

**SPECIAL MEETING OF THE WATER RESOURCES COMMITTEE  
OF THE BOARD OF DIRECTORS  
WATER REPLENISHMENT DISTRICT OF SOUTHERN CALIFORNIA  
4040 PARAMOUNT BOULEVARD, LAKEWOOD, CALIFORNIA 90712  
3:00 P.M., WEDNESDAY, APRIL 7, 2010**

**AGENDA**

EACH ITEM ON THE AGENDA, NO MATTER HOW DESCRIBED, SHALL BE DEEMED TO INCLUDE ANY APPROPRIATE MOTION, WHETHER TO ADOPT A MINUTE MOTION, RESOLUTION, PAYMNET OF ANY BILL, APPROVAL OF ANY MATTER OR ACTION, OR ANY OTHER ACTION. ITEMS LISTED AS "FOR INFORMATION" MAY ALSO BE THE SUBJECT OF ANY "ACTION" TAKEN BY THE BOARD OR A COMMITTEE AT THE SAME MEETING.

- 1. DETERMINATION OF A QUORUM**
- 2. PUBLIC COMMENT**
- 3. GROUNDWATER BASIN UPDATE**  
*Staff Recommendation:* For information.
- 4. UPDATE ON THE ENGINEERING SURVEY AND REPORT**  
*Staff Recommendation:* For information.
- 5. AWARD OF CONTRACT FOR FIELD SERVICES**  
*Staff Recommendation:* For discussion and possible action to recommend a firm to the Board.
- 6. RENEW CONTRACT WITH GEI CONSULTANTS**  
*Staff Recommendation:* Execute a Contract Amendment with GEI Consultants, Inc., subject to approval of form by District Counsel, for professional services for an additional amount of \$50,000, with an expiration date of June 30, 2011.
- 7. REPLENISHMENT WATER PURCHASE OFFER – LONG BEACH**  
*Staff Recommendation:* Authorize the General Manager to enter into an agreement with the Long Beach Water Department and the Central Basin Municipal Water District, subject to approval of form by District Counsel, to purchase up to 3,000 acre feet of untreated Tier 1 water for groundwater replenishment at a rate of \$569 per acre-foot by April 30, 2010.
- 8. LOS ANGELES RIVER GROUNDWATER RECHARGE UPDATE**  
*Staff Recommendation:* For information.
- 9. WEST COAST BASIN MASTER PLAN UPDATE**  
*Staff Recommendation:* For information.
- 10. REVIEW OF WATER RESOURCE PROJECTS**  
*Staff Recommendation:* For information and possible committee recommendations.
- 11. GROUNDWATER RELIABILITY IMPROVEMENT PROGRAM (GRIP) UPDATE**  
*Staff Recommendation:* For information.

**12. DIRECTORS REPORTS, INQUIRIES, REVIEW OF DIRECTIONS TO STAFF**

**13. ADJOURNMENT**

Posted by Abigail C. Andom, Deputy Secretary, April 5, 2010.

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).



**MEMORANDUM**

**ITEM NO. 3**

*Prepared by:* Ted Johnson

*Reviewed by:* Nancy Matsumoto

*Approved by:* Robb Whitaker

**DATE: APRIL 7, 2010**  
**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 the current conditions is presented below.

**Precipitation:**

The National Weather Service reports that precipitation in downtown Los Angeles (USC Campus) as of February 23, 2010 has been 14.66 inches this year compared to a normal by this date of 13.94 inches. This means the region is 0.72 inches or 5% above normal for this time of year. Total average rainfall for the entire water year is 14.41 inches, so the current year is slightly above average for a normal year.

**Replenishment:**

WRD uses the Rio Hondo and San Gabriel River Spreading Grounds in the Montebello Forebay and the Alamitos Barrier (AB), Dominguez Gap Barrier (DG), and West Coast Barrier (WC) along the coast to recharge the groundwater basins. WRD purchases the recycled and imported waters that go into these facilities for groundwater replenishment. WRD works cooperatively with the Los Angeles County Department of Public Works (LACDPW) which owns and operates these facilities. A summary of the replenishment water amounts received to date are shown on the table below and a discussion follows.

