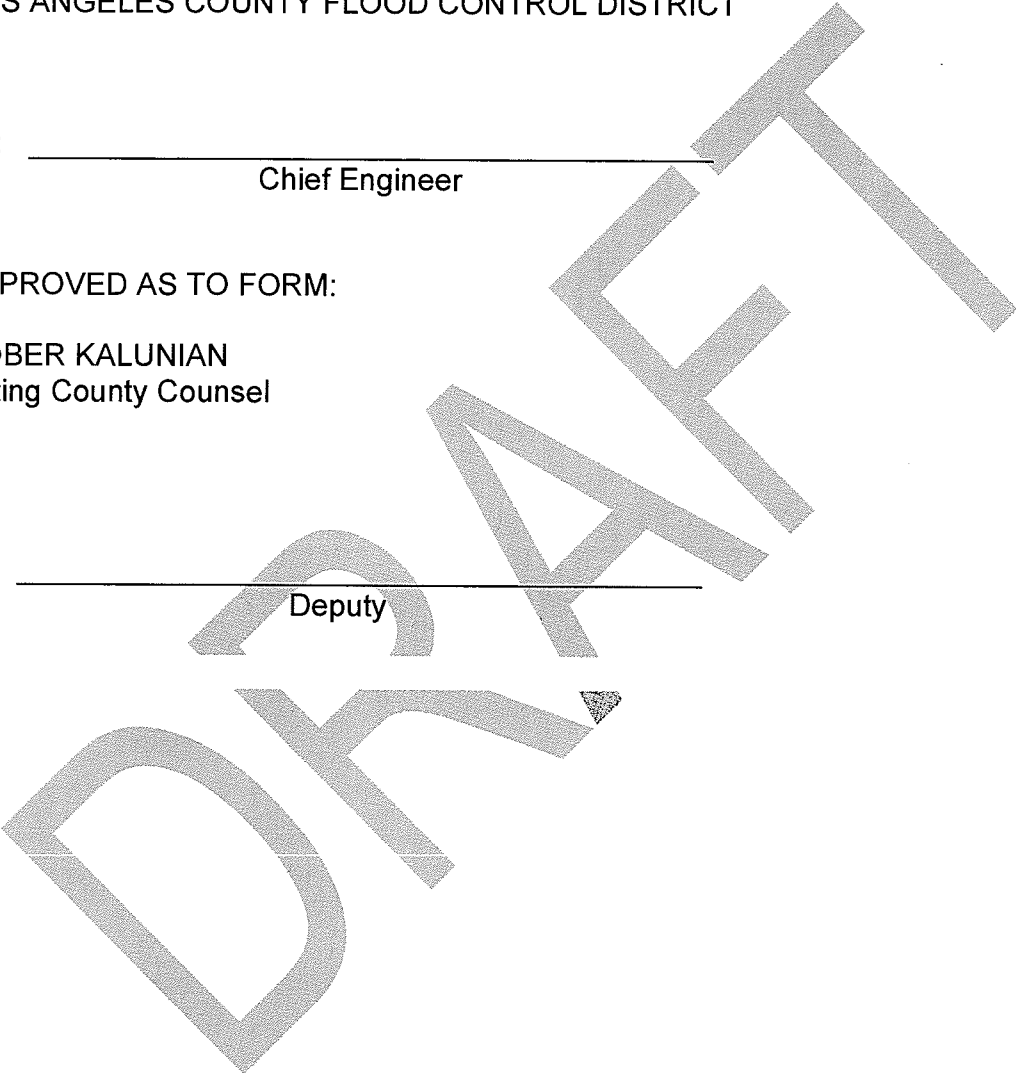
LOS ANGELES COUNTY FLOOD CONTROL DISTRICT

By: \_\_\_\_\_  
Chief Engineer

APPROVED AS TO FORM:

ROBER KALUNIAN  
Acting County Counsel

By: \_\_\_\_\_  
Deputy



IN WITNESS WHEREOF, the parties thereto have caused this agreement to be executed by their duly authorized representatives.

