

**AGENDA
IRVINE RANCH WATER DISTRICT
BOARD OF DIRECTORS
REGULAR MEETING**

March 26, 2012

PLEDGE OF ALLEGIANCE

CALL TO ORDER 5:00 P.M., Board Room, District Office
15600 Sand Canyon Avenue, Irvine, California

ROLL CALL Directors Reinhart, LaMar, Swan, Withers and President Matheis

NOTICE

If you wish to address the Board on any item, including Consent Calendar items, please file your name with the Secretary. Forms are provided on the lobby table. Remarks are limited to five minutes per speaker on each subject. Consent Calendar items will be acted upon by one motion, without discussion, unless a request is made for specific items to be removed from the Calendar for separate action.

COMMUNICATIONS TO THE BOARD

1. A. Written:
- B. Oral: Mrs. Joan Irvine Smith relative to the Dyer Road Wellfield.

2. **ITEMS RECEIVED TOO LATE TO BE AGENDIZED**

Recommendation: Determine that the need to discuss and/or take immediate action on item(s) introduced come to the attention of the District subsequent to the agenda being posted.

PRESENTATION

Next Resolution No. 2012-15

3. **CAL-STATE FULLERTON PUBLIC SECTOR LEADERSHIP**

Sally Starr, Director, Corporate Relations and Workplace Solutions, and Shelly Wang, Program Developer with the University Extended Education California State University, Fullerton, will be giving a brief presentation about their series entitled “Leadership Development for Public Agencies” and honoring IRWD’s most recent employees to complete the program: Amy McNulty, Dave Hayden, Rosemary Riddle, and Jo Ann Corey.

4. **ORANGE COUNTY LAFCO ACTIVITIES AND PROJECTS UPDATE**

The Orange County Local Agency Formation Commission (LAFCO) will provide the Board with an update on its latest activities and projects, including the revamp of its Municipal Service Reviews featuring the Fiscal Trend Analysis and Shared Services Program.

CONSENT CALENDAR	Next Resolution No. 2012-15	Items 5-13
5. <u>MINUTES OF REGULAR BOARD MEETING</u> Recommendation: That the minutes of the February 22, 2012 Adjourned Regular Meeting and February 27, 2012 Regular Board Meeting be approved as presented.		
6. <u>RATIFY/APPROVE BOARD OF DIRECTORS' ATTENDANCE AT MEETINGS AND EVENTS</u> Recommendation: That the Board ratify/approve the meetings and events for Steven LaMar, Mary Aileen Matheis, Douglas Reinhart, Peer Swan and John Withers.		
7. <u>FEBRUARY 2012 FINANCIAL REPORTS</u> Recommendation: That the Board receive and file the Treasurer's Investment Summary Report and the Monthly Interest Rate Swap Summary for February 2012; approve the February 2012 Summary of Payroll ACH payments in the total amount of \$1,400,794.94, and approve the February 2012 accounts payable Disbursement Summary of Warrants Nos. 327179 through 327967, Workers' Compensation distributions, wire transfers, payroll withholding distributions and voided checks in the total amount of \$22,751,234.66.		
8. <u>DISTRICT STRATEGIC MEASURES DASHBOARDS</u> Recommendation: That the Board receive and file the Strategic Measures Dashboards and Information items.		
9. <u>2012 STATE LEGISLATIVE UPDATE</u> Recommendation: That the Board take a support position on AB 2398 (Hueso) and SB 250 (Rubio); a watch position on AB 1750 (Solorio); and remove opposition and take a neutral position on AB 1354 (Huber), AB 246 (Wieckowski), and SB 200 (Wolk).		
10. <u>AMENDMENT NO. 1 TO AGREEMENT BETWEEN ORANGE COUNTY SANITATION DISTRICT AND IRVINE RANCH WATER DISTRICT</u> Recommendation: That the board authorize District officers to execute Amendment No. 1 to the Agreement by and between the Orange County Sanitation District and Irvine Ranch Water District; and adopt a resolution approving execution of Amendment No. 1 to Agreement between Orange County Sanitation District and Irvine Ranch Water District.		Reso No. 2012-

CONSENT CALENDAR	Next Resolution No. 2012-15	Items 5-13
11. <u>REIMBURSEMENT AGREEMENT BETWEEN IRWD AND THE CITY OF IRVINE FOR INSTALLATION AND ADJUSTMENT OF IRWD FACILITIES TO GRADE</u>	Recommendation: That the Board authorize the addition of projects 11658 (3786), 21658 (3787), and 31658 (3788) to the FY 2011-12 Capital Budget in the amount of \$222,200, \$95,700, and \$28,600, respectively; approve Expenditure Authorizations for projects 11658 (3786) and 21658 (3787) in the amount of \$222,200 and \$95,700, respectively; and authorize the General Manager to execute a Reimbursement Agreement with the City of Irvine for its annual slurry seal and pavement rehabilitation project, capital improvement projects 311106, 311203, 341203, and 361204.	
12. <u>OPERATIONS CENTER EXPANSION PROJECT PHASE I MEZZANINE CONVERSION REDUCTION OF RETENTION</u>	Recommendation: That the Board find that satisfactory progress is being made on the contract; authorize the reduction of retention from 10% to 5% of the contract amount; and release funds in excess of 5% of the contract amount from retention currently held for the Operations Center Expansion Project Phase I Mezzanine Conversion, projects 11422 (1388), 21422 (1120), and 31422 (1156).	
13. <u>WELL 107 DRILLING AND EQUIPPING PROJECT REDUCTION OF RETENTION</u>	Recommendation: That the Board find that satisfactory progress is being made on the District's construction contract with Pascal & Ludwig Constructors; authorize the reduction of retention from 10% to 5% of the contract amount; and release funds in excess of 5% of the contract amount from retention currently held for the Well 107 drilling and equipping, project 11432 (1403).	

ACTION CALENDAR	
14. <u>WELLS 21 AND 22 PIPELINES CONTRACT CHANGE ORDER AND VARIANCE</u>	Recommendation: That the Board approve Contract Change Order No. 7 in the amount of \$138,320.51 to Flatiron West and authorize the General Manager to execute Variance No. 2 in the amount of \$69,500 with Ninyo & Moore for geotechnical services during construction for the pipelines for the Wells 21 and 22, project 10286 (1081).

ACTION CALENDAR

15. WELLS 21 AND 22 WELLHEAD FACILITIES EXPENDITURE
AUTHORIZATION, CONTRACT CHANGE ORDER AND VARIANCE

Recommendation: That the Board approve an Expenditure Authorization in the amount of \$1,577,800; approve Contract Change Order No. 5 in the amount of \$791,166 to F.T. Ziebarth Company; and authorize the General Manager to execute Variance No. 1 in the amount of \$105,630 with Geoscience for engineering services during construction of the Wellhead Facilities for the Wells 21 and 22, project 10286 (1081).

16. ORANGE PARK ACRES TRANSMISSION PIPELINE PROJECT
CONTRACT CHANGE ORDER NO. 28

Recommendation: That the Board authorize an Expenditure Authorization in the amount of \$1,839,800 for the Orange Park Acres Transmission Pipeline, project 11408 (1279), and approve Contract Change Order No. 28 with Leatherwood Construction, Inc. in the amount of \$668,679.

17. DEVELOPMENT AGREEMENT AND ENVIRONMENTAL COMPLIANCE
FOR A JOINT WATER BANKING PROJECT INVOLVING THE
STOCKDALE WEST RANCH

Recommendation: That the Board authorize the General Manager to execute the agreement with Rosedale that will facilitate the cost sharing of an Environmental Impact Report (EIR) and the development of a long-term agreement for a joint banking project; authorize the addition of project 11645 (3766) to the FY 2011-12 Capital Budget for the Stockdale West Joint Banking in the amount of \$246,400; approve an Expenditure Authorization in the amount of \$246,400 for project 11645 (3766) for the preparation of the EIR, preparation of summary technical reports, providing for peer review support and staff and legal time; authorize the General Manager to execute a Professional Services Agreement in the amount of \$135,675 for project 11645 (3766) with environmental science associates to prepare the EIR and supporting studies; authorize the General Manager to execute a Professional Services Agreement in the amount of \$49,918 (\$32,710 for project 11645 (3766) and \$17,208 for operations related well monitoring at the Strand Ranch project) with Wildermuth Environmental, Inc. to prepare reports on aquifer-system parameters, recharge mounding and groundwater quality to supplement and support the EIR as well as to provide independent peer reviews of the hydrologic evaluations to be completed by Rosedale's geohydrogeologist and to provide operations related well monitoring at the Strand Ranch.

OTHER BUSINESS

Pursuant to Government Code Section 54954.2, members of the Board of Directors or staff may ask questions for clarification, make brief announcements, make brief reports on his/her own activities. The Board or a Board member may provide a reference to staff or other resources for factual information, request staff to report back at a subsequent meeting concerning any matter, or direct staff to place a matter of business on a future agenda. Such matters may be brought up under the General Manager's Report or Directors' Comments.

18. A. General Manager's Report

B. Directors' Comments

- 1)
- 2)
- 3)
- 4)
- 5)

C. CLOSED SESSION with legal counsel relative to existing litigation - Government Code Section 54956.9(a) – SEMA Construction vs. City of Tustin and City of Tustin vs. IRWD; and Sloan vs. Davis, et al.; and

CLOSED SESSION with legal counsel relative to anticipated litigation- Government Code Section 54956.9(b) - significant exposure to litigation – one potential case concerning claim filed by Jaimie Davis against IRWD under the Government Tort Claims Act, on file with the District.

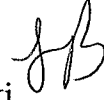
D. Adjourn

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Availability of agenda materials: Agenda exhibits and other writings that are disclosable public records distributed to all or a majority of the members of the Irvine Ranch Water District Board of Directors in connection with a matter subject to discussion or consideration at an open meeting of the Board of Directors are available for public inspection in the District's office, 15600 Sand Canyon Avenue, Irvine, California ("District Office"). If such writings are distributed to members of the Board less than 72 hours prior to the meeting, they will be available from the District Secretary of the District Office at the same time as they are distributed to Board Members, except that if such writings are distributed one hour prior to, or during, the meeting, they will be available at the entrance to the Board of Directors Room of the District Office.

The Irvine Ranch Water District Board Room is wheelchair accessible. If you require any special disability-related accommodations (e.g., access to an amplified sound system, etc.), please contact the District Secretary at (949) 453-5300 during business hours at least seventy-two (72) hours prior to the scheduled meeting. This agenda can be obtained in alternative format upon written request to the District Secretary at least seventy-two (72) hours prior to the scheduled meeting.

March 26, 2012
Prepared and
Submitted by: L. Bonkowski
Approved by: P. Cook



CONSENT CALENDAR

MINUTES OF REGULAR BOARD MEETING

SUMMARY:

Provided are the minutes of the February 22, 2012 Adjourned Regular Board Meeting and February 27, 2012 Regular Board Meeting for approval.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

Not applicable.

RECOMMENDATION:

THAT THE MINUTES OF THE FEBRUARY 22, 2012 ADJOURNED REGULAR BOARD MEETING, AND THE FEBRUARY 27, 2012 REGULAR BOARD MEETING, BE APPROVED AS PRESENTED.

LIST OF EXHIBITS:

Exhibit "A" – February 22, 2012 Adjourned Regular Board Meeting
Exhibit "B" – February 27, 2012 Regular Board Meeting

Exhibit "A"

MINUTES OF ADJOURNED REGULAR MEETING –FEBRUARY 22, 2012

The adjourned regular meeting of the Board of Directors of the Irvine Ranch Water District (IRWD) was called to order at 5:00 p.m. by President Matheis on February 22, 2012 in the District office, 15600 Sand Canyon Avenue, Irvine, California.

Directors Present: Reinhart, LaMar, Matheis, and Swan

Directors Absent: Withers.

Also Present: General Manager Cook, Executive Director of Operations Pedersen, Executive Director of Engineering and Planning Burton, Executive Director of Finance Cherney, Executive Director of Water Policy Heiertz, Treasurer/Assistant Director of Finance Jacobson, Director of Wastewater Operations Posey, Secretary Bonkowski, Legal Counsel Arneson, Director of Public Affairs Beeman, Director of Human Resources Wells, Ms. Fiona Sanchez, Mr. Carl Spangenberg, and other members of the public and staff.

WRITTEN COMMUNICATION:

Secretary Bonkowski reported that she had received two communications: 1) a document entitled: Employee's Concerns; and 2) Employee Questions/Comment Received through February 22, 2012 at 3:30 p.m.

ORAL COMMUNICATION:

Mrs. Joan Irvine Smith's assistant addressed the Board of Directors with respect to the Dyer Road wellfield. She said it was her understanding that currently wells 1, 5, 6, 7, C-8, C-9, 10, 15 and 17 will operate in accordance with the District's annual pumping plan. Wells, 2, 3, 4, 11, 12, 13, 14 and 16 will be off. This was confirmed by Mr. Cook, General Manager of the District.

With respect to the Orange County Basin Groundwater Conjunctive Use Program being coordinated by Municipal Water District of Orange County (MWDOC) and Orange County Water District (OCWD), a Notice of Completion was approved by the OCWD Board of Directors on March 19, 2009. Metropolitan Water District has given notice to OCWD to extract 22,000 acre feet in fiscal year 2009/10. The extraction is being performed by agencies that constructed conjunctive use wells under this program. IRWD is not a participant. This was confirmed by Mr. Cook.

With respect to the OCWD annexation of certain IRWD lands, on June 5, 2009, IRWD received a letter from OCWD noting that OCWD has completed the formal responses to comments they previously received on the draft program Environmental Impact Report. The letter further noted that with this task completed, OCWD has exercised its right to terminate the 2004 Memorandum of Understanding (MOU) regarding annexation. OCWD also indicated that due to the lack of progress on the annexation issue, the draft program Environmental Impact Report will not be completed. On June 8, 2009, OCWD completed the Long-Term Facilities Plan which was received and filed by the OCWD Board in July 2009. Staff has been coordinating

Exhibit "A"

with the City of Anaheim (Anaheim) and Yorba Linda Water District (YLWD) on their most recent annexation requests and has reinitiated the annexation process with OCWD. IRWD, YLWD and Anaheim have negotiated a joint MOU with OCWD to process and conduct environmental analysis of the annexation requests. The MOU was approved by the OCWD Board on July 21, 2010. This was confirmed by Mr. Cook.

With respect to the Groundwater Emergency Service Plan, IRWD has an agreement in place with various south Orange County water agencies, MWDOC and OCWD, to produce additional groundwater for use within IRWD and transfer imported water from IRWD to south Orange County in case of emergencies. IRWD has approved the operating agreement with certain south Orange County water agencies to fund the interconnection facilities needed to affect the emergency transfer of water. MWDOC and OCWD have also both approved the operating agreement. This was confirmed by Mr. Cook.

ITEMS RECEIVED TOO LATE TO BE AGENDIZED: None.

WORKSHOP

RETIREMENT STUDY: FINANCIAL ANALYSIS AND POTENTIAL ALTERNATIVE RETIREMENT PLAN DESIGN

President Matheis welcomed the employees to the meeting and said that the emails sent to Ms. Janet Wells and Mr. Paul Cook had also been forwarded to the Board for consideration. She said that tonight's workshop and future meetings will facilitate a solution that strikes the appropriate balance between the current problem facing IRWD and the needs of the employees. Mr. Cook reported on why the District hired consultants from Aon Hewitt to perform a retirement study for the District.

Using a PowerPoint presentation, Mr. Yves McGale provided an overview of the financial analysis of the current plan, including three different philosophies for discount rates, a summary of IRWD's retirement program of the CalPERS pension noting the accrued liability, market value of assets, deficit, funded status and the District's costs. Mr. McGale reviewed IRWD's retirement program history along with options for the current retirement program. He further reviewed a *Strawman* design and analysis, including Governor Brown's proposed retirement program. Using a PowerPoint presentation, Ms. Debby Cherney provided the next steps for concluding the retirement component of the benefits study. Following comments by Directors LaMar, Matheis and Reinhart, General Manager Cook read a document entitled "Employee's Concerns."

RECESS AND RECONVENE

President Matheis declared a recess at 7:18 p.m. The meeting was reconvened at 7:28 p.m. with

Exhibit "A"

Directors Matheis, Reinhart, LaMar, and Swan present.

PROPOSED DECREASES TO CALPERS EMPLOYER-PAID MEMBER CONTRIBUTIONS

General Manager Cook reported that this item was submitted to the February 13, 2012 Board meeting, and following discussion, was continued to this evening. Mr. Cook provided an overview of the two alternative proposals for transitioning employees to paying the full 8% of the CalPERS employee contribution which were introduced at the February 7, 2012 Finance and Personnel Committee meeting.

Mr. Cook said that on April 25, 2011, the Board approved a multi-year process that would eventually transition the District's employees to paying the full 8% of the CalPERS employee contribution. He said that on July 1, 2011, initial adjustments of employee-paid contributions were approved including 1) Executive Management CalPERS employee contributions increased from 1% to 6%; 2) Senior Management CalPERS employee contributions increased from 1% to 5%; and 3) all other Full-Time Regular Employee CalPERS employee contributions increased from 1% to 3%. He said that at that time, all Full-Time Regular Employee positions and the Senior Management positions also received a 2% increase in salary on July 1, 2011.

Mr. Cook said that at the Board meeting on November 14, 2011, the Board: 1) approved a 2.47% cost of living adjustment (COLA) for all eligible employees and adopted a resolution to reflect this adjustment; and 2) directed staff to notify employees that in February 2012, the Board would consider an increase of at least 2% of the employee-paid contribution to CalPERS, effective March 1, 2012. Notification of the Board's intent was communicated to all employees through an e-mail on November 15, 2011 along with communications at the various departmental all-hands/safety meetings conducted during the subsequent weeks.

Mr. Cook said that for the Board to make the adjustments to the employee-paid contributions to CalPERS, resolutions would need to be adopted stipulating the specific amount of each adjustment. He said that staff is recommending adjustments to the employee-paid contributions on March 1, 2012 as follows: 1) the General Manager and the Assistant General Manager positions (Executive Management) will pay an additional 2% into CalPERS, increasing the employee contributions from 6% to the full 8%; 2) all Department Director and Executive Director positions (Senior Management) will pay an additional 2% into CalPERS, increasing their employee contributions from 5% to 7%; and 3) all other Full-Time Regular Employees will pay an additional 2% into CalPERS, increasing their employee contributions from 3% to 5%. Mr. Cook also summarized future shifts proposed for March 1, 2013.

This item was reviewed by the Finance and Personnel Committee on February 7, 2012 where the Committee did not reach a consensus regarding this item. Director Swan said that he recommended that the full time employee's contribution be decreased by 2 percent this year, and then wait until the Board received a final *Strawman* design and analysis from the consultants for a future recommendation. Director LaMar said that he would recommend that no additional action for percentage decreases occur until March 1, 2013. Following discussion, on MOTION by Swan, seconded and unanimously carried, THE FOLLOWING RESOLUTIONS WERE ADOPTED BY TITLE:

Exhibit "A"

RESOLUTION 2012-9

RESOLUTION OF THE BOARD OF
DIRECTORS OF THE IRVINE RANCH WATER DISTRICT,
ORANGE COUNTY, CALIFORNIA MODIFYING
EMPLOYER-PAID MEMBER CONTRIBUTIONS
(FOR EXECUTIVE MANAGEMENT)

RESOLUTION 2012-10

RESOLUTION OF THE BOARD OF
DIRECTORS OF THE IRVINE RANCH WATER DISTRICT,
ORANGE COUNTY, CALIFORNIA MODIFYING
EMPLOYER-PAID MEMBER CONTRIBUTIONS
(FOR SENIOR MANAGEMENT STAFF)

RESOLUTION 2012-11

RESOLUTION OF THE BOARD OF
DIRECTORS OF THE IRVINE RANCH WATER DISTRICT,
ORANGE COUNTY, CALIFORNIA MODIFYING
EMPLOYER-PAID MEMBER CONTRIBUTIONS
(FOR FULL-TIME REGULAR EMPLOYEES)

ADJOURNMENT

There being no further business, President Matheis adjourned the meeting at 7:37 p.m.

APPROVED and SIGNED this ____ day of March, 2012.

President, IRVINE RANCH WATER DISTRICT

Secretary IRVINE RANCH WATER DISTRICT

APPROVED AS TO FORM:

Legal Counsel - Bowie, Arneson, Wiles & Giannone

Exhibit "B"

MINUTES OF REGULAR MEETING –FEBRUARY 27, 2012

The regular meeting of the Board of Directors of the Irvine Ranch Water District (IRWD) was called to order at 5:00 p.m. by President Matheis on February 27, 2012 in the District office, 15600 Sand Canyon Avenue, Irvine, California.

Directors Present: Reinhart, LaMar, Withers (arrived at 5:15 p.m.), and Matheis

Directors Absent: Swan

Also Present: General Manager Cook, Executive Director of Operations Pedersen, Executive Director of Engineering and Planning Burton, Executive Director of Finance Cherney, Executive Director of Water Policy Heiertz, Secretary Bonkowski, Legal Counsel Arneson, Director of Water Resources Weghorst, and other members of the public and staff.

WRITTEN COMMUNICATION: None.

ORAL COMMUNICATION:

Mrs. Joan Irvine Smith's assistant addressed the Board of Directors with respect to the Dyer Road wellfield. She said it was her understanding that currently wells 2, 4, C-8, C-9, 10, 13, 14, 15 and 17 will operate in accordance with the District's annual pumping plan. Wells, 1, 3, 5, 6, 7, 8, 11, 12, 16 and 18 will be off. This was confirmed by Mr. Cook, General Manager of the District.

With respect to the Orange County Basin Groundwater Conjunctive Use Program being coordinated by Municipal Water District of Orange County (MWD OC) and Orange County Water District (OCWD), a Notice of Completion was approved by the OCWD Board of Directors on March 19, 2009. Metropolitan Water District has given notice to OCWD to extract 22,000 acre feet in fiscal year 2009/10. The extraction is being performed by agencies that constructed conjunctive use wells under this program. IRWD is not a participant. This was confirmed by Mr. Cook.

With respect to the OCWD annexation of certain IRWD lands, on June 5, 2009, IRWD received a letter from OCWD noting that OCWD has completed the formal responses to comments they previously received on the draft program Environmental Impact Report. The letter further noted that with this task completed, OCWD has exercised its right to terminate the 2004 Memorandum of Understanding (MOU) regarding annexation. OCWD also indicated that due to the lack of progress on the annexation issue, the draft program Environmental Impact Report will not be completed. On June 8, 2009, OCWD completed the Long-Term Facilities Plan which was received and filed by the OCWD Board in July 2009. Staff has been coordinating with the City of Anaheim (Anaheim) and Yorba Linda Water District (YLWD) on their most recent annexation requests and has reinitiated the annexation process with OCWD. IRWD, YLWD and Anaheim have negotiated a joint MOU with OCWD to process and conduct environmental analysis of the annexation requests. The MOU was approved by the OCWD Board on July 21, 2010. This was confirmed by Mr. Cook.

Exhibit "B"

With respect to the Groundwater Emergency Service Plan, IRWD has an agreement in place with various south Orange County water agencies, MWDOC and OCWD, to produce additional groundwater for use within IRWD and transfer imported water from IRWD to south Orange County in case of emergencies. IRWD has approved the operating agreement with certain south Orange County water agencies to fund the interconnection facilities needed to affect the emergency transfer of water. MWDOC and OCWD have also both approved the operating agreement. This was confirmed by Mr. Cook.

ITEMS RECEIVED TOO LATE TO BE AGENDIZED: None.

CONSENT CALENDAR

On MOTION by Reinhart, seconded and carried (4-0) (Matheis, Swan, Reinhart, and Swan voting aye and Withers absent), CONSENT CALENDAR ITEMS 3 THROUGH 13 WERE APPROVED AS FOLLOWS:

3. MINUTES OF REGULAR BOARD MEETINGS

Recommendation: That the minutes of the February 13, 2012 Regular Board Meeting, the February 21, 2012 Adjourned Regular Board Meeting, and the February 22, 2012 Regular Board Meeting be approved as presented.

4. RATIFY/APPROVE BOARD OF DIRECTORS' ATTENDANCE AT MEETINGS AND EVENTS

Recommendation: That the Board ratify/approve the meetings and events for Steven LaMar, Mary Aileen Matheis, Peer Swan and John Withers.

5. JANUARY 2012 FINANCIAL REPORTS

Recommendation: That the Board receive and file the Treasurer's Investment Summary Report and the Monthly Interest Rate Swap Summary for January 2012; approve the January 2012 Summary of Payroll ACH payments in the total amount of \$1,386,762.97, and approve the January 2012 accounts payable Disbursement Summary of Warrants Nos. 326347 through 327178, Workers' Compensation distributions, wire transfers, payroll withholding distributions and voided checks in the total amount of \$15,655,484.60.

6. DISTRICT STRATEGIC MEASURES DASHBOARD

Recommendation: Receive and file the Strategic Measures Dashboard and information items.

7. UPCOMING PROJECTS STATUS UPDATE

Recommendation: Receive and file.

Exhibit "B"

CONSENT CALENDAR (CONTINUED)

8. QUITCLAIM OF REAL PROPERTY TO VON KARMAN PLAZA, LLC

Recommendation: That the Board adopt the following resolution by title approving execution of the Quitclaim Deed to Von Karman Plaza, LLC.

RESOLUTION NO. 2012-12

RESOLUTION OF THE BOARD OF DIRECTORS OF
IRVINE RANCH WATER DISTRICT
APPROVING EXECUTION OF THE QUITCLAIM DEED TO
VON KARMAN PLAZA, LLC

9. QUITCLAIM OF REAL PROPERTY TO WAL-MART REAL ESTATE
BUSINESS TRUST

Recommendation: That the Board adopt the following resolution by title approving execution of the Quitclaim Deed to Wal-Mart Real Estate Business Trust.

RESOLUTION NO. 2012-13

RESOLUTION OF THE BOARD OF DIRECTORS OF
IRVINE RANCH WATER DISTRICT
APPROVING EXECUTION OF THE QUITCLAIM DEED TO
WAL-MART REAL ESTATE BUSINESS TRUST

10. ADDENDUM NO. 1 TO THE BAKER WATER TREATMENT PLANT
ENVIRONMENTAL IMPACT REPORT

Recommendation: That the Board approve the proposed Addendum No. 1 to the Baker Water Treatment Plant Project Environmental Impact Report, including the determination set forth in the addendum, and approve the modifications to the project consisting of changes to the Mechanical Design and Planned Operation to the product water pump station and alignment of the treated water pipeline.

11. DOMESTIC AND RECYCLED VAULT LIDS REHABILITATION -
EXPENDITURE AUTHORIZATIONS AND CONSULTANT SELECTION

Recommendation: That the Board approve an Expenditure Authorization in the amount of \$154,600 for the Domestic Vault Lid Rehabilitation, project 11358 (1800), and approve an Expenditure Authorization in the amount of \$115,500 for the Recycled Vault Lid Rehabilitation, project 31358 (1065).

Exhibit "B"

12. PLANNING AREA 9B JEFFREY ROAD PIPELINES EXPENDITURE AUTHORIZATIONS AND POTENTIAL CHANGE OF WORK WITH IRVINE COMMUNITY DEVELOPMENT COMPANY

Recommendation: That the Board approve Expenditure Authorizations for project 10423 (1519) in the amount of \$38,100 and project 30422 (1024) in the amount of \$47,400; and approve a potential change of work in the amount of \$83,146 to the Reimbursement Agreement with the Irvine Community Development Company for Planning Area 9B to construct Planning Area 9B Jeffrey Road IRWD Capital Facilities, projects 10423 (1519) and 30422 (1024).

13. EMERGENCY DOMESTIC WATER INTERCONNECTION AGREEMENT WITH SANTA MARGARITA WATER DISTRICT

Recommendation: That the Board authorize the General Manager to execute an agreement with Santa Margarita Water District that terminates the 1979 Capacity Agreement and provides for an emergency domestic water interconnect; authorize the District officers to execute a Quitclaim Deed to transfer IRWD's capacity ownership in various pipelines and the Alicia Reservoir A to Santa Margarita Water District; and adopt the following resolution by title approving execution of the Quitclaim Deed to Santa Margarita Water District.

RESOLUTION NO. 2012 -14

RESOLUTION OF THE BOARD OF DIRECTORS OF
IRVINE RANCH WATER DISTRICT, ORANGE COUNTY, CALIFORNIA,
APPROVING EXECUTION OF THE QUITCLAIM DEED TO
SANTA MARGARITA WATER DISTRICT

ACTION CALENDAR

BAKER WATER TREATMENT PLANT DESIGN VARIANCE NO. 6

General Manager Cook reported that at the onset of the project, the Baker Water Treatment Plant (WTP) residuals were planned to be delivered to the Los Alisos Water Recycling Plant (LAWRP) for processing if available sewer capacity between Baker WTP and LAWRP could be confirmed. Director Withers arrived at 5:15 p.m.

Mr. Cook said that the District's consultant, RBF/Carollo, defined residuals production estimates, and following review, staff became concerned about LAWRP's ability to process the residuals, especially when Irvine Lake Water (ILW) is used as the source of supply to the Baker WTP, while continuously meeting plant effluent discharge requirements. More significantly though, staff realized that the current method of sludge disposal at LAWRP will be modified in 2015 when the solids will no longer be trucked to Arizona, but rather to MWRP, where they will be processed through the solids processing facilities currently in design. As such, staff coordinated with the MWRP biosolids engineering design consultant, Black & Veatch, to identify potential impacts associated with introducing the Baker WTP residuals into the proposed

Exhibit "B"

solids processing facilities. Black & Veatch has expressed concerns regarding the potential impacts to the proposed facilities including: 1) lower quality pellet produced from the dryer due to the high concentration of inorganics present in the Baker WTP residuals; 2) concerns associated with pellet formation and pellet stabilization during transport; 3) increased digested sludge production; 4) increased drying and disposal costs; 5) increased complexities associated with operation of the acid phase digestion process; and 6) extensive operational impacts associated with variable incoming solids loading to the primary sludge thickening processes. Mr. Cook said that all of these issues pose significant risks to the overall success of the proposed MWRP biosolids project and to avoid these risks, staff is evaluating the construction of onsite residuals handling facilities at the Baker WTP.

Mr. Cook said that staff requested RBF/Carollo to perform a high-level analysis to identify a conceptual treatment process that would be capable of processing and dewatering the Baker WTP residuals onsite. RBF/Carollo developed initial estimates for the capital and operations and maintenance (O&M) costs associated with the conceptual facilities estimates which range from \$5.5 to \$9 million and the O&M cost estimates which range from \$500,000 to \$600,000 per year. As part of Variance No. 6, RBF/Carollo will refine the design criteria for the residuals handling facilities in an effort to further reduce the size and cost of the facilities.

Executive Director Burton said that staff proposes to proceed with the incorporation of onsite residuals handling facilities in a two-phased approach. The first phase, which is addressed by Variance No. 6, will identify the recommended residuals handling facilities, define the design criteria, site the facilities, identify the impacts of those facilities on the current design, and update the overall capital and O&M costs for the project. The second phase, which will be addressed by a future design variance, will be the development of the final design and the incorporation of the residuals handling facilities into the overall project. RBF/Carollo submitted Variance No. 6 in the amount of \$73,000 to complete the first phase of the work described above.

Mr. Burton said that throughout this entire process, staff has closely coordinated with the Baker Project Committee stakeholders. He said that an initial meeting with the stakeholders was held on December 21, 2011 to present the issues and to obtain concurrence on proceeding with the evaluation of onsite residuals handling facilities with a second meeting held on January 26, 2012 to present the approach to completing the evaluation and RBF/Carollo's preliminary scope of work and fee to complete the work. He further said that the stakeholders concur with the two-phased approach defined above and are planning to take the variance to their respective Boards in February and March.

Director Reinhart reported that this item was reviewed and approved by the Engineering and Operations Committee on February 23, 2012. Following discussion, on MOTION by Reinhart, seconded and unanimously carried, **THE BOARD AUTHORIZED THE GENERAL MANAGER TO EXECUTE VARIANCE NO. 6, IN THE AMOUNT OF \$73,000, WITH RBF CONSULTING FOR THE BAKER WATER TREATMENT PLANT, PROJECT 11218 (1417).**

WELL 115 REPLACEMENT – CAPITAL BUDGET ADDITION, EXPENDITURE AUTHORIZATION, AND VARIANCE NO. 1

General Manager Cook reported that the District pursued replacement of Wells 106 and 107 in an effort to promptly augment flow to the Irvine Desalter Project Potable Treatment Plant (IDP-

Exhibit "B"

PTP). Mr. Cook said that Tetra Tech was retained to provide design and construction phase services for both wells. Well 107 is currently under construction. He said that Well 106 replacement was evaluated and deemed extremely difficult due to site constraints and extensive coordination required with the stakeholders. He said that staff recommends that Well 115 be substituted for the Well 106 replacement.

Tetra Tech is providing preliminary design, design, bid, and construction phase services for both Well 107 and Well 106. Additionally, Tetra Tech is providing modifications to the vessels and cartridge filters, modifications to pretreatment and post treatment chemicals, and modifications to the hypochlorite and de-chlorination facilities at IDP-PTP. Variance No. 1 with Tetra Tech includes: 1) an additional \$15,000 for additional preliminary design work for Well 106; 2) deletion of the Well 106 pipeline portion of the project; 3) deletion of Well 106 replacement design and construction services component; and 4) the addition of Well 115 replacement project. Variance No. 1 does not change Tetra's Tech existing scope to provide modifications to IDP-PTP.

Director Reinhart reported that this item was reviewed and approved by the Engineering and Operations Committee on February 23, 2012. On MOTION by Reinhart, seconded and unanimously carried, THE BOARD AUTHORIZED THE ADDITION OF PROJECT 11627 (3717) IN THE AMOUNT OF \$3,685,600 TO THE FY 2011-12 CAPITAL BUDGET FOR WELL 115 REPLACEMENT; APPROVED AN EXPENDITURE AUTHORIZATION IN THE AMOUNT OF \$551,300 FOR PROJECT 11627 (3717); AND APPROVED A NO-COST VARIANCE NO. 1 WITH TETRA TECH FOR THE WELL 115 REPLACEMENT, PROJECT 11627 (3717).

MICHELSON WATER RECYCLING PLANT PHASE 2 EXPANSION AND FLOOD PROTECTION IMPROVEMENTS – CHANGE ORDERS, VARIANCE, AND REDUCTION OF RETENTION

Executive Director of Engineering Burton reported that construction of the Michelson Water Recycling Plant (MWRP) Phase 2 Expansion and Flood Protection Improvements project was awarded to J. R. Filanc Construction Company in July 2009 in the amount of \$87,479,450. Mr. Burton said that the Phase 2 expansion contract documents show that Filanc was to install a two-ton bridge crane over the membrane bioreactors (MBR) to allow lifting of the membrane modules and moving them to the south side of the MBR for membrane module cleaning. The District's design engineer, HDR, later discovered after review of the GE/Zenon submittal that a five-ton bridge crane would be required. He said that Construction Contract Change Order (CCO) No. 57 is for the incremental cost for material and labor to construct and install the 5-ton bridge crane. IRWD would have had to pay these costs had the Contract Documents shown a five-ton crane. Additionally, the bridge crane was modified to extend an additional nine feet to the north side of the MBR to allow the membrane modules to be lifted to and from trucks. This change order also includes \$14,817 of unusable material and re-engineering by the crane manufacturer since the manufacturer had started manufacturing the two-ton crane before the discovery was made. Staff has negotiated with the HDR to credit IRWD an equivalent amount on its construction services invoices to reimburse IRWD for this portion of the CCO.

Mr. Burton said that CCO No. 58 is for the final quantity adjustment for Bid Item No. A.06 – Precast Pre-stressed Concrete Drive Piles – Structure Piles. The adjustment was due to differing

Exhibit "B"

site conditions. This CCO credit amount represents a 23% decrease from the original \$2,916,000 amount for the bid item. The total amount of all change orders for this construction project is \$2,327,807.14 (2.7% of the original bid).

Mr. Burton said that Ninyo and Moore has been providing construction phase services associated with pile installation since the start of the project. Variance No. 2 is to provide supplemental construction phase services for pile installation for the remaining 237 piles. Specifically, these services include monitoring of pile driving operations, geotechnical engineering, data complication and analysis, consultations, and a final report. Filanc has installed between three and 26 piles per day. Ninyo and Moore has assumed about 12 piles per day for Variance No. 2. Should the remaining piles take longer than this installation rate, another variance may be required.

Mr. Burton said that construction of project is 72.5% completed and that Filanc has formally requested that the retention be reduced pursuant to the project manual. Staff has reviewed Filanc's request and verified that they are currently working at a pace to complete the contract work prior to the contract completion date, and concur with the request.

Director Reinhart reported that this item was reviewed and approved by the Engineering and Operations Committee on February 23, 2012. On MOTION by Reinhart, seconded and unanimously carried, THE BOARD APPROVED CONTRACT CHANGE ORDER NO. 57 IN THE AMOUNT OF \$116,206.53 WITH J. R. FILANC CONSTRUCTION CO. TO INSTALL A FIVE-TON CRANE FOR MICHELSON WATER RECYCLING PLANT PHASE 2 EXPANSION, PROJECTS 20214 (1599) AND 30214 (1706); APPROVED CONTRACT CHANGE ORDER NO. 58 IN THE CREDIT AMOUNT OF \$669,030.20 WITH J. R. FILANC CONSTRUCTION CO. DUE TO FINAL QUANTITY ADJUSTMENT OF THE STRUCTURE PILES WITHIN MICHELSON WATER RECYCLING PLANT PHASE 2 EXPANSION, PROJECTS 20214 (1599) AND 30214 (1706); AUTHORIZED THE GENERAL MANAGER TO EXECUTE VARIANCE NO. 2 IN THE AMOUNT OF \$24,700 WITH NINYO AND MOORE FOR SUPPLEMENTAL CONSTRUCTION PHASE SERVICES FOR PILE INSTALLATION FOR THE MICHELSON WATER RECYCLING PLANT PHASE 2 EXPANSION, PROJECTS 20214 (1599) AND 30214 (1706) AND FLOOD PROTECTION IMPROVEMENT, PROJECTS 20542 (1150) AND 30542 (1118); FOUND THAT SATISFACTORY PROGRESS IS BEING MADE ON THE MICHELSON WATER RECYCLING PLANT PHASE 2 EXPANSION AND FLOOD PROTECTION IMPROVEMENTS CONTRACT; AUTHORIZED THE REDUCTION OF RETENTION FROM 10% TO 5% OF THE CONTRACT AMOUNT; AND RELEASE FUNDS IN EXCESS OF 5% OF THE CONTRACT AMOUNT FROM RETENTION CURRENTLY HELD FOR MWRP PHASE 2 EXPANSION AND FLOOD PROTECTION IMPROVEMENTS, PROJECTS 20214 (1599), 20542 (1150), 30214 (1706), AND 30542 (1118).

GENERAL MANAGER'S REPORT

General Manager Cook reported that the Lake Forest City Council approved an action to form a Community Facilities District (CFD) for the District's Serrano Summit project. He said that this is a two-step process with the final approval for the zoning process of the CFD to occur in April.

Exhibit "B"

Mr. Cook noted the Exchange Club of Irvine's event on March 1 which Directors Withers and Matheis plan to attend. Director Reinhart said he may also be in attendance, and will confirm with staff.

Mr. Cook reported on a recent trip to Sacramento with Directors Matheis and LaMar with various key legislators and staff.

DIRECTORS' COMMENTS

Director LaMar reported on the trip to Sacramento, an NROC Executive Committee meeting, and a MWDOC meeting.

Director Reinhart said he attended several standing meetings for the District.

Director Withers apologized for being absent at the last Board meeting on February 22 due to a commitment in Palmdale. He further reported on his attendance at a public policy group meeting on pension reform last Friday at Concordia University along with a recent lunch meeting with Mr. Paul Hernandez from the Irvine Company. He said he will be attending a WACO meeting this Friday. In response to his inquiry relative to a retrofit program with UCI, staff provided an update on the project noting that staff will have data soon on the water study.

Director Matheis reported that she will be traveling to Washington, DC to attend ACWA's Legislative conference including a luncheon on Wednesday with Orange County legislators. She further noted that she was unable to attend ACWA's Regional Forum.

Director LaMar reported that he attended a lunch meeting with the Army Corps of Engineers' Colonel Toy, Mr. Jack Foley, and staff from Congressman Ken Calvert's office. He said that District staff will be meeting this week with Colonel Toy's staff relative to potential Federal funding for the Syphon Reservoir.

Following Consultant Bruce Newell's comments relative to the low levels in the creeks in Santiago Canyon, staff asked that he provide a review of the District's pump stations for potential fire hazards.

ADJOURNMENT

President Matheis adjourned the meeting at 5:37 p.m.

APPROVED and SIGNED this 26th day of March, 2012.

President, IRVINE RANCH WATER DISTRICT

Secretary, IRVINE RANCH WATER DISTRICT

Exhibit "B"

APPROVED AS TO FORM:

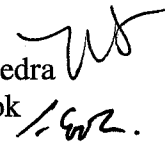
Legal Counsel - Bowie, Arneson, Wiles and Giannone

March 26, 2012

Prepared and

Submitted by: N. Savedra

Approved by: P. Cook



CONSENT CALENDAR

RATIFY/APPROVE BOARD OF DIRECTORS' ATTENDANCE AT MEETINGS AND EVENTS

SUMMARY:

Pursuant to Resolution 2006-29 adopted on August 28, 2006, approval of attendance of the following events and meetings are required by the Board of Directors.

Events/Meetings

Steven LaMar

2/23/12	Lunch Meeting with Col. Mark Toy, Army Corps of Engineers
3/27-28/12	Water Education Foundation – Executive Briefing, Sacramento, CA
3/29/12	ACWA Federal Affairs Committee Meeting, Sacramento, CA
3/30/12	Meeting with Colonel Toy regarding Syphon Reservoir
4/05/12	District tour with Senator Mimi Walters
4/13/12	Meeting w/Senator Correa regarding IRWD rate structure & legislative priorities

Mary Aileen Matheis

3/19/12	Monthly meeting with Paul Cook regarding District activities
3/21/12	WACO –Municipal Bond & Debt Financing Workshop
3/22/12	Chapman University-World Water Day Event
3/27-28/12	Water Education Foundation – Executive Briefing, Sacramento, CA
3/30/12	Concordia University Seminar
4/05/12	District tour with Senator Mimi Walters
4/13/12	Meeting w/Senator Correa regarding IRWD rate structure & legislative priorities

Douglas Reinhart

3/5-6/12	WaterReuse Board Meeting, Washington, D.C.
3/26-27/12	WaterReuse California Annual Conference, Sacramento, CA

Peer Swan

2/15/12	OCWA February Meeting
3/15/12	ACWA Water Management & Finance Committee Meetings, Sacramento, CA
3/29-30/12	AWCA Board of Directors' Meeting, Sacramento, CA
4/30-5/1/12	ACWA Executive Board of Directors' Meeting

John Withers

3/21/12	OCWA March Meeting
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RECOMMENDATION:

THAT THE BOARD RATIFY/APPROVE THE MEETINGS AND EVENTS FOR STEVEN LaMAR, MARY AILEEN MATHEIS, DOUGLAS REINHART, PEER SWAN AND JOHN WITHERS AS DESCRIBED.

LIST OF EXHIBITS:

None

March 26, 2012

Prepared by: Tanja Fournier/Rob Jacobson

Submitted by: Debby Cherney

Approved by: Paul Cook

CONSENT CALENDAR

FEBRUARY 2012 FINANCIAL REPORTS

SUMMARY:

The following is submitted for the Board's information and approval:

- A. The Investment Summary Report for February 2012. This Investment Summary Report is in conformity with the 2012 Investment Policy and provides sufficient liquidity to meet estimated expenditures during the next six months, as outlined in Exhibit "A".
- B. The Monthly Interest Rate Swap Summary as of February 29, 2012, as outlined in Exhibit "B".
- C. The Summary of Payroll ACH payments in the total amount of \$1,400,794.94, as outlined in Exhibit "C".
- D. The February 29, 2012 Disbursement Summary of the tabulation of Warrant Nos. 327179 through 327967, Workers' Compensation distributions, payroll withholding distributions, and voided checks in the total amount of \$22,751,234.66.

FISCAL IMPACTS:

As of February 29, 2012, the book value of the investment portfolio was \$354,499,158 with a 0.45% rate of return and a market value of \$354,705,828. Based on the District's February 29, 2012 quarterly real estate investment rate of return of 9.66%, the District's weighted average return for the fixed income and real estate investments was 1.83%.

As of February 29, 2012, the total notional amount of the interest rate swap portfolio was \$130 million of fixed payer swaps. Cash accrual in February from all swaps was negative \$573,440 and negative \$4,924,211 fiscal year to date.

Payroll ACH payments totaled \$1,400,794.94, and wire transfers, all other ACH payments, and checks issued for debt service, accounts payable, payroll and water purchases for February totaled \$22,751,234.66.

ENVIRONMENTAL COMPLIANCE:

This item is not a project as defined in the California Environmental Quality Act Code of Regulations, Title 14, Chapter 3 Section 15378.

COMMITTEE STATUS:

This item was not submitted to a Committee; however, the investment and interest rate swap reports are submitted to the Finance and Personnel Committee on a monthly basis.

RECOMMENDATION:

THAT THE BOARD RECEIVE AND FILE THE TREASURER'S INVESTMENT SUMMARY REPORT AND THE MONTHLY INTEREST RATE SWAP SUMMARY FOR FEBRUARY 2012; APPROVE THE FEBRUARY 2012 SUMMARY OF PAYROLL ACH PAYMENTS IN THE TOTAL AMOUNT OF \$1,400,794.94, AND APPROVE THE FEBRUARY 2012 ACCOUNTS PAYABLE DISBURSEMENT SUMMARY OF WARRANTS NOS. 327179 THROUGH 327967, WORKERS' COMPENSATION DISTRIBUTIONS, WIRE TRANSFERS, PAYROLL WITHHOLDING DISTRIBUTIONS AND VOIDED CHECKS IN THE TOTAL AMOUNT OF \$22,751,234.66.

LIST OF EXHIBITS:

- Exhibit "A" - Investment Summary Report
- Exhibit "B" - Monthly Interest Rate Swap Summary
- Exhibit "C" - Monthly Payroll ACH Summary
- Exhibit "D" - Monthly Summary of District Disbursements

02/29/12

SETTLEMENT	Call Schedule	Call Date	Maturity Date	Rating	INVESTMENT TYPE	INSTITUTION / ISSUER	PAR Amount	COUPON	YIELD	YTC	ORIGINAL COST	CARRY VALUE	MARKET VALUE 1	UNREALIZED GAIN/(LOSS) (2)	
02/29/12			03/01/12		LAIF	State of California Tsy.	\$44,500,000		0.380%		\$44,500,000.00	\$44,500,000.00	44,573,513.87	73,513.87	
01/31/12			03/01/12		LAIF-JPA	State of California Tsy.	50,000,000		0.380%		\$50,000,000.00	\$50,000,000.00	50,082,599.85	82,599.85	
01/13/12			02/05/12		LAIF-2009A	State of California Tsy.	468,000		0.380%		\$468,000.00	\$468,000.00	468,773.13	773.13	
01/13/12			02/05/12		LAIF-2009B	State of California Tsy.	468,000		0.380%		\$468,000.00	\$468,000.00	468,773.13	773.13	
01/18/12			02/17/12		LAIF BABS	State of California Tsy.	111,529,467		0.380%		\$111,529,467.30	\$111,529,467.30	111,713,713.65	184,246.35	
02/29/12			03/01/12		B of A Tsy. Reserves	Bank of America	1,180,580.80		0.009%		1,180,580.80	1,180,580.80	1,180,580.80		
04/04/11	03/14/12	03/14/13		Aaa/AAA/NR	FHLMC - Note	Fed Home Loan Mortgage Bank	5,000,000	0.500%	1.013%	0.500%	5,000,000.00	5,000,000.00	5,000,350.00	350.00	
05/23/11		04/11/13		Aaa/AAA/AAA	FHLMC - Note	Fed Home Loan Mortgage Bank	5,000,000	1.720%	0.517%		5,112,550.00	5,066,321.19	5,081,350.00	15,028.81	
04/25/11	04/25/12	04/25/13		NA/AAA/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	0.750%	0.750%	0.750%	5,000,000.00	5,000,000.00	5,003,850.00	3,850.00	
06/27/11	06/27/12	09/27/13		Aaa/AAA/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	0.700%	0.700%	0.700%	5,000,000.00	5,000,000.00	5,005,850.00	5,850.00	
10/25/11	04/25/12	10/25/13		Aaa/AA+/NR	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	0.625%	0.625%	0.625%	5,000,000.00	5,000,000.00	5,001,800.00	1,800.00	
11/29/11	11/29/12	11/29/13		Aaa/AA+/AA+	FHLMC - Note	Fed Home Loan Mortgage Bank	5,000,000	0.500%	0.596%	0.690%	4,990,500.00	4,991,708.62	5,003,600.00	11,891.38	
01/31/12	04/27/12	01/27/14		Aaa/AA+/NR	FFCB - Note	Fed Farm Credit Bank	5,000,000	0.350%	0.350%	0.350%	5,000,000.00	5,000,000.00	4,991,900.00	(8,100.00)	
01/30/12	01/30/13	01/30/14		Aaa/AA+/NR	FFCB - Note	Fed Farm Credit Bank	5,000,000	0.330%	0.355%	0.380%	4,997,500.00	4,997,606.02	4,988,000.00	(9,606.02)	
02/09/12	04/25/12	04/25/14		Aaa/AA+/NR	FFCB - Note	Fed Farm Credit Bank	5,000,000	0.430%	0.430%	0.430%	5,000,000.00	5,000,000.00	4,941,000.00	(59,000.00)	
06/27/11	06/27/12	06/27/14		Aaa/AAA/NR	FFCB - Note	Fed Farm Credit Bank	10,000,000	1.050%	1.050%	1.050%	10,000,000.00	10,000,000.00	10,016,300.00	16,300.00	
07/14/11	07/11/12	07/11/14		Aaa/AAA/NR	FNMA - Note	Fed Natl Mortgage Assoc	5,008,000	1.125%	0.962%	0.962%	5,008,000.00	5,006,309.23	5,011,250.00	4,940.77	
08/22/11	08/22/12	08/22/14		Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	0.650%	0.660%	0.680%	4,998,500.00	4,998,762.78	4,995,450.00	(3,312.78)	
08/29/11	08/28/12	08/28/14		Aaa/AA+/NR	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	0.650%	0.650%	0.650%	5,000,000.00	5,000,000.00	4,999,400.00	(600.00)	
10/13/11	08/28/12	08/28/14		Aaa/AA+/NR	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	0.650%	0.791%	1.110%	4,980,000.00	4,982,666.67	4,999,400.00	16,733.33	
12/15/11	03/15/12	09/15/14		Aaa/AA+/NR	FFCB - Note	Fed Farm Credit Bank	5,000,000	0.700%	0.700%	0.700%	5,000,000.00	5,000,000.00	5,000,700.00	700.00	
10/19/11	10/17/12	10/17/14		Aaa/AA+/NR	FHLMC - Note	Fed Home Loan Mortgage Bank	5,000,000	0.750%	0.801%	0.902%	4,992,500.00	4,993,418.65	5,008,150.00	14,731.35	
12/05/11	06/05/12	12/05/14		Aaa/AA+/NR	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.000%	1.010%	1.060%	4,998,500.00	4,998,619.07	5,000,150.00	1,530.93	
12/19/11	12/19/12	12/19/14		Aaa/AA+/NR	FHLMC - Note	Fed Home Loan Mortgage Bank	5,000,000	0.625%	1.038%	0.625%	5,000,000.00	5,000,000.00	5,002,850.00	2,850.00	
01/31/12	04/26/12	01/26/15		Aaa/AA+/NR	FFCB - Note	Fed Farm Credit Bank	5,000,000	0.570%	0.570%	0.570%	5,000,000.00	5,000,000.00	4,991,800.00	(8,200.00)	
01/30/12	01/30/14	01/30/15		Aaa/AA+/NR	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	0.750%	0.500%	0.500%	5,024,850.00	5,024,147.13	4,988,650.00	(35,497.13)	
01/30/12	01/30/14	01/30/15		Aaa/AA+/NR	FNMA - Note	Fed Natl Mortgage Assoc	10,000,000	0.750%	0.453%	0.453%	10,059,000.00	10,057,331.20	9,977,300.00	(80,031.20)	
02/09/12	05/09/12	02/09/15		Aaa/AA+/NR	FFCB - Note	Fed Farm Credit Bank	5,000,000	0.460%	0.480%	0.700%	4,997,000.00	4,997,057.48	4,968,250.00	(28,807.48)	
09/22/11	N/A	06/26/12		MIG1/SP-1+/F1	CA ST-RANS-A2	State of California	2,000,000	2.000%	0.400%		2,024,280.00	2,010,218.57	2,011,580.00	1,361.43	
SUB-TOTAL							<u>\$330,146,048</u>				<u>\$330,329,228.10</u>	<u>\$330,270,214.70</u>	<u>\$330,476,884.43</u>	<u>\$206,669.73</u>	
RESTRICTED CASH (Swap Collateral Deposits)															
02/01/12			02/29/12		Collateral Deposit	Citi-Group	\$17,168,944		0.104%		\$17,168,943.50	\$17,168,943.50	17,168,943.50		
09/23/11			02/29/12		Collateral Deposit	Merrill Lynch	\$7,060,000		0.104%		\$7,060,000.00	\$7,060,000.00	7,060,000.00		
SUB-TOTAL							<u>\$24,228,944</u>				<u>\$24,228,943.50</u>	<u>\$24,228,943.50</u>	<u>\$24,228,943.50</u>		
TOTAL INVESTMENTS							<u>\$354,374,992</u>				<u>\$354,558,171.60</u>	<u>\$354,499,158.20</u>	<u>\$354,705,827.93</u>		
Petty Cash												3,300.00			
Bank Bal. (unrec.)												(4,429,818.19)			
												<u>\$350,131,653.41</u>			

- (1) LAIF market value is as of the most recent quarter-end as reported by LAIF. Security market values are determined using Bank of New York ("Trading Prices"), Bloomberg and/or broker dealer pricing.
- (2) Gain (loss) calculated against carry value using the trading value provided by Bank of New York/or Brokers
- (3) Real estate rate of return is based on most recent quarter end return

Outstanding Variable Rate Debt	\$380,260,000
Net Outstanding Variable Rate Debt (Less \$130 million fixed-payer swaps)	\$250,260,000
Investment Balance:	\$350,131,653
Investment to Variable Rate Debt Ratio:	140%
Portfolio - Average Number of Days To Maturity	296

	Investment Portfolio	Real Estate Portfolio (3)	Weighted Avg. Return
February	0.45%	9.66%	1.83%
January	0.40%	9.66%	1.77%
Change	0.05%		

This Investment Summary Report is in conformity with the 2012 Investment Policy and provides sufficient liquidity to meet the next six months estimated expenditures.

IRVINE RANCH WATER DISTRICT
SUMMARY OF MATURITIES

02/29/12

PORTFOLIO \$354,374,992

DATE	TOTAL	%	LAIF	AGENCIES	CAL REV NOTES	MONEY MARKET SAVINGS & SWEEP	Collateral * Deposit
3/12	\$234,374,992	66.14%	\$206,965,467		2,000,000	1,180,581	\$24,228,944
4/12							
5/12							
6/12							
7/12							
8/12							
9/12							
10/12							
11/12							
12/12							
1/13							
2/13							
SUB-TOTAL	\$234,374,992	66.14%	\$206,965,467	-	2,000,000	1,180,581	\$24,228,944
13 Months - 3 YEARS							
3/31/2013	\$5,000,000	1.41%		5,000,000			
4/1/2013 - 6/30/2013	\$10,000,000	2.82%		10,000,000			
7/1/2013 - 9/30/2013	\$5,000,000	1.41%		5,000,000			
10/1/2013 - 12/31/2013	\$10,000,000	2.82%		10,000,000			
1/1/2014 - 3/31/2014	\$10,000,000	2.82%		10,000,000			
4/1/2014 - 6/30/2014	\$15,000,000	4.23%		15,000,000			
7/1/2014 - 9/30/2014	\$25,000,000	7.05%		25,000,000			
10/1/2014 - 12/31/2014	\$15,000,000	4.23%		15,000,000			
1/1/2015 - 3/31/2015	\$25,000,000	7.05%		25,000,000			
TOTALS	\$354,374,992	100.00%	\$206,965,467	120,000,000	2,000,000	1,180,581	\$24,228,944

% OF PORTFOLIO 58.40% 33.86% 0.56% 0.33% 6.84%

* Return of posted collateral is dependant on interest rates.

IRVINE RANCH WATER DISTRICT INVESTMENT SUMMARY REPORT
INVESTMENT ACTIVITY
Feb-12

MATURITIES/SALES

PURCHASES

DATE	SECURITY TYPE	PAR	YIELD	DATE	SECURITY TYPE	PAR	YIELD
2/8/2012	FHLB - Note	\$5,000,000	1.00%	2/9/2012	FFCB - Note	\$5,000,000	0.48%
				2/9/2012	FFCB - Note	\$5,000,000	0.43%

LAIF ACTIVITY

2/29/2012	LAIF	(\$5,500,000)
	Increase/(Decrease)	<u>(\$5,500,000)</u>

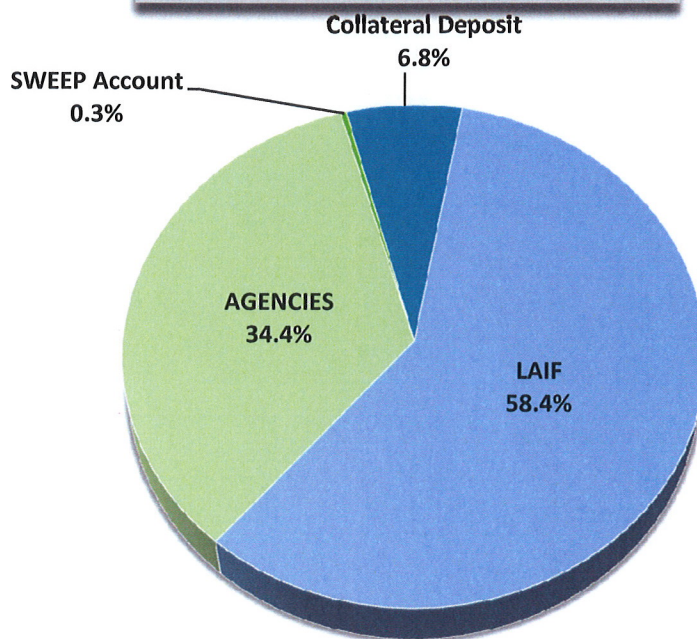
COLLATERALIZED DEPOSIT ACTIVITY

	Balance Forward	\$22,924,704
2/1/2012	CITIGROUP MERRIL LYNCH	\$1,304,240
	Balance at 2/29	<u>\$24,228,944</u>

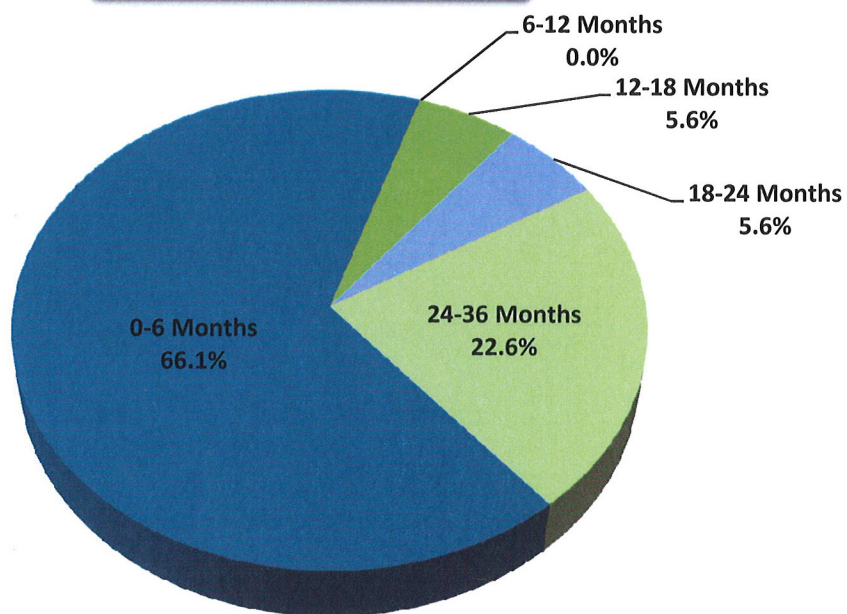
FEBRUARY 2012 INVESTMENT PORTFOLIO

As of February 29, 2012

Portfolio by Investment Type



Portfolio by Maturities



IRVINE RANCH WATER DISTRICT
 INVESTMENT SUMMARY REPORT

Joint Powers Agency - Investment Contracts

12/31/2011

<u>Settlement Date</u>	<u>JPA Issue</u>	<u>Investment Contract</u>	<u>Original Cost</u>	<u>Current Par</u>	<u>Market Value 12/31/11</u>
10/25/1994	JPA - Issue #1	AIG Matched Funding Corp. 7.705% Due 2-15-14	\$ 407,878,616	\$ 306,642,500	\$ 268,818,400
10/25/1994	JPA - Issue #2	Federal National Mortgage Assoc. 8.18% Due 2-15-14	\$ 518,644,189	\$ 380,152,449	\$ 439,885,804
			<u>\$ 926,522,805</u>	<u>\$ 686,794,949</u>	<u>\$ 708,704,204</u>

Irvine Ranch Water District
 Summary of Real Estate
 12/31/2011

	<u>ACQUISITION DATE</u>	<u>PROPERTY TYPE</u>	<u>OWNERSHIP INTEREST</u>	<u>ORIGINAL COST</u>	<u>RATE OF RETURN QUARTER ENDED Dec-11</u>
Sycamore Canyon	Dec-92	Apartments	Fee Simple	43,550,810	10.93%
Wood Canyon Villas	Jun-91	Apartments	Limited Partner	\$ 6,000,000	8.53%
ITC (230 Commerce)	Jul-03	Office Building	Fee Simple	5,739,845	9.89%
Waterworks Business Pk.	Nov-08	Research & Dev.	Fee Simple	8,630,577	3.90%
				<u>\$ 63,921,232</u>	<u>9.66%</u>

**IRVINE RANCH WATER DISTRICT
INTEREST RATE SWAP MONTHLY SUMMARY REPORT - DETAIL
February 29, 2012**

Exhibit "B"

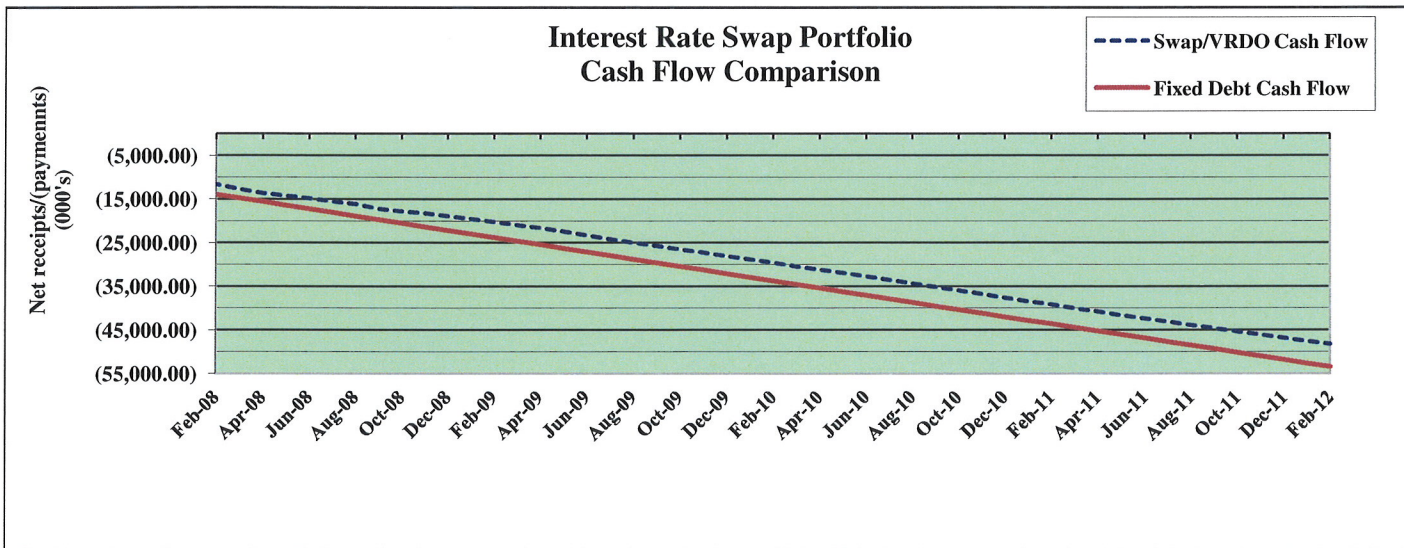
LIBOR Avg %	Prior Mo.	Current Mo.	12-Mo Avg
	0.24%	0.28%	0.23%

Current Fiscal Year Active Swaps								Cash Flow				Mark to Market	
Effective Date	Maturity Date	Years to Maturity	Counter Party	Notional Amt	Type	Base Index	Fixed Rate	Cash Flow			(Since 6/06)	Current Mark to Market	Notional Difference
								Prior Month	Current Month	Fiscal YTD	Cumulative Cash Flow		

Fixed Payer Swaps - By Effective Date													
6/4/2006	6/4/2019	7.3	ML	\$ 20,000,000	FXP	LIBOR	6.200%	\$ (101,594)	\$ (92,142)	\$ (790,829)	\$ (4,642,419)	\$ 13,558,162	\$ (6,441,838)
6/4/2006	6/4/2019	7.3	CG	\$ 20,000,000	FXP	LIBOR	6.200%	\$ (101,594)	\$ (92,142)	(790,829)	(4,642,419)	13,486,023	(6,513,977)
6/17/2006	6/17/2019	7.3	CG	\$ 30,000,000	FXP	LIBOR	6.140%	\$ (151,022)	\$ (136,768)	(1,174,505)	(6,872,691)	20,324,360	(9,675,640)
3/10/2007	3/10/2029	17.0	ML	\$ 30,000,000	FXP	LIBOR	5.687%	\$ (139,196)	\$ (126,194)	(1,084,024)	(6,004,558)	16,477,378	(13,522,622)
3/10/2007	3/10/2029	17.0	CG	\$ 30,000,000	FXP	LIBOR	5.687%	(139,196)	(126,194)	(1,084,024)	(6,004,558)	16,240,792	(13,759,208)
Totals/Weighted Avgs		11.8		\$ 130,000,000			5.949%	\$ (632,602)	\$ (573,440)	\$ (4,924,211)	\$ (28,166,646)	\$ 80,086,715	\$ (49,913,285)
Total Current Year Active Swaps				\$ 130,000,000				\$ (632,602)	\$ (573,440)	\$ (4,924,211)	\$ (28,166,646)	\$ 80,086,715	\$ (49,913,285)

Current Fiscal Year Terminated Swaps								Cash Flow				Mark to Market	
Effective Date	Maturity Date		Counter Party	Notional Amt	Type	Base Index	Fixed Rate	Cash Flow			Current Mark to Market	Notional Difference	
								Prior Month	Current Month	Fiscal YTD			Cumulative Cash Flow
Total Current Year Terminated Swaps								\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Current Fiscal Year - Total Swaps								Cash Flow				Mark to Market	
								Prior Month	Current Month	Fiscal YTD	Cumulative Cash Flow	Current Mark to Market	Notional Difference
Total Current Year Active & Terminated Swaps				\$ 130,000,000				\$ (632,602)	\$ (573,440)	\$ (4,924,211)	\$ (28,166,646)	\$ 80,086,715	\$ (49,913,285)



Cash Flow Comparison Synthetic Fixed vs. Fixed Rate Debt	
<u>Cash Flow to Date</u>	
Synthetic Fixed =	\$48,231,362
Fixed Rate =	\$53,445,630
Assumptions:	
- Fixed rate debt issued at 5.10% in Jun-06, and 4.93% in Mar-07 (estimated TE rates - Bloomberg)	
- 'Synthetic' includes swap cash flow + interest + fees to date	

Exhibit "C"

MONTHLY SUMMARY OF WIRE TRANSFERS AND ACH PAYMENTS

FEBRUARY
2012

DATE	AMOUNT	VENDOR	PURPOSE
2/10/2012	696,529.12	BANK OF AMERICA	PAYROLL 2/10/12
2/24/2012	704,265.82	BANK OF AMERICA	PAYROLL 2/24/12
	<u><u>\$1,400,794.94</u></u>		

Exhibit "D"

IRWD Ledger Payment Register For 01-FEB-12 To 29-FEB-12 Report Date: 01-MAR-2012 13:22
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 1
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
327179		02-FEB-12	Alexander Murphy		100.00			Negotiable
327180		02-FEB-12	Anthony Mossbarger		397.60			Negotiable
327181		02-FEB-12	Charles Hjorth		210.00			Negotiable
327182		02-FEB-12	Christopher Fike		37.28			Negotiable
327183		02-FEB-12	Cynthia Beck		170.00			Negotiable
327184		02-FEB-12	Eileen Lin		120.00			Negotiable
327185		02-FEB-12	Franklin Soto		210.00			Negotiable
327186		02-FEB-12	Gina Jackson		33.00			Negotiable
327187		02-FEB-12	Harry Cho		238.00			Negotiable
327188		02-FEB-12	Jack Morales		70.00			Negotiable
327189		02-FEB-12	Jason La		150.00			Negotiable
327190		02-FEB-12	Kenneth Erwin		51.48			Negotiable
327191		02-FEB-12	Kirsten McLaughlin		99.90			Negotiable
327192		02-FEB-12	Leslie Bonkowski		255.14			Negotiable
327193		02-FEB-12	Richard Torres		78.00			Negotiable
327194		02-FEB-12	Rodolfo Perez		162.40			Negotiable
327195		02-FEB-12	Soha Vazirnia		63.27			Negotiable
327196		02-FEB-12	Wayne Posey		482.50			Negotiable
327197		02-FEB-12	ACE SAW & SUPPLY		87.50			Negotiable
327198		02-FEB-12	AFLAC		5,467.42			Negotiable
327199		02-FEB-12	AIRGAS-WEST, INC.		399.21			Negotiable
327200		02-FEB-12	APPLIED TECHNOLOGY GROUP INC		2,997.96			Negotiable
327201		02-FEB-12	ARCADIS U.S., INC.		2,991.42			Negotiable
327202		02-FEB-12	ARMORCAST PRODUCTS COMPANY		1,473.93			Negotiable
327203		02-FEB-12	AT&T		51.31			Negotiable
327204		02-FEB-12	AT&T		442.13			Negotiable
327205		02-FEB-12	AYRES HOTEL AND SUITES (DBA)		3,098.76			Negotiable
327206		02-FEB-12	BAKERSFIELD WELL & PUMP CO		180,359.10			Negotiable
327207		02-FEB-12	BELL PIPE & SUPPLY CO		202.03			Negotiable
327208		02-FEB-12	BIOMAGIC INC		8,979.90			Negotiable
327209		02-FEB-12	BUSH & ASSOCIATES INC		5,024.00			Negotiable
327210		02-FEB-12	C WELLS PIPELINE MATERIALS INC		1,928.45			Negotiable
327211		02-FEB-12	CALIFORNIA BARRICADE INC		700.00			Negotiable
327212		02-FEB-12	CALIFORNIA TRUCK EQUIPMENT COMPANY		9,999.20			Negotiable
327213		02-FEB-12	CALTROL INC		1,258.40			Negotiable
327214		02-FEB-12	CAPTIVE AUDIENCE MARKETING INC.		85.12			Negotiable

