

**MEETING OF THE WATER RESOURCES COMMITTEE
OF THE BOARD OF DIRECTORS
WATER REPLENISHMENT DISTRICT OF SOUTHERN CALIFORNIA
4040 PARAMOUNT BOULEVARD, LAKEWOOD, CALIFORNIA 90712
12:00 P.M., WEDNESDAY, SEPTEMBER 3, 2008**

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. APPROVAL OF THE MINUTES OF JULY 9, 2008**
Staff Recommendation: Approve the minutes as submitted.
- 4. ALAMITOS BARRIER TIER 1 IMPORTED WATER STORAGE AGREEMENT**
Staff Recommendation: Authorize the General Manager to enter into an Agreement with Long Beach Water Department to purchase and store up to 2,000 acre-feet of Tier 1 imported water in 2008 in accordance with the WRD FY 2008-09 budget, subject to approval of form by District Counsel.
- 5. WATER SUPPLY RELIABILITY VALUATION STUDY**
Staff Recommendation: Authorize the General Manager to enter into a Memorandum of Understanding with the National Water Research Institute for the Water Supply Reliability Valuation Study, subject to approval of form by District Counsel, for an amount not to exceed \$50,000.
- 6. MEMORANDUM OF UNDERSTANDING WITH UPPER SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT AND LOS ANGELES COUNTY SANITATION DISTRICTS ON AN ADVANCED WATER TREATMENT PLANT IN THE MONTEBELLO FOREBAY**
Staff Recommendation: Authorize the General Manager to sign the Memorandum of Understanding Concerning Development of an Advanced Water Treatment Plant in the Montebello Forebay Between Upper San Gabriel Valley Municipal Water District, Water Replenishment District of Southern California and Sanitation Districts of Los Angeles County, subject to approval of form by District Counsel.
- 7. TRAVEL REQUEST FOR AWWARF RESEARCH PROJECT – DENVER**
Staff Recommendation: Approve out-of-state travel for one staff member to participate, at AWWARF's expense, in the AWWARF Project Advisory Committee (PAC) Meeting to be held in Denver, Colorado on October 14 and 15, 2008.
- 8. UPDATE ON THE VANDER LANS ADVANCED WATER TREATMENT FACILITY**
Staff Recommendation: For information.

9. DIRECTORS REPORTS, INQUIRIES, REVIEW OF DIRECTIONS TO STAFF

10. ADJOURNMENT

Posted by Abigail C. Andom, Deputy Secretary, August 29, 2008

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.

UNAPPROVED
MINUTES

UNAPPROVED
MINUTES

**MINUTES OF JULY 9, 2008
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 Board of Directors of the Water Replenishment District of Southern California was held on July 9, 2008 at 3:37 p.m. at the District Office, 4040 Paramount Boulevard, Lakewood, California. Director Rob Katherman called the meeting to order and presided thereafter. Administrative Specialist Sheryll A. Petty recorded the minutes.

1. DETERMINATION OF A QUORUM

Attendees at the meeting were as follows:

Committee: Directors Robert Katherman and Willard H. Murray, Jr.

Staff: Jason Weeks

Member of the Public: Mr. Fernando Paludi, West Basin Municipal Water District; Mr. David Hill, Central Basin Municipal Water District

2. PUBLIC COMMENT

None.

3. APPROVAL OF THE MINUTES OF MARCH 5, 2008, APRIL 2, 2008 AND APRIL 10, 2008

The minutes were received and filed.

4. ALAMITOS BARRIER GROUNDWATER MODELING WITH UCLA – CONTRACT TIME EXTENSION

The committee concurred with the staff recommendation to extend the term of the agreement with the University of California-Los Angeles (UCLA) to December 31, 2008 with no additional cost to the District.

5. TIME EXTENSION FOR PROFESSIONAL SERVICES AGREEMENT WITH ROBERT E. BUSH CORPORATION

Director Katherman provided the committee with an overview of the services provided by the Robert E. Bush Corporations.

The committee concurred with the staff recommendation to extend the term of the contract with Robert E. Bush Corporation to September 30, 2008 with no additional cost to the District.

