

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

**November 22, 2010**

**PLEDGE OF ALLEGIANCE**

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

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

**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.

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**COMMUNICATIONS TO THE BOARD**

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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.

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**PRESENTATION AND ACTION ITEM**

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3.     **DISCOVERY GARDEN PROJECT WATER CONSERVATION GARDENS AND WATER EDUCATION PAVILION DESIGN FEASIBILITY STUDY**

Discovery Science Center staff will make a presentation at the meeting on Discovery Gardens and concepts for the Design Feasibility Study.

Recommendation: That the Board authorize the addition of \$85,000 to the Fiscal Year 2010/11 Operating budget using undesignated over-allocation use revenues for the retention of Discovery Science Center for \$85,000, to complete a design feasibility study for the Water Conservation Gardens and Water Education Pavilion at Discovery Gardens.

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**PUBLIC HEARING AND ACTION ITEM**

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4A. **PUBLIC HEARING FOR 2010 GENERAL OBLIGATION BOND ISSUANCE**

1. Recommendation: Open the hearing
2. Inquire of the Secretary how the hearings were noticed
3. Receive and file the affidavit of posting and proof of publications
4. Request legal counsel to describe the nature of the proceedings
5. Request Director of Finance to provide a report with respect to each series of the proposed refunding bonds
6. Inquire of the Secretary if there has been any written communications
7. Hear any persons who wishes to speak relative to 2010A and 2010B Refunding Bond Issuance
8. Board comments/discussion
9. Close the hearings
10. Adopt a Resolution Making Findings Relative to Consolidated Bonds (Series 2010A and Series 2010B).

Reso No. 2010-

4B. **2010 GENERAL OBLIGATION BOND ISSUANCE: DOCUMENT APPROVAL AND MARKET UPDATE**

Recommendation: That the Board adopt a Resolution providing for the Issuance of Consolidated Bonds of said district, approving documents and authorizing and ratifying certain actions (Series 2010A and Series 2010B).

Reso No. 2010-

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**CONSENT CALENDAR**

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**Items 5-10**

5. **MINUTES OF REGULAR BOARD MEETING**

Recommendation: That the minutes of the November 8, 2010 Regular Board Meeting be approved as presented.

6. **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, Douglas Reinhart, Peer Swan, and John Withers.

7. **STRATEGIC MEASURES DASHBOARDS**

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

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**CONSENT CALENDAR - Continued**

**Items 5-10**

8. 2010 STATE LEGISLATIVE PLANNING UPDATE

Recommendation: Receive and file.

9. OCTOBER 2010 FINANCIAL REPORTS

Recommendation: That the Board receive and file the Treasurer's Investment Summary Report and the Monthly Interest Rate Swap Summary for October 2010; approve the October 2010 Summary of Wire Transfers and ACH payments in the total amount of \$12,550,713.93 and approve the October 2010 Warrants Nos. 3147760 through 315529, Workers' Compensation distributions and voided checks in the total amount of \$5,475,199.74.

10. SUPPORT OF ACWA'S POLICY PRINCIPLES ON IMPLEMENTATION OF STATE AND FEDERAL ENDANGERED SPECIES ACT

Recommendation: That the Board adopt a resolution supporting the Association of California Water Agencies' policy principles on implementation of State and Federal Endangered Species Act.

Reso No. 2010-

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**ACTION CALENDAR**

11. ORANGE PARK ACRES DOMESTIC WATER TRANSMISSION MAIN CONSTRUCTION PHASE SERVICES

Recommendation: That the Board approve a budget reduction in the amount of \$3,078,600, from \$3,635,200 to \$556,600, for project 11407; approve Expenditure Authorizations in the amounts of \$22,000 for project 11407, \$855,700 for project 11408, \$42,000 for project 11409, and \$111,600 for project 11410; authorize the General Manager to execute a Professional Services Agreement in the amount of \$223,598 with Stantec Consulting Services, Inc. for construction phase engineering services; authorize the General Manager to execute a Professional Services Agreement in the amount of \$72,542 with NMG Geotechnical, Inc. for construction phase geotechnical services; and authorize the General Manager to execute a Professional Services Agreement in the amount of \$110,288 with Bush & Associates, Inc. for construction phase surveying services for the Orange Park Acres Domestic Water Transmission Main, projects 11407, 11408, 11409, and 11410.