Date: \_\_\_\_\_

WATER REPLENISHMENT DISTRICT OF SOUTHERN CALIFORNIA

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
President, Board of Directors  
Title

\_\_\_\_\_  
Secretary, Board of Directors  
Title

APPROVED AS TO FORM  
ALSTON + BIRD LLP

By: \_\_\_\_\_  
Edward J. Casey  
Attorneys for the Water Replenishment  
District of Southern California

IN WITNESS WHEREOF, the parties thereto have caused this agreement to be executed by their duly authorized representatives.

Date: \_\_\_\_\_

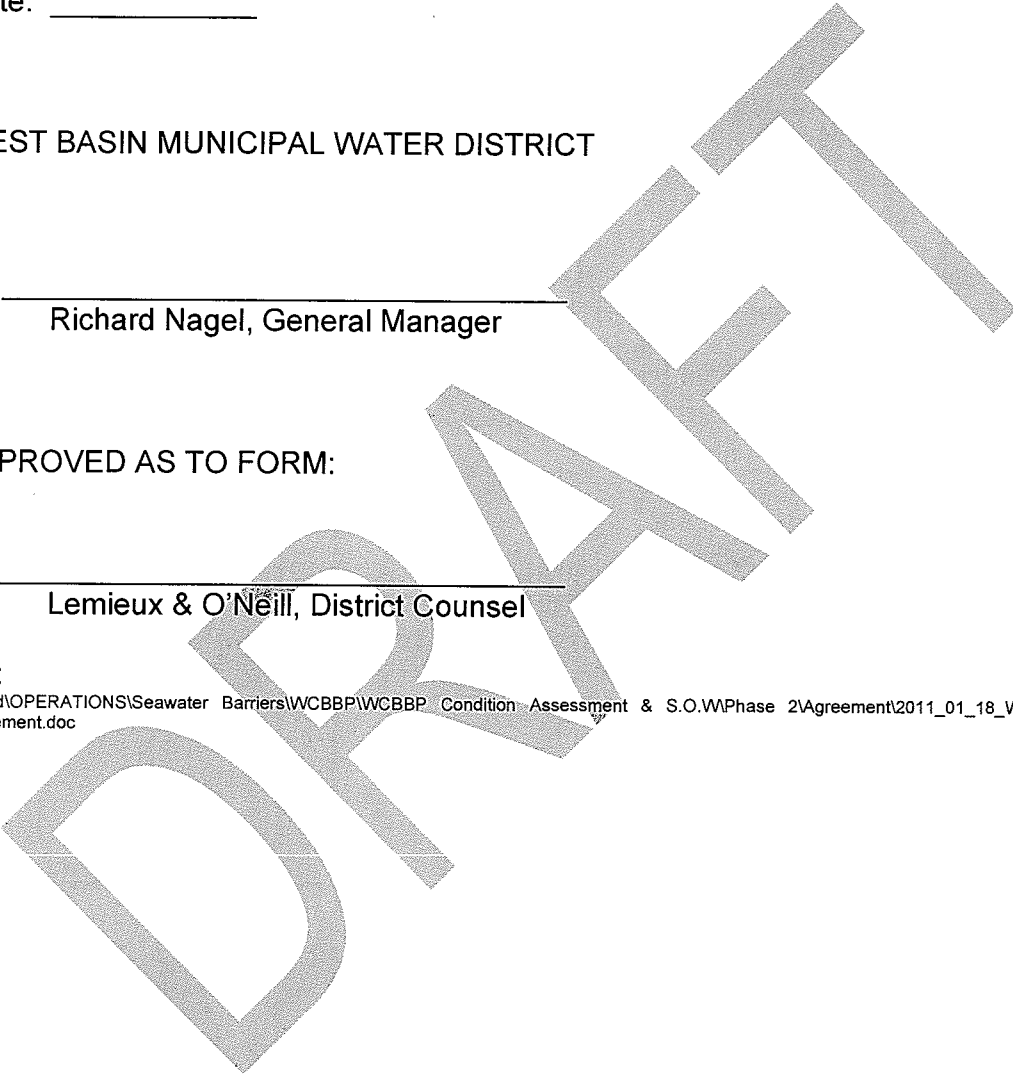
WEST BASIN MUNICIPAL WATER DISTRICT

By: \_\_\_\_\_  
Richard Nagel, General Manager

APPROVED AS TO FORM:

By: \_\_\_\_\_  
Lemieux & O'Neill, District Counsel

EB:  
P:\wrd\OPERATIONS\Seawater Barriers\WCBBP\WCBBP Condition Assessment & S.O.W\Phase 2\Agreement2011\_01\_18\_WCBBP CA Ph2 Agreement.doc





**MEMORANDUM**

**ITEM NO. 8**

*Prepared by: Nancy Matsumoto  
Reviewed by: Ted Johnson  
Approved by: Robb Whitaker*

**DATE: MARCH 2, 2011**

**TO: WATER RESOURCES COMMITTEE**

**FROM: ROBB WHITAKER, GENERAL MANAGER**

**SUBJECT: DOMINGUEZ GAP BARRIER CONDITION ASSESSMENT MOU**

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Proper functioning of the Dominguez Gap Barrier is critical to the health of the West Coast Basin by preventing seawater intrusion. The Los Angeles County Department of Public Works (LACDPW) owns and operates the Dominguez Gap Barrier, with WRD purchasing the recycled and imported injection water for the barrier from sources including the Los Angeles Department of Water and Power (LADWP) and the West Basin Municipal Water District.

LACDPW seeks to evaluate the condition of the Dominguez Gap Barrier through a Condition Assessment that will examine the barrier infrastructure throughout the system, from the pressure reducing station to well head connections inside the injection well vaults. The scope of work will include water supply lines, injection wells and observation wells. Hydraulic modeling will also be performed, to assess the structural effects of water delivery under the current configuration of two delivery points (LADWP's treatment plant connection and the WB-37 connection), and possible future configuration of a single delivery point (LADWP's treatment plant connection only). The Condition Assessment will evaluate the barrier infrastructure and provide recommendations for repairs, improvements, and preventative measures at the barrier. LACDPW has requested that WRD and LADWP share the costs for this Condition Assessment.

Any major failure of the barrier infrastructure could cause the barrier to be shut down for months to a year or more for repairs, making the West Coast Basin susceptible to seawater intrusion. Therefore, a prompt, comprehensive evaluation of the Dominguez Gap Barrier is needed due to the age of the infrastructure (which began operations in the water year 70-71) and the leaks which have occurred along the barrier in recent years. The Condition Assessment would help to identify locations along the barrier that may be susceptible to leaks, and make recommendations to prevent such leaks from occurring.

LACDPW will be the lead agency for the work, will issue the Request for Proposals and will manage the consulting contract. Both WRD and LADWP will provide review and input on the entire project. A Memorandum of Understanding (MOU) between LACDPW, WRD and LADWP was drafted and approved by each of the agencies' legal counsel. The final MOU is being submitted by LACDPW to WRD and LADWP for approval and signature, upon which WRD and LADWP are anticipated to approve and execute the MOU.

**FISCAL IMPACT**

Based on LACDPW's experience with barrier condition assessments, the total cost of the Dominguez Gap Barrier Condition Assessment is estimated at an amount not to exceed \$1,000,000. Under the terms of the MOU, WRD would reimburse LACDPW for approximately one-third of the cost of the Condition Assessment, up to a maximum of \$333,000. A total of \$200,000 for this project has been budgeted under Project 023 (Replenishment Operations) in the fiscal year 10-11 budget. The remaining \$133,000 is not a budgeted item but funding opportunities are being explored during the current mid-year budget review process.