6. PORTUGUESE BEND, MALAGA COVE – METROPOLITAN WATER DISTRICT'S CLEAN-UP PROGRAM

Director Katherman said that there are two places in the Palos Verdes Peninsula where there is a constant stream of water released to the ocean: one is Portuguese Bend and that is the result of the dewatering

wells that slow down an active landslide area. The other is Malaga Cove which has a source of water of unknown origination. Edison wants to get rid of the water source and is willing to help finance its removal. Mr. Paludi gave an update from West Basin Municipal Water District's perspective. He said that due to the reduced availability of imported water sources, MET is very interested in looking for conservation projects in the near term that can be brought on line in the next year or two and indicated that MET has funding available for such projects through a competitive bidding process.

In regard to this project Director Katherman directed staff to continue to follow up on this study and coordinate with West Basin Municipal Water District to prepare the application to submit to MET for funding.

7. IMPORTED WATER STORAGE AGREEMENT WITH LONG BEACH WATER DEPARTMENT (LBWD)

Senior Engineer Jason Weeks said that the development of the agreement with LBWD had been part of the budget process and will be coming to the committee in August for approval. He said that LBWD will be meeting with MWD at the end of this month to confirm the 2,000 acre feet of available surplus of Tier I imported water. He said that staff has been working with LBWD staff on the development of the agreement. He said that the water going into the Alamitos Barrier now is imported water that the District purchased from the Long Beach Water Department at \$508.00 per acre foot plus a \$5.00 per acre foot surcharge making it a total of \$513.00 per acre foot. He said that beginning January 1, 2009 the MWD rate is going to increase to \$579 per acre foot so by purchasing this Tier 1 water and storing it this calendar year is mitigating against that \$71.00 increase. He said the terms of the agreement with Long Beach are essentially the MWD commodity rate that the District will be buying which is \$508.00 an acre foot plus a \$10.00 per acre foot surcharge. He concluded saying that the District will begin extracting this stored imported water on January 1, 2009 and that a draft of the agreement with LBWD would be presented at the next Water Resources Committee meeting.

8. INTEGRATED REGIONAL WATER MANAGEMENT PLAN (IRWMP) MEMORANDUM OF UNDERSTANDING (MOU)

Mr. Weeks said that a Memorandum of Understanding (MOU) has been developed to formalize the governance structure of the Regional Water Management Plan (IRWMP).

Mr. Weeks explained that one of the primary roles of the Leadership Committee is to provide guidance to steering committees on the review and ranking of projects based on grant source priorities. This ensures the projects that the steering committees put forth for funding consideration provide the best opportunity for the suite of projects as a whole within the LA region and be competitive with the other regions in the State.

The committee concurred with the staff recommendation to authorize the General Manager to enter into an MOU, as a Leadership Committee member, with the other 15 members of the Regional Water Management Group.

9. DIRECTORS REPORTS, INQUIRIES, REVIEW OF DIRECTIONS TO STAFF

Director Katherman also asked that staff provide an update on the availability of recycled water for the Leo J. Vander Lans Treatment Plant expansion. Director Murray asked that staff obtain a rough estimate of costs and effort to obtain a 100% recycled water permit for the Alamitos Barrier. Director Katherman requested staff provide an update on efforts to offset the West Coast Basin refinery groundwater pumping with recycled water at the August meeting.

8. ADJOURNMENT

With no further business for the Committee, the meeting was adjourned at 4:24 p.m.