IRWD Ledger Payment Register For 01-FEB-12 To 29-FEB-12 Report Date: 01-MAR-2012 13:22
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 2
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
327215		02-FEB-12	CHEM TECH INTERNATIONAL INC		6,261.20			Negotiable
327216		02-FEB-12	CITY OF TUSTIN		711.00			Negotiable
327217		02-FEB-12	COLONIAL LIFE & ACCIDENT INSURANCE CO.		1,854.94			Negotiable
327218		02-FEB-12	COMMERCE ENERGY INC		2,245.36			Negotiable
327219		02-FEB-12	COMPUCOM SYSTEMS, INC.		33,733.44			Negotiable
327220		02-FEB-12	CONYBEARE INC		5,495.40			Negotiable
327221		02-FEB-12	CONTROLLED KEY SYSTEMS INC		388.20			Negotiable
327222		02-FEB-12	CORELOGIC INC		12.00			Negotiable
327223		02-FEB-12	COX COMMUNICATIONS		31.55			Negotiable
327224		02-FEB-12	CREDENTIAL CHECK CORPORATION		23.50			Negotiable
327225		02-FEB-12	DCSE INC		6,810.00			Negotiable
327226		02-FEB-12	DEE JASPAR & ASSOCIATES, INC.		328.85			Negotiable
327227		02-FEB-12	DJ NELSON & SON POOL SERVICE		1,780.00			Negotiable
327228		02-FEB-12	DUDEK		19,303.01			Negotiable
327229		02-FEB-12	ELECTRABOND		380.00			Negotiable
327230		02-FEB-12	EMEDCO		102.59			Negotiable
327231		02-FEB-12	ENVIRONMENTAL ENGINEERING AND		36,717.96			Negotiable

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
327232	02-FEB-12	02-FEB-12	CONTRACTING, INC. ENVIRONMENTAL EXPRESS INC		1,729.31			Negotiable
327233	02-FEB-12	02-FEB-12	ESA PWA		5,312.93			Negotiable
327234	02-FEB-12	02-FEB-12	EXPRESSAIR		72.00			Negotiable
327235	02-FEB-12	02-FEB-12	EXTERRAN ENERGY SOLUTIONS LP		853.24			Negotiable
327236	02-FEB-12	02-FEB-12	FASTENAL COMPANY		1,701.83			Negotiable
327237	02-FEB-12	02-FEB-12	FEDEX		2,070.89			Negotiable
327238	02-FEB-12	02-FEB-12	FEDEX NATIONAL LTL, INC		1,625.62			Negotiable
327239	02-FEB-12	02-FEB-12	FISERV		775.25			Negotiable
327240	02-FEB-12	02-FEB-12	FISHER SCIENTIFIC COMPANY LLC		1,135.22			Negotiable
327241	02-FEB-12	02-FEB-12	FRONTLINE MANAGEMENT INC		1,918.25			Negotiable
327242	02-FEB-12	02-FEB-12	FT ZIEBARTH COMPANY		151,806.36			Negotiable
327243	02-FEB-12	02-FEB-12	GANAHL LUMBER CO.		454.88			Negotiable

IRWD Ledger Payment Register For 01-FEB-12 To 29-FEB-12 Report Date: 01-MAR-2012 13:22
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 3
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
327244	02-FEB-12	02-FEB-12	GEI CONSULTANTS INC		61,368.76			Negotiable
327245	02-FEB-12	02-FEB-12	GOLDMAN, SACHS & CO		20,194.63			Negotiable
327246	02-FEB-12	02-FEB-12	GRAINGER		1,402.50			Negotiable
327247	02-FEB-12	02-FEB-12	GRAYBAR ELECTRIC COMPANY		190.46			Negotiable
327248	02-FEB-12	02-FEB-12	H2O INNOVATION USA INC		2,016.30			Negotiable
327249	02-FEB-12	02-FEB-12	HACH COMPANY		534.08			Negotiable
327250	02-FEB-12	02-FEB-12	HARTFORD LIFE AND ACCIDENT INSURANCE COMPANY		180.38			Negotiable
327251	02-FEB-12	02-FEB-12	HDR ENGINEERING INC		31,774.57			Negotiable
327252	02-FEB-12	02-FEB-12	HENRY PRATT COMPANY		35,542.42			Negotiable
327253	02-FEB-12	02-FEB-12	HILL BROTHERS CHEMICAL COMPANY		4,624.38			Negotiable
327254	02-FEB-12	02-FEB-12	HOME DEPOT USA INC		761.80			Negotiable
327255	02-FEB-12	02-FEB-12	HR/LABOR SOLUTIONS INC		600.00			Negotiable
327256	02-FEB-12	02-FEB-12	HYAS GROUP LLC		700.00			Negotiable
327257	02-FEB-12	02-FEB-12	IDEXX DISTRIBUTION, INC		2,706.68			Negotiable
327258	02-FEB-12	02-FEB-12	II FUELS INC		13,628.49			Negotiable
327259	02-FEB-12	02-FEB-12	IRVINE PIPE & SUPPLY INC		3,472.46			Negotiable
327260	02-FEB-12	02-FEB-12	IRWD-PETTY CASH CUSTODIAN		383.17			Negotiable
327261	02-FEB-12	02-FEB-12	JCI JONES CHEMICALS INC		6,606.60			Negotiable
327262	02-FEB-12	02-FEB-12	JOHN G. ALEVIKOS D.O. INC.		464.99			Negotiable
327263	02-FEB-12	02-FEB-12	KOCH MEMBRANE SYSTEMS		6,631.82			Negotiable
327264	02-FEB-12	02-FEB-12	L&S CONSTRUCTION INC		47,655.00			Negotiable
327265	02-FEB-12	02-FEB-12	LAB SAFETY SUPPLY INC		509.69			Negotiable
327266	02-FEB-12	02-FEB-12	LABELLE-MARVIN INC		9,830.00			Negotiable
327267	02-FEB-12	02-FEB-12	LAGUNA BEACH COUNTY WATER DISTRICT		4,417.81			Negotiable
327268	02-FEB-12	02-FEB-12	LEE & SAKAHARA ARCHITECTS, INC		882.50			Negotiable

IRWD Ledger Payment Register For 01-FEB-12 To 29-FEB-12 Report Date: 01-MAR-2012 13:22
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 4
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
327269	02-FEB-12	02-FEB-12	LEWIS OPERATING CORP		11,003.12			Negotiable
327270	02-FEB-12	02-FEB-12	MARVIN GARDENS LLC		2,593.70			Negotiable
327271	02-FEB-12	02-FEB-12	MBC APPLIED ENVIRONMENTAL SCIENCES		1,000.00			Negotiable
327272	02-FEB-12	02-FEB-12	MC MASTER CARR SUPPLY CO		1,658.35			Negotiable

327273	02-FEB-12	MEL UNDERWOOD WATER TRUCKS & EQUIPMENT	910.00	Negotiable
327274	02-FEB-12	MWH AMERICAS INC	7,811.35	Negotiable
327275	02-FEB-12	NATIONAL READY MIXED CONCRETE CO	597.78	Negotiable
327276	02-FEB-12	NEW PIG CORPORATION	695.00	Negotiable
327277	02-FEB-12	NINYO & MOORE	26,075.25	Negotiable
327278	02-FEB-12	OLIN CORPORATION	2,589.34	Negotiable
327279	02-FEB-12	ON ASSIGNMENT LAB SUPPORT	2,489.60	Negotiable
327280	02-FEB-12	ONESOURCE DISTRIBUTORS LLC	2,957.42	Negotiable
327281	02-FEB-12	ORANGE, COUNTY OF	180.00	Negotiable
327282	02-FEB-12	PASCAL & LUDWIG CONSTRUCTORS	1,040,249.62	Negotiable
327283	02-FEB-12	PASCAL & LUDWIG CONSTRUCTORS	103,341.42	Negotiable
327284	02-FEB-12	PRAXAIR DISTRIBUTION INC	1,065.16	Negotiable
327285	02-FEB-12	PRE-PAID LEGAL SERVICES INC	1,599.16	Negotiable
327286	02-FEB-12	PRUDENTIAL OVERALL SUPPLY	859.62	Negotiable
327287	02-FEB-12	PSOMAS	257.65	Negotiable
327288	02-FEB-12	QUALITY ENVIRONMENTAL	1,466.63	Negotiable
327289	02-FEB-12	RAM AIR ENGINEERING INC	3,735.08	Negotiable
327290	02-FEB-12	REACH EMPLOYEE ASSISTANCE INC	785.20	Negotiable
327291	02-FEB-12	Richard Gallegos	436.78	Negotiable
327292	02-FEB-12	RMC WATER AND ENVIRONMENT	2,210.00	Negotiable
327293	02-FEB-12	RRM DESIGN GROUP	7,950.80	Negotiable
327294	02-FEB-12	SANTA ANA BLUE PRINT	1,012.03	Negotiable

IRWD Ledger Payment Register For 01-FEB-12 To 29-FEB-12 Report Date: 01-MAR-2012 13:22
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 5
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
327295		02-FEB-12	SANTA ANA CITY OF		19,760.37			Negotiable
327296		02-FEB-12	SEPARATION PROCESSES INC		2,792.00			Negotiable
327297		02-FEB-12	SIRIUS COMPUTER SOLUTIONS INC		7,172.61			Negotiable
327298		02-FEB-12	SNYDER LANGSTON L.P.		224,346.60			Negotiable
327299		02-FEB-12	SOUTH COAST WATER DISTRICT		2,335.00			Negotiable
327300		02-FEB-12	SOUTHERN CALIFORNIA EDISON COMPANY		462,577.65			Negotiable
327301		02-FEB-12	STEVEN ENTERPRISES INC		379.40			Negotiable
327302		02-FEB-12	SUPERIOR WATER TECHNOLOGIES		29,097.00			Negotiable
327303		02-FEB-12	SUPPORT PRODUCTS SERVICES		1,763.80			Negotiable
327304		02-FEB-12	SWAINS ELECTRIC MOTOR SERVICE		5,357.30			Negotiable
327305		02-FEB-12	TEKDRAULICS		19,750.09			Negotiable
327306		02-FEB-12	TETRA TECH, INC		42,553.56			Negotiable
327307		02-FEB-12	THE GAS COMPANY		2,032.80			Negotiable
327308		02-FEB-12	THOMPSON INDUSTRIAL SUPPLY		425.34			Negotiable
327309		02-FEB-12	TREE OF LIFE NURSERY		416.35			Negotiable
327310		02-FEB-12	TRIPAC MARKETING INC		2,569.47			Negotiable
327311		02-FEB-12	TRUGREEN LANDCARE LLC		150.00			Negotiable
327312		02-FEB-12	TRUGREEN LANDCARE LLC		496.75			Negotiable
327313		02-FEB-12	UNITED SITE SERVICES OF CALIFORNIA INC		344.28			Negotiable
327314		02-FEB-12	UNITED WAY OF ORANGE COUNTY		841.48			Negotiable
327315		02-FEB-12	URS CORPORATION		2,755.00			Negotiable
327316		02-FEB-12	VERIZON CALIFORNIA INC		297.98			Negotiable
327317		02-FEB-12	VWR INTERNATIONAL, LLC		19.81			Negotiable
327318		02-FEB-12	WASTE MANAGEMENT OF ORANGE COUNTY		1,647.51			Negotiable

IRWD Ledger Payment Register For 01-FEB-12 To 29-FEB-12 Report Date: 01-MAR-2012 13:22

BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 6
Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
327319		02-FEB-12	WAXIE'S		569.03			Negotiable
327320		02-FEB-12	ENTERPRISES, INC		2,249.00			Negotiable
327321		02-FEB-12	WECK LABORATORIES INC		600.00			Negotiable
327322		02-FEB-12	WESTERN EXTERMINATOR COMPANY		1,695.00			Negotiable
327323		02-FEB-12	THE SNELL GROUP BATTERY SPECIALTIES	BARRE PAY	78.74			Negotiable
327324		02-FEB-12	AMERICAN MESSAGING SERVICES LLC		287.76			Negotiable
327325		02-FEB-12	BANK OF AMERICA		20,113.89			Negotiable
327326		02-FEB-12	FISHER SCIENTIFIC COMPANY LLC		3,381.13			Negotiable
327327		02-FEB-12	GLOBALSTAR INC		170.42			Negotiable
327328		02-FEB-12	GRAINGER		1,169.18			Negotiable
327329		02-FEB-12	GRAYBAR ELECTRIC COMPANY		215.77			Negotiable
327330		02-FEB-12	IRONMAN PARTS & SERVICE		190.47			Negotiable
327331		02-FEB-12	IRVINE PIPE & SUPPLY INC		858.01			Negotiable
327332		02-FEB-12	MC MASTER CARR SUPPLY CO		127.66			Negotiable
327333		02-FEB-12	MISCOWATER		5,057.24			Negotiable
327334		02-FEB-12	PHILCO CONSTRUCTION INC		20,591.58			Negotiable
327335		02-FEB-12	PRAXAIR DISTRIBUTION INC		1,079.69			Negotiable
327336		02-FEB-12	PROTECTION ONE ALARM MONITORING INC		235.64			Negotiable
327337		02-FEB-12	VERIZON WIRELESS SERVICES LLC		7,901.02			Negotiable
327338		02-FEB-12	WASTE MANAGEMENT OF ORANGE COUNTY		2,112.49			Negotiable
327339		06-FEB-12	UNITED STATES POSTAL SERVICE	EAGAN	67.11			Negotiable
327340		09-FEB-12	Brian McKinstry		71.79			Negotiable
327341		09-FEB-12	David Hopkins		66.00			Negotiable
327342		09-FEB-12	Eric Akiyoshi		25.00			Negotiable
327343		09-FEB-12	Gretchen Maswadeh		59.40			Negotiable
327344		09-FEB-12	Jacob Moeder		30.00			Negotiable
327345		09-FEB-12	James Hamer		171.00			Negotiable
327346		09-FEB-12	Jason La		208.18			Negotiable

IRWD Ledger Payment Register For 01-FEB-12 To 29-FEB-12 Report Date: 01-MAR-2012 13:22
BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 7
Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
327347		09-FEB-12	Jenny Pan		49.33			Negotiable
327348		09-FEB-12	Lars Oldewage		89.65			Negotiable
327349		09-FEB-12	Martin Perez		220.00			Negotiable
327350		09-FEB-12	Zackariah Tegel		66.00			Negotiable
327351		09-FEB-12	ADS LLC		645.50			Negotiable
327352		09-FEB-12	ASHFORD, WALT		120.78			Negotiable
327353		09-FEB-12	ASSOCIATION OF CALIFORNIA CITIES		5,000.00			Negotiable
327354		09-FEB-12	AT&T		252.86			Negotiable
327355		09-FEB-12	AYRES HOTEL AND SUITES (DBA)		593.10			Negotiable
327356		09-FEB-12	BLACK & VEATCH CORPORATION		448,552.45			Negotiable
327357		09-FEB-12	CANON FINANCIAL SERVICES INC		3,528.35			Negotiable
327358		09-FEB-12	CITY OF IRVINE		1,500.00			Negotiable
327359		09-FEB-12	CITY OF TUSTIN		183.83			Negotiable
327360		09-FEB-12	CLEARINGHOUSE		528.45			Negotiable
327361		09-FEB-12	COMMERCIAL CLEANING SYSTEMS INC		240.00			Negotiable
327362		09-FEB-12	ONEYBEARE INC		6,596.41			Negotiable
327363		09-FEB-12	EAST ORANGE COUNTY WATER DISTRICT		7,077.64			Negotiable
327364		09-FEB-12	EMPLOYMENT DEVELOPMENT DEPARTMENT		8,130.00			Negotiable
327365		09-FEB-12	EXPRESSAIR		205.40			Negotiable

327366	09-FEB-12	FEDEX		55.09		Negotiable
327367	09-FEB-12	FRANCHISE TAX BOARD		435.33		Negotiable
327368	09-FEB-12	GUY BALANCING INC		650.00		Negotiable
327369	09-FEB-12	GWAVA TECHNOLOGIES, INC.		1,800.00		Negotiable
327370	09-FEB-12	HDR ENGINEERING INC		181,247.04		Negotiable
327371	09-FEB-12	HOME DEPOT USA INC		310.98		Negotiable
327372	09-FEB-12	II FUELS INC		26,673.14		Negotiable
327373	09-FEB-12	INTERNAL REVENUE SERVICE		1,488.65		Negotiable
327374	09-FEB-12	IRVINE PIPE & SUPPLY INC		97.40		Negotiable
327375	09-FEB-12	IRWD-PETTY CASH CUSTODIAN		980.36		Negotiable
327376	09-FEB-12	ISDOC		200.00		Negotiable

IRWD Ledger Payment Register For 01-FEB-12 To 29-FEB-12 Report Date: 01-MAR-2012 13:22
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 8
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
327377		09-FEB-12	JCI JONES CHEMICALS INC		21,861.70			Voided
327378		09-FEB-12	KELLY SERVICES INC		680.96			Negotiable
327379		09-FEB-12	KENNEDY/JENKS CONSULTANTS INC		44,964.90			Negotiable
327380		09-FEB-12	LABELLE-MARVIN INC		1,197.50			Negotiable
327381		09-FEB-12	LEE & SAKAHARA ARCHITECTS, INC		5,457.31			Negotiable
327382		09-FEB-12	LEONARD CHAIDEZ TREE SERVICE		2,450.00			Negotiable
327383		09-FEB-12	LOCHRIDGE, DAVID		1,650.00			Negotiable
327384		09-FEB-12	MALCOLM PIRNIE INC		41,712.11			Negotiable
327385		09-FEB-12	MARK ENTERPRISES, INC.		1,900.00			Negotiable
327386		09-FEB-12	MARKET-THINK LLC		7,400.00			Negotiable
327387		09-FEB-12	MERCHANTS LANDSCAPE SERVICES INC		7,280.00			Negotiable
327388		09-FEB-12	MGH PAINTING INC		7,350.00			Negotiable
327389		09-FEB-12	MUNICIPAL WATER DISTRICT OF ORANGE COUNTY		7,500.00			Negotiable
327390		09-FEB-12	MWH AMERICAS INC		300.00			Negotiable
327391		09-FEB-12	NEWPORT REAL ESTATE SERVICES INC		4,663.22			Negotiable
327392		09-FEB-12	NRP PRODUCTS LLC		6,170.00			Negotiable
327393		09-FEB-12	OCEAN BLUE ENVIRONMENTAL SERVICES INC		949.65			Negotiable
327394		09-FEB-12	OLIN CORPORATION		28,260.27			Negotiable
327395		09-FEB-12	ORANGE COUNTY TREASURER		403.31			Negotiable
327396		09-FEB-12	ORCHARD HILLS APARTMENTS		320.45			Negotiable
327397		09-FEB-12	ORDONEZ, CYNTHIA MARIE		500.17			Negotiable
327398		09-FEB-12	PALOMAR MOUNTAIN PREMIUM SPRING WATER		9,730.00			Negotiable
327399		09-FEB-12	PAUL E BRADLEY INC		3,825.00			Negotiable
327400		09-FEB-12	PAYNE & FEARS LLP		157.50			Negotiable
327401		09-FEB-12	PERS LONG TERM CARE		1,394.27			Negotiable
327402		09-FEB-12	PSB THE MARKETING SUPERSOURCE		5,042.70			Negotiable

IRWD Ledger Payment Register For 01-FEB-12 To 29-FEB-12 Report Date: 01-MAR-2012 13:22
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 9
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
327403		09-FEB-12	PTI SAND & GRAVEL INC		692.86			Negotiable
327404		09-FEB-12	RAINBOW DISPOSAL CO INC		459.26			Negotiable
327405		09-FEB-12	RAINBOW NUT & BOLT INC		7,199.86			Negotiable
327406		09-FEB-12	RBF CONSULTING		29,386.08			Negotiable
327407		09-FEB-12	RBF CONSULTING		19,601.46			Negotiable
327408		09-FEB-12	REED, JAMES D		1,936.54			Negotiable
327409		09-FEB-12	SANTA MARGARITA		20,546.32			Negotiable

327410	09-FEB-12	WATER DISTRICT						
327411	09-FEB-12	SHELF MASTER INC			1,209.51		Negotiable	
	09-FEB-12	SOUTH COAST AIR			832.82		Negotiable	
		QUALITY MANAGEMENT						
		DISTRICT						
327412	09-FEB-12	SOUTH COAST			465.46		Negotiable	
		ANSWERING SERVICE						
327413	09-FEB-12	SOUTHERN			1,468.06		Negotiable	
		CALIFORNIA EDISON						
		COMPANY						
327414	09-FEB-12	SOUTHERN			268.40		Negotiable	
		CALIFORNIA EDISON						
		COMPANY						
327415	09-FEB-12	STANTEC CONSULTING			1,504.00		Negotiable	
		SERVICES INC.						
327416	09-FEB-12	STATE BOARD OF			398.00		Negotiable	
		EQUALIZATION						
327417	09-FEB-12	STEVEN ENTERPRISES			656.50		Negotiable	
		INC						
327418	09-FEB-12	SUPERMEDIA LLC			69.75		Negotiable	
327419	09-FEB-12	T AND S LARSEN			540.00		Negotiable	
		MAINTENANCE						
327420	09-FEB-12	THE GAS COMPANY			23.69		Negotiable	
327421	09-FEB-12	TIC-RETAIL			6.47		Negotiable	
		PROPERTIES						
327422	09-FEB-12	TRUCPARCO			1,100.22		Negotiable	
327423	09-FEB-12	TRUGREEN LANDCARE			280.00		Negotiable	
		LLC						
327424	09-FEB-12	UNITED RENTALS			1,623.62		Negotiable	
		NORTHWEST INC						
327425	09-FEB-12	UNITED SITE			139.24		Negotiable	
		SERVICES OF						
		CALIFORNIA INC						
327426	09-FEB-12	WASTE MANAGEMENT			1,011.04		Negotiable	
		OF ORANGE COUNTY						

IRWD Ledger Payment Register For 01-FEB-12 To 29-FEB-12 Report Date: 01-MAR-2012 13:22
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 10
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
327427		09-FEB-12	WATERLINE		2,308.72			Negotiable
			TECHNOLOGIES INC					
327428		09-FEB-12	WAXIE'S		339.18			Negotiable
			ENTERPRISES, INC					
327429		09-FEB-12	WILLIAM RICHARD		1,980.00			Negotiable
			HORWATH					
327430		09-FEB-12	FRANCHISE TAX	SACRAMENTO	10.00			Voided
			BOARD	2				
327431		09-FEB-12	FRANCHISE TAX	SACRAMENTO	10.00			Voided
			BOARD	2				
327432		09-FEB-12	FRANCHISE TAX	SACRAMENTO	10.00			Negotiable
			BOARD	1				
327433		09-FEB-12	FRANCHISE TAX	SACRAMENTO	10.00			Voided
			BOARD	2				
327434		09-FEB-12	ATTORNEY GENERAL'S	SACRAMENTO	150.00			Negotiable
			REGISTRY OF					
			CHARITABLE TRUSTS					
327435		09-FEB-12	AARP HEALTH CARE	PAY	210.92			Negotiable
			OPTIONS					
327436		09-FEB-12	HUMANA INSURANCE	PAY	20.90			Negotiable
			COMPANY					
327437		09-FEB-12	JOHN MICHAEL COVASSI	SILVERADO	99.90			Negotiable
327438		09-FEB-12	FIRST HEALTH LIFE	PAY	38.70			Negotiable
			AND HEALTH					
			INSURANCE COMPANY					
327439		09-FEB-12	ANTHEM BLUE CROSS	LOS	388.80			Negotiable
				ANGELES				
327440		10-FEB-12	FIRST HEALTH LIFE	PAY	38.70			Negotiable
			AND HEALTH					
			INSURANCE COMPANY					
327441		10-FEB-12	FRANCHISE TAX	SACRAMENTO	10.00			Negotiable
			BOARD	1				
327442		10-FEB-12	FRANCHISE TAX	SACRAMENTO	10.00			Negotiable
			BOARD	1				
327443		10-FEB-12	FRANCHISE TAX	SACRAMENTO	10.00			Negotiable
			BOARD	1				
327444		10-FEB-12	FRANCHISE TAX	SACRAMENTO	1,039.87			Negotiable
			BOARD	1				
327445		10-FEB-12	PRINCIPAL LIFE	DES MOINES	23,356.45			Negotiable
			INSURANCE	1				
327446		10-FEB-12	THE PLUMBERS	LOS	4,778.32			Negotiable
			WAREHOUSE	ANGELES				
327447		10-FEB-12	THE PLUMBERS	LOS	7,437.98			Voided
			WAREHOUSE	ANGELES				
327448		10-FEB-12	THE PLUMBERS	LOS	7,289.22			Negotiable
			WAREHOUSE	ANGELES				

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 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 11
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)

Payment Type: All

Display Supplier Address: No

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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
327449		10-FEB-12	FRANCHISE TAX BOARD	SACRAMENTO 1	10.00			Negotiable
327450		10-FEB-12	A & Y ASPHALT CONTRACTORS INC		18,872.00			Negotiable
327451		10-FEB-12	ACTION ELECTRIC CORP		255.22			Negotiable
327452		10-FEB-12	AIRGAS-WEST, INC.		4,023.94			Negotiable
327453		10-FEB-12	ALEXANDER CONTRACT SERVICES INC		98,084.49			Negotiable
327454		10-FEB-12	AMERICAN INNOTEK INC		1,023.94			Negotiable
327455		10-FEB-12	ANTHEM BLUE CROSS		5,122.80			Negotiable
327456		10-FEB-12	AQUA-METRIC SALES COMPANY		301.24			Negotiable
327457		10-FEB-12	ARCADIS U.S., INC.		5,669.55			Negotiable
327458		10-FEB-12	ARMORCAST PRODUCTS COMPANY		3,191.24			Negotiable
327459		10-FEB-12	BILL'S SWEEPING SERVICE INC		460.00			Negotiable
327460		10-FEB-12	BIOMAGIC INC		4,312.16			Negotiable
327461		10-FEB-12	BLACK & VEATCH CORPORATION		266,059.67			Negotiable
327462		10-FEB-12	BRENNTAG PACIFIC INC		601.50			Negotiable
327463		10-FEB-12	BRITHINEE ELECTRIC		10,086.31			Negotiable
327464		10-FEB-12	BUSH & ASSOCIATES INC		2,512.00			Negotiable
327465		10-FEB-12	C WELLS PIPELINE MATERIALS INC		3,335.84			Negotiable
327466		10-FEB-12	CALIFORNIA BARRICADE INC		10,347.00			Negotiable
327467		10-FEB-12	CAMERON WELDING SUPPLY		1,293.00			Negotiable
327468		10-FEB-12	CANON FINANCIAL SERVICES INC		6,136.50			Negotiable
327469		10-FEB-12	CAPTIVE AUDIENCE MARKETING INC.		85.12			Negotiable
327470		10-FEB-12	CARL WARREN & CO		842.47			Negotiable
327471		10-FEB-12	CLEAN ENERGY FUELS		569.66			Negotiable
327472		10-FEB-12	COASTAL TRAFFIC SYSTEMS, INC		510.00			Negotiable
327473		10-FEB-12	COASTAL TRAFFIC SYSTEMS, INC		510.00			Negotiable
327474		10-FEB-12	COMMERCIAL CLEANING SYSTEMS INC		21,211.98			Negotiable

IRWD Ledger

Payment Register For 01-FEB-12 To 29-FEB-12

Report Date: 01-MAR-2012 13:22

BANK: Bank of America N.A.

Branch : Los Angeles

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Bank Account Currency: USD (US Dollar)

Payment Currency: USD (US Dollar)

Payment Type: All

Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
327475		10-FEB-12	CREDENTIAL CHECK CORPORATION		56.50			Negotiable
327476		10-FEB-12	D & H WATER SYSTEMS INC.		7,326.15			Negotiable
327477		10-FEB-12	DATASITE INC		8,039.00			Negotiable
327478		10-FEB-12	DRAEGER SAFETY INC		1,140.58			Negotiable
327479		10-FEB-12	DUDLEY RIDGE WATER DISTRICT		25,702.36			Negotiable
327480		10-FEB-12	EAST ORANGE COUNTY WATER DISTRICT		1,663.23			Negotiable
327481		10-FEB-12	ECOLOGY CONTROL INDUSTRIES		1,967.74			Negotiable
327482		10-FEB-12	EI&C ENGINEERING INC		14,440.00			Negotiable
327483		10-FEB-12	EISEL ENTERPRISES INC		3,944.94			Negotiable
327484		10-FEB-12	EMA INC		17,163.32			Negotiable
327485		10-FEB-12	EXPRESSAIR		68.00			Negotiable
327486		10-FEB-12	EXTERRAN ENERGY SOLUTIONS LP		687.07			Negotiable
327487		10-FEB-12	FARRELL & ASSOCIATES		172.90			Negotiable
327488		10-FEB-12	FISHER SCIENTIFIC COMPANY LLC		2,228.98			Negotiable
327489		10-FEB-12	FLEETWOOD CONTINENTAL INC		2,143.73			Negotiable
327490		10-FEB-12	FRONTLINE MANAGEMENT INC		5,040.74			Negotiable
327491		10-FEB-12	G.M. SAGER CONSTRUCTION		17,200.00			Negotiable

327492	10-FEB-12	CO, INC GMU GEOTECHNICAL INC	11,512.35	Negotiable
327493	10-FEB-12	GRAINGER	395.89	Negotiable
327494	10-FEB-12	GRAYBAR ELECTRIC COMPANY	295.54	Negotiable
327495	10-FEB-12	HACH COMPANY	620.34	Negotiable
327496	10-FEB-12	HARRINGTON INDUSTRIAL PLASTICS LLC	666.48	Negotiable
327497	10-FEB-12	HILL BROTHERS CHEMICAL COMPANY	15,016.54	Negotiable
327498	10-FEB-12	HUNSAKER & ASSOCIATES IRVINE	1,792.00	Negotiable
327499	10-FEB-12	IDENTICARD SYSTEMS WORLDWIDE INC	851.37	Negotiable

IRWD Ledger Payment Register For 01-FEB-12 To 29-FEB-12 Report Date: 01-MAR-2012 13:22
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 13
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
327500		10-FEB-12	IDEXX DISTRIBUTION, INC		4,703.29			Negotiable
327501		10-FEB-12	INDUSTRIAL ELECTRIC MACHINERY LLC		5,109.57			Negotiable
327502		10-FEB-12	IRVINE PIPE & SUPPLY INC		2,480.86			Negotiable
327503		10-FEB-12	JCI JONES CHEMICALS INC		7,861.70			Negotiable
327504		10-FEB-12	JONES & STOKES ASSOCIATES, INC		1,900.00			Negotiable
327505		10-FEB-12	KENNEDY/JENKS CONSULTANTS INC		35,860.17			Negotiable
327506		10-FEB-12	LENOVO UNITED STATES INC		6,101.79			Negotiable
327507		10-FEB-12	LEONARD CHAIDEZ TREE SERVICE		1,480.00			Negotiable
327508		10-FEB-12	LI, PAOL		1,270.00			Negotiable
327509		10-FEB-12	MBC APPLIED ENVIRONMENTAL SCIENCES		2,000.00			Negotiable
327510		10-FEB-12	MC MASTER CARR SUPPLY CO		1,649.19			Negotiable
327511		10-FEB-12	METRON FARNIER, LLC		4,225.62			Negotiable
327512		10-FEB-12	MUTUAL PROPANE		18.00			Negotiable
327513		10-FEB-12	NATIONAL READY MIXED CONCRETE CO		1,646.48			Negotiable
327514		10-FEB-12	NEPTUNE TECHNOLOGY		64,469.63			Negotiable
327515		10-FEB-12	NEWAGE INDUSTRIES INC		172.54			Negotiable
327516		10-FEB-12	NMG GEOTECHNICAL INC		6,639.00			Negotiable
327517		10-FEB-12	O'HAREN GOVERNMENT RELATIONS		6,500.00			Negotiable
327518		10-FEB-12	ON ASSIGNMENT LAB SUPPORT		2,489.60			Negotiable
327519		10-FEB-12	ONESOURCE DISTRIBUTORS LLC		7,952.24			Negotiable
327520		10-FEB-12	PACIFIC PARTS & CONTROLS INC		773.61			Negotiable
327521		10-FEB-12	PARKWAY LAWNMOWER SHOP		634.42			Negotiable
327522		10-FEB-12	PAUL E BRADLEY INC		4,185.00			Negotiable
327523		10-FEB-12	PINNACLE LANDSCAPE COMPANY		6,560.00			Negotiable

IRWD Ledger Payment Register For 01-FEB-12 To 29-FEB-12 Report Date: 01-MAR-2012 13:22
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 14
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
327524		10-FEB-12	PONTON INDUSTRIES INC		5,388.77			Negotiable
327525		10-FEB-12	PRAXAIR DISTRIBUTION INC		1,308.11			Negotiable
327526		10-FEB-12	PRIME CONTROLS COMPANY INC		1,749.31			Negotiable
327527		10-FEB-12	PRIME TILE INC		6,875.00			Negotiable
327528		10-FEB-12	PRUDENTIAL OVERALL SUPPLY		776.89			Negotiable
327529		10-FEB-12	PSOMAS		5,471.50			Negotiable
327530		10-FEB-12	PTI SAND & GRAVEL		1,563.56			Negotiable

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
327531	10-FEB-12	INC			5,945.00			Negotiable
327532	10-FEB-12	PURE EFFECT INC			840.45			Negotiable
327533	10-FEB-12	R & S SOIL PRODUCTS INC			3,238.79			Negotiable
327534	10-FEB-12	RAM AIR ENGINEERING INC			217,922.55			Negotiable
327535	10-FEB-12	RBF CONSULTING			8,056.92			Negotiable
327536	10-FEB-12	RJS SOFTWARE SYSTEMS INC			2,437.50			Negotiable
327537	10-FEB-12	RRM DESIGN GROUP			66.12			Negotiable
327538	10-FEB-12	SANTA ANA BLUE PRINT			1,543.89			Negotiable
327539	10-FEB-12	SHAMROCK SUPPLY CO INC			7,214.39			Negotiable
327540	10-FEB-12	SIRIUS COMPUTER SOLUTIONS INC			281.66			Negotiable
327541	10-FEB-12	SOUTH COAST WATER SOUTH ORANGE COUNTY WASTEWATER AUTHORITY			91,856.50			Negotiable
327542	10-FEB-12	SOUTHERN CALIFORNIA SECURITY CENTER, INC.			1,464.82			Negotiable
327543	10-FEB-12	SPECTER INSTRUMENTS			395.00			Negotiable
327544	10-FEB-12	SUPERMEDIA LLC			69.75			Negotiable
327545	10-FEB-12	SYNAGRO SOUTH, LLC			19,260.85			Negotiable
327546	10-FEB-12	TESTAMERICA LABORATORIES, INC			576.45			Negotiable
327547	10-FEB-12	TETRA TECH, INC			82,768.80			Negotiable
327548	10-FEB-12	TETRA TECH, INC			21,090.00			Negotiable
327549	10-FEB-12	TRENCH SHORING COMPANY			77.75			Negotiable

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 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 15
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
327550	10-FEB-12	TROPICAL PLAZA NURSERY INC			3,100.00			Negotiable
327551	10-FEB-12	UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA			639.00			Negotiable
327552	10-FEB-12	URS CORPORATION			3,363.78			Negotiable
327553	10-FEB-12	US PEROXIDE LLC			20,570.55			Negotiable
327554	10-FEB-12	UTILITY SYSTEMS SCIENCE & SOFTWARE INC.			1,448.56			Negotiable
327555	10-FEB-12	WALTERS WHOLESALE ELECTRIC			126.24			Negotiable
327556	10-FEB-12	WAXIE'S ENTERPRISES, INC			447.79			Negotiable
327557	10-FEB-12	WECK LABORATORIES INC			340.00			Negotiable
327558	10-FEB-12	WESTERN EXTERMINATOR COMPANY			1,395.00			Negotiable
327559	10-FEB-12	WESTERN MUNICIPAL WATER DISTRICT			13,435.50			Negotiable
327560	10-FEB-12	WONDERWARE WEST			69,566.15			Negotiable
327561	10-FEB-12	XYLEM DEWATERING SOLUTIONS INC			2,366.19			Negotiable
327562	16-FEB-12	DEVISE ENGINEERINGMISSION INC	VIEJO		5,848.27			Negotiable
327563	16-FEB-12	CITY OF TUSTIN	TUSTIN		10,000.00			Negotiable
327564	16-FEB-12	DEPARTMENT OF CONSUMER AFFAIRS	SACRAMENTO	1	120.00			Negotiable
327565	16-FEB-12	Amy McNulty			58.50			Negotiable
327566	16-FEB-12	Brian Bystrom			115.00			Negotiable
327567	16-FEB-12	Christopher Fike			112.44			Negotiable
327568	16-FEB-12	Eric Flotho			885.63			Negotiable
327569	16-FEB-12	Lars Oldewage			849.51			Negotiable
327570	16-FEB-12	ADS LLC			1,291.00			Negotiable
327571	16-FEB-12	AT&T			48.00			Negotiable
327572	16-FEB-12	AT&T			2,645.15			Negotiable
327573	16-FEB-12	AT&T			1,887.14			Negotiable
327574	16-FEB-12	AYRES HOTEL AND SUITES (DBA)			494.25			Negotiable
327575	16-FEB-12	BCGR			385.00			Negotiable
327576	16-FEB-12	BDC SPECIAL WASTE			200.00			Negotiable
327577	16-FEB-12	BOOT WORLD INC			1,182.53			Negotiable
327578	16-FEB-12	BORCHARD SURVEYING & MAPPING, INC.			7,092.50			Negotiable

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 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 16
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
327579		16-FEB-12	BUTIER ENGINEERING INC		20,984.00			Negotiable
327580		16-FEB-12	CANON BUSINESS SOLUTIONS INC		4,808.92			Voided
327581		16-FEB-12	CANON FINANCIAL SERVICES INC		3,191.81			Negotiable
327582		16-FEB-12	CH2M HILL, INC		9,177.00			Negotiable
327583		16-FEB-12	ONEYBEARE INC		8,654.00			Negotiable
327584		16-FEB-12	CONTROLLED KEY SYSTEMS INC		4,927.18			Negotiable
327585		16-FEB-12	EAGLE GRAPHICS INC		1,761.51			Negotiable
327586		16-FEB-12	EMPLOYEE BENEFIT SPECIALIST, INC		830.00			Negotiable
327587		16-FEB-12	ENVIRONMENTAL EXPRESS INC		2,012.89			Negotiable
327588		16-FEB-12	FEDEX		48.86			Negotiable
327589		16-FEB-12	FERGUSON, DAVID		5,582.74			Negotiable
327590		16-FEB-12	HACH COMPANY		126.28			Negotiable
327591		16-FEB-12	HEARTLAND BUSINESS CREDIT CORPORATION		1,141.16			Negotiable
327592		16-FEB-12	HOME DEPOT USA INC		670.74			Negotiable
327593		16-FEB-12	IRVINE PIPE & SUPPLY INC		1,603.64			Negotiable
327594		16-FEB-12	JP MACHINE TOOL SERVICE		375.00			Negotiable
327595		16-FEB-12	KELLY SERVICES INC		1,532.16			Negotiable
327596		16-FEB-12	KEY EQUIPMENT FINANCE		3,972.93			Negotiable
327597		16-FEB-12	LEHIGH OUTFITTERS		1,965.56			Voided
327598		16-FEB-12	LEWIS OPERATING CORP		28,510.50			Negotiable
327599		16-FEB-12	MALCOLM PIRNIE INC		30,008.75			Negotiable
327600		16-FEB-12	MBC APPLIED ENVIRONMENTAL SCIENCES		2,000.00			Negotiable
327601		16-FEB-12	MC MASTER CARR SUPPLY CO		549.32			Negotiable
327602		16-FEB-12	MUNICIPAL WATER DISTRICT OF ORANGE COUNTY		189,713.98			Negotiable
327603		16-FEB-12	NATIONAL READY MIXED CONCRETE CO		395.44			Negotiable
327604		16-FEB-12	NEW DIMENSION CONSTRUCTION		5,551.20			Negotiable
327605		16-FEB-12	NEW WAVE COMPUTER SUPPLY LLC		141.38			Negotiable

IRWD Ledger
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Report Date: 01-MAR-2012 13:22
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar) Page: 17
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
327606		16-FEB-12	NEWPORT REAL ESTATE SERVICES INC		7,500.00			Negotiable
327607		16-FEB-12	NIAGARA CONSERVATION CORP.		56,800.00			Negotiable
327608		16-FEB-12	NMG GEOTECHNICAL INC		9,194.40			Negotiable
327609		16-FEB-12	OLIN CORPORATION		5,129.20			Negotiable
327610		16-FEB-12	ORANGE COUNTY SANITATION DISTRICT		3,140.00			Negotiable
327611		16-FEB-12	PACIFIC COAST BOLT CORP		43.10			Negotiable
327612		16-FEB-12	PAPER DEPOT DOCUMENT DESTRUCTION LLC		2,681.24			Negotiable
327613		16-FEB-12	PINNACLE TOWERS LLC		8.35			Negotiable
327614		16-FEB-12	PMK ASSOCIATES INC		5,100.00			Negotiable
327615		16-FEB-12	PSOMAS		19,808.62			Negotiable
327616		16-FEB-12	RAM AIR ENGINEERING INC		2,266.17			Negotiable
327617		16-FEB-12	RBF CONSULTING		102,450.76			Negotiable
327618		16-FEB-12	REACH EMPLOYEE ASSISTANCE INC		785.20			Negotiable
327619		16-FEB-12	REED, JAMES D		1,936.54			Voided
327620		16-FEB-12	RELIANT TESTING ENGINEERS, INC.		5,019.00			Negotiable
327621		16-FEB-12	RIDGE LANDSCAPE ARCHITECTS		253.62			Negotiable
327622		16-FEB-12	RINGCLEAR LLC		56.76			Negotiable

327623	16-FEB-12	SHAPERO, DAVID & THERESA	144.99	Negotiable
327624	16-FEB-12	SOUTHERN CALIFORNIA EDISON COMPANY	4,215.33	Negotiable
327625	16-FEB-12	SOUTHERN CALIFORNIA EDISON COMPANY	29,547.99	Negotiable
327626	16-FEB-12	STANTEC CONSULTING SERVICES INC.	1,941.10	Negotiable
327627	16-FEB-12	TESTAMERICA LABORATORIES, INC	231.00	Negotiable
327628	16-FEB-12	THE GAS COMPANY	112.64	Negotiable
327629	16-FEB-12	TRANSFORMER TESTING	6,718.00	Negotiable

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 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 18
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
327630		16-FEB-12	UNITED SITE SERVICES OF CALIFORNIA INC		278.48			Negotiable
327631		16-FEB-12	US BANK NAT'L ASSOC N.DAKOTA		750.00			Negotiable
327632		16-FEB-12	VERIZON CALIFORNIA INC		43.04			Negotiable
327633		16-FEB-12	WASTE MANAGEMENT OF ORANGE COUNTY		1,161.25			Negotiable
327634		16-FEB-12	WATERLINE TECHNOLOGIES INC		5,407.50			Negotiable
327635		16-FEB-12	WINGTIP, LLC		2,175.00			Negotiable
327636		16-FEB-12	AAF INTERNATIONAL		881.98			Negotiable
327637		16-FEB-12	ACTION ELECTRIC CORP		1,318.32			Negotiable
327638		16-FEB-12	AMERICAN DOCK BOXES, INC.		502.25			Negotiable
327639		16-FEB-12	AQUA BEN CORPORATION		4,498.02			Negotiable
327640		16-FEB-12	ARCADIS U.S., INC.		1,928.50			Negotiable
327641		16-FEB-12	BATTERY SPECIALTIES		3,484.56			Negotiable
327642		16-FEB-12	BAVCO BACKFLOW APPARATUS & VALVE COMPANY		489.07			Negotiable
327643		16-FEB-12	BRENNTAG PACIFIC INC		12,237.03			Negotiable
327644		16-FEB-12	BRITHINEE ELECTRIC		3,722.55			Negotiable
327645		16-FEB-12	CABELA'S MARKETING AND BRAND MANAGEMENT, INC.		919.85			Negotiable
327646		16-FEB-12	CAL WATER PURIFICATION		80.00			Negotiable
327647		16-FEB-12	CALIFORNIA BARRICADE INC		1,600.00			Negotiable
327648		16-FEB-12	CALTROL INC		749.64			Negotiable
327649		16-FEB-12	COASTAL TRAFFIC SYSTEMS, INC		510.00			Negotiable
327650		16-FEB-12	CONDITION MONITORING SERVICES INC		10,600.00			Negotiable
327651		16-FEB-12	CONTROLLED KEY SYSTEMS INC		668.00			Negotiable
327652		16-FEB-12	CR & R INCORPORATED		11.98			Negotiable

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 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 19
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
327653		16-FEB-12	DUDLEY RIDGE WATER DISTRICT		2,750.00			Negotiable
327654		16-FEB-12	ENDRESS AND HAUSER INC		4,178.14			Negotiable
327655		16-FEB-12	FARRELL & ASSOCIATES		392.46			Negotiable
327656		16-FEB-12	FISERV		10,170.52			Negotiable
327657		16-FEB-12	FISHER SCIENTIFIC COMPANY LLC		5,616.07			Negotiable
327658		16-FEB-12	FIVE POINT PARTNERS LLC		1,401.76			Negotiable
327659		16-FEB-12	GANAHL LUMBER CO.		127.68			Negotiable
327660		16-FEB-12	GARZA INDUSTRIES,		1,292.57			Negotiable

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
327661	16-FEB-12	INC	GENERAL CHEMICAL PERFORMANCE		350.80			Negotiable
327662	16-FEB-12	GRAINGER			1,506.03			Negotiable
327663	16-FEB-12	GRAYBAR ELECTRIC COMPANY			1,182.15			Negotiable
327664	16-FEB-12	HACH COMPANY			464.34			Negotiable
327665	16-FEB-12	HASLER			394.37			Negotiable
327666	16-FEB-12	HILL BROTHERS CHEMICAL COMPANY			1,439.36			Negotiable
327667	16-FEB-12	HOME DEPOT USA INC			75.75			Negotiable
327668	16-FEB-12	HYAS GROUP LLC			1,500.00			Negotiable
327669	16-FEB-12	INDUSTRIAL ELECTRIC MACHINERY LLC			5,169.60			Negotiable
327670	16-FEB-12	INDUSTRIAL METAL SUPPLY CO			117.88			Negotiable
327671	16-FEB-12	IRVINE PIPE & SUPPLY INC			1,057.01			Negotiable
327672	16-FEB-12	LAB SAFETY SUPPLY INC			34.26			Negotiable
327673	16-FEB-12	LAYNE CHRISTENSEN COMPANY			9,324.33			Negotiable
327674	16-FEB-12	LEE & SAKAHARA ARCHITECTS, INC			2,180.01			Negotiable
327675	16-FEB-12	LENOVO UNITED STATES INC			13,417.84			Negotiable
327676	16-FEB-12	MC MASTER CARR SUPPLY CO			902.21			Negotiable
327677	16-FEB-12	MCCALL'S METERS, INC.			3,127.97			Negotiable
327678	16-FEB-12	MCR TECHNOLOGIES INC			65,299.22			Negotiable

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 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 20
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
327679	16-FEB-12	MWH AMERICAS INC			1,057.50			Negotiable
327680	16-FEB-12	NATIONAL READY MIXED CONCRETE CO			517.44			Negotiable
327681	16-FEB-12	NINYO & MOORE			25,974.25			Negotiable
327682	16-FEB-12	NMG GEOTECHNICAL INC			7,596.10			Negotiable
327683	16-FEB-12	OCEAN BLUE ENVIRONMENTAL SERVICES INC			1,798.97			Negotiable
327684	16-FEB-12	ON ASSIGNMENT LAB SUPPORT			2,178.40			Negotiable
327685	16-FEB-12	ONESOURCE			357.28			Negotiable
327686	16-FEB-12	DISTRIBUTORS LLC			1,720.00			Negotiable
327687	16-FEB-12	ORANGE COUNTY FIRE PROTECTION			385.50			Negotiable
327688	16-FEB-12	ORANGE, COUNTY OF PAULUS ENGINEERING INC			82,698.79			Negotiable
327689	16-FEB-12	PRAXAIR			162.75			Negotiable
327690	16-FEB-12	DISTRIBUTION INC			840.43			Negotiable
327691	16-FEB-12	PRUDENTIAL OVERALL SUPPLY			270.46			Negotiable
327692	16-FEB-12	PURE EFFECT INC			345.35			Negotiable
327693	16-FEB-12	QUALITY ENVIRONMENTAL			1,292.00			Negotiable
327694	16-FEB-12	RADWELL INTERNATIONAL INC			1,789.47			Negotiable
327695	16-FEB-12	SANTA ANA BLUE PRINT			3,700.00			Negotiable
327696	16-FEB-12	SECURTEC DISTRICT PATROL INC			563.36			Negotiable
327697	16-FEB-12	SHAMROCK SUPPLY CO INC			40.00			Negotiable
327698	16-FEB-12	SOUTH COAST WATER			1,604.00			Negotiable
327699	16-FEB-12	STEVEN ENTERPRISES INC			2,273.78			Negotiable
327700	16-FEB-12	SWAINS ELECTRIC MOTOR SERVICE			192.15			Negotiable
327701	16-FEB-12	TESTAMERICA LABORATORIES, INC			77,328.99			Negotiable
327702	16-FEB-12	US BANK NAT'L ASSOCIATION NORTH DAKOTA			29,876.75			Negotiable
327703	16-FEB-12	USA BLUEBOOK			479.89			Negotiable

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 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 21
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
327704		16-FEB-12	USA MOBILITY WIRELESS INC		70.97			Negotiable
327705		16-FEB-12	VA CONSULTING, INC		1,141.00			Negotiable
327706		16-FEB-12	VULCAN MATERIALS COMPANY		1,182.30			Negotiable
327707		16-FEB-12	WALTERS WHOLESALE ELECTRIC		242.14			Negotiable
327708		16-FEB-12	WAXIE'S ENTERPRISES, INC		452.06			Negotiable
327709		16-FEB-12	WECK LABORATORIES INC		2,343.00			Negotiable
327710		16-FEB-12	WEST & SYLVESTER ELECTRICAL		1,300.00			Negotiable
327711		16-FEB-12	WESTERN EXTERMINATOR COMPANY		7,113.50			Negotiable
327712		16-FEB-12	ZEE MEDICAL SERVICE CO		46.02			Negotiable
327713		23-FEB-12	Carl Spangenberg		30.00			Negotiable
327714		23-FEB-12	Harry Cho		69.01			Negotiable
327715		23-FEB-12	Jeffrey Dugan		161.00			Negotiable
327716		23-FEB-12	Malcolm Cortez		69.01			Negotiable
327717		23-FEB-12	Pio Reynoso		83.00			Negotiable
327718		23-FEB-12	Richard Gallegos		88.00			Negotiable
327719		23-FEB-12	Robert Jacobson		59.18			Negotiable
327720		23-FEB-12	Rory Moore		144.13			Negotiable
327721		23-FEB-12	Scott Van Deusen		132.00			Negotiable
327722		23-FEB-12	13 WHATNEY LTD PARTNERSHIP		1,242.35			Negotiable
327723		23-FEB-12	ALEJANDRA GUTIERREZ		173.38			Negotiable
327724		23-FEB-12	AMANDA HEFFNER		32.38			Negotiable
327725		23-FEB-12	AMERICAN WATER WORKS ASSOC		238.00			Negotiable
327726		23-FEB-12	AMIE GARCIA		44.59			Negotiable
327727		23-FEB-12	AMORSOLO LACANILAO		33.33			Negotiable
327728		23-FEB-12	ANGELA KIM		18.07			Negotiable
327729		23-FEB-12	ARMANDO TUNNERMANN		7.98			Negotiable
327730		23-FEB-12	ARTURO RODRIGUEZ		64.72			Negotiable
327731		23-FEB-12	AT&T		1,568.07			Negotiable
327732		23-FEB-12	AT&T INTERNET SERVICES		24.00			Negotiable
327733		23-FEB-12	BAHK SHINHYE		125.63			Negotiable
327734		23-FEB-12	BOMEL CONSTRUCTION CO INC.		653.80			Negotiable

IRWD Ledger Payment Register For 01-FEB-12 To 29-FEB-12 Report Date: 01-MAR-2012 13:22
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 22
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
327735		23-FEB-12	BORCHARD SURVEYING & MAPPING, INC.		4,305.00			Negotiable
327736		23-FEB-12	BRIAN HO		30.99			Negotiable
327737		23-FEB-12	CECILIA HERNANDEZ		26.00			Negotiable
327738		23-FEB-12	CHARLES CARAGAN		67.14			Negotiable
327739		23-FEB-12	CHARLES DEVORE		39.78			Negotiable
327740		23-FEB-12	CHLORINE INSTITUTE INC, THE		840.00			Negotiable
327741		23-FEB-12	CHRIS BARNES		24.00			Negotiable
327742		23-FEB-12	CHRISTINE BOWE		72.67			Negotiable
327743		23-FEB-12	CHRISTOPHER TSAO		38.43			Negotiable
327744		23-FEB-12	CITY OF TUSTIN		11,492.00			Negotiable
327745		23-FEB-12	CLEAN ENERGY FUELS		1,188.02			Negotiable
327746		23-FEB-12	CYNTHIA PRUZINSKY		28.52			Negotiable
327747		23-FEB-12	DANELLE OH		73.79			Negotiable
327748		23-FEB-12	DANIEL P POWERS		28.81			Negotiable
327749		23-FEB-12	DANIEL SMITH		39.49			Negotiable
327750		23-FEB-12	DANIELLE MCFARLAND		24.49			Negotiable
327751		23-FEB-12	DEBORAH AVELLA		34.20			Negotiable
327752		23-FEB-12	DENNIS GROB		25.87			Negotiable
327753		23-FEB-12	DENNIS YOUNG		18.81			Negotiable
327754		23-FEB-12	DEREK L BETTS		82.80			Negotiable
327755		23-FEB-12	DIRECTV INC		89.99			Negotiable
327756		23-FEB-12	DONNA OSTROM		21.45			Negotiable
327757		23-FEB-12	DUDEK		6,165.00			Negotiable
327758		23-FEB-12	DZUNG HA		30.57			Negotiable
327759		23-FEB-12	EMA INC		7,103.44			Negotiable
327760		23-FEB-12	EMIL NASTRI		60.80			Negotiable
327761		23-FEB-12	FARHAN RAFIQUE		41.30			Negotiable
327762		23-FEB-12	FARRAH CRANE		25.71			Negotiable
327763		23-FEB-12	FERGUSON WATERWORKS		533.36			Negotiable
327764		23-FEB-12	FIDELITY SECURITY LIFE INSURANCE		5,803.72			Negotiable

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
327765	23-FEB-12	COMPANY FISHER SCIENTIFIC COMPANY LLC			1,041.11			Negotiable
327766	23-FEB-12	FLATIRON WEST INC			266,684.00			Negotiable
327767	23-FEB-12	FT ZIEBARTH COMPANY			173,872.13			Negotiable
327768	23-FEB-12	GARZA INDUSTRIES, INC			1,292.57			Negotiable
327769	23-FEB-12	GATEWAY PACIFIC CONTRACTORS, INC.			16,587.83			Negotiable
327770	23-FEB-12	GATEWAY PACIFIC CONTRACTORS, INC.			149,290.47			Negotiable

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 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 23
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
327771	23-FEB-12	GEI CONSULTANTS INC			109,858.35			Negotiable
327772	23-FEB-12	GENTERRA CONSULTANTS INC			1,161.87			Negotiable
327773	23-FEB-12	GEOSCIENCE SUPPORT SERVICES INC			6,147.00			Negotiable
327774	23-FEB-12	GFE GODDARD			54.40			Negotiable
327775	23-FEB-12	GRAINGER			432.56			Negotiable
327776	23-FEB-12	HACH COMPANY			520.11			Negotiable
327777	23-FEB-12	HELEN WORMSER			43.00			Negotiable
327778	23-FEB-12	HILL BROTHERS CHEMICAL COMPANY			8,349.47			Negotiable
327779	23-FEB-12	HILLEBRECHT, WARREN K			124.87			Negotiable
327780	23-FEB-12	HOME DEPOT USA INC			244.72			Negotiable
327781	23-FEB-12	HSIAO LI KANG			20.03			Negotiable
327782	23-FEB-12	HUIHUA CHEN			37.52			Negotiable
327783	23-FEB-12	HUMANSCALE OF CALIFORNIA INC			1,727.93			Negotiable
327784	23-FEB-12	HYUNSOOK LEE			33.26			Negotiable
327785	23-FEB-12	INDUSTRIAL ELECTRIC MACHINERY LLC			2,940.74			Negotiable
327786	23-FEB-12	INTEGRITY MUNICIPAL SERVICES			5,852.19			Negotiable
327787	23-FEB-12	IRVINE PACIFIC, LP			15.00			Negotiable
327788	23-FEB-12	IRWD-PETTY CASH CUSTODIAN			470.08			Negotiable
327789	23-FEB-12	IVAN NUNO			31.30			Negotiable
327790	23-FEB-12	JACK CAROL			34.46			Negotiable
327791	23-FEB-12	JAMBOREE MICHELSON HCG LLC			619.65			Negotiable
327792	23-FEB-12	JAMES LIN			3.21			Negotiable
327793	23-FEB-12	JAN HSYOU TSWU			44.59			Negotiable
327794	23-FEB-12	JAN WILSON			26.56			Negotiable
327795	23-FEB-12	JANICE LIGHTFOOT			32.52			Negotiable
327796	23-FEB-12	JCI JONES CHEMICALS INC			5,615.50			Negotiable
327797	23-FEB-12	JEFFREY NGUYEN			17.16			Negotiable
327798	23-FEB-12	JEFFREY NORNHOLD			53.31			Negotiable
327799	23-FEB-12	JENNIFER LIM			24.00			Negotiable
327800	23-FEB-12	JENNIFER WITHERS			47.41			Negotiable
327801	23-FEB-12	JILL SPECTER			100.89			Negotiable
327802	23-FEB-12	JOANNA HO			15.92			Negotiable
327803	23-FEB-12	JOHN G. ALEVIZOS D.O. INC.			130.00			Negotiable

IRWD Ledger Payment Register For 01-FEB-12 To 29-FEB-12 Report Date: 01-MAR-2012 13:22
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 24
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
327804	23-FEB-12	JORGE BAILON			56.67			Negotiable
327805	23-FEB-12	JOSE HERNANDEZ			61.78			Negotiable
327806	23-FEB-12	JUAN JHON			35.25			Negotiable
327807	23-FEB-12	JUANA LOPEZ			29.91			Negotiable
327808	23-FEB-12	KAMBIT INC			15.00			Negotiable
327809	23-FEB-12	KB HOMES			17.96			Negotiable
327810	23-FEB-12	KELLY SERVICES INC			3,377.92			Negotiable
327811	23-FEB-12	KELSEY PETERS			31.13			Negotiable
327812	23-FEB-12	KIRK A. STAMMHERR			95.00			Negotiable
327813	23-FEB-12	KIT LING MUI			29.91			Negotiable
327814	23-FEB-12	KPRS CONSTRUCTION SERVICES, INC			459,701.89			Negotiable
327815	23-FEB-12	LCS TECHNOLOGIES, INC.			4,375.00			Negotiable
327816	23-FEB-12	LENOVO UNITED			3,798.19			Negotiable

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
			STATES INC					
327817		23-FEB-12	LISA FRITSCH		30.93			Negotiable
327818		23-FEB-12	MARTHA CABEZAS		14.36			Negotiable
327819		23-FEB-12	MARY A O'MALLEY		398.24			Negotiable
327820		23-FEB-12	MAYRA CAMPBELL		39.19			Negotiable
327821		23-FEB-12	MEI LING CHAN		25.65			Negotiable
327822		23-FEB-12	MERVIN LOW		24.18			Negotiable
327823		23-FEB-12	MESREEN TILLO		26.39			Negotiable
327824		23-FEB-12	MICHAEL MCKIBBEN		12.39			Negotiable
327825		23-FEB-12	MICHAEL R MUSICH		43.74			Negotiable
327826		23-FEB-12	MICHAEL SCHRECK		83.50			Negotiable
327827		23-FEB-12	MOBIL OIL CORP		286.28			Negotiable
327828		23-FEB-12	MUNICIPAL WATER DISTRICT OF ORANGE COUNTY		73,500.00			Negotiable
327829		23-FEB-12	NAGHMEH JIRVAND		79.66			Negotiable
327830		23-FEB-12	NATIONAL SPECIALITY ALLOYS LLC		2,693.75			Negotiable
327831		23-FEB-12	NCM DEMOLITION & REMEDIATION		14.88			Negotiable
327832		23-FEB-12	NEGOV		15,700.00			Negotiable
327833		23-FEB-12	NEWPORT BAY CONSERVANCY		25.00			Negotiable
327834		23-FEB-12	NEWPORT BEACH, CITY OF		686.49			Negotiable
327835		23-FEB-12	NINA CHANG		34.48			Negotiable
327836		23-FEB-12	OCEAN BLUE ENVIRONMENTAL SERVICES INC		4,678.66			Negotiable
327837		23-FEB-12	OLIN CORPORATION		2,387.81			Negotiable

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 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 25
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
327838		23-FEB-12	ON ASSIGNMENT LAB SUPPORT		2,489.60			Negotiable
327839		23-FEB-12	ONESOURCE DISTRIBUTORS LLC		2,083.31			Negotiable
327840		23-FEB-12	ORANGE COUNTY WATER DISTRICT		6,691.34			Negotiable
327841		23-FEB-12	ORANGE, COUNTY OF		105.00			Negotiable
327842		23-FEB-12	PARING DOWN, INC		88.91			Negotiable
327843		23-FEB-12	PASCAL & LUDWIG CONSTRUCTORS		592,768.52			Negotiable
327844		23-FEB-12	PASCAL & LUDWIG CONSTRUCTORS		167,154.19			Negotiable
327845		23-FEB-12	PATRICIA SCHREINER		35.06			Negotiable
327846		23-FEB-12	PATRICK RUE		37.52			Negotiable
327847		23-FEB-12	PAULUS ENGINEERING INC		44,237.70			Negotiable
327848		23-FEB-12	PENINSULA PUMP CORPORATION		1,979.50			Negotiable
327849		23-FEB-12	PHILIP PALMER		106.17			Negotiable
327850		23-FEB-12	PHYLLIS JOHNSON		44.70			Negotiable
327851		23-FEB-12	PINNACLE LANDSCAPE COMPANY		1,016.00			Negotiable
327852		23-FEB-12	PIVOT INTERIORS INC		89,282.60			Negotiable
327853		23-FEB-12	PR DIAMOND PRODUCTS INC		1,392.00			Negotiable
327854		23-FEB-12	PRUDENTIAL OVERALL SUPPLY		738.22			Negotiable
327855		23-FEB-12	PSB THE MARKETING SUPERSOURCE		2,521.35			Negotiable
327856		23-FEB-12	RICARDO NOGUERA		32.60			Negotiable
327857		23-FEB-12	RIDGE LANDSCAPE ARCHITECTS		141.47			Negotiable
327858		23-FEB-12	ROBERT HOANG		61.09			Negotiable
327859		23-FEB-12	ROCK STRUCTURES		1,354.88			Negotiable
327860		23-FEB-12	ROGER KLIMINSKI		193.58			Negotiable
327861		23-FEB-12	ROSEMARIE BONVECCHIO		104.54			Negotiable
327862		23-FEB-12	RUDY MARTINEZ		53.43			Negotiable
327863		23-FEB-12	SAJENDRA K MISHRA		180.00			Negotiable
327864		23-FEB-12	SANTA ANA BLUE PRINT		79.52			Negotiable
327865		23-FEB-12	SAYUMI YOSHIDA		27.47			Negotiable
327866		23-FEB-12	SEPARATION PROCESSES INC		4,781.50			Negotiable
327867		23-FEB-12	SERENA WEIR		29.60			Negotiable

IRWD Ledger Payment Register For 01-FEB-12 To 29-FEB-12 Report Date: 01-MAR-2012 13:22
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 26
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Cleared

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
327868		23-FEB-12	SHANNON STARKWEATHER		15.14			Negotiable
327869		23-FEB-12	SIRIUS COMPUTER SOLUTIONS INC		43,900.00			Negotiable
327870		23-FEB-12	SOUTHERN CALIFORNIA EDISON COMPANY		167,002.96			Negotiable
327871		23-FEB-12	SPARKLETT'S		165.11			Negotiable
327872		23-FEB-12	SUSAN ACKERMANN		31.97			Negotiable
327873		23-FEB-12	SWAP FINANCIAL GROUP LLC		10,500.00			Negotiable
327874		23-FEB-12	TAEFOON CHUNG		36.13			Negotiable
327875		23-FEB-12	TAYLOR WOODROW HOMES		30.98			Negotiable
327876		23-FEB-12	TERRY GENNRICH		110.55			Negotiable
327877		23-FEB-12	THE GAS COMPANY		5,579.41			Negotiable
327878		23-FEB-12	THOA K NGUYEN		248.99			Negotiable
327879		23-FEB-12	TREVOR NELSON		25.40			Negotiable
327880		23-FEB-12	TRI-CO FRANKLIN		975.60			Negotiable
327881		23-FEB-12	TRISHINE INVESTMENT, LLC		200.00			Negotiable
327882		23-FEB-12	TRUGREEN LANDCARE LLC		150.00			Negotiable
327883		23-FEB-12	UNITED PARCEL SERVICE INC		20.00			Negotiable
327884		23-FEB-12	UNITED STATES POSTAL SERVICE		58.24			Negotiable
327885		23-FEB-12	VERIZON CALIFORNIA INC		216.25			Negotiable
327886		23-FEB-12	VERONICA OH		82.35			Negotiable
327887		23-FEB-12	WESSAM ZAKHARY		28.38			Negotiable
327888		23-FEB-12	WIDE OPEN EXCURSIONS LLC		223.28			Negotiable
327889		23-FEB-12	ACWA		31,989.97			Negotiable
327890		23-FEB-12	AIRGAS-WEST, INC.		34.10			Negotiable
327891		23-FEB-12	AQUA-METRIC SALES COMPANY		10,234.25			Negotiable
327892		23-FEB-12	BATTERY SPECIALTIES		575.30			Negotiable
327893		23-FEB-12	BAVCO BACKFLOW APPARATUS & VALVE COMPANY		763.00			Negotiable
327894		23-FEB-12	BIOMAGIC INC		7,294.47			Negotiable
327895		23-FEB-12	BRENNTAG PACIFIC INC		4,099.90			Negotiable
327896		23-FEB-12	BRITHINEE ELECTRIC		7,192.37			Negotiable

IRWD Ledger Payment Register For 01-FEB-12 To 29-FEB-12 Report Date: 01-MAR-2012 13:22
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 27
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
327897		23-FEB-12	BROWN AND CALDWELL		9,628.33			Negotiable
327898		23-FEB-12	BSK ASSOCIATES		890.00			Negotiable
327899		23-FEB-12	C WELLS PIPELINE MATERIALS INC		3,663.50			Negotiable
327900		23-FEB-12	CALIFORNIA BARRICADE INC		10,618.95			Negotiable
327901		23-FEB-12	CH2M HILL, INC		19,523.85			Negotiable
327902		23-FEB-12	CHEM TECH INTERNATIONAL INC		10,174.45			Negotiable
327903		23-FEB-12	CITY OF IRVINE		217,687.60			Negotiable
327904		23-FEB-12	CITY OF TUSTIN		65,022.40			Negotiable
327905		23-FEB-12	CLEARINGHOUSE		528.45			Negotiable
327906		23-FEB-12	COASTAL IGNITION & CONTROLS, INC		6,769.03			Negotiable
327907		23-FEB-12	CREDENTIAL CHECK CORPORATION		146.32			Negotiable
327908		23-FEB-12	D & G SIGNS		425.61			Negotiable
327909		23-FEB-12	DELPHIN COMPUTER SUPPLY		3,025.62			Negotiable
327910		23-FEB-12	DRAEGER SAFETY INC		469.79			Negotiable
327911		23-FEB-12	EMEDCO		1,150.27			Negotiable
327912		23-FEB-12	EQUIPCO SALES & SERVICE		8,438.19			Negotiable
327913		23-FEB-12	FRANCHISE TAX BOARD		826.01			Negotiable
327914		23-FEB-12	HACH COMPANY		155.85			Negotiable
327915		23-FEB-12	INDUSTRIAL METAL SUPPLY CO		34.31			Negotiable
327916		23-FEB-12	INTERNAL REVENUE SERVICE		1,488.65			Negotiable
327917		23-FEB-12	IRVINE PIPE & SUPPLY INC		1,965.58			Negotiable
327918		23-FEB-12	LEONARD CHALDEZ TREE SERVICE		4,500.00			Negotiable

327919	23-FEB-12	MC MASTER CARR SUPPLY CO		284.26		Negotiable
327920	23-FEB-12	MITCHELL PEST CONTROL, INC.		1,510.00		Negotiable
327921	23-FEB-12	NATIONAL READY MIXED CONCRETE CO		763.40		Negotiable
327922	23-FEB-12	ORDONEZ, CYNTHIA MARIE		500.17		Negotiable
327923	23-FEB-12	PACIFIC PARTS & CONTROLS INC		121.98		Negotiable
327924	23-FEB-12	PASCAL & LUDWIG CONSTRUCTORS		58,750.98		Negotiable

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 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 28
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
327925		23-FEB-12	PERS LONG TERM CARE		1,394.27			Negotiable
327926		23-FEB-12	PRUDENTIAL OVERALL SUPPLY		23.87			Negotiable
327927		23-FEB-12	ROCHESTER MIDLAND CORPORATION		2,025.05			Negotiable
327928		23-FEB-12	SANDERS PAVING INC		13,099.00			Negotiable
327929		23-FEB-12	SCHNEIDER AUTOMATION		6,500.00			Negotiable
327930		23-FEB-12	SEVERN TRENT WATER		981.14			Negotiable
327931		23-FEB-12	SHAMROCK SUPPLY CO INC		43.83			Negotiable
327932		23-FEB-12	SOUTHERN COUNTIES LUBRICANTS LLC		2,022.18			Negotiable
327933		23-FEB-12	THE FURMAN GROUP		10,101.00			Negotiable
327934		23-FEB-12	TRUGREEN LANDCARE LLC		22,200.00			Negotiable
327935		23-FEB-12	ULTRA SCIENTIFIC		210.50			Negotiable
327936		23-FEB-12	VCI TELCOM INC		3,494.00			Negotiable
327937		23-FEB-12	WESTERN AV		488.90			Negotiable
327938		23-FEB-12	ZEBRON CONTRACTING INC		2,750.00			Negotiable
327939		23-FEB-12	CITY OF IRVINE	IRVINE 1	1,500.00			Negotiable
327940		23-FEB-12	AFLAC	PAY	5,540.45			Negotiable
327941		23-FEB-12	HARTFORD LIFE AND ATLANTA ACCIDENT INSURANCE COMPANY		180.38			Negotiable
327942		23-FEB-12	PRE-PAID LEGAL SERVICES INC	ADA	1,599.16			Negotiable
327943		23-FEB-12	COLONIAL LIFE & ACCIDENT INSURANCE CO.	COLUMBIA	1,854.94			Negotiable
327944		24-FEB-12	LOCHRIDGE, DAVID	RANCHO SANTA MA	4,290.00			Negotiable
327945		24-FEB-12	ADT SECURITY SERVICES INC		766.82			Negotiable
327946		24-FEB-12	AIRGAS-WEST, INC.		1,138.38			Negotiable
327947		24-FEB-12	AYRES HOTEL AND SUITES (DBA)		1,432.70			Negotiable
327948		24-FEB-12	BORCHARD SURVEYING & MAPPING, INC.		3,605.00			Negotiable
327949		24-FEB-12	C WELLS PIPELINE MATERIALS INC		3,087.04			Negotiable
327950		24-FEB-12	ONEYBEARE INC		1,020.00			Negotiable
327951		24-FEB-12	CONTROLLED KEY SYSTEMS INC		1,883.63			Negotiable

IRWD Ledger Payment Register For 01-FEB-12 To 29-FEB-12 Report Date: 01-MAR-2012 13:22
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 29
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
327952		24-FEB-12	COX COMMUNICATIONS		129.21			Negotiable
327953		24-FEB-12	DELTA SYSTEMS ENGINEERING		33,284.81			Negotiable
327954		24-FEB-12	DJ NELSON & SON POOL SERVICE		1,780.00			Negotiable
327955		24-FEB-12	DRAEGER SAFETY INC		1,008.71			Negotiable
327956		24-FEB-12	EXPRESSAIR		70.00			Negotiable
327957		24-FEB-12	HEARTLAND BUSINESS CREDIT CORPORATION		570.58			Negotiable
327958		24-FEB-12	LEHIGH OUTFITTERS		1,711.17			Negotiable
327959		24-FEB-12	MARYANN BROWN		1,086.00			Negotiable
327960		24-FEB-12	PACIFIC LIFE INSURANCE CO		160.67			Negotiable
327961		24-FEB-12	SANTA ANA BLUE PRINT		765.73			Negotiable

327962	24-FEB-12	SOUTHERN CALIFORNIA EDISON COMPANY	69,802.85	Negotiable
327963	24-FEB-12	THE GAS COMPANY	1,076.28	Negotiable
327964	24-FEB-12	TROPICAL PLAZA NURSERY INC	3,905.00	Negotiable
327965	24-FEB-12	UNIVERSITY OF CALIFORNIA	1,250.00	Negotiable
327966	24-FEB-12	VERIZON CALIFORNIA INC	191.31	Negotiable
327967	24-FEB-12	WALTERS WHOLESALE ELECTRIC	1,473.19	Negotiable

Payment Document Subtotal: 9,631,417.11

Payment Document : IRWD Wire

9301	16-FEB-12	YORK INSURANCE SERVICES GROUP INC - CA	304.17	Negotiable
9302	16-FEB-12	YORK INSURANCE SERVICES GROUP INC - CA	1,540.02	Negotiable
9303	28-FEB-12	YORK INSURANCE SERVICES GROUP INC - CA	676.33	Negotiable
9304	28-FEB-12	YORK INSURANCE SERVICES GROUP INC - CA	1,491.54	Negotiable

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 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 30
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD Wire								
9305		28-FEB-12	INTERNAL REVENUE SERVICE	FRESNO	144,052.67			Negotiable
9306		28-FEB-12	FRANCHISE TAX BOARD	SACRAMENTO	40,856.07			Negotiable
9307		28-FEB-12	EMPLOYMENT DEVELOPMENT DEPARTMENT	W SACRAMENTO	10,263.69			Negotiable
9308		28-FEB-12	WILLIAMS, TWYLA CALIFORNIA	PARKER SACRAMENTO	658.62			Negotiable
9309		28-FEB-12	DEPARTMENT OF CHILD SUPPORT SERVICES		1,958.41			Negotiable
9310		28-FEB-12	EMPLOYEE BENEFIT SPECIALIST, INC	PAY	11,584.50			Negotiable
9311		28-FEB-12	GREAT WEST	DENVER	88,043.24			Negotiable
9312		28-FEB-12	CALPERS	SACRAMENTO	251,736.59			Negotiable
9313		28-FEB-12	INTERNAL REVENUE SERVICE	FRESNO	146,041.51			Negotiable
9314		28-FEB-12	FRANCHISE TAX BOARD	SACRAMENTO	41,366.45			Negotiable
9315		28-FEB-12	EMPLOYMENT DEVELOPMENT DEPARTMENT	W SACRAMENTO	10,382.23			Negotiable
9316		28-FEB-12	WILLIAMS, TWYLA CALIFORNIA	PARKER SACRAMENTO	658.62			Negotiable
9317		28-FEB-12	DEPARTMENT OF CHILD SUPPORT SERVICES		1,958.41			Negotiable
9318		28-FEB-12	EMPLOYEE BENEFIT SPECIALIST, INC	PAY	11,984.43			Negotiable
9319		28-FEB-12	GREAT WEST	DENVER	66,591.57			Negotiable
9320		28-FEB-12	CALPERS	SACRAMENTO	254,849.90			Negotiable
9321		28-FEB-12	INTERNAL REVENUE SERVICE	FRESNO	420.68			Negotiable
9322		28-FEB-12	CALPERS	SACRAMENTO	327,755.87			Negotiable
9323		28-FEB-12	U.S. BANK NATIONALST. LOUIS ASSOCIATION		8,426.88			Negotiable
9324		28-FEB-12	CITIGROUP GLOBAL MARKETS INC.	NEW YORK	1,304,239.66			Negotiable
9325		28-FEB-12	METROPOLITAN WATERPAY DISTRICT		682,161.45			Negotiable
9326		29-FEB-12	BANK OF AMERICA MERRILL LYNCH	PAY	2,520.53			Negotiable
9327		29-FEB-12	U.S. BANK NATIONALST. LOUIS ASSOCIATION		1,950.82			Negotiable

IRWD Ledger Payment Register For 01-FEB-12 To 29-FEB-12 Report Date: 01-MAR-2012 13:22
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 31
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
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Payment Document : IRWD Wire

9328	29-FEB-12	BANK OF AMERICA MERRILL LYNCH	PAY		295.00	Negotiable
9329	29-FEB-12	GOLDMAN, SACHS & CO	PAY		73,843.75	Negotiable
9330	29-FEB-12	SUMITOMO MITSUI BANKING CORPORAION	NEW YORK		880.82	Negotiable
9331	29-FEB-12	BANK OF NEW YORK MELLON TRUST COMPANY NA	NEWARK		8,716.13	Negotiable
9332	29-FEB-12	HELABA LANDESBANK HESSEN-THUERINGEN	NEW YORK		68.61	Negotiable
9333	29-FEB-12	BANK OF AMERICA MERRILL LYNCH	PAY		1,794.10	Negotiable
9334	29-FEB-12	J.R. FILANC CONSTRUCTION COMPANY INC.	ESCONDIDO		1,379,550.85	Negotiable
9335	29-FEB-12	SUMITOMO MITSUI BANKING CORPORAION	NEW YORK		1,636.72	Negotiable
9336	29-FEB-12	CITIGROUP GLOBAL MARKETS INC.	NEW YORK		50,676.15	Negotiable
9337	29-FEB-12	BANK OF NEW YORK MELLON TRUST COMPANY NA	NEWARK		2,582.56	Negotiable
9338	29-FEB-12	J.R. FILANC CONSTRUCTION COMPANY INC.	ESCONDIDO		2,071,334.11	Negotiable
9339	29-FEB-12	BANK OF NEW YORK MELLON TRUST COMPANY NA	NEWARK		6,113,000.00	Negotiable
9340	29-FEB-12	BANK OF NEW YORK MELLON TRUST COMPANY NA	NEWARK		127.78	Negotiable
9341	29-FEB-12	BANK OF NEW YORK MELLON TRUST COMPANY NA	NEWARK		836.11	Negotiable

Payment Document Subtotal: 13,119,817.55

Bank Account Subtotal : 22,751,234.66

Report Count : 830

Report Total: 22,751,234.66

IRWD Ledger

Payment Register For 01-FEB-12 To 29-FEB-12

Report Date: 01-MAR-2012 13:22

BANK:

Branch :

Account:

Page: 32

Bank Account Currency: ()

Payment Currency: ()

Payment Type: All

Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
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*** End of Report ***

March 26, 2012

Prepared and Submitted by: Various

Approved by: Paul Cook */P. Cook*

CONSENT CALENDAR

STRATEGIC MEASURES DASHBOARD

SUMMARY:

Provided as Exhibits "A", "B", and "C" are the Strategic Measures Dashboard and informational items for Board review.