**STAFF RECOMMENDATION**

Enter into a Memorandum of Understanding with the Los Angeles County Department of Public Works and the Los Angeles Department of Water and Power, subject to approval to form by District Counsel, to perform a Condition Assessment of the Dominguez Gap Barrier for a cost to WRD not to exceed \$333,000.



## MEMORANDUM

ITEM NO. 9

*Prepared by:* Ted Johnson  
*Reviewed by:* Cathy Chang  
*Approved by:* Robb Whitaker

**DATE:** MARCH 2, 2011  
**TO:** WATER RESOURCES COMMITTEE  
**FROM:** ROBB WHITAKER, GENERAL MANAGER  
**SUBJECT:** NO-COST TIME EXTENSION; U.C.SANTA BARBARA GROUNDWATER TRACER RESEARCH PROJECT

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The Regents of the University of California, Santa Barbara (UCSB) is under contract with the District to perform a groundwater tracer test research project to study recycled water travel times at the Rio Hondo Spreading Grounds. The purpose of the work is to determine the time required for recharge water to travel from the spreading grounds to nearby monitoring wells and production wells.

Work has been proceeding as planned for the past year, and the contract is set to expire on June 30, 2011. However, UCSB is recommending continuing the work through February 2012 at no additional cost to the District. A simple contract time extension is needed for the work to continue. The District will receive substantial additional benefit from increased sampling without incurring any added expense. Therefore, Staff recommends the time extension.

The Agreement is attached to this Staff Report and has been approved by District Counsel.

### FISCAL IMPACT

None.

### STAFF RECOMMENDATION

Extend the termination date of the Tracer Test Research Agreement with The Regents of the University of California, University of California, Santa Barbara, to February 29, 2012, with no additional cost to the District.

**AMENDMENT 1 TO RESEARCH AGREEMENT**

**Between**

**THE REGENTS OF THE UNIVERSITY OF CALIFORNIA  
UNIVERSITY OF CALIFORNIA, SANTA BARBARA**

**And**

**WATER REPLINSHMENT DISTRICT OF SOUTHERN CALIFORNIA**

The above referenced agreement is modified as follows:

**1. ARTICLE III PERIOD OF PERFORMANCE AND TERM OF THE AGREEMENT**

Please replace with the following:

*The period of performance and the Term of this Agreement shall be from January 1, 2009 through February 29, 2012.*

Except as hereby modified, all terms and conditions of said Agreement remain unchanged and in full force and effect.

WATER REPLINSHMENT DISTRICT OF  
SOUTHERN CALIFORNIA

THE REGENTS OF THE UNIVERSITY  
OF CALIFORNIA

By: \_\_\_\_\_  
By: Sergio Calderon  
Title: President, Board of Directors  
Date: \_\_\_\_\_

By: \_\_\_\_\_  
By: Stephanie May  
Title: Senior Sponsored Projects Officer  
Date: \_\_\_\_\_

WATER REPLINSHMENT DISTRICT OF  
SOUTHERN CALIFORNIA

By: \_\_\_\_\_  
By: Robert Katherman  
Title: Secretary, Board of Directors  
Date: \_\_\_\_\_

WATER REPLINSHMENT DISTRICT OF  
SOUTHERN CALIFORNIA

Approved As To Form; Leal - Trejo APC

By: \_\_\_\_\_  
By: Francisco Leal  
Title: Attorneys for the Water  
Replenishment District of Southern California  
Date: \_\_\_\_\_



**MEMORANDUM**

**ITEM NO. 10**

*Prepared by: Jim McDavid*

*Reviewed by: Ted Johnson*

*Approved by: Robb Whitaker*

**DATE: MARCH 2, 2011**

**TO: WATER RESOURCES COMMITTEE**

**FROM: ROBB WHITAKER, GENERAL MANAGER**

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

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**SUMMARY**

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

The first meeting of the JPA Board of Directors was held on January 31, 2011. Staff will provide an update of that meeting and the progress of tasks assigned to staff at that time.

**FISCAL IMPACT**

None at this time.

**STAFF RECOMMENDATION**

For information.