Chairperson

ATTEST:

Director



MEMORANDUM

ITEM NO. 4

Prepared by: Jason Weeks

Reviewed by: Robert Siemak

Approved by: Robb Whitaker

DATE: SEPTEMBER 3, 2008

TO: WATER RESOURCES COMMITTEE

FROM: ROBB WHITAKER, GENERAL MANAGER

SUBJECT: ALAMITOS BARRIER TIER 1 IMPORTED WATER STORAGE AGREEMENT

BACKGROUND

WRD is permitted to use a 50 percent blend of imported and recycled water at the Alamitos Barrier. The recycled water is produced at the District's Leo J. Vander Lans Water Treatment Facility and the imported water has typically been Tier 1 non-interruptible water purchased from Long Beach Water Department (LBWD) at the MWD Commodity Rate plus a \$5 per acre-foot administrative surcharge. More recently, WRD has enjoyed the benefits of using less expensive seasonal imported water as a result of a groundwater storage agreement with LBWD. The recent lack of availability of MWD seasonal water has halted the District's ability to put additional water into groundwater storage, resulting in decreased storage levels and the need to revert back to using Tier 1 non-interruptible water to meet Alamitos Barrier Imported Water Demands.

FUTURE WATER SUPPLY TO ALAMITOS BARRIER

While the utilization of this stored water has benefited the District greatly, it was foreseen when entering into the agreement that future reduced availability of seasonal water may require the District to revert back to use of Tier 1 water to meet imported barrier demands.

Since MWD has not had seasonal water available since early 2007, the District has not been able to replace stored water that has been extracted and delivered to the barrier. Further, it appears that MWD will not have seasonal water for the foreseeable future. As a result, the remaining 2,000 acre-feet of stored water will remain in storage to offset possible future Tier 2 penalties or Water Supply Allocation Penalties.

Tier 2 penalties, currently \$98 per acre-foot, could be incurred if imported water deliveries to the barrier may cause Long Beach to exceed its Tier 1 Allocation, which is approximately 39,000 acre-feet per year. Water Supply Allocation Penalties could be incurred if MWD implemented its Water Supply Allocation Plan and imported water deliveries to the barrier cause Long Beach to exceed its allocation. For up to 10% overage of its allocation, the penalty would be two times the Tier 2 rate, or currently \$1,212 per acre-foot. For allocation overages of greater than 10%, the penalty would be four times the Tier 2 rate, or currently \$2,424 per acre-foot.

TIER 1 IMPORTED WATER STORAGE

District staff has been discussing the storage of Tier 1 water in the second half of 2008. Discussions with LBWD indicate that they have an additional 2,000 acre-feet of Tier 1 water available that could be purchased and stored by the District for \$518 per acre-foot; this cost is based on the \$508 per acre-foot MWD Commodity Rate plus a \$10 per acre-foot administrative surcharge.

Since this water is not seasonal water and therefore not subject to the one-year storage requirement, it will be available for extraction and delivery to the barrier immediately. This stored water, which costs \$518 per acre-foot in 2008 will offset 2,000 acre-feet of non-interruptible imported water purchases that would have cost the district \$584 per acre-foot beginning in January 2009, resulting in a savings to the District of \$132,000.

WRD District counsel has reviewed and approved the attached agreement between WRD and LBWD for the purchase and storage of this Tier 1 imported water through the end of 2008. District staff will review the terms of the agreement with the Committee.

FISCAL IMPACT

Savings of up to \$132,000 for Alamitos Barrier imported water purchases in 2009 if stored water is used to offset non-interruptible water purchases beginning in January 2009. This savings was included in the FY2008-09 budget. Additional savings may be realized if the stored water is used in later years as imported water cost increase more.

STAFF RECOMMENDATION

Authorize the General Manager to enter into an Agreement with Long Beach Water Department to purchase and store up to 2,000 acre-feet of Tier 1 imported water in 2008 in accordance with the WRD FY 2008-09 budget, subject to approval of form by District Counsel.



MEMORANDUM

ITEM NO. 5

<i>Prepared by:</i>	Nancy Matsumoto
<i>Reviewed by:</i>	Ted Johnson
<i>Approved by:</i>	Robb Whitaker