RECOMMENDATION:

THAT THE BOARD RECEIVE AND FILE THE STRATEGIC MEASURES DASHBOARD AND INFORMATION ITEMS.

EXHIBITS:

Exhibit "A" – Strategic Measures Dashboard

Exhibit "B" – Dyer Road Wellfield Status

Exhibit "C" – Reservoir Data

**IRVINE RANCH WATER DISTRICT
STRATEGIC MEASURES DASHBOARD**

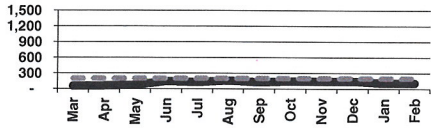
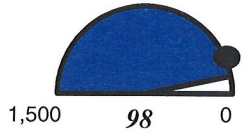
Exhibit "A"

February 2012

Note: The more blue area displayed on the dial, the more favorable the measure.

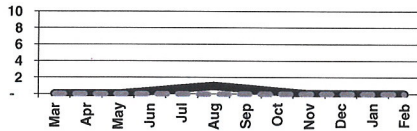
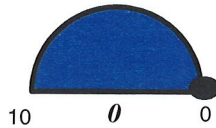
Reliability-Potable/Nonpotable

Target = 200 customer hours out of service this month



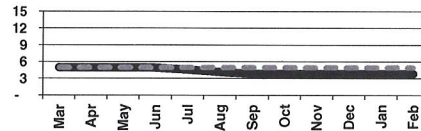
Sewer Spills

Target = 0 Spills this month



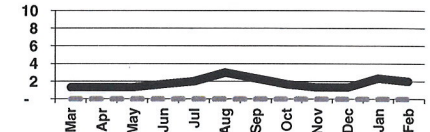
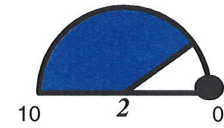
OCSD CORF Flows

Target = 4.95 MGD
CORF flow to OCSD this month



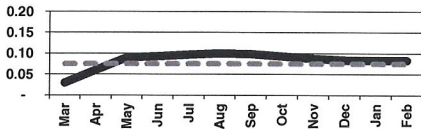
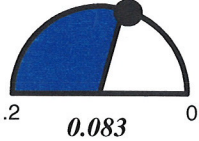
OSHA Recordables

Target = 0 reportable accidents this month



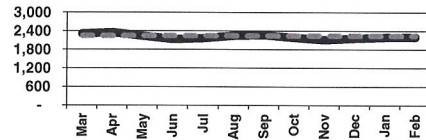
MWRP Energy Cost per kwh

Target = .0792 cost per kWh this month



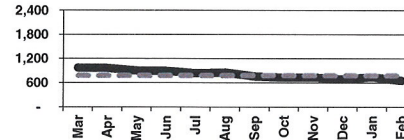
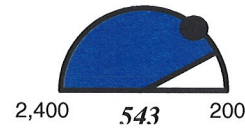
Wastewater Cost

Target = \$2,241/MG processed this month



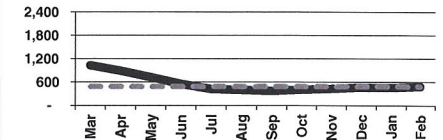
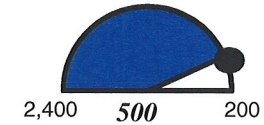
Water System Cost--Potable

Target = \$786/ac-ft delivered this month



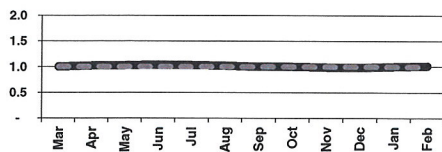
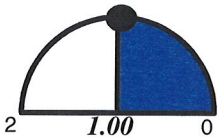
Water System Cost--Nonpotable

Target = \$486/ac-ft delivered this month



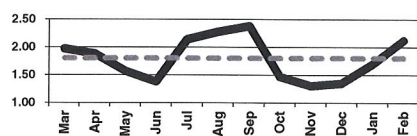
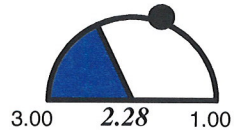
Enterprise Return

Target = 1.0 (net income/goal) last month



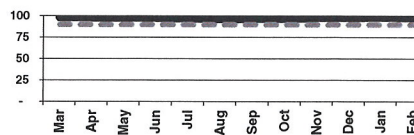
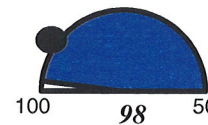
Overhead Ratio

Target = 1.90 (G&A expenses/direct labor) this month



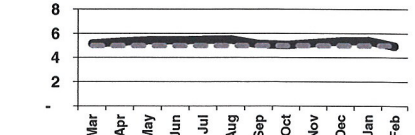
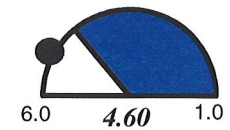
Customer Satisfaction

Target = 90% satisfaction this month



Employee Satisfaction

Target = 5.0 score this month



● Target shown on gauge
00.00 Figure for Current Month

----- Target shown on trend graph
----- 3-month rolling average

IRVINE RANCH WATER DISTRICT
STRATEGIC MEASURES

Reliability-Potable/Nonpotable

MONTHLY STATUS REPORT

Metric Owner: Water Ops

Definition of Measure:

The relative magnitude of system outages due to failures or scheduled maintenance for Potable and Non Potable Water.

Method:

Summation of the time any part of the system was out of service times the number of customers affected by the given outage during the month.

Data Collection

Data was derived from the CSR database for customer based reports of "no water" and from the work order database for scheduled maintenance requiring the shut down of water service during repairs.

Current Issues

1. None

MONTHLY DATA

<u>Month</u>	<u>Value</u>	<u>Goal</u>	<i>From:</i> March 2011
March 2011	59.22		<i>Thru:</i> February 2012
April 2011	120.60		<i>Goal:</i> 200.00
May 2011	45.68		
June 2011	283.80		
July 2011	62.33		
August 2011	148.10		
September 2011	176.90		
October 2011	130.00		
November 2011	114.50		
December 2011	197.10		
January 2012	35.42		
February 2012	98.10		

IRVINE RANCH WATER DISTRICT
STRATEGIC MEASURES

Sewer Spills

MONTHLY STATUS REPORT

Metric Owner: Gregory Springman

Collection System Manager

Definition of Measure:

Number of sewer overflows of any quantity, regardless of cause, in IRWD's sanitary sewer collection system. This does not include spills from private sewers within IRWD's service area. IRWD has no control over private spills and is not responsible for them. However, it should be noted that IRWD will assist the County Health Care Agency in responding to and cleaning up private spills in the interest of the community.

Method:

Total number of IRWD sewer spills

Data Collection

Data is obtained from the California State Water Boards CIWQS data base for reporting SSO's.

Current Issues

1. June, 2011 - MWRP MPS-3 Forcemain Pigging Operation, blockage occurred at the termination point of the 18" MPS-3 forcemain due to debris accumulation. 250 gals SSO with 250 gals of wastewater contained and recovered.
2. July, 2011-MWRP MPS-3 Forcemain Pigging Operation (2nd Phase), blockage occurred due to same cause. 25 gals SSO with 25 gals of wastewater contained and recovered.
3. August, 2011 - Irvine, 8" VCP. 165 gals SSO with 100% of wastewater contained and recovered. Caused by root intrusion.

MONTHLY DATA

<u>Month</u>	<u>Value</u>	<u>Goal</u>	<i>From:</i> March 2011
March 2011	0		<i>Thru:</i> February 2012
April 2011	0		<i>Goal:</i> 0
May 2011	0		
June 2011	1.00		
July 2011	1.00		
August 2011	1.00		
September 2011	0		
October 2011	0		
November 2011	0		
December 2011	0		
January 2012	0		
February 2012	0		

IRVINE RANCH WATER DISTRICT
STRATEGIC MEASURES

OCSD CORF Flows

MONTHLY STATUS REPORT

Metric Owner: Wayne Posey

Director of Wastewater Operations

Definition of Measure:

Estimated CORF flow for current FY. CORF flow ownership as of the end of FY 2009/2010 was 8.62 MGD.

Method:

IRWD's CORF flow is derived by using the actual Main Street Flume Meter flow and subtracting the MWRP biosolid discharge flow and all non Revenue Area 14 (IRWD) flows tributary to the Main Street Flume meter/MWRP and adding in the San Joaquin Hills Planned Community flow and flow discharges from the Gas Recovery System (Formerly Laidlaw) for the FY four calendar months with the highest flow totals multiplied by three, averaging the result thereof with the same result of the same calculation for the preceding two fiscal years and adding in the current IBC transfer flow.

Note: All of the Newport Coast flows with the exception of the San Joaquin Hills Planned Community and Gas Recovery System flow are excluded from IRWD's CORF flow calculation. The OCSD's 1988 Downcoast Area Agreement only requires for IRWD to provide local wastewater collection service and requires OCSD to provide wastewater regional collection, transmission, treatment and disposal for that area.

Data Collection

The OCSD's Monthly Gallonage Flow Summary Report provides the actual flows used in calculating IRWD's CORF flow. This includes the Main Street Flume Meter actual monthly flow. All non Revenue Area 14 (IRWD) flows that are tributary to the Main Street Flume Meter is adjusted every year based on the results of OCSD's Flow Verification Study. The San Joaquin Hills Planned Community flow is adjusted every year based on the results of IRWD's Flow Verification Study. The Gas Recovery System flow is the actual monthly meter flow. The IBC transfer flow is adjusted every five years based on the results of OCSD's Flow Verification Study.

Current Issues

1. None

MONTHLY DATA

<u>Month</u>	<u>Value</u>	<u>Goal</u>	<i>From:</i> March 2011
March 2011	4.92		<i>Thru:</i> February 2012
April 2011	4.92		<i>Goal:</i> 4.95
May 2011	4.93		
June 2011	4.95		
July 2011	3.85		
August 2011	3.83		
September 2011	3.83		
October 2011	3.83		
November 2011	3.83		
December 2011	3.84		
January 2012	3.84		
February 2012	3.84		

IRVINE RANCH WATER DISTRICT
STRATEGIC MEASURES

OSHA Recordables

MONTHLY STATUS REPORT

Metric Owner: Ken Erwin

District Safety & Security Manager

Definition of Measure:

OSHA Recordables are a monthly measure of injuries and illnesses that occurred and must be entered on the OSHA 300 (Log of Work Related Injuries and Illnesses), in conformance with OSHA requirements. This measure is standardized not only in the water/wastewater industry, but throughout industries nationwide.

Method:

OSHA Recordables = Number of OSHA Recordable cases occurring during the subject month.

Data Collection

All injuries/illnesses and near-misses are reported to the District Safety & Security Manager immediately when they occur. All are investigated and cases meeting the recordable definition are logged. This measure simply reports the number of accidents whose occurrence date is within the calendar month.

Current Issues

1. Collections System Technician II, University Lift Station exposure to Ozone, respiratory distress
2. Collections System Technician II, University Lift Station exposure to Ozone, respiratory distress

MONTHLY DATA

<u>Month</u>	<u>Value</u>	<u>Goal</u>	<i>From:</i> March 2011
March 2011	2.00		<i>Thru:</i> February 2012
April 2011	1.00		<i>Goal:</i> 0
May 2011	1.00		
June 2011	3.00		
July 2011	2.00		
August 2011	4.00		
September 2011	1.00		
October 2011	0		
November 2011	3.00		
December 2011	1.00		
January 2012	3.00		
February 2012	2.00		

IRVINE RANCH WATER DISTRICT
STRATEGIC MEASURES

MWRP Energy Cost per kWh

MONTHLY STATUS REPORT

Metric Owner: Wayne Posey

Director of Wastewater Operations

Definition of Measure:

Actual MWRP Cost per kWh used at MWRP with new generating facility.

Method:

MWRP cost per kWh is calculated by the monthly total energy purchased from imported SCE electricity, purchased natural gas for the generators from Coral Energy, and SCG natural gas transportation charge divided by the total monthly kWh generated and imported from SCE. We then add in actual maintenance costs, including g/a.

Data Collection

Data collected from actual monthly SCE, Coral Energy and SCG Invoices. Total kWh is collected from the two generator kWh meters and SCE main electric meter.

Current Issues

1. None

MONTHLY DATA

<u>Month</u>	<u>Value</u>	<u>Goal</u>	<i>From:</i> March 2011
March 2011	.09		<i>Thru:</i> February 2012
April 2011	.09		<i>Goal:</i> .08
May 2011	.09		
June 2011	.10		
July 2011	.10		
August 2011	.10		
September 2011	.10		
October 2011	.09		
November 2011	.08		
December 2011	.08		
January 2012	.08		
February 2012	.08		

IRVINE RANCH WATER DISTRICT
STRATEGIC MEASURES

Wastewater Cost

MONTHLY STATUS REPORT

Metric Owner: Wayne Posey

Director of Wastewater Operations

Definition of Measure:

Total cost of collection and treatment (primary, secondary, and solids disposal) of wastewater, on a unit basis (\$/million gallons) for this month.

Method:

(MWRP cost of collections(G/L #530) + MWRP cost of treatment(G/L #551,552,565) + OCSD cost(G/L #535,555) + SMWD cost(G/L #531,556)) divided by the total sewage flows emanating from OCSD District #14 (Includes MWRP flow + OCSD flow + SMWD flow)

Data Collection

Data used for this measure are collected from the general ledger and from Orange County Sanitation District (OCSD) and Santa Margarita Water District (SMWD) staff. Costs and flows from OCSD District #7 are not included in the calculation.

Current Issues

1. None

MONTHLY DATA

<u>Month</u>	<u>Value</u>	<u>Goal</u>	<i>From:</i> March 2011
March 2011	2,277.00	2,375.00	<i>Thru:</i> February 2012
April 2011	2,297.00	2,378.00	<i>Goal:</i> 2,241.00
May 2011	2,143.23	2,375.00	
June 2011	1,973.19	2,378.00	
July 2011	2,393.00	2,380.00	
August 2011	2,390.00	2,386.00	
September 2011	2,040.00	2,386.00	
October 2011	2,126.00	2,190.00	
November 2011	2,186.00	2,196.00	
December 2011	2,196.00	2,206.00	
January 2012	2,202.00	2,232.00	
February 2012	2,218.65	2,241.00	

IRVINE RANCH WATER DISTRICT
STRATEGIC MEASURES

Water System Cost--Potable

MONTHLY STATUS REPORT

Metric Owner: Denise To-Nguyen

Accountant

Definition of Measure:

Total cost of potable water delivered to IRWD's customers this month, on a unit basis (\$/acre-foot). These monthly costs can vary greatly due to variation in water sales and power cost billing cycles. Thus, monthly expenses do not match up with their corresponding water sales.

Method:

Sum of all potable water costs accrued this month divided by the quantity of potable water sold this month.

Data Collection

Potable water costs collected from current month general ledger. This cost includes labor, power, distribution, and other costs. The quantity of water sold is collected from the Water Usage Variance Report, which summarizes metered water sales. Wide fluctuations in this measure may occur due to the billing delays for such expenses as electrical power (ie, bills are not paid in the same month as the water is sold).

Current Issues

1. None

MONTHLY DATA

<u>Month</u>	<u>Value</u>	<u>Goal</u>	<i>From:</i> March 2011
March 2011	1,031.46	897.43	<i>Thru:</i> February 2012
April 2011	951.24	873.74	<i>Goal:</i> 786.00
May 2011	728.69	920.18	
June 2011	1,005.05	943.89	
July 2011	798.49	854.55	
August 2011	773.00	789.00	
September 2011	731.00	768.00	
October 2011	699.00	866.00	
November 2011	795.17	858.00	
December 2011	587.43	828.00	
January 2012	859.01	836.00	
February 2012	543.39	786.00	

IRVINE RANCH WATER DISTRICT
STRATEGIC MEASURES

Water System Cost--Nonpotable

MONTHLY STATUS REPORT

Metric Owner: Denise To-Nguyen

Accountant

Definition of Measure:

Total cost of nonpotable water delivered to IRWD's customer this month, on a unit basis (\$/acre-foot). These monthly costs can vary greatly due to variation in water sales and power cost billing cycles. Thus, monthly expenses do not match up with their corresponding water sales.

Method:

Sum of all nonpotable water costs accrued this month divided by the quantity of nonpotable water sold this month.

Data Collection

Nonpotable water costs collected from current month general ledger. This cost includes labor, power, distribution, and other costs related to tertiary treatment and reclaimed water distribution. The quantity of water sold is collected from the Water Usage Variance Report, which summarizes metered water sales. Wide fluctuations in this measure may occur due to the billing delays for such expenses as electrical power (ie, bills are not paid in the same month as the water is sold).

Current Issues

1. None

MONTHLY DATA

<u>Month</u>	<u>Value</u>	<u>Goal</u>	<i>From:</i> March 2011
March 2011	1,000.90	707.32	<i>Thru:</i> February 2012
April 2011	777.61	563.92	<i>Goal:</i> 486.00
May 2011	424.12	452.90	
June 2011	471.96	413.85	
July 2011	394.00	432.00	
August 2011	338.00	408.00	
September 2011	413.08	422.00	
October 2011	490.00	451.00	
November 2011	404.40	468.00	
December 2011	517.82	485.00	
January 2012	463.75	473.00	
February 2012	500.14	486.00	

IRVINE RANCH WATER DISTRICT
STRATEGIC MEASURES

Enterprise Return

MONTHLY STATUS REPORT

Metric Owner: Jayne George

Debt and Investment Analyst

Definition of Measure:

This is a monthly measure of performance by IRWD's various enterprise activities, including residential and commercial real estate, Strawberry Farms Golf Course, and wireless communications leases.

Method:

Enterprise Return = Actual Net Income/Budgeted Net Income x 100

Data Collection

The various enterprise activities generate revenues and expenses at different frequencies through the year. Except for the real estate projects, the enterprise projects are primarily revenue generating activities with relatively little associated expenses. The measure reflects a comparison between the actual and budgeted net income of the various projects on a monthly basis.

Current Issues

1. The February measure is on budget.

MONTHLY DATA

<u>Month</u>	<u>Value</u>	<u>Goal</u>	<i>From:</i> March 2011
March 2011	1.02		<i>Thru:</i> February 2012
April 2011	1.06		<i>Goal:</i> 1.00
May 2011	1.02		
June 2011	1.05		
July 2011	1.04		
August 2011	.98		
September 2011	1.00		
October 2011	1.03		
November 2011	.95		
December 2011	.99		
January 2012	1.07		
February 2012	1.00		

IRVINE RANCH WATER DISTRICT
STRATEGIC MEASURES

Overhead Ratio

MONTHLY STATUS REPORT

Metric Owner: Jessica Craig

Accountant

Definition of Measure:

Overhead Ratio is a measure of general and administrative (G&A) overhead expenses compared to direct labor expenses.

Method:

Ratio of total G&A expenses to total direct labor (including regular and overtime wages).

Data Collection

G&A expenses are summarized from the general ledger and include all costs incurred that are not directly accounted to mission-critical work (charged to g/l #792). Direct labor expenses are the hourly staff charges accounted to mission-critical work (generally charged to expense codes #110 and #120). Benefits are considered G&A, not direct labor expenses.

Current Issues

1. Information not available at time of reporting

MONTHLY DATA

<u>Month</u>	<u>Value</u>	<u>Goal</u>	<i>From:</i> March 2011
March 2011	1.92		<i>Thru:</i> February 2012
April 2011	1.72		<i>Goal:</i> 1.80
May 2011	1.06		
June 2011	1.36		
July 2011	3.99		
August 2011	1.48		
September 2011	1.68		
October 2011	1.24		
November 2011	1.00		
December 2011	1.81		
January 2012	2.28		
February 2012	Not available		

IRVINE RANCH WATER DISTRICT
STRATEGIC MEASURES

Customer Satisfaction

MONTHLY STATUS REPORT

Metric Owner: Gina Jackson

Customer Service Manager

Definition of Measure:

Customer Satisfaction is measured by IRWD's Customer Satisfaction Index. The index is measured by sending surveys to a statistically-significant, random selection of customers that have called IRWD for some type of service. Services range from answering questions about water conservation or billing to repairing a sewer blockage in the street. The surveys allow the customer to rate IRWD's response to their request in eight categories. Each category is rated from 1 to 5, with 1 indicating the highest level of satisfaction. A total score of 100 indicates the highest level of satisfaction in all eight categories. The scores of all responses in the subject month are a weighted average for the monthly index figure.

Method:

Data Collection

Surveys are mailed at the end of each work week for the customer requests completed that week. The monthly index reflects the surveys received within the subject month.

Current Issues

1. Total Overall Satisfaction: 98%
 Satisfaction: 94%
 Timely: 96%
 Phone: 100%
 Field Contact: 100%

MONTHLY DATA

<u>Month</u>	<u>Value</u>	<u>Goal</u>	From: March 2011
March 2011	97.00		Thru: February 2012
April 2011	98.00		Goal: 90.00
May 2011	98.00		
June 2011	98.00		
July 2011	95.00		
August 2011	96.00		
September 2011	99.00		
October 2011	95.00		
November 2011	100.00		
December 2011	98.00		
January 2012	98.00		
February 2012	98.00		

IRVINE RANCH WATER DISTRICT
STRATEGIC MEASURES

Employee Satisfaction

MONTHLY STATUS REPORT

Metric Owner: Gretchen Maswadeh

Human Resources Manager

Definition of Measure:

Level of employee satisfaction with employment at IRWD.

Method:

Average of all scores on surveys for performance evaluations presented this month

Data Collection

A survey is sent to each employee receiving a performance evaluation this month. The survey simply asks the employee to rate his/her overall employment satisfaction on a scale of 1 to 6 (1 being very dissatisfied and 6 being very satisfied). The ratings are compiled and averaged by Human Resources.

Current Issues

1. 5 surveys were returned of 20 surveys sent (25%). 5 of 20 respondents (60%) rated satisfaction as 5 or 6 on a scale of 1 to 6. In the 12 month period ending February 2012, 102 surveys have been returned of 294 surveys sent (35%). 87 of 102 respondents (85%) rated satisfaction as 5 or 6 on a scale of 1 to 6. 12 month average rating is 5.28%.

MONTHLY DATA

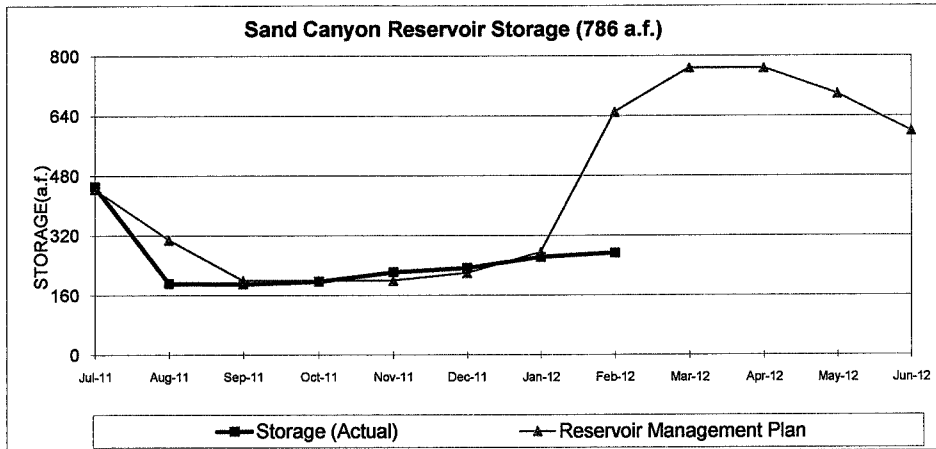
<u>Month</u>	<u>Value</u>	<u>Goal</u>	<i>From:</i> March 2011
March 2011	5.50		<i>Thru:</i> February 2012
April 2011	5.46		<i>Goal:</i> 5.00
May 2011	5.33		
June 2011	5.50		
July 2011	5.63		
August 2011	5.38		
September 2011	4.38		
October 2011	5.36		
November 2011	5.91		
December 2011	4.86		
January 2012	5.40		
February 2012	4.60		

EXHIBIT "B"

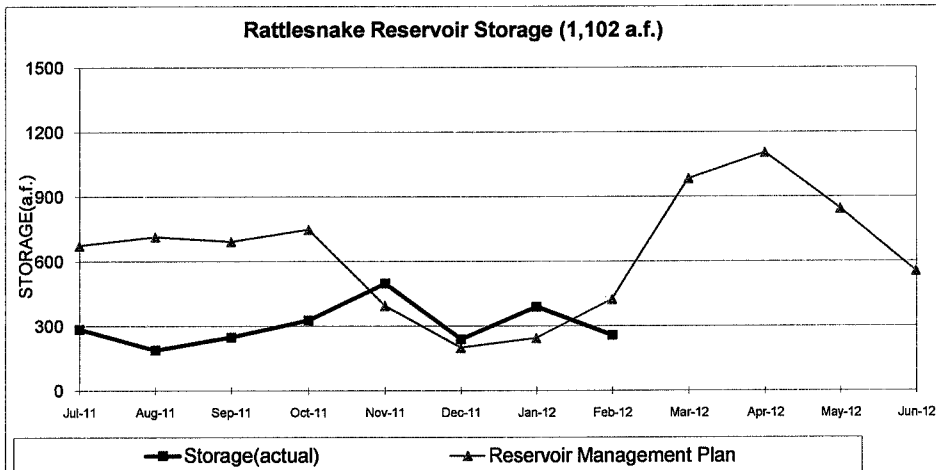
DYER ROAD WELL FIELD STATUS							Feb-2012
Well Number	Production Mo./YTD	Ref. Point Elevation	Depth to Water 2/29/2012	Water Level-MSL	Depth of Bowls	Bowl Setting-MSL	Feet of Water Above Intake
1	82.3 AF 578.1 AF	34	N/A	N/A	270	-236	N/A
2	122.3 AF 971.6 AF	37	162	-126	270	-234	108
			Pumping				
3	0.0 AF 0.0 AF	55	90	-35	215	-160	125
			Static				
4	102.5 AF 715.3 AF	38	139	-101	216	-178	77
			Pumping				
5	155.2 AF 807.0 AF	48	270	-222	290	-242	20
			Pumping				
6	104.1 AF 680.0 AF	43	77	-34	250	-207	173
			Static				
7	123.9 AF 637.0 AF	40	216	-176	290	-250	74
			Pumping				
C-8 DATS	427.2 AF 3,350.4 AF	37	121	-84	305	-268	184
			Pumping				
C-9 DATS	328.8 AF 2,585.0 AF	23	122	-99	305	-282	183
			Pumping				
10	350.3 AF 1,333.4 AF	47	149	-102	250	-203	101
			Pumping				
11	132.2 AF 555.0 AF	40	168	-128	300	-260	132
			Pumping				
12	156.0 AF 757.5 AF	51	161	-110	300	-249	139
			Pumping				
13	27.6 AF 194.7 AF	40	104	-64	300	-260	196
			Static				
14	135.4 AF 700.7 AF	47	114	-67	311	-264	197
			Static				
15	370.3 AF 1,415.3 AF	44	155	-111	300	-256	145
			Pumping				
16	16.0 AF 407.5 AF	47	210	-163	280	-233	70
			Pumping				
17	311.2 AF 1,491.6 AF	52	163	-112	250	-199	87
			Pumping				
18	134.2 AF 478.0 AF	45	216	-171	300	-255	84
			Pumping				
Clear production: 2,323.5 AF for the month FYTD: 11,722.7 AF							
DATS production: 756.0 AF for the month FYTD: 5,935.4 AF							

EXHIBIT "C"

RESERVOIR DATA FY 11-12



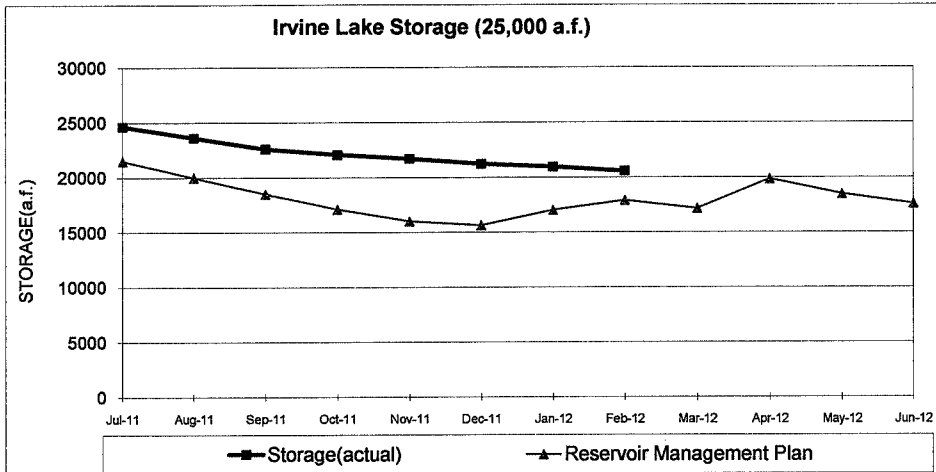
Storage was under 200 AF by October 1 as required by Regional Board permit.



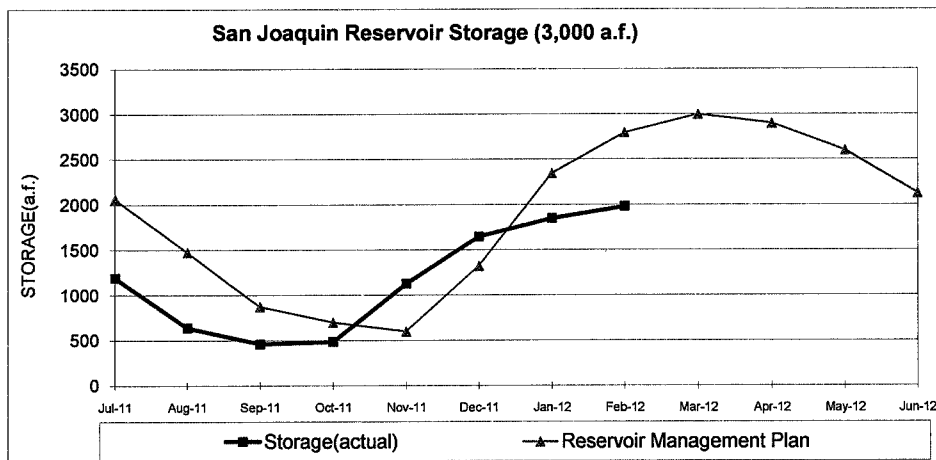
Rattlesnake storage is below average due to dry weather. The GAP was shutdown on 3/15/12.

EXHIBIT "C"

RESERVOIR DATA FY 11-12



Irvine Lake storage is above average due to rainfall and reduced demands.



All Lake Forest recycled demand is being supplied from the East Irvine Zone B system. The GAP was started on to help control seasonal storage.

March 26, 2012

Prepared by: K. McLaughlin *KGM*

Submitted by: G. Heiertz

Approved by: Paul Cook */GOL*

CONSENT CALENDAR

2012 STATE LEGISLATIVE UPDATE

SUMMARY:

This report provides an update on the 2012 legislative session and IRWD priorities. A copy of the 2012 State Legislative Matrix is attached as Exhibit "A".

Staff recommends that the Board consider the following positions:

- AB 2398 (Hueso): The Law of Recycled Water – *Support*
- AB 246 (Wieckowski): Income Taxes: Credit: Hiring – remove opposition, *Neutral*
- AB 1354 (Huber): *Civil Procedure: Discovery: Objections* – remove opposition, *Neutral*
- AB 1750 (Solorio): Rainwater Capture – *Watch*
- SB 200 (Wolk): Levee Maintenance – remove opposition, *Neutral*
- SB 250 (Rubio): Bay Delta Conservation Plan – *Support*

BACKGROUND:

The 2012 bill introduction deadline was February 24, 2012. Many of the hundreds of bills introduced by the deadline are "intent" or "spot" bills that must be substantively amended by the policy committee deadlines in late April and early May.

IRWD 2012 Legislative Priorities:

Senate Governance and Finance Omnibus Bill:

After consultation with the Senate Judiciary Committee, the consultant for the Senate Governance and Finance Committee has agreed to circulate the IRWD Bona Fide Encumbrancer clean-up language proposal as part of the next round of amendments to the Governance and Finance Omnibus bill, SB 1090. The next round of amendments will be circulated to the local government community in mid-March. If no concerns are raised, the bill will be amended shortly thereafter.

Additionally, Assembly Member Solorio has introduced AB 2069 (Solorio) as a vehicle for IRWD to use for this issue if the Omnibus Bill avenue does not come to fruition.

The Law of Recycled Water:

Assembly Member Hueso introduced AB 2398 (Hueso), the Law of Recycled Water on behalf of the WaterReuse Association. This bill proposes a new statutory framework that recognizes recycled water as a resource separate and distinct from both potable water and sewage/wastewater. The proposal would establish a system for regulating and permitting

recycled water grounded in objective scientific review to both maximize its use and protect public health and the environment. Specifically the bill would:

- Remove recycled water from the definitions of waste in the Water Code and Health and Safety Code and distinguish recycled water by type and level of treatment;
- Create a separate Recycled Water section of the Water Code that establishes a clear permitting system specific to recycled water, specifies the permitting and enforcement mechanisms and process of the regulating agencies, and provide funding for those activities; and
- Establish a California Department of Public Health permitting process for advanced treated purified water; the most highly treated recycled water.

AB 2398 is expected to be double-referred to the Assembly Water, Parks and Wildlife Committee and the Assembly Environmental Safety and Toxic Materials Committee. The bill's first hearing will likely be April 10 or April 14, 2012.

Staff recommends that the Board consider a *support* position on AB 2398 (Hueso), the Law of Recycled Water.

Other 2012 Statewide Issues:

AB 246 (Wieckowski): Income Taxes: Credit: Hiring:

As introduced, AB 246 (Wieckowski) would have authorized the Regional Water Quality Control Boards to delegate the judicial enforcement authority of their executive officers to the Attorney General, district attorney, or city attorney. By expanding the number of agencies charged with the ability to file civil prosecutions for violations of the water quality act, and by reducing the oversight of the ability of a Regional Board to seek such enforcement, the bill had the potential to increase judicial enforcement actions against water suppliers for water quality act violations. IRWD had taken an *oppose* position on AB 246 in 2011. On February 13, 2012, AB 246 was gutted and amended into a proposal on personal and corporation taxes and no longer applies to IRWD.

Staff recommends that the Board consider officially removing IRWD's opposition to AB 246 (Wieckowski) and moving to *neutral* on the bill.

AB 1354 (Huber): Civil Procedure: Discovery: Objections:

As introduced, AB 1354 (Huber) was one of several bills introduced in 2011 proposing to eliminate the ability of a public agency to retain any portion of payment on a contract. IRWD took an *oppose* position in 2011. AB 1354 was gutted and amended in early January to now apply to civil proceedings and no longer applies to IRWD.

Staff recommends that the Board consider officially removing IRWD's opposition to AB 1354 (Huber) and moving to *neutral* on the bill.

AB 1750 (Solorio): Rainwater Capture:

AB 1750 (Solorio) would enact the Rainwater Capture Act of 2012 which would authorize residential, commercial and governmental landowners to install, maintain and operate rain barrel systems built to specified requirements. AB 1750 is the third iteration of a rainwater capture bill introduced by Assembly Member Solorio. Both AB 1834 (Solorio), introduced in 2010, and AB 275 (Solorio), introduced in 2011, passed in the Legislature and were vetoed by the Governor. IRWD *watched* these bills, with particular attention to their impact, if any, on recycled water operations.

Staff recommends that the Board consider a *watch* position on AB 1750.

SB 200 (Wolk): Delta Levee Maintenance:

As introduced, SB 200 would have required a series of new conditions for each state agency to meet before that state agency could authorize or take action to implement a conservation measure within the Bay Delta Conservation Plan (BDCP). A large coalition of water agencies, including IRWD, took an *oppose* position on SB 200 as introduced. SB 200 was gutted and amended in early January to remove the BDCP language and instead address extending the Delta levee subventions program through 2013. This extension will serve as an interim measure until the Delta Stewardship Council complies with its 2009 water package mandate to recommend and prioritize strategic Delta levee investments. AB 200 is currently awaiting referral to a policy committee in the Assembly.

In response to the amended bill, many entities that had previously been opposed, removed their opposition. Staff recommends that the Board consider officially removing IRWD's opposition to SB 200 (Wolk) and moving to *neutral* on the bill.

SB 250 (Rubio): Bay Delta Conservation Plan:

SB 250 would set statutory deadlines for the completion of the BDCP process and for the construction of Delta conveyance facilities. The Author's goal is to help ensure that the BDCP process continues to move forward and California achieves the co-equal goals of water supply reliability and ecosystem restoration by legislatively setting these deadlines. There is wide support for SB 250 in the water and business communities. SB 250 is currently in the Senate Rules Committee awaiting referral and a hearing date.

Staff recommends that the Board consider a *support* position on SB 250 (Rubio).

FISCAL IMPACTS:

Not applicable.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

This item was reviewed at the Water Resources Policy and Communications Committee on February 29, 2012.

RECOMMENDATION:

THAT THE BOARD TAKE A SUPPORT POSITION ON AB 2398 (HUESO) AND SB 250 (RUBIO); A WATCH POSITION ON AB 1750 (SOLORIO); AND REMOVE OPPOSITION AND TAKE A NEUTRAL POSITION ON AB 1354 (HUBER), AB 246 (WIECKOWSKI), AND SB 200 (WOLK).

LIST OF EXHIBITS:

Exhibit "A" – IRWD 2012 State Legislative Matrix

EXHIBIT "A"
IRWD 2012 LEGISLATIVE MATRIX
Updated March 21, 2012

Bill No. Author	Title	IRWD Position	Summary/Effects	Status	Notes
AB 246 Wieckowski (D)	Income Taxes: Credit: Hiring	Oppose	Redefines, under the Personal Income Tax and Corporation Tax laws, the term qualified employer to mean a disabled veteran business enterprise, a disadvantaged business enterprise, a microbusiness, or small business. Allows a credit for each net increase in full-time employees, who are paid qualified wages according to specified hourly wage rates.	03/01/2012 - Re-referred to SENATE Committee on GOVERNANCE AND FINANCE.	3/26/12 Board Meeting – Recommended remove IRWD oppose due to 2/13/12 amends.
AB 403 Campos (D)	Public Drinking Water Standards: Hexavalent Chromium	Watch	Requires the DPH to post its progress on the establishment of primary drinking water standard hexavalent chromium on the department's Internet Web site. Includes the adoption of a primary drinking water standard for hexavalent chromium among the proposed regulations relating to maximum contaminant levels for primary or secondary water standards that are subject to a review by the Department of Finance of not more than 90 days.	03/01/2012 - In ASM. From Inactive File. To third reading. 03/01/2012 - In ASM. Ordered returned to SENATE. *****To SENATE.	
AB 1514 Lowenthal B (D)	Public Works: Excavations: Violations		Amends existing law that generally requires any person planning to conduct an excavation to contact a regional notification center prior to excavation, and, if practical, to delineate the areas to be excavated. Authorizes the Attorney General, a district attorney, or the state or a local agency that issued a permit to excavate to bring an action for the enforcement of a civil penalty against an operator or excavator who negligently or knowingly and willfully violates these and related provisions.	02/09/2012 - To ASSEMBLY Committee on UTILITIES AND COMMERCE.	Excavations. Could be detrimental to IRWD. Working with CMUA.
AB 1669 Perea (D)	Safe Drinking Water and Water Quality Projects		Relates to grants for projects to prevent or reduce the contamination of groundwater that serves as a source of drinking water. Eliminates the requirement that they be immediate projects needed to protect public health, as prescribed.	02/23/2012 - To ASM Committee on WATER, PARKS AND WILDLIFE.	
AB 1750 Solorio (D)	Rainwater Capture Act of 2012		Enacts the Rainwater Capture Act of 2012. Authorizes residential, commercial and governmental landowners to install, maintain, and operate rain barrel systems and rainwater capture systems for specified purposes, provided that the systems comply with specified requirements. Authorizes a landscape contractor working within the classification of his or her license to enter into a prime contract for the construction of a rainwater capture system if the system is used	03/01/2012 - To ASM Committees on BUSINESS, PROFESSIONS & CONSUMER PROTECTION and WATER, PARKS	3/26/12 Board meeting – recommended IRWD watch.

Bill No. Author	Title	IRWD Position	Summary/Effects	Status	Notes
			exclusively for landscape irrigation.	AND WILDLIFE.	
<u>AB 1813</u> Buchanan (D)	Sacramento-San Joaquin Delta Reform Act of 2009		Makes a technical, nonsubstantive change to the Sacramento-San Joaquin Delta Reform Act of 2009 establishing the Delta Stewardship Council as an independent agency of the state and requiring the State Water Resources Control Board to establish an effective system of Delta watershed diversion data and public reporting.	02/21/2012 - INTRODUCED.	
<u>AB 2000</u> Huber (D)	Sacramento-San Joaquin Delta: Delta Plan		States findings and declarations regarding the lack of information about the regulatory and environmental consequences of incorporating the Bay Delta Conservation Plan into the Delta Plan. States the intent of the Legislature to enact legislation that would include elements in the environmental impact report and environmental impact statement for the Bay Delta Conservation Plan and to include certain changes in the Bay Delta Conservation Plan.	02/23/2012 - INTRODUCED.	
<u>AB 2011</u> Gatto (D)	CalConserve State Revolving Fund		Requires a percentage of Safe, Clean, and Reliable Drinking Water Supply Act funds to be allocated to establish a CalConserve State Revolving Fund to provide grants and loans to private entities for water use efficiency retrofit projects.	03/08/2012 - To ASM Com on WATER, PARKS AND WILDLIFE.	
<u>AB 2021</u> Wagner (R)	Works of Improvement: Disputed Amounts		Relates to existing law providing, with respect to contracts, an increase in the amount that may be withheld from progress payments or final payments for works of improvement. Increases the amount that may be withheld from progress payments, or final payments, depending on the circumstances, to a sum of various amounts and percentages, as specified.	03/08/2012 - To ASM Com on BIZ, PROFESSIONS & CONSUMER PROTECTION and JUDICIARY.	
<u>AB 2051</u> Campos (D)	Public Drinking Water Standards: Hexavalent Chromium		Expresses the intent of the Legislature to enact legislation that would set a deadline for the State Department of Public Health to establish a maximum contaminant level for hexavalent chromium in drinking water.	02/23/2012 - INTRODUCED.	
<u>AB 2069</u> Solorio (D)	Sanitation, Sewerage, and Water Charges: Collection		Relates to an existing law authorizing various local public entities to prescribe fees for services and facilities furnished in connection with their water, sanitation, storm drainage, or sewerage system and providing that such charges may be collected on the tax roll in the same manner as property taxes, the amount of the charges constituting a lien against the lot or parcel, unless the real property has been transferred or conveyed. Makes changes concerning a transfer, conveyance, or attachment.	03/08/2012 - To ASSEMBLY Committee on LOCAL GOVERNMENT.	Introduced on behalf of IRWD as a back up if proposal is not part of Senate Gov/Fin Omnibus Bill.

Bill No. Author	Title	IRWD Position	Summary/Effects	Status	Notes
<u>AB 2075</u> Fong (D)	State Water Policy		Declares that it is the policy of the state to promote water conservation, water efficiency, and water recycling as the most cost-effective means of increasing water supply and protecting the environment.	02/23/2012 - INTRODUCED.	
<u>AB 2230</u> Gatto (D)	Recycled Water: Car Washes		Requires an in-by car wash, or a conveyor car wash to either install, use, and maintain a water recycling system, or enter into a contract to use recycled water provided by a retail water supplier to wash and rinse vehicles.	02/24/2012 - INTRODUCED.	
<u>AB 2398</u> Hueso (D)	Water Recycling		Enacts the Water Recycling Act of 2012. Establishes a statewide goal to recycle a total of 1.5 million acre-feet of water per year by the year 2020 and 2.5 million acre-feet of water per year by the year 2030. Requires the State Water Resources Control Board and regional boards, the department, the PUC, the Department of Water Resources, and other state agencies to exercise the authority and discretion granted to them to encourage the use of recycled water and meet the goals of the act.	03/15/2012 - To ASM Com on WATER, PARKS AND WILDLIFE and ENV SAFETY AND TOXIC MATERIALS.	3/26/12 Board Meeting – Reccomended IRWD support.
<u>AB 2421</u> Berryhill B (R)	Sacramento-San Joaquin Delta: Peripheral Canal		Requires the Legislative Analyst's Office to complete a prescribed economic feasibility analysis prior to the enactment of a statute authorizing the construction of a peripheral canal.	02/24/2012 - INTRODUCED.	
<u>AB 2423</u> Berryhill B (R)	Comprehensive Sacramento-San Joaquin Delta Planning		Makes a technical, nonsubstantive change to the Sacramento-San Joaquin Delta Reform Act establishing the Delta Stewardship Council as an independent agency of the state.	02/24/2012 - INTRODUCED.	
<u>AB 2443</u> Williams (D)	Vessels: Registration Fee: Mussels		Authorizes a county to assess a fee in an unspecified amount on a vessel registered in that county. Requires funds from the fee to be used to establish and operate a dreissenid mussel monitoring, inspection, and eradication program in the county.	02/24/2012 - INTRODUCED.	
<u>AB 2595</u> Hall (D)	Desalination		Requires the Ocean Protection Council to report to the Legislature on opportunities for streamlining the statewide permitting process for seawater desalination facilities. Requires the council to convene the Seawater Desalination Permit Streamlining Task Force. Appropriates specified bond funds to pay the costs of convening the Task Force and preparation of the report.	02/24/2012 - INTRODUCED.	Sponsor: CalDesal
<u>SB 27</u> Simitian (D)	Public Employees' Retirement		Amends the State Teachers' Retirement Law. Relates to the Defined Benefit Supplement Program and creditable compensation. Relates to the receipt of lump-sum payments. Relates to substitute employees' postretirement compensation. Authorizes penalties for	08/25/2011 - In ASSEMBLY Committee on APPROPRIATIONS:	

Bill No. Author	Title	IRWD Position	Summary/Effects	Status	Notes
			late or improper adjustments to on Cash Balance Benefit Program contributions. Requires a Public Employees' Retirement System participating employer to notify the Board of Administration of payrate changes.	Not heard.	
SB 31 Correa (D)	Post Government Employment: Restrictions		Applies the post government employment restrictions of the Political Reform Act of 1974 to other public officials serving as members of local governing boards or commissions with decision making authority.	01/26/2012 - Passed SENATE. *****To ASSEMBLY.	2_Year_Bill
SB 46 Correa (D)	Public Officials: Compensation Disclosure	Oppose_Am end	Requires every designated employee and other person, except a candidate for public office, who is required to file a statement of economic interests to include a compensation disclosure form that provides compensation information for the preceding calendar year. Requires every agency to post of that agency's Internet Web site information contained on the compensation disclosure form filed by a person required to file a statement of economic interests. Requires the adoption of emergency regulations.	08/22/2011 - In SENATE. Read third time, urgency clause adopted. Passed SENATE. *****To ASSEMBLY.	Correa not expected to move forward with SB 46 in this form.
SB 52 Steinberg (D)	Environmental Quality: Jobs and Economic Improvement		Amends the Environmental Quality Act. Requires that a project result in a specified minimum financial investment that is spent on planning, design, and construction of the project. Requires a lead agency to place the highest priority on feasible measure that will reduce greenhouse gas emissions on the site and in the neighboring communities of the project site. Relates to judicial review of an environmental impact report. Relates to the Judicial Council's reporting requirements.	In SENATE. Read third time. Passed SENATE. *****To ASSEMBLY.	2_Year_Bill
SB 186 Kehoe (D)	The Controller		Authorizes the Controller to exercise discretionary authority to perform an audit or investigation of any county, city, special district, joint powers authority, or redevelopment agency. Expands existing law, providing that if reports are not made in a specified manner of if there is reason to believe that reports are false, an investigation may be made and a copy of the results transmitted to the grand jury of the county, to also include a special district, joint powers authority, or redevelopment agency.	In ASM Committee on LOCAL GOVERNMENT: Reconsideration granted.	
SB 200 Wolk (D)	Delta Levee Maintenance	Oppose	Declares the legislative intent to reimburse eligible local agencies up to a specified percentage of maintenance or improvement or project or no project levees in the Sacramento-San Joaquin Delta until an specified date and to increase the reimbursement rate on and after that date. Extends the authorization of the Reclamation Board to	01/26/2012 - In SENATE. Read third time. Passed SENATE. *****To ASSEMBLY.	3/26/12 Board Meeting – Recommended removal of IRWD oppose

Bill No. Author	Title	IRWD Position	Summary/Effects	Status	Notes
			provide funds to an eligible local agency in the form of an advance in an amount that does not exceed a specified percentage of the estimated state share.		due to 1/12/12 amends.
SB 250 Rubio (D)	Sacramento-San Joaquin Delta: Delta Plan: Facility		Amends the Sacramento-San Joaquin Delta Reform Act of 2009 which requires the incorporation of the Bay Delta Conservation Plan into the Delta Plan and requires the Bay Plan to include a review and analysis of Delta conveyance alternatives including specified canals and pipelines. Requires the Department of Water Resources development of certain Delta conveyance facilities to be completed on or before a specified date, and the construction of those facilities to be completed by a specified date.	In ASSEMBLY. Read second time and amended. Re-referred to Committee on RULES.	3/26/12 Board Meeting – recommended IRWD support. 2_Year_Bill
SB 449 Pavley (D)	Controller: Local Agency Financial Review		Authorizes the Controller to conduct a preliminary review to determine the existence of a local agency financial problem, and perform an audit upon completion of that review and to convene a local agency financial review committee and to authorize the committee to recommend a financial recovery plan for a local agency requesting assistance. Requires the Controller to report to the Legislature on the actions of the committee and the status of all engagements with local agencies.	06/29/2011 - In ASSEMBLY Committee on LOCAL GOVERNMENT: Reconsideration granted.	
SB 900 Steinberg (D)	Regional Water Quality Control Boards: Members		Amends the Porter-Cologne Water Quality Control Act. Deletes provisions of the act prohibiting a board member from participating in actions that involve the member or a waste discharger with which the member is connected. Specifies that the limitation on the member's financial interest applies only to a disqualifying financial interest within the Political Reform Act. Relates to requirements, qualifications, and to disqualifying factors for regional board members.	07/01/2011 - In ASSEMBLY. To Inactive File.	
SB 911 De Leon (D)	Local Agency Bonds: Reports		Requires the Chief Fiscal Officer of a local agency issuing bonds to file a report on any project funded with its governing body within 60 days after the close of the agency's fiscal year. Provides that failure to do so on time shall result in a suspension of bond proceeds until the report is submitted. Requires a issuing local agency, upon a request about any expenditure of bond proceeds exceeding a specified amount, to make specified information available with respect to any expenditure or expenditures.	05/23/2011 - To ASSEMBLY Committee on LOCAL GOVERNMENT.	
SB 964 Wright (D)	State Water Resources Control Board		Provides that the exemption for the adoption of regulations for the issuance, denial or revocation of specified waste discharge	In SENATE. Read second time and	

Bill No. Author	Title	IRWD Position	Summary/Effects	Status	Notes
			requirements and permits shall not apply to any general permits or waivers issued under state law or the federal National Pollutant Discharge Elimination System, thereby requiring the State Water Resources Control Board and the regional water quality control boards to comply with provisions that require the adoption of regulations under those circumstances.	amended. Re-referred to Committee on ENVIRONMENTAL QUALITY.	
SB 965 Wright (D)	Water Resources Control Boards: Ex Parte Communications		Prohibits a state water resources control board, regional board member, or a person, other than a board staff member acting in his or her official capacity, who intends the influence the decisions of a board member on a matter before the board, from conducting an ex parte communication. Provides that if such communication occurs, the board member shall notify the interested party that a full disclosure of the communication shall be entered in the board's record.	In SENATE. Read second time and amended. Re-referred to Committee on ENVIRONMENTAL QUALITY.	
SB 1090 Governance and Finance Cmt	Local Government: Omnibus Bill		Requires the legislative body of a general law city to submit a sidewalk installation charge to the voters and receive a 2/3 vote to approve the charge prior to imposing the charge. Specifies that, if the improvements and activities proposed for each year of operation of the district are the same, this requirement may be satisfied if the management plan includes a description of the first year's proposed improvements and activities. Relates to the refunding of district revenues upon district expiration.	03/01/2012 - To SENATE Committee on GOVERNANCE AND FINANCE.	
SB 1146 Pavley (D)	Wells: Reports: Public Availability		Relates to well reports. Requires the Department of Water Resources to make the well reports available to the public. Requires the department to provide specified disclaimers. Allows the department to charge a reasonable fee to recover the cost of reproducing the report and for compliance with the Information Practices Act.	03/01/2012 - To SENATE Coms on NATURAL RESOURCES AND WATER and ENVIRONMENTAL QUALITY.	
SB 1251 Evans (D)	Invasive Aquatic Species: Quagga Mussels		States the intent of the Legislature to enact legislation to require the Department of Fish and Game to develop a new statewide quagga mussel prevention and management plan dependent on criteria, including, but not limited to, inspection protocols and the tracking of vessels.	03/08/2012 - To SENATE Committee on RULES.	
SB 1340 LaMalfa (R)	Appropriation of Water: Sewerage Commission Oroville		Authorizes the Sewerage Commission Oroville to file an application for a permit to appropriate a specified amount of water that is based on the volume of treated wastewater that it discharges into the	03/08/2012 - To SENATE Committee on NATURAL	Expansion of AB 134 (Dickenson),

Bill No. Author	Title	IRWD Position	Summary/Effects	Status	Notes
			Feather River. Authorizes the State Water Resources Control Board to grant a permit to appropriate that treated wastewater upon terms and conditions determined by the board. Requires the board to comply with permit, approval and review requirements, prior to granting a permit pursuant to these provisions.	RESOURCES AND WATER.	sponsored by Sac Regional in 2011.
SB 1387 Emmerson (R)	Metal Theft		Prohibits any junk dealer or recycler from possessing a public fire hydrant, fire department connection, including, but not limited to, bronze or brass fittings or parts, a public manhole cover or lid, or any part of that cover or lid, or a public backflow device and connections to that device without a written certification on the letterhead of the public agency or utility that owns or previously owned the material and that the entity has sold. Makes such dealers civilly liable.	03/08/2012 - To SENATE Committees on BUSINESS, PROFESSIONS AND ECONOMIC DEVELOPMENT and RULES.	
SB 1395 Rubio (D)	State Auditor: Local Government Agency Audit Program		Makes technical, nonsubstantive changes to existing law authorizing the State Auditor to establish a high-risk local government agency audit program for the purpose of identifying, auditing, and issuing reports on any local government agency that the State Auditor identifies as being at high risk for the potential of waste, fraud, abuse, and mismanagement or that has major challenges associated with its economy, efficiency, or effectiveness.	03/08/2012 - To SENATE Committee on RULES.	
SB 1495 Wolk (D)	Sacramento-San Joaquin Delta Reform Act of 2009		Excludes from the definition of covered action, under the Sacramento-San Joaquin Delta Reform Act of 2009, specified leases approved by specified special districts, and dredging activities and projects conducted by the federal government or specified special districts to improve interstate and international commerce through the navigable waters.	02/24/2012 - INTRODUCED.	
SB 1498 Emmerson (R)	Local Agency Formation Commission: Powers		Authorizes the Local Agency Formation Commission to authorize a city or district to provide new or existing services outside its jurisdictional boundaries and outside its sphere of influence to support existing or planned uses involving public or private properties, subject to approval at a noticed public hearing.	02/24/2012 - INTRODUCED.	Sponsor: League of Cities (LAFCO proposal No.3). ACWA concerns - working with author/sponsor

DS
March 26, 2012
Prepared by: R. Thatcher/M. Hoolihan
Submitted by: K. Burton
Approved by: Paul Cook

CONSENT CALENDAR

AMENDMENT NO. 1 TO AGREEMENT
BETWEEN ORANGE COUNTY SANITATION DISTRICT AND
IRVINE RANCH WATER DISTRICT

SUMMARY:

Orange County Sanitation District (“OCSD”) and Irvine Ranch Water District (“IRWD”) entered into an agreement on July 1, 2003 transferring certain sewer facilities and responsibilities in the Irvine Business Complex and the former MCAS Tustin Air Station from Revenue Area 7 (OCSD) to Revenue Area 14 (IRWD). The agreement identified certain facilities to be transferred to IRWD. However, no interest in the real property rights associated with those facilities was identified or transferred at that time. IRWD and OCSD staff have identified the real property interests to be transferred and IRWD staff has requested a quitclaim of those interests from OCSD to IRWD. OCSD prepared an amendment to the 2003 OCSD/IRWD Agreement to address the quitclaim of the real property interests from OCSD to IRWD. Staff recommends that the Board:

- Approve Amendment No. 1 to the Agreement by and between OCSD and IRWD; and
- Adopt a resolution authorizing District Officers to execute Amendment No. 1 to the 2003 OCSD/IRWD Agreement transferring the real property interests to IRWD.

A resolution authorizing the execution of Amendment No. 1 is attached as Exhibit “A”. The 2003 agreement is attached as Exhibit “B”. Amendment No. 1 to the 2003 agreement which includes the quitclaim deed is attached as Exhibit “C”. The Amendment has been reviewed by IRWD’s legal counsel.

FISCAL IMPACT:

None.

ENVIRONMENTAL COMPLIANCE:

Activities such as amending facility transfer agreements is exempt from the California Environmental Quality Act (CEQA) as authorized under the California Code of Regulations, Title 14, Chapter 3, Section 15061 (b) (3). These types of activities are covered by the general rule that CEQA applies only to projects which have the potential for causing a significant direct effect on the environment or reasonably indirect effect on the environment.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE DISTRICT OFFICERS TO EXECUTE AMENDMENT NO. 1 TO THE AGREEMENT BY AND BETWEEN THE ORANGE COUNTY SANITATION DISTRICT AND IRVINE RANCH WATER DISTRICT; AND ADOPT THE FOLLOWING RESOLUTION BY TITLE:

RESOLUTION NO. 2012 - _____

RESOLUTION OF THE BOARD OF DIRECTORS OF
IRVINE RANCH WATER DISTRICT APPROVING EXECUTION
OF AMENDMENT NO. 1 TO AGREEMENT
BETWEEN ORANGE COUNTY SANITATION DISTRICT
AND IRVINE RANCH WATER DISTRICT

LIST OF EXHIBITS:

Exhibit "A" – Resolution

Exhibit "B" – 2003 OCSD/IRWD Agreement (Attachment 1 to Agmt. on file in GM's Office)

Exhibit "C" – Amendment No. 1 to OCSD/IRWD Agreement

EXHIBIT "A"

RESOLUTION NO. 2012 -

RESOLUTION OF THE BOARD OF DIRECTORS OF
IRVINE RANCH WATER DISTRICT APPROVING EXECUTION
OF AMENDMENT NO. 1 TO AGREEMENT
BETWEEN ORANGE COUNTY SANITATION DISTRICT
AND IRVINE RANCH WATER DISTRICT

WHEREAS, Orange County Sanitation District ("OCSD") and Irvine Ranch Water District ("IRWD") entered into an agreement July 1, 2003 (the "Agreement") to transfer certain OCSD sewer facilities in the Irvine Business Complex and MCAS Tustin Air Station from Revenue Area 7 to Revenue Area 14; and

WHEREAS, the real property interests associated with the facilities transferred in the Agreement were not mentioned or identified in said Agreement; and

WHEREAS, the intent of OCSD was to include the real property rights with the transfer of the sewer facilities identified in the Agreement; and

WHEREAS, OCSD has prepared Amendment No. 1 to the Agreement to quitclaim all of the rights associated with the sewer facilities and identified by OCSD and IRWD staff; and

WHEREAS, the proposed Amendment No. 1 to Agreement has been presented to this Board of Directors, copy of which is attached hereto as Exhibit "A".

NOW, THEREFORE, BE IT RESOLVED, the Amendment No. 1 By and Between the Orange County Sanitation District and Irvine Ranch Water District, herein described is hereby approved and execution by the District's officers is authorized.

ADOPTED, SIGNED and APPROVED this 26th day of March, 2012.

President, IRVINE RANCH WATER DISTRICT
and of the Board of Directors thereof

Secretary, IRVINE RANCH WATER DISTRICT
and of the Board of Directors thereof

APPROVED AS TO FORM:
BOWIE, ARNESON, WILES & GIANNONE
IRWD Legal Counsel

By _____

EXHIBIT "B"

AGREEMENT

THIS AGREEMENT is made and entered into the 1st day of July, 2003, to be effective on the effective date specified herein, by and between:

ORANGE COUNTY SANITATION DISTRICT,
a County Sanitation District, hereinafter
referred to as "OCSD,"

AND

IRVINE RANCH WATER DISTRICT, A
California water district, hereinafter referred to
as "IRWD."