Seasonal imported water for spreading that WRD has historically utilized has not been available from the Metropolitan Water District of Southern California (MWD) since May 2007 due to continued drought conditions, environmental issues, and judicial decisions on the Bay Delta. There is no indication that this water will be available anytime soon. Therefore, the WRD Board has authorized the purchase of untreated Tier 1 water for spreading and replenishment. A total of 3,001.8 acre feet (AF) of this water were purchased from the City of Long Beach in October and November 2009 and an order for up to 20,295 AF has been placed with the Central Basin Municipal Water District (CBMWD) of which 11,436 AF has been received as of April 1, 2010.

Recycled water for spreading is being maximized in light of new permit requirements that were enacted in 2009. Modifications have been made to a discharge point to allow additional recycled water to be captured and recharged that was previously lost to the ocean. Progress

is being made on the interconnection pipeline and the Groundwater Reliability Improvement Program (GRIP) to increase recycled water usage in the future.

Local water recharge (storm water and river base flow) is captured at the spreading grounds by LACDPW. Due to time involved in tracking and reporting on the 23 spreading facilities county wide, the LACDPW numbers are usually a few months behind.

Water Year 2009/2010 Oct 1 – Sept 30	Planned (af)	Actual to Date (af)	Through	Difference (af)
Spreading Imported	21,000	14,438	March	6,562.0
Spreading Recycled <sup>1</sup>	50,000	25,154	February	24,846.0
Spreading Local	54,000	22,574	January	31,426.0
Barrier Imported (WCB)	3,800	3,384	February	416.0
Barrier Recycled (WCB)	11,400	3,368	February	8,032.0
Barrier Imported (DG)	4,000	2,348	February	1,652.0
Barrier Recycled (DG)	4,000	689	February	3,311.0
Barrier Imported (AB) <sup>2</sup>	2,100	1,119	February	981.0
Barrier Recycled (AB) <sup>2</sup>	2,100	880	February	1,220.0
<b>TOTAL</b>	<b>152,400</b>	<b>73,954</b>		<b>78,446</b>

<sup>1</sup> Recycled includes purchased water from Whittier Narrows & San Jose Creek and incidental recharge from Pomona Plant.

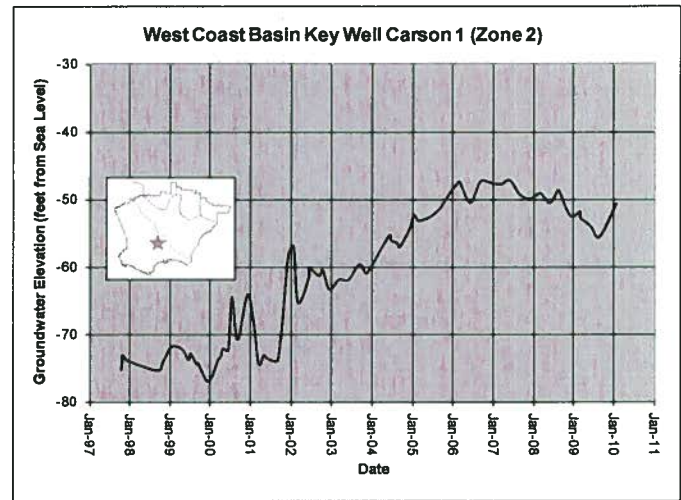
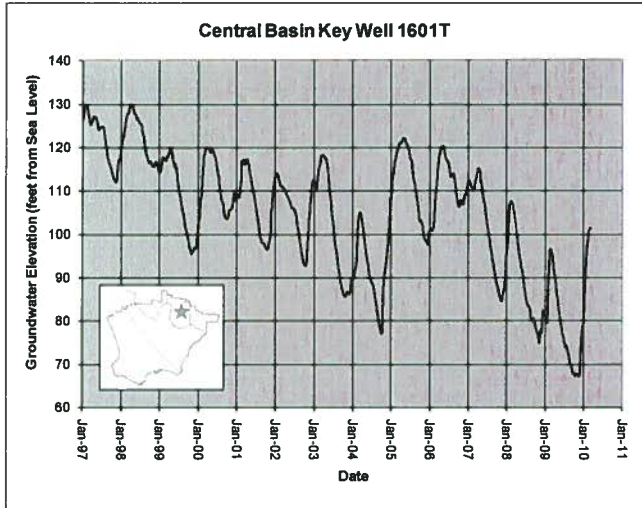
<sup>2</sup> Alamitos Barrier Water purchased by WRD for LA County side of barrier. Does not include Orange County.