DATE: SEPTEMBER 3, 2008

TO: WATER RESOURCES COMMITTEE

FROM: ROBB WHITAKER, GENERAL MANAGER

SUBJECT: WATER SUPPLY RELIABILITY VALUATION STUDY

SUMMARY

Water agencies, including WRD, traditionally conduct an economic analysis in the evaluation process for a particular water supply project. This analysis compares the value of the benefits derived from a project to the cost of building and operating the project. This determines the economic feasibility of a project. Simply put, if a project's benefits outweigh the costs, it is deemed economically feasible. Typical benefits for a water project include the cost savings of developing a new water source compared to a baseline, which is typically an existing water source. One significant benefit that we have not been able to include in our economic analysis has been the value of water reliability. This is because we have not developed a quantifiable economic value associated with the reliability of water in our region. Without a quantified economic value defined for water reliability, we cannot completely determine the full value of the benefit of a project that may increase water supply reliability compared to existing sources. For example, in analyzing groundwater replenishment supplies in the Montebello Forebay, the cost of our current replenishment supply, MWD imported water, when compared to other alternative including advanced treated recycled water, may appear to be the least cost option. However, the analysis does not factor in the reliability of the supply. Although we know that recycled water is more available and reliable than imported replenishment water, a traditional economic analysis (without factoring in the value of reliability) may lead us to conclude to select the continued use of imported water. Without consideration for the value of reliability, a purely economical analysis results in decisions that may provide the lowest cost, but not the most reliable water supply solution.

The National Water Research Institute is conducting a study based on an economic method that integrate reliability (i.e. risk and uncertainty) into the unit-cost value of water. This method is relatively new to the water industry and is based on portfolio investment theory. Mr. Steven Kasower, now a Senior Economist at UC – Santa Cruz, developed this methodology while at the U.S. Bureau of Reclamation.

Traditionally, all new water supplies and water management programs have been compared by examining their discounted capital and operations and maintenance costs per acre-foot of yield. Water supply reliability has not been considered in these traditional unit cost calculations. However, variability in supply through time may actually be a more important

consideration for a water agency than simply selecting the least cost approach from the traditional unit-cost perspective.

Recently, water planning discussions are including the concept of a “portfolio” approach to water supplies; for example, California Department of Water Resources’ California Water Plan Update (Bulletin 160) describes California’s water supplies as a portfolio of diverse sources.

Placing an accurate value on supply reliability and applying that measure to each source changes the overall ranking of sources within a water supply portfolio. Each supply source suffers its own kinds of risk and uncertainty. In general, it has been observed that more reliable supplies, including recycled water and desalinated brackish groundwater and seawater, often have lower unit costs than less reliable or uncertain supplies imported from distant watersheds, once reliability is included in the cost calculation. Also, the key to an overall reliable water supply portfolio is to have sources whose uncertainties are not related. For example, if some sources are drought-sensitive, it is important to have other sources available whose uncertainties are not impacted by climate and hydrology.

The proposed study would include the following steps:

- Define and estimate the reliability for each of West Basin MWD and WRD current and planned water supplies and water management programs.
- Calculate the statistical variability and covariance of each supply and water management program.
- Calculate the “reliability-adjusted” unit values for each supply and water management program.
- Prepare a report that describes the methodology, data collection process, analytical procedure, findings and policy recommendations; i.e., portfolio analysis. The report would be peer reviewed and vetted for technical accuracy.
- Present findings to West Basin MWD, WRD and NWRI.

As an added benefit, the proposed study would enhance a water supply study already in progress. “An Integrated Natural and Social Science Decision Support Tool to Model the Potential Effects of Severe Water Supply Disruptions in Los Angeles”, which is being conducted and funded solely by the U.S. Geological Survey (USGS), focuses on evaluating the feasibility and value of groundwater as a “back-up” emergency supply source under different emergency scenarios. However, the USGS study does not differentiate reliability of the various water sources for the region. The results of the proposed Water Supply Reliability Valuation Study could be folded into the analyses of the USGS study, providing more precise results.

At this writing, West Basin MWD and NWRI are interested in sharing the costs of this study (estimated at \$150,000). West Basin MWD has executed a Memorandum of Understanding (MOU) with NWRI to fund \$50,000 of the total study costs, while NWRI will also fund \$50,000. Therefore, WRD has been asked to fund the remaining \$50,000 toward the study. A draft MOU has been forwarded by NWRI and is being reviewed by staff and District Counsel.

FISCAL IMPACT

WRD's funding share for the study would be \$50,000. Funding for this study is included in the current fiscal year budget.