RECITALS

WHEREAS, OCSD is a County Sanitation District duly organized and existing pursuant to the County Sanitation District Act, California Health and Safety Code sections 4700 *et seq.*, which provides for the ownership, operation and maintenance of wastewater collection, treatment and disposal facilities;

WHEREAS, IRWD is a public agency duly organized and existing pursuant to the California Water District Act, California Water Code sections 34000 *et seq.*, and also owns, operates and maintains wastewater collection, treatment and disposal facilities;

WHEREAS, OCSD accounts for property tax and other revenues and expenses separately in Revenue Areas existing within OCSD's jurisdictional boundaries;

WHEREAS, within OCSD's Revenue Area 14, IRWD provides local wastewater collection service and delivers the wastewater collected within IRWD's service area to OCSD's trunk sewer and treatment plant facilities for treatment and disposal, pursuant to the terms and conditions of those certain agreements between IRWD and OCSD, as the successor to County Sanitation District No. 14 of Orange County, identified in and

affirmed by OCSD's Resolution No. OCSD 98-37, providing for IRWD's use and funding of capacity and ownership equity in the OCSD wastewater collection, treatment and disposal facilities for the benefit of the area in OCSD's Revenue Area 14 and the cooperative pretreatment ordinance administration (collectively, the "Revenue Area 14 Agreements");

WHEREAS, those real properties within the boundaries of the "Irvine Business Complex" ("IBC") and the Tustin Marine Corps Air Facility ("MCAF"), as depicted on Exhibit "A" attached hereto and incorporated herein by reference (the "Transfer Area"), are located within OCSD Revenue Area 7 and adjacent to Revenue Area 14, and receive water service from IRWD and local wastewater collection service from OCSD;

WHEREAS, the IBC portion of the Transfer Area is, in large part, developed. Under the Defense Base Closure and Realignment Act of 1991, MCAF is designated for reuse with a mixture of uses pursuant to a reuse plan and specific plan prepared by the City of Tustin ("Tustin") as the local redevelopment authority;

WHEREAS, taking into consideration IRWD's ongoing provision of local retail water service to the Transfer Area, the proximity of the Transfer Area to OCSD Revenue Area 14 and other factors, OCSD and IRWD have determined that efficiency would be gained by having IRWD provide local wastewater collection service within the Transfer Area, including the proposed uses of MCAF, in the same manner as such service is provided in the adjacent Revenue Area 14;

WHEREAS, in order to facilitate the provision of local wastewater collection service to the Transfer Area by IRWD, the parties have determined that the Transfer Area should be transferred from OCSD Revenue Area 7 to Revenue Area 14 and that

the contractual funding arrangements of the Revenue Area 14 Agreements should be made applicable to the Transfer Area, subject to the terms and conditions as set forth in this Agreement;

WHEREAS, the Revenue Area 14 Agreements provide for funding of such costs by IRWD on the basis of OCSD's annual integration adjustment and CORF-sharing formulas, utilizing flows generated within Revenue Area 14;

WHEREAS, a portion of the Revenue Area 14 wastewater flow is tributary to both IRWD's Michelson Water Reclamation Plant (MWRP) and the trunk line sewer facilities of Revenue Area 14;

WHEREAS, under the Revenue Area 14 Agreements, the annual integration adjustment and CORF-sharing formulas used by OCSD are based on a running three-year average of the highest four calendar months' flows within Revenue Area 14 instead of average annual flows, which is intended to adjust for the seasonal variation that can occur in Revenue Area 14's flows to OCSD because of IRWD's reclamation of a portion of the wastewater flow at its MWRP;

WHEREAS, the Transfer Area wastewater flow is not tributary to MWRP, and it is not presently feasible for IRWD to reclaim such non-tributary flow;

WHEREAS, in recognition of the foregoing distinction between the Transfer Area and Revenue Area 14, the parties have determined that for purposes of including the Transfer Area in IRWD's annual integration adjustment and CORF-sharing allocation under the Revenue Area 14 Agreements, the formula adjustment to highest-four-months should not be applied to the Transfer Area flows for so long as said flows remain non-

tributary to MWRP. In place thereof, the annual integration adjustment and the CORF-sharing formulas applicable to the rest of OCSD shall apply;

WHEREAS, the parties intend that IRWD succeed OCSD in any and all existing sewer service agreements within the Transfer Area, with appropriate notification of existing customers, and IRWD proposes to enter into local sewer service agreements with Tustin and/or the future developers and owners of property within MCAF;

WHEREAS, a small volume of wastewater flow from the existing MCAF military personnel housing on the east side of Peters Canyon Wash, and a portion of the proposed MCAF development will be delivered to the existing Red Hill Trunk Sewer (collectively, the "Red Hill Trunk Flow") until completion of the development of MCAF. Thereafter flow will be delivered to OCSD's planned Armstrong Trunk Sewer.

In consideration of the promises, covenants, rights and obligations set forth herein, the parties hereto covenant and agree as follows:

AGREEMENT

1. Within sixty (60) days of the effective date of this Agreement, OCSD agrees to administratively transfer the Transfer Area from Revenue Area 7 to Revenue Area 14. Except as herein provided, the Transfer Area shall be subject to the Revenue Area 14 Agreements, including the February 11, 1987 Memorandum of Understanding relating to industrial waste program administration.
2. Except as otherwise set forth on Exhibits A and B hereto, within sixty (60) days of the effective date of this Agreement, OCSD agrees to transfer from Revenue Area 7 to Revenue Area 14 (i) all sewer facilities and capacity rights therein used by the Transfer Area and (ii) 3.69 million gallons per day (MGD) of ownership equity in the joint

OCSD facilities, which equity transfer the parties acknowledge has been determined to be attributable to the Transfer Area, based on the annual integration adjustment formula in use by OCSD on the effective date hereof and an initial flow measurement made prior to the effective date of this Agreement in accordance with the procedure for flow measurements set forth in Section 6 hereof. The parties agree to divide equally the cost of the initial flow measurement.

The sewer facilities to be transferred to IRWD and those to be retained by OCSD are more specifically identified on Exhibit "B," which is attached hereto and incorporated herein by this reference. The facilities to be retained by OCSD are collectively referred to herein as the "Retained Facilities." Retained Facilities are also depicted on Exhibit "A" hereto. Users located within the Transfer Area shall be allowed to use the Retained Facilities; provided, however, that IRWD shall pay for a percentage of the replacement and refurbishment costs for the Retained Facilities based upon the percentage of capacity in the Retained Facilities utilized by users located within the Transfer Area. Within sixty (60) days of the effective date of this Agreement, OCSD shall provide to IRWD (a) a copy of the Sewer System Atlas for the Transfer Area, dated July 1997, prepared by Camp, Dresser & McKee, Inc. and (b) copies of the record drawings showing the "as-built" trunk and local collector sewer lines in the Transfer Area.

3. Nothing in this Agreement shall effect a change in the status of sewerage facilities located outside the Transfer Area, but serving the John Wayne Airport area.

4. Within sixty (60) days of the effective date of this Agreement, OCSD shall compute the difference, as of the effective date, between the Transfer Area's proportional share of OCSD's outstanding Certificates of Participation and the Transfer

Area's proportional share of OCSD's unrestricted net assets and net assets restricted for debt service, based on the initial flow measurement referred to in Section 2. If such share of the outstanding Certificates of Participation is the larger of the two amounts, IRWD shall pay the difference to OCSD within sixty (60) days of receipt of an invoice therefore from OCSD; if it is the smaller of the two amounts, OCSD shall credit the difference to Revenue Area 14 within sixty (60) days of making the computation. OCSD shall transfer to IRWD all future property tax revenue attributable to the Transfer Area which revenue is received by OCSD. The revenue entitlement so transferred shall be credited by OCSD against IRWD's funding obligations with respect to Revenue Area 14.

5. Upon making the transfers pursuant to Sections 1, 2 and 4 hereof, OCSD shall provide IRWD with a written report of the transfers and amounts applied to debt service and credited to IRWD's Revenue Area 14 funding obligations.

6. Wastewater flows from the Transfer Area shall be included in Revenue Area 14's flows to OCSD for purposes of determining IRWD's funding obligations for the Revenue Area 14 share of OCSD's capital expenditures and operation and maintenance costs in accordance with the Revenue Area 14 Agreements; provided, however, that the Transfer Area flow shall be calculated as an average annual flow. The Transfer Area flow shall be calculated by using the annualized flows metered by OCSD at the Main Street Pump Station and Main Street Flume and totalized flows generated inside and outside the Transfer Area, established from periodic measurements. The measurement of the flows to be subtracted and added shall be made in accordance with the following procedure: not less than every five (5) years, IRWD shall retain the services of a reputable firm specializing in sewage flow

measurement to measure the flow at appropriate points of subtraction and addition within the Transfer Area. The current locations of flow subtraction and addition within the Transfer Area are:

- (a) Manhole station 107+12.00 on the 42 inch diameter line in Red Hill Avenue at the intersection of Barranca Parkway. This meter will monitor flows entering the Transfer Area from the Northeast;
- (b) Manhole station 107+12.30 on the 24 inch diameter line in Red Hill Avenue at the intersection of Barranca Parkway. This meter will monitor flows entering the Transfer Area from the Northeast;
- (c) Manhole station 101+21.00 on the 24 inch diameter line in Red Hill Avenue Northeast of Deer Avenue. This meter will monitor flows entering the Transfer Area via an eight inch lateral from the Northwest;
- (d) Manhole station 94+60.00 on the 24 inch diameter line in Red Hill Avenue at the intersection of Deer Avenue. This meter will monitor flows entering the Transfer Area via an eight inch lateral from the Northwest;
- (e) Manhole station 81+44.00 on the 24 inch diameter line in Red Hill Avenue at the intersection of Alton Avenue. This meter will monitor flows entering the Transfer Area via a ten inch lateral from the Northwest;
- (f) Manhole station 230+36.83 on the 66 inch diameter line in Main Street at the intersection of McDurmott West. This meter will monitor flows leaving the Transfer Area;
- (g) Manhole station 18+68.87 on the 30 inch diameter line Southeast of the intersection of Main Street and Sky Park South. This meter will monitor flows leaving the Transfer Area to the Southwest;
- (h) Manhole station 15+93.50 on the 12 inch at the intersection of Macarthur Boulevard and Campus Drive. This meter will monitor flows entering the Transfer Area from the South;
- (i) Manhole station 0+00.00 on the 30 inch at the intersection of Von Karman Avenue and Campus Drive. This meter will monitor flows entering the Transfer Area from the Southeast;
- (j) Manhole station 6+99.93 on the 12 inch diameter line located on the Southwest side of Jamboree Road just North of Macarthur Boulevard. This meter will monitor flows leaving the Transfer Area.

The parties acknowledge that such inclusion of the Transfer Area flows in the Revenue Area 14 annual integration adjustment and CORF share calculations, with credit for the transfers of ownership equity, facilities and capacity from Revenue Area 7 pursuant to Section 2, shall satisfy IRWD's obligation to purchase additional OCSD treatment plant and collection system capacity attributable to the Transfer Area.

7. IRWD agrees to complete the design and construct the Armstrong Subtrunk Sewer and the McGaw Subtrunk Sewer, identified on Exhibit "C" which is attached hereto and incorporated herein by reference. IRWD shall reimburse OCSD for the cost incurred to date for designing and constructing the Armstrong Subtrunk Sewer and the McGaw Subtrunk Sewer.

8. Within sixty (60) days of the effective date of this Agreement, OCSD shall transfer to Revenue Area 14 all connection and capital facilities capacity charges collected by OCSD within the 515 days immediately preceding the effective date that have not received a certificate of occupancy. Except as provided in the foregoing sentence, no service or capital facilities capacity charges or other amounts previously collected by OCSD shall be owed to IRWD with respect to the Transfer Area. OCSD shall not impose or collect, nor shall IRWD owe to OCSD, any sewer service charges or capital facilities capacity charges applicable to properties within the Transfer Area after the effective date of this Agreement.

9. Any existing manhole covers bearing OCSD's or CSDOC's logos will be changed to IRWD's logos upon the need for frame and cover replacement, due to wear, or upon street resurfacing.

10. OCSD hereby agrees to indemnify, defend and hold harmless IRWD, and its officers, agents, board members, and employees from any and all claims, damages, liabilities, judgments, and causes of litigation, including but not limited to reasonable attorney fees and court costs, if any, which (a) arose before the effective date hereof as a result of the acts or omissions of OCSD, its officers, agents, board members or employees, or its predecessor County Sanitation District No. 7 of Orange County or its officers, agents, board members or employees, within or affecting the Transfer Area; or (b) which arose before the effective date hereof or may hereafter arise and relate to the imposition of fees or charges by OCSD or County Sanitation District No. 7 of Orange County on any user or parcel within the Transfer Area.

11. All notices shall be in writing and shall be considered given either: (i) when delivered in person to the recipient named below; or (ii) on the date of delivery or refusal shown on the return receipt, after deposit in the United States mail in a sealed envelope as either registered or certified mail with return receipt requested, and postage and postal charges prepaid, and addressed to the recipient named below; (iii) on the date of delivery or refusal, when delivered by Federal Express or other commercial express delivery service providing acknowledgements of receipt; or (iv) on the date of delivery when delivered by facsimile or other electronic transmission providing verification of delivery and receipt. Such notices or communications shall be given to the Parties at their addresses set forth below:

To OCSD:

Orange County Sanitation District
Attention: Board Secretary
P.O. Box 8127
Fountain Valley, CA 92728-8127
Facsimile: (714) 962-0356

To IRWD:

Irvine Ranch Water District
Attention: General Manager
15600 Sand Canyon Avenue
P.O. Box 57000
Irvine, CA 92619-7000
Facsimile: (949) 453-1228

Either Party may change its address for notices by written notice to the other Party given in the manner provided in this section.

12. The Recitals above are hereby incorporated into this section as though fully set forth herein and each party acknowledges and agrees that such Party is bound, for purposes of this Agreement, by the same.

13. The effective date of this Agreement shall be July 1, 2003.

IN WITNESS WHEREOF, OCSD and IRWD have executed this Agreement as of the day and year first above written.

Dated: 1/28/04

Dated: 1/28/04

ORANGE COUNTY SANITATION DISTRICT

By Steve Anderson
Vice Chairman, Board of Directors

By Lenny M. Kelly
Secretary, Board of Directors

APPROVED AS TO FORM:
THOMAS L. WOODRUFF
DISTRICT COUNSEL

By: [Signature]

Dated: _____

Dated: _____

IRVINE RANCH WATER DISTRICT

By [Signature]
President

By [Signature]
Secretary

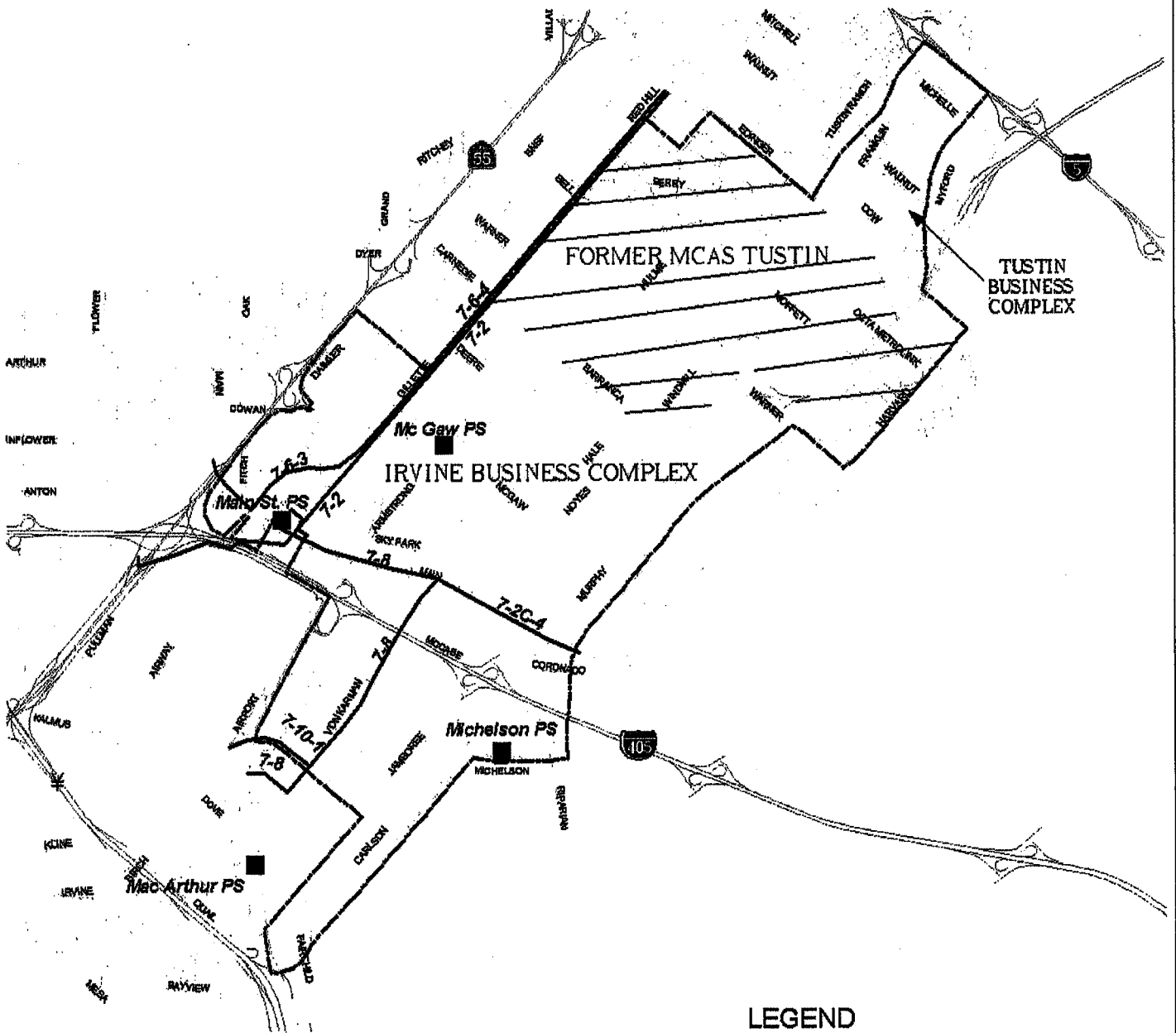
APPROVED AS TO FORM:
BOWIE, ARNESON, WILES & GIANNONE
Legal Counsel - IRWD

By: _____


Joan C. Arneson

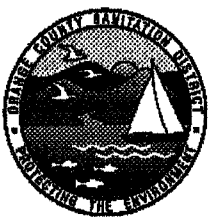
EXHIBIT "A"

SANITARY SEWERS TO BE RETAINED BY ORANGE COUNTY SANITATION DISTRICT (OCSD)



LEGEND

- TRANSFER AREA BOUNDARY
- OCSD TRUNK SEWERS TO BE RETAINED BY OCSD IN TRANSFER AREA



0 1 Miles

May, 2003

**OCSD Engineering
Geographic Information Systems**

Information shown on this map is derived from the OCSD GIS database. It is not to be used for any other purpose without the prior written permission of the OCSD. The OCSD is not responsible for any errors or omissions on this map.

EXHIBIT "B"

LIST OF SANITARY SEWERS TO BE TRANSFERRED TO IRVINE RANCH WATER DISTRICT AND LIST OF SEWERS TO BE RETAINED BY ORANGE COUNTY SANITATION DISTRICT

Please refer to Attachment 1 to Exhibit B for sewer atlas details

<u>Name of Street Containing Sewer</u>	<u>IBC Sewer Atlas Sheet</u>
1. Jamboree Road (Stanford Research) (Note: The portion of the 10" sewer shown in blue that is in and east of Jamboree Road, initially called the Stanford Research Institute Off-site sewer, will be transferred to IRWD. The remaining 12" portion west and north of Jamboree receives flow from the City of Newport Beach, outside of the IBC, and will be retained by OCSD. This flows into the MacArthur Pump Station, also to be retained by OCSD).	101NW
2. Campus Drive and Jamboree (Note: all sewers shown in red & in blue will be transferred to IRWD).	101NE
3. Near Fairchild Road (Stanford Research) (Note: the 10" sewer shown in blue, initially called the Stanford Research Institute Off-site Sewer, will be transferred to IRWD).	101SE
4. Near Jamboree (Stanford Research) (Note: the 10" sewer shown in blue, initially called the Stanford Research Institute off-site Sewer, will be transferred to IRWD. This is the identical 10" sewer that is reproduced in portions of grids 101NW, 101SE and 101SW.).	101SW
5. Carlson Ave., Campus Dr., "A" St. , & "C" St. (Note: all sewers shown in red & in blue will be transferred to IRWD).	102NW
6. MacArthur Blvd. & Douglas St. (Note: all sewers shown in red & in blue will be transferred to IRWD).	105NW
38. MacArthur, Michelson, Von Karman, Dupont, Business Center Dr. & San Diego Fwy (Note: the 21" sewer shown in red in Michelson Drive, east of Von Karman, terminating at the OCSD manhole labeled as MAA071, will be transferred to IRWD. The entire 30" & 42" sewer shown in red in Von Karman Dr. will be retained by OCSD. The 18" sewer shown in red in Business Center Dr. & parallel to the San Diego Fwy , will be transferred to IRWD. All other sewers shown in blue will be transferred to IRWD).	105NE

38. **Martin, Dupont, Von Karman, Campus, 105SE**
Bardeen, Teller, Jamboree, "A" & "D" St. (Note: the 15" sewer shown in red in Campus Dr. west of Von Karman, terminating at the manhole labeled as MAA093, and the entire 30" sewer shown in red in Von Karman will be retained by OCSD. All other sewers, whether shown in red or blue, including the 21" sewer shown in red in Campus east of Von Karman, terminating in the manhole labeled as MAA093 will be transferred to IRWD).
9. **MacArthur, Campus & Martin 105SW**
 (Note: the 8" sewer shown in red on MacArthur north of Campus, terminating at the manhole labeled as MAA104, and the 8" sewer shown in blue in Martin will be transferred to IRWD. The 12" & 15" sewer shown in red along Campus and the two sewers shown in red and blue south of Campus with no street names will be retained by OCSD).
10. **Von Karman, Morse, McCabe, White, Teller, 106NW**
Michelson, & Jamboree (Note: the 42" sewer shown in red in Von Karman will be retained by OCSD. All other sewers, whether shown in red or blue, including the 21" sewer shown in red in Michelson and the 18" sewer shown in red parallel to San Diego Freeway, terminating at the manhole labeled as MAA066, will be transferred to IRWD).
11. **White, McCabe, Jamboree, Main St. & Union 106NE**
 (Note: All sewers, whether shown in red or blue, except everything downstream of the 60" starting at the manhole labeled as MAA043 and flume metering equipment, will be transferred to IRWD).
12. **Michelson Drive 106SE**
 (Note: all sewers whether shown in red or blue on this portion of Michelson Dr., including the Michelson Pump Station, & its incoming & outgoing lines will be transferred to IRWD)
13. **Teller, Jamboree, Michelson, "A" St., 106SW**
Carlson and surroundings (Note: all sewers, whether shown in red or in blue, including the sewer on A Street, will be transferred to IRWD)
14. **Newport Fwy, Cowan, McDermott W&E, Fitch, 109NW**
Redhill, Mitchell, & Main St. (Note: the 24" & 27" sewer shown in red in Main St., terminating at the manhole labelled as JAA002, and all other sewers shown in blue will be transferred to IRWD. The 30" sewer shown in red in Main St. discharging from the Main St. Pump Station and terminating at the manhole labeled as JAA002 will be retained by OCSD. The 63" sewer shown in red in Redhill Ave., terminating at the manhole labeled as JAA002 will be retained by OCSD).

The two sections of 66" sewers shown in red in Main St., one commencing at the manhole labeled as JAA002 and the other terminating at the Main Street Pump Station will be retained by OCSD. The Main St. Pump Station and the dual 42" force mains commencing at the Main St. P. S. will be retained by OCSD).

15. **Mitchell, Fitch, Cowan, Redhill, Reynolds, Gillette; MacArthur, Skypark, and Armstrong** **109NE**
(Note: all sewers shown in blue will be transferred to IRWD. All sewers shown in red in Redhill and the 27" and 30" sewer shown diagonally in red will be retained by OCSD).
16. **Main St., Executive Park, MacArthur, Gillette, Koll Center & Business Center** **109SE**
(Note: the 18" & 21" sewer shown in red in Main St., terminating at the manhole labeled as MAA019, and all other sewers shown in blue will be transferred to IRWD. The entire 66" sewer shown in red in Main St. will be retained by OCSD).
17. **Main St. and Redhill Ave.** **109SW**
(Note: the 21" sewer shown in red in Main St., terminating at the manhole labeled as MAA019; as well as the 24" sewer shown in red in Main St., commencing at the manhole labeled as MAA114, will be transferred to IRWD. The 30" sewer shown in red crossing Main St. diagonally, including the manholes labeled as MAB001 and MAB002; as well as the 66" sewer shown in red in Main St., which includes the manhole labeled as MAA019, and the dual 42" DIP force mains shown in red will be retained by OCSD).
18. **Gillette, Armstrong, Reynolds, Kaiser, McGaw, Langley, & Von Karman** **110NW**
(Note: All sewers, whether shown in red or blue, including the McGaw Pump Station and its force main, will be transferred to IRWD. OCSD has designed Contract No. 7-35 that will be built by IRWD after the new proposed Armstrong Subtrunk Sewer in Armstrong Ave. is finished. This Contract No. 7-35 will include a new gravity sewer in McGaw Ave. to connect to the Armstrong Subtrunk and will allow the McGaw Pump Station to be abandoned in the future).
19. **Dewar, Von Karman, Alton & McGaw** **110NE**
(Note: all sewers, whether in red or blue, will be transferred to IRWD).
20. **Cartwright, Davinci, Main St., Derian, Kelvin, McGaw, Jamboree, & Murphy** **110SE**
(Note: All sewers, whether shown in red or blue, including the 15" shown in red in Jamboree, the 18" & 21" shown in red in McGaw, and the 18", will be transferred to IRWD). (The 60" sewer shown in red in Main St. will be retained by OCSD)

21. **Gillette, Main St., Koll Center, Von Karman 110SW**
Morse, Cartwright, & White (Note: the 66" sewer shown in red in Main St., west of Von Karman, commencing at the manhole labeled as MAA025, as well as the 36" & 48" sewer shown in red in Von Karman, south of Main St., terminating at the manhole labeled as MAA025, will be retained by OCSD. All the other sewers, whether shown in red or blue, including the 10" sewer shown in red in Von Karman, north of Main St., terminating at the manhole labeled as MAA026, and the entire 18" & 21" sewer shown in red in Main St. on the south side of the street, will be transferred to IRWD. The 60" sewer shown in red in Main St., mostly east of Von Karman, terminating at the manhole labeled as MAA025, will be retained by OCSD).
22. **Hale, Milliken, Dubridge, Alton, Richter, Noyes, 111NW**
Jamboree, Barranca, Beckman, Corporate Park, & Murphy
 (Note: all sewers in red and in blue will be transferred to IRWD).
23. **Corporate Park, Barranca, & Construction Circle 111NE**
 (Note: all sewers in red and in blue will be transferred to IRWD).
24. **Jamboree, McGaw, Murphy, & Alton 111SW**
 (Note: all sewers in red and in blue will be transferred to IRWD).
25. **Pullman, Duryea & Alton 113NE**
 (Note: all sewers shown in blue will be transferred to IRWD).
26. **Pullman, Daimler, MacArthur, Cowan, 113SE**
Fitch, McGaw, Eastman, Reynolds, & Redhill. (Note: the 54" & 63" as well as the 27" sewers shown in red in Redhill Ave. will be retained by OCSD. All other sewers shown in blue will be transferred to IRWD).
27. **Cowan 113SW**
 (Note: all sewers shown in blue will be transferred to IRWD).
28. **Redhill Ave. 114NW**
 (Note: 24" and 42" sewers in Redhill in red will be retained by OCSD).
29. **Redhill, Barranca & Aston 114NE**
 (Note: the 24" and 42" sewers shown in red in Redhill will be retained by OCSD. The 8" sewer shown in blue in Aston St. will be transferred to IRWD).
30. **Aston, Deere, Armstrong, Alton, & Von Karman 114SE**
 (Note: all sewers whether shown in red or in blue will be transferred to IRWD).

31. **Redhill, Gillette, Kaiser, McGaw, Langley** **114SW**
Kettering, Alton, Aston, Browning, Stanley & Armstrong (Note: the
24" & 27" as well as the 42" & 54" sewers shown in red in Redhill will be
retained by OCSD. All other sewers shown in red and in blue will be
transferred to IRWD).
32. **Construction Circle, Jamboree & Warner Avenue** **115SE**
(Note: all sewers shown in blue will be transferred to IRWD).
33. **Von Karman & Hale Avenue** **115SW**
(Note: all sewers shown in blue will be transferred to IRWD).
34. **Warner Avenue & Jamboree** **116SW**
(Note: all sewers shown in blue will be transferred to IRWD).

Name of Street Containing Sewer **Tustin Sewer Atlas Sheet**

35. **Chambers, Franklin, Michelle & Myford** **120NE**
(Note: all sewers shown in green will be transferred to IRWD).
36. **Franklin & Dow** **120SW**
(Note: all sewers on Franklin and Dow Avenue will be transferred to
IRWD).
37. **Franklin, Walnut, Myford, Dow, Bentley & Sinclair** **120SE**
(Note: all sewers in green and red will be transferred to IRWD).
38. **Myford & Dow** **116NE**
(Note: the red and green sewers on Dow will be transferred to IRWD).
39. **Michelle & Myford** **121NW**
(Note: all sewers in green and red will be transferred to IRWD).

Attachment 1 to Exhibit B
Transfer Area Sewer Atlas

Exhibit "C"

AMENDMENT NO. 1 TO AGREEMENT BY AND BETWEEN THE ORANGE COUNTY SANITATION DISTRICT AND IRVINE RANCH WATER DISTRICT

This Amendment No. 1 ("Amendment") to the Agreement (defined below) is made and entered into this 31st day of January 2012, by and between the Orange County Sanitation District ("OCSD") and the Irvine Ranch Water District ("IRWD").

RECITALS

WHEREAS, on or about July 1, 2003, OCSD and IRWD entered into an Agreement ("Agreement") concerning the transfer of sewer facilities from OCSD to IRWD within the boundaries of the Irvine Business Complex ("IBC") and the Tustin Marine Corps Air Facility ("MCAF"), which are collectively referred to herein as the "Transfer Area"; and

WHEREAS, pursuant to the Agreement, OCSD agreed to transfer specifically identified sewer facilities to IRWD as described in Exhibit "B" attached and incorporated by reference to the Agreement; and

WHEREAS, the sewer facilities identified in Exhibit "B" to the Agreement detailed specific sewers to be transferred to IRWD; however, no interest in real property was identified or agreed to in the Agreement or any exhibits attached and incorporated thereto; and

WHEREAS, IRWD has requested that OCSD transfer all real property interests associated with the sewers that were transferred to IRWD pursuant to the Agreement.

NOW, THEREFORE, in consideration of the promises and mutual benefits, which will result to the parties in carrying out the terms of this Amendment, it is mutually agreed as follows:

1. The following paragraph shall be added as a third paragraph to Paragraph 2 of the Agreement as follows:

"OCSD shall execute a Quitclaim Deed transferring all of OCSD's real property interest, if any, associated with the sewer facilities to be transferred to IRWD, which is more specifically identified in Exhibit "C", attached hereto and incorporated herein by this reference. Upon such transfer, IRWD agrees to indemnify, defend, and hold harmless OCSD, its elected and appointed officials, board members, employees, and agents from and against any and all claims, demands, losses, liens, damages, costs, expenses, environmental mitigation costs, penalties, fines or liabilities of any kind or nature, which OCSD, its officers, elected and appointed officials, employees, agents, and representatives may sustain or incur, or which may be imposed upon them for injury to or death of persons, or damage to property, as a result of or arising out of any act or failure to act by IRWD, its elected and appointed officials, directors, employees, agents, contractors, subcontractors, suppliers, representatives, invitees, or licensees, in

connection with this transfer of real property and property rights for the sewer facilities, except to the extent the same are sustained, incurred or imposed as a result of or arising out of any act or failure to act by OCSD, its elected and appointed officials, directors, employees, agents, contractors, subcontractors, suppliers, representatives, invitees, or licensees, and except for any such claims, demands, losses, liens, damages, costs, expenses, environmental mitigation costs, penalties, fines or liabilities with respect to which OCSD is required to indemnify IRWD under the provisions of Section 10 of the Agreement."

2. Exhibit "C", which is attached hereto and incorporated herein, shall be added to and incorporated to the Agreement.

3. This Amendment is supplemental to the Agreement, and is by reference made a part of said Agreement. All of the terms, conditions, and provisions thereof, unless specifically modified herein, shall continue in full force and effect.

4. In the event of any conflict or inconsistency between the provisions of this Amendment and any of the provisions of the original Agreement, the provisions of this Amendment shall in all respects govern and control.

IN WITNESS WHEREOF, this Amendment to the Agreement has been executed in the name of OCSD and IRWD as of the day and year first above written.

[SIGNATURES ON FOLLOWING PAGE]

ORANGE COUNTY SANITATION DISTRICT

By Larry R. Crandall
Larry R. Crandall,
Chairman of the Board of Directors

By Maria Ayala
Maria Ayala,
Clerk of the Board of Directors

Approved As To Form

By Bradley R. Hogin
Bradley R. Hogin,
General Counsel

IRVINE RANCH WATER DISTRICT

By _____
Mary Aileen Matheis
President of the Board of Directors

By _____
Leslie Bonkowski
Secretary of the Board of Directors

Approved As To Form

By _____
Bowie, Arneso, Wiles & Giannone
Legal Counsel

EXHIBIT "C"

Quitclaim Deed

**RECORDING REQUESTED BY AND
WHEN RECORDED RETURN TO:**

Leslie Bonkowski, District Secretary
Irvine Ranch Water District
15600 Sand Canyon Avenue
P.O. Box 57000
Irvine CA, 92619-7000

ASSESSOR PARCEL NO.:

(Space Above This Line For Recorder's Use)

This document is recorded at the request of and for the benefit of Irvine Ranch Water District and is therefore exempt from the payment of the recording fee pursuant to Government Code Section 6103 and from the payment of the documentary transfer tax pursuant to Revenue and Taxation Code Section 11922.

QUITCLAIM DEED

FOR VALUABLE CONSIDERATION, receipt of which is hereby acknowledged, ORANGE COUNTY SANITATION DISTRICT, a County Sanitation District, successor in interest to COUNTY SANITATION DISTRICT NO. 7, does hereby remise, release, and forever quitclaim to IRVINE RANCH WATER DISTRICT, a California Water District organized under and existing pursuant to Section 34000 et seq. of the California Water Code,

all RIGHT, TITLE and INTEREST in and to that certain real property in the Cities of Irvine and Tustin, County of Orange, State of California more particularly described in Exhibit "A" , attached hereto and by this reference, made a part hereof.

The rights, title and interest hereby quitclaimed are for the purposes of transferring real property and property rights for the facilities described in that certain Agreement dated July 1, 2003, by and between Orange County Sanitation District and Irvine Ranch Water District and referred to in said agreement as "will be transferred to IRWD".

Dated: January 31, 2012

ORANGE COUNTY SANITATION DISTRICT,
a County Sanitation District

By: *General Ruth*
Name: _____
Title: General Manager

By: *Wing Tan*
Name: _____
Title: Director of Finance

MAIL TAX STATEMENTS TO ADDRESS ABOVE

828569.1

STATE OF CALIFORNIA }
COUNTY OF ORANGE }

On January 31, 2012, before me, Lilia A. Kovac, a Notary Public in and for said State, personally appeared James D. Ruth and Lorenzo Tyner, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) ~~is~~ are subscribed to the within instrument and acknowledged to me that ~~he~~ they executed the same in ~~his~~ their authorized capacity(ies), and that by ~~his~~ their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature Lilia A. Kovac
Notary Public in and for said State

(SEAL)



IRVINE RANCH WATER DISTRICT

CERTIFICATE OF ACCEPTANCE

This is to certify that the interest in real property conveyed by deed or grant dated _____
from ORANGE COUNTY SANITATION DISTRICT
to IRVINE RANCH WATER DISTRICT, a California Water District, is hereby accepted by the
undersigned officer on behalf of the Board of Directors pursuant to authority conferred by Resolution
1964-36 of the Board of Directors, adopted on October 6, 1965, and the grantee consents to
recordation thereof by its duly authorized officer.

Date: _____

IRVINE RANCH WATER DISTRICT

By: _____
Leslie Bonkowski
Secretary to Board of Directors

EXHIBIT "A"

LIST OF PROPERTY RIGHTS ACQUIRED BY COUNTY SANITATION DISTRICT NO. 7 OF ORANGE COUNTY, CA TO BE QUITCLAIMED TO IRVINE RANCH WATER DISTRICT:

1. Grant of Easement per Book 6207, Page 905,
2. Final Judgment in Condemnation per Book 6324, Page 712,
3. Resolution of the Board of Supervisors per Book 7883, Page 592,
4. Grant of Easement per Book 8338, Page 323,
5. Grant of Easement per Book 8403, Page 213,
6. Grant of Easement per Book 8870, Page 21,
7. Grant of Easement per Book 9283, Page 411,
8. Grant of Easement per Book 9960, Page 577,
9. Grant of Easement per Book 9970, Page 124,
10. Grant of Easement per Book 10271, Page 214,
11. Grant of Easement per Book 10374, Page 425,
12. Grant of Easement per Instrument No. 84-370129,
13. Grant of Easement per Instrument No. 87-129459,
14. Grant of Easement per Instrument No. 87-425625,
15. Grant of Easement per Instrument No. 93-0093669,
16. Easement Grant Deed per Instrument No. 19960112328,
17. Dedication Grant Deed (fee) per Instrument No. 19960112329

All of the above per Official Records in the Office of the County Recorder of Orange County, California.

08
March 26, 2012 K/L
Prepared by: K. Lew/M. Gortez
Submitted by: K. Burton KLB
Approved by: Paul Cook P.C.

CONSENT CALENDAR

REIMBURSEMENT AGREEMENT BETWEEN IRWD AND THE CITY OF IRVINE FOR INSTALLATION AND ADJUSTMENT OF IRWD FACILITIES TO GRADE

SUMMARY:

The City of Irvine is proceeding with its annual slurry seal and pavement rehabilitation project for miscellaneous areas throughout the City. This project requires a separate Reimbursement Agreement (RA) since the estimated construction cost is over \$100,000. Staff recommends that the Board:

- Authorize the addition of Projects 11658, 21658, and 31658 to the FY 2011-12 Capital Budget in the amount of \$222,200, \$95,700, and \$28,600, respectively;
- Approve Expenditure Authorizations for Projects 11658 and 21658 in the amount of \$222,200 and \$95,700, respectively; and
- Authorize the General Manager to execute an RA with the City of Irvine for its Annual Slurry Seal and Pavement Rehabilitation Project, Capital Improvement Projects 311106, 311203, 341203, and 361204.

BACKGROUND:

Irvine Ranch Water District has had an annual RA in place with the City of Irvine since 1995 for managing various street rehabilitation projects. Typically included in the City's Capital Improvement Projects (CIPs) are alternate bid items for raising existing IRWD sewer manhole covers and cleanouts, and water valve frames and lids to the new pavement grade. Any project up to \$100,000 in reimbursable costs can be authorized by the General Manager as an addendum to this annual "umbrella" RA.

IRWD and the City have also agreed that any City street improvement project, which involves the construction, modification or relocation of IRWD facilities with an estimated construction cost over \$100,000, shall be administered through a separate RA. The City's Annual Slurry Seal and Street Rehabilitation Project, CIP 311106, 311203, 341203, and 361204, is estimated at \$261,612. This project, therefore, requires a project-specific RA.

The project area consists of the Irvine Business Complex, University Town Center, University Research Park, Turtle Ridge, and Spectrum villages. Approximately 374 domestic and 34 recycled water valve frames and lids, eight sewer cleanouts, and 143 sewer manholes will be installed or adjusted to new pavement grade. A Vicinity Map is attached as Exhibit "A", the Engineer's Estimate as Exhibit "B", and the RA as Exhibit "C". The RA has been reviewed by IRWD's legal counsel.

FISCAL IMPACTS:

Projects 11658 (3786), 21658 (3787), and 31658 (3788) are not included in the FY 2011-12 Capital Budget. Staff requests the addition of these projects to the FY 2011-12 Capital Budget and approval of Expenditure Authorizations to fund the projects as shown in the table below and attached as Exhibit "D". Since the Expenditure Authorization for Project 31658 is an initial Expenditure Authorization less than \$60,000, it only requires the approval of the General Manager pursuant to IRWD's current procurement policy.

Project No.	Current Budget	Addition <Reduction>	Total Budget	Existing EA	This EA Request	Total EA Request
11658 (3786)	\$-0-	\$222,200	\$222,200	\$-0-	\$222,200	\$222,200
21658 (3787)	\$-0-	\$ 95,700	\$ 95,700	\$-0-	\$ 95,700	\$ 95,700
31658 (3788)	\$-0-	\$ 28,600	\$ 28,600	\$-0-	\$ 28,600	\$ 28,600
TOTAL	\$-0-	\$346,500	\$346,500	\$-0-	\$346,500	\$346,500

ENVIRONMENTAL COMPLIANCE:

These projects are exempt from the California Environmental Quality Act (CEQA) as authorized under the California Code of Regulations, Title 14, Chapter 3, Section 15061 (b) (3). The activity is covered by the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA.

In addition, projects referenced in these agreements are exempt from CEQA as authorized under the California Code of Regulations, Title 14, Chapter 3, Section 15302 C, which provides exemption for projects that involve replacement or reconstruction of existing structures and facilities where the new structure will be located on the same site as the structure replaced and will have substantially the same purpose and capacity as the structure replaced.

COMMITTEE STATUS:

This item was reviewed by the Engineering and Operations Committee on March 20, 2012.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE ADDITION OF PROJECTS 11658 (3786), 21658 (3787), AND 31658 (3788) TO THE FY 2011-12 CAPITAL BUDGET IN THE AMOUNT OF \$222,200, \$95,700, AND \$28,600, RESPECTIVELY; APPROVE EXPENDITURE AUTHORIZATIONS FOR PROJECTS 11658 (3786) AND 21658 (3787) IN THE AMOUNT OF \$222,200 AND \$95,700, RESPECTIVELY; AND AUTHORIZE THE GENERAL MANAGER TO EXECUTE A REIMBURSEMENT AGREEMENT WITH THE CITY OF IRVINE FOR ITS ANNUAL SLURRY SEAL AND PAVEMENT REHABILITATION PROJECT, CAPITAL IMPROVEMENT PROJECTS 311106, 311203, 341203, AND 361204.

LIST OF EXHIBITS:

- Exhibit "A" – Vicinity Map
- Exhibit "B" – Engineer's Estimate
- Exhibit "C" – Reimbursement Agreement
- Exhibit "D" – Expenditure Authorizations

EXHIBIT "B"

REIMBURSEMENT AGREEMENT BETWEEN IRVINE RANCH WATER DISTRICT (IRWD)
AND THE CITY OF IRVINE
FOR
ANNUAL SLURRY SEAL AND PAVEMENT REHABILITATION, CIP 311106, 311203, 341203 AND 361204

ENGINEER'S ESTIMATE

ITEM NO.	DESCRIPTION	QUANTITY	UNITS	UNIT COST	EXTENDED AMOUNT
A-1	INSTALL NEW IRWD WATER VALVE FRAME AND COVER TO GRADE	374	EA	\$ 450.00	\$ 168,300.00
A-2	INSTALL NEW IRWD RECLAIM WATER VALVE FRAME AND COVER TO GRADE	34	EA	\$ 450.00	\$ 15,300.00
A-3	INSTALL NEW IRWD SEWER CLEANOUT FRAME AND COVER TO GRADE	8	EA	\$ 450.00	\$ 3,600.00
A-4	ADJUST EXISTING IRWD SEWER MANHOLE FRAME AND COVER TO GRADE	143	EA	\$ 450.00	\$ 64,350.00
TOTAL CONSTRUCTION ESTIMATE					\$ 251,550.00
4% ADMINISTRATION FEE PER SECTION 5 OF AGREEMENT					\$ 10,062.00
TOTAL COSTS					\$ 261,612.00

Exhibit "C"

File No.

REIMBURSEMENT AGREEMENT BETWEEN
IRVINE RANCH WATER DISTRICT
AND THE CITY OF IRVINE
FOR
INSTALLATION AND ADJUSTMENT OF STREET UTILITIES TO GRADE FOR
ANNUAL SLURRY SEAL AND PAVEMENT REHABILITATION
CIP 311106, 311203, 341203 AND 361204

This Agreement is made and entered into as of this ____ day of _____, 2012, by and between IRVINE RANCH WATER DISTRICT, a California water district formed and existing pursuant to the California Water District Law, hereinafter referred to as "DISTRICT," and the CITY OF IRVINE, a municipal corporation, hereinafter referred to as "CITY."

W I T N E S S E T H:

WHEREAS, CITY proposes to construct street and utility improvements within the Irvine Business Complex, University Town Center, University Research Park, Turtle Ridge and Spectrum villages for the Annual Slurry Seal and Pavement Rehabilitation, CIP 311106, 311203, 341203 and 361204 (the "Project"), within the jurisdictional boundaries of DISTRICT and the City of Irvine; and

WHEREAS, such construction will necessitate the installation or adjustment to grade of approximately 374 Water Valves, approximately 34 Reclaim Water Valves, approximately 8 Sewer Cleanouts and approximately 143 Sewer Manholes, as depicted on Exhibit "A" attached hereto incorporated by reference herein (hereinafter referred to as the "IRWD FACILITIES"); and

WHEREAS, the parties have determined that it would be more expedient for CITY to construct the IRWD FACILITIES rather than for DISTRICT to do so; and

WHEREAS, DISTRICT is amenable to the CITY constructing the IRWD FACILITIES with the CITY agreeing to advance the costs; and

WHEREAS, DISTRICT agrees to fully reimburse the CITY through payments billed by the CITY and approved by DISTRICT for the entire cost of the IRWD FACILITIES; and

WHEREAS, except as otherwise provided herein, upon the completion of the IRWD FACILITIES, the IRWD FACILITIES shall become the property of DISTRICT in accordance with the terms and conditions hereinafter set forth.

NOW, THEREFORE, in consideration of the mutual promises and covenants hereinafter set forth, the parties hereto agree as follows:

SECTION 1. IRWD FACILITIES. In conjunction with the Project, CITY agrees to initiate and pursue to completion the design and construction of the IRWD FACILITIES.

SECTION 2. PLANS. CITY agrees that the IRWD FACILITIES shall be completed pursuant to approved project plans and specifications (the "Plans and Specifications") which shall be approved by DISTRICT and used in awarding the construction contract. Prior to commencement of preparation of the Plans and Specifications, CITY shall submit its design engineer's proposal for the design of the IRWD FACILITIES to DISTRICT. DISTRICT will have a period of five (5) calendar days from its receipt of such design proposal to review and either indicate its approval or request changes. CITY shall cause its design engineer to review and respond to any requested changes. The Plans and Specifications shall be deemed to incorporate the applicable portions of DISTRICT's latest edition of "Construction Manual for the Construction of Water, Sewer, and Reclaimed Water Facilities" (the "Construction Manual"). The IRWD FACILITIES shall be contracted by CITY together with non-reimbursable work to be completed by CITY within the Project pursuant to plans prepared by CITY's design engineer.

SECTION 3. BIDDING AND AWARD. The parties agree that the construction of the IRWD FACILITIES shall be included in CITY's contract(s) awarded for the Project and that the IRWD FACILITIES shall be bid as a separate item or items that can be deleted. During the bidding process, CITY shall deliver to IRWD one (1) complete set of the bid documents that include the IRWD FACILITIES, including all related addenda concurrently with the distribution thereof to prospective bidders. Upon opening of bids by CITY, CITY will submit the bids or a spread sheet summary of the bids to DISTRICT. DISTRICT will have a period of ten (10) calendar days from its receipt of the bid results for review and approval of the IRWD FACILITIES bid item(s) submitted by the bidder identified to DISTRICT by CITY as CITY's proposed successful bidder. CITY agrees that bids received for the construction of the IRWD

FACILITIES bid item(s) shall be subject to the approval of DISTRICT prior to award of the Project construction contract(s) that include the IRWD FACILITIES; and further agrees that in the event DISTRICT does not approve such bids, either party may terminate this Agreement upon twenty-four (24) hours' prior written notice, in which event CITY shall have no further obligation to construct the IRWD FACILITIES, and DISTRICT may elect to install the IRWD FACILITIES with its own contractor. If DISTRICT approves of the IRWD FACILITIES bid item(s) of CITY's successful bidder, CITY agrees to cause the IRWD FACILITIES to be constructed as part of the contract awarded to such bidder. The total estimated construction cost for the IRWD FACILITIES is \$261,612.00, provided, however, the amount to be reimbursed by DISTRICT shall be based on the actual costs of construction. Upon award of the construction contract, CITY shall provide DISTRICT with one (1) original copy of the fully executed contract documents and one (1) copy of the bid package relating to the IRWD FACILITIES received from the successful bidder.

SECTION 4. DESIGN REVISIONS AND CHANGE ORDERS. DISTRICT agrees to reimburse CITY for any change order(s) for revision(s) requested by DISTRICT or otherwise required to construct the IRWD FACILITIES. CITY shall promptly furnish DISTRICT with copies of any proposed change order(s) to such contract within five (5) working days of the initiation of the changed conditions to such contract, which shall be subject to DISTRICT approval if and to the extent the IRWD FACILITIES are affected therefrom.

DISTRICT shall promptly review proposed change order(s) and provide CITY with a response within five (5) working days or sooner of receiving proposed change order(s) information from CITY. DISTRICT agrees not to unreasonably cause delay(s) to the construction schedule of the Project in reviewing proposed change order(s) for the IRWD FACILITIES. Notwithstanding any other provision herein, any approval required to be given by the DISTRICT under this Section shall be deemed given if no response to the CITY's request for such approval is received by the CITY within eight (8) working days following the written request for such approval unless the parties agree otherwise in a writing executed by both parties.

SECTION 5. REIMBURSEMENT. DISTRICT agrees to reimburse CITY for the following costs (collectively, the "Costs"): (1) the actual costs of design, construction, permits, bonds, and legal fees (excluding the costs of preparation of this Agreement) incurred by CITY in connection with the design and construction of the IRWD FACILITIES, plus (2) an administration fee which shall be equal to four percent (4%) of the actual cost of construction (costs paid directly to CITY's contractor for construction, only, excluding any cost for design,

surveying, geotechnical or other work) of the IRWD FACILITIES and which shall be deemed to cover all costs of project administration, including, but not limited to, accounting, inspection, surveying, compaction testing, geotechnical services and engineering. CITY shall keep a separate accounting of all Costs incurred by CITY in relation to the IRWD FACILITIES.

Within sixty (60) days of DISTRICT's acceptance of the IRWD FACILITIES as provided in Section 8, a final accounting of the Costs shall be made by CITY and submitted to DISTRICT along with an invoice for the Costs and any supporting documentation necessary to show the amounts which represent Costs of IRWD FACILITIES. Amounts paid pursuant to progress payment invoices shall be subject to adjustment in the final accounting. Within thirty (30) days of said final accounting, DISTRICT agrees to pay to CITY the total amount of the Costs.

SECTION 6. LAWS, ORDINANCES, RULES AND REGULATIONS. CITY shall require in its contract for the construction of the IRWD FACILITIES that its contractor be fully informed of and comply with all laws, ordinances, rules and regulations, including, but not limited to, all applicable requirements of the California Labor Code, prevailing wage laws, the Construction Manual, and the Rules and Regulations of DISTRICT, in connection with the construction of the IRWD FACILITIES.

SECTION 7. INSPECTION. DISTRICT shall have sole and absolute discretion as to all aspects of design and construction of the IRWD FACILITIES, and DISTRICT shall be entitled to inspect the construction of IRWD FACILITIES as it deems necessary to assure compliance with the Plans and Specifications, including shop drawing review and material inspection thereof. DISTRICT shall have access to all phases of the Project work to be performed by CITY for the purpose of such inspection; provided, however, all questions regarding the work being performed will be directed to CITY's resident engineer. DISTRICT will promptly notify CITY of any portion of the work on the IRWD FACILITIES which appears not to conform to the Plans and Specifications. The determination of DISTRICT as to conformity of the IRWD FACILITIES with the Plans and Specifications shall be made in DISTRICT's sole and absolute discretion. DISTRICT agrees not to unreasonably withhold its approval as to such conformity of the IRWD FACILITIES with the Plans and Specifications. CITY shall require its contractor to construct the IRWD FACILITIES so that the IRWD FACILITIES conform to the Plans and Specifications. CITY agrees to assume full responsibility for certifying or obtaining certification of the compaction of backfill material over the IRWD FACILITIES.

SECTION 8. ACCEPTANCE. DISTRICT agrees to accept the IRWD FACILITIES when the IRWD FACILITIES have been completed by CITY in accordance with all requirements of the Plans and Specifications, including any change orders approved by DISTRICT as provided in Section 3 hereof. At the time of completion and acceptance of the IRWD FACILITIES, CITY agrees to furnish DISTRICT with one (1) copy of the contractor's redlined set of blue-line "record" drawings (showing all revisions, manufacturer and type of valves, pipe and fittings as required by DISTRICT) and one (1) copy of the compaction reports and certificate, survey notes and cut sheets.

SECTION 9. OWNERSHIP. It is mutually agreed between the parties hereto that notwithstanding the fact that CITY shall accomplish the construction of the IRWD FACILITIES subject to reimbursement, the IRWD FACILITIES to be completed hereunder, together with the necessary franchises, licenses, easements, rights-of-way, and other privileges, shall at all times be subject to the applicable rates, rules and regulations of DISTRICT, as modified or amended from time to time. CITY hereby disclaims any interest in the IRWD FACILITIES and does hereby transfer and assign to DISTRICT any and all right, title, and interest it may have in the IRWD FACILITIES. DISTRICT shall own, operate and maintain the IRWD FACILITIES following acceptance thereof.

SECTION 10. GUARANTEES. CITY will, pursuant to the requirement(s) of the Plans and Specifications, cause its contractor(s) for the IRWD FACILITIES to guarantee the IRWD FACILITIES against defects in workmanship and materials for a period of one (1) year from the date of acceptance by CITY, which acceptance shall be given only after acceptance by DISTRICT as provided in Section 8. It is further agreed that CITY shall cause the IRWD FACILITIES to be brought or restored to full compliance with the requirements of the Plans and Specifications, including any test requirements, for any portions of the IRWD FACILITIES which during said one (1) year period are found not to be in conformance with the provisions of the Plans and Specifications. This guarantee is in addition to any and all other warranties, express or implied, from CITY's contractors or material manufacturers, with respect to the IRWD FACILITIES. The guarantee and obligations under this section shall in no way be relieved by DISTRICT's inspection and/or acceptance of the IRWD FACILITIES. This section sets forth the entire guarantee and warranty of CITY with respect to the IRWD FACILITIES. The express or implied warranties of other persons with respect to IRWD FACILITIES shall in no way be limited by the guarantee and warranty of CITY contained in this section. If requested by DISTRICT, CITY agrees to assign to DISTRICT the contractor's guarantee and/or any other guarantees or warranties relating to the IRWD FACILITIES.

SECTION 11. INDEMNIFICATION. CITY shall indemnify, defend and hold DISTRICT, its officers, agents, employees, and engineers harmless from any expense, liability or claim for death, injury, loss, damage or expense to persons or property which may arise or is claimed to have arisen during construction of the IRWD FACILITIES as a result of any work or action performed by CITY or on behalf of CITY, save and except to the extent such expense, liability or claim is proximately caused in whole or in part by any act, omission, or negligence of DISTRICT, its officers, agents, employees or engineers or by any act or omission for which DISTRICT, its officers, agents, employees or engineers are liable without fault.

DISTRICT shall indemnify, defend and hold CITY, its officers, agents, and employees, harmless from any expense, liability or claim for death, injury, loss, damage or expense to persons or property which may arise or is claimed to have arisen either (i) as a result of any acts performed by DISTRICT, its officers, agents, or employees, with respect to the IRWD FACILITIES construction; or (ii) following DISTRICT acceptance of the IRWD FACILITIES, with respect to maintenance and operation of the IRWD FACILITIES, save and except to the extent such expense, liability or claim is proximately caused in whole or in part by any negligence of CITY, its officers, agents, employees or engineers, or by any act or omission for which CITY, its officers, agents, employees or engineers are liable without fault.

SECTION 12. INSURANCE AND BONDING. CITY shall cause its contractor(s) to provide performance and payment bonds for the construction of the Project including the IRWD FACILITIES and to obtain insurance coverage sufficiently broad to insure the matters set forth in this Agreement and to include DISTRICT, its officers, agents, employees and engineers, as additional insureds on all insurance policies that CITY requires its contractor(s) to provide. As evidence of such insurance coverage, CITY shall, prior to commencement of construction of the IRWD FACILITIES, provide DISTRICT with certificates of insurance and insurance endorsements from CITY's contractor(s) in a form acceptable to DISTRICT.

SECTION 13. TERMINATION. DISTRICT shall have the right to terminate this Agreement at any time, subject to the provisions of this section, by providing five (5) business days' prior written notice to CITY, except as noted in Section 3. If at the request or direction of a party other than CITY, the construction of the IRWD FACILITIES is not accomplished or completed, DISTRICT shall remain obligated for the actual amount of the Costs incurred by CITY to the date of termination.

If CITY's Project is canceled or modified so as to eliminate the necessity of the construction of the IRWD FACILITIES, CITY shall have the right to terminate this Agreement and thereby terminate its obligation to construct the IRWD FACILITIES, by providing five (5) business days' prior written notice to DISTRICT. In such case, DISTRICT will not be obligated for any design or any other Costs incurred by CITY. If IRWD elects to construct the IRWD FACILITIES, DISTRICT may, but shall not be obligated to, acquire the design or other work from CITY by separate agreement.

SECTION 14. NOTICE. Any notice or other written instrument required or permitted by this Agreement to be given to either party shall be deemed received when personally served or twenty-four (24) hours after being deposited in the U.S. Mail, postage prepaid, registered or certified and addressed as follows:

DISTRICT: Irvine Ranch Water District
15600 Sand Canyon Avenue
P.O. Box 57000
Irvine, CA 92619-7000
Attn: General Manager

CITY: City of Irvine
6427 Oak Canyon, Bldg. 1
Irvine, CA 92618
Attn: Reza Jafari, Assistant Engineer

SECTION 15. SUCCESSORS AND ASSIGNS; INTEGRATION; AMENDMENT.

This Agreement shall be binding upon and inure to the benefit of the successor and assigns of CITY and DISTRICT. This Agreement constitutes the entire Agreement between CITY and DISTRICT and supersedes all prior understandings and agreements between the parties with respect to the subjects hereof. This Agreement may be modified only in writing signed by both parties hereto.

SECTION 16. LEGAL FEES. In the event of any declaratory or other legal or equitable action instituted between CITY and DISTRICT in connection with this Agreement, the prevailing party shall be entitled to recover from the losing party all of its costs and expenses, including court costs and reasonable attorneys' fees.

SECTION 17. DEEMED APPROVAL. Any approval required to be given by either party pursuant to this Agreement shall be deemed given if no response to the party's request for

such approval is received by the requesting party within fifteen (15) days following the written request for such approval.

SECTION 18. SEVERABILITY. If any term, provision, covenant or condition of this Agreement is held to be invalid, void or other unenforceable, to any extent, by any court of competent jurisdiction, the remainder of this Agreement shall not be affected thereby, and each term provision, covenant or condition of this Agreement shall be valid and enforceable to the fullest extent permitted by law.

SECTION 19. APPLICABLE LAW. This Agreement shall be construed and enforced in accordance with the laws of the State of California.

SECTION 20. WAIVER. The waiver of any provision of this Agreement by either party shall not be deemed to be a waiver of any other provision or of any preceding or subsequent breach hereunder.

IN WITNESS WHEREOF, the parties to the Agreement have executed this Agreement on the date herein above written.

IRVINE RANCH WATER DISTRICT

By _____
General Manager

Dated _____

ATTEST:

By _____
Secretary/Assistant Secretary

Dated _____

APPROVED AS TO FORM:

By _____
Legal Counsel, IRWD

Dated _____

CITY OF IRVINE
A Municipal Corporation

By _____
Sean Joyce
City Manager of the City of Irvine

Dated _____

By _____
Manuel Gomez
Director of Public Works

Dated _____

ATTEST:

By _____
Sharie Apodaca
City Clerk of the City of Irvine

Dated _____

APPROVED AS TO FORM:

By _____
Phil Kohn
City Attorney of the City of Irvine

Dated _____

EXHIBIT "D"

IRVINE RANCH WATER DIST Expenditure Authorization

Project Name: DW ANNUAL SLURRY SEAL AND PAVEMENT REHAB, IRVINE

EPMS Project No: 11658 **EA No:** 1

ID Split: Miscellaneous

Oracle Project No:

Improvement District (ID) Allocations

Project Manager: CORTEZ, MALCOLM

ID No.	Allocation %	Source of Funds
101	100.0	REPLACEMENT FUND**
Total	100.0%	

Project Engineer: LEW, KELLY

Request Date: March 1, 2012

Summary of Direct Cost Authorizations

Previously Approved EA Requests:	\$0
This Request:	\$222,200
Total EA Requests:	\$222,200
Previously Approved Budget:	\$0
Budget Adjustment Requested this EA:	\$222,200
Updated Budget:	\$222,200
Budget Remaining After This EA	\$0

Comments:

Oracle 3786

Phase	This EA Request	Previous EA Requests	EA Requests to Date	This Budget Request	Previous Budget	Updated Budget	Start	Finish
ENGINEERING - CA&I IRWD	20,000	0	20,000	20,000	0	20,000	3/12	12/12
CONSTRUCTION	180,000	0	180,000	180,000	0	180,000	3/12	12/12
LEGAL	2,000	0	2,000	2,000	0	2,000	3/12	12/12
Contingency - 10.00% Subtotal	\$20,200	\$0	\$20,200	\$20,200	\$0	\$20,200		
Subtotal (Direct Costs)	\$222,200	\$0	\$222,200	\$222,200	\$0	\$222,200		
Estimated G/A - 180.00% of direct labor*	\$36,000	\$0	\$36,000	\$36,000	\$0	\$36,000		
Total	\$258,200	\$0	\$258,200	\$258,200	\$0	\$258,200		
Direct Labor	\$20,000	\$0	\$20,000	\$20,000	\$0	\$20,000		

*EA includes estimated G&A. Actual G&A will be applied based on the current ratio of direct labor to general and administrative costs.

EA Originator:

Kelly Lew (M) _____ 3/5/12

Department Director:

Brian L. Buck _____ 3/6/12

Finance:

Board/General Manager:

** IRWD hereby declares that it reasonably expects those expenditures marked with two asterisks to be reimbursed with proceeds of future debt to be incurred by IRWD in a maximum principal amount of additional documents, if any, which are hereby incorporated by reference into this authorization. No official intent to reimburse costs of the above-captioned project is made under Treasury Regulation Section 1.1

IRVINE RANCH WATER DISTRICT

Expenditure Authorization

Project Name: SS ANNUAL SLURRY SEAL AND PAVEMENT REHAB, IRVINE
EPMS Project No: 21658 **EA No:** 1 **ID Split:** Miscellaneous
Oracle Project No:
Project Manager: CORTEZ, MALCOLM
Project Engineer: LEW, KELLY
Request Date: March 1, 2012

Improvement District (ID) Allocations		
ID No.	Allocation %	Source of Funds
101	100.0	REPLACEMENT FUND**
Total	100.0%	

Summary of Direct Cost Authorizations

Previously Approved EA Requests:	\$0
This Request:	<u>\$95,700</u>
Total EA Requests:	\$95,700
Previously Approved Budget:	\$0
Budget Adjustment Requested this EA:	<u>\$95,700</u>
Updated Budget:	\$95,700
Budget Remaining After This EA	\$0

Comments:

Oracle 3787

Phase	This EA Request	Previous EA Requests	EA Requests to Date	This Budget Request	Previous Budget	Updated Budget	Start	Finish
ENGINEERING - CA&I IRWD	10,000	0	10,000	10,000	0	10,000	3/12	12/12
CONSTRUCTION	75,000	0	75,000	75,000	0	75,000	3/12	12/12
LEGAL	2,000	0	2,000	2,000	0	2,000	3/12	12/12
Contingency - 10.00% Subtotal	\$8,700	\$0	\$8,700	\$8,700	\$0	\$8,700		
Subtotal (Direct Costs)	\$95,700	\$0	\$95,700	\$95,700	\$0	\$95,700		
Estimated G/A - 180.00% of direct labor*	\$18,000	\$0	\$18,000	\$18,000	\$0	\$18,000		
Total	\$113,700	\$0	\$113,700	\$113,700	\$0	\$113,700		
Direct Labor	\$10,000	\$0	\$10,000	\$10,000	\$0	\$10,000		

*EA includes estimated G&A. Actual G&A will be applied based on the current ratio of direct labor to general and administrative costs.

EA Originator:

Kelly Lew 3/5/12

Department Director:

Ron J. Burton 3/6/12

Finance:

Board/General Manager:

** IRWD hereby declares that it reasonably expects those expenditures marked with two asterisks to be reimbursed with proceeds of future debt to be incurred by IRWD in a maximum principal amount of \$113,000.00. This project is further described in the attached staff report and additional documents, if any, which are hereby incorporated by reference. The project is made under Treasury Regulation Section 1.15

IRVINE RANCH WATER DISTRICT

Expenditure Authorization

Project Name: RW ANNUAL SLURRY SEAL AND PAVEMENT REHAB, IRVINE
 EPMS Project No: 31658 EA No: 1
 Oracle Project No:
 Project Manager: CORTEZ, MALCOLM
 Project Engineer: LEW, KELLY
 Request Date: March 1, 2012

ID Split: Miscellaneous

Improvement District (ID) Allocations

ID No.	Allocation %	Source of Funds
101	100.0	REPLACEMENT FUND**
Total	100.0%	

Summary of Direct Cost Authorizations

Previously Approved EA Requests:	\$0
This Request:	\$28,600
Total EA Requests:	\$28,600
Previously Approved Budget:	\$0
Budget Adjustment Requested this EA:	\$28,600
Updated Budget:	\$28,600
Budget Remaining After This EA	\$0

Comments:

Oracle 3788

Phase	This EA Request	Previous EA Requests	EA Requests to Date	This Budget Request	Previous Budget	Updated Budget	Start	Finish
ENGINEERING - CA&I IRWD	5,000	0	5,000	5,000	0	5,000	3/12	12/12
CONSTRUCTION	20,000	0	20,000	20,000	0	20,000	3/12	12/12
LEGAL	1,000	0	1,000	1,000	0	1,000	3/12	12/12
Contingency - 10.00% Subtotal	\$2,600	\$0	\$2,600	\$2,600	\$0	\$2,600		
Subtotal (Direct Costs)	\$28,600	\$0	\$28,600	\$28,600	\$0	\$28,600		
Estimated G/A - 180.00% of direct labor*	\$9,000	\$0	\$9,000	\$9,000	\$0	\$9,000		
Total	\$37,600	\$0	\$37,600	\$37,600	\$0	\$37,600		
Direct Labor	\$5,000	\$0	\$5,000	\$5,000	\$0	\$5,000		

*EA includes estimated G&A. Actual G&A will be applied based on the current ratio of direct labor to general and administrative costs.

EA Originator:

Kelly Lew (W)

3/5/12

Department Director:

Tom L. Burton

3/6/12

Finance:

Board/General Manager:

** IRWD hereby declares that it reasonably expects those expenditures marked with two asterisks to be reimbursed with proceeds of future debt to be incurred by IRWD in a maximum principal amount of \$35 million, which are hereby incorporated into the budget. This project is made under Treasury Regulation Section 1.150-2.

is further described in the attached staff report and is official intent to reimburse costs of the above-captioned

March 26, 2012

Prepared by: J. Smyth/M. Cortez

Submitted by: K. Burton

Approved by: Paul Cook

CONSENT CALENDAR

OPERATIONS CENTER EXPANSION PROJECT PHASE I MEZZANINE CONVERSION REDUCTION OF RETENTION

SUMMARY:

Construction of the Operations Center Expansion Project Phase I Mezzanine Conversion is 90% completed. The contractor, Snyder Langston, requests that the retention withheld from payments be reduced from 10% to 5% of the contract amount. Staff recommends that the Board:

- Find that satisfactory progress is being made on the Operations Center Expansion Project Phase I Mezzanine Conversion contract;
- Authorize the reduction of retention from 10% to 5% of the contract amount; and
- Release funds in excess of 5% of the contract amount from retention currently held for the Operations Center Expansion Project Phase I Mezzanine Conversion.

BACKGROUND:

This project converted the existing mezzanine area of the Operations Center Purchasing Warehouse from storage space to 2,300 square feet of office space. The project also installed seismic upgrades to the roof.

In June 2011, Snyder Langston was awarded the construction contract in the amount of \$722,361. The project is 90% complete. The contractor has requested that the project retention be reduced pursuant to the project manual. According to General Provisions Section 11.4.3, "At any time after fifty (50) percent of the work has been satisfactorily completed and if DISTRICT determines that aggressive progress will continue to a timely completion of the Work, DISTRICT may pay any of the remaining progress payments in full for actual work completed."

Staff has reviewed the contractor's request and verified that they are currently working at a pace to complete the contract work prior to the contract completion date. Snyder Langston has consistently maintained good construction progress throughout the project duration.

FISCAL IMPACTS:

Approval of the request to reduce the retention from 10% to 5% of the contract amount will not impact the project budget.

ENVIRONMENTAL COMPLIANCE:

Activities such as reducing retention agreements is exempt from the California Environmental Quality Act (CEQA) as authorized under the California Code of Regulations, Title 14, Chapter 3, Section 15061 (b) (3). These types of activities are covered by the general rule that CEQA applies only to projects which have the potential for causing a significant direct effect on the environment or reasonably indirect effect on the environment.

In addition, the Operations Center Expansion Project Phase 1 Mezzanine Conversion and Seismic Upgrades Project is exempt from CEQA as authorized under the California Code of Regulations, Title 14, Chapter 3, Section 15303, which provides exemption for construction or conversion of limited numbers of new small facilities or structures. A Notice of Exemption was filed with the County of Orange on February 15, 2011.

COMMITTEE STATUS:

This item was not reviewed by a Committee.

RECOMMENDED MOTION:

THAT THE BOARD FIND THAT SATISFACTORY PROGRESS IS BEING MADE ON THE CONTRACT; AUTHORIZE THE REDUCTION OF RETENTION FROM 10% TO 5% OF THE CONTRACT AMOUNT; AND RELEASE FUNDS IN EXCESS OF 5% OF THE CONTRACT AMOUNT FROM RETENTION CURRENTLY HELD FOR THE OPERATIONS CENTER EXPANSION PROJECT PHASE I MEZZANINE CONVERSION, PROJECTS 11422 (1388), 21422 (1120), AND 31422 (1156).

LIST OF EXHIBITS:

None.

March 26, 2012
Prepared by: R. Shum/J. Moeder
Submitted by: K. Burton
Approved by: Paul Cook

CONSENT CALENDAR

WELL 107 DRILLING AND EQUIPPING PROJECT
REDUCTION OF RETENTION

SUMMARY:

In June 2011, Pascal & Ludwig Constructors was awarded a construction contract for \$2,705,543 to construct Well 107. Based on the February progress payment, work is 61% complete and the contractor has requested that the retention being withheld by IRWD be reduced from 10% to 5%. Staff recommends that the Board authorize the reduction in the contractor's retention for this project.