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

### Groundwater Levels:

Groundwater levels in Central and West Coast Basin Key Wells are shown below. In the Central Basin key well 1601T, water levels in the unconfined aquifer rise and fall sharply over the seasons as winter and spring precipitation cause water levels to rise whereas summer and autumn pumping and lack of rainfall cause water levels to drop. Over the previous 4 years, water levels had fallen over 40 feet to their lowest levels in 32 years due to lower-than-normal precipitation and lack of imported replenishment water. However average rains in December through March plus the purchase of untreated Tier 1 water have allowed water levels to climb based on their normal winter rise. The sustainability of this increase will be seen in the upcoming months.

In the West Coast Basin, seasonal water level fluctuations in the confined aquifers are not as pronounced as in the Central Basin because recharge is relatively stable from the seawater barrier injection wells and because pumping is also relatively steady throughout the year. But long term seasonal trends occur based on overall recharge and discharge amounts. In this Key Well, water levels generally rose between 1997 and 2006, leveled off between 2006 and 2008, declined in 2009 and are now rebounding.



**Pumping:**

The amount of pumping in the District in the current water year versus the previous water year is shown on the table below. Central Basin is currently 4% below the previous year and the West Coast Basin is currently 3% higher than the previous year.

BASIN	October - January		Difference (af)	Difference (%)	Total Planned for Water Year
	Current WY	Previous WY			
Central	59,767.90	62,366.81	(2,598.91)	(4.17%)	201,500
West Coast	14,691.73	14,264.95	426.78	2.99%	38,700
TOTAL	74,459.63	76,631.76	(2,172.13)	(2.83%)	240,200

**Other Items:**

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

**FISCAL IMPACT**

For information.

**STAFF RECOMMENDATION**

For information.



## MEMORANDUM

### ITEM NO. 4

<i>Prepared by:</i>	Ted Johnson
<i>Reviewed by:</i>	Jason Weeks
<i>Approved by:</i>	Robb Whitaker

**DATE: APRIL 7, 2010**

**TO: WATER RESOURCES COMMITTEE**

**FROM: ROBB WHITAKER, GENERAL MANAGER**

**SUBJECT: UPDATE ON THE ENGINEERING SURVEY AND REPORT**

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### SUMMARY

On January 15, 2010, the Board of Directors adopted Resolution No. 10-869 ordering the preparation of the annual Engineering Survey and Report (ESR). The report determines, among other things, the replenishment water needs and costs of the District for the ensuing water year October 1, 2010 – September 30, 2011.

Staff completed the report and on March 19, 2010, the Board received and filed it and adopted Resolution No. 10-872 to declare that funds will be raised to purchase water for replenishment for the next ensuing fiscal year (July 1, 2010 – June 30, 2011) and how those funds will be raised, and declared that funds will be raised to remove contaminants from groundwater supplies during the next ensuing fiscal year and to exercise any other power under Section 60224 of the Water Code.

On April 2, 2010, at the Board of Directors meeting, the Public Hearing on the ESR and the Replenishment Assessment will be opened to receive any public comments on the ESR or rate setting process. It is anticipated that the Public Hearing will be continued to the April 16 and May 11 board meetings, and that at the May 11 Board meeting the Public Hearing will be closed and the Replenishment Assessment will be adopted. An updated ESR will then be prepared to document and updates since the March 19 report.

Any updates on the information contained in the ESR to date will be discussed at the Committee meeting.

### FISCAL IMPACT

None at this time.

### STAFF RECOMMENDATION

For information.