STAFF RECOMMENDATION

Authorize the General Manager to enter into a Memorandum of Understanding with the National Water Research Institute for the Water Supply Reliability Valuation Study, subject to approval of form by District Counsel, for an amount not to exceed \$50,000.



MEMORANDUM

ITEM NO. 6

Prepared by: Bob Siemak

Reviewed by: Robb Whitaker

Approved by: Robb Whitaker

DATE: SEPTEMBER 3, 2008

TO: WATER RESOURCES COMMITTEE

FROM: ROBB WHITAKER, GENERAL MANAGER

SUBJECT: MEMORANDUM OF UNDERSTANDING WITH UPPER SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT AND LOS ANGELES COUNTY SANITATION DISTRICTS ON AN ADVANCED WATER TREATMENT PLANT IN THE MONTEBELLO FOREBAY

SUMMARY

Historically WRD has purchased both imported water and recycled water for groundwater replenishment in the Montebello Forebay spreading grounds. On average, WRD uses 50,000 acre-feet per year (afy) of recycled water (our current regulatory limit) and 21,000 afy of untreated imported water for groundwater replenishment in the Montebello Forebay. However, the availability of imported water for replenishment has become less and less reliable, and so replenishment alternatives are needed in order to sustain the current pumping demands of the groundwater users. Last year, imported replenishment supplies were interrupted and remain unavailable. This was the first time in WRD's nearly 50 years history that no imported water was available for groundwater recharge at any price for an entire year. We are now in our second year of interruption imported replenishment water with no end in sight. Therefore, consistent with our Water Independence Network (WIN) Program, WRD is moving to create a locally sustainable groundwater supply that eliminates our dependence on imported water for groundwater replenishment.

WRD has purchased recycled water from Los Angeles County Sanitation Districts (LACSD) for replenishment in the Montebello Forebay since 1962. This water has proven to be a reliable, high quality, and cost effective local source of replenishment water. LACSD has additional recycled water available that is currently flowing into the ocean unused. WRD intends to use this available recycled water to ultimately replace the 21,000 afy of imported replenishment water to ensure long-term replenishment capabilities with a locally sustainable supply.

A similar imported water shortage situation is also facing the Upper San Gabriel Valley Municipal Water District (USGVMWD), which supplies replenishment water for the Main San Gabriel Basin. USGVMWD's ultimate replenishment requirement is 25,000 afy. WRD and USGVMWD have discussed development of a joint project that would increase the use of reclaimed water for replenishment and also achieve economies of scale. A joint project would also have a regional water supply benefit which would enhance its potential of receiving Proposition 84 funds and other state and federal funding.

LACSD indicated that it can currently provide 24,000 afy of available supply for a joint project from the San Jose Creek Water Reclamation Plant (SJCWRP). Also, LACSD indicated that there may be opportunities to make available more recycled water for replenishment in the future, up to the combined joint replenishment requirement of 46,000 afy. The current approach is to develop a joint project in two phases. The first phase will treat the recycled water currently available (24,000 afy). The second phase will treat additional water to meet the ultimate replenishment requirements of both WRD and USGVMWD. Opportunities may also exist for partnership among WRD pumpers to invest in additional capacity of the second phase of the project to treat additional water for groundwater storage and to augment groundwater rights.

Even if imported replenishment water becomes available again, the cost of this source of water is expected to increase at a faster rate than the cost of recycled water and will likely exceed the cost of advanced treated recycled water within 5 years. Imported water is subject to significant rate increases, as demonstrated by the most recent MWD rate increase of 14.4%, with the expectation of continued significant increased over the next few years. This joint project between WRD and USGVMWD, in cooperation with LACSD, provides a locally sustainable and reliable groundwater replenishment supply with predictable and stable costs compared to imported water. This joint project also provides broad scale regional benefits, increasing potential for grant funding.