BACKGROUND:

Well 107 is one of the five wells that deliver raw water to the Potable Treatment Plant (PTP). The PTP has been experiencing operational problems due to various issues including lack of production from the IDP wells. Replacement of Well 107 will improve operational performance at PTP. The new location of Well 107 is located outside the Tamarisk Community Association sound wall adjacent to Interstate 5 highway at the north corner of Trabuco Road and Culver Drive. The new well has a stainless steel casing and will be equipped with a vertical turbine pump rated for 1,000 gallons per minute.

Board approval is required to reduce retention from 10% to 5%. The General Provisions state:

“At any time after 50% of the work has been satisfactorily completed and if the District determines that aggressive progress will continue to a timely completion of the work, the District may pay any of the remaining progress payments in full for actual work completed.”

Staff has reviewed the contractor's request and verified that it is currently working at a pace to complete the contract work prior to the contract completion date. Pascal & Ludwig Constructors has consistently maintained good construction progress throughout the project duration.

FISCAL IMPACTS:

No adjustments are required to the FY 2011-12 Capital Budget and Expenditure Authorization for the Well 107 Drilling and Equipping, Project 11432 (1403).

ENVIRONMENTAL COMPLIANCE:

This project is subject to the California Environmental Quality Act (CEQA). In conformance with the California Code of Regulations Title 14, Chapter 3, Section 15004, a Notice of Exemption was filed at the County Recorder's Office on March 14, 2011.

COMMITTEE STATUS:

This item was not reviewed by Committee.

RECOMMENDATION:

THAT THE BOARD FIND THAT SATISFACTORY PROGRESS IS BEING MADE ON THE DISTRICT'S CONSTRUCTION CONTRACT WITH PASCAL & LUDWIG CONSTRUCTORS; AUTHORIZE THE REDUCTION OF RETENTION FROM 10% TO 5% OF THE CONTRACT AMOUNT; AND RELEASE FUNDS IN EXCESS OF 5% OF THE CONTRACT AMOUNT FROM RETENTION CURRENTLY HELD FOR THE WELL 107 DRILLING AND EQUIPPING, PROJECT 11432 (1403).

LIST OF EXHIBITS:

None.

March 26, 2012
Prepared by: S. Bomkamp/P. Uematsu
Submitted by: K. Burton
Approved by: Paul Cook

ACTION CALENDAR

WELLS 21 AND 22 PIPELINES CONTRACT CHANGE ORDER AND VARIANCE

SUMMARY:

The Wells 21 and 22 Pipelines are being constructed by Flatiron West, Inc. Staff recommends that the Board:

- Approve Contract Change Order (CCO) No. 7 in the amount of \$138,320.51 to Flatiron West, Inc., and
- Authorize the General Manager to execute Variance No. 2 in the amount of \$69,500 with Ninyo & Moore for geotechnical services during construction of the Pipelines.

BACKGROUND:

The components of the overall Wells 21 and 22 Project are being constructed through three major construction contracts: 1) the Wells 21 and 22 Design-Build Desalter Plant being constructed by Pascal & Ludwig; 2) the Wellhead Facilities Project being constructed by F. T. Ziebarth, and 3) the Wells 21 and 22 Pipelines Project being constructed by Flatiron West, Inc. Each of these construction projects is receiving 25% matching funds, up to a combined maximum of \$11,700,000, in Title XVI funding through the United States Bureau of Reclamation from the American Recovery and Reinvestment Act (ARRA) of 2009. The original contract amount for the Wells 21 and 22 Pipelines, awarded in May 2011, was in the amount of \$7,839,221. The Pipelines Project consists of four pipelines: untreated water, well pump-to-waste, non-reclaimable waste and product water.

Pipelines Contract Change Order No. 7:

CCO No. 7 is for work related primarily to the untreated water pipe (2,650 feet of steel pipe in Newport Avenue) and the well pump-to-waste pipelines being constructed as part of the Pipelines contract. The costs include design revisions implemented after receiving the contractor's pothole data and changed conditions encountered during construction. The pothole revisions resulted in costs for increased excavation and backfill, additional lateral utility crossings, and additional steel pipe and fittings. Changed conditions that resulted in additional costs are as follows:

- Mismarked or unidentified utilities;
- Realignment of the 18-inch concrete pipe to avoid the base of an existing manhole;
- Additional effort to cross a 12-inch water main due to the City of Tustin's difficulties in isolating the line for removal and replacement; and
- Replacement of 500 feet of curb and gutter due to damage encountered because of deeper pipe placement imposed by the design changes and unstable trench soils encountered while traversing electrical utilities found both in the designed trench zone and in closer proximity than shown on the plan drawings.

After staff reviewed Flatiron's initial cost proposal, costs for the changes were negotiated and agreed upon. CCO No. 7, in the amount of \$138,320.51, is attached as Exhibit "A". The construction change order summary for the Pipelines Project is attached as Exhibit "B".

Ninyo & Moore Variance No. 2 for Geotechnical Services:

During the initial pipeline work the City of Tustin requested additional pavement testing which included binder, stability and gradation tests. The City of Tustin also requested more frequent testing and multiple sampling locations (asphalt batch plant and the field). These tests were not included in the original scope of work and budget. As a part of this effort, Ninyo & Moore has also been participating with LaBelle Marvin on pavement remediation requirements. This Variance No. 2 includes the additional pavement testing and engineering support performed by Ninyo & Moore, and Flatiron's extended pipeline construction schedule through April 2012. Ninyo & Moore's original requested costs totaled \$88,914. Staff reviewed Ninyo & Moore's cost proposal, negotiated changes, and mutually agreed on the costs. Variance No. 2 in the amount of \$69,500 is attached as Exhibit "C".

Schedule:

The Pipelines Project's completion date had been set for April 30, 2012, with the current ARRA deadline set for June 30, 2012. Staff has been monitoring the construction schedules for the Desalter Plant, Wellheads, and Pipelines Projects, and expects to make a formal request for a time extension of four months from the United States Bureau of Reclamation (USBR) in early April. Based on preliminary discussions with USBR staff, it appears they are amenable to the proposed time extension.

FISCAL IMPACTS:

Project 10286 (1081) is included in the FY 2011-12 Capital Budget. The existing budget and Expenditure Authorization are sufficient to fund these costs.

ENVIRONMENTAL COMPLIANCE:

This project is subject to the California Environmental Quality Act. In conformance with the California Code of Regulations Title 14, Chapter 3, Section 15004, a Mitigated Negative Declaration was adopted February 8, 2010. To fulfill requirements of the ARRA, the project is also subject to compliance with the National Environmental Policy Act (NEPA). An Environmental Assessment was prepared to achieve NEPA compliance for the project and the USBR has adopted a Categorical Exemption.

COMMITTEE STATUS:

This item was reviewed by the Engineering and Operations Committee on March 20, 2012.

RECOMMENDATION:

THAT THE BOARD APPROVE CONTRACT CHANGE ORDER NO. 7 IN THE AMOUNT OF \$138,320.51 TO FLATIRON WEST AND AUTHORIZE THE GENERAL MANAGER TO EXECUTE VARIANCE NO. 2 IN THE AMOUNT OF \$69,500 WITH NINYO & MOORE FOR GEOTECHNICAL SERVICES DURING CONSTRUCTION FOR THE PIPELINES FOR THE WELLS 21 AND 22, PROJECT 10286 (1081).

LIST OF EXHIBITS:

- Exhibit "A" – Flatiron West Contract Change Order No. 7
- Exhibit "B" – Flatiron West Construction Change Order Summary
- Exhibit "C" – Ninyo & Moore's Variance No. 2

EXHIBIT "A"

CONTRACT CHANGE ORDER

IRVINE RANCH WATER DISTRICT
 15600 Sand Canyon Avenue
 Irvine, California 92619
 (949) 453-5300



C.O. No. 7
 Final
 Project No. 10286

Wells 21 and 22 Desalter Project Pipelines
 Project Title

Date: March 7, 2012

THE FOLLOWING CHANGE TO CONTRACT, DRAWINGS AND SPECIFICATIONS IS PROPOSED.	\$ ADDITIONS	\$ DELETIONS	DAYS ±
Completion of the untreated water and well pump to waste pipelines (Newport Avenue changed conditions and delta drawing revisions):			
Additional Excavation	\$8,745.15		0
Additional Backfill	\$21,241.11		0
Crossing Additional Utilities per delta details	\$7,018.10		0
Mismarked or Unidentified Utilities Encountered (T&M)	\$31,583.65		0
Manhole Conflict with 18" RCP Install (T&M)	\$2,724.92		0
12" Tustin AC Line Remove and Replace (T&M)	\$6,831.27		0
Curb and Gutter Remove and Replace	\$29,670.00		0
West Coast Pipe delta plan revisions and extra pipe/fittings	\$30,506.31		0
TOTAL	\$138,320.51	0	0

DAYS ±

1. NET AMOUNT THIS CHANGE ORDER	=	\$138,320.51	0
2. ORIGINAL CONTRACT AMOUNT	=	\$7,839,221.76	330
3. TOTAL PREVIOUS CHANGE ORDER(S)	=	\$119,425.54	33
4. TOTAL BEFORE THIS CHANGE ORDER (2+3)	=	\$7,958,647.30	363
5. PROPOSED REVISED CONTRACT AMOUNT TO DATE (1+4)	=	\$8,096,967.81	363

We hereby agree to make the above change subject to the terms of this change order for the sum of: _____

One hundred thirty eight thousand three hundred twenty and 51/100 ----- Dollars

3/7/2012 Date Flatiron West, Inc. Contractor By NICHOLAS DEHANN

SIGNATURE	DATE	APPROVAL LEVEL REQUIRED
	<u>3/7/2012</u> Date	Department Director Approval Required <input type="checkbox"/>
	<u>3/7/12</u> Date	General Manager Approval Required <input type="checkbox"/>
	<u>3/8/12</u> Date	Committee Approval Required <input type="checkbox"/>
	Date	Board Approval Required <input checked="" type="checkbox"/>
	Date	By _____ Date _____
		502281
		Purchase Order No.

NOTE: The documents supporting this Change Order, including any drawings and estimates of cost, if required are attached hereto and made a part hereof. This Change Order shall not be considered as such until it has been signed by the Owner and the Contractor. Upon final approval, distribution of copies will be made as required. The parties mutually agree the pricing set forth in this Change Order are complete and fair compensation for the entirety of the work authorized under this Change Order and that no additional compensation is warranted nor shall it be allowed.

CHANGES: All workmanship and materials called for by this Order shall be fully in accord with the original Contract Documents insofar as the same may be applied without conflict to the conditions set forth by this Order. The time for completing the contract will not be extended unless expressly provided for in this Change Order.

CSG-02



14850 Central Ave
Chino, Ca 91710

Request for Change Order

rev 1 - 3/1/2012

TO: Steve Bomkamp
IRWD

DATE: February 7, 2012

PROJECT: IRWD Wells 21 & 22 Desalter Project

FROM: Nicholas de Haan

IRWD Proj # 10286

Delta # 3 and Misc
RFC. NO.: 06

Flatiron Job # 3117

SUBJECT: RFC 005 UTW, Newport (Sta 39+00 to 66+50) Delta Changes and Field Conditions

Cost Impacts:

Item	Qty	Unit	Cost	Total
Additional Excavation	337	CY	\$25.95	\$ 8,745.15
Additional Backfill	337	CY	\$63.03	\$ 21,241.11
Cost to Cross Additional Unidentified Utilities	5	EA	\$1,403.62	\$ 7,018.10
Mis/Unmarked Utilities Encounters while Excavating (T&M)	1	LS	\$31,583.65	\$ 31,583.65
MH in Conflict with 18" RCP Install (T&M)	1	LS	\$2,724.92	\$ 2,724.92
12" Tustin AC Line R&R (T&M)	1	LS	\$6,831.27	\$ 6,831.27
Curb and Gutter R&R	500	LF	\$59.34	\$ 29,670.00
West Coast Pipe Cost for Delta 3 Changes	1	LS	\$30,506.31	\$ 30,506.31

Total	\$ 138,320.51
--------------	----------------------

Schedule Impacts:

Days requested: 0 Days

Total 0 Days

Flatiron

IRWD Wells 21 & 22

RFC 005 UTW, Newport (Sta 39+00 to 66+50) Delta Changes and Field Conditions

Narrative

- **Additional Excavation:** Cost per CY of additional excavation from As-Bid to Delta plan changes
- **Additional Backfill:** Cost per CY of additional backfill from As-Bid to Delta plan changes
- ~~**Additional Fittings:** Cost per EA for additional fittings added from As-Bid to Delta plan changes~~
- **Cost to Cross Additional Unidentified Utilities:** Cost per EA to cross/pothole additional utilities identified between the As-Bid to Delta plan changes
- **Mis/Unmarked Utilities Encountered while Excavating:** T&M cost of impacts due to utilities that were not marked out by USA or identified on plans and other impacts due to differing site conditions
- **MH in Conflict with 18" RCP Install:** T&M cost of impacts due to MH in conflict with 18" RCP installation and Mitchell and Newport
- **12" Tustin AC Line R&R:** T&M cost of impacts due to Tustin Water Department's inability to shut down line and changes to As-Bid scope based on Tustin Water Department's requirements
- **Curb and Gutter R&R:** Curb and gutter replacement cost on Newport from Station 60+75 to 65+75: The added depth to the line resulting from the Delta 3 changes affected our original bid means and methods combined with the sandy/caving conditions resulted in Flatiron being unable to protect the existing curb and gutter in place (which was intended in our original bid). The curb and gutter has slightly pulled away from the sidewalk and the City of Tustin is requiring the curb and gutter to be replaced.
- **West Coast Pipe Cost for Delta 3 Changes:** Cost from our pipe supplier West Coast Pipe for the As-Bid to Delta plan changes
- **West Coast Pipe Cost for Extra Pipe/Fittings Requested by IRWD:** Additional fittings/pipe that were purchased at the request of IRWD to be on hand and prevent delays for unforeseen conditions that might impact the pipe alignment.

**Wells 21 and 22 Desalter Project Pipelines
PR 10286 (Oracle 1081)
Construction Summary**

Contractor: Flatiron West, Inc.
Design Engineer: RBF

		Contract Amount						Contract Days				Original Completion Date:
		Original Contract Amount: \$7,839,221.76						Original Days: 330				3/29/2012
Change Order	Description	Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Change Order Days	Previous Change Orders	Cum. Total C.O. days	Revised Total Contract Days	Revised Completion Date
1	Approved by Director of Engineering and Construction Approved on October 6, 2010 1.1 The Contractor agrees to fulfill all necessary requirements, including insurance and construction measures, of the Tustin Redevelopment Agency (RDA) for a "Non-exclusive Construction Access Area" across Parcel 10A per the license agreement.	\$0.00	\$0.00	\$0.00	\$0.00	0.0%	\$7,839,221.76	0	0	0	330	3/29/2012
2	Approved by GM Approved on September 9, 2011 2.1 Additional excavation 2.2 Additional backfill 2.3 Additional fittings 2.4 Mis/unmarked utilities encountered while excavating 2.5 Sewer laterals in conflict with pipeline alignment 2.6 Remove abandoned 2" pipe in trench	\$0.00 \$7,832.21 \$19,024.75 \$4,814.47 \$2,028.99 \$2,486.75 \$4,529.85	\$40,717.02	\$0.00	\$40,717.02	0.5%	\$7,879,938.78	0	0	0	330	3/29/2012
3	Approved by Director of Engineering and Construction Approved on September 9, 2011 3.1 Additional utility crossings potholed 3.2 Pipe thickness changes per Delta 3 plans	\$8,421.70 \$12,876.55	\$21,298.25	\$40,717.02	\$62,015.27	0.8%	\$7,901,237.03	0	0	0	330	3/29/2012
4	Approved by GM Approved on November 22, 2011 4.1 Additional excavation 4.2 Additional backfill 4.3 Mis/unmarked utilities encountered while excavating 4.4 Sewer laterals in conflict with 4.5 Cross additional unidentified 4.6 Additional base paving on Mitchell 4.7 West Coast Pipe cost for Delta 3 Changes	\$1,576.89 \$3,830.34 \$8,625.37 \$749.32 \$7,018.09 \$8,247.47 \$5,121.79	\$35,169.27	\$62,015.27	\$97,184.54	1.24%	\$7,936,406.30	0	0	0	330	3/29/2012
5	Approved by Director of Engineering and Construction Approved on November 21, 2011 5.1 CMS Board Rentals	\$22,241.00	\$22,241.00	\$97,184.54	\$119,425.54	1.52%	\$7,958,647.30	0	0	0	330	3/29/2012
6	Approved by Director of Engineering and Construction Approved on February 27, 2012 6.1 Additional Calendar Days	\$0.00	\$0.00	\$119,425.54	\$119,425.54	1.52%	\$7,958,647.30	33	0	33	363	4/30/2012

B-1

EXHIBIT "B"

**Wells 21 and 22 Desalter Project Pipelines
PR 10286 (Oracle 1081)
Construction Summary**

Contractor: Flatiron West, Inc.
Design Engineer: RBF

		Contract Amount						Contract Days				Original Completion Date:
		Original Contract Amount: \$7,839,221.76						Original Days: 330				3/29/2012
Change Order	Description	Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Change Order Days	Previous Change Orders	Cum. Total C.O. days	Revised Total Contract Days	Revised Completion Date
7	Pending Approval by Board		\$138,320.51	\$119,425.54	\$257,746.05	3.29%	\$8,096,967.81	0	33	33	363	4/30/2012
	Pending Approval											
	7.1 Additional excavation	\$8,745.15						0				
	7.2 Additional backfill	\$21,241.11						0				
	7.3 Crossing additional utilities per revision details	\$7,018.10						0				
	7.4 Mis/unmarked utilities encountered while excavating	\$31,583.65						0				
	7.5 Manhole conflict with 18" RCP install	\$2,724.92						0				
	7.6 Remove and replace 12" Tustin AC water line	\$6,831.27						0				
	7.7 Remove and replace curb and gutter	\$29,670.00						0				
	7.8 Added West Coast Pipe	\$30,506.31						0				

TOTAL CHANGE ORDERS	\$257,746.05	3.29%
REVISED CONTRACT AMOUNT	\$8,096,967.81	

B-2

Exhibit "C"

IRVINE RANCH WATER DISTRICT PROFESSIONAL SERVICES VARIANCE

Project Title: IRWD/Wells 21 & 22 Pipelines

Project No.: 10286 (1081)

Date: 3/5/12

Purchase Order No.: 501674

Variance No.: 2

Originator: IRWD ENGINEER/CONSULTANT Other (Explain) _____

Description of Variance (*attach any back-up material*):

Additional laboratory testing services for asphalt sampled in the field and at batch plants. Additional testing performed as requested per the unit rates stated in the original agreement.

Engineering & Management Cost Impact:

Classification	Manhours	Billing Rate	Labor \$	Direct Costs	Subcon. \$	Total \$
1. Observation & Testing						58,485
2. Laboratory Testing						1,509
3. Geo/Eng/Office						7,298
4. Final Report						2,208
5. Special Services						
Total \$ =						69,500

Schedule Impact:

Task No.	Task Description	Original Schedule	Schedule Variance	New Schedule
	Geotechnical Services for:			
	1. Pipelines	March 29, 2012		April 30, 2012
	2. Wellheads	April 8, 2012		May 10, 2012

Required Approval Determination:

<p>Total Original Contract <u>\$70,274</u></p> <p>Previous Variances <u>\$30,000</u></p> <p>This Variance <u>\$69,500</u></p> <p>Total Sum of Variances <u>\$99,500</u></p> <p>New Contract Amount <u>\$169,774</u></p> <p>Percentage of Total Variances to Original Contract <u>142 %</u></p>	<p><input type="checkbox"/> General Manager: Single Variance less than or equal to \$30,000.</p> <p><input type="checkbox"/> Committee: Single Variance greater than \$30,000, and less than or equal to \$60,000.</p> <p><input type="checkbox"/> Board: Single Variance greater than \$60,000.</p> <p><input checked="" type="checkbox"/> Board: Cumulative total of Variances greater than \$60,000, or 30% of the original contract, whichever is higher.</p>
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ENGINEER/CONSULTANT: Ninyo & Moore

IRVINE RANCH WATER DISTRICT

[Signature]
Project Engineer/Manager

3/7/12
Date

[Signature]
Department Director

3/8/12
Date

[Signature]
Engineer's/Consultant's Management

3/7/12
Date

General Manager/Comm./Board

Date

March 7, 2012
Project No. 208087002

Ms. Patricia Uematsu
Irvine Ranch Water District
15600 Sand Canyon Avenue
Irvine, California 92618

Subject: Budget Status for Geotechnical Services
Wells 21 and 22 Pipelines Project
Tustin, California


Dear Ms. Uematsu:

Per your request, we have revised our previously submitted Variance No. 2 and removed the asphalt concrete (AC) pavement stability and oil content testing. As authorized by Irvine Ranch Water District, we are providing our services for the above referenced project. To date, we have been providing our services on an as-requested basis as scheduled by the project inspector, Mr. Brad Jackson. We understand that our current approved budget is \$100,274. We anticipate exceeding our approved budget. Several days of additional AC inspection and testing were requested since the issuance of Variance No. 1. The additional work was not included in our original approved scope of services or Variance No. 1. We understand that the additional AC testing was requested to provide more data to the City of Tustin. We also understand that the current estimated date of project completion is May 10, 2012. Based on the information described above, our estimated fee for Variance No. 2 is \$69,500 (sixty-nine thousand five hundred dollars).

Our understanding is that this project has experienced some overruns and additional costs. Ninyo & Moore would like to do our part to assist with a successful project; therefore, we are providing a professional discount of 5 percent for our services for this contract, which is reflected in Variance No. 2.

We appreciate the opportunity to be of service on this project.

Respectfully submitted,
NINYO & MOORE



Jared B. Recla
Project Manager



A. Tino Rodriguez
Principal/Construction Services

JBR/AR/CAP/sc

Attachment: Variance No. 2

Distribution: (1) Addressee (via e-mail)

IRVINE RANCH WATER DISTRICT

PROFESSIONAL SERVICES VARIANCE REGISTER

Project Title: IRWD/Wells 21 & 22 Pipelines

Project No.: 10286 (1081) Project Manager: Bomkamp/Uematsu

Variance No.	Description	Dates		Variance Amount
		Initiated	Approved	
1	Geotechnical Testing Services	12/29/11	1/12/12	\$30,000
2	Geotechnical testing services	3/5/12		\$78,000

08
March 26, 2012 SK
Prepared by: S. Bomkamp/P. Uematsu
Submitted by: K. Burton (KB)
Approved by: Paul Cook J.C.K.

ACTION CALENDAR

WELLS 21 AND 22 WELLHEAD FACILITIES EXPENDITURE AUTHORIZATION, CONTRACT CHANGE ORDER AND VARIANCE

SUMMARY:

The Wells 21 and 22 Wellhead Facilities are being constructed by F.T. Ziebarth Company. Staff recommends that the Board:

- Approve an Expenditure Authorization in the amount of \$1,577,800;
- Approve Contract Change Order (CCO) No. 5, in the amount of \$791,166 to F.T. Ziebarth Company; and
- Approve Variance No. 1, in the amount of \$105,630, with Geoscience for engineering services during construction of the Wellhead Facilities.

BACKGROUND:

The construction contract for the Wells 21 and 22 Wellhead Facilities was awarded to F.T. Ziebarth Company in July 2011 for an amount of \$2,183,700. The wellhead facilities will produce untreated groundwater for the Wells 21 and 22 Desalter Plant currently being constructed by Pascal & Ludwig. The untreated groundwater and resulting product water will be conveyed by the pipelines being constructed by Flatiron West under a separate construction contract. The Wells 21 and 22 Projects are receiving 25% matching funds, up to a maximum of \$11,700,000, in Title XVI funding through the United States Bureau of Reclamation (USBR) from the American Recovery and Reinvestment Act of 2009 (ARRA).

Wellheads Project Contract Change Order No. 5:

Wells 21 and 22 were initially rehabilitated in 2008 to identify flow rates and water quality characteristics, from which reverse osmosis treatment design criteria for the Wells 21 and 22 Desalter Plant could be developed. Since the wells were idle for over three years, downhole video surveys were completed in July 2011 prior to starting construction, which resulted in limited well rehabilitations being recommended to remove the accumulated tubercles. CCO No. 2 was approved in October 2011 for the well drilling subcontractor, Best Drilling, to perform limited well rehabilitations. After well brushing and bailing were completed, subsequent downhole video surveys showed holes and severe corrosion in the upper 300 feet of each well, where the 20-inch copper-bearing steel casing was used. The 16-inch casing at the lower 700 feet of each well was constructed using stainless steel, which remains in good condition and does not require any repairs. Additional downhole surveys were conducted to better define casing conditions, casing thickness, metallurgy and alignment.

Geoscience prepared technical memoranda describing well repair options, with drilling and schedule input from Ziebarth, well drillers, and the well liner manufacturer. The proposed well

repair work includes installation of a 300-foot long section of 304L stainless steel liner, a specially designed landing shoe for the 16-inch by 20-inch reducer, and cement fill in the resulting annular space for each well. Additional airlifting, swabbing and bailing will also be performed at each well. The life expectancy for the stainless steel liner is 20 years.

Staff received a quote for this work from Ziebarth / Best Drilling. This quote was compared with a quote from another well drilling contractor and with costs associated with Geoscience's liner projects for other wells. Based on these comparisons the quote from Best Drilling was found to be reasonable. CCO No. 5, in the amount of \$791,166, is attached as Exhibit "A". The construction change order summary is attached as Exhibit "B".

Future Project Change Order Work:

Due to the smaller diameter of the casing in Well 21, the originally specified (and approved) 300-horsepower will not fit into the well. A substitute Goulds pump has been identified which will provide the required 3,000 to 3,300 gpm capacity. The Goulds pump is expected to be manufactured and delivered to the site within a 12 to 16 week time period. The pump changes include the Flowserve pump credit and new Goulds pump costs. Staff continues to negotiate the Well 21 pump changes which will be separately addressed in a subsequent CCO.

Schedule Impacts:

The total contract time extension for CCO No. 5 is 113 days. Ziebarth, Best Drilling, and staff worked together to develop an acceptable approach and schedule. Procurement of the well liner piping is estimated at three weeks, and each well will require six weeks for liner installation. Sequential liner repairs are being planned in order to benefit from Best Drilling's more experienced liner repair crew. Well pump manufacturing and Best Drilling's liner repairs are the time critical issues, and Ziebarth is proceeding with these items to prevent any additional delays. Ziebarth has scheduled their work and Best Drilling's liner repairs for on-going concurrent work. By late March, Ziebarth will have completed most of the piping, mechanical and electrical work at Well 21, which will then allow Best Drilling to mobilize and perform the well liner work associated with CCO No. 5, complete the pump development and testing work remaining for CCO No. 2, and then set the Well 21 pump. During this time, Ziebarth will move over to complete the Well 22 work, which would be followed by Best Drilling's work at that well site. Lastly, Ziebarth would complete the remaining paving and civil work, couple up the pump and motors, start up the wellheads, and complete the seven-day demonstration test. This time extension revises the project completion date to August 31, 2012.

The Wellheads Project's completion date is May 10, 2012 and the current ARRA deadline is June 30, 2012. USBR staff appears to be amenable to a proposed time extension of four months. The formal request for a time extension will be presented to the USBR in early April.

Geoscience Variance No. 1 for Hydrogeologic Services during Well Repairs:

Geoscience was contracted in October 2011 to assist with the hydrogeologic services for the CCO No. 2 work which consisted of well rehabilitation work only. Variance No. 1 is for the

Action Calendar: Wells 21 and 22 Wellhead Facilities Expenditure Authorization, Contract Change Order and Variance

March 26, 2012

Page 3

additional work for the recent well videos, casing thickness testing, metallurgic testing, gyroscopic surveys, investigation of well repair options, summary reports for the proposed well repairs, technical specifications and bid schedule for the well liners, change order negotiations and schedule evaluations, working with the well liner supplier, upcoming field inspection for the installation of the full-length liners in both wells, and adding well repair work to the summary rehabilitation reports. Geoscience's Variance No. 1 in the amount of \$105,630 is attached as Exhibit "C". Staff finds their scope and fee proposal to be reasonable, and staff recommends approval of Variance No. 1 to Geoscience.

FISCAL IMPACTS:

Project 10286 (1081) is included in the FY 2011-12 Capital Budget. Expected expenditures include the upcoming Construction Change Orders, other construction-related work, consultant and staff time related to the time extension, and the on-going planning study associated with the City of Tustin/IRWD cooperative agreement. The project contingency was also reduced from 5% to 2%. An Expenditure Authorization is requested as shown in the table below and in Exhibit "D".

Project No.	Current Budget	Addition <Reduction>	Total Budget	Existing EA	This EA Request	Total EA Request
10286 (1081)	\$39,921,300	\$-0-	\$39,921,300	\$36,347,300	\$1, 577,800	\$37,925,100

ENVIRONMENTAL COMPLIANCE:

This project is subject to the California Environmental Quality Act. In conformance with the California Code of Regulations Title 14, Chapter 3, Section 15004, a Mitigated Negative Declaration was adopted February 8, 2010. To fulfill requirements of the American Recovery and Reinvestment Act of 2009, the project is also subject to compliance with the National Environmental Policy Act (NEPA). An Environmental Assessment was prepared to achieve NEPA compliance for the project and the USBR has adopted a Categorical Exemption for the project.

COMMITTEE STATUS:

This item was reviewed by the Engineering and Operations Committee on March 20, 2012.

RECOMMENDATION:

THAT THE BOARD APPROVE AN EXPENDITURE AUTHORIZATION IN THE AMOUNT OF \$1,577,800; APPROVE CONTRACT CHANGE ORDER NO. 5 IN THE AMOUNT OF \$791,166 TO F.T. ZIEBARTH COMPANY; AND AUTHORIZE THE GENERAL MANAGER TO EXECUTE VARIANCE NO. 1 IN THE AMOUNT OF \$105,630 WITH GEOSCIENCE FOR ENGINEERING SERVICES DURING CONSTRUCTION OF THE WELLHEAD FACILITIES FOR THE WELLS 21 AND 22, PROJECT 10286 (1081).

Action Calendar: Wells 21 and 22 Wellhead Facilities Expenditure Authorization, Contract
Change Order and Variance

March 26, 2012

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LIST OF EXHIBITS:

Exhibit "A" – F.T. Ziebarth Contract Change Order No. 5

Exhibit "B" – F.T. Ziebarth Construction Change Order Summary

Exhibit "C" – Geoscience's Variance No. 1

Exhibit "D" – Expenditure Authorization

EXHIBIT "A"

CONTRACT CHANGE ORDER

IRVINE RANCH WATER DISTRICT
 15600 Sand Canyon Avenue
 Irvine, California 92618
 (949) 453-5300



C.O. No. 5
 Final
 Project No. 10286 (1081)

Wells 21 and 22 Wellheads
 Project Title

Date: March 14, 2012

THE FOLLOWING CHANGE TO CONTRACT, DRAWINGS AND SPECIFICATIONS IS PROPOSED.	\$ ADDITIONS	\$ DELETIONS	DAYS ±
Installation of Liners to Repair Wells 21 and 22:			113
1. Well 21 full-length 16-3/8" diameter, 5/16" thick 304L SST Liner with Landing Shoe (283 linear feet)	\$363,574.00		
2. Well 22 full-length 15" diameter, 5/16" thick 304L SST Liner with Landing Shoe (295 linear feet)	\$427,592.00		
Reference Detailed Technical Specifications dated March 7, 2012 by Geoscience for complete scope of work.			
TOTAL	\$791,166.00	\$0	113
			DAYS ±

1. NET AMOUNT THIS CHANGE ORDER	=	\$791,166.00	113
2. ORIGINAL CONTRACT AMOUNT	=	\$2,183,700.00	270
3. TOTAL PREVIOUS CHANGE ORDER(S)	=	\$420,352.63	32
4. TOTAL BEFORE THIS CHANGE ORDER (2+3)	=	\$2,604,052.63	302
5. PROPOSED REVISED CONTRACT AMOUNT TO DATE (1+4)	=	\$3,395,218.63	415

We hereby agree to make the above change subject to the terms of this change order for the sum of: _____
 ----- Seven hundred ninety one thousand one hundred sixty six and 00/100 ----- Dollars

3-14-2012
 Date

F. T. Ziebarth Company
 Contractor

[Signature]

SIGNATURE	DATE	APPROVAL LEVEL REQUIRED
<i>[Signature]</i> IRWD Engineer or Consulting Engineer	<u>3/14/2012</u> Date	Department Director Approval Required <input type="checkbox"/>
<i>[Signature]</i> Principal Engineer	<u>3/14/2012</u> Date	General Manager Approval Required <input type="checkbox"/>
<i>[Signature]</i> Director of Engineering and Construction	<u>3/15/12</u> Date	Committee Approval Required <input type="checkbox"/>
 General Manager	Date	Board Approval Required <input checked="" type="checkbox"/>
		By _____ Date _____
		<u>503567</u> Purchase Order No.

NOTE: The documents supporting this Change Order, including any drawings and estimates of cost, if required are attached hereto and made a part hereof. This Change Order shall not be considered as such until it has been signed by the Owner and the Contractor. Upon final approval, distribution of copies will be made as required. The parties mutually agree the pricing set forth in this Change Order are complete and fair compensation for the entirety of the work authorized under this Change Order and that no additional compensation is warranted nor shall it be allowed.

CHANGES: All workmanship and materials called for by this Order shall be fully in accord with the original Contract Documents insofar as the same may be applied without conflict to the conditions set forth by this Order. The time for completing the contract will not be extended unless expressly provided for in this Change Order.

F.T. ZIEBARTH COMPANY

P.O. BOX 4173 • FULLERTON, CA 92834-4173
920 E. WALNUT AVENUE • FULLERTON, CA 92831-4534
(714) 992-5151 • FAX: (714) 992-4151

March 12, 2012

Irvine Ranch Water District
15600 Sand Canyon Ave
Irvine, CA 92619-7000

Attn: Steve Bomkamp

Reference: **WELLS 21 & 22 DESALTER PROJECT WELLHEAD FACILITIES
LINER REPAIRS TO WELLS 21 & 22**

Dear Steve:

We propose to provide labor, equipment and materials to furnish and install 304 SS liners in both wells for the above project per specifications titled Installation of Liners to Repair Wells 21 and 22, dated March 7, 2012 prepared by Geoscience Support Services Inc.

Our scope includes the installation of 271 l.f. 17" 304L stainless steel liner at Well 21, and 283 l.f. 15" 304L stainless steel liner at Well 22. Also included are alignment surveys, sanitary seals, video surveys, OCSD compliant discharge systems with Baker tanks, bailing, airlifting and swabbing and final video survey of both wells to inspect the condition of the liner at the end of the work. The unit costs for the entire scope are attached below.

The work can begin at Well 21 within two weeks of a notice to proceed. The electrical equipment will be in place at Well 21 but we will delay the wall relocation and other site work improvements so as not to interfere with Best. The liner work will take about 6 weeks, and immediately after Well 21 liner is completed, Best Drilling will proceed with approximately two weeks of test pumping to complete unfinished limited rehabilitation work under the change order no. 2.

While the Well 21 liner and rehabilitation is underway, we will finish all mechanical, electrical and site work at Well 22 with the exception of AC paving. We will swap sites with Best at the conclusion of their Well 21 work, and we will complete the site work at and wall relocation there while Best completes the two months of liner and test pumping at Well 22. We will coordinate with Best Drilling and Geoscience to complete the work as efficiently as possible to minimize the impact on the completion schedule.

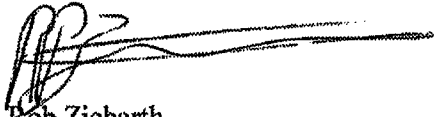
The price for the liner work is as follows:

Well 21	\$363,574.00
Well 22	<u>\$427,592.00</u>
Total	\$791,166.00

The above price includes all labor, equipment, materials, supervision, overhead and profit for both F. T. Ziebarth and Best Drilling and pump for all of the work shown on the attached spread sheets. The unit quantities in hours on the spread sheets are pay quantities, so IRWD will only be billed for the actual hours worked on that specific activity. The District will be credited for any unused standby hours.

We request a change order in the amount of \$791,166.00 and an extension of time of 113 calendar days for the extra work. If you have any questions or concerns regarding this matter, please do not hesitate to contact me.

Sincerely,



Rob Ziebarth
F.T. ZIEBARTH COMPANY

F. T. Ziebarth Co. / Best Drilling Cost Proposal
Installation of 17 in. OD (16 3/8 in. ID) 304L Stainless Steel Liner - IRWD Well Z1¹

Item	Description	Qty	Unit Price	Total Item Price
1	Mobilization of Necessary Equipment and Personnel, Including Demobilization at the Completion of Work, and Site Clean Up.	1 EA	\$ 40,250.00 /EA	\$ 40,250.00
2	Labor and Materials to Install 17 in. OD (16 3/8 in. ID) x 5/16 in. wall ASTM 778 304L Stainless Steel Blank Casing as Liner (Butt-Weld, without Collars), Including Installation of a 304L Stainless Steel Landing Shoe Placed within the 16 in. x 20 in. Reducer (located approx. 278 to 283 ft bgs), ² Liner to be installed approximately 11 to 282 ft bgs.	271 FT	\$ 652.00 /FT	\$ 176,692.00
3	Perform Alignment Survey with 40 ft Dummy to Verify Straightness of Liner Prior to Cementing.	1 EA	\$ 4,025.00 /EA	\$ 4,025.00
4	Labor and Materials to Install 3 ft of Fine Sand Layer to Seal the Bottom of the Liner.	3 FT	\$ 460.00 /FT	\$ 1,380.00
5	Perform Video Survey to Verify Placement of Liner and Fine Sand Layer, and During Placement of Initial Lift of Cement.	1 EA	\$ 2,415.00 /EA	\$ 2,415.00
6	Labor and Materials to Install Initial Lift of 10.3 sk Sand-Cement Grout. Cement to be Pumped Through 2 7/8 in. Tremie Pipe Placed in Camera Access Tube.	10 FT	\$ 218.00 /FT	\$ 2,180.00
7	Labor and Materials to Install Neat Cement Grout to Seal 17 in. OD Liner within 20 in. Casing and Existing Camera Tube. Cement to be Pumped Through 1 in. Tremie Pipe Placed in Annulus.	258 FT	\$ 218.00 /FT	\$ 56,244.00
8	Labor and Materials to Install 5 ft of 16 x 17 in. 304L Stainless Steel Patch from Approximately 281 to 286 ft bgs.	1 EA	\$ 9,852.00 /EA	\$ 9,852.00
9	Perform Verification Video Survey to Inspect Liner and Seal.	1 EA	\$ 2,415.00 /EA	\$ 2,415.00
10	Perform Alignment Survey with 40 ft Dummy to Verify Straightness of Liner.	1 EA	\$ 4,025.00 /EA	\$ 4,025.00
11	Airlift and Swab Screened Intervals in 10 ft Intervals to Remove Sand and Clean Well Screens. Total Length 601 ft of Screen, Assume 60 Intervals at 1.5 Hours per Interval, at 200 gpm.	90 HR	\$ 460.00 /HR	\$ 41,400.00
12	Bail to Remove Sediment from Bottom of Well.	8 HR	\$ 402.00 /HR	\$ 3,216.00
13	Perform Video Survey to Inspect Condition of Liner and Screen at the End of the Work.	1 EA	\$ 1,840.00 /EA	\$ 1,840.00
14	Standby Time - With Crews and Equipment	24 HR	\$ 402.00 /HR	\$ 9,648.00
15	Standby Time - Equipment Only	24 HR	\$ 333.00 /HR	\$ 7,992.00
TOTAL IRWD WELL Z1 (ITEMS 1-15):			\$	363,574.00

Notes:

- ¹ Well Z1 is located in a concrete vault. Work occur through 6 ft x 6 ft opening above well. Due to electrical components located in the vault, vault shall be kept dry.
- ² Length of liner does not include depth of vault, estimated to extend to approximately 11 ft bgs.

Best Drilling and Pump, Inc. Cost Proposal
Installation of 15 5/8 in. OD (15 in. ID) 304L Stainless Steel Liner - IRWD Well 22¹

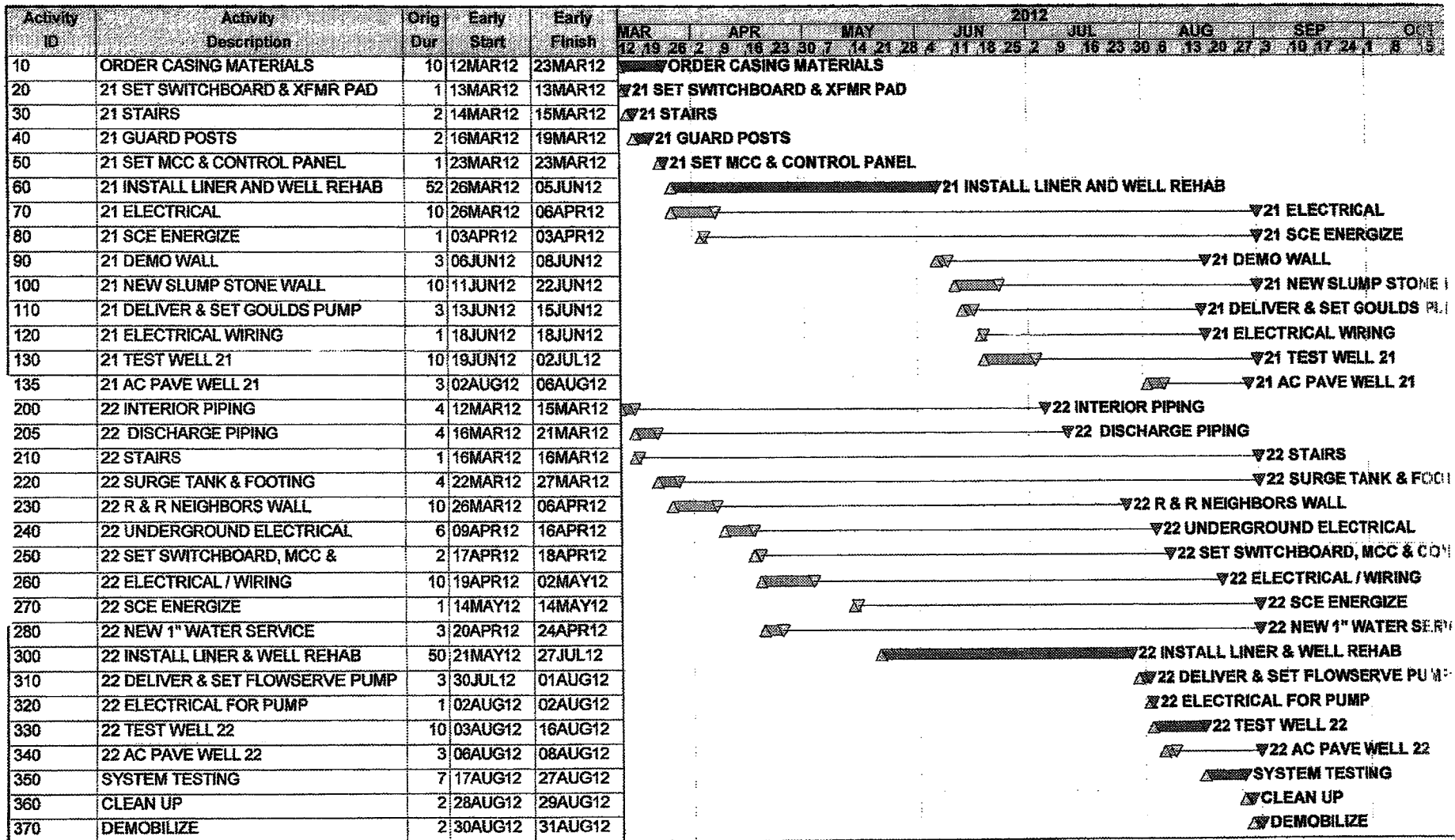
Item	Description	Qty	Unit Price	Total Item Price
1	Mobilization of Necessary Equipment and Personnel, Including Demobilization at the Completion of Work, and Site Clean Up.	1 EA	\$ 40,250.00 /EA	\$40,250.00
2	Labor and Materials to Install 15 in. ID (15 5/8 in. OD) x 5/16 in. wall ASTM 778 304L Stainless Steel Blank Casing as Liner (Butt-Weld, without Collars), Including Installation of a 304L Stainless Steel Landing Shoe Placed within the 1.6 in. x 20 in. Reducer (located approx. 291 to 295 ft bgs). ² Liner to be installed approximately 11 to 294 ft bgs.	283 FT	\$ 612.00 /FT	\$173,196.00
3	Perform Alignment Survey with 40 ft Dummy to Verify Straightness of Liner Prior to Cementing.	1 EA	\$ 4,025.00 /EA	\$4,025.00
4	Labor and Materials to Install 3 ft of Fine Sand to Seal the Bottom of the Liner.	3 FT	\$ 460.00 /FT	\$1,380.00
5	Perform Video Survey to Verify Placement of Liner and Fine Sand Layer, and During Placement of Initial Lift of Cement.	1 EA	\$ 2,415.00 /EA	\$2,415.00
6	Labor and Materials to Install Initial Lift of 10.3 sk Sand-Cement Grout. Cement to be Pumped Through 2 7/8 in. Tremie Pipe Placed in Camera Access Tube.	10 FT	\$ 218.00 /FT	\$2,180.00
7	Labor and Materials to Install Neat Cement Grout to Seal 15 5/8 in. OD Liner within 20 in. Casing and Existing Camera Tube. Cement to be Pumped Through 1 in. Tremie Pipe Placed in Annulus.	270 FT	\$ 218.00 /FT	\$58,860.00
8	Perform Verification Video Survey to Inspect Liner and Seal.	1 EA	\$ 2,415.00 /EA	\$2,415.00
9	Perform Alignment Survey with 40 ft Dummy to Verify Straightness of Liner After Cementing.	1 EA	\$ 4,025.00 /EA	\$4,025.00
10	Provide Baker tank, Rigid Discharge Piping, and Circular Chart Recording Device for Discharge to Sanitary Sewer. Comply with OCSO permit.	1 EA	\$ 28,750.00 /EA	\$28,750.00
11	Provide In-Situ Certification of Flowmeter for Accuracy at Three Rates, including Engineer's Review of Calculations and Stamp Certifying Accuracy, Installation of Flowmeter.	1 EA	\$ 5,750.00 /EA	\$5,750.00
12	Bail to Remove Sediment from Bottom of Well.	8 HR	\$ 402.00 /HR	\$3,216.00
13	Airlift and Swab Screened Intervals in 10 ft Intervals to Remove Sand and Clean Well Screens. Total Length 589 ft of Screen, Assume 60 Intervals at 1.5 Hours per Interval, at 200 gpm.	90 HR	\$ 460.00 /HR	\$41,400.00
14	Reinstall and Remove Development/Test Pumping Equipment to a Depth of Approximately 260 ft bgs, Pump Shall be Capable of Producing 2,500 gpm, Discharging to Baker Tank.	1 EA	\$ 40,250.00 /EA	\$40,250.00
15	Perform Final Video Survey to Inspect Condition of Liner and Screen at the End of the Work.	1 EA	\$ 1,840.00 /EA	\$1,840.00
16	Standby Time - With Crews and Equipment	24 HR	\$ 402.00 /HR	\$9,648.00
17	Standby Time - Equipment Only	24 HR	\$ 333.00 /HR	\$7,992.00
TOTAL IRWD WELL 22 (ITEMS 1-17):			\$	427,592.00

Notes:

¹ Well 22 is located in a concrete vault. Work occur through 6 ft x 6 ft opening above well. Due to electrical components located in the vault, vault shall be kept dry.

² Length of liner does not include depth of vault, estimated to extend to approximately 11 ft bgs.

A-6



Project Start	12MAR12		Early Bar
Project Finish	31AUG12		Float Bar
Date Date	12MAR12		Progress Bar
Plot Date	12MAR12		Critical Activity

TUST

WELLS 21 & 22 DESALTER PROJECT
 IRVINE RANCH WATER DISTRICT
 COMPLETION SCHEDULE

Sheet 1 of 1

**Wells 21 and 22 Wellheads Project
PR 10286 (Oracle 1081)
Construction Summary**

Design/Build Contractor: F.T. Ziebarth
Design Engineer: RBF

		Contract Amount						Contract Days				Original Completion Date:
		Original Contract Amount: \$2,183,700.00						Original Days: 270				4/8/2012
Change Order	Description	Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Change Order Days	Previous Change Orders	Cum. Total C.O. days	Revised Total Contract Days	Revised Completion Date
1	Approved by Director of Engineering and Construction Approved on September 22, 2011 1.1 Addition of Anti-Siphon component to the Bladder Type Surge Tank	\$16,529.93	\$16,529.93	\$0.00	\$16,529.93	0.8%	\$2,200,229.93	0	0	0	270	4/8/2012
2	Approved by Board of Directors Approved on October 24, 2011 2.1 Well 21 and 22 Wellhead Rehabilitation	\$356,274.98	\$356,274.98	\$16,529.93	\$372,804.91	17.07%	\$2,556,504.91	0	0	0	270	4/8/2012
3	Approved by Director of Engineering and Construction Approved on February 10, 2012 3.1 Hatch and Stair Modifications 3.2 Surge Tank Piping 3.3 Conduit and Wire for Surge Tank 3.4 Increased Concrete Base for Surge Tank	\$8,668.00 \$11,647.00 \$1,972.53 \$1,583.18	\$23,870.71	\$372,804.91	\$396,675.62	18.17%	\$2,580,375.62	2	0	2	272	4/10/2012
4	Approved by Director of Engineering and Construction Approved on February 13, 2012 4.1 Wells 22 Rehabilitation Work 4.2 Stainless Steel Pilots & Tubing for Cla-Valve	\$21,041.32 \$2,635.69	\$23,677.01	\$396,675.62	\$420,352.63	19.25%	\$2,604,052.63	30	2	32	302	5/10/2012
5	Pending Approval by Board Pending Approval 5.2 Well 21 Casing Liner Repair 5.3 Well 22 Casing Liner Repair	\$363,574.00 \$427,592.00	\$791,166.00	\$420,352.63	\$1,211,518.63	55.48%	\$3,395,218.63	113	32	145	415	8/31/2012

EXHIBIT "B"

		% of Original Contract Amount
TOTAL CHANGE ORDERS	\$1,211,518.63	55.48%
REVISED CONTRACT AMOUNT	\$3,395,218.63	

Exhibit "C"
IRVINE RANCH WATER DISTRICT
PROFESSIONAL SERVICES VARIANCE

Project Title: Geohydrologic Services File No.: _____
Wells 21/22 Rehabilitation Date: March 9, 2012
 Variance No.: 1
 Project No.: PR 10286 (1081) Project No. PR 10286 (1081)
 Purchase Order No.: 504952

Originator: IRWD ENGINEER/CONSULTANT Other (Explain) _____

Description of Variance (attach any back-up material):
Additional work for well video/gyroscopic surveys, Technical Memorandum,
Technical Liner Specifications and Field Inspection Services Related to
Wells 21 and 22 Liner Installation (See Attached Breakdown)

Engineering & Management Cost Impact:

Classification	Manhours	Billing Rate	Labor \$	Direct Costs	Subcon. \$	Total \$
Well 22 - Additional Work			27,230	500	4,320	32,050
Well 21 - Additional Work			13,725	250	1,550	15,525
Well 22 - Field Inspection			20,680	2,125	0	22,805
Well 21 - Field Inspection			19,840	1,375	0	21,215
Summary Report & Miscellaneous			14,035	0	0	14,035
Total \$ =						105,630

Schedule Impact:

Task No.	Task Description	Original Schedule	Schedule Variance	New Schedule

Required Approval Determination:

Total Original Contract	\$ <u>55,399</u>	<input type="checkbox"/> General Manager: Single Variance less than or equal to \$30,000.
Previous Variances \$	<u>0</u>	<input type="checkbox"/> Committee: Single Variance greater than \$30,000, and less than or equal to \$60,000.
This Variance	\$ <u>105,630</u>	<input type="checkbox"/> Board: Single Variance greater than \$60,000.
Total Sum of Variances	\$ <u>105,630</u>	<input checked="" type="checkbox"/> Board: Cumulative total of Variances greater than \$60,000, or 30% of the original contract, whichever is higher.
New Contract Amount	\$ <u>161,029</u>	
Percentage of Total Variances to Original Contract	<u>190 %</u>	

ENGINEER/CONSULTANT: GEOSCIENCE Support IRVINE RANCH WATER DISTRICT
 Company Name Services, Inc.
Alvina M. Smith 9-Mar-12 Rami J. Bunker 3/14/12
 Project Engineer/Manager Date Department Director Date
Alvina M. Smith 9-Mar-12 _____
 Engineer's/Consultant's Management Date General Manager/Comm./Board Date

GEOSCIENCE Support Services, Inc.
Wells 21 and 22 Rehabilitation - Variance #1
RD 100557

Task	Description	GEOSCIENCE Support Services, Inc.							Reimbursable Labor	Reimbursable Expenses ¹	Subcontractor Costs ²	Total Cost	
		Principal Hydrologist \$280	Senior Geohydrologist \$180	Project Geohydrologist \$150	Senior Staff Geohydrologist \$125	Staff Geohydrologist \$115	Technical Manager \$100	Clerical \$85					
1.0 ADDITIONAL WORK - WELL 22													
Work in Progress or Completed	1.1	Evaluation of Repair Options, Conference Call with IRWD Personnel on November 30, 2011 to Discuss Alternatives	1	8						\$ 1,720	\$ -	\$ -	\$ 1,720
	1.2	Field Supervision - Collection of 20 in. Casing Metal Samples from Wells 21 and 22 - December 5, 2011		6						\$ 1,080	\$ 125	\$ -	\$ 1,205
	1.3	Field Supervision - January 3 and 4, 2012 Video Surveys, Pacific Surveys Costs (Including 7% Markup)		12						\$ 2,160	\$ 250	\$ 2,770	\$ 5,180
	1.4	Field Supervision - February 21, 2012 Gyroscopic Survey, Pacific Surveys Costs (Including 7% Markup) and Subsequent Analysis	2	12						\$ 2,720	\$ 125	\$ 1,550	\$ 4,395
	1.5	Preparation of Technical Memorandum Recommending Repair for Well 22, Including Revisions	4	32	4	12	4		1	\$ 9,525	\$ -	\$ -	\$ 9,525
	1.6	Preparation of Technical Specifications for Well Repair of Wells 21 and 22, Obtain Contractor's Costs	2	24			8	2	1	\$ 6,085	\$ -	\$ -	\$ 6,085
	1.7	Bid Support - Obtain Bids from Contractors for Repair of Wells 21 & 22	2	16		4				\$ 3,940	\$ -	\$ -	\$ 3,940
	Subtotal - Task 1	11	110	4	16	22	2	2	\$ 27,230	\$ 500	\$ 4,320	\$ 32,050	
2.0 ADDITIONAL WORK - Well 21													
Work in Progress or Completed	2.1	Re-run Video Survey January 27, 2012 Due to Cloudy Water Column (Water to Site Shut Off, Not Available to Clear Water Column in Well). Run Cement Bond Log (CBL)	1	6						\$ 1,360	\$ 125	\$ -	\$ 1,485
	2.2	Evaluation of Repair Options, Conference Call with IRWD Personnel on February 10, 2012 to Discuss Alternatives and Pump Selection, Conference Call with RBF February 15, 2012 to Discuss Maximum Diameter of Liner and Pump Selection	1	8						\$ 1,720	\$ -	\$ -	\$ 1,720
	2.3	Preparation of Technical Memorandum Recommending Repair for Well 21	2	32	2	12			1	\$ 8,205	\$ -	\$ -	\$ 8,205
	2.4	Field Inspection during Gyroscopic Survey - February 21, 2012 and Subsequent Analysis.	1	12						\$ 2,440	\$ 125	\$ 1,550	\$ 4,115
	2.5	Preparation of Technical Specifications for Well Repair of Wells, Obtain Contractor's Costs (see Out of Scope Costs for Well 22 - Task 1.6)	-	-	-	-	-	-	-	\$ -	\$ -	\$ -	\$ -
	2.6	Bid Support - Obtain Bids from Contractors for Repair of Well 21 (See Out of Scope Costs for Well 22 Task 1.7)	-	-	-	-	-	-	-	\$ -	\$ -	\$ -	\$ -
	Subtotal - Task 2	5	58	2	12	0	0	1	\$ 13,725	\$ 250	\$ 1,550	\$ 15,525	
3.0 FIELD INSPECTION SERVICES DURING LINER INSTALLATION - WELL 22³													
	3.1	Field Inspection during Installation of Full-Length Stainless Steel Liner and Grout Seal, Verify Casing Tally and Witness Video Surveys (Full Time)	2	56		8				\$ 11,640	\$ 750	\$ -	\$ 12,390
	3.2	Field Inspection during Airlifting and Swabbing (Part Time)	1	24		24				\$ 7,600	\$ 1,250	\$ -	\$ 8,850
	3.3	Re-certification of Flowmeter and Recording Device, if Necessary (Full Time)		8						\$ 1,440	\$ 125	\$ -	\$ 1,565
	Subtotal - Task 3	3	80	0	32	0	0	0	\$ 20,680	\$ 2,125	\$ -	\$ 22,805	
4.0 FIELD INSPECTION SERVICES DURING LINER INSTALLATION - WELL 21³													
	4.1	Field Inspection during Installation of Full-Length Stainless Steel Liner and Grout Seal, Verify Casing Tally and Witness Video Surveys and Dummy Tests (Full Time)	2	56	4	8				\$ 12,240	\$ 750	\$ -	\$ 12,990
	4.2	Field Inspection during Airlifting and Swabbing (Part Time)	1	24		24				\$ 7,600	\$ 625	\$ -	\$ 8,225
	Subtotal - Task 4	3	80	4	32	0	0	0	\$ 19,840	\$ 1,375	\$ -	\$ 21,215	
5.0 SUMMARY REPORT													
	5.1	Final Report - Additional Information and Analysis of Liner Installation and Development to be Included in the Summary Report (see Original Scope of Work Task 4.1)	2	16				4	2	\$ 4,010	\$ -	\$ -	\$ 4,010
	Subtotal - Task 5	2	16	0	0	0	4	2	\$ 4,010	\$ -	\$ -	\$ 4,010	
	TOTAL HOURS AND COST - Tasks 1 to 5	24	344	10	82	12	6	5	\$ 85,485	\$ 4,250	\$ 6,870	\$ 92,605	
6.0 MISCELLANEOUS													
	6.1	Miscellaneous Task - To Address Unforeseen Issues	8	40				5	1	\$ 10,025	\$ -	\$ -	\$ 10,025
	Subtotal - Task 6	8	40	0	0	0	5	1	\$ 10,025	\$ -	\$ -	\$ 10,025	
	TOTAL HOURS AND COST - Tasks 1 to 6	32	384	10	82	12	11	6	\$ 95,510	\$ 4,250	\$ 6,870	\$ 106,630	

Notes:

- ¹ Reimbursable expenses include report reproduction, mailing charges, field equipment, and mileage. Contractor fees for video surveys, patch material, equipment use and personnel are not included.
- ² Subcontractor costs include Pacific Surveys costs for video logs on January 3 and 4, 2012, and gyroscopic surveys on February 21, 2012.

C-2

IRVINE RANCH WATER DISTRICT

PROFESSIONAL SERVICES VARIANCE REGISTER

Project Title: Geohydrologic Services Well 21/22 Rehabilitation

Project No.: 10286 (1081) Project Manager: Patty Uematsu

Variance No.	Description	Dates		Variance Amount
		Initiated	Approved	
1	See Attached	9-Mar-12		\$105,630

EXHIBIT "D"

IRVINE RANCH WATER DISTRI

Expenditure Authorization

Project Name: WELLS 21 & 22 WELLHEAD, PIPELINE & TREATMENT PLANT

EPMS Project No: 10286 **EA No:** 15

ID Split: Regional Potable Water Splits (11/08)

Oracle Project No: 1081

Improvement District (ID) Allocations

Project Manager: UEMATSU, PATRICIA

Project Engineer: MORI, RICHARD

Request Date: March 14, 2012

ID No. Allocation % Source of Funds

ID No.	Allocation %	Source of Funds
112	4.3	BONDS YET TO BE SOLD**
113	5.2	BONDS YET TO BE SOLD**
115	7.3	CAPITAL FUND
121	15.3	BONDS YET TO BE SOLD**
130	11.8	BONDS YET TO BE SOLD**
140	4.2	BONDS YET TO BE SOLD**
150	31.2	BONDS YET TO BE SOLD**
153	3.4	BONDS YET TO BE SOLD**
154	1.5	BONDS YET TO BE SOLD**
161	8.0	BONDS YET TO BE SOLD**
182	3.0	BONDS YET TO BE SOLD**
184	2.8	BONDS YET TO BE SOLD**
186	1.0	BONDS YET TO BE SOLD**
188	1.0	BONDS YET TO BE SOLD**
Total	100.0%	

Summary of Direct Cost Authorizations

Previously Approved EA Requests:	\$36,347,300
This Request:	\$1,577,800
Total EA Requests:	\$37,925,100
Previously Approved Budget:	\$39,921,300
Budget Adjustment Requested this EA:	\$0
Updated Budget:	\$39,921,300
Budget Remaining After This EA	\$1,996,200

Comments:

Phase	This EA Request	Previous EA Requests	EA Requests to Date	This Budget Request	Previous Budget	Updated Budget	Start	Finish
ENGINEERING - PLANNING IRWD	20,000	0	20,000	20,000	0	20,000	10/11	9/12
ENGINEERING - PLANNING OUTSIDE	150,000	0	150,000	150,000	0	150,000	10/11	9/12
ENGINEERING DESIGN - IRWD	0	250,000	250,000	0	250,000	250,000	11/09	6/12
ENGINEERING DESIGN - OUTSIDE	1,105,100	2,919,900	4,025,000	825,000	3,200,000	4,025,000	11/09	6/12
DESIGN STAFF FIELD SUPPORT	(40,000)	50,000	10,000	(40,000)	50,000	10,000	11/09	6/12
ENGINEERING - CA&I IRWD	0	250,000	250,000	0	250,000	250,000	5/10	9/12
ENGINEERING - CA&I OUTSIDE	855,100	1,585,000	2,440,100	845,100	1,595,000	2,440,100	5/10	9/12
CONSTRUCTION FIELD SUPPORT	40,000	10,000	50,000	40,000	10,000	50,000	5/10	9/12
CONSTRUCTION	350,000	25,091,300	25,441,300	(806,700)	28,205,000	27,398,300	5/10	9/12
LEGAL	40,000	10,000	50,000	40,000	10,000	50,000	11/09	9/12
LAND	0	4,325,100	4,325,100	0	4,325,100	4,325,100	11/10	6/10
WATER QUALITY	120,000	50,000	170,000	120,000	50,000	170,000	11/09	9/12
ENGINEERING ENVIRONMENTAL-OUTS	(75,000)	75,000	0	(75,000)	75,000	0	6/09	6/10
Contingency - 2.00% Subtotal	(\$987,400)	\$1,731,000	\$743,600	(\$1,118,400)	\$1,901,200	\$782,800		
Subtotal (Direct Costs)	\$1,577,800	\$36,347,300	\$37,925,100	\$0	\$39,921,300	\$39,921,300		
Estimated G/A - 180.00% of direct labor*	\$252,000	\$1,098,000	\$1,350,000	\$252,000	\$1,098,000	\$1,350,000		
Total	\$1,829,800	\$37,445,300	\$39,275,100	\$252,000	\$41,019,300	\$41,271,300		
Direct Labor	\$140,000	\$610,000	\$750,000	\$140,000	\$610,000	\$750,000		

*EA includes estimated G&A. Actual G&A will be applied based on the current ratio of direct labor to general and administrative costs.

EA Originator:

Patricia Uematsu 3/14/12

Department Director:

Tim L. Burt 3/15/12

Finance:

Board/General Manager:

** IRWD hereby declares that it reasonably expects those expenditures marked with two asterisks to be reimbursed with proceeds of future debt to be incurred by IRWD in a maximum principal amount of \$42,097,000. The above-captioned project is further described in the attached staff report and additional documents, if any, which are hereby incorporated by reference. This declaration of official intent to reimburse costs of the above-captioned project is made under Treasury Regulation Section 1.150-2.

March 26, 2012 J.S.
Prepared by: J. Stanart / M. Cortez
Submitted by: K. Burton
Approved by: Paul Cook

ACTION CALENDAR

ORANGE PARK ACRES TRANSMISSION PIPELINE PROJECT CONTRACT CHANGE ORDER NO. 28

SUMMARY:

The Orange Park Acres Transmission Pipeline Project is currently being constructed by Leatherwood Construction, Inc. Staff recommends that the Board approve the following actions related to various unforeseen conditions along Rancho Santiago Boulevard, Hewes Avenue and Bond Avenue:

- Approve an Expenditure Authorization in the amount of \$1,839,800 for the Orange Park Acres Transmission Pipeline Project, and
- Approve Contract Change Order (CCO) No. 28 in the amount of \$668,679 to Leatherwood Construction, Inc.

BACKGROUND:

Construction of the Orange Park Acres Transmission Pipeline Project was awarded to Leatherwood Construction, Inc. in October 2010 for the amount of \$6,786,397. This project replaces the existing riveted steel pipeline installed in 1929 that has experienced repeated failures, and will also improve fire flow and water system pressure to the Orange Park Acres area. A Location Map of the project is attached as Exhibit "A".

Contract Change Order No. 28:

CCO No. 28, in the amount of \$668,679, includes the following Change Requests (CR):

- Additional work related to the Delta No. 9 plan revisions along Rancho Santiago for added pot-holing, saw-cutting, breaking and removal of Portland Cement Concrete beneath the asphalt pavement sections; for additional utility crossings, and for additional slurry backfill required by the City of Orange in intersections (CR-41, 43, 44, 46 and 51);
- Additional labor, equipment and materials for the construction of the jack and bore operation at Hewes Avenue because of the unforeseen presence of large rocks which necessitated a larger casing, a deeper excavation and more dewatering (CR-45-1 through CR 45-41);
- Additional work related to the Delta No. 10 plan revisions along Bond Avenue for additional utility crossings; and for additional slurry backfill required by the City of Orange in the intersections (CR-52, 53 and 54); and
- Additional base paving of 20,641 square feet for trenches over and above the bid quantity of 127,160 square feet at the contract unit price of \$9.00 per SF (CR 58).

A staff report, which is attached as Exhibit "B", provides more detail on CCO No. 28 in the amount of \$668,679, which is attached as Exhibit "C". Staff has reviewed Leatherwood's cost proposals and negotiated changes, and believes that Leatherwood's final costs are appropriate and reasonable. The Contract Change Order Summary is attached as Exhibit "D".

FISCAL IMPACTS:

Project 11408 (1279) is included in the FY 2011-12 Capital Budget. The existing budget is sufficient to fund these costs. An Expenditure Authorization is requested as shown in the table below and in Exhibit "E".

Project No.	Current Budget	Addition <Reduction>	Total Budget	Existing EA	This EA Request	Total EA Request
11408 (1279)	\$10,988,900	\$0	\$10,988,900	\$9,149,100	\$1,839,800	\$10,988,900

ENVIRONMENTAL COMPLIANCE:

This project is subject to the California Environmental Quality Act (CEQA). In conformance with the California Code of Regulations, Title 14, Chapter 3, Section 15004, a Mitigated Negative Declaration was adopted on August 9, 2010.

COMMITTEE STATUS:

This item was reviewed by the Engineering and Operations Committee on March 20, 2012.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE AN EXPENDITURE AUTHORIZATION IN THE AMOUNT OF \$1,839,800 FOR THE ORANGE PARK ACRES TRANSMISSION PIPELINE, PROJECT 11408 (1279), AND APPROVE CONTRACT CHANGE ORDER NO. 28 WITH LEATHERWOOD CONSTRUCTION, INC. IN THE AMOUNT OF \$668,679.

LIST OF EXHIBITS:

- Exhibit "A" – Location Map
- Exhibit "B" – Staff Report – Contract Change Order No. 28
- Exhibit "C" – Contract Change Order No. 28
- Exhibit "D" – Contract Change Order Summary
- Exhibit "E" – Expenditure Authorization

LEGEND

- CITY OF ORANGE DOMESTIC WATER
- ===== PHASE 1 IMPROVEMENTS (TRANSMISSION MAIN & WELL OPA)
- PHASE 2 IMPROVEMENTS (3 PRV'S AND FIRE FLOW IMPS.)
- PHASE 3 IMPROVEMENTS (ABANDONMENTS)
- PHASE 4 (FUTURE)
- EXISTING PIPELINE
- ◇ EXISTING CITY OF ORANGE INTERTIE
- ◇ INTERIM CITY OF ORANGE INTERTIE

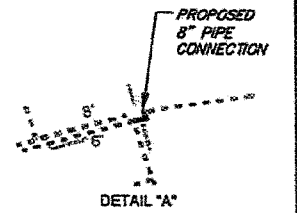
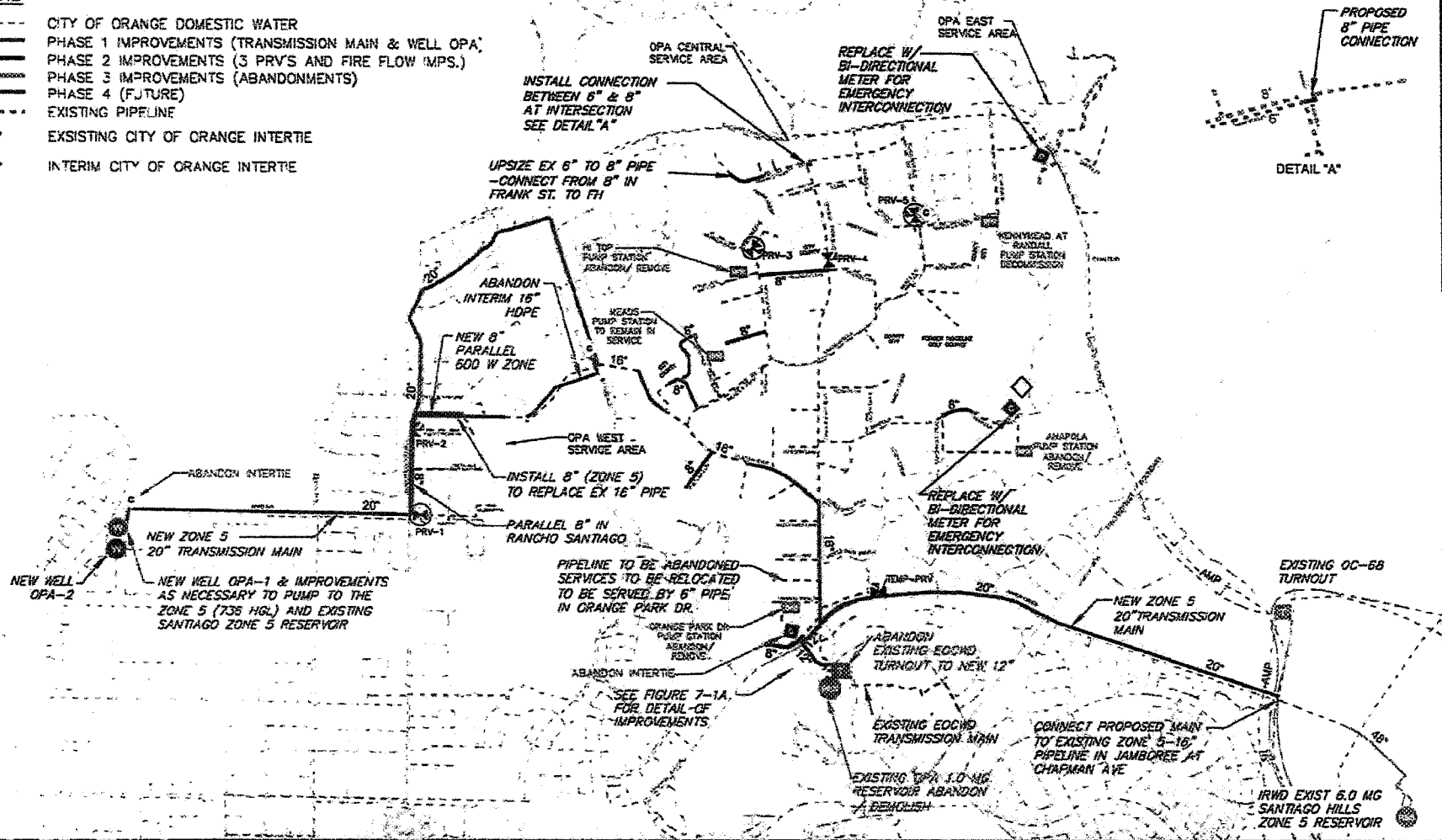
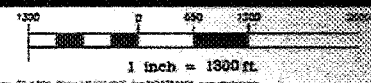


Exhibit "A"



OPA SANIP

PROPOSED WATER SYSTEM IMPROVEMENTS PHASING

FIGURE 7

EXHIBIT "B"

Staff Report
for
Orange Park Acres Transmission Pipeline Project
Contract Change Order No. 28

The Orange Park Acres Transmission Pipeline Project is currently being constructed by Leatherwood Construction, Inc. The purpose of this staff report is to summarize and explain the components of Contract Change Order No. 28 (CCO No. 28).