**MEMORANDUM**

**ITEM NO. 5**

<i>Prepared by:</i>	Ted Johnson
<i>Reviewed by:</i>	Tony Kirk
<i>Approved by:</i>	Robb Whitaker

**DATE: APRIL 7, 2010**

**TO: WATER RESOURCES COMMITTEE**

**FROM: ROBB WHITAKER, GENERAL MANAGER**

**SUBJECT: AWARD OF CONTRACT FOR FIELD SERVICES**

**SUMMARY**

The District performs many field services in the course of its duties, including sampling monitoring and production wells, collecting water levels, downloading data loggers, site reconnaissance for monitoring well locations, permit compliance sampling at the barrier wells and spreading grounds, and specialized sampling programs for unique projects such as Total Organic Carbon and sulfur hexafluoride tracer tests related to recycled water recharge. In addition, the District requires maintenance to some of the field facilities, such as monitoring well vaults and casings.

There is currently more work than Staff time available, particularly for monitoring well sampling, finding new well locations for monitoring wells, and performing well maintenance. Therefore, based on approval by the Board of Directors at their March 10, 2010 meeting, Staff released a Request for Proposals (RFP) for on-call hydrogeology field services. RFPs were mailed to 11 firms from the Districts per-qualifications list and the RFP was also posted on the web site. A total of 8 proposals were received from the following firms:

Clear Creek Associates  
 DMJ Consulting Group  
 Environmental Engineering & Contracting  
 MACTEC

Stetson Engineers  
 SADG Inc.  
 Wayne Perry  
 Worley Parsons

The proposals are being reviewed and a recommendation will be brought to the Committee. Because these will be on-call services based on District needs over the next 6 months, the proposals will be rated based on the experience of the personnel assigned for this job (50%), the hourly billing rates for the personnel assigned, equipment rates, and subcontractor mark-up rates (40%), and adherence to the requirements of the RFP (10%).

**FISCAL IMPACT**

This work was anticipated and budgeted in the current FY under Project 011000 – Regional Groundwater Monitoring Program. A total of \$50,000 has been budgeted.

**STAFF RECOMMENDATION**

For discussion and possible action to recommend a firm to the Board.



## MEMORANDUM

### ITEM NO. 6

*Prepared by: Nancy Matsumoto*

*Reviewed by: Ted Johnson*

*Approved by: Robb Whitaker*

**DATE: APRIL 7, 2010**

**TO: WATER RESOURCES COMMITTEE**

**FROM: ROBB WHITAKER, GENERAL MANAGER**

**SUBJECT: RENEW CONTRACT WITH GEI CONSULTANTS**

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### SUMMARY

District staff recommends the renewal of WRD's existing professional services contract with GEI Consultants, Inc. (a.k.a. Bookman Edmonston Engineers). The District's existing contract with GEI has remaining funds of approximately \$5,800. However, the term of the contract will expire on June 30, 2010 and significant additional work is anticipated for the current and ensuing year which will exceed the remaining funds. This is a budgeted item.

Mr. Richard Rhone of GEI is the principal point of contact for the District and performs most of the work. Mr. Rhone is the reason that GEI is uniquely qualified for this work and the continuation of the contract. Mr. Rhone has an extensive history with the District, servicing as the consulting engineer for years and acting as consulting General Manager in the past. Mr. Rhone serves as the lower area (Central Basin) Watermaster under the Long Beach Judgment and has in-depth knowledge on water availabilities and flows from San Gabriel Basin into the Central Basin. Some upcoming and in-progress work that requires the services of Mr. Rhone are as follows:

1. Economic valuation of facility and operations changes on WRD as those changes affect the amount and cost of replenishment water to WRD.
2. Interpretation and historical perspective regarding operations and actions of WRD.
3. Interpretation and perspective regarding LACDPW operations and MWD and member agency programs and planning.
4. Analysis regarding availability of MWD water on a short- and long-term basis, and alternate sources of replenishment water.
5. Routing options for water deliveries and updated metering systems for the spreading grounds.
6. Review of progress of interconnection pipeline between spreading grounds.
7. On-call services for input and advice on replenishment activities based on history.

**FISCAL IMPACT**

The Contract Amendment will be for an additional amount of \$50,000.00. This is a budgeted item under Project 023.

**STAFF RECOMMENDATION**

Execute a Contract Amendment with GEI Consultants, Inc., subject to approval of form by District Counsel, for professional services for an additional amount of \$50,000, with an expiration date of June 30, 2011.