USGVMWD authorized a contract with MWH to prepare the preliminary design report for their project that would satisfy their ultimate groundwater replenishment requirements of 25,000 afy. WRD and LACSD requested that USGVMWD expand the scope of work to include the joint project with an ultimate capacity of 46,000 afy. USGVMWD agreed and will continue to be the contracting agency for the study with WRD and LACSD reimbursing USGVMWD for their share of the study.

To this end, the three agencies propose to work together and execute a Memorandum of Understanding (MOU) to jointly fund a Preliminary Development Plan for the joint project. A draft copy of the MOU is attached for reference and outlines the basic principals that are required to move the project forward. The scope of the plan is to define the project, including treatment requirements, site selection and development, phasing and cost estimates. The plan will be used to help us secure state and federal funding for the project.

FISCAL IMPACT

WRD's share of the Concept Development Plan is \$100,000 and was included in the FY 08-09 budget.

STAFF RECOMMENDATION

Authorize the General Manager to sign the Memorandum of Understanding Concerning Development of an Advanced Water Treatment Plant in the Montebello Forebay Between Upper San Gabriel Valley Municipal Water District, Water Replenishment District of Southern California and Sanitation Districts of Los Angeles County, subject to approval of form by District Counsel.

Memorandum of Understanding Concerning Development of an Advanced Water Treatment Plant in the Montebello Forebay Between Upper San Gabriel Valley Municipal Water District, Water Replenishment District of Southern California and Sanitation Districts of Los Angeles County

This Memorandum of Understanding is entered into as of [INSERT DATE] by and among Upper San Gabriel Valley Municipal Water District (hereafter USGVMWD), Water Replenishment District (hereafter WRD) and Los Angeles County Sanitation Districts (hereafter LACSD).

RECITALS

WHEREAS, USGVMWD's mission is to provide a reliable supply of imported water for domestic consumption and groundwater recharge within the boundaries of the Upper San Gabriel Valley Municipal Water District

WHEREAS, WRD's mission is to maintain and enhance the ground water basins in southern Los Angeles County, including groundwater replenishment in the Central Basin,

WHEREAS, LACSD's mission is to provide environmentally sound, cost-effective wastewater and solid waste management and, in the process, convert waste into resources such as reclaimed water, energy, and recycled materials.

WHEREAS, no imported replenishment water is or will be available from Metropolitan Water District in the near future,

WHEREAS, LACSD produces a tertiary quality recycled water at the San Jose Creek Water Reclamation Facility (San Jose Creek Plant) that is used by WRD for a portion of its replenishment needs, in addition to stormwater conservation and imported water

WHEREAS, USGVMWD plans to reduce its imported water demand for groundwater replenishment by replacing 25,000 acre feet per year of imported water with recycled water for groundwater replenishment in the San Gabriel groundwater basin

WHEREAS, WRD plans to replace its imported water demand for groundwater replenishment by increasing recycled water use for groundwater replenishment in the Montebello Forebay by 21,000 acre feet per year

WHEREAS, LACSD has at least 24,000 acre feet per year of additional tertiary effluent from the San Jose Creek Plant that it can provide to USGVMWD and WRD for purposes of groundwater replenishment beyond what WRD currently receives for replenishment and would represent the first phase of the joint project that will ultimately produce 46,000 acre feet per year of treated effluent for groundwater replenishment.

Whereas, USGVMWD and WRD plan to jointly develop a project that would provide an advanced level of treatment of San Jose Creek Plant tertiary effluent for purposes of groundwater replenishment in each agencies' respective service area, and

WHEREAS, USGVMWD has contracted with Montgomery Watson Harza (MWH) to prepare a Concept Development Plan on its portion of the proposed advanced treatment plant.

NOW THEREFORE, the parties agree and covenant as follows:

Provisions of Memorandum

- USGVMWD, WRD and LACSD shall perform a joint study to investigate the potential of initially treating 24,000 acre feet per year of San Jose Creek Plant effluent to produce additional replenishment water.
- USGVMWD, LACSD and WRD shall share equally in the cost of the study which will be administered by USGVMWD.