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**ACTION CALENDAR - Continued**

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12. LONG-TERM EXCHANGE PROGRAM AGREEMENT WITH BUENA VISTA WATER STORAGE DISTRICT (BVWSD)

Recommendation: That the Board authorize the General Manager to execute the Long-Term Water Exchange Program Agreement with Buena Vista Water Storage District, subject to non-substantive changes, with a negotiated term length of a minimum of 15 years and not to exceed 28 years.

13. METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA (MWDOC) LOCAL RESOURCES PROGRAM FUNDING AGREEMENT FOR THE WELLS 21 AND 21 DESALTER PROJECT

Recommendation: That the Board approve and authorize execution of the Local Resources Program Agreement with Metropolitan Water District of Southern California (MWD) and Municipal Water District of Orange County (MWDOC), subject to non-substantive changes approved by the General Manager and Legal Counsel; and adopt a resolution approving and authorizing execution of Wells 21 and 22 Desalter Project Local Resources Program Agreement among Metropolitan Water District of Southern California, Municipal Water District of Orange County and Irvine Ranch Water District.

Reso No. 2010-

14. COORDINATED OPERATING, WATER STORAGE, EXCHANGE AND DELIVERY AGREEMENT WITH METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Recommendation: That the Board authorize the General Manager to execute the Coordinated Operating, Water Storage, Exchange and Delivery Agreement between IRWD, Metropolitan and MWDOC subject to non-substantive changes approved by the General Manager and Legal Counsel.

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**OTHER BUSINESS**

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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.

15. A. General Manager's Report



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**OTHER BUSINESS - Continued**

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15. B. Directors' Comments

1)

2)

3)

4)

5)

C. 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.



November 22, 2010

Prepared by: B. Beeman/F. Sanchez 

Submitted by: B. Beeman

Approved by: Paul Jones 

## PRESENTATION AND ACTION ITEM

### DISCOVERY GARDEN PROJECT WATER CONSERVATION GARDENS AND WATER EDUCATION PAVILION DESIGN FEASIBILITY STUDY

#### SUMMARY:

Discovery Science Center (DSC) has approached the Irvine Ranch Water District (IRWD) to explore a partnership to assist in the design and sponsorship of the Water Conservation Gardens and Water Education Pavilion area of Discovery Gardens. The initial concept for this area covers many things – from educating the public on types of grasses for their home and the corresponding water consumption to the science behind innovations in water purveyance and delivery. DSC is a known leader in hands-on innovative educational installations and a trusted partner of IRWD on our current water conservation education program. To more fully develop initial installation concepts and cost estimates for the project, the first step is to complete a design feasibility study. The Design Feasibility Study does not commit IRWD to participating in the Discovery Garden project. Staff recommends that the Committee approve a contract for \$85,000 with DSC to complete a Design Feasibility Study for the Water Conservation Gardens and Education Pavilion.

Representatives from Discovery Science Center will provide a presentation to the Board regarding the Discovery Garden Project including the proposed Water Conservation Gardens and Education Pavilion.

#### BACKGROUND:

Since the mid-1970's IRWD has provided innovative student water quality education programs to students and teachers, from kindergarten to college for schools throughout the service area. In 2007, IRWD began a successful contractual partnership with DSC to help provide education programs that are designed to meet California curriculum content standards and incorporate both in-classroom learning and hands-on activities conducted by at the IRWD Learning Center. The Learning Center provides a wide variety of educational venues and teaching opportunities utilizing the San Joaquin Marsh, the Natural Treatment System, and San Diego Creek.