Contract Change Order No. 28

CCO No. 28 is submitted in the amount of \$668,679. The change order includes four (4) change order categories from the contractor.

1. Changes related to the Rancho Santiago Boulevard 20-inch steel pipe segment and the Delta No. 9 plan revisions.
2. Changes related to the "jack & bore" pipe installation at the Hewes Street and Rancho Santiago Boulevard intersection crossing.
3. Changes related to the Bond Avenue 20-inch steel pipe segment and the Delta No. 10 plan revisions.
4. Changes to the pay quantity square footage for the areas to be base paved.

The change requests (CR's) are detailed hereafter:

Rancho Santiago Boulevard – Delta No. 9 Plan Revisions -- \$186,413

Additional potholing requested by District for 20-inch steel transmission pipeline in alternate alignment & depths per IRWD Delta no. 9 plan revisions – (CR No. 41-1 & 41-2): This extra work was necessary because the original pipe route along Rancho Santiago Boulevard was crossed and encroached on by 10 additional utility conduits that were not reflected on the project plans. Initial potholing revealed numerous conflicts with the proposed pipe grade and several conflicts with alignment. The contractor was directed to perform additional potholing.

CR No. 41-1 and 41-2, each in the amount of \$4,795 are for labor and equipment and materials to perform the excavation and potholing to determine the effects of the existing utilities on the proposed pipeline grade and location. Work was done on a "time & materials" basis over a two day period. Staff reviewed the costs and believe they are reasonable and appropriate for the work performed. Net change amount for CR No. 41 is \$9,590.

Additional work at intersection of Bond Ave. & Rancho Santiago to install 20-inch steel transmission pipeline in alternate alignment & depths per IRWD Delta no. 9 plan revisions – (CR No. 43-1): The Delta No. 9 project plans revised the alignment through the intersection. Within the intersection, there were seven additional utility crossings to contend with that were not anticipated on the original project plans. The District directed the contractor to make the grade adjustments in the field with weld collars and fittings to avoid the interfering utility conduits. Existing 0.188” thick pipe was replaced with 0.25” thick pipe and four additional bends were welded into place. The extra work was tracked on a “time & materials” basis. The costs of labor, equipment and materials were reviewed and a lump sum price adjustment was agreed to in the amount of \$37,676.

Additional work to construct 20-inch steel transmission pipeline in Rancho Santiago Blvd. at greater depth, crossing additional utilities and using alternate trench backfill (sand-cement slurry) in all intersections and transverse trenches per IRWD Delta no. 9 plan revisions – (CR No. 44-1 & 46-1): The Delta No. 9 plan revisions provided for an alternate pipe grade (deeper) over a significant portion of the Rancho Santiago Blvd. segment. There were also ten additional transverse utility crossings that were not part of the original scope of contract work. As a result, additional excavation, shoring, bracing, backfill, spoil haul-away, and CMB backfill were all required.

CR No. 44-1 in the amount of \$49,855 is for labor, equipment and materials to perform the excavation, shoring, and placement of the pipe, including the ten additional transverse utility crossings. Additional CMB backfill was required.

CR No. 46-1 in the amount of \$43,299.00 is for the additional sand-cement slurry (650 cubic yards) backfill required by the City of Orange. The item also covers the additional costs to haul away and dispose of the additional native trench material. This amount also includes credit and reduced labor and equipment costs reflecting the reduced compactive effort within the intersection areas and transverse trench areas where sand-cement slurry was required.

Staff reviewed the contractors “time & materials” cost estimates for both items and negotiated a lump sum amount for the incremental work effort for each. Staff believes the costs are fair and reasonable for the work performed and the materials provided.

Additional work to remove and dispose of a buried PCC roadway encountered during trenching for the 20-inch steel transmission pipeline in Rancho Santiago Blvd. between Station 51+00 and Station 59+00 – (CR No. 51-1 thru 51-6): During the additional potholing operation, the contractor discovered an old roadway section was buried beneath the pipe alignment on Rancho Santiago Blvd. over a stretch of approximately 800 feet. The old road section (12-inches thick) was built with Portland Cement Concrete (PCC). The contractor was directed to saw-cut, break and remove the PCC. The contractor devoted one crew to work separately on this extra work task out ahead of the pipeline work so as to be able to better track the incremental effort and to prevent delaying the pipeline installation.

The work was performed on a “time & materials” basis. The effort took six crew days. The costs of labor, equipment and materials, dump and disposal fees were reviewed and a lump sum price adjustment was agreed to in the amount of \$45,963. Staff believes the costs are fair and reasonable for the work performed and the materials provided.

Jack & Bore at Hewes Street & Rancho Santiago Boulevard -- \$215,042

Additional work to revise the “Jack & Bore” at the Hewes St. / Rancho Santiago Blvd. Intersection due to encountering large rock at the “Bore Site” – Delta No. 10 Plan Revisions – (CR No. 45-1 & 45-41): This extra work was necessary because the contractor encountered very rocky sedimentary deposits and numerous large (10” to 20” cobbles) rock at the lower elevations of the “bore pit” excavation. The project plans and specifications made no reference to the presence or expectation of rocky conditions. Upon discovery of the soil (rocky) conditions, staff, the contractor, the District’s consultant and the contractor’s boring specialty sub-contractor discussed the options to best deal with the conditions. The boring sub-contractor and the contractor both recommended enlarging the bore casing size and the bore diameter to 42-inches. This would allow the removal of the auger-head and allow entry of personnel into the casing to hand-break and free large rocks as they were encountered during the jacking and boring operation. Staff and the consultant agreed this was a prudent approach and the contractor was directed to proceed.

In order to adequately track the incremental work (for dealing with the rocky conditions, additional bore depth, larger bore casing, larger bore machine and bore diameter, and additional excavation, shoring and dewatering); staff and the contractor agreed to credit back the bid amount for the original scope of work, and track the “jack and bore” operation on a time and materials basis. Deletion of Bid Item No. 7 for installation of the “jack & bore” with 33” casing will give a credit of \$136,500.

CR No. 45-1 thru 45-40 were itemized “time & materials” price sheets for individual daily work activity. The costs can be summarized into four categories of work:

1. Mobilize & prepare the “Bore Pit” & set the boring machine. CR Nos. 45-1 thru 45-7 totaling \$56,785 covers these activities.
2. Jacking & Boring 42-inch casing & hand-tunneling to remove rock. CR Nos. 45-8 thru 45-33 totaling \$178,599 covers these activities.
3. Complete “Receiving Pit” & connect piping. Remove all shoring & backfill, compact and pave. CR Nos. 45-34 thru 45-40 totaling \$53,804 covers these activities.
4. Restock 33” casing, spacers & end-seals. Provide 42” casing, casing spacers and end-seals. CR No. 45-41 in the amount of \$62,354 covers these items of work.

The aggregated costs for the “jack & bore” installation is a gross cost of \$351,542 and after deletion of the bid item, results in a net cost for this change order item of \$215,042. Staff has reviewed all of the costs and believe they are reasonable and appropriate for the work performed.

Additional Base Paving – Bid Item No. 55 -- \$185,769

Contract Bid Quantity Adjustment for Additional Square Footage of Base Paving – Quantity Error – (CR No. 58): This extra work is necessary because the contract plans and specifications included only 127,160 square feet of “base paving” under the unit price Bid Item No.55. In reviewing the plans versus the footage of pipe and trenching called for, it appears the quantities of paving considered only the main line trenches and no consideration was given to the appurtenances or side-connections for services.

CR No. 58 from the contractor proposes to authorize an increase in the pay quantity by 20,641 square feet (about 16%). Staff, the District's design consultant and the contractor have reviewed the proposed quantity increase and believe it is a reasonable request. The extended price cost for this change using the contract unit price of \$9.00 per square foot is \$185,769.

Bond Avenue – Delta No. 10 Plan Revisions -- \$81,455

Additional work to construct 20-inch steel transmission pipeline in Bond Avenue crossing additional utilities and using alternate trench backfill (sand-cement slurry) in intersections and transverse trenches per IRWD Delta no. 10 plan revisions – (CR No. 52-1 & 53-1): This extra work was necessary because the original project plans for the route along Bond Avenue did not reflect a number of existing utilities within the street. The pipeline contractor encountered and had to cross beneath 12 additional utility conduits not reflected on the project plans. A portion of the pipe alignment had to be shifted nearer to the street centerline.

CR No. 52-1 in the amount of \$49,323 is for labor, equipment and materials to perform the excavation, shoring, and placement of the pipe, including the twelve additional transverse utility crossings. CR 53-1 in the amount of 32,755 is for the additional sand cement slurry backfill which was required at the transverse crossings and at intersections at the insistence of the City inspector. Credit was negotiated for some reductions in compactive effort because of the use of slurry instead of compacted CMB material. Work was done on a "time & materials" basis. Staff reviewed and negotiated the costs associated with this work and believe they are reasonable and appropriate for the work performed.

As a part of the Delta No. 10 plan changes there were also three items requiring credits to the District. One is a credit in the amount of \$10,200 (Unit price per Bid Item No. 41) for deleting a 4-inch blow-off assembly at station 44+00 which was made unnecessary because of grade changes to the pipeline. This is a unit price item deduction per the contract bid schedule. The second and third credit items are for deletion of 12 feet of 8-inch DIP (Unit price bid item No. 12) for a credit amount of \$1,520 and 20-inch tie-in at station 9+94 (Lump sum price bid item No. 28) for a credit amount of \$16,800. The net credit amount for these three items is \$28,520.

Additional work to modify the 20-inch steel transmission pipeline in Bond Avenue at the existing well site near the intersection of Gravier Street per IRWD Delta no. 10 plan revisions – (CR No. 54-1): This extra work was necessary because of the design change to the pipeline through the intersection of Bond Avenue and Gravier Street. The original project plans for the route along Bond Avenue did not reflect a number of existing utilities within the street. The pipeline alignment had to be shifted to avoid the other utilities and to go underneath those crossed. The tie-in point to the well site was also changed slightly to more closely match the current well site design.

CR No. 54-1 in the amount of \$27,897 was performed under a "time & materials" basis. Staff reviewed the costs associated with this work and believe they are reasonable and appropriate for the work performed.

The net cost of the Delta No. 10 plan changes totals \$81,455.

Exhibit "C"

CONTRACT CHANGE ORDER

IRVINE RANCH WATER DISTRICT
 15600 Sand Canyon Avenue
 Irvine, CA 92618
 (949) 453-5300



C.O. No. 28 Page 1 of 1

Final

Project No. 11408

Date: 03-07-12

Orange Park Acres Pipelines Code 5406

Project Title

THE FOLLOWING CHANGE TO CONTRACT, DRAWINGS AND SPECIFICATIONS IS PROPOSED.	\$ ADDITIONS	\$ DELETIONS	DAYS ±
Item No. 1: (CR Nos. 41, 43, 44, 46, 51) Additional labor, materials and equipment to perform work reflected on the Delta No. 9 plan revisions. Work tracked on a "time and materials" basis and negotiated to a lump sum price increase. A time extension of 5 calendar was granted for this additional work.	\$186,413.00	\$0	5
Item No. 2: (CR No. 45-1 thru 45-41) Additional labor, materials and equipment to perform Jack & Bore work at the Hewes St. & Rancho Santiago intersection. Work tracked on a "time and materials" basis and negotiated to a lump sum price increase. A time extension of 7 calendar days was granted for this additional work.	\$351,542.00	\$136,500.00	7
Item No. 3: (CR No. 58) Additional labor, materials and equipment to do approximately 20K sq. ft. of additional base paving. Work tracked on a "time and materials" basis and negotiated to a lump sum price increase. No time extension was granted for this additional work.	\$185,769.00		0
Item No. 4: (CR No. 48) Additional labor, materials and equipment to perform work reflected on the Delta No. 10 plan revisions. Work tracked on a "time and materials" basis and negotiated to a lump sum price increase. A time extension of 3 calendar days was granted for this additional work.	\$109,975.00	\$28,520.00	3
NOTE: The Contract Completion Date of July 2, 2012 is unchanged to stay at July 17, 2012 with this Change Order.			
TOTAL =	\$833,699.00	\$165,020.00	15

DAYS ±

1. NET AMOUNT THIS CHANGE ORDER	=	\$668,679.00	15
2. ORIGINAL CONTRACT AMOUNT	=	\$6,786,397.00	455
3. TOTAL PREVIOUS CHANGE ORDERS	=	\$1,524,629.00	158
4. TOTAL BEFORE THIS CHANGE ORDER (2+3)	=	\$8,311,026.00	613
5. PROPOSED REVISED CONTRACT AMOUNT TO DATE (1+4)	=	\$8,979,705.00	628

We hereby agree to make the above change subject to the terms of this change order for the sum of:

----- six hundred sixty eight thousand seven hundred sixty nine dollars and no cents

 Date Name of Contractor By

Leatherwood Construction, Inc.

SIGNATURE	DATE	APPROVAL LEVEL REQUIRED
<u>JEFF STANEART</u> IRWD Project Engineer or Consulting Engineer	<u>3/14/12</u> Date	Department Director Approval Required <input type="checkbox"/> General Manager Approval Required <input type="checkbox"/> Committee Approval Required <input type="checkbox"/> Board Approval Required <input checked="" type="checkbox"/>
<u>Michael Heister</u> Principal Engineer / Construction Manager	<u>3/15/12</u> Date	
<u>Rain Z. Bueh</u> Director of Engineering & Construction	<u>3/15/12</u> Date	
_____ General Manager	_____ Date	
		By _____ Date _____
		127808
		Purchase Order No.

NOTE: The documents supporting this Change Order, including any drawings and estimates of cost, if required are attached hereto and made a part hereof. This Change Order shall not be considered as such until it has been signed by the Owner and the Contractor. Upon final approval, distribution of copies will be made as required. The parties mutually agree the pricing set forth in this Change Order are complete and fair compensation for the entirety of the work authorized under this Change Order and that no additional compensation is warranted nor shall it be allowed.

CHANGES: All workmanship and materials called for by this Change Order shall be fully in accord with the original Contract Documents insofar as the same may be applied without conflict to the conditions set forth by this Change Order. The time for completing the contract will not be extended unless expressly provided for in this Change Order.

**OPA Transmission Pipelines - Code 5406
PR 11408
Construction Summary**

Contractor: Leatherwood Construction
Engineer: Stantec

			Contract Amount						Contract Days				Original Completion Date:
			Original Contract Amount: \$ 6,786,397.00						Original Days: 455				1/25/2012
Change Order	Description	Category	Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Change Order Days	Previous Change Orders	Cum. Total C.O. days	Revised Total Contract Days	Revised Completion Date
1	Approved by Director of Engineering and Construction Approved on February 7, 2011			\$ 24,670.00	\$ -	\$ 24,670.00	0.4%	\$ 6,811,067.00	3	0	3	458	1/28/2012
1.1	Additional potholing on December 1, 2010 of undisclosed utility conduits along Chapman Avenue at five locations.	B	\$ 7,060.00						1				
1.2	Additional potholing on December 3, 2010 of undisclosed utility conduits in the intersection of Jamboree and Chapman Avenue.	B	\$ 2,795.00						1				
1.3	Additional potholing on December 6, 2010 of undisclosed utility conduits in the intersection of Jamboree and Chapman Avenue at the 54-in. and 72-in. pipelines.	B	\$ 2,795.00						1				
1.4	Additional potholing on December 28, 2010 of undisclosed utility conduits along Chapman Avenue at four locations.	B	\$ 3,720.00						0				
1.5	Addition of a 20-inch Cl. 250 butterfly valve at contract unit price.	C	\$ 8,300.00						0				
2	Approved by Director of Engineering and Construction Approved on February 15, 2011			\$ 18,393.00	\$ 24,670.00	\$ 43,063.00	0.6%	\$ 6,829,460.00	0	3	3	458	1/28/2012
2.1	Up-size 4-inch diameter blow-offs to 6-inch blow-offs per IRWD standards.	C	\$ 18,393.00						0				
3	Approved by Assistant General Manager Approved on February 25, 2011			\$ 48,084.00	\$ 43,063.00	\$ 91,147.00	1.3%	\$ 6,877,544.00	10	3	13	468	2/7/2012
3.1	Addition of four new fire hydrants on Jons Way to replace existing FH's in poor condition.	B	\$ 8,334.00						3				
3.2	Upsize 5 ea. 1-in. water services to 2-in. water services to match existing connection sizes.	B	\$ 10,250.00						3				
3.3	Additional potholing on Jons Way on 12/7, 12/8 & 12/9 to locate existing utilities not shown on project plans.	B	\$ 21,795.00						3				
3.4	Additional potholing on Jons Way to locate 11 different undisclosed utility crossings not shown on the project plans.	B	\$ 7,705.00						1				
4	Approved by Director of Engineering and Construction Approved on March 23 2011			\$ 22,830.00	\$ 91,147.00	\$ 113,977.00	1.7%	\$ 6,900,374.00	9	13	22	477	2/16/2012
4.1	Additional potholing on Chapman, Calle Grande & Jons Way East to pothole utilities not shown on project plans.	B	\$ 12,575.00						5				
4.2	Additional work to remove & salvage cactus plants for habitat restoration on a "time & materials" basis.	D	\$ 10,255.00						4				
5	Approved by Director of Engineering and Construction Approved on March 18, 2011			\$ 22,834.00	\$ 113,977.00	\$ 136,811.00	2.0%	\$ 6,923,208.00	25	22	47	502	3/12/2012
5.1	Rock excavation & removal between stations 138 & 138 in open-space lot between Cannon & Meads on "time & materials" basis.	B	\$ 22,834.00						9				
5.2	No cost time extension to allow for rain days through the end of February 2011.	B	\$ -						16				
6	Approved by Assistant General Manager Approved on April 28, 2011			\$ 34,571.00	\$ 136,811.00	\$ 171,382.00	2.5%	\$ 6,957,779.00	5	47	52	507	3/17/2012
6.1	Additional work to remove AC pavement & excavate services at 896 & 898 Jons Way.	A	\$ 5,792.00						1				
6.2	Additional work to excavate & construct new service laterals at 896, 898 & 932 Jons way.	A	\$ 13,819.00						1				
6.3	Additional work to excavate for new service lateral at 930 Jons Way; excavate 4-inch ACP & prepare for 3 hot-taps.	A	\$ 4,690.00						1				
6.4	Additional work to complete new service at 930 Jons Way and 4 each, hot-taps and construct new 2-in. services on 4-in. ACP.	A	\$ 4,306.00						1				
6.5	Additional work to base pave all trenches on Jons Way East related to added services.	A	\$ 5,964.00						1				

D-1

EXHIBIT "D"

OPA Transmission Pipelines - Code 5406
PR 11408
Construction Summary

Contractor: Leatherwood Construction
Engineer: Stantec

			Contract Amount						Contract Days				Original Completion Date:
			Original Contract Amount: \$ 6,786,397.00						Original Days: 455				1/25/2012
Change Order	Description	Category	Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Change Order Days	Previous Change Orders	Cum. Total C.O. days	Revised Total Contract Days	Revised Completion Date
7	Approved by Director of Engineering and Construction Approved on April 28, 2011			\$ 24,500.00	\$ 171,382.00	\$ 195,882.00	2.9%	\$ 6,982,279.00	3	52	55	510	3/20/2012
7.1	Additional traffic control along Chapman Avenue reach east of Newport Blvd. due to change in alignment of existing gas line.	B	\$ 21,400.00						2				
7.2	Lump sum adjustment for additional daily work to set-up and tear-down traffic control along Chapman Ave. from Orange Hill to Equestrian Dr. Required due to change in gas line location.	B	\$ 3,100.00						1				
8	Approved by Director of Engineering and Construction Approved on April 29, 2011			\$ 24,905.00	\$ 195,882.00	\$ 220,787.00	3.3%	\$ 7,007,184.00	2	55	57	512	3/22/2012
8.1	Lump sum adjustment to add 12-in. vent pipes for PRV vault no. 1. Includes AC removal, trenching, backfill, paving & traffic control.	A	\$ 24,905.00						2				
9	Approved by Board Approved on May 23, 2011			\$ 264,882.00	\$ 220,787.00	\$ 485,669.00	7.2%	\$ 7,272,066.00	29	57	86	541	4/20/2012
9.1	Change 4 each, gate valves to butterfly valves at the contract unit prices.	A	\$ (1,400.00)						0				
9.2	Lump sum price change for 10 work tasks related to placing pipe and reconstructing private improvements across Randazzo property including retaining walls and concrete driveway.	C	\$ 193,426.00						21				
9.3	Lump sum adjustment to add service connection and modify steel pipe for Women's Auxiliary project site.	D	\$ 6,725.00						1				
9.4	Lump sum price reduction for change (Delta 5) pipe connection between Meads and open-space lot.	B	\$ (8,288.00)						0				
9.5	Additional work to perform 14 tasks to install 16-inch DIP in tight quarters along steep private drive alignment on Randazzo property.	C	\$ 58,293.00						9				
9.6	Lump sum adjustment to delete pipe & connection for OPA reservoir on Calle Grande & change pipe at Chapman Ave.	A	\$ (24,492.00)						-5				
9.7	Additional work to add FH's and service to easement serving Randazzo property in private easement up steep slope.	A	\$ 40,618.00						3				
10	Approved by Director of Engineering and Construction Approved on May 20, 2011			\$ 15,924.00	\$ 485,669.00	\$ 501,593.00	7.4%	\$ 7,287,990.00	4	86	90	545	4/24/2012
10.1	Add 2-inch PVC sleeve for future private gas line - Randazzo Drwy.	D	\$ 5,457.00						3				
10.2	Add 4-inch PVC sleeve for future private sewer line - Randazzo Drwy.	D	\$ 10,467.00						1				
11	Approved by Board. Approved on 06/27/11			\$ 204,350.00	\$ 501,593.00	\$ 705,943.00	10.4%	\$ 7,492,340.00	4	90	94	549	4/28/2012
11.1	Deepen 20-inch steel pipeline; add bends; additional utility crossings.	B	\$ 137,406.00						7				
11.2	Lump sum adjustment for changing back-fill to crushed miscellaneous base and for additional sand-cement slurry along Chapman Ave. from Jamboree Rd. to Orange Park Blvd.	B	\$ 66,944.00						(3)				
12	Approved by Board pending review of E&O Committee Approved on 07/27/11			\$ 312,939.00	\$ 705,943.00	\$ 1,018,882.00	15.0%	\$ 7,805,279.00	20	94	114	569	5/18/2012
12.1	Extreme pavement thickness removal for 20-inch steel pipeline along Chapman Ave reach.	B	\$ 166,707.00						8				
12.2	Lump sum adjustment for wet conditions and groundwater dewatering efforts along Chapman Ave. from Jamboree Rd. to Orange Park Blvd.	B	\$ 146,232.00						12				

D-2

**OPA Transmission Pipelines - Code 5406
PR 11408
Construction Summary**

Contractor: Leatherwood Construction
Engineer: Stantec

			Contract Amount						Contract Days				Original Completion Date:
			Original Contract Amount: \$ 6,786,397.00						Original Days: 455				1/25/2012
Change Order	Description	Category	Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Change Order Days	Previous Change Orders	Cum. Total C.O. days	Revised Total Contract Days	Revised Completion Date
13	Approved by Director of Engineering and Construction Approved on May 20, 2011			\$ 8,106.00	\$ 1,018,882.00	\$ 1,026,988.00	15.1%	\$ 7,813,385.00	6	114	120	575	5/24/2012
13.1	Downsize casing from 33" to 30" for Chapman at Npt. Blvd.	A	\$ (8,237.00)						0				
13.2	Lump sum adjustment for sequence work change, temp flush-out on OP Blvd.	B	\$ 16,343.00						6				
14	Approved by Assistant General Manager Approved on Sep 29, 2011			\$ 45,079.00	\$ 1,026,988.00	\$ 1,072,067.00	15.8%	\$ 7,858,464.00	4	120	124	579	5/28/2012
14.1	Lump sum price adjustment for "cold plane & AC cap pave" on Jons Way & Cannon Avenue.	B	\$ 16,950.00						1				
14.1	Lump sum adjustment for Delta No. 08 plan revisions for 16-inch connection on Meads Ave. near Vicki Ln.	B	\$ 28,129.00						3				
15	Approved by Assistant General Manager Approved on Sep 29, 2011			\$ 24,681.00	\$ 1,072,067.00	\$ 1,096,748.00	16.2%	\$ 7,883,145.00	3	124	127	582	5/31/2012
15.1	Lump sum price adjustment for unmarked utility crossing at sta. 184+41 on OP Blvd.	B	\$ 11,565.00						2				
15.2	Lump sum adjustment for steel pice mark 240B on OP Blvd.	B	\$ 4,916.00						1				
15.3	Lump sum adjustment to upsize four 1" services to 2" services on OP Blvd.	B	\$ 8,200.00						0				
16	Approved by Assistant General Manager Approved on October 24, 2011			\$ 49,803.00	\$ 1,096,748.00	\$ 1,146,551.00	16.9%	\$ 7,932,948.00	0	127	127	582	5/31/2012
16.1	Lump Sum to modify "jack & bore" at Cannon Ave. to remove large rock.	B	\$ 49,803.00						0				
17	Approved by Assistant General Manager Approved on October 18, 2011			\$ 44,689.00	\$ 1,146,551.00	\$ 1,191,240.00	17.6%	\$ 7,977,637.00	2	127	129	584	6/2/2012
17.1	Delete 2-wire CP test station	B	\$ (1,400.00)						0				
17.2	Add one 4-wite CP test station	B	\$ 1,500.00						0				
17.3	Lump sum adjustment to perform additional utility crossings per Delta No. 7 plans	B	\$ 43,203.00						2				
17.4	Lump sum to add temporary power for PRV station on Chapman.	B	\$ 1,386.00						0				
18	Approved by Director of Engineering and Construction Approved on 11/28/11			\$ 24,086.00	\$ 1,191,240.00	\$ 1,215,326.00	17.9%	\$ 8,001,723.00	5	129	134	589	6/7/2012
18.1	Lump sum to perform work reflected on Delta No. 6 project plans for changes along Cannon Avenue.	B	\$ 11,786.00						2				
18.2	Lump sum adjustment to remove extra thick pavement along Meads Ave.	B	\$ 12,300.00						3				
19	Approved by Assistant General Manager Approved on December 14, 2011			\$ 49,927.00	\$ 1,215,326.00	\$ 1,265,253.00	18.6%	\$ 8,051,650.00	3	134	137	592	6/10/2012
19.1	Lump Sum to perform extra work shown on Delta No. 7 plans on Linda Vista Ave.	B	\$ 49,927.00						3				
20	Approved by Assistant General Manager Approved on February 25, 2011			\$ 23,603.00	\$ 1,265,253.00	\$ 1,288,856.00	19.0%	\$ 8,075,253.00	3	137	140	595	6/13/2012
20.1	Lump sum adjustment to deepen bore pit at Cannon Ave.	B	\$ 6,275.00						1				
20.2	Lump sum adjustment to remove and dispose of 15" AC pavement at receiving pit & relocate four 2" conduits.	B	\$ 3,103.00						1				
20.3	Lump sum to fabricate and adjust 20" steel on Cannon at station 125+30 to avoid unmarked electrical bank.	B	\$ 8,315.00						1				
20.4	Lump sum for additional cold-planing and AC cap paving for County on Meads Ave.	B	\$ 5,910.00						0				

D-3

**OPA Transmission Pipelines - Code 5406
PR 11408
Construction Summary**

Contractor: Leatherwood Construction
Engineer: Stantec

			Contract Amount						Contract Days				Original Completion Date:
			Original Contract Amount: \$ 6,786,397.00						Original Days: 455				1/25/2012
Change Order	Description	Category	Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Change Order Days	Previous Change Orders	Cum. Total C.O. days	Revised Total Contract Days	Revised Completion Date
21	Approved by Assistant General Manager Approved on November 29, 2011 21.1 Additional cold planning & AC capping extra as shown on Delta No. 4 plans.	B	\$ 43,114.00	\$ 43,114.00	\$ 1,288,856.00	\$ 1,331,970.00	19.6%	\$ 8,118,367.00	1	140	141	596	6/14/2012
22	Approved by Assistant General Manager Approved on December 27, 2011 22.1 Lump sum to add bends to 16" steel pipe at station 165+80 to avoid SD along Meads Avenue. 22.2 Lump sum remove interfering SD and install 8" steel by-pass assembly along Meads Ave.	B	\$ 33,583.00	\$ 49,678.00	\$ 1,331,970.00	\$ 1,381,648.00	20.4%	\$ 8,168,045.00	8	141	149	604	6/22/2012
23	Approved by Assistant General Manager Approved on December 27, 2011 23.1 Lump sum to re-fabricate and re-weld 20" steel on Linda Vista Ave. to avoid conflicts with 8 & 12" City pipelines.	B	\$ 45,233.00	\$ 45,233.00	\$ 1,381,648.00	\$ 1,426,881.00	21.0%	\$ 8,213,278.00	7	149	156	611	6/29/2012
24	Approved by Director of Engineering and Construction Approved on December 28, 2011 24.1 Lump sum to slurry seal and repair pavement required by City of Orange at San Remo & Valencia and at Christine & Valencia.	B	\$ 22,407.00	\$ 22,407.00	\$ 1,426,881.00	\$ 1,449,288.00	21.4%	\$ 8,235,685.00	1	156	157	612	6/30/2012
25	Approved by Assistant General Manager Approved on December 27, 2011 25.1 Lump sum to fabricate inter-ties to 16" steel pipe at station 166+15 & 166+53 along Meads Avenue. Requested by IRWD OPS. 25.2 Lump sum remove interfering SD and install 8" steel by-pass assembly along Meads Ave.	A	\$ 8,534.00	\$ 20,495.00	\$ 1,449,288.00	\$ 1,469,783.00	21.7%	\$ 8,256,180.00	0	157	157	612	6/30/2012
26	Approved by Director of Engineering and Construction Approved on March 8, 2012 26.1 Lump sum to cut & fabricate 16" steel at stations 155+11 and 166+75 at intersection of Meads & OP Blvd. to avoid existing utilities.	B	\$ 29,863.00	\$ 29,863.00	\$ 1,469,783.00	\$ 1,499,646.00	22.1%	\$ 8,286,043.00	0	157	157	612	6/30/2012
27	Approved by Director of Engineering and Construction Approved on March 14, 2012 27.1 Lump sum to fabricate bends on new 20" steel and repair existing 16" pipe at station 61+17 on Rancho Santiago. 27.2 Lump sum to install small CMU retaining wall around PRV appurtenances. Not called for on project plans.	B	\$ 10,383.00	\$ 24,983.00	\$ 1,499,646.00	\$ 1,524,629.00	22.5%	\$ 8,311,026.00	1	157	158	613	7/1/2012

D-4

A - District Convenience/Initiation - Project Related	\$ 74,499.00
B - Differing Site Conditions	\$ 1,124,214.00
C - Design Oversight	\$ 293,012.00
D - District Convenience/Initiation - Non-Project Related	\$ 32,904.00
TOTAL (A+B+C+D)	\$ 1,524,629.00

22.5%

EXHIBIT "E"

IRVINE RANCH WATER DIST

Expenditure Authorization

Project Name: EAST ORANGE REGIONAL TRANSMISSION MAIN
EPMS Project No: 11408 **EA No:** 8
Oracle Project No: 1279
Project Manager: CORTEZ, MALCOLM
Project Engineer: STANEART, JEFFREY
Request Date: March 14, 2012

ID Split: Miscellaneous

Improvement District (ID) Allocations

ID No.	Allocation %	Source of Funds
112	3.2	BONDS YET TO BE SOLD**
113	3.9	BONDS YET TO BE SOLD**
115	5.5	CAPITAL FUND
121	11.4	BONDS YET TO BE SOLD**
130	8.9	BONDS YET TO BE SOLD**
140	3.2	BONDS YET TO BE SOLD**
150	23.2	BONDS YET TO BE SOLD**
153	2.6	BONDS YET TO BE SOLD**
154	1.1	BONDS YET TO BE SOLD**
156	25.0	CAPITAL FUND
161	6.0	BONDS YET TO BE SOLD**
182	2.3	BONDS YET TO BE SOLD**
184	2.1	BONDS YET TO BE SOLD**
186	.8	BONDS YET TO BE SOLD**
188	.8	BONDS YET TO BE SOLD**
Total	100.0%	

Summary of Direct Cost Authorizations

Previously Approved EA Requests:	\$9,149,100
This Request:	\$1,839,800
Total EA Requests:	\$10,988,900
Previously Approved Budget:	\$10,988,900
Budget Adjustment Requested this EA:	\$0
Updated Budget:	\$10,988,900
Budget Remaining After This EA	\$0

Comments:

Phase	This EA Request	Previous EA Requests	EA Requests to Date	This Budget Request	Previous Budget	Updated Budget	Start	Finish
ENGINEERING - PLANNING IRWD	0	10,000	10,000	0	10,000	10,000	11/09	7/10
ENGINEERING - PLANNING OUTSIDE	5,000	10,000	15,000	0	15,000	15,000	11/09	7/10
ENGINEERING DESIGN - IRWD	0	30,000	30,000	0	30,000	30,000	11/08	7/10
ENGINEERING DESIGN - OUTSIDE	43,600	400,000	443,600	0	443,600	443,600	11/08	7/10
DESIGN STAFF FIELD SUPPORT	0	10,000	10,000	0	10,000	10,000	4/10	11/10
ENGINEERING - CA&I IRWD	0	250,000	250,000	0	250,000	250,000	3/11	7/12
ENGINEERING - CA&I OUTSIDE	0	414,000	414,000	0	414,000	414,000	3/11	7/12
CONSTRUCTION FIELD SUPPORT	0	20,000	20,000	0	20,000	20,000	3/11	7/12
CONSTRUCTION	1,623,900	7,171,400	8,795,300	0	8,795,300	8,795,300	3/11	7/12
LEGAL	0	2,000	2,000	0	2,000	2,000	1/11	7/12
Contingency - 10.00% Subtotal	\$167,300	\$831,700	\$999,000	\$0	\$999,000	\$999,000		
Subtotal (Direct Costs)	\$1,839,800	\$9,149,100	\$10,988,900	\$0	\$10,988,900	\$10,988,900		
Estimated G/A - 180.00% of direct labor*	\$0	\$576,000	\$576,000	\$0	\$576,000	\$576,000		
Total	\$1,839,800	\$9,725,100	\$11,564,900	\$0	\$11,564,900	\$11,564,900		
Direct Labor	\$0	\$320,000	\$320,000	\$0	\$320,000	\$320,000		

*EA includes estimated G&A. Actual G&A will be applied based on the current ratio of direct labor to general and administrative costs.

EA Originator:

JEFF STANEART

3/14/12

Department Director:

Louis L. Burton

3/16/12

Finance:

Board/General Manager:

** IRWD hereby declares that it reasonably expects those expenditures marked with two asterisks to be reimbursed with proceeds of future debt to be incurred by IRWD in a maximum principal amount of \$11,797,000. The above-captioned project is further described in the attached staff report and additional documents, if any, which are hereby incorporated by reference. This declaration of official intent to reimburse costs of the above-captioned project is made under Treasury Regulation Section 1.150-2.

March 26, 2012
Prepared By: K. Welch
Submitted By: P. Weghorst/G. Heiertz
Approved By: Paul Cook

ACTION CALENDAR

DEVELOPMENT AGREEMENT AND ENVIRONMENTAL COMPLIANCE FOR A JOINT WATER BANKING PROJECT INVOLVING THE STOCKDALE WEST RANCH

SUMMARY:

In January, 2012 the Water Banking Ad-hoc Committee approved draft terms for a Water Banking and Exchange Project (Joint Banking Project) with Rosedale-Rio Bravo Water Storage District (Rosedale) that would utilize IRWD's Stockdale West Ranch and the property east of the Strand Ranch owned by Rosedale. These terms call for IRWD and Rosedale to share in the cost of the development of an Environmental Impact Report (EIR) and to cooperate in the development of a comprehensive long-term agreement for the Joint Banking Project. An agreement has been prepared by legal counsel and staff that will facilitate the cost sharing of the EIR. In order to initiate work on the Joint Banking Project and to proceed with the development of the EIR and supporting studies, staff recommends the Board:

- Authorize the General Manager to execute the agreement with Rosedale that will facilitate the cost sharing of an EIR and the development of a long-term agreement for a Joint Banking Project;
- Authorize the addition of Project 11645 (3766) to the FY 2011-12 Capital Budget for the Stockdale West Joint Banking Project in the amount of \$246,400;
- Approve an Expenditure Authorization in the amount of \$246,400 for Project 11645 (3766) for the preparation of the EIR, technical studies and for staff and legal time associated with these activities;
- Authorize the General Manager to execute a Professional Services Agreement in the amount of \$135,675 for Project 11645 (3766) with Environmental Science Associates (ESA) to prepare the EIR (which Rosedale will cost-share with IRWD); and
- Authorize the General Manager to execute a Professional Services Agreement in the amount of \$49,918 with Wildermuth Environmental, Inc., of which \$32,710 will be used for Project 11645 (3766) in the preparation of summary technical reports and in providing peer review support related to the Joint Banking Project EIR, and \$17,208 for operations related well monitoring which will be funded through Strand Ranch operating budget.

BACKGROUND:

Staff has been working with Rosedale in initiating a Joint Banking Project that would utilize IRWD's Stockdale West Ranch and Rosedale's Enos property located directly east of the Strand Ranch. A location map of these properties is provided as Exhibit "A". The Joint Banking Project would provide for each agency to receive reciprocal use of each other's facilities on a second priority basis. The Joint Banking Project would also incorporate additional storage rights for IRWD that would offset the use of existing storage capacity to store water on behalf of IRWD's unbalanced exchange partners and in exchange would incorporate the construction of

additional recovery capacity for Rosedale. To begin work on the Joint Banking Project, an agreement needs to be executed that will provide for the development of an EIR for the Joint Banking Project and the development of a long-term agreement for the construction and operation of the Joint Banking Project. Following is an overview and recommendations related to this agreement and the EIR related work items.

Development Agreement:

In January 2012, staff presented to the Water Banking Ad-hoc Committee conceptual draft terms for a Joint Banking Project with Rosedale that would utilize IRWD's Stockdale West Ranch and Rosedale's Enos property located directly east of the Strand Ranch. The draft terms provide for the following:

1. The determination of recharge, recovery and storage rights;
2. Reciprocal second priority rights to facilities with Rosedale being able to use the Stockdale West Ranch Facilities once IRWD has used the facilities to satisfy its own requirements and IRWD being able to use equivalent capacity in Rosedale's service area after Rosedale satisfies its own requirements;
3. The division of costs for CEQA, design and construction;
4. An additional storage account in the amount of 50,000 AF for IRWD's use in Rosedale's Conjunctive Use Program with spill provisions that would allow IRWD to store water in Rosedale's Conjunctive Use Program;
5. The construction of additional recovery capabilities for Rosedale on the Enos Property for a cost not to exceed \$1,500,000;
6. The division of high flow Kern River water spread on Joint Banking Project facilities;
7. The division of Kern River flood waters spread on the Joint Banking Project facilities;
8. Rosedale's support of IRWD's pursuit of water supply programs with Friant 215 water suppliers.
9. The operation of the facilities consistent with the long-term IRWD and Rosedale program for the Strand Ranch Integrated Banking Project; and
10. The identification of infrastructure improvements that would benefit the parties.

The draft terms have been finalized with Rosedale and IRWD legal counsel has developed an agreement that commits IRWD and Rosedale to the development of an EIR for the project and to the development of a comprehensive long-term agreement that incorporates the proposed terms (Development Agreement). This agreement is provided as Exhibit "B". The Rosedale Board of

Directors has already approved the Development Agreement. Staff recommends that the Board authorize the execution of the Development Agreement.

Preparation of an Environmental Impact Report:

Both IRWD and Rosedale have extensive experience working with Environmental Science Associates (ESA) on water banking projects including the preparation of the comprehensive Strand Ranch Integrated Banking Project EIR. ESA has successfully provided consulting services for IRWD on many environmental projects and is currently providing environmental consulting services to IRWD. ESA has assisted Rosedale and other Kern County water banking entities on other water banking projects and can bring relevant, qualified experience to the development of a Joint Banking Project EIR.

Staff has successfully negotiated a scope of work, schedule and cost estimate with ESA to prepare an EIR for the proposed Joint Banking Project that incorporates efficiencies based on ESA's prior work on the Strand Ranch EIR and other environmental documentation prepared for Rosedale. Staff recommends that ESA be awarded a sole-source professional services contract to prepare the EIR. ESA's scope of work, schedule, budget proposal, schedule of fees and team resumes are included in the project proposal that is included as Exhibit "C". A Sole Source Procurement Justification form is provided as Exhibit "D".

The Development Agreement calls for IRWD and Rosedale to share equally the cost of preparation of the EIR and related technical studies including hydrogeologic evaluations to determine the recharge, storage and recovery limitations of both the Stockdale West Ranch and the Enos property. Initially, IRWD will fund the cost of the EIR and Rosedale will fund the cost of the hydrogeologic evaluations. The overall costs will be reconciled and shared after all work has been completed.

Staff is working with Rosedale in negotiating with Rosedale's hydrogeologist (Thomas Harder), on a scope of work and costs associated with hydrogeologic evaluations. Staff expects that this cost will be less than the cost of the EIR and that Rosedale will be reimbursing IRWD for a portion of the cost of the EIR. Staff will update the Committee in the future on the reconciled costs of the preparation of the EIR.

Groundwater Reports and Support for EIR:

In addition to the work that Rosedale's hydrogeologist will be performing for the EIR, staff recommends contracting with Wildermuth Environmental, Inc. to summarize previous analyses and groundwater work performed at the Strand Ranch that are relevant to the Joint Banking Project and to provide pertinent peer review support for the EIR. The work that will be summarized is related to aquifer properties and groundwater water quality data derived from pump tests of the recently constructed Strand Ranch wells. In addition, the recharge mounding analyses that were conducted in support of Addendum 1 to the Strand Ranch Integrated Banking Project EIR will also be summarized. These studies are relevant to the preparation of the Joint

Banking Project EIR and will provide important information to assist in answering questions from other Kern County water banking entities during the public review period.

Staff also recommends that Wildermuth be retained to provide independent technical support to IRWD during the development of the Joint Banking Project EIR, conducting peer reviews of Rosedale’s geohydrologic evaluations and in responding to public comments.

Staff has negotiated a scope of work and cost estimate for Wildermuth to perform the above work. The total cost for Wildermuth’s scope of work is \$32,710. At the request of staff, Wildermuth has included in its scope of work tasks associated with groundwater elevation monitoring on the Strand Ranch for a two year period. This work, valued at \$17,208, is relevant to the operation of the Strand Ranch wells and will be funded through the Strand Ranch annual operating budget. Wildermuth’s total scope of work, schedule, budget proposal, schedule of fees and team resumes are included as Exhibit “E”. A Sole Source Procurement Justification form for Wildermuth to perform this work is provided as Exhibit “F”.

FISCAL IMPACTS:

IRWD and Rosedale will equally share in the costs associated with the preparation of an EIR including hydrogeologic evaluations for the Joint Banking Project. Project 11645 (3766), Stockdale West Joint Banking Project is not included in the FY 2011-12 Capital Budget. The total cost for the preparation of the Joint Banking Project EIR and the reports and support to be provided by Wildermuth is \$168,385. This includes \$135,675 for ESA to prepare the EIR and \$32,710 for Wildermuth. Staff time and legal assistance in the amounts of \$40,000 and \$15,000 respectively are also required. Staff requests an addition to the FY 2011-12 Capital Budget for \$246,400 to prepare the EIR and supporting groundwater studies. Staff also requests an Expenditure Authorization in the amount of \$246,400 as shown below and in Exhibit “G”. The portion of Wildermuth’s scope of work exclusively for Strand Ranch well monitoring (\$17,208) will be funded through the Strand Ranch operating budget and will not be included in this Project 11645 (3766) budget.

Project No.	Current Budget	Addition <Reduction>	Total Budget	Existing EA	This EA Request	Total EA Request
11645 (3766)	\$0	\$246,400	\$246,400	\$0	\$246,400	\$246,400

ENVIRONMENTAL COMPLIANCE:

The preparation of an EIR will be necessary for the implementation of the proposed Joint Banking Project in compliance with the California Environmental Quality Act (CEQA) of 1970 (as amended), codified at California Public Resources Code Sections 21000 et. seq., and the State CEQA Guidelines in the Code of Regulations, Title 14, Division 6, Chapter 3.

COMMITTEE STATUS:

The components of this item were reviewed by the Water Banking Ad-Hoc Committee on January 11, 2012 and March 22, 2012.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXECUTE THE AGREEMENT WITH ROSEDALE THAT WILL FACILITATE THE COST SHARING OF AN EIR AND THE DEVELOPMENT OF A LONG-TERM AGREEMENT FOR A JOINT BANKING PROJECT; AUTHORIZE THE ADDITION OF PROJECT 11645 (3766) TO THE FY 2011-12 CAPITAL BUDGET FOR THE STOCKDALE WEST JOINT BANKING IN THE AMOUNT OF \$246,400; APPROVE AN EXPENDITURE AUTHORIZATION IN THE AMOUNT OF \$246,400 FOR PROJECT 11645 (3766) FOR THE PREPARATION OF THE EIR, PREPARATION OF SUMMARY TECHNICAL REPORTS, PROVIDING FOR PEER REVIEW SUPPORT AND STAFF AND LEGAL TIME; AUTHORIZE THE GENERAL MANAGER TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT IN THE AMOUNT OF \$135,675 FOR PROJECT 11645 (3766) WITH ENVIRONMENTAL SCIENCE ASSOCIATES TO PREPARE THE EIR AND SUPPORTING STUDIES; AUTHORIZE THE GENERAL MANAGER TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT IN THE AMOUNT OF \$49,918 (\$32,710 FOR PROJECT 11645 (3766) AND \$17,208 FOR OPERATIONS RELATED WELL MONITORING AT THE STRAND RANCH PROJECT) WITH WILDERMUTH ENVIRONMENTAL, INC. TO PREPARE REPORTS ON AQUIFER-SYSTEM PARAMETERS, RECHARGE MOUNDING AND GROUNDWATER QUALITY TO SUPPLEMENT AND SUPPORT THE EIR AS WELL AS TO PROVIDE INDEPENDENT PEER REVIEWS OF THE HYDROLOGIC EVALUATIONS TO BE COMPLETED BY ROSEDALE'S GEOHYDROGEOLOGIST AND TO PROVIDE OPERATIONS RELATED WELL MONITORING AT THE STRAND RANCH.

EXHIBITS:

- Exhibit "A" – Location Map: IRWD and Rosedale Water Banking Properties
- Exhibit "B" – Agreement between Rosedale and IRWD for Development of a Water Banking Project for the Stockdale West Ranch and Enos Lane Properties
- Exhibit "C" – ESA Scope of Work, Budget, and Schedule
- Exhibit "D" – Sole Source Procurement Justification form for ESA
- Exhibit "E" – Wildermuth Environmental, Inc. Scope of Work, Budget and Schedule
- Exhibit "F" – Sole Source Procurement Justification form for Wildermuth Environmental
- Exhibit "G" – Expenditure Authorization for Project 11645 (3766)

Exhibit "A" – IRWD and Rosedale Water Banking Properties



EXHIBIT "B"

03/12/12 DRAFT

AGREEMENT BETWEEN
ROSEDALE-RIO BRAVO WATER STORAGE DISTRICT
AND IRVINE RANCH WATER DISTRICT
FOR DEVELOPMENT OF WATER BANKING PROJECT
FOR STOCKDALE WEST AND ENOS LANE PROPERTIES

This AGREEMENT FOR DEVELOPMENT OF WATER BANKING PROJECT FOR STOCKDALE WEST PROPERTY ("Project Development Agreement") is entered into the ____ day of _____, 2012, by and between ROSEDALE-RIO BRAVO WATER STORAGE DISTRICT, a water storage district formed and existing under Section 39000 *et seq.* of the California Water Code ("RRBWS") and IRVINE RANCH WATER DISTRICT, a California water district formed and existing under Section 34000 *et seq.* of the California Water Code ("IRWD").

RECITALS

A. RRBWS and IRWD have entered into an "Agreement For A Water Banking and Exchange Program," dated as of January 13, 2009 (the "Strand Ranch Agreement"), providing for the development and operation of a groundwater banking program on IRWD's Strand Ranch property, and the operation and integration of such program within RRBWS's water banking programs (the "Strand Ranch Integrated Banking Project").

B. IRWD desires to develop recharge and recovery facilities on its property known as "Stockdale West Ranch," and RRBWS desires to develop recharge and recovery facilities on its Enos Lane property, both of which are adjacent to Strand Ranch, as depicted in Exhibit "A" hereto, which is incorporated herein by this reference. In connection therewith, IRWD and RRBWS desire to develop a program and agreement for a new, joint water banking project using the Stockdale West and Enos Lane properties together with other available banking program facilities to augment RRBWS's banking programs and to provide IRWD with a means for acquiring and regulating, through basin storage, water supplies to improve the reliability and diversification of its water supplies (the "Stockdale-Enos Banking Project").

C. Pursuant to a letter agreement dated August 15, 2011 and its incorporated terms and conditions, the parties provided for the implementation of a one-year pilot augmentation banking project on IRWD's Stockdale West property, to test the feasibility of developing a banking project on such property.

D. The results of the one-year pilot augmentation banking project indicate that a long-term banking project would be successful, and the parties have determined that it would be mutually beneficial to develop the Stockdale-Enos Banking Project.

E. To implement the above-recited objectives, the parties intend to prepare detailed

terms of a final project agreement. It is acknowledged that this will require a sequential effort, and through this agreement the parties desire to agree to a summary of the principal terms of their overall transaction.

F. The parties acknowledge that they are carrying out certain actions in parallel with the preparation of a final project agreement and to facilitate CEQA compliance (described herein) and other requirements. The parties wish to make provision for the payment of costs associated with CEQA compliance and for the retention [~~disposition~~] of existing facilities that have been constructed or installed on each party's property in the event a final project is not consummated.

AGREEMENTS

NOW, THEREFORE, the parties agree as follows:

1. Principal Terms. The parties agree to all of the terms and provisions set forth in Attachment "B" hereto, which is incorporated herein by this reference. The parties agree to cooperate in good faith with each other and deliver such further documents and perform such other acts as are necessary or appropriate to consummate and carry into effect all of the terms and provisions summarized in Attachment "B."
2. Preparation of Final Project Agreement; Sequential Effort; Binding Effect. Each of the parties acknowledges that in reliance upon this Project Development Agreement, each party will participate in the preparation of detailed terms of a final project agreement to effectuate the terms and provisions contained in Attachment "B," and that some portions of the transaction may be initiated and pursued before others. Subject to Section 4 hereof, this Project Development Agreement is intended to be a binding agreement as to the basic terms contained in Attachment "B." The final project agreement to be developed as set forth herein may add to, expand upon or clarify these basic terms but will not contradict or be inconsistent therewith, except by further agreement of the parties. The final project agreement may adapt, incorporate or reference provisions of the Strand Ranch Agreement, but is intended to be a separate agreement and not to supersede or amend the Strand Ranch Agreement.
3. CEQA. Certain actions by the parties to implement the provisions set forth under the heading "GENERAL TERMS – CEQA Compliance" in Attachment "B" will be carried out in parallel with the development of the final project agreement, with the objective of taking appropriate and sufficient proceedings under the California Environmental Quality Act (CEQA) in advance of any discretionary actions of the parties approving the final project agreement. The parties will use their best efforts to complete such CEQA proceedings and execute the final project agreement within one year from the date of this Project Development Agreement, unless otherwise agreed to by the parties.
4. Due Diligence. The parties will, in parallel with the development of the final

project agreement, conduct such due diligence as they deem necessary. If the parties or either of them determines, based on the results of the due diligence, that the costs and benefits of the transactions contemplated in this Project Development Agreement are materially different from those contemplated in Attachment "B" at the time of entering into this Project Development Agreement, or significant environmental impacts have been identified that cannot be reasonably mitigated pursuant to the proceedings conducted under Section 3, each party reserves the right to decline to enter into the final project agreement or to negotiate such changes in the terms and provisions as will conform the transaction to such intent or otherwise make it mutually acceptable.

5. Rights If Final Project Agreement Is Not Entered Into. In the event either party notifies the other that it is declining to enter into a final project agreement pursuant to Section 4 hereof, each of the parties will retain ownership and rights to use of all existing facilities that have been constructed or installed on their respective properties, and each party will retain full and unconditional rights to negotiate and implement other water banking and exchange agreements with other persons or entitles to make use of such party's facilities, and shall have no further obligation under this Project Development Agreement.

6. Amendment. This Project Development Agreement may be amended only by a writing executed by both parties.

7. Assignment. Neither party shall assign or otherwise transfer its rights or obligations in, under or to this Project Development Agreement, in whole or in part, without the prior written consent of the other party. All covenants and agreements contained in this Project Development Agreement shall bind and inure to the benefit of the parties' respective successors and permitted assigns.

8. Representations. Each party represents and warrants to the other party that it is a duly organized or constituted entity, with all requisite power to carry out its obligations under the Project Development Agreement, and that the execution, delivery and performance of Project Development Agreement have been duly authorized by all necessary action of the board of directors or other governing body of such party, and shall not result in a violation of such party's organizational documents or any agreement to which it is a party or to which it is otherwise subject or bound. Each party further represents and warrants to the other party that, to its knowledge at the time it executed this Project Development Agreement, there is no pending or threatened litigation involving such representing party that will affect this Project Development Agreement. The parties have relied on the forgoing representations as a material inducement to execute this Project Development Agreement, and should any representation not be correct or true in any material respect, it shall constitute a material breach of the Project Development Agreement.

9. Governing Law. This Project Development Agreement shall be construed and enforced in accordance with the laws of the State of California.

IRVINE RANCH WATER DISTRICT

ROSEDALE-RIO BRAVO WATER STORAGE DISTRICT

By _____

By _____

Title: _____

Title: _____

By _____

By _____

Title: _____

Title: _____

**Attachment "A" – IRWD and Rosedale
Water Banking Properties**



**Rosedale-Rio Bravo Water Storage District and
Irvine Ranch Water District**

**Conceptual Terms for a
Long-Term Water Banking and Exchange Program
for the Stockdale West Ranch and Enos Property**

GENERAL TERMS

- Entities:** Rosedale-Rio Bravo Water Storage District (“RRB”) and Irvine Ranch Water District (“IRWD”)
- Description:** IRWD and RRB seek to enter into a Long Term Water Banking and Exchange Program (“Joint Banking Program”) that would provide for the coordinated use and operation of IRWD’s Stockdale West Ranch located to the west of IRWD’s Strand Ranch in T30S, R25E, Section 3 (“Stockdale West Property”) and RRB’s property located to the east of the Strand Ranch on the opposite side of the Enos Lane in T30S, R25E, Section 1 (“Enos Property”). The Joint Banking Program would be implemented through a separate agreement that would replicate many terms from the agreement between RRB and IRWD for a Water Banking and Exchange Program that was executed on January 13, 2009 that established the principles for the joint use and operation of the Strand Ranch Integrated Banking Project (“Strand Banking Agreement”). The Joint Banking Program would be considered a separate project and not part of IRWD’s and RRB’s other projects and programs.
- Effective Date:** Upon execution of a Program Agreement as described below and after the certification of a Final Environmental Impact Report (FEIR) for the Joint Banking Program.
- Term:** The term of the program would be consistent with the Strand Banking Agreement and would commence on the effective date and would terminate on January 12, 2039. The term would be extendable in fifteen (15) year increments upon written agreement of the parties.
- Ownership:** IRWD would retain ownership of the Stockdale West Ranch and any facilities constructed on that property. RRB would retain ownership of the Enos Property and any facilities constructed on that property.

**Non-Binding
Effect:**

This Term Sheet is intended to be a non-binding statement of the conceptual terms of the proposed transaction. It is subject to the negotiation, execution and delivery of a Water Banking and Exchange Agreement ("Program Agreement") not inconsistent with the basic terms and conditions set forth herein.

Representations: RRB and IRWD would provide usual and customary representations and warranties including title to property.

**General
Expenses:**

Each party would be responsible for its own fees and expenses arising out of the negotiation and execution of the Program Agreement, obtaining necessary approvals and the like.

**Hydrogeologic
Evaluations:**

RRB and IRWD would cooperate with each other and equally fund hydrogeologic studies to determine the recharge, storage and recovery limitations of both the Stockdale West Ranch and the Enos Property.

**CEQA
Compliance:**

RRB and IRWD would comply with CEQA and would cooperate with one another and equally fund the development of an Environmental Impact Report (EIR) for the construction and operation of the Joint Banking Program facilities including all technical studies necessary to support the EIR. RRB would be the lead agency with respect to CEQA compliance. IRWD would be a responsible agency. The parties would agree to equally fund any litigation expenses associated with the CEQA compliance work for the Joint Banking Program.

Permit Costs:

RRB and IRWD would each pay for any and all regulatory and permitting fees and costs associated with the construction of facilities on their own respective properties.

**Program
Agreement:**

Contract language to be incorporated into the final Program Agreement.

PROGRAM TERMS

- Facility Costs:** RRB and IRWD would each pay for the design and construction of facilities on their own respective properties except as provided for below under Additional Storage and Recovery Considerations.
- Operations:** RRB would operate all facilities on the Stockdale West Ranch in addition to the Enos Property. Operations of the Stockdale West Ranch Facilities would occur under terms consistent with the Strand Banking Agreement.
- Operation Costs:** Operation, maintenance and replacement costs would be occur under terms consistent with the Strand Banking Agreement.
- Reciprocal Use Of Facilities:** IRWD would have priority use of all recharge and recovery facilities and capacities located on the Stockdale West Ranch. RRB would have the use of these same facilities and unused recharge and recovery capacities on the Stockdale West Ranch to the extent that it is available after IRWD's use. RRB would have priority use of all recharge and recovery facilities and capacities located on the Enos Property. Provided RRB has unused capacity available in the RRB Program after meeting its obligations, RRB would provide IRWD use to an equivalent amount of maximum recharge and recovery capacity as established for the Stockdale West Ranch to assist IRWD in delivering its water in and out of storage up to the defined total annual recharge and recovery acre-foot limits set for the Stockdale West Ranch.
- Recharge, Storage and Recovery Rights:** RRB and IRWD would each retain priority rights to the recharge and recovery capacities that were identified in the jointly funded hydrogeologic studies of their respective properties. Each agency would also retain for their exclusive use of the storage capacities identified in the studies. Each agency would have equivalent access to

available and unused recharge and recovery capacities in each other's facilities not used on an annual basis through the use of each agency's priority rights as described above.

Storage of Water: Water recharged by either RRB or IRWD on their own lands using the reserved priority recharge rights would be stored in each agency's own storage accounts. Water recharged on a second priority basis by RRB on the Stockdale West Ranch would be stored in RRB's own storage accounts. Water recharged on a second priority basis by IRWD on the Enos Property or elsewhere in Rosedale would be stored in IRWD's own storage accounts.

Additional Storage And Recovery

Considerations: IRWD would pay for the drilling, construction and equipping of two groundwater extraction wells, with a mutually agreed upon design, on the Enos Property for a cost not to exceed \$1.5 Million.. In exchange, RRB would provide IRWD access to a 50,000 AF storage account in RRB's Conjunctive Use Program ("Acquired Storage Account") that would be available for IRWD's use over the term of the Program Agreement including any agreed upon extensions. IRWD could use this Acquired Storage Account to store any water recharged at the Strand Ranch Integrated Banking Project, the Joint Banking Program or by in-lieu means. IRWD could pay for the construction of additional facilities for RRB in exchange for other additional recharge, storage and recovery rights as may be mutually agreed upon between RRB and IRWD.

IRWD Storage Spills:

Any water that IRWD transfers into its Acquired Storage Account that is in excess of 50,000 AF would be considered a spill into RRB's Conjunctive Use Program where water could be stored subject to space availability for up to 3 years. At the end of the three years of storage, RRB would retain 10 percent of the spilled water that has not been transferred back as a lease fee for each year that the water is stored in RRB's Conjunctive Use Program beyond 3 years. IRWD would have the ability to transfer balances of water held in RRB's

Conjunctive Use Program back to its Acquired Storage Account, Strand Ranch or Stockdale West Ranch Banking Programs, as space is available.

Kern River
Regulated
High Flows:

Nothing in the Program Agreement would prohibit IRWD from amending its agreement with Buena Vista Water Storage District (BVWSD) for water acquisition from the Buena Vista Management Program that was executed on December 22, 2010 to include deliveries of exchange water to the Stockdale West Ranch consistent with the 2-for-1 terms of that agreement. The terms of this existing IRWD/BVWSD agreement allow BVWSD to deliver exchange water to the Strand Ranch when the hydrology of the Kern River for the April-July runoff is at 125% of normal or higher. Under separate agreement with BVWSD, IRWD and RRB would relinquish their priority recharge rights on the Stockdale West Ranch and equivalent Rosedale facilities to include the Enos Property up to a recharge capacity equal to the recharge capacity on the Stockdale West Ranch, to BVWSD to spread regulated Kern River high flows when the hydrology for the Kern River for April-July runoff is at ____% of normal and higher (Note: this percentage would need to be negotiated with BVWSD) provided that such water is recharged simultaneously on all Joint Program Facilities. These second-tier high flows would be divided equally with each agency receiving one-third of the quantity of the water recharged into storage on both properties, for the equal benefit of BVWSD, IRWD and RRB. Fifty (50) percent of BVWSD's share would be stored in RRB's storage account in RRB's Conjunctive Use Program and the other fifty (50) percent of BVWSD's share would be stored in IRWD's Acquired Storage Account. BVWSD's recharge, storage and recovery rights relative to these second-tier high Kern River flows would be specified in a separate agreement between BVWSD, RRB and IRWD.

Kern River
Flood Flows:

During times that the "Kern River flood water" is available (e.g. when the Kern River Watermaster offers water to all takers willing to sign a "Notice/Order", or the Kern River Watermaster offers water to the California Aqueduct/Kern River Intertie, such water is expected to flood

farmed acreage in Buena Vista Lake, or is expected to be delivered into the Kern River Flood Channel for delivery out-of-county), RRB would have a first priority right to use all Joint Banking Program facilities for recharge of Kern River flood water; provided, however, any Kern River flood water banked using Stockdale West facilities would be shared between RRB and IRWD on an equal basis.

Friant 215

Water:

RRB would support IRWD's pursuit of water supply programs with Friant 215 water suppliers. IRWD has priority right to utilize the Stockdale West Ranch for recharge of such Friant 215 water. RRB would assist and cooperate with IRWD in the exchange of Friant 215 water for exportable water for delivery into IRWD's service area.

Exchanges:

Recharge and recovery of water on behalf of IRWD via exchanges would occur using terms consistent with the Strand Banking Agreement.

Water Quality:

The quality of water to be recharged and recovered at Joint Banking Program facilities would be specified using terms consistent with the Strand Banking Agreement.

Other Facilities:

RRB and IRWD would agree to cooperate and equally fund the study of infrastructure improvements that would benefit the Joint Banking Program. Improvements to be studied could include (but are not limited to) modification of existing Cross Valley Canal (CVC) turnouts, the design and construction of diversions from the Pioneer Canal and the design and construction of improvements to facilities that would improve the ability to deliver Kern River water to the Joint Banking Program facilities. RRB and IRWD would also cooperate in the evaluation of the need to secure additional CVC capacity for the joint benefit of IRWD and RRB. The infrastructure improvements would be evaluated in the EIR for the Joint Banking Program. Funding for the design and construction of the improvements would be established in amendments to the Program Agreement.

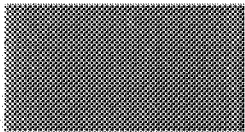
EXHIBIT C

Proposal

**STOCKDALE WEST RANCH
JOINT BANKING PROJECT**
Environmental Impact Report

Prepared for
Irvine Ranch Water District

February 13, 2012





626 Wilshire Boulevard
Suite 1100
Los Angeles, CA 90017
213.599.4300 phone
213.599.4301 fax

www.esassoc.com

February 14, 2012

Mr. Paul A. Weghorst
Principal Water Resources Manager
Irvine Ranch Water District
15600 Sand Canyon Avenue
Irvine, CA 92618-3102

Subject: Preparation of an Environmental Impact Report (EIR) for the Stockdale West Ranch Joint Banking Project

Dear Paul:

We are pleased to submit our proposal to the Irvine Ranch Water District (IRWD or District) to prepare an EIR in accordance with the California Environmental Quality Act (CEQA) for the Stockdale West Ranch Joint Banking Project, which will develop a new groundwater banking facility in Kern County in conjunction with Rosedale-Rio Bravo Water Storage District (Rosedale). The Project will be used to capture high-flow Kern River to provide water supply reliability and redundancy to IRWD and its customers, and to provide Rosedale with greater operational flexibility and recharge and extraction capacity for its Conjunctive Use Program.

As you know, ESA Water specializes in CEQA compliance and natural resources permitting for water and wastewater infrastructure projects, with considerable experience throughout Southern California. In the attached proposal, we have provided a summary of our experience and capabilities to demonstrate why ESA is uniquely qualified to provide effective and efficient environmental services for the Project. We have outlined below what we feel to be our particular strengths that sets us apart:

- **Dedicated Water Group.** Our Water Group works exclusively on CEQA/NEPA compliance for water and wastewater infrastructure projects in California. We provide technical analysis and environmental documentation for both large and small projects, such as groundwater banking projects and groundwater extraction wells. We are focused in our market sector, providing no learning curve on assessing impacts of constructing and operating such water supply and management facilities.
- **Knowledge of IRWD, Rosedale, and Project Area.** Our Water Group has established a record of successful completion of environmental documentation for IRWD projects and has direct working knowledge of IRWD services and facilities. We understand IRWD's expectations regarding CEQA and NEPA, have fostered respectful relationships with IRWD staff, and have demonstrated our commitment to client service. We also have previous experience working with IRWD and Rosedale together on the Strand Ranch Integrated Banking Project EIR. The Strand Ranch Project will serve as a model for the neighboring Joint Banking Project. In addition, ESA recently completed an evaluation of Rosedale's CEQA documentation for all its facilities and agreements. Thus, there will be no learning curve to understanding the Joint Banking Project, its location, its integration into Rosedale's Conjunctive Use Program, or the key environmental issues and stakeholders.



Paul A. Weghorst
February 14, 2012
Page 2

- **Client Service.** The foundation of our business is responsiveness to client needs. We are sensitive to the timeliness of tasks, and we provide multiple levels of management to ensure consistently high quality professional services.
- **In-House Capabilities.** We anticipate that we will conduct the requested services almost entirely with in-house ESA staff. We have in-house capabilities to provide technical studies for biological and cultural surveys; air and noise modeling; energy, greenhouse gas and climate change; traffic impact assessments, and visual impacts. We also have in-house hydrogeologists that will interpret the technical reports and investigations to be provided for the Joint Banking Project and identify potential impacts as appropriate to CEQA. Having internal expertise greatly enhances our efficiency
- **Local Office.** ESA's Los Angeles office is located 40 miles from IRWD Headquarters. Our Project Director (**Tom Barnes**) and our Project Manager (**Jennifer Jacobus, PhD**) are both located in this office and routinely provide CEQA/NEPA guidance and environmental documentation services to local water agencies, special districts, and cities throughout Orange County. Tom and Jennifer both also have worked on the Strand Ranch Integrated Banking Project EIR and other groundwater and Kern River projects in Kern County,

We appreciate the opportunity to submit our proposal and qualifications, and we welcome the opportunity to discuss our proposal and rates with you at any time.

Sincerely,

A handwritten signature in black ink, appearing to read 'Tom Barnes', written over a horizontal line.

Tom Barnes
Director, Southern California Water Group

Proposal

STOCKDALE WEST RANCH JOINT BANKING PROJECT

Environmental Impact Report

Prepared for
Irvine Ranch Water District

February 13, 2012



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SECTION 1

Why ESA?

Environmental Science Associates

ESA's office locations:

- *Los Angeles*
626 Wilshire Boulevard
Suite 1100
Los Angeles, CA 90017
213. 599.4300
- *Oakland*
- *Orlando*
- *Palm Springs*
- *Petaluma*
- *Portland*
- *Sacramento*
- *San Diego*
- *San Francisco*
- *Santa Cruz*
- *Seattle*
- *Tampa*
- *Woodland Hills*

Founded in 1969, Environmental Science Associates (ESA) is a multidisciplinary environmental consulting firm offering services in planning and environmental analysis for a wide range of both public and private clients. Our passion is to serve as trusted advisors to our clients, incubating new ideas, inspiring superior results, and having the foresight and understanding of our clients' needs to help them achieve their goals. With a current staff of more than 330 professionals and offices throughout California (24 in Los Angeles County), we have in-house capabilities to perform California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA) analyses and technical studies including air emissions models; noise models and monitoring; biological assessments and permitting, cultural resources services; traffic; air quality and noise; energy; greenhouse gas emissions and climate change; aesthetics; water quality, hazardous materials; surface hydrology and drainage studies; visual simulations; and geospatial analysis using Geographic Information Systems.