- The cost estimate for the study is (estimated at \$300,000). USGVMWD shall contract with MWH for the study and invoice LACSD and WRD one third each of the actual costs as they are accrued.
- LACSD shall commit 24,000 acre feet per year of tertiary treated effluent from San Jose Creek Plant for the first phase of this joint project subject to negotiation of terms including pricing.
- LACSD and WRD shall renegotiate the terms of its existing tertiary effluent purchases from the San Jose Creek and Whittier Narrows Plants as part of an overall effort to increase use of recycled water for groundwater recharge in the Montebello Forebay.
- LACSD shall continue to work with WRD and USGVMWD to provide additional tertiary treated effluent from San Jose Creek Plant to meet the ultimate needs of WRD and USGVMWD for production of 46,000 acre feet per year of replenishment water, in addition to WRD's current use.

APPROVED :
UPPER SAN GABRIEL VALLEY
MUNICIPAL WATER DISTRICT

APPROVED AS TO FORM:

By: _____
Tim Jochem, General Manager

By: _____
Add Name, District Counsel

WATER REPLENISHMENT DISTRICT OF
SOUTHERN CALIFORNIA

By: _____
Robb Whitaker, General Manager

By: _____
James Casso, District Counsel

SANITATION DISTRICTS OF LOS
ANGELES COUNTY

By: _____
Steve Maguin, General Manager

By: _____
Add Name, District Counsel



MEMORANDUM

ITEM NO. 7

Prepared by: Ted Johnson

Reviewed by: Bob Siemak

Approved by: Robb Whitaker

DATE: SEPTEMBER 3, 2008

TO: WATER RESOURCES COMMITTEE

FROM: ROBB WHITAKER, GENERAL MANAGER

SUBJECT: TRAVEL REQUEST FOR AWWARF RESEARCH PROJECT - DENVER

SUMMARY

Chief Hydrogeologist Ted Johnson is on a four-member Project Advisory Committee (PAC) peer review panel for an American Water Works Association Research Foundation (AWWARF) project on carbon sequestration. The title of the research project is "Potential Impacts of Underground Carbon Geologic Sequestration on the Quality of Groundwater Supplies". The objective of the project is to assess potential impacts to groundwater if carbon dioxide is injected into the deep earth for disposal instead of being released to the atmosphere where it can contribute to green house gas problems.

One target for potential injection sites is depleted oil and gas fields, making the Los Angeles Basin a potential location for sequestration projects. Having WRD on the PAC will ensure representation for the protection of aquifers similar to those in the Central and West Coast Basins. The research project will involve 4 phases: 1) gather existing information on the topic, 2) synthesize the available information and produce a preliminary report on the potential impacts of carbon dioxide capture and sequestration (CCS), 3) develop monitoring guidelines to protect groundwater resources, and 4) hold a stakeholder meeting after a proposed rule on CCS is passed by the U.S. Environmental Protection Agency to discuss the rule's implications and identify research gaps. Following the work a final report will be prepared and reviewed by the PAC. The research is being conducted by experts from MWH and Schlumberger.

Phase 4 – the Stakeholder Meeting, will be held October 14 and 15, 2008, in Denver, and the PAC participants have been requested to attend. Therefore, Mr. Johnson is seeking Board approval to travel out of the state to attend this meeting.

FISCAL IMPACT

AwwaRF will pay for Mr. Johnson's airfare, hotel accommodations, ground transportation, and meals.

STAFF RECOMMENDATION

Approve out-of-state travel for one staff member to participate, at AWWARF's expense, in the AWWARF Project Advisory Committee (PAC) meeting to be held in Denver, Colorado, on October 14 and 15, 2008.