## MEMORANDUM

### ITEM NO. 7

<i>Prepared by:</i>	Ted Johnson
<i>Reviewed by:</i>	Jason Weeks
<i>Approved by:</i>	Robb Whitaker

**DATE:** APRIL 7, 2010

**TO:** WATER RESOURCES COMMITTEE

**FROM:** ROBB WHITAKER, GENERAL MANAGER

**SUBJECT:** REPLENISHMENT WATER PURCHASE OFFER – LONG BEACH

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### SUMMARY

Seasonal imported water for groundwater replenishment at the Montebello Forebay Spreading Grounds has not been available for nearly three years due to lack of surplus supplies by the Metropolitan Water District of Southern California (MWD). WRD has historically utilized this water type since 1959 to help replenish the Central and West Coast groundwater basins. It is anticipated that seasonal replenishment water will not be available in 2010 or 2011, with no projection of when this water will become available in the near future.

Over the past three years, due to drought and lack of replenishment water, the basins have lost over 150,000 acre feet from storage and groundwater levels have fallen to a 32-year low. To help remedy this situation in light of the lack of availability of traditional seasonal imported water, the WRD Board authorized on September 24, 2009 the purchase of up to 5,000 acre feet of untreated Tier 1 water from the City of Long Beach. Although this water is more expensive than seasonal water, it is also more readily available. Both the Water Resources Committee and the Technical Advisory Committee recommended this purchase. In October and November 2009, a total of 3,002 af of this water was purchased before Long Beach suspended deliveries.

On November 20, 2009, the Board authorized the purchase of 20,295 af of untreated Tier 1 water from Central Basin Municipal Water District (CBMWD) for groundwater replenishment for the same reasons as the Long Beach purchase. All of this water is expected to be received between mid to late April 2010. This water plus the Long Beach water is a great benefit to the replenishment needs of the basins but still leaves an imported water deficit to the District (water that was budgeted for in earlier years but unable to be purchased due to MWD interruption) of 27,700 acre feet.

The City of Long Beach has recently contacted WRD to indicate they would like to enter into a new agreement to sell the District up to 3,000 acre feet of untreated Tier 1 water through April 30, 2010. The price of the water would be \$569/acre foot, which is the same as their previous offer plus a \$5/af increase due to an increase in the MWD Readiness-to-serve (RTS) charge that affected Long Beach on January 1, 2010. As with the previous sale, the Long Beach water would be delivered through CBMWD's connections and therefore Long Beach would pay CBMWD a \$5/af administrative fee for the use of the connection.

An agreement between WRD, Long Beach, and CBMWD very similar in form to the previous agreement except for new termination date (April 30, 2010) and new water price (\$569/af) has been drafted and reviewed by WRD counsel.

**FISCAL IMPACT**

The purchase of up to 3,000 acre feet of untreated Tier 1 water from Long Beach at the rate of \$569/af will cost the District up to \$1,707,000. Funds for this purchase will come from the District's Water Purchase Reserve fund.

**STAFF RECOMMENDATION**

Authorize the General Manager to enter into an agreement with the Long Beach Water Department and the Central Basin Municipal Water District to purchase up to 3,000 acre feet of untreated Tier 1 water for groundwater replenishment at a rate of \$569 per acre-foot by April 30, 2010.



## MEMORANDUM

ITEM NO. 8

*Prepared by:* Nancy Matsumoto

*Reviewed by:* Ted Johnson

*Approved by:* Robb Whitaker

**DATE:** APRIL 7, 2010

**TO:** WATER RESOURCES COMMITTEE

**FROM:** ROBB WHITAKER, GENERAL MANAGER

**SUBJECT:** LOS ANGELES RIVER GROUNDWATER RECHARGE UPDATE

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### SUMMARY

The Los Angeles Forebay in the Central Basin presents opportunities for groundwater recharge due to its hydrogeology, available storage space, and presence of the Los Angeles River. But unlike the Montebello Forebay where groundwater recharge facilities were constructed decades ago, the Los Angeles Forebay has been heavily developed and any new recharge facilities would be more difficult to develop.

Nevertheless, given the current situation of reduced imported replenishment water supply, extended drought, decreased groundwater levels, and increased support for recycled water recharge projects, Staff has been directed to explore potential projects for recharge in the Los Angeles Forebay.