#### *Discovery Gardens at the Great Park*

In September 2010, staff was approached by the Discovery Science Center regarding a new water education partnership opportunity at the Great Park. As shown on Exhibit "A", the Discovery Science Center has begun planning for a new state of the art educational facility to be located on 12.0 acres at the Great Park and anchored by the existing Officer's Club building. The property, dubbed Discovery Gardens, will initially contain demonstration gardens, water conservation gardens and pavilion, a science education garden, an ecology garden, a butterfly pavilion, a multi-purpose outdoor classroom, a children's interactive garden and play area, a

ranch style market, specialty gift shop, plant nursery, nature education exhibitions, nature exchange program, teacher's resource library, and offer science based field trips for students. Discovery Gardens will be managed and operated by the Discovery Science Center as a non-profit educational center. The Garden is expected to have over 160,000 annual visitors and over 25,000 students in field trips annually. Exhibit "A" provides a brief overview and map of the overall plan.

The Discovery Gardens will be a model Southern California garden that blends the best elements of both a science center and a nature garden. Discovery Gardens will focus on nature, science, education, environmental stewardship, water use efficiency and resource management, energy conservation, habitat restoration and native species reintroduction all in a beautiful garden setting that is unique to Orange County. The Garden will include California native and California friendly plants, and will educate guests through interactive, engaging exhibits on concepts like conservation and protection of the environment.

#### *Water Conservation Gardens and Water Education Pavilion*

DSC has approached IRWD to explore a possible partnership to assist in design and sponsorship of the Water Conservation Gardens and Pavilion area of Discovery Gardens. The initial concept for this area is to cover many things – from educating the public on water efficient plant alternatives for their home and the corresponding water consumption to how the science behind the innovations in water purveyance and delivery. This area could include interactive demonstration gardens along with technology showcases, a plant lab to understand the science behind drought tolerant plants, and much more. However, these ideas are only conceptual at this point. Should IRWD decide to partner with DSC, the District would have the ability to assist in the development and design the Water Conservation Gardens and Pavilion to reflect the best practices of IRWD not only in water efficiency but also in water resources and reliability.

#### *Existing Partners*

Discovery Garden project partners currently include the Discovery Science Center, providing leadership, design and operational know-how; the Southern California Edison Company, providing exhibits on energy efficiency and conservancy through the gardens along with funds to make the Officer's Club building have a net zero energy consumption; the Great Park Corporation, providing the land, the Officer's Club building, funding to renovate the building and grant funds for the Bug's Eyes Garden; and the Great Park Conservancy, providing funding for the Master Garden area. To date, Discovery Science Center has received the following commitments for the project and has several grant proposals pending:

Entity	Contribution \$	Description
Great Park Corporation	N/A	Land and Officer’s Club building for \$1/year, leased for 30 years
Great Park Corporation	\$2.5M	\$2.5M in cash to renovate the Officers’ Club for DSC’s use
Great Park Conservancy	\$0.5M	Raised \$500K for design and construction of garden spaces within the nature education garden
Southern California Edison	\$250K	Will donate \$250K towards renovations of Officers’ Club for net zero energy use building
Discovery Science Center	\$0.5M	In-kind and cash contribution of \$0.5M for design and pre-development efforts

The proposed Discovery Gardens at the Great Park offers IRWD a unique opportunity to further water education programming by presenting information to our customers on the important subjects of water use efficiency, water resources and water reliability. DSC is a known leader in hands-on innovative educational installations and a trusted partner of IRWD on our current water conservation education program. The location of the Great Park offers IRWD an opportunity to centralize our education program into a venue that is easily accessible from all service areas of the District. In order to more fully develop installation concepts and possible long term costs, the first step would be to complete a design feasibility study. DSC has provided a scope of work and costs for a design feasibility study in Exhibit B. Staff recommends that the Committee approve a contract for \$85,000 with Discovery Science Center to complete a Design Feasibility Study for the Water Conservation Gardens and Water Education Pavilion at Discovery Gardens.

Discovery Science Center staff will make a presentation at the Committee meeting on Discovery Gardens and concepts for the Design Feasibility Study.

FISCAL IMPACTS:

The consultant costs for the Design Feasibility Study for the Water Conservation Gardens and Water Education Pavilion at Discovery Gardens will be funded through an increase to the FY 2010-11 Operating Budget, using undesignated over-allocation use funding revenues. The