ESA's Water Group focuses specifically on CEQA and the NEPA compliance and permit acquisition for water and wastewater infrastructure projects. We understand, from current and repeated experience, the technical and regulatory issues, public concerns, and CEQA/NEPA standards of practice that are specific to the review of water infrastructure projects in the region. In particular, ESA is well versed in the environmental review requirements of water and wastewater infrastructure funding sources such as the State Revolving Fund (SRF) and the US Bureau of Reclamation, Title XVI.

The services performed for Irvine Ranch Water District (IRWD or District) under this contract will be managed from our Los Angeles Office. Tom Barnes, Director of the ESA Southern California Water Group will be the primary point of contact and responsible for quality control of all products.

ESA's major strengths are our commitment to customer service, teamwork, and the coordination it takes to prepare effective interdisciplinary environmental impact analyses and design mitigation. ESA has depth and diversity of staff, including urban and regional planners, geographers, water resources specialists, hydrogeologists, biologists, ecologists, archaeologists, hazardous materials technicians, chemists, engineers, and economists. The

staff selected for this contract as described in **Section 2** have an extensive portfolio of experience relative to the District's environmental compliance needs. As our core business, ESA routinely prepare Initial Studies, Addenda, Negative Declarations, Mitigated Negative Declarations (MNDs), Environmental Impact Reports (EIRs) and Environmental Assessments (EAs) for water and wastewater utilities.

Why ESA?

We are pleased to submit this proposal for environmental services for IRWD's Stockdale West Ranch Joint Banking Project, to be implemented in Kern County in conjunction with Rosedale-Rio Bravo Water Storage District (Rosedale). As described further in **Section 2**, our ESA team has years of experience working with IRWD on many of its innovative projects and has thorough knowledge of its facilities and standards regarding the design development and environmental review process.

In particular, our ESA team prepared the EIR for IRWD and Rosedale's Strand Ranch Integrated Banking Project, a similar project to the Joint Banking Project that is being proposed at the Stockdale West Ranch and the Enos Property, which are directly adjacent to Strand Ranch. Our ESA team also assisted IRWD with its environmental assessment for the Pilot Recharge Project already implemented at Stockdale West Ranch. ESA has worked with Rosedale as well, recently providing a comprehensive overview of all CEQA documentation completed for its facilities and Conjunctive Use Program.

In addition, our ESA team has worked on groundwater recharge and banking projects in Kern County for other water agencies. Thus, our history of experience with IRWD and Rosedale and with similar types of projects in Kern County make ESA uniquely qualified to provide the most efficient service in preparation of an EIR for the Joint Banking Project. We will have no learning curve in understanding this Project site, the key issues and stakeholders. Our ESA team already knows the general characteristics of the Project area, including the agricultural landscape and County agricultural preserves, the hydrogeologic conditions and neighboring groundwater operations such as the Kern Water Bank, and potential biological and cultural resources.



SECTION 2

ESA Team and Qualifications

ESA Management Team

To meet the District's need for highly responsive environmental consulting services, ESA has assembled an expert Project team with the appropriate skills and experience to address the full range of issues that will arise.

Project success will be ensured by our **Project Director, Tom Barnes**, and our **Project Manager, Jennifer Jacobus**. Tom and Jennifer are based in our Los Angeles office. Tom will direct ESA's comprehensive scope of work performance, providing senior strategic planning, oversight of CEQA/NEPA process execution, and quality control. Jennifer will provide a second point of contact for IRWD and will be the key team member responsible for schedule management and execution of the ESA team's environmental analyses. She will monitor the progress of technical work, notify team members of deadlines ahead of time, organize conference calls, and manage production staff.

Tom and Jennifer are uniquely qualified for the Joint Banking Project, having successfully worked together to manage other ESA Water projects in Southern California, including IRWD and Rosedale's Strand Ranch Integrated Banking Project EIR and Addenda. In addition, both Tom and Jennifer assisted IRWD with its environmental assessment for the Stockdale West Ranch Pilot Recharge Project and thus are already familiar with the project site. In addition, Tom and Jennifer have worked together on other IRWD projects such as the Baker Water Treatment Plant Project EIR; Wells 21 & 22 Project/Tustin Legacy Well 1 Project MND/EA, and Biosolids Handling and Energy Recovery Facilities Project EIR.

Brief biographies for Tom and Jennifer provided below. Detailed resumes for each team member are provided in **Appendix A**.

Tom Barnes, Project Director, Director of ESA's Southern California Water Group, will be the primary contact for IRWD. Tom has over 20 years experience in CEQA/NEPA analysis, project management, environmental documentation, permit review and facilitation, and data analysis. His recent experience has included managing the preparation of MNDs and EIRs for water and wastewater districts and maintaining close communication with clients, agencies, and subcontractors to facilitate timely completion of work products.



Jennifer Jacobus, Ph.D., Project Manager, is an ecologist with nine years experience in CEQA/NEPA analysis, including project management, technical research, biological field work, data analysis and natural resource permitting. As a Senior Project Manager in ESA's Southern California Water Group, Jennifer specializes in the preparation of environmental documents exclusively for water and wastewater projects, including groundwater recharge and reuse facilities; groundwater banking facilities; treatment plant upgrades; water supply pipelines and wellheads; recycled water facilities; pipelines, pump stations, and storage tanks; wastewater facility expansions; water rights; and river diversion/discharge projects. She has successfully completed numerous CEQA-Plus documents supporting lead agencies' applications for funding for SRF loans through the State Water Resources Control Board and has completed NEPA environmental documentation necessary to satisfy funding requirements of the U.S. Bureau of Reclamation and U.S. Environmental Protection Agency.

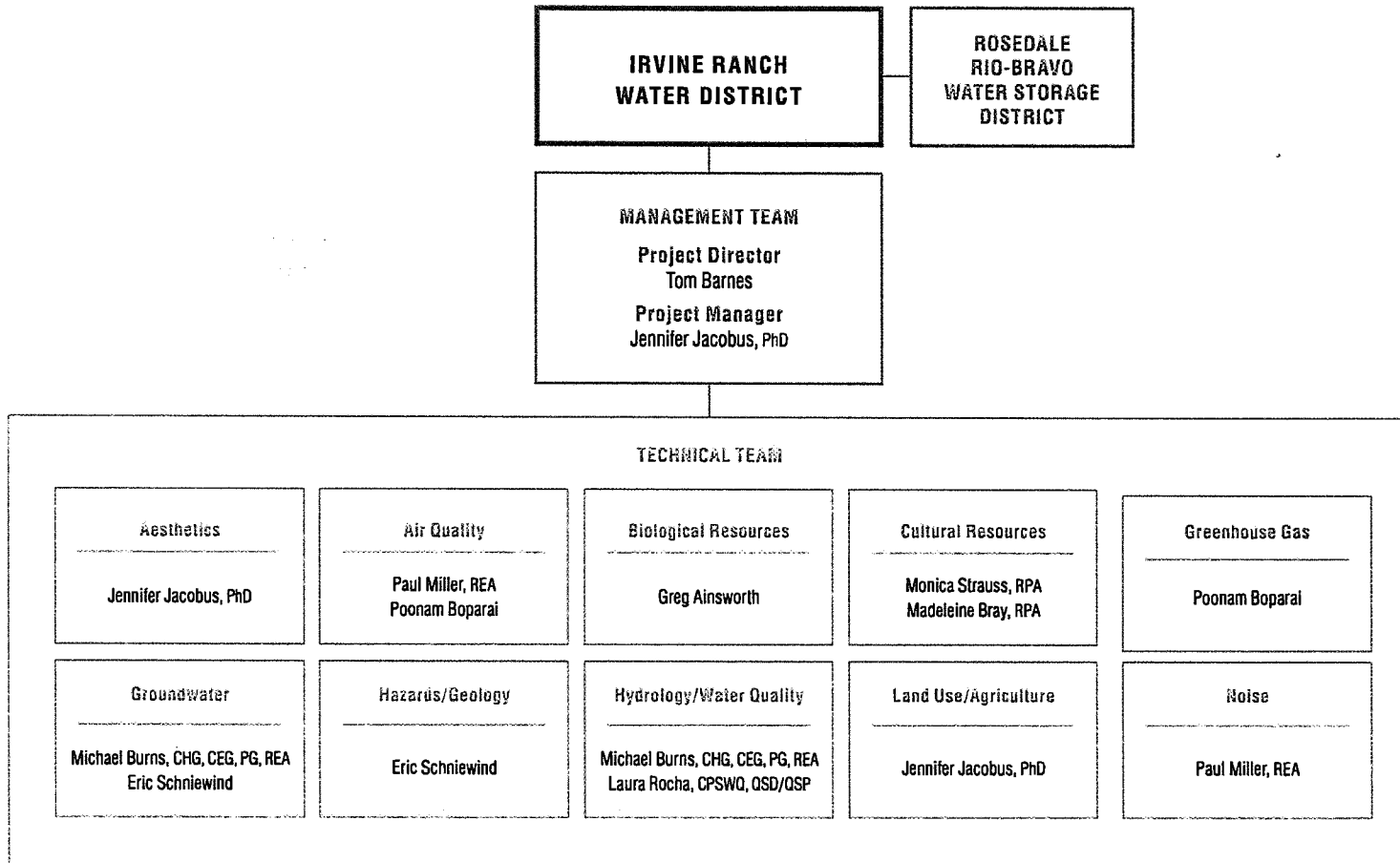
Key Technical Team

The project organization chart depicted in **Figure 2-1** presents key members of ESA's team, and their primary roles. ESA has assembled a highly qualified Project team with the appropriate skills, experience, capacity and local presence to address the issues as necessary for the District. As shown in the resumes provided for each key member in **Appendix A**, our Project team has a demonstrated history of working with IRWD and Rosedale projects, groundwater banking and recharge projects, and Kern County projects.

Table 2-1 provides a summary of the key technical staff proposed for this Contract. The following individuals will be available, as needed, depending on the scope of individual projects. Our proposed management and technical teams have an extensive history of working together on many CEQA/NEPA projects described later in this section. In addition to the team highlighted below, ESA has a deep pool of technical expertise company-wide, providing diverse perspectives and insight to assist our clients in tackling the unique issues that arise in the field during project planning and implementation.



Figure 2-1 Team Organization
Stockdale West Ranch Joint Banking Project



2. ESA Team and Qualifications

TABLE 2-1: SUMMARY OF TECHNICAL TEAM QUALIFICATIONS (LISTED IN ALPHABETICAL ORDER)

Name & Responsibility	Education	Technical Expertise
<p>Gregory Alnsworth <i>Biological Resources</i></p> <p>Years Experience: 11</p>	<p>M.A. Environmental Planning, California Polytechnic State University, San Luis Obispo</p> <p>B.S. Environmental Horticulture Science, California Polytechnic State University, San Luis Obispo</p>	<ul style="list-style-type: none"> ▪ Director of ESA Southern California Biological Resources Group ▪ Data collection and analysis including focused surveys for plants, animals (large and small mammals [including bats], reptiles, amphibians, and nesting birds), sensitive plant communities and habitats, tree surveys, and jurisdictional permit packages per the Clean Water Act (CDFG Streambed Alteration Agreement and Section 401/404 Permit Applications), and other resource planning/permitting
<p>Poonam Boparai <i>Air Quality and Greenhouse Gas Emissions</i></p> <p>Years Experience: 7</p>	<p>M.S., Environmental Engineering, University of Illinois, Urbana - Champaign</p> <p>Bachelor of Engineering, Chemical Engineering, Birla Institute of Technology and Science, Pilani, India</p>	<ul style="list-style-type: none"> ▪ Proficient in conducting emissions inventories and dispersion modeling using a variety of U.S. Environmental Protection Agency and California Air Resources Board approved models (e.g., URBEMIS, AERMOD, CalEEMod) ▪ Solid understanding of air quality and GHG protocols promulgated by ARB and regional California air districts, including South Coast AQMD
<p>Madeline Bray, RPA <i>Cultural Resources</i></p> <p>Years Experience: 11</p>	<p>M.A., Archaeology, University of California, Los Angeles</p> <p>B.A., Classical Archaeology, Macalester College, Saint Paul, Minnesota</p> <p>Registered Professional Archaeologists (RPA)</p>	<ul style="list-style-type: none"> ▪ Has managed numerous CEQA and Section 106 compliance water projects in southern California ▪ Experienced in archival research, coordinating field crews and carrying out fieldwork, data collection, site testing and evaluation, and report preparation
<p>Michael Burns, REA, PG, CEG, CHG <i>Hydrology/Water Quality and Groundwater</i></p> <p>Years Experience: 30</p>	<p>B.S., Geology, San Jose State University</p> <p>Registered Environmental Assessor I (REA I), No.570</p> <p>Professional Geologist (PG), No.4532</p> <p>Certified Engineering Geologist (CEG), No.1846</p> <p>Certified Hydrogeologist (CHG), No.280, CA</p>	<ul style="list-style-type: none"> ▪ Director of ESA's Hydrology Technical Services Group ▪ Provides expert services in planning and permitting, site characterization, Superfund sites, Remedial Investigation/ Feasibility Studies, waste management, litigation support, property assessments, development and redevelopment, soil and groundwater remediation, and water rights ▪ His projects include water districts, industrial and manufacturing facilities, airports, levees, landfills, refineries, research and development facilities, hazardous waste management, vineyards, and commercial properties.
<p>Paul Miller, REA <i>Air Quality and Noise</i></p> <p>Years Experience: 25</p>	<p>M.S., Zoology and Entomology, Colorado State University</p> <p>B.A., Zoology, Miami University</p> <p>Registered Environmental Assessor (REA) No. 00926</p>	<ul style="list-style-type: none"> ▪ West Coast coordinator for ESA's air quality and noise programs ▪ Broad range of environmental skills, he has applied his background to NEPA and CEQA environmental assessments ▪ Has managed numerous EIR documents in counties throughout California
<p>Laura Rocha, CPSWQ, QSD/QSP <i>Hydrology/Water Quality</i></p> <p>Years Experience: 8</p>	<p>M.S., Environmental Studies; California State University, Fullerton</p> <p>B.A., Environmental Studies and Psychology; University of California Santa Barbara</p> <p>Certified Professional in Storm Water Quality</p>	<ul style="list-style-type: none"> ▪ Developer/Practitioner providing environmental management services, with a focus in water quality/water resources in the Southern California region ▪ Contributes to a variety of tasks related to the preparation and management of environmental documents, including technical reports, EIRs, MNDs and EAs, pursuant to the CEQA and NEPA for water infrastructure, commercial, residential, and mixed-use projects

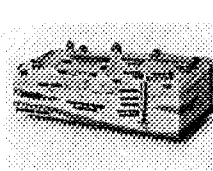
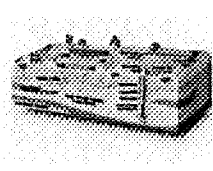
Name & Responsibility	Education	Technical Expertise
Eric Schniewind <i>Hazards / Geology and Groundwater</i> Years of Experience: 16	B.A., Geological Sciences, UC Santa Barbara	<ul style="list-style-type: none"> ▪ Soil and groundwater contamination studies, environmental remediation planning and implementation, and pre-acquisition site assessments ▪ Project management, site historical research, report preparation, aquifer and well tests analysis, fault hazards and landslide hazard studies
Monica Strauss, RPA <i>Cultural Resources</i> Years Experience: 15	M.A., Archaeology , California State University, Northridge B.A., Anthropology, California State University, Northridge Registered Professional Archaeologists (RPA)	<ul style="list-style-type: none"> ▪ Experience in cultural resources management, including archaeological investigations; prehistoric and historic field and research projects; conducting/managing construction monitoring ▪ Regularly provides prehistoric and historic field and research projects for public agencies and private developers throughout Southern California

ESA Qualifications and Experience



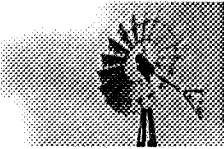

ESA's breadth of project experience provides IRWD with the best combination of regional perspective and local understanding for water supply infrastructure issues.



Table 2-2 provides a sampling of ESA's relevant and similar experience with CEQA/NEPA analysis and documentation for water projects similar in nature or location as the Joint Banking Project. These projects demonstrate ESA's experience and understanding of the key issues for analyzing groundwater banking projects in Kern County. ESA has a proven track record for understanding the client's priorities, meeting critical deadlines, working and coordinating with other consultants and engineering firms, and successfully completing legally-defensible environmental compliance documents.

TABLE 2-2: RELEVANT PROJECTS AND SERVICES PROVIDED

Relevant Projects	Services Provided
 <p>IRWD Strand Ranch Integrated Banking Project EIR</p> <p>IRWD and Rosedale-Rio Bravo Water Storage District are partners in development of new groundwater banking facilities in Kern County. The Integrated Banking Project developed groundwater recharge and recovery facilities on Strand Ranch, annexed Strand Ranch into Rosedale's service area, and integrated the project facilities into Rosedale's existing Conjunctive Use Program. Project facilities included recharge basins, water supply channels, and recovery wells and pipelines. The recharge and recovery waters would be delivered to/from the project site via the Cross Valley Canal, which is part of the State Water Project. This EIR was successfully completed and certified in 2008.</p>	<ul style="list-style-type: none"> ▪ CEQA ▪ EIR ▪ Groundwater impact assessment
 <p>IRWD Strand Ranch Integrated Banking Project EIR Addendum No. 1</p> <p>ESA prepared Addendum No. 1 to IRWD's Strand Ranch Integrated Banking Project EIR. Addendum No. 1 covered two changes to the Project since the Final EIR was certified in 2008. IRWD proposed to recharge water offsite at other existing facilities within Rosedale's service area and recover it at Strand Ranch, without changing the annual extraction limit for the Project. IRWD also proposed to allow conventional (non-organic) farming on Strand Ranch during interim periods when the basins are not used for active recharge operations, in accordance with the County's Standard Uniform Rules for Agricultural Preserves and the Williamson Act contract for the project site.</p>	<ul style="list-style-type: none"> ▪ CEQA ▪ Addendum ▪ Groundwater impact assessment ▪ Agricultural resources assessment

2. ESA Team and Qualifications

	Relevant Projects	Services Provided
	<p>IRWD Baker Water Treatment Plant Project EIR and Addendum</p> <p>ESA prepared the EIR for the Baker Water Treatment Plant Project. The goal of the proposed project is to increase water supply reliability in southern Orange County. The project includes construction of new raw water treatment facilities at the existing Baker Filtration Plant located in Lake Forest, CA. Key issues associated with the project include construction-related impacts experienced by neighboring residential areas and impacts to biological and cultural resources. The Final EIR was successfully completed and certified in 2011. ESA currently is preparing Addendum No. 1 to the Final EIR for changes to a treated water pipeline.</p>	<ul style="list-style-type: none"> ▪ CEQA ▪ EIR and Addendum ▪ Technical Studies
	<p>IRWD Wells 21 & 22/Tustin Legacy Well No. 1 Project MND/IS/EA</p> <p>IRWD was awarded federal funds through the American Recovery and Reinvestment Act of 2009 (ARRA) from the Bureau of Reclamation for this project. The Project will recover and treat impaired groundwater to augment local water supplies and increase water supply reliability. The Project would install wellhead equipment on two existing groundwater wells (Wells 21, 22), drill one exploratory well (Well TL-1), and construct a new water treatment plant and water transmission pipelines in the cities of Tustin and Irvine. ESA aided in coordination with the Bureau and successfully met the aggressive schedule requirements for federal funding. The MND was certified in February 2010. ESA also prepared Addendum No. 1 for changes to the location of Well TL-1.</p>	<ul style="list-style-type: none"> ▪ CEQA/NEPA ▪ MND and Addendum ▪ Environmental Assessment ▪ Cultural Resources Section 106 Compliance
	<p>IRWD Biosolids Handling and Energy Recovery Facilities Project EIR</p> <p>IRWD is proposing to implement solids handling facilities at the Michelson WRP rather than continuing to transport sludge to Orange County Sanitation District. Since 1988 all residuals from the Michelson WRP have been conveyed to OCS D for processing and disposal. The proposed project would provide a complete biosolids process, biogas management, and energy generation system for the Michelson and Los Alisos WRPs. ESA is preparing the EIR for the proposed project, which is expected to be released for public review in April 2012.</p>	<ul style="list-style-type: none"> ▪ CEQA
	<p>Rosedale-Rio Bravo Water Storage District Supplemental Environmental Analysis</p> <p>ESA reviewed the Rosedale-Rio Bravo Water Storage District's projects, Agreements, and procedures and prepared a report with a matrix that identifies Rosedale's water banking activities. The report evaluates the status of CEQA compliance documentation for each of Rosedale's projects, Agreements, and procedures as necessary to clarify compliance with CEQA.</p>	<ul style="list-style-type: none"> ▪ CEQA ▪ Kern County
	<p>Kern Delta Water District (KDWD) Kern River Water Allocation Plan</p> <p>ESA is preparing the EIR for KDWD's Kern River Water Allocation Plan (Plan or WAP). The District has prepared the WAP to optimize the use of water available to the KDWD, provide operational flexibility, and maximize the beneficial use of its Kern River water rights. The Plan would optimize use of Kern River water that previously was released to subordinate water rights holders. The project would potentially result in decreased access to Kern River water supply by subordinate water rights holders. Previous environmental analysis resulted in a lawsuit, brought by North Kern Water Storage District and the City of Bakersfield against the District, which was recently resolved in the Superior Court of California. The resulting Statement of Decision requires that KDWD evaluate the utilization of the water pursuant to the California Environmental Quality Act (CEQA). The ESA team includes specialized support from Todd Engineers. Todd Engineers prepared the WAP and is assisting with the analysis of the WAP's impacts on groundwater and to neighboring water districts.</p>	<ul style="list-style-type: none"> ▪ CEQA ▪ Groundwater impact assessment ▪ Kern County

Relevant Projects	Services Provided
	<p>West Kern Water District Groundwater Recharge Project EIR</p> <p>ESA prepared an EIR for the groundwater banking project to be constructed by the West Kern Water District (District). The project involved purchasing 480-acres of property outside the District service area for use as a water recharge and recovery site. Several recharge basins would be constructed within the property , as well as up to nine extraction wells and a pipeline to the District's existing well field. The project provide s additional groundwater recharge, storage, and recovery for the district.</p> <ul style="list-style-type: none"> ▪ CEQA ▪ Groundwater impact assessment ▪ Kern County
	<p>City of Corona Groundwater Management Plan Program EIR</p> <p>ESA prepared a Program EIR for the AB 3030 Groundwater Management Plan (GWMP) prepared by AKM Consulting Engineers and Todd Engineers for the City of Corona Department of Water and Power. ESA prepared program-level impact analyses for a number of management strategies identified in the GWMP , as well as project-level impact analysis for a few management strategies including pipelines and recharge basins. The strategies in the GWMP are intended to provide a sustainable groundwater resource to augment the City's potable water supply.</p> <ul style="list-style-type: none"> ▪ CEQA



SECTION 3

Project Understanding and Scope of Work

At the request of IRWD and Rosedale, ESA has prepared the following scope of work for an Environmental Impact Report (EIR) for the Stockdale West Ranch Joint Banking Project ("Project"), in accordance with the California Environmental Quality Act (CEQA) (CEQA Guidelines, Sections 15062, 15300). The Project would be located on lands adjacent to the Strand Ranch Integrated Banking Project, for which ESA prepared the Final EIR in 2008. The Project includes the 330-acre Stockdale West Ranch, owned by IRWD, and the 230-acre Enos Property, owned by Rosedale. For purposes of CEQA, we understand that Rosedale will be the Lead Agency, and IRWD will be the Responsible Agency.



The Stockdale West Ranch already has approximately 200 acres of recharge basins built onsite for IRWD's previous Pilot Recharge Project. The Project would require construction of groundwater recovery wells only at the Stockdale West Ranch. We understand that the Enos Property was most recently used for agricultural production. The Project would require construction of approximately 180 acres of recharge basins and groundwater recovery wells onsite at the Enos Property. We understand that neither property is under a Williamson Act contract.

The Project would allow for coordinated and reciprocal use and operation of both properties as an integrated part of Rosedale's existing Conjunctive Use Program, similar to that established for the Strand Ranch Integrated Banking Project. Rosedale would operate the facilities on both properties. Exact annual recharge and recovery amounts and limitations will be determined from hydrogeologic studies. We understand that IRWD would be granted a 50,000 AFY storage account in Rosedale's Conjunctive Use Program.

Potential recharge water sources for the Project include Kern River regulated high flows, Kern River flood flows, Friant 215 water, and other water acquired through exchanges. Water would be delivered to/from the Project using the Cross Valley Canal (CVC) and/or Pioneer Canal. The Project may include improvements to these facilities, such as modifications to the CVC turnouts or construction of turnouts on the Pioneer Canal.

Scope of Work

All deliverables defined below in the scope of work will be provided in hard copy where indicated and in electronic format. Electronic format will include both Microsoft Word and Adobe PDF files. All electronic deliverables will be made available on a password-protected FTP site and provided on CD where indicated.

Task 1 Deliverables

- *Draft EIR Outline*
 - *Project Schedule*
 - *One (1) Meeting*
-

Task 1: Project Initiation and Management

ESA will attend a kick-off meeting at IRWD offices. ESA will prepare a schedule, Draft EIR outline, and initial data request.

ESA will provide regular status updates to IRWD and Rosedale. Potential impacts to schedule will be reported to both agencies promptly. ESA will participate in team conference calls with IRWD and Rosedale on an as-needed basis to maintain focus on action items and milestones for effective schedule management. ESA will be available for fifteen (15) team meetings, including those identified in the tasks below, at IRWD offices or by teleconference over the course of the Project. We anticipate approximately eight (8) hours per month for Project management and coordination for the duration of the Project (12 months).

Task 2 Deliverable

- *Data Request*
-

Task 2: Submit a Request for Information

ESA will review the existing data for the Project and will determine if additional information is needed. ESA will then prepare a Request for Information and will submit the request to IRWD and Rosedale in an attempt to collect and compile data for use in the CEQA analysis.

Task 3 Deliverables

- *Draft Project Description*
 - *Revised Draft Project Description*
 - *Final Project Description*
 - *Three (3) meetings*
-

Task 3: Develop a Project Description

ESA will prepare a draft project description based on information provided by IRWD and Rosedale and will include the project location and setting, site characteristics, project objectives and need, and the characteristics of the project. This section will also include the requested permits and approvals for the proposed project. In addition, this section will include a discussion of the past, present, and reasonably foreseeable future projects and activities in the surrounding areas that will serve as the basis for the cumulative impact analysis as well an overview of the Project alternatives to be analyzed in the EIR. ESA will submit the draft project description to IRWD and Rosedale for review. ESA will attend up to three (3) team meetings to discuss the project description and will revise the project description up to two (2) times per comments from both agencies.



Task 4 Deliverables

- *Prepare and distribute NOP (up to 50 copies)*
 - *Prepare and distribute NOC*
 - *One (1) meeting*
-

Task 4: Prepare a Notice of Preparation and Notice of Completion

Concurrently with preparation of the Project Description (Task 3), ESA will prepare the Notice of Preparation (NOP) and Notice of Completion (NOC) as required by the State CEQA Guidelines including a brief description of the Project, site map, and summary of potential environmental impacts of the project. ESA will confer with IRWD and Rosedale to create a mailing list that identifies appropriate stakeholders. ESA will conduct mailings to the State Clearinghouse, responsible and trustee agencies, surrounding property owners and persons requesting notice. ESA will post notices in local newspapers and with the Orange County and Kern County Clerks. ESA will attend one (1) meeting with the Project team for this task.

Task 5 Deliverables

- *Public Scoping Meeting Agenda*
 - *Draft and Final Presentation*
 - *Scoping Meeting Presentation materials*
 - *Comment Memo*
 - *Three (3) meetings*
-

Task 5: Conduct Public Scoping

ESA will assist IRWD and Rosedale in coordinating two public Scoping Meetings, one in the vicinity of the Project location and Rosedale in Kern County and one in the vicinity of IRWD in Orange County. ESA will prepare presentation materials and conduct an interactive presentation to solicit and record public comments pertaining to the scope and content of the EIR.

ESA will prepare a scoping memorandum summarizing the scoping process and comments received during the NOP review period and Scoping Meetings. The comment memorandum will be included as an Appendix to the Draft EIR. In addition to the Scoping Meetings, ESA will attend one (1) rehearsal meeting with the Project team prior to the Scoping Meeting for this task.

Task 6 Deliverables

- *Administrative Draft (5 copies)*
 - *Two (2) meetings*
-

Task 6: Prepare an Administrative Draft EIR

ESA will prepare an Administrative Draft EIR (ADEIR) in accordance with State CEQA Guidelines. The ADEIR will include the project description, including any revisions that occur as a result of the Scoping Meeting. The ADEIR will summarize environmental setting, regulatory framework, potential environmental impacts, and proposed mitigation by resource area. As required by CEQA, the setting will describe the baseline conditions in the study area "as it exists before the commencement of the project" and the effects of the Project on existing conditions. The impact analysis will identify direct, indirect, and cumulative impacts for design, construction, and operation of the Project based on thresholds of significance. The analysis will include all issue areas included in Appendix G of the CEQA Guidelines. Mitigation measures will be identified to avoid or substantially lessen potential environmental effects. The ADEIR will also provide an analysis of CEQA project alternatives.

ESA will review the Strand Ranch Integrated Banking Project EIR and Addenda and the Stockdale West Ranch Pilot Recharge Project documentation for background information to utilize in the proposed Project EIR and for applicable mitigation measures to apply to any potential impacts.

3. Project Understanding and Scope of Work

ESA will submit the ADEIR to IRWD and Rosedale for review. ESA will attend two (2) team meetings during the Draft EIR preparation stage. The following issue areas will be addressed in the ADEIR.

Aesthetics

The EIR will summarize the aesthetic and visual impacts associated with construction and operation of the proposed Project. The EIR will include photographs and a description of existing visual conditions in the Project area and will evaluate if the proposed Project will substantially degrade the existing visual character of the Project area. The EIR will evaluate the potential effects to public view corridors resulting from the proposed Project and determine whether the Project would substantially alter the character of scenic vistas or create substantial new sources of light and glare. Mitigation measures will be identified if necessary to reduce aesthetic impacts.

Air Quality

The EIR will summarize existing air quality in the Project area and will identify current attainment plans for criteria pollutants. The San Joaquin Valley Air Pollution Control District (APCD) thresholds of significance will be identified for operational and construction activities. ESA will coordinate with the Project team to identify construction-related and operational impacts of the Project to air quality. The EIR will estimate construction related emissions and long-term operational related emissions. ESA will prepare a data request to identify the types, number, and duration of use of equipment needed for operational and construction activities. ESA will conduct air emissions modeling utilizing the URBEMIS emissions model. The EIR will provide the setting and air quality impact assessment and mitigation measures will be developed to minimize air pollutant emissions. The EIR will compare project emissions with APCD threshold of significance. The EIR will also evaluate the project's consistency with the regional air quality attainment plans and will address global climate change issues (see below).

Biological Resources

ESA will use available information sources, including aerial photographs, topographic maps, habitat conservation plans and existing biological and planning documents in the project region to document potential biological resources at the Project sites and in the vicinity of the sites. ESA will utilize the California Department of Fish and Game (CDFG) California Natural Diversity Data Base (CNDDB) and the California Native Plant Society's Electronic Inventory of Rare and Endangered Vascular Plants of California to develop a list of threatened and endangered and other sensitive species with potential to occur within the Project area. In addition, ESA will review and determine the applicability of biological analyses in other available planning and site-specific biological assessments and EIRs written for the region, including the Strand Ranch Integrated Banking Project EIR.





ESA will conduct a field survey to characterize the baseline conditions of biological resources at the sites, for use in evaluating Project impacts. The field survey will focus primarily on the Enos Property and the footprint of the planned recharge basins. Ground disturbance at the Stockdale West Ranch is expected to be minor, related only to new groundwater production wellheads and well pads. The survey will focus only on these areas of Stockdale West Ranch. The field survey will take two people up to two days to complete. We recommend preparation of a Biological Technical Report (BTR) that summarizes the biological field survey methodology, findings, and recommendations. The BTR can be appended to the Draft EIR and referenced in the Biological Resources chapter of the Draft EIR. This serves to streamline the EIR chapter and improve readability. Conclusions regarding potential impacts to sensitive species and habitats will be the focus of the EIR chapter and mitigation strategies will be identified that would minimize the impacts. The analysis will include a comprehensive list of permits required from resource agencies to implement the project as well.

Our scope of work assumes that no direct evidence of special-status species, such as the burrowing owl, are detected during the field survey. If found, ESA will discuss with both agencies the need for additional focused surveys for such species and submit an additional scope and fee for consideration by IRWD and Rosedale.

Cultural Resources

ESA will conduct a Phase I cultural resources survey of the Project area. The field survey will take two people up to two days to complete. Similar to the biological resources survey, the Enos Property will be the focus of the cultural resources survey. ESA will conduct a records search at the Southern San Joaquin Valley Information Center at California State University, Bakersfield. ESA will notify the Native American Heritage Commission and request a list of interested Native American Groups if necessary. ESA will mail notices to local Native American groups to request whether the Project is located in an area of cultural significance if necessary. ESA will summarize information from the records search and site survey and identify the potential for impacts to archaeological, historical, and Native American resources in a Phase I Cultural Assessment Report. Similar to the BTR, the Cultural Report will serve to streamline the Cultural Resources EIR chapter and improve readability. Citing the results of the Cultural Report, the EIR will identify potential impacts of the Project and provide mitigation measures to minimize impacts. The recommended scope of work for the field survey and Phase I Cultural Assessment Report are included as **Appendix B** to this proposal.

In addition, ESA will conduct a records search of the Project area to identify the potential for significant paleontological resources to be encountered during construction. The EIR will summarize the results of the records search and identify mitigation measures necessary to minimize impacts. If the records search indicates that significant paleontological resource may be present that

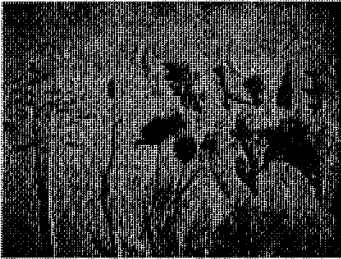
warrant a paleontological survey, then ESA will submit an additional scope and fee request to IRWD and Rosedale to authorize such a survey.

Geology, Soils and Mineral Resources

The EIR will include regional and local geologic and seismologic data pertinent to the Project area, including information from the U.S. Geological Survey and California Geological Survey as well as data from the Geotechnical Investigations prepared for both Project sites. We understand that IRWD and Rosedale will provide ESA with such Geotechnical Investigations. The EIR will identify potential geologic impacts of the Project and will provide mitigation measures to minimize the effects where possible. The EIR also will identify any mineral resource zones or oil well fields in the Project area and potential impacts related to access to such resources.

GHGs and Energy Efficiency

The EIR will include analysis of Greenhouse Gas Emissions (GHGs) for the Project. Construction-related and operational GHGs would be quantified in terms of CO₂ equivalents (CO₂e) to account for varying warming potential of gases, and compared to regional thresholds of significance. ESA will also determine whether the Project would interfere with implementation of the California Global Warming Solutions Act of 2006 (Assembly Bill No. 32, or AB32) or Governor Schwarzenegger's Executive Order S-3-05, which both set State-wide goals to reduce GHGs to 1990 levels by 2020. This analysis will consider the collective size of Project facilities with respect to levels of CO₂e emissions and the energy efficiency parameters of the project.



Hazards and Hazardous Materials

ESA will conduct a search of publically-available databases (including the Cortese List in accordance with Appendix G of the CEQA Guidelines) to identify any hazardous materials sites in the Project vicinity. The EIR will summarize the results of the database search and rely on other Project-related documentation (e.g., Phase I Site Assessments) to identify known contamination sites at the Stockdale West Ranch and Enos Property. The EIR will list potentially hazardous materials used at the Project sites historically and disclose hazardous materials to be stored or used during construction and operation of the proposed Project. The EIR will address potential soil contamination and groundwater contamination due to construction and operation of the Project. Mitigation measures will be developed to minimize potential hazards where feasible.

Hydrology and Water Quality

The EIR will identify surface water and groundwater resources in the Project area and will evaluate potential impacts posed by the Project during construction and operation. The EIR will rely on Geotechnical Investigations and technical analyses to be provided by IRWD and Rosedale that describe the recharge



capacities of the Project sites and model potential impacts of recharge and extraction activities both onsite and offsite at other Rosedale facilities in accordance with the Project terms. The EIR will summarize the results of a groundwater drawdown analysis for proposed production well operations and a mounding analyses for proposed recharge operations. The EIR will provide groundwater quality data and analyze the impact of Project operations on any nearby plumes. The EIR will describe storm water runoff control requirements and provide mitigation if necessary to meet construction and operational storm water runoff quality requirements.

Land Use and Agriculture

ESA will conduct land use surveys of the Project area to identify current uses and sensitive receptors. Local General Plans, airport master plans, and habitat conservation plans will be identified and summarized if applicable. State-designated important farmland and Kern County agricultural preserves in the Project area also will be identified. The EIR will identify the adopted land use and agricultural goals and policies that could be affected by the Project. The EIR will evaluate consistency of the proposed project with existing land uses within the project area and develop mitigation measures to avoid or substantially lessen inconsistencies where feasible.

Noise

ESA will briefly describe and discuss existing noise sources at the Project site and describe the existing noise environment. ESA will summarize state and local noise policies, regulations, and standards as they pertain to the proposed project. The EIR will discuss the potential for onsite construction activities to generate noise and affect sensitive receptors. This discussion will be based upon proposed construction activities and scheduling information provided by IRWD and Rosedale. Otherwise, this discussion will be based upon peak noise and vibration levels generated by an assumed standard mix of construction equipment and activities. The EIR will evaluate the Project compliance with existing noise standards and policies.

Population and Housing / Growth Inducement

ESA will evaluate and discuss the potential for the Project to indirectly induce growth due to the potential for the Project to remove an obstacle to growth, namely water supply. The EIR will discuss population growth in both IRWD and Rosedale's service area, along with general water supply and demand projections. The EIR will discuss the purpose of the Project to improve overall water supply reliability within IRWD's service area rather than a predictable water source that would support development on an annual basis.

Transportation/Traffic

The EIR will characterize the existing regional and local transportation networks and traffic conditions in the Project area, including traffic flow,

3. Project Understanding and Scope of Work

access, and circulation conditions. The EIR will assess the potential for construction traffic and operational traffic to affect local roadways. ESA will estimate Project construction traffic volume on the basis of estimates of earthwork quantities onsite, worker crew size, and equipment needs. Mitigation measures will be developed if required to reduce adverse effects to traffic and circulation.

Utilities, Service Systems, and Energy

The EIR will review the potential effects of the Project on utilities and energy services resulting from both construction and operation of the Project. The EIR will describe any potential need for water entitlements to operate the Project and identify potential impacts to local and regional energy supplies and capacity due to Project operation.

Cumulative Effects

ESA will address potential cumulative impacts of implementing the proposed Project in conjunction with past, present, and reasonably foreseeable public and private projects in the immediate project area. The analysis will include a description of the geographic area in which cumulative impacts could be experienced for each resource area. ESA will consult the local General Plan and relevant agencies to compile a list of major projects planned within or near the area over the next 10-15 years as well as projects under way or completed in the last five years. A brief description of the relevant past, present, and proposed future projects occurring in the area that could produce effects similar to the Project will be provided. As CEQA requires, the analysis will focus on the potential for the Project's impacts to be cumulatively considerable when combined with the impacts of other related projects.

Alternatives

The EIR will evaluate alternatives to the Project including the No Project Alternative. The EIR will compare the alternatives to determine if any would substantially meet the project objectives and reduce significant impacts associated with the proposed Project. As required by CEQA, IRWD and Rosedale will consider any alternatives identified by agencies or others at scoping meetings or in response to the NOP and determine whether they should be included in the EIR as feasible or infeasible. The EIR will identify the environmentally superior alternative based on the conclusions of the analysis.

Task 7: Prepare a Screencheck Draft EIR

ESA will revise the Draft EIR per the comments received from IRWD and Rosedale staff on the ADEIR. ESA will prepare a Screencheck Draft EIR for review by both agencies. ESA will attend one (1) team meeting to discuss revisions to the ADEIR prior to finalizing and circulating the Public Draft EIR.

Task 7 Deliverables

- **Screencheck Draft (5 copies)**
- **One (1) meeting**



Task 8 Deliverables

- *Public Draft EIR (25 copies, 25 CDs)*
 - *NOA (50 copies)*
 - *NOC (5 copies)*
 - *One (1) CD with all documents*
-

Task 8: Prepare Public Draft EIR, Notice of Availability, and Notice of Completion

ESA will incorporate comments from IRWD and Rosedale staff and prepare the Public Draft EIR. ESA will compile the mailing list and conduct the mailing and public noticing required by CEQA for the Public Draft EIR. ESA will prepare and file the NOC with the State Clearinghouse and the Notice of Availability (NOA) of the Draft EIR with both the Orange County and Kern County Clerks. The notices will include the date and location of public meetings on the Draft EIR. ESA will produce thirty (30) bound hard copies, thirty (30) CDs containing electronic versions of the Public Draft EIR, fifty (50) NOAs, and five (5) NOCs, and two (2) CDs with PDF files of the Draft Public EIR, NOA, and NOC for IRWD and Rosedale records.

Task 9 Deliverables

- *Public Meeting Agenda*
 - *Draft and Final Presentation*
 - *Public Meeting Presentation materials*
 - *Itemized list of comments received*
 - *Two (2) meetings*
-

Task 9: Conduct Public Meeting

ESA will organize and arrange two (2) Public Meetings to receive comments on the Draft EIR, one in Orange County and one in Kern County. ESA will take the lead in conducting a presentation. ESA will prepare presentation materials and an agenda and conduct a presentation. Presentation and/or hard copy materials will be approved by IRWD and Rosedale in advance of the meeting. The presentation will be organized as an summary overview of the Draft EIR and will identify potential environmental issues. The purpose of the meeting will be to collect additional comments on the Draft EIR. ESA will document all comments received during the Public Meetings and will incorporate them into the Final EIR if applicable.

Task 10 Deliverables

- *Administrative and Screencheck Final EIR*
 - *Final EIR (15 copies)*
 - *One (1) meeting*
-

Task 10: Prepare Final EIR and Response to Comments

At the conclusion of the public review period, ESA will work with IRWD and Rosedale to obtain all comments received on the Draft EIR. ESA will provide a detailed review and evaluation of all of the comments received. ESA will develop a strategy for addressing the comments and will present this approach to IRWD and Rosedale during a team meeting. An Administrative Final EIR containing proposed responses to comments to the Draft EIR will be prepared once ESA's approach is agreed with by IRWD and Rosedale staff.

After incorporation of comments on the Administrative Final EIR, ESA will prepare a Screencheck Final EIR for review by IRWD and Rosedale. ESA assumes that comments on the Screencheck Final EIR will be minimal, due to early consultation with both agencies when comments are received.

The Response to Comments in conjunction with the Draft EIR will constitute the Final EIR. After IRWD and Rosedale have reviewed the Final EIR, ESA will incorporate the necessary revisions into the document and will mail a copy to each entity that commented.

Task 11 Deliverables

- *Findings of Fact and SOC*
 - *NOD*
 - *Final EIR Filing with CDFG Fee*
 - *One (1) Meeting*
-

Task 11: Prepare Findings, Statement of Overriding Considerations, Notice of Determination, and Finalize EIR/DFG Fee

ESA will prepare draft Findings of Fact and a Statement of Overriding Considerations (SOC) (if necessary) for review by the IRWD and Rosedale Boards of Directors. ESA will incorporate IRWD and Rosedale's comments and will prepare the final Findings. ESA will also attend one (1) EIR Certification Hearing. ESA will prepare and file the Notice of Determination (NOD) with the County Clerks and the State Clearinghouse following certification by Rosedale first as the CEQA Lead Agency and IRWD second as a Responsible Agency.

Task 12 Deliverables

- *Draft and Final MMCRP*
-

Task 12: Prepare a Mitigation Monitoring Compliance and Reporting Program

In compliance with Public Resources Code Section 21081.6, ESA will prepare a draft Mitigation Monitoring Compliance and Reporting Program (MMCRP) for review by IRWD and Rosedale. MMCRP describes the required mitigation necessary to avoid or reduce significant impacts, the responsible parties, tasks, and schedule necessary for monitoring mitigation compliance.

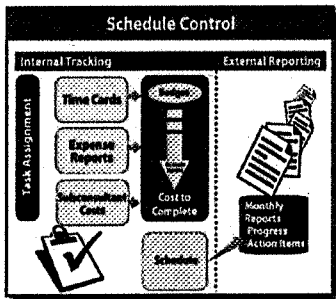


SECTION 4

Project Schedule

Proposed Schedule of Work

The proposed schedule for completion of the Stockdale West Ranch Joint Banking Project EIR is presented in Figure 4-1. The schedule assumes the issuance of a Notice to Proceed by the District on April 2, 2012.

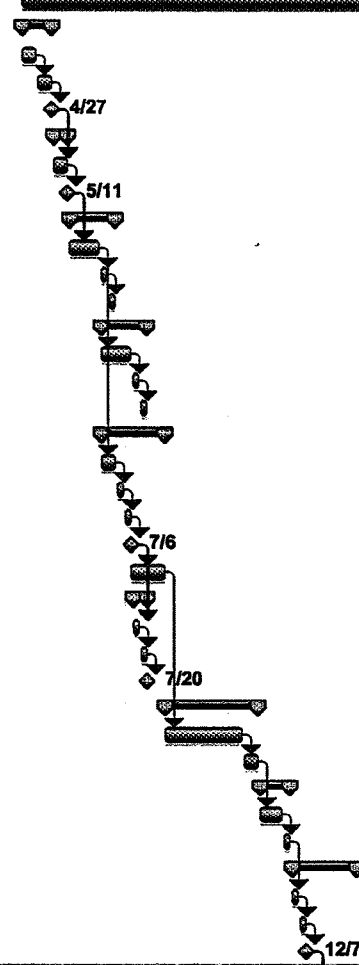


Our schedule shows that upon completion of the final technical studies, ESA would complete the EIR and release it for public review (for a 45-day period) within approximately 18 weeks. If few or no comments are received during the 45-day public review period, ESA will be able to finalize the EIR document within six weeks for use by decision-makers. If a substantial number of comments or a set of complex comments requiring additional analysis is received, then up to three additional weeks would be necessary.

Once the Notice to Proceed is issued, ESA will work with the District to gain a better understanding of their key dates and milestones, and will develop a more detailed concrete schedule.

**Irvine Ranch Water District - Stockdale West Ranch Joint Banking Project EIR
CEQA Documentation Schedule**

ID	Task Name	Duration	Start	Finish	1. 2012 Qtr 2. 2012 Qtr 3. 2012 Qtr 4. 2012 Qtr 1. 2013 Qtr 2.											
					Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
1	CEQA Environmental Review Process	279 days	Mon 4/2/12	Thu 4/25/13	[Gantt bar for task 1]											
2	Project Initiation, Management and Initial Study	20 days	Mon 4/2/12	Fri 4/27/12	[Gantt bar for task 2]											
3	Notice to Proceed-Preparation of Initial Study	2 wks	Mon 4/2/12	Fri 4/13/12	[Gantt bar for task 3]											
4	Prepare Draft EIR Outline	2 wks	Mon 4/16/12	Fri 4/27/12	[Gantt bar for task 4]											
5	Kick-off Meeting	0 days	Fri 4/27/12	Fri 4/27/12	[Gantt bar for task 5]											
6	ESA Submits Data Request	10 days	Mon 4/30/12	Fri 5/11/12	[Gantt bar for task 6]											
7	Review Existing Data	2 wks	Mon 4/30/12	Fri 5/11/12	[Gantt bar for task 7]											
8	Submit Request for Information	0 days	Fri 5/11/12	Fri 5/11/12	[Gantt bar for task 8]											
9	ESA Develops the Project Description	30 days	Mon 5/14/12	Fri 6/22/12	[Gantt bar for task 9]											
10	ESA Prepares the Project Description	4 wks	Mon 5/14/12	Fri 6/8/12	[Gantt bar for task 10]											
11	IRWD/Rosedale Reviews the Project Description	1 wk	Mon 6/11/12	Fri 6/15/12	[Gantt bar for task 11]											
12	ESA Finalizes the Project Description	1 wk	Mon 6/18/12	Fri 6/22/12	[Gantt bar for task 12]											
13	Conduct Technical Studies	30 days	Mon 6/11/12	Fri 7/20/12	[Gantt bar for task 13]											
14	ESA Prepares Technical Studies	4 wks	Mon 6/11/12	Fri 7/6/12	[Gantt bar for task 14]											
15	IRWD/Rosedale Review Technical Studies	1 wk	Mon 7/9/12	Fri 7/13/12	[Gantt bar for task 15]											
16	ESA Finalizes Technical Studies	1 wk	Mon 7/16/12	Fri 7/20/12	[Gantt bar for task 16]											
17	ESA Prepares a Notice of Preparation and Notice of Completion	40 days	Mon 6/11/12	Sun 8/5/12	[Gantt bar for task 17]											
18	ESA Prepares Draft NOP and Distribution List	2 wks	Mon 6/11/12	Fri 6/22/12	[Gantt bar for task 18]											
19	IRWD/Rosedale Reviews Draft NOP and Distribution List	1 wk	Mon 6/25/12	Fri 6/29/12	[Gantt bar for task 19]											
20	ESA Revises NOP	1 wk	Mon 7/2/12	Fri 7/6/12	[Gantt bar for task 20]											
21	NOP Publication	0 days	Fri 7/6/12	Fri 7/6/12	[Gantt bar for task 21]											
22	Circulation of NOP for 30 days	30 edays	Fri 7/6/12	Sun 8/5/12	[Gantt bar for task 22]											
23	Conduct Public Scoping Meeting	10 days	Mon 7/9/12	Fri 7/20/12	[Gantt bar for task 23]											
24	ESA Prepares Meeting Presentation/Materials	1 wk	Mon 7/9/12	Fri 7/13/12	[Gantt bar for task 24]											
25	IRWD/Rosedale Reviews Meeting Presentation/Materials	1 wk	Mon 7/16/12	Fri 7/20/12	[Gantt bar for task 25]											
26	Scoping Meeting	0 days	Fri 7/20/12	Fri 7/20/12	[Gantt bar for task 26]											
27	ESA Prepares Administrative Draft EIR	60 days	Mon 8/6/12	Fri 10/26/12	[Gantt bar for task 27]											
28	ESA Prepares Administrative Draft EIR	10 wks	Mon 8/6/12	Fri 10/12/12	[Gantt bar for task 28]											
29	IRWD/Rosedale provides comments on Administrative Draft EIR	2 wks	Mon 10/15/12	Fri 10/26/12	[Gantt bar for task 29]											
30	ESA Prepares Screencheck Draft EIR	20 days	Mon 10/29/12	Fri 11/23/12	[Gantt bar for task 30]											
31	ESA Prepares Screencheck Draft EIR	3 wks	Mon 10/29/12	Fri 11/16/12	[Gantt bar for task 31]											
32	IRWD/Rosedale provides final comments on Screencheck Draft EIR	1 wk	Mon 11/19/12	Fri 11/23/12	[Gantt bar for task 32]											
33	ESA Prepares Public Draft EIR, Notice of Availability, Notice of Comple	41 days	Mon 11/26/12	Mon 1/21/13	[Gantt bar for task 33]											
34	ESA Finalizes Public Draft EIR	1 wk	Mon 11/26/12	Fri 11/30/12	[Gantt bar for task 34]											
35	Notice, Printing, Mailing	1 wk	Mon 12/3/12	Fri 12/7/12	[Gantt bar for task 35]											
36	Public Draft EIR Publication	0 days	Fri 12/7/12	Fri 12/7/12	[Gantt bar for task 36]											



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Project: Stockdale Water Banking Proj Date: Tue 2/14/12	Task	[Solid Bar]	Milestone	[Diamond]	External Tasks	[Hatched Bar]
	Split	[Dotted Bar]	Summary	[Arrow]	External Milestone	[Diamond]
	Progress	[Thick Solid Bar]	Project Summary	[Arrow]	Deadline	[Down Arrow]



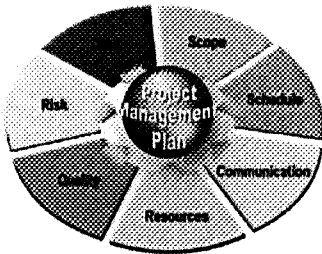
SECTION 5

Cost Estimate

Project Cost

The cost estimate on page 5-2 has been provided based on the project-specific scope of work described in Section 3, Project Understanding and Scope of Work. It is inclusive of all ESA reimbursable expenses, and overhead costs. This has been presented in an hourly format for key staff.

Project Controls and Invoicing



ESA engages in a proactive approach to tracking, reporting and controlling costs so that budgets are managed effectively. The first step in managing project costs is working closely with the client to establish a clear and detailed scope, schedule and budget. The scope of services assures that the project is undertaken with maximum efficiency. ESA's Water Group has maintained a continuity of leadership and team members for its projects. This continuity assures our clients that each project benefits from the efficiencies of a familiar team and receives the budget supervision it deserves. We conscientiously advise our clients when requested to perform services outside the scope of work to protect our clients from cost overruns.

ESA uses the DELTEK electronic time reporting system to monitor and track staff activities for each project and submit monthly invoices in a timely manner. This system allows real-time monitoring of labor costs, which are compiled weekly and are used to measure project performance, percentage of completion and percentage of budget spent. We include a progress report with each monthly invoice, indicating activities performed for active tasks during the invoicing period, expected activities for the next monthly period, and any expected challenges or problems. ESA's invoices always include total approved project budget, amount previously expended, amount expended for the current monthly billing period, and budget remaining.

All ESA work products are subject to a stringent Quality Assurance/Quality Control (QA/QC) Program. The Program consists of multiple levels of review, each requiring a sign-off from the manager in charge. Each work product under this Contract would receive final review from the Project Director and Project Manager prior to submittal to the client. The process provides for clear, traceable lines of responsibility for technical and editorial accuracy and completeness.

COST PROPOSAL
ESA Labor Detail and Expense Summary
Stockdale West Ranch Joint Banking Project

Task Number / Description	T. Barnes G. Almonoth	M. Strauss	J. Jacobus	E. Schestend	L. Rocha	P. Beparel	T. Wong	M. Gray A. Deeg	V. Zalameda J. West			Subtotal	MDD/GR Sr Adml GrphArt	JLR Adml GrphArt	SDG Clinical	Subtotal	Total Hours	Total Labor Price
	Dir II	Dir I	Sr MATA II	TA II	MA II	Sr Assoc II	Sr Assoc I	Assoc 3	Assoc 2	Assoc 1								
Hourly Billing Rate	\$200	\$185	\$175	\$180	\$180	\$135	\$125	\$110	\$100	\$90		\$	105	\$85	\$70			
1 Project Initiation/Management/Initial Study																		
Kickoff meeting/DEIR Outline		4		8								\$ 2,200	4			\$ 420	16	\$ 2,620
Project Meetings		12		30								\$ 7,050				\$ -	42	\$ 7,050
Project Management		8		24								\$ 5,800	8		4	\$ 1,120	44	\$ 6,920
2 Develop a Project Description		4		16				16				\$ 5,360	8	8		\$ 1,520	52	\$ 6,880
3 Prepare a Notice of Preparation (NOP) and NOC		2		8						24		\$ 4,200	2	2	4	\$ 660	42	\$ 4,860
4 Conduct Public Scoping		4		6						4		\$ 2,250	2	4	2	\$ 600	22	\$ 2,850
5 Prepare an Administrative Draft EIR																		
5A Biological and Cultural Resources Technical Studies		4	8	2				100	72	20		\$ 22,630	8	16		\$ 2,200	230	\$ 24,830
5B Administrative Draft EIR																		
Aesthetics				2					4			\$ 750		2		\$ 170	8	\$ 920
Air Quality				2			4	16				\$ 2,800				\$ -	22	\$ 2,800
Biological Resources		2							4			\$ 800				\$ -	6	\$ 800
Cultural Resources			2						16			\$ 2,130				\$ -	18	\$ 2,130
Geology, Soils and Mineral Resources				2	4							\$ 900		2		\$ 170	8	\$ 1,070
GHG and Energy Efficiency							4	8				\$ 1,540				\$ -	12	\$ 1,540
Hazardous and Hazardous Materials					8				4			\$ 1,080				\$ -	12	\$ 1,080
Hydrology and Water Quality		2		4	24	4			4			\$ 6,020		2		\$ 170	40	\$ 6,190
Land Use and Agriculture				2					4			\$ 750		1		\$ 85	7	\$ 835
Noise				2					4			\$ 750				\$ -	6	\$ 750
Transportation and Traffic				2				4	7			\$ 790		1		\$ 85	7	\$ 875
Utilities, Service Systems and Energy				2					4			\$ 750				\$ -	6	\$ 750
Alternatives				8				4				\$ 1,840				\$ -	12	\$ 1,840
Cumulative Effects			4						8			\$ 1,500				\$ -	12	\$ 1,500
Growth Inducement Potential				8					4			\$ 1,800				\$ -	12	\$ 1,800
QA/QC, Production, Mail-out		4		4				4	8			\$ 2,740	4	4	4	\$ 700	28	\$ 3,440
6 Prepare a Screenscheck Draft EIR		4		24	4			16	16			\$ 9,000	4	4	2	\$ 900	74	\$ 9,900
7 Prepare Public Draft EIR, NOA, NOC				16				16	8			\$ 5,360	4	2	8	\$ 1,160	54	\$ 6,520
8 Conduct Public Meeting			4	8					4			\$ 2,250	2	4		\$ 550	20	\$ 2,800
9 Prepare Final EIR and Response to Comments		24		24	8				24			\$ 12,580	4	4	4	\$ 700	88	\$ 13,280
10 Prepare Findings, SOC, MOD		4		8					12			\$ 3,400				\$ -	24	\$ 3,400
11 Prepare a MMRP				4				8				\$ 1,560		1		\$ 105	13	\$ 1,665
Total Hours	62	18	218	48	4	8	24	188	208	20			51	48	28		937	
Subtotals - Labor Hours	\$ 18,400	\$ 1,850	\$ 38,150	\$ 7,680	\$ 640	\$ 1,080	\$ 3,000	\$ 20,680	\$ 20,800	\$ 1,800		\$ 112,080	\$ 6,355	\$ 4,080	\$ 1,960	\$ 11,395		\$ 123,475
Percent of Effort - Labor Hours Only	8.9%	1.1%	23.3%	5.1%	0.4%	0.9%	2.6%	20.1%	22.2%	2.1%			5.4%	5.1%	3.0%		100.0%	
Percent of Effort - Total Project Cost	12.1%	1.4%	28.1%	5.7%	0.6%	0.8%	2.2%	15.2%	15.3%	1.3%			3.9%	3.0%	1.4%			91.0%

ESA Labor Costs	\$ 123,475
3% Communication Fee on Labor Cost	\$ 3,784
ESA Non-Labor Expenses	
CDFG CEQA Filing Fees for 2012	\$ 2,069
Reimbursable Expenses (see Attachment A for detail)	\$ 5,377
ESA Equipment usage (see Attachment A for detail)	\$ 150
Subtotal ESA Non-Labor Expenses	\$ 8,496
TOTAL PROJECT PRICE	\$ 135,675

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**Attachment A
Pricing Proposal Template
ESA Non-Labor Expenses**

Reimbursable Costs

Project Supplies (newspaper ads)	\$	900
Printing/Reproduction	\$	2,033
Document and Map Reproductions	\$	-
Postage and Deliveries	\$	178
Mileage	\$	1,466
Vehicle Rental	\$	350
Lodging	\$	660
Airfare	\$	-
Other Travel Related	\$	-
Database search: Cultural Resources	\$	800
<hr/>		
Subtotal Reimbursable Costs	\$	6,387
15% Fee on Reimbursable Expenses		
Total Reimbursable Costs	\$	6,387

ESA Equipment Usage

Company Vehicle Usage	\$	-
HP Plotter	\$	-
GIS Computer Time	\$	150
Trimble GeoXT GPS	\$	-
Laptop Computers	\$	-
LCD Projector	\$	-
Noise Meter	\$	-
Sample Pump	\$	-
Surveying Kit	\$	-
Field Traps	\$	-
Digital Planimeter	\$	-
Cameras/Video/Cell Phone	\$	-
Miscellaneous Small Equipment	\$	-
<hr/>		
Total Equipment Usage Costs	\$	150

Environmental Science Associates & Subsidiaries 2012 Schedule of Fees

I. Personnel Category Rates

Charges will be made at the Category hourly rates set forth below for time spent on project management, consultation or meetings related to the project, field work, report preparation and review, travel time, etc. Time spent on projects in litigation, in depositions and providing expert testimony will be charged at the Category rate times 1.5.

Executive Director	\$255.00
Senior Director II – Engineer	\$245.00
Senior Director II	\$235.00
Senior Director I – Engineer	\$215.00
Senior Director I	\$215.00
Director – Engineer	\$200.00
Director II	\$200.00
Director I	\$185.00
Senior Managing Associate / Technical Assoc. – Engineer	\$175.00
Senior Managing Associate / Technical Associate II	\$175.00
Senior Managing Associate / Technical Associate I	\$170.00
Managing Associate / Technical Associate – Engineer	\$160.00
Managing Associate / Technical Associate II	\$160.00
Managing Associate / Technical Associate I	\$150.00
Senior Associate II – Engineer	\$145.00
Senior Associate II	\$135.00
Hydrologist II	\$125.00
Hydrologist I	\$115.00
Senior Associate I	\$125.00
Associate III	\$110.00
Hydrographer	\$105.00
Senior Administrative / Graphics	\$105.00
Associate II	\$100.00
Associate I	\$90.00
Environmental Tech II	\$80.00
Environmental Tech I	\$70.00
Administrative / Graphics	\$85.00
Clerical	\$70.00

- (a) From time to time, ESA retains outside professional and technical labor on a temporary basis to meet peak workload demands. Such contract labor may be charged at regular Employee Category rates.
- (b) ESA reserves the right to revise the Personnel Category Rates annually to reflect changes in its operating costs.



II. ESA Expenses

A. Travel Expenses

1. Transportation
 - a. Company vehicle – IRS mileage reimbursement rate
 - b. Common carrier or car rental – actual multiplied by 1.15
2. Lodging, meals and related travel expenses – direct expenses multiplied by 1.15

B. Communications Fee

In-house costs for phone, e-mail, fax, regular postage, walk-up copier, and records retention – project labor charges multiplied by 3%

C. Printing/Reproduction Rates

Item	Rate/page
8 1/2 x 11 b/w	\$0.05
11 x 17 b/w	\$0.10
8 1/2 x 11 color	\$1.00
11 x 17 color	\$1.50
Covers	\$0.50
Binding	\$1.00
HP Plotter	\$25.00
CD	\$10.00
Digital Photography	\$20.00 (up to 50 images)

D. Equipment Rates

Item	Rate/Day	Rate/Week	Rate/Month
General Equipments:			
Vehicles	\$ 40 ^a	\$ 180	
Laptop Computers	50	200	\$ 500
LCD Projector	200	600	
Noise Meter	50		
Electrofisher	300	1,200	
Sample Pump	25		
Surveying Kit	20		
Total Station Set	100	400	
Field Traps	40		
Digital Planimeter	40		
Cameras/Video/Cell Phone	20		200
Miscellaneous Small Equipment	5		
Computer Time (i.e. GIS)	120 ^b		
Trimble GPS	75	350	900
GIS Imagery	2 ^c		
GIS Web Maps			200 ^d
Tablet GPS	100	400	1,000
Laser Level	60		
Garmin GPS or equivalent	25		250
Stilling Well / Coring Pipe (3 inch aluminum)	\$3/ft		

^a Actual project charges will be either the IRS mileage reimbursement rate or the daily rate, whichever is higher.
^b GIS computer time will be charged at \$15.00 per hour.
^c A GIS image is based on 800 x 1,000 pixels. Custom size will be charged accordingly.
^d GIS Web Maps will be charge in \$200 per unit of disk space.

III. Subcontracts

Subcontract services will be invoiced at cost multiplied by 1.15.

IV. Other

There shall be added to all charges set forth above amounts equal to any applicable sales or use taxes legally levied in lieu thereof, now or hereinafter imposed under the authority of a federal, state, or local taxing jurisdiction.

Appendix A Resumes





TOM BARNES

Director, Southern California Water Group

Tom Barnes is the Director of ESA's Southern California Water Group, focused on providing environmental planning and management services for water and wastewater utilities in the Southern California region. Tom has over 19 years experience in NEPA/CEQA analysis, Phase I and II site assessments, hazardous waste site remediation, asbestos management, stormwater management, and health and safety management. He has extensive experience in project management, document preparation and production, permit review and facilitation, data analysis, and field work. His responsibilities have included maintaining close communication with clients, agencies, and sub-contractors to facilitate timely completion of work products.

Relevant Experience

Education

B.A., English, University of California, Berkeley

19 Years Experience

Certifications / Registrations

Registered Environmental Assessor (REA), California, #06152 (1995)

Specialized Training

40-hour OSHA training for Hazardous Waste Operations

8-hour OSHA Certification, Supervisor

Asbestos Site Surveillance Technician, #98-1880

Irvine Ranch Water District (IRWD), Strand Ranch Integrated Banking Project EIR. Irvine, CA. *Project Director.* IRWD and the Rosedale-Rio Bravo Water Storage District (Rosedale) are partners in development of new water banking facilities that would benefit the customers of both districts. The Integrated Banking Project would develop groundwater recharge and recovery facilities on Strand Ranch and annex Strand Ranch into Rosedale's service area. Tom managed the EIR, coordinating input from both IRWD and Rosedale. This EIR was successfully completed and certified in 2008.

IRWD, Baker Water Treatment Plant EIR. Irvine, CA. *Project Director.* The goal of the proposed project is to increase water supply reliability in southern Orange County. The project would upgrade the existing Baker Filtration Plant in the City of Lake Forest, construct additional transmission pipelines, and install a new pump station. Key issues associated with the project include construction-related impacts experienced by neighboring residential areas and impacts to biological and cultural resources. The EIR was successfully completed and certified in 2011.

IRWD, Wells 21, 22, and Tustin Legacy Well 1 Projects, MND/IS/EA. Tustin, CA. *Project Director.* IRWD was awarded federal funds through the American Recovery and Reinvestment Act of 2009 (ARRA) from the Bureau of Reclamation for this project. The project will recover and treat impaired groundwater to augment local water supplies and increase water supply reliability. The MND was certified in February 2010.

Rosedale Rio-Bravo WSD Supplemental Environmental Analysis, Bakerfield, CA. *Project Manager.* ESA reviewed the Rosedale-Rio Bravo Water Storage District's projects, Agreements, and procedures and prepared a report with a matrix that identified the District's water banking activities. The report evaluated the status of CEQA compliance documentation for each of Rosedale's projects, Agreements, and procedure as necessary to clarify compliance with CEQA.

Relevant Experience (Continued)

Kern Delta Water District Kern River Water Allocation Plan, Kern County, CA. *Project Director.* ESA is preparing the EIR for KDWD's Kern River Water Allocation Plan (WAP). The District has developed the WAP to reaffirm its Kern River water rights and propose changes to its historical operations in order to increase diversions of river water to meet underserved demands. The proposed WAP would optimize use within the District service area of Kern River water that previously has been released to junior water rights holders. Previous environmental analysis resulted in a lawsuit, brought by North Kern Water Storage District and the City of Bakersfield against the District, which was recently resolved in the Superior Court of California. The resulting Statement of Decision requires that KDWD evaluate the utilization of the water pursuant to the California Environmental Quality Act (CEQA).

Department of Water Resources East Branch Extension Phase II, San Bernardino County, CA. *Project Manager.* Tom managed the preparation of an EIR for the project that included the installation of a 78-inch pipeline across the Santa Ana River from the Foothills Pump Station to the Crafton Hills Pump Station. Tom managed the EIR process, biological surveys, cultural surveys and reporting, and permitting. The project required Section 7 consultation with the USFWS through the US Corps of Engineers Section 404 permit.

City of Corona Department of Water and Power, Groundwater Management Plan Program EIR, Corona, CA. *Project Director.* Tom is overseeing the preparation of the EIR. ESA is currently preparing a Program EIR for the AB 3030 Groundwater Management Plan (GWMP) prepared by AKM Consulting Engineers and Todd Engineers for the City of Corona Department of Water and Power. ESA is preparing program-level impact analysis for a number of management strategies identified in the GWMP, as well as project-level impact analysis for a few management strategies. The strategies in the GWMP are intended to provide a sustainable groundwater resource to augment the City's potable water supply.

Metropolitan Water District of Southern California On-Call Environmental Services, Los Angeles, CA. *Project Manager.* Tom assigned and oversaw teams to conduct task orders received from the District including CEQA compliance efforts, mitigation monitoring and reporting, and preparation of technical studies. Projects included the **Colorado River Aqueduct Refurbishment Project**, the **Allen-McColloch Pipeline Repair Project MND**, the **Diamond Valley Lake EIR Addendum** for power generation facilities, and the **Skinner Treatment Plant Expansion Project**. The repair of the Colorado River Aqueduct involved shutting down the aqueduct for two weeks and draining the excess water into the Mojave Desert. The Allen-McColloch Pipeline project involved potential impacts to coastal sage scrub habitat. Issues of concern included biological resources (desert tortoise), cultural resources, and construction air emissions.



JENNIFER JACOBUS, Ph.D.

Senior Managing Associate

Dr. Jennifer Jacobus is an ecologist with nine years experience in CEQA/NEPA analysis, including project management, technical research, biological field work, data analysis and natural resource permitting. As a Project Manager in ESA's Southern California Water Group, Dr. Jacobus specializes in the preparation of Environmental Impact Reports (EIRs), Mitigated Negative Declarations (MNDs) and Environmental Assessments (EAs) exclusively for water and wastewater projects, including water supply pipelines, recycled water facilities, wastewater facility expansions, groundwater recharge and reuse, groundwater banking, and water rights. Dr. Jacobus has successfully completed numerous CEQA-Plus documents supporting lead agencies' applications for funding for State Revolving Fund loans through the State Water Resources Control Board. Dr. Jacobus' general project management talents include maintaining close communication with clients, agencies, and subcontractors to facilitate timely completion of work products. Dr. Jacobus also has published scientific articles in the field of fisheries and aquatic ecology.