Recently, Staff reported on federal grant monies for "Los Angeles River Demonstration Projects", which included possible studies to evaluate high-tech materials as alternatives to concrete; i.e., alternative materials that would allow water to percolate into the underlying aquifers and help to replenish the groundwater supply. Staff will discuss this opportunity at the Committee meeting.

### FISCAL IMPACT

None.

### STAFF RECOMMENDATION

For information.



## MEMORANDUM

ITEM NO. 9

*Prepared by:* Jason Weeks

*Reviewed by:* Ted Johnson

*Approved by:* Robb Whitaker

**DATE:** APRIL 7, 2010  
**TO:** WATER RESOURCES COMMITTEE  
**FROM:** ROBB WHITAKER, GENERAL MANAGER  
**SUBJECT:** WEST COAST BASIN MASTER PLAN UPATE

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### SUMMARY

District staff and consultants CH2MHILL and RMC Water and Environment have been proceeding with development of the West Coast Basin Master Plan, which was approved by the WRD Board in February.

An overview of the plan was presented at the West Basin Water Association Board of Director's Meeting in March, where the group was informed of the goals and objectives of the plan and notified of upcoming meetings to be scheduled with individual pumpers.

District staff and the consultant are currently in the process of scheduling those meetings and compiling readily available information for each of the pumpers.

District staff will provide the Committee with an update on the status of the plan and individual pumper interviews.

### FISCAL IMPACT

None.

### STAFF RECOMMENDATION

For information.



## **MEMORANDUM**

**ITEM NO. 10**

<i>Prepared by:</i>	Theresa Wu
<i>Reviewed by:</i>	Ted Johnson
<i>Approved by:</i>	Robb Whitaker

**DATE: APRIL 7, 2010**

**TO: WATER RESOURCES COMMITTEE**

**FROM: ROBB WHITAKER, GENERAL MANAGER**

**SUBJECT: REVIEW OF WATER RESOURCES PROJECTS**

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### **SUMMARY**

District staff will provide the Committee with an update on the Water Resources projects budgeted for fiscal year 2010-2011.

Budgeted projects that fall under this committee include:

- Leo J. Vander Lans Water Treatment Facility Project
- Groundwater Resources Planning Program, including the Whittier Narrows Conservation Pool, Planning & Grants, West Coast Basin Master Plan, and Conjunctive Use.
- Geographic Information System
- Regional Groundwater Monitoring Program
- Replenishment Operations (Spreading & Barriers)
- Hydrogeology Program
- Groundwater Reliability Improvement Program (GRIP)

### **FISCAL IMPACT**

None.

### **STAFF RECOMMENDATION**

For information and possible committee recommendations.



## MEMORANDUM

ITEM NO. 11

*Prepared by:* Jim McDavid

*Reviewed by:* Ted Johnson

*Approved by:* Robb Whitaker

**DATE:** APRIL 7, 2010

**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 WRD, Upper San Gabriel Valley Municipal Water District (USGVMWD) and Los Angeles County Sanitation Districts (LACSD), continues to move forward with developing a project that would replace unreliable imported replenishment water with a locally sustainable supply (i.e. advanced treated reclaimed water). Items on the immediate horizon that require attention include:

- Governance Agreement
  - LACSD staff has presented draft outlines for the source water contract, the brine disposal contract, site lease agreement and the facility operations contract for the anticipated GRIP facility. WRD staff is currently analyzing these documents and will prepare a summary for the Water Resources Committee at its next meeting
- Public Outreach Program
  - On March 8, 2010, the GRIP Joint Ad-Hoc Committee recommended that The Rogers Group be retained to perform the public outreach effort for the GRIP Partnership. A contract has been prepared and is awaiting award by the WRD Board of Directors.
- Alternatives Analysis
  - RMC Water and Environment has begun work on the Alternatives Analysis and is expected to present the summary of the work completed to date at the GRIP monthly team meeting on April 12, 2010.
- GRIP Working Group
  - The Working Group is comprised of pumpers in our service area and other interested parties. The group is tentatively scheduled to meet later in April 2010.

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

### FISCAL IMPACT

None.

### STAFF RECOMMENDATION

For information.