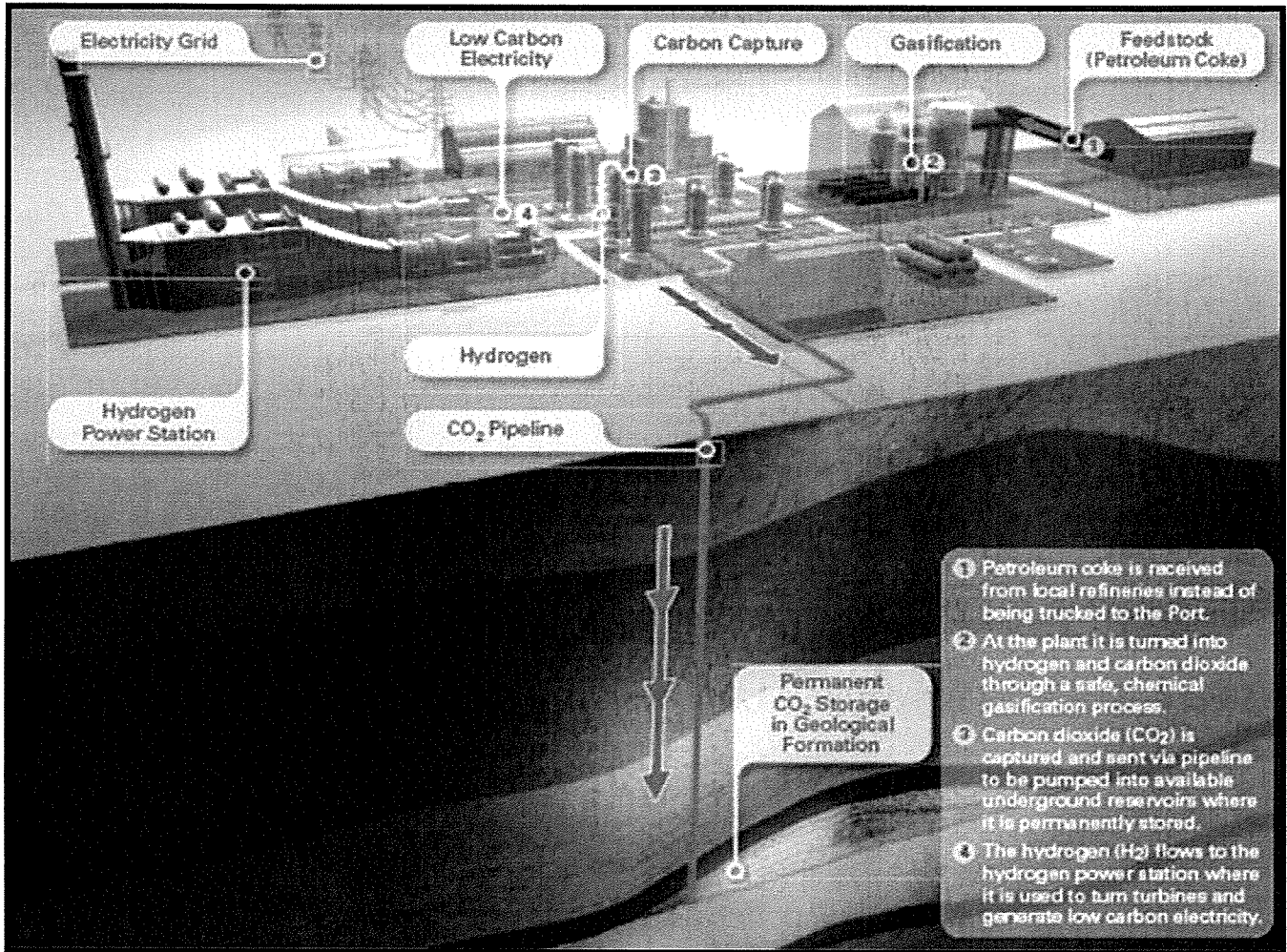


Figure: Hydrogen gas production and carbon dioxide capture and sequestration concept, from Hydrogen Energy.



MEMORANDUM

ITEM NO. 8

*Prepared by: Abbie Andom
Reviewed by: Scott Ota
Approved by: Robb Whitaker*

DATE: SEPTEMBER 3, 2008
TO: WATER RESOURCES COMMITTEE
FROM: ROBB WHITAKER, GENERAL MANAGER
SUBJECT: UPDATE ON VANDER LANS ADVANCED WATER TREATMENT FACILITY

SUMMARY

Staff will provide a verbal update to the Committee at the meeting.

FISCAL IMPACT

None.

STAFF RECOMMENDATION

For information.