Education

Ph.D., Aquatic Ecology,
University of Michigan

M.A., Geography, Boston
University

B.A., Economics, Johns
Hopkins University

Years Experience: 9

Specialized Training
Successful CEQA
Compliance, UCLA
Extension, 2005

CWEA Emerging
Contaminants, UCLA
Extension, 2006

Land Use Law & Planning,
UCLA Extension, 2008

Professional Affiliations
Association of Environmental
Professionals

Society for Conservation
Biology

Ecological Society of America

Women's Environmental
Council

Relevant Experience

Irvine Ranch Water District (IRWD), Strand Ranch Integrated Banking Project EIR and Addendum No. 1. Kern County, CA. Project Manager. IRWD and Rosedale-Rio Bravo Water Storage District (Rosedale) are partners in development of new water banking facilities that would benefit the customers of both districts. The Integrated Banking Project developed groundwater recharge and recovery facilities on Strand Ranch and annexed Strand Ranch into Rosedale's service area. Jennifer has contributed to successful organization of this project through its many iterations and changes to the project description. Jennifer evaluated the impacts of the proposed project on agricultural resources and land use. Jennifer also evaluated the cumulative impacts of the proposed project and developed feasible project alternatives.

In addition, Jennifer managed the preparation of an Addendum to the Strand Ranch Integrated Banking Project EIR, which ESA prepared. The Addendum describes proposed modifications to the project description, including allowing conventional (non-organic) farming on Strand Ranch and recharging water offsite within Rosedale for recovery onsite.

Irvine Ranch Water District (IRWD), Baker Water Treatment Plant EIR. Irvine, CA. Project Manager. Jennifer managed the preparation of the EIR for the Baker Water Treatment Plant Project. The goal of the proposed project is to increase water supply reliability in southern Orange County. The project will upgrade the existing Baker Filtration Plant in the City of Lake Forest, construct additional transmission pipelines, and install a new pump station. Key issues associated with the project include construction-related impacts experienced by neighboring residential areas and impacts to biological and cultural resources. The EIR was successfully completed and certified in 2011.

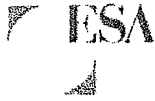
Relevant Experience (Continued)

IRWD, Wells 21, 22, and Tustin Legacy Well 1 Projects, MND/IS/EA. Tustin, CA. Project Manager. Jennifer managed the preparation of the Initial Study/Environmental Assessment and successfully met aggressive schedule requirements for federal funding. IRWD was awarded federal funds through the American Recovery and Reinvestment Act of 2009 (ARRA) from the Bureau of Reclamation for this project. The project will recover and treat impaired groundwater to augment local water supplies and increase water supply reliability. The proposed project would install wellhead equipment on two existing groundwater wells (Wells 21, 22), drill one production well (Well TL-1), and construct a new water treatment plant and water transmission pipelines in the cities of Tustin and Irvine. The MND was certified in February 2010.

IRWD Biosolids Handling and Energy Recovery Project EIR. Irvine, CA. Project Manager. Jennifer is managing the ESA team to prepare the EIR for Irvine Ranch Water District's Biosolids Handling and Energy Recovery Project. IRWD would construct new facilities at the Michelson Water Recycling Plant (MWRP) to process biosolids onsite rather than sending them to Orange County Sanitation District (OCS) for processing and disposal. The project would produce Class A pelletized biosolids that could be reclaimed for beneficial use as a fertilizer or biofuel. The project also would capture biogas during the anaerobic digestion process that would be used to generate electricity onsite using energy recovery facilities, such as a microturbine. Publication of the Draft EIR is expected in April 2012.

Kern Delta Water District (KDWD) Kern River Water Allocation Plan, Kern County, CA. Project Manager. ESA is preparing the EIR for KDWD's Kern River Water Allocation Plan (WAP). The District has developed the WAP to reaffirm its Kern River water rights and propose changes to its historical operations in order to increase diversions of river water to meet underserved demands. The proposed WAP would optimize use within the District service area of Kern River water that previously has been released to junior water rights holders. Previous environmental analysis resulted in a lawsuit, brought by North Kern Water Storage District and the City of Bakersfield against the District, which was recently resolved in the Superior Court of California. The resulting Statement of Decision requires that KDWD evaluate the utilization of the water pursuant to the California Environmental Quality Act (CEQA).

LACWWD40 Phase 2 Antelope Valley Regional Recycled Water Project MND/EA. Palmdale, CA. Project Manager. Jennifer is working with Los Angeles County Waterworks Division No. 40 (LACWWD40) and the engineering design team to prepare a MND/EA for Phase 2 of the Regional Recycled Water Project. ESA prepared the Program EIR for the project in 2008. Phase 2 would construct a portion of the regional backbone system primarily within the City of Palmdale. LACWWD40 is seeking funding for the project from the U.S. Environmental Protection Agency. ESA is coordinating with USEPA in preparation of the joint MND/EA to fulfill NEPA funding requirements.



GREGORY C. AINSWORTH

Director, Southern California Biological Resources Group

Gregory Ainsworth directs the Southern California Biological Resources Group and is a certified arborist. He has 11 years of experience managing projects and preparing reports related to the Endangered Species Act (ESA), California Environmental Quality Act (CEQA), biological assessments, constraints and due diligence studies, mitigation feasibility studies, jurisdictional permit packages per the Clean Water Act (CDFG Streambed Alteration Agreement and Section 401/404 Permit Applications), and other resource planning/permitting (e.g., Conditional Use Permits and Oak Tree Permits). He has overseen and performed data collection and analysis including focused surveys for plants, animals (large and small mammals [including bats], reptiles, amphibians, and nesting birds), sensitive plant communities and habitats, and tree surveys. Greg has established internal field survey protocols and data collection methodologies and conducted and managed construction monitoring.

Relevant Experience

Education

M.A. Environmental Planning,
California Polytechnic State
University, San Luis Obispo

B.S. Environmental
Horticulture Science,
California Polytechnic State
University, San Luis Obispo

Years Experience: 11

Certifications

International Certified Arborist
(Cert# WE 7473A)

California Department of Fish
and Game Scientific
Collection Permit

Southwestern Willow
Flycatcher Section
10(a)(1)(A) Recovery Permit
Pending)

Certified wetland delineator,
Wetland Delineation &
Management (ACOE,
#2128), 2003

Professional Affiliations

Oak Woodland Habitat
Conservation Strategic
Alliance

International Society of
Arboriculture

Association of Environmental
Professionals

The Surfrider Foundation,
Ventura Chapter

The Wildlife Society

Irvine Ranch Water District, Baker Regional Water Treatment Plant MND. Irvine, CA. Senior Biologist. Greg prepared the biological resource section of this Initial Study and MND for the Irvine Ranch Water District (IRWD) Baker Regional Water Treatment Plant (RWTP) project. The goal of the proposed project is to increase water supply reliability in southern Orange County by creating redundancy of treatment system capacity and distribution infrastructure for potable water in the event of facility outages due to routine maintenance or unforeseen emergencies. Greg conducted a rare plant survey, habitat assessment for potentially occurring special-status species, mapped plant communities and sensitive habitats, and assessment potential mitigation options.

OCS D Newport Trunk Sewer Biological Mitigation Monitoring and Reporting Program. Newport, CA. Senior Biologist. Greg provided construction monitoring efforts for sensitive biological resources in the area of the Santa Ana River Marsh. Greg assisted in the demarcation of boundaries for construction through the marsh area and conducted breeding surveys for the federally and state listed Belding's savannah sparrow. He also provided training for the construction workers to ensure they are aware of their responsibilities with regard to protecting sensitive species and habitats in the area.

Las Virgenes Municipal Water District, April Road Reservoir Environmental Constraints Analysis. Agoura Hills, CA. Senior Biologist. Greg is preparing a Biological Constraints Analysis for the proposed April Road Recycled Water Reservoir Site for the Las Virgenes Municipal Water District. The purpose of the assessment is to identify fatal flaws of the site and to characterize key biological resource hurdles. His analysis includes an assessment of potential incompatibilities with Los Angeles County's Sensitive Ecological Areas (SEA), impacts to wildlife migration corridors and sensitive plants and wildlife, and potential mitigation options. Greg prepared a draft oak tree appraisal

Relevant Experience (Continued)

to assess the potential cost of impacting approximately 200 coast live oak trees and conducted a rare plant survey of the proposed project site.

California Department of Water Resources (DWR) Arroyo Toad Monitoring Plan, Los Padres National Forest, CA. *Biological Technician and Technical Analyst.* Greg is providing three consecutive years' of biological monitoring and technical analysis for DWR's monitoring program for the federally endangered arroyo toad and other special-status species including California red-legged frog, southwestern pond turtle, and two-striped garter snake in middle Piru Creek in the Los Padres National Forest. Greg managed the implementation of the U.S. Fish and Wildlife Service-approved monitoring plan, and is conducting field surveys to monitor arroyo toad reproductive success, habitat quality, and hydrological features on middle Piru Creek.

Department of Water Resources, East Branch Enlargement Project, Los Angeles and San Bernardino Counties, CA. *Senior Biologist.* Greg conducted habitat assessments for special-status plant and animal species in proposed construction areas, as well as, presence/absence surveys for burrowing owls. He is currently conducting a floristic inventory and rare plant survey within the Department's easement areas. ESA has conducted technical studies to complete the EIR and has begun negotiating permit requirements and restoration planning with resource agencies including the USACE, RWQCB, and USFWS.

California Department of Water Resources On-Call Environmental Planning Services, East Branch Enlargement Project, Riverside County, CA. *Senior Biologist.* Greg conducted habitat assessments for special-status plant and animal species in proposed construction areas, as well as, presence/absence surveys for burrowing owls. He is currently conducting a floristic inventory and rare plant survey within the Department's easement areas. The East Branch Enlargement project is an EIR for the enlargement of 100 miles of the California Aqueduct from the Tehachapi split through the Antelope Valley and Mojave River Basin to Silverwood Reservoir. The project would increase conveyance capacity to Southern California State Water Contractors served by the aqueduct including Metropolitan Water District of Southern California. ESA has conducted technical studies to complete the EIR and has begun negotiating permit requirements and restoration planning with resource agencies including the USACE, RWQCB, and USFWS.

Metropolitan Water District City of La Verne Tree Ordinance Compliance and Breeding Bird Surveys, La Verne, CA. *Senior Biologist.* Greg conducted a significant tree survey, prepared a tree report, and submitted a tree permit to the City of La Verne for the Metropolitan Water District Weymouth Treatment Plant Main Line Project. Greg conducted a preconstruction breeding bird and nest survey for the proposed project and identified appropriate buffers to avoid impacts to breeding birds.



POONAM BOPARAI

Senior Associate II

Poonam Boparai has over seven years of experience conducting air quality and greenhouse gas (GHG) assessments for land use development, transportation, energy, and infrastructure projects. She has a strong educational background specializing in air quality management that she has successfully applied in her professional experience. Poonam has a Master's degree in Environmental Engineering from University of Illinois at Urbana-Champaign. She is proficient in conducting emissions inventories and dispersion modeling using a variety of U.S. Environmental Protection Agency (EPA) and California Air Resources Board (ARB)-approved models (e.g., AERMOD and URBEMIS). She also possesses a solid understanding of air quality and GHG protocols promulgated by ARB, the California Climate Action Registry (CCAR), and California air districts. She has worked on multiple major projects including city and county General Plans; Specific Plans; school expansions; residential, commercial, and industrial development; energy projects; freeway expansions; GHG inventories; and Climate Action Plans.

Education

M.S., Environmental Engineering (Focus: Air Quality Engineering and Science), University of Illinois, Urbana-Champaign

Bachelor of Engineering, Chemical Engineering, Birla Institute of Technology and Science, Pilani, India

7 Years Experience

Professional Affiliations

Member of Association of Environmental Professionals

Air and Waste Management Association

American Association for Aerosol Research

Relevant Experience

California Air Pollution Control Officers Association, Development of Greenhouse Gas Mitigation Strategies Contract Support, CA. *Primary Author, Air Quality and Climate Change Specialist.* CAPCOA initiated the project to provide a comprehensive list of mitigation measures currently in practice and under study that would reduce GHG emissions associated with land use development, planning-level infrastructure projects, and goods movement. Poonam Boparai performed literature reviews to develop a full description of each measure and identify applicable project types and emission sources. The document also assessed the feasibility of each measure in terms of its reduction effectiveness, technological and logistical availability, and economic cost. By presenting example projects, the analysis also demonstrated how implementation of measures into project design and land use planning would result in quantifiable reductions in GHG emissions. Categories of measures include transportation and circulation, parking, commercial and residential building design, neighborhood layout and density, land use planning, mixed-use development, energy efficient building components, construction practices, social-awareness measures, and planning policy. A majority of the measures are consistent with the concepts of new urbanism and neo-traditional development. This work was presented in CAPCOA's *CEQA & Climate Change* document released January 2008.

Bay Area Air Quality Management District, CEQA Guidelines Update, CA. *Air Quality and Climate Change Specialist.* Poonam Boparai was the primary author of the "Operational-Related Impacts" chapter of the BAAQMD CEQA Guidelines, updated in 2010. As part of the project, Poonam developed screening criteria for a project's operational emissions, provided quantification methodologies for estimating operational emissions, and compiled mitigation measures and associated reduction metrics to mitigate a project's operational impacts. The updated CEQA Guidelines address recent changes in air quality standards for ozone and particulate matter from the State of California and EPA. The purpose of the CEQA Guidelines

Relevant Experience (Continued)

is to assist lead agencies in evaluating air quality impacts of projects and plans proposed in the San Francisco Bay Area Air Basin (SFBAAB). The Guidelines provides BAAQMD-recommended procedures for evaluating potential air quality impacts during the environmental review process consistent with CEQA requirements. The updated Guidelines supersede the 1999 version.

Sacramento Metropolitan Air Quality Management District, CEQA Guidelines Update, CA. Air Quality and Climate Change Specialist. Poonam Boparai was the primary author of the "Operational Criteria Air Pollutant and Precursor Emissions" chapter of the SMAQMD's *Guide to Air Quality Assessment in Sacramento County* (Guide), updated in 2009. As part of the project, Poonam outlined analysis expectations, provided methodologies for estimating operational emissions, developed screening criteria for a project's operational emissions, and compiled mitigation measures and associated reduction metrics to mitigate a project's operational impacts. The Guide provides methods for the analysis and review of air quality impacts from land use development projects being considered within the boundaries of the Sacramento Metropolitan Air Quality Management District. The updated Guide supersedes the 2004 version.

City of Buena Park, Beach & Orangethorpe Mixed Use Specific Plan, Buena Park, CA. Air Quality and Climate Change Specialist. Poonam prepared the air quality and climate change analyses for the proposed mixed-use development in the city of Buena Park. The proposed Specific Plan would allow for an urban mixed-use development on the 12.75-acre project site. The Specific Plan does not provide a specific land use concept; rather, it identifies a number of land use concepts that demonstrate how development allowed under the Plan could be implemented on the site. Construction of the proposed development was expected to occur over two phases. Key issues included the localized effects on the adjacent sensitive receptors due to construction of the proposed project. Poonam evaluated construction- and operations-generated emissions using URBEMIS to determine the level of significance and recommended mitigation measures where applicable. She assessed criteria air pollutant concentrations during construction at the project boundary using the EPA-approved Industrial Source Complex (ISC) model. Poonam developed a methodology for quantification of GHG emissions and evaluation of the project's incremental cumulative contribution to global climate change in absence of any adopted or recommended guidance or significance thresholds from federal, state, or local agencies.

City of San Bernardino, Energy Efficiency and Conservation Strategy, San Bernardino, CA. Climate Change Specialist. The City of San Bernardino is preparing an Energy Efficiency and Conservation Strategy (EECS), pursuant to requirements of the federal Energy Efficiency and Conservation Block Grant (EECBG) program. The City has been allocated a direct formula EECBG grant and is preparing an EECS that will ensure the most effective implementation of the funds towards providing lasting environmental and economic benefits for the City. Focusing on implementable strategies and action items, Poonam prepared a baseline GHG inventory and future projections for the City's municipal operations based on the Local Government Operations Protocol (LGOP). The City is also building on the EECS and GHG inventory to develop a Climate Action Plan.



MADELEINE BRAY, RPA

Cultural Resources Project Manager

Madeleine Bray is an archaeologist and cultural resources project manager with 11 years of survey, excavation and mapping experience related to historically significant sites. She has managed numerous projects in California in compliance with CEQA and with Section 106 of the National Historic Preservation Act, including Phase I surveys, site significance testing and evaluation, mitigation recommendations, and archaeological construction monitoring. She has worked extensively throughout southern California, with particular experience in the context of the Mojave and California deserts, historic mining sites, and historic artifacts. She is currently involved in several fieldwork efforts in Los Angeles County. Internationally, she has participated in the excavation of a Roman temple in Omrit, Israel, and in the pedestrian and geophysical survey of Sikyon, an important urban site in Greece.

Relevant Experience

Education

M.A., Archaeology, University of California, Los Angeles

B.A., Classical Archaeology, Macalester College, Saint Paul, Minnesota

Years Experience: 11

Professional Affiliations

Society for American Archaeology

Register of Professional Archaeologists

Qualifications

Meets Secretary of the Interior's Standards

Riverside County Certified

CA State BLM Permitted

Certified in CA BLM Protocol

Continuing Education

ACHP Section 106 Basics seminar

Riverside County certification course, 2007 and 2009

Irvine Ranch Water District (IRWD), Tustin Wells MND/EA, Orange County, CA. *Technical Analyst.* IRWD was awarded federal funds from the U.S. Bureau of Reclamation through the American Recovery and Reinvestment Act of 2009 for this project. The project will recover and treat impaired groundwater to augment local water supplies and increase water supply reliability. The proposed project would install wellhead equipment on two existing groundwater wells (Wells 21, 22), drill one exploratory well (Well TL-1), and construct a new water treatment plant and water transmission pipelines in the cities of Tustin and Irvine. ESA aided in coordination with the Bureau and successfully met the aggressive schedule requirements for federal funding. The MND was certified in February 2010. Madeleine conducted a Phase I cultural resources study for the Tustin Wells Project. She participated in the cultural resources survey and assisted in writing a technical report in support of a MND/EA.

Los Angeles County Waterworks District 40 (LACWWD40) Regional Recycled Water Project, Phase 2, Palmdale, CA. *Cultural Resources Project Manager.* ESA was retained by LACWWD40 in 2009 to prepare an Initial Study/Environmental Assessment and cultural resources technical study for Phase 2 of the Regional Recycled Water Project. Madeleine is preparing a Phase I archaeological study for the project, including archival research, Native American contact and coordination, and pedestrian archaeological survey, in compliance with CEQA and Section 106 of the National Historic Preservation Act. In 2010 and 2011, a team of ESA archaeologists performed a pedestrian survey of the 5.25 linear mile project area and documented archaeological sites encountered. Nine cultural resources were documented during the survey; however, because the project APE was narrowed after the survey, only four are located within the current project area.



MICHAEL G. BURNS, CHG, CEG, PG, REA

Geologist

Mr. Burns is a highly skilled and effective project manager with over 30 years of experience in the environmental and geological sciences. He provides expert services in planning and permitting, site characterization, Superfund sites, Remedial Investigation/Feasibility Studies (RI/FS), waste management, litigation support, property assessments, development and redevelopment, soil and groundwater remediation, and water rights. His projects include industrial and manufacturing facilities, airports, levees, landfills, refineries, research and development facilities, hazardous waste management, vineyards, and commercial properties.

Education

B.S., Geology, San Jose State University

30 Years Experience

Certifications /Registrations

Certified Hydrogeologist (CHG), No.280, CA, 1995

Certified Engineering Geologist (CEG), No.1846, CA, 1993

Professional Geologist (PG), No.4532, CA, 1989

Registered Environmental Assessor I (REA I), No.570, CA, 1988

Specialized Training / Continuing Education

Managed Aquifer Recharge Symposium, NWRRI, 2011

CEQA Update Conference, CLE International, 2010

Development & Preservation of Water Rights, Sheppard Mullins et al, 2009

40-Hour OSHA Hazardous Materials & Waste Operations, Current

30-Hour OSHA Constriction Safety, 2010

Relevant Experience

Cadiz Groundwater Conservation, Recovery, and Storage Project and Programmatic EIR, Cadiz, CA. *Geologist, Hydrologist, and Hazardous Materials Analyst.* Mr. Burns is evaluating geologic, hydrologic, and hazardous materials impacts for the EIR for the proposed Cadiz Groundwater Conservation, Recovery, and Storage Project. The Project is a groundwater recovery, water conservation and conjunctive use storage project that would actively manage the groundwater basin within the Fenner and Orange Blossom Watersheds in the eastern Mojave Desert for the purposes of developing a new reliable water supply and storage facility for the Santa Margarita Water District (SMWD) and other participating water agencies. The Conservation and Recovery component would recover up to 32,500 acre-feet per year water that would otherwise be lost to evaporation in two dry lakes. The Storage and Recovery component would actively manage the groundwater basin as a conjunctive use project. Up to 1 million acre feet of water originating from the Colorado River, directly or by exchange, would be conveyed to the watershed from the CRA through the pipeline constructed under the Conservation and Recovery Component of the project. This water would be recharged into the aquifer system via spreading basins and recovered when needed.

North Bay Water Recycling Program, (also known as the North San Pablo Restoration and Reuse Project). *Geologist.* Mr. Burns evaluated geologic and cultural resources along certain proposed pipeline alignments that may have been in or near recorded cultural resources. The Project is proposed to promote the expanded beneficial use of recycled water in the North Bay region to:

- Offset urban and agricultural demands on potable supplies;
- Enhance local and regional ecosystems;
- Improve local and regional water supply reliability;
- Maintain and protect public health and safety;
- Promote sustainable practices;
- Give top priority to local needs for recycled water; and
- Implement recycled water facilities in an economically viable manner.

Marin County Flood Control, Novato Creek CEQA Mitigated Negative Declaration, Novato, CA. *Project Manager, Geologist, Hydrologist Analyst.* Mr. Burns provided planning and permitting services to assist Marin County Flood Control with evaluating and preparing CEQA documents for the Novato Creek Flood Control Dredging Project within Novato Creek and its tributaries in Novato. The Project was designed to remove an estimated 70,000 cubic yards of accumulated silt from the creek beds of Novato Creek, Warner Creek, and Arroyo Avichi Creek to restore originally-designed flood control capacity. Mr. Burns oversaw the baseline surveys for wetland delineation, biological assessment, geotechnical conditions, and potential disposal sites, preparation of the mitigated negative declaration, and evaluation of required permits.

Tin Cross Vineyards Water Rights, Cloverdale, California - From 2007 to Present. *Project Manager and Hydrologist.* Mr. Burns is providing planning and permitting services for Tin Cross Vineyards to establish and maintain their water rights. The diverted and stored water is used for irrigation and frost protection. He is providing the baseline environmental documentation, water availability analysis/cumulative flow impairment index, biological survey, initial study, and mitigated negative declaration per CEQA and state water rights guidelines.

Frey Vineyards Water Rights, Redwood Valley, CA. *Project Manager and Hydrologist.* Mr. Burns provided planning and permitting services to assist Frey Vineyards in establishing and maintaining their water rights. The diverted and stored water is used for irrigation and frost protection. He provided the environmental baseline documentation, initial study, and mitigated negative declaration per CEQA and state water rights guidelines.

Masut du Ho Vineyards Water Rights, Redwood Valley, CA. *Project Manager and Hydrologist.* Mr. Burns provided planning and permitting services to assist Masut du Ho Vineyards in establishing and maintaining their water rights. The diverted and stored water is used for irrigation and frost protection. He provided the environmental baseline documentation, initial study, and mitigated negative declaration per CEQA and state water rights guidelines.



PAUL MILLER, REA

Senior Managing Associate

Paul is an environmental professional with more than 25 years of experience in providing services and products to government agencies and private sector corporations. His technical areas of expertise include energy, integrated waste management, air quality and noise analyses. Since 2002, he has been ESA's West Coast coordinator for ESA's air quality and noise programs. The air quality staff primarily prepare Air Quality Sections under CEQA and NEPA. Air Quality work includes review of background air quality data (from the CARB ADAM database), estimates of construction and operation emissions, and development of mitigation measures. The air quality staff use several modeling tools to predict emissions and resultant concentrations; including CALINE4, SCREEN3, ISC3, URBEMIS2007 and EMFAC emission estimates. The group also has conducted several recent reviews of the health risks of diesel particulate matter. Noise staff review of background noise data (from City and County General Plan Noise Elements and Noise Ordinances), estimates of construction and operation noise levels and potential noise impacts, and development of mitigation measures. Noise measurements of the existing setting are collected for each project and generally include a combination of short term noise measurements and 24-hour measurements. The group uses several modeling tools to predict future noise levels including FHWA noise prediction models. ESA's noise staff also conducts architectural acoustics.

Education

M.S., Zoology and Entomology, Colorado State University
B.A., Zoology, Miami University
Registered Environmental Assessor # 00926

25 Years of Experience

Certifications

Certificate of Integrated Waste Management, San Francisco State University
Certified Asbestos Building Inspector and Management Planner under the EPA's AHERA programs

Specialized Training

40-hour health and safety training course, complying with OSHA regulations for hazardous waste site activities, and annual 8-hour updates

Professional Affiliations

Air and Waste Management Association; Board Member
Mother Lode Chapter of Golden West Section

Association of Environmental Professionals

Relevant Experience

Waterman Water Treatment Plant (WTP) Expansion and Modernization Project Biological & Noise Study, Fairfield, CA. *Noise Analyst.* ESA analyzed biological resources, impacts, and mitigations, as well as potential noise impacts to the City of Fairfield's Waterman Water Treatment Plant (WTP) Expansion and Modernization Project. Paul conducted short-term and long-term noise measurements to determine the effects of the existing plant on adjacent residences. Paul also prepared projection of future noise levels based on changes proposed at the project site.

March Joint Powers Authority Air Quality On-Call Consulting, Riverside County, CA. *Noise Task Leader.* Paul has experience at the March Business Center. Early in 2007, he helped with final comments in the noise sections of the Initial Studies for the Project Garden (a 208,000 square-foot food processing center) and Project Sunfield (a 179,500 square-foot food processing center) both within the boundaries of the March Business Center. Paul appeared at the hearing of the March Joint Powers Authority (JPA) to respond to noise comments and concerns for these projects.

Stockton Delta Water Supply Project Feasibility Study, EIR, and Permitting. *Senior Air Quality and Noise Analyst.* ESA supported the City of Stockton in the development, feasibility assessment, CEQA EIR, and permitting for the Delta Water Supply Project. The project involves construction of a new delta water intake, transmission pipelines from the Delta inland to a new treatment plant, and new distribution pipelines to connect to the city's water

system. Paul helped develop the work plan for the air quality and noise analyses and reviewed the draft air quality and noise sections.

Wildhawk Groundwater Supply Facilities Project. *Noise Analyst. ESA* performed a noise impact analyses study to determine the potential noise impacts that would result from the construction and operation of the proposed Wildhawk Groundwater Supply Facilities Project. The Proposed Project consists of the design and construction of drinking water supply facilities to serve the Wildhawk Estates and surrounding areas in Sacramento County. Paul collected background noise measurements at the project site and also noise measurements at an existing facility that uses similar pumps. The estimated noise levels were compared to Sacramento County standards and noise mitigation measures were identified.

El Dorado Irrigation District Folsom Lake Temperature Control Device, Folsom, CA. *Senior Noise Analyst. ESA* prepared an Environmental Impact Report for the El Dorado Irrigation District (EID) on it Folsom Lake Temperature Control Device (TCD) Project. The primary objective of the Proposed Project is to construct a TCD that would allow EID to meet its current and future water service demands, in addition to providing EID with the ability to selectively withdraw water from different lake elevations. Paul was task leader for the collection of short-term noise measurements and also modified the noise meters to collect week-long noise measurements, with a one-hour resolution, at three locations.

Novato Sanitary District Master Plan EIR. *Air Quality and Noise Reviewer.* ESA provided environmental services for the Novato Sanitary District Master Plan, which will examine various alternatives to meet near term and buildout capacity needs. The District currently maintains two aged treatment plants and a bay outfall that are nearing the end of their design life, and will not provide the treatment and disposal capacity necessary to meet buildout within the Novato service area. Paul made noise measurements at both plants to identify any noise sources at the treatment plant that could affect adjacent residential uses.

California Energy Commission (CEC) Power Plant Environmental Reviews. *Technical Reviewer.* Paul was a technical reviewer in 2001 for aspects of the noise assessments for several proposed power plants with applications before the CEC. He prepared the staff noise assessment (as staff assistant to the CEC) for Phase I of the United Golden Gate Power Plant proposed at San Francisco International Airport (50 MW, simple cycle). Paul also reviewed applicant noise reports (data adequacy review and follow-up data requests) for the Sunrise Power Project II Amendment and the Ocotillo Energy Project. He has also given noise feedback at preapplication meetings and reviewed noise compliance filings for the Procter & Gamble Cogeneration Facility. He has been trained for expert testimony by CEC legal staff.



LAURA ROCHA, CPSWQ, QSD/QSP

Managing Associate

Laura Rocha is a Managing Associate in ESA's Southern California Water Group, providing environmental management services, with a focus in water quality/water resources in the Southern California region. She is a Certified Professional in Storm Water Quality (CPSWQ) and a Qualified Storm Water Pollution Prevention Plan (SWPPP) Developer/Practitioner. In addition, Laura contributes to a variety of tasks related to the preparation and management of environmental documents, including technical reports, Environmental Impact Reports (EIRs), Mitigated Negative Declarations (MNDs) and Environmental Assessments (EAs), pursuant to the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) for commercial, residential, mixed-use, and water infrastructure projects. Laura is known for her ability to provide quality work products in a timely manner.

Education

M.S., Environmental Studies;
California State University,
Fullerton.

B.A., Environmental Studies
and Psychology; University of
California Santa Barbara.

8+ Years of Experience

Professional Affiliations

California Stormwater Quality
Association, CASQA

Water Environment Research
Foundation, WERF

Relevant Experience

On-Call Contract Projects

Santiago Canyon Booster Pump Station Permanent Generators Project, Orange County, CA. *Project Manager.* Laura was responsible for managing preparation of the biological and cultural resources technical studies for the project. In addition, Laura served as the primary author for the Initial Study/Mitigated Negative Declaration that was prepared for the project and certified by IRWD. The project was replacement of the portable generators at five Booster Pump Stations in Santiago Canyon to improve the reliability of the water system during power outages, particularly when the outages are caused by fires in the canyons. The project also required approval from the USFS. As part of the USFS approval, Laura coordinated with and prepared the environmental documents on behalf of the USFS in support of a Categorical Exclusion.

Addendum No. 4 to the Environmental Impact Report (EIR) for the Irvine Desalter Project, Orange County, CA. *Project Manager.* Laura was responsible for managing preparation of Addendum No. 4 for the Irvine Desalter Project (IDP). The IDP is a joint groundwater restoration project by the Orange County Water District (OCWD) and IRWD to clean up the groundwater in the vicinity of the former El Toro Marine Corps Air Station (MCAS). The IDP consists of three separate treatment facilities, the Potable Treatment Plant (PTP) and two nonpotable treatment plants. Laura was the primary author for Addendum No. 4 which analyzed the replacement of Well 78, which functions as a non-potable well owned and operated by IRWD, located at the intersection of Warner Avenue/Culver Drive. The Addendum analyzed the impact of well rehabilitation, wellhead facilities, and piping modifications.

Colorado Lagoon Restoration Project, Long Beach, CA. *Water Quality Task Leader.* Laura assisted in preparation of an Environmental Impact Report (EIR) for the Colorado Lagoon Restoration Project, to evaluate the environmental

Relevant Experience (Continued)

impacts that would result from water quality, habitat, and recreation improvements to the Colorado Lagoon and adjacent areas. The Lagoon is an approximately 11.7 ac tidal water body that is connected to Alamitos Bay and the Pacific Ocean through an underground tidal culvert to Marine Stadium. The water and sediment quality within the Lagoon are substantially degraded. The purpose of the project was to restore the site's ecosystem, provide enhanced recreation facilities, and improve water and sediment quality while managing storm water. The project features included removal of contaminated sediment, re-contouring Lagoon banks, storm water upgrades, vegetated bioswales, habitat restoration, and a perimeter walking trail. Phase two of the project included construction of an open tidal channel connection the Lagoon with Marine Stadium. Laura served as the primary author for addressing impacts to hydrology and the water quality of Colorado Lagoon during operation and construction of the project. The EIR was certified by the City Council in October, 2008.

Laguna Canyon Road Stockpiles Removal Project, Orange County, CA. *Project Manager.* Laura was responsible for managing preparation of the biological and cultural resources technical studies for the project. In addition, Laura served as the primary author for the Initial Study/Mitigated Negative Declaration that was prepared for the project and certified by the County. The project removed vegetated stockpiled material that was left on the site after construction of the SR-133-Laguna Canyon Road Widening and Realignment project (from Interstate 405 [I-405] to SR-73).

Plummer Park Improvement Project Environmental Impact Report, West Hollywood, CA. *Project Manager.* Laura managed preparation of the EIR to provide environmental clearance of all the proposed projects and programs listed in the Plummer Park Master Plan, including the demolition of Great Hall/Long Hall (historic resource). Laura oversaw the preparation of several technical reports, including biological resources, traffic, air quality, and noise. Laura was also responsible for overseeing preparation of the EIR that was certified by the City on May 17, 2010. Plummer Park is approximately 8.5 ac in overall area, surrounded on three sides by residential neighborhoods and on its south side by Santa Monica Boulevard. In an October 2008 Historic Resources Assessment of Plummer Park, two historic resources were identified; the Great Hall/Long Hall complex and the Fiesta Hall. Both buildings are considered historical resources for the purposes of CEQA. In 2004, the City adopted a Master Plan for the redevelopment of Plummer Park, which includes the demolition of Great Hall/Long Hall to provide additional park space for City residents.



ERIC SCHNIEWIND

Technical Associate - Geologist

Eric has over 16 years of experience as a geologist, hydrogeologist, hydrologist, and hazardous materials specialist in environmental consulting. His technical background includes geotechnical engineering, soil, and groundwater contamination investigations, environmental remediation planning and implementation, and Phase I site assessments. In addition, Eric has been involved in fault trace identification and landslide hazard studies. His general responsibilities include providing geological, geotechnical, and hydrogeological technical support for National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) documents such as Environmental Impact Reports (EIRs) and Environmental Impact Statements (EISs), and Environmental Assessments (EAs).

Relevant Experience

Education

B.A., Geological Sciences,
UC Santa Barbara

16 Years of Experience

Irvine Ranch Water District, Strand Ranch Integrated Banking Project EIR, Kern County, CA. *Geologist and Hydrogeologist.* Eric provided technical analysis for the Hydrology section of the EIR that involved extensive regional characterization of ASR operations. The principal technical issues involved in this groundwater banking project included potential impacts of constructing groundwater recharge ponds, installing new groundwater extraction wells, pumping effects on neighboring wells, and potential impacts on groundwater supplies.

West Kern Water District Groundwater Recharge Project EIR, Kern County, CA. *Geologist and Hydrogeologist.* Eric provided technical analysis for the Groundwater section of an EIR for a project that would provide additional groundwater recovery capabilities combined with aquifer storage and recovery (ASR) operations. Technical issues involved included expansion of groundwater pumping on aquifer that is currently in overdraft and recovering previously banked groundwater. Other issues involved characterizing regional water quality impairments.

Kern Delta Water District Kern River Water Allocation Plan, Kern County, CA. *Hydrogeologist.* Eric provided technical analysis for Hydrology and Groundwater Resources on the EIR for the Kern Delta Water District's Water Utilization Program. The District has developed the Water Utilization Program to reaffirm its Kern River water rights and establish reasonable and beneficial use of about 30,000 acre-feet per year. The proposed program would optimize use within the District service area of Kern River water that previously has been released to subordinate water rights holders. The project would potentially result in decreased access to Kern River water supply by subordinate water rights holders. The technical analysis involved an evaluation of potential impacts to water levels based on presumed alterations to groundwater resource management by these subordinate water rights holders that would likely require additional groundwater pumping in this basin which is in overdraft.

Relevant Experience (Continued)

Palmdale Water Reclamation Plant 2025 Facilities Plan Program EIR, Palmdale, CA. *Geologist.* Eric prepared the geology and mineral resources sections of the EIR that included analysis of potential fault hazards, encroachment on state identified aggregate mineral resources, and liquefaction hazard areas. ESA was selected by the County Sanitation Districts of Los Angeles County, District 20 to prepare an alternatives screening analysis and EIR for the Palmdale Water Reclamation Plant 2025 Facilities Plan.

Sandy River Pipeline Project, Portland, OR. *Hazardous Materials Specialist and Hydrologist.* Eric provided consultation of a contaminated plume discovered in tunneling spoils on this large construction project immediately adjacent to the Sandy River. In addition, Eric provided technical assistance on retained dewatering water with constituents that were outside of discharge requirements. ESA is currently providing monitoring for this long term construction project and enforcing required Best Management Practices (BMPs) to protect water quality.

Soquel Creek Water District Environmental Services, CA. *Geologist and Hydrologist.* Eric analyzed two alternative measures for augmenting water supply for the district in conjunction with neighboring agencies. Elements of the project included construction of desalination plant, importing groundwater supply, stabilizing aquifer to prevent encroachment of seawater, and balanced water supply projections with conservation programs. Eric provided analysis on geology, hydrology, and surface water related potential impacts.

Dairy Digester and Co-Digester Facilities' Waste Discharge Requirements, Central Valley RWQCB, EIR, CA. *Hydrologist and Hydrogeologist.* This Program EIR was prepared to evaluate the environmental effects from the development of dairy manure digester and co-digestion facilities within the Central Valley Region. Eric analyzed the potential water quality impacts to surface waters and groundwater from land application of post-processing solid digestate and liquid effluent throughout the Central Valley region where water quality impairments already exist. Among the potential pollutant loadings considered were nitrates, salts, heavy metals, pathogens, antibiotics and growth hormones.

CSLC NuStar Marine Terminal CEQA Document, CA. *Geologist and Hydrologist.* Eric evaluated geology and hydrology related impacts for this CEQA project entailing the renewal of an operational lease for a Marine Oil Terminal lying within the Carquinez Strait. Major environmental issues analyzed included mitigation of significant impacts to water quality from the handling of ship ballast water, emergency oil spill response, oil product transfer through pipelines that connect wharf to the shoreline, use of marine anti-fouling paints, sea-level rise, and tsunami hazards.



MONICA STRAUSS, RPA

Manager, Southern California Cultural Resources Group

Monica Strauss is Manager of ESA's Southern California Cultural Resources Group and is based in the Los Angeles office. She has 15 years of experience in cultural resources management and has directed numerous archaeological investigations throughout Southern California and the Channel Islands. She directs prehistoric and historic field and research projects for public agencies and private developers and is proficient in CEQA and Section 106 compliance. She manages a staff of cultural resources specialists who conduct various types of compliance work including phase I surveys, construction monitoring, Native American consultation, archaeological testing and treatment, historic resource significance evaluations, and large-scale data recovery programs. Monica has prepared technical documents meeting the requirements of federal, State, and local agencies in support of CEQA and Section 106 as well as cultural resources components for General and Specific Plans. She provides senior oversight and quality control of archaeological resources-focused documents for ESA staff throughout the State.

Education

MA, Archaeology, California State University, Northridge

BA, Anthropology, California State University, Northridge

AA, Humanities, Los Angeles Pierce College

15 Years of Experience

Professional Affiliations

Register of Professional Archaeologists (RPA)

Society for California Archaeology (SCA)

Society for American Archaeology (SAA)

Specialized Experience

Treatment of Historic and Prehistoric Human Remains

Archaeological Monitoring

Complex Shell Midden Sites

Groundstone Analysis

Qualifications

Exceeds Secretary of Interior Standards

CA State BLM Permitted

Certified in CA BLM Protocol

Relevant Experience

Irvine Ranch Water District (IRWD), Tustin Wells MND/EA, Orange County, CA. Cultural Resources Project Director. IRWD was awarded federal funds from the U.S. Bureau of Reclamation through the American Recovery and Reinvestment Act of 2009 for this project. The project will recover and treat impaired groundwater to augment local water supplies and increase water supply reliability. The proposed project would install wellhead equipment on two existing groundwater wells (Wells 21, 22), drill one exploratory well (Well TL-1), and construct a new water treatment plant and water transmission pipelines in the cities of Tustin and Irvine. ESA aided in coordination with the Bureau and successfully met the aggressive schedule requirements for federal funding. The MND was certified in February 2010. Monica provided senior technical oversight to staff reporting.

Irvine Ranch Water District Baker Water Treatment Plant EIR. Orange County, CA. Cultural Resources Principal Investigator. ESA was retained by the Irvine Ranch Water District to provide environmental compliance services. In support of an EIR for the upgrade of the IRWD's Baker Treatment Plant near Lake Forest, Orange County, ESA cultural resources staff conducted a Phase 1 Cultural Resources Assessment. Monica directed the archival research, a series of pedestrian surveys, and oversaw the preparation of Phase 1 Cultural resources Technical reports and the cultural resources section of the EIR.

West Kern Water District Groundwater Recharge Project EIR. Kern County, CA. Cultural Resources Principal Investigator. Monica managed a Phase 1 archaeological resources survey of a 500-acre Project area proposed for groundwater recharge basins and a 9-mile pipeline in Kern County. The Project was carried out in compliance with CEQA and Section 106 of the NHPA. The

Relevant Experience (Continued)

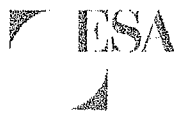
survey resulted in the identification of over 20 archaeological sites. She managed the preparation of a Phase 1 Archaeological Resources Survey Report and Cultural Resources EIR Section that addressed the potential for site eligibility and provided an impacts analysis and mitigation measures.

Cadiz Groundwater Project. San Bernardino County, CA. Cultural Resources Principal Investigator. ESA was retained by Cadiz Land Company, Inc. to prepare an EIR in connection with a water supply project in Cadiz Valley of the Mojave Desert. Monica directed a Phase 1 archaeological resources assessment including literature review, 42-mile long pedestrian survey, and Native American outreach to meet CEQA compliance requirements. An Archaeological Resources Technical Report was prepared that evaluated the California Register eligibility of over 40 historic-period archaeological sites that had been identified as a result of the investigation. The results of the technical report were incorporated into the EIR which included an impacts analysis and appropriate mitigation measures.

Helix Water District El Monte Valley. San Diego County, CA. Cultural Resources Principal Investigator. ESA is providing professional Environmental Consulting services in support of the HWD's El Monte Mining, Reclamation, and Groundwater Recharge Project. The project includes mining of approximately 10 million tons of aggregate from the El Monte Valley in San Diego County. Monica is currently directing the cultural resources component of this project to insure it complies with CEQA, Section 106 and the County of San Diego, Guidelines for Determining Significance. Duties involve providing oversight to the managements team and coordination with the client on key issues including Section 106 requirements and Native American issues.

Sweetwater Reservoir Water Main Replacement. San Diego County, CA. Cultural Resources Principal Investigator. ESA was retained by Sweetwater Authority to prepare an IS/MND for the replacement of a 36-inch pipeline leading from Sweetwater Dam. Sweetwater Dam was originally constructed in the late 19th century and was subject to upgrades in 1917. ESA conducted a Phase 1 Cultural Resources Assessment including archival research, pedestrian, survey, historical research, Native American outreach, and the preparation of a technical report documenting archaeological and historic-architectural resources that might be impacted by the project. The study concluded that features that would be altered by the project that were contributing elements to the historic dam would need to be replaced in kind. Monica directed the team of researchers which conducted this work, assisted in evaluating project impacts to the dam, and facilitated in the development of appropriate mitigation.

Appendix B
Cultural Resources Report
Scope of Work



Stockdale EIR Proposal - Cultural Resources Technical Study Scope of Work

The following three tasks will be conducted in order to provide a Phase I Cultural Resources Survey Report for the IRWD Stockdale project. This scope has been prepared assuming the project will not require federal compliance.

Task 1. Archival Research.

- Archival research will be conducted at the Southern San Joaquin Valley Information Center to identify the presence of previous cultural investigations and previously recorded cultural resources within a one-mile radius of the project area. Research will include a review of historic topographic and aerial maps. The purpose of this research is to identify any cultural resources present in the project area and, based on the types of resources found within 1 mile of the project area, to generalize the archaeological sensitivity of the project area and the types of resources that could be found within the project area.
- A Sacred Lands File (SLF) check will be requested from the California Native American Heritage Commission (NAHC) in order to solicit information on sensitive or undocumented traditional/cultural sites in the vicinity of the project. Native American representatives identified by the NAHC as having affiliation with the area, will be contacted to assist in identifying any locations of cultural sensitivity.
- A paleontological resources records check will be conducted at the University of California Museum of Paleontology and/or Los Angeles County Natural History Museum to identify paleontological resources in or near the project area.

Task 2. Survey.

- An intensive cultural resources survey will be conducted of the proposed approximately 230-acre Enos Property project area. Qualified cultural resources surveyors will systematically survey all accessible portions of the project area where exposed ground surface is visible. Soils will be inspected for evidence of cultural resources. A less intensive, reconnaissance survey will be conducted within the proposed locations of the groundwater wells and piping on the Stockdale property, which is understood to have already been developed with groundwater basins. In the event resources are discovered, the discoveries will be photo-documented and recorded on appropriate DPR 523 forms, and their locations mapped using a GPS unit. Only resources in imminent danger of destruction will be collected - all others will be left in situ. This scope assumes that no more than one (1) new or previously recorded cultural resource will be encountered as a result of the survey. The resource will be preliminarily evaluated for significance under CEQA. Should potentially significant resources be identified, additional work associated with the formal evaluation of resources would be recommended to be conducted as part of a separate scope and cost prior to the preparation of the environmental document.

Task 3. Technical Report.

- A Phase I Cultural Resources Report addressing CEQA requirements will be prepared. The report will follow the guidelines in *Archaeological Resource Management Reports (ARMR): Recommended Contents and Format*, Department of Parks and Recreation, Office of Historic Preservation, State of California, 1990. The report will provide background contexts for the project area and will present the methods and results of the study. The report will also provide recommendations regarding further treatment of any significant resources identified as a result of the study, and will address the likelihood of encountering subsurface intact

archaeological resources during construction. A draft report will be provided to the client for review. A final report, incorporating one round of comments, will be prepared and one hard copy and an electronic copy (PDF) will be provided. Hard copies of the report will be sent to the archives at the Information Center for their files.

Assumptions:

- *No more than 230 acres will require survey.*
- *Survey will be conducted by 2 surveyors over the course of 3 days.*
- *The project area will be accessible to surveyors.*
- *No more than 1 resource will be recorded and a preliminary eligibility evaluation provided. The client will be notified immediately if more than 1 resource is encountered.*
- *No historic architectural resources exist within or immediately adjacent to the project area.*
- *In the event a Native American monitor/s is required during the survey, the monitor will contract directly with the client.*
- *In the event the paleontological records check indicates the potential for sensitive formations, some degree of paleontological survey may be recommended under a separate scope and cost.*

ESA

3

EXHIBIT "E"



WILDERMUTH™
ENVIRONMENTAL INC.

February 14, 2012

Irvine Ranch Water District
Attn: Paul Weghorst, Director of Water Resources
15600 Sand Canyon Avenue
Irvine, CA 92618

Subject: *Proposal for Summary Reports, Groundwater Monitoring and Data Management, and Technical Support*

Dear Mr. Weghorst,

Pursuant to your verbal request, Wildermuth Environmental, Inc. (WEI) is pleased to submit this proposal for the following services:

1. Prepare a report that summarizes the derivation of the Strand Ranch aquifer-system parameters and the analysis of recharge mounding sensitivity.
2. Prepare a report that summarizes the Strand Ranch groundwater-quality data and determines the concentration of specific constituents of concern (CoC) within the water being discharged from the Strand Ranch Water Bank (SRWB) into the Cross Valley Canal (CVC) at various discharge rates and well combinations.
3. Provide independent technical support to the IRWD during the development of environmental documents related to the Stockdale West Water Bank (SWWB).
4. Provide field and data management services for the collection, processing, and management of groundwater elevation data from the SRWB.

Scope of Work

Task 1 – Prepare Summary Report on Aquifer-System Parameters and the Analysis of Recharge Mounding Sensitivity

WEI will prepare a report that summarizes the results and analysis of the pumping tests and the analysis of recharge mounding sensitivity at the SRWB. WEI conducted pumping tests at wells perforated in the unconfined and semi-confined portions of the groundwater aquifer underlying the Strand Ranch. The unconfined aquifer-system parameters were estimated using pumping-test data from Strand No. 6 (SREX-6) and measured groundwater-level data from on-site monitoring wells. The semi-confined aquifer-system parameters were estimated using pumping-test data from SREX-1, -2, -3, -4, -5, and -7, and measured groundwater-level data from on-site monitoring wells. Using the aquifer-system parameters derived from Strand Ranch pumping tests, WEI conducted an analysis of recharge mounding sensitivity to changes in certain conditions, including aquifer-system parameters, initial water-level conditions, and recharge locations. The report will include a description of the conceptual hydrogeologic model of the aquifer system underlying the Strand Ranch, the pumping-test methods, the pumping-test data collection and analyses methods, and the derivation of aquifer-system parameters. The report will summarize the recharge alternatives,

hydraulic parameters, initial conditions, boundary conditions, and the results and conclusions of the recharge sensitivity analysis. Finally, the report will contain a section titled Discussion that will describe, in general terms, responses to the comments provided by KWBA and KCWA in their review of Addendum No. 1 without specific reference to the agency review. The comments will be discussed as topics in a format similar to that used in the September 16, 2011 *Analysis of Recharge Mounding report*. Topics to be discussed will include: Water Levels (Initial Conditions), Recharge Location, Hydraulic Parameters, Geologic Characterization, Extraction Timing, Extraction Location and Other Regional Project Operations. In addition, this section will describe why the recharge mounding sensitivity analysis results estimated a mound height that is less than the height estimated in Addendum No. 1.

One draft report will be prepared and submitted in electronic format to the IRWD for review and comment. WEI will participate in one meeting with IRWD staff to review comments. Following the incorporation of IRWD comments, WEI will prepare and submit two bound hard-copies of the final report to the IRWD—each with an electronic copy attached.

Task 2 – Prepare Summary Report on Groundwater Quality

In support of the development of the SRWB operating plan, WEI will prepare a report that (i) summarizes the current groundwater quality at all wells on the Stand Ranch and (ii) provides a water-quality-blending analysis that characterizes the current water quality of various blends from Stand Ranch extraction wells.

Groundwater samples were collected from Strand Ranch wells for laboratory analysis as follows: 1) while conducting isolated aquifer-zone testing during the construction of selected wells, 2) at the conclusion of development in all newly constructed wells, 3) at wells that existed on the Strand Ranch prior to its development as a water bank, and 4) during packer testing at SREX-5. Groundwater quality at the Strand Ranch was also measured using field instrumentation during well development, pump testing, and sample collection. The summary report will include all groundwater quality data collected by WEI from the following wells: monitoring wells SROW-1, -3, and -4; extraction wells SREX-1, -2, -3, -4, -5, and -7; and Strand Ranch wells 1, 2, 3, 4, and 6 (see Figure 1).

Water extracted from the SRWB will be conveyed to the State Water Project (SWP) via the CVC. The KCWA, as operator of the CVC, regulates CVC water quality pursuant to DWR requirements. The Rosedale-Rio Bravo Water Storage District (RRBWSD), which will operate the SRWB on behalf of the IRWD, is currently negotiating with the KCWA on SRWB operating guidelines. It is our understanding, based on information provided by the IRWD, that the RRBWSD must determine and report to the KCWA the composite blended water-quality of all well discharges from the SRWB into the CVC.

WEI will perform a flow-weighted water-quality-blending analysis. The objective of this analysis is to determine the concentrations of specific CoCs within the water being discharged from the SRWB into the CVC for the following well and production rate combinations:

- All wells (total production at 36 cubic feet per second [cfs] and 40 cfs)
- North turn-in 1 wells: SREX-1 and -2 (with total production of all wells at 36 cfs and 40 cfs)
- North turn-in 2 wells: SREX-3 and -4 (with total production of all wells at 36 cfs and 40 cfs)

- South turn-in wells: SREX-5, -6, and -7 (with total production of all wells at 36 cfs and 40 cfs)

The flow-weighted, water-quality-blending analysis will be conducted, using the following assumptions:

- CoC concentrations will be based on the most recent SRWB water quality data.
- The CoCs will include arsenic, bromide, conductivity, total dissolved solids (TDS), dissolved organic carbon (DOC), nitrate-nitrogen, sulfate, gross-alpha, and uranium.
- The production rate at individual wells will be mutually agreed upon by the IRWD and WEI.
- The CoC concentrations will not be compared to any criteria, as there are no established water quality criteria specific to the SRWB.

The CoCs that will be included in this analysis were developed based upon a report from the DWR and SRWB water quality data. The DWR identified several CoCs within water discharged from the KWBA, which uses the CVC to deliver water to the SWP. These constituents included arsenic, bromide, conductivity, TDS, dissolved organic carbon, total organic carbon, nitrate-nitrogen, and sulfate (DWR, 2004). Additional CoCs specific to the Strand Ranch include gross alpha and uranium; these constituents have been detected in one or more SRWB extraction wells in concentrations exceeding Federal and State maximum contaminant levels. With the exception of total organic carbon,¹ the above-mentioned constituents will be included in the water quality blending analysis.

The following table will be completed to meet the blending analysis objective.

Constituents of Concern Concentrations under Various CVC Pump-in Scenarios

CoC	Units	All Wells		North Turn-in 1		North Turn-in 2		South Turn-in	
		36 cfs	40 cfs	36 cfs	40 cfs	36 cfs	40 cfs	36 cfs	40 cfs
Arsenic	ug/L								
Bromide	mg/L								
Conductivity	mg/L								
TDS	mg/L								
DOC	mg/L								
Nitrate (NO3)	mg/L								
Sulfate	mg/L								
Gross-alpha	pCi/L								
Uranium	pCi/L								

One draft report will be prepared and submitted in electronic format to the IRWD for review and comment. WEI will participate in one meeting with IRWD staff to review comments. Following the incorporation of IRWD comments, WEI will prepare and submit two bound hard-copies of the final report to the IRWD—each with an electronic copy attached.

¹ Total organic carbon was not included as an analyte during water quality testing of Strand Ranch wells and will not be included in the blending analysis.

Task 3 – Provide Technical Support for Stockdale West Environmental Documentation

WEI will provide as-requested SWWB-related technical support to the IRWD. WEI anticipates services will include, but not be limited to, the review and preparation of comments on technical work performed by others, attending meetings, and performing technical analyses.

Task 4 – Groundwater Elevation Monitoring and Data Management

The IRWD uses integrated water level pressure transducers and data loggers to measure and record groundwater elevation data in wells at the Strand Ranch. Currently, there are transducers in the following 18 wells: SROW-1/1, -1/2, -1/3, -3/1, -3/2, -3/3, -4/1, -4/2, -4/3, SREX-1, -2, -3, -4, -5, -6, -7, and Strand Nos. 2 and 3. The groundwater elevation data is used to assess impacts to groundwater levels from pumping and recharge and to guide operations. The following subtasks will be performed by WEI to assure the data and tools necessary to manage the SRWB are maintained with current groundwater elevation data.

Task 4.1: HydroDaVE™ Project Update. WEI will update the existing Strand Ranch HydroDaVE™ database with the following geographic information system files: 1) as-built basin drawings, and 2) conveyance facility design drawings.

Task 4.2: Groundwater Elevation Monitoring. WEI anticipates site visits to the Strand Ranch will be necessary to adjust the transducer depth settings, perform routine transducer maintenance, and review transducer operation procedures with RRBWSD staff. This task includes two site visits by WEI over the duration of Task 4, which will be approximately two years. During each site visit a WEI staff member will 1) adjust the transducer depth to maintain appropriate submergence based upon the groundwater elevation changes anticipated over the next year, 2) perform routine transducer maintenance, and 3) review the transducer data collection and operation procedures with RRBWSD staff.

Task 4.3: Data Processing and Upload to HydroDaVE™. It is our understanding that each quarter RRBWSD staff will manually measure groundwater elevations, download the groundwater level data from the transducers, and transmit the data to WEI. WEI will process, review for quality assurance and quality control, and load the data into HydroDaVE™². This task will include eight quarters of data processing, review for quality assurance and quality control, and upload to HydroDaVE™.

Schedule and Fee

Tasks 1 and 2 will be completed within two months of receiving notice to proceed. Task 3 will occur on an as-needed basis. The duration of Task 4 will be two years.

The fee to complete Tasks 1 through 3 is approximately \$33,000, and is detailed in the work breakdown structure and fee estimate shown in Table 1. The fee to complete Task 4 is approximately \$17,000, and is detailed in the work breakdown structure and fee estimate shown in Table 2.

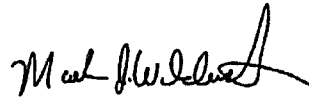
We appreciate the opportunity to serve the IRWD on this important project. Please call me or Mark Wildermuth if you have any questions or concerns.

² Before uploading the data to HydroDaVE™, WEI will check the transducer data for accuracy by comparing the manual groundwater elevation measurements taken at the time of the transducer data download to the data recorded on the transducer. An algorithm will be used to reduce the 15-minute interval transducer data to a series of representative data that will be uploaded to HydroDaVE™.

Wildermuth Environmental, Inc.



William E. Leever Jr., CHG
Principal Hydrogeologist



Mark J. Wildermuth, PE
President

Enclosures:

Table 1 – Work Breakdown Structure and Fee Estimate, Tasks 1 Through 3

Table 2 – Work Breakdown Structure and Fee Estimate, Task 4

Figure 1 – Detailed Well Location Map

References

DWR. (2001). Interim Department of Water Resources Water Quality Criteria for Acceptance of Non-Project Water into the State Water Project. March 1, 2001.

DWR. (2004). Memo Report: Groundwater Turn-ins to the California Aqueduct, 2004 (DWR office memo).

WEI. (2010). Analysis of Recharge Mounding during Strand Ranch Water Bank Operations. October 21, 2010.

WEI. (2011). Draft Analysis of Recharge Mounding Sensitivity. September 16, 2011.

Table 1: Work Breakdown Structure and Fee Estimate, Tasks 1 through 3
Proposal for Summary Reports, Groundwater Monitoring and Data Management, and Technical Support

Description	Notes	Labor							Other Direct Charges			Total Program Costs		
		Principal III	Principal I, II	Senior	Eng Tech	Task Rep Multiplier	Person Hours	Total Labor		Repro	Total ODCs		Task	Project
								Cost	Project		Task	Project		
Task 1 Prepare Summary Report on Aquifer-System Parameters and the Analysis of Recharge Mounding Sensitivity								\$9,480			\$500		\$9,980	
1.1	Prepare draft Aquifer-System Parameters and Analysis of Recharge Mounding Sensitivity Summary Report	a	16	32	2	1	50	\$8,450			\$0		\$8,450	
1.2	Prepare final Aquifer-System Parameters and Analysis of Recharge Mounding Sensitivity Summary Report	b	2	4		1	6	\$1,030	\$500	\$500			\$1,530	
Task 2 Prepare Summary Report on Groundwater Quality								\$9,480			\$500		\$9,980	
2.1	Prepare draft Groundwater Quality Summary Report	a	16	32	2	1	50	\$8,450			\$0		\$8,450	
2.2	Prepare final Groundwater Quality Summary Report	b	2	4		1	6	\$1,030	\$500	\$500			\$1,530	
Task 3 Provide Technical Support for Stockdale West Environmental Documentation								\$12,750			\$0		\$12,750	
3.1	Technical Support for Stockdale West Environmental Documentation	c	30	30		1	60	\$12,750			\$0		\$12,750	
Total Costs			30	66	72	4		\$31,710	\$1,000		\$1,000		\$32,710	

Notes

- a A draft report will be submitted as an electronic pdf document for review by IRWD.
- b Following incorporation of IRWD comments on the draft report, a final report will be submitted to IRWD as an electronic pdf document and two bound hard copies.
- c Task will be performed on an as-needed basis, not to exceed the dollar value shown, without prior written authorization from IRWD.

E-9

Table 2: Work Breakdown Structure and Fee Estimate, Task 4
Proposal for Summary Reports, Groundwater Monitoring and Data Management, and Technical Support

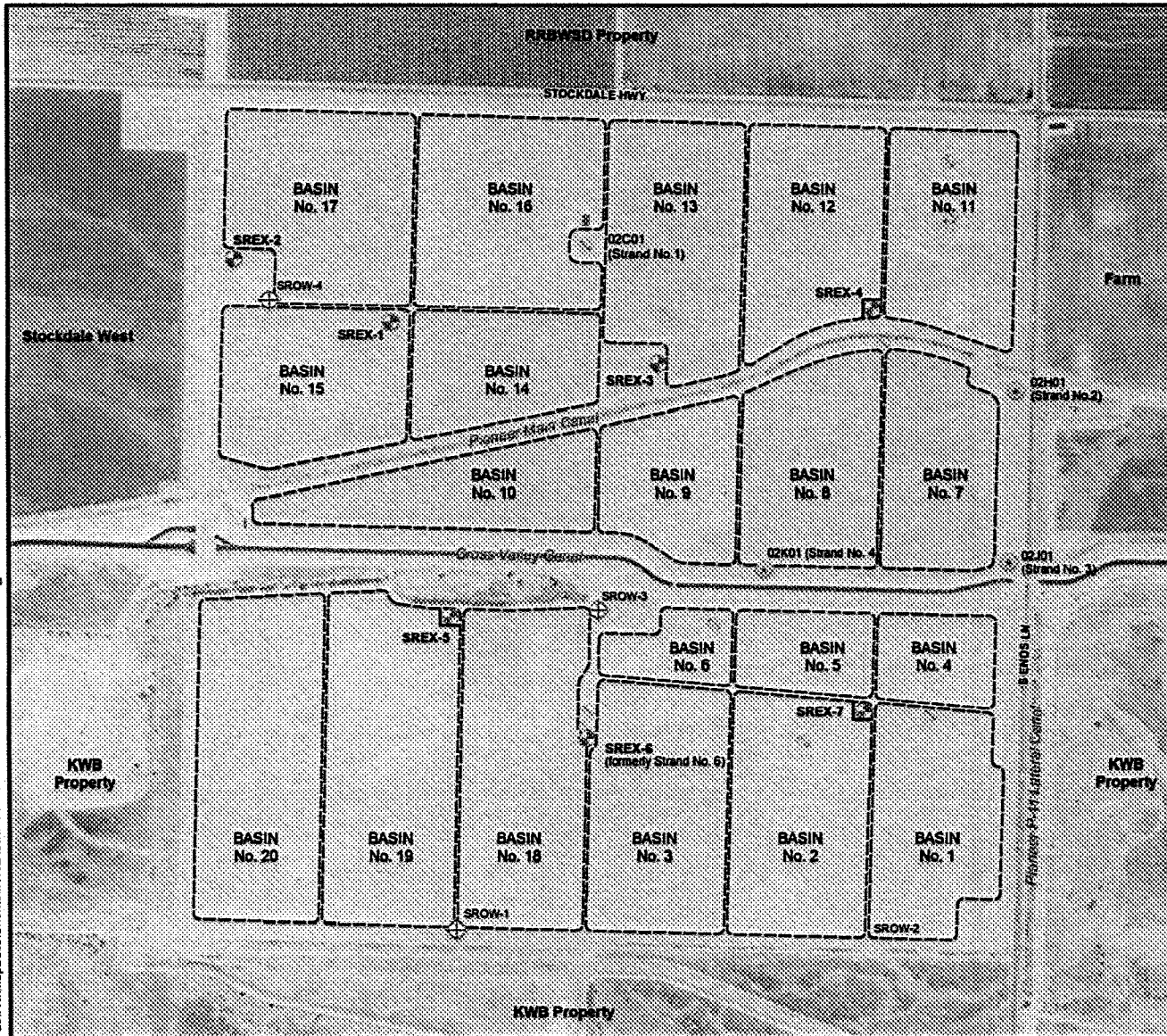
Description	Notes	Labor							Other Direct Charges				Total Program Costs		
		Principal I, II	Senior	Staff	Field Tech	Task Rep Multiplier	Total Labor		Travel & Lodging	Equip. Rental	Total ODCs		Task	Project	
							Person Hours	Cost			Task	Project			
								Task							Project
Task 4 Groundwater Elevation Monitoring and Data Management								\$16,635		\$573		\$17,208			
4.1 HydroDaVE™ Project Update		1		3		1	4	\$595			\$0		\$595		
4.2 Groundwater Elevation Monitoring	a	1	1		12	2	14	\$2,760	\$509	\$64	\$573		\$3,333		
4.3 Data Processing and Upload to HydroDaVE™	b	1	1	10		8	12	\$13,280			\$0		\$13,280		
Total Costs								\$16,635	\$509	\$64	\$573		\$17,208		

Notes






- a Includes WEI personnel adjusting the transducer depth setting, performing routine transducer maintenance, and reviewing data collection procedures with RRBWSD staff once per year for two years.
- b Includes the processing, review for quality assurance / quality control, and upload of groundwater elevation data to HydroDaVE™ on a quarterly basis for eight consecutive quarters. Assumes RRBWSD staff will collect and transmit the data to WEI on a quarterly basis.

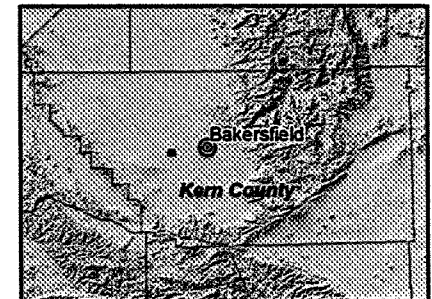
E-7

Path: N:\MapDocs\Clients\RRWD\Stand Ranch\South Basin Infiltration\20111228_DetailedWellLocationMap.mxd



Main Features

-  Strand Ranch Recharge Basins
-  Extraction Well
-  Observation Well - Nested
-  Existing Strand Ranch Well
-  Destroyed Strand Ranch Well



Produced by:



Author: bleever
Date: 11/29/2011

www.wildermuthenvironmental.com



067-001
004

Detailed Well Location Map
Stand Ranch Integrated Banking Project

Figure 1

EXHIBIT "F"

IRVINE RANCH WATER DISTRICT Sole Source Procurement Justification



A. Supplier Information:

Name of Company: Wildermuth Environmental, Inc.
Purchase Requisition Number
Purchase Order Number: ¹
Amount: \$49,918.00

B. Project Information (if applicable):

Project Name: Stockdale West Joint Banking Project
IRWD Project Number: 11645 (3766)

C. Justification Definition:

- Equipment Teardown Estimate
- Only Qualified Supplier
- Proprietary Item
- Physical Requirements
- Power Requirements
- Original Design Restriction
- Urgent Necessity
- Bid process did not produce competitors
- Governmental agency, association, or utility
- Land acquisition right-of-way
- Professional Services Contract less than \$30,000
- Prior phase of professional services contract completed successfully by same Consultant

D. Narrative Explanation:

The Stockdale West Joint Banking Project is a joint water banking project with Rosedale-Rio Bravo Water Storage District (RRB) in Kern County. Wildermuth Environmental is uniquely qualified to prepare the reports on aquifer-system parameters, recharge mounding sensitivity and groundwater quality to supplement and support the environmental impact report for the Project because of its extensive past experience in modeling and monitoring for the Strand Ranch Integrated Banking Program.

E. Signature/Approvals:

Kelly Wilson 3/12/12
Requester Date

[Signature] 3/15/12
Department Director Date

General Manager² Date

Purchasing Manager Date

¹ To be provided by the Purchasing Staff

² GM signature required for Professional Services Only

IRVINE RANCH WATER DISTRI EXHIBIT "G"

Expenditure Authorization

Project Name: STOCKDALE WEST RANCH JOINT BANKING PROJECT
EPMS Project No: 11645 **EA No:** 1
Oracle Project No: 3766
Project Manager: WEGHORST, PAUL
Project Engineer: WELCH, KELLY
Request Date: March 12, 2012

ID Split: Regional Potable Water Splits (11/08)
Improvement District (ID) Allocations

ID No.	Allocation %	Source of Funds
112	4.3	BONDS YET TO BE SOLD**
113	5.2	BONDS YET TO BE SOLD**
115	7.3	CAPITAL FUND
121	15.3	BONDS YET TO BE SOLD**
130	11.8	BONDS YET TO BE SOLD**
140	4.2	BONDS YET TO BE SOLD**
150	31.2	BONDS YET TO BE SOLD**
153	3.4	BONDS YET TO BE SOLD**
154	1.5	BONDS YET TO BE SOLD**
161	8.0	BONDS YET TO BE SOLD**
182	3.0	BONDS YET TO BE SOLD**
184	2.8	BONDS YET TO BE SOLD**
186	1.0	BONDS YET TO BE SOLD**
188	1.0	BONDS YET TO BE SOLD**
Total	100.0%	

Summary of Direct Cost Authorizations

Previously Approved EA Requests:	\$0
This Request:	\$246,400
Total EA Requests:	\$246,400
Previously Approved Budget:	\$0
Budget Adjustment Requested this EA:	\$246,400
Updated Budget:	\$246,400
Budget Remaining After This EA	\$0

Comments:

Phase	This EA Request	Previous EA Requests	EA Requests to Date	This Budget Request	Previous Budget	Updated Budget	Start	Finish
ENGINEERING - PLANNING IRWD	40,000	0	40,000	40,000	0	40,000	3/12	6/13
ENGINEERING - PLANNING OUTSIDE	33,000	0	33,000	33,000	0	33,000	3/12	6/13
LEGAL	15,000	0	15,000	15,000	0	15,000	3/12	6/13
ENGINEERING ENVIRONMENTAL-OUTS	136,000	0	136,000	136,000	0	136,000	3/12	6/13
Contingency - 10.00% Subtotal	\$22,400	\$0	\$22,400	\$22,400	\$0	\$22,400		
Subtotal (Direct Costs)	\$246,400	\$0	\$246,400	\$246,400	\$0	\$246,400		
Estimated G/A - 180.00% of direct labor*	\$72,000	\$0	\$72,000	\$72,000	\$0	\$72,000		
Total	\$318,400	\$0	\$318,400	\$318,400	\$0	\$318,400		
Direct Labor	\$40,000	\$0	\$40,000	\$40,000	\$0	\$40,000		

*EA includes estimated G&A. Actual G&A will be applied based on the current ratio of direct labor to general and administrative costs.

EA Originator: Kellie Welch 3/12/12
Department Director: [Signature] 3/15/12
Finance: _____
Board/General Manager: _____

**** IRWD hereby declares that it reasonably expects those expenditures marked with two asterisks to be reimbursed with proceeds of future debt to be incurred by IRWD in a maximum principal amount of \$325,000. The above-captioned project is further described in the attached staff report and additional documents, if any, which are hereby incorporated by reference. This declaration of official intent to reimburse costs of the above-captioned project is made under Treasury Regulation Section 1.150-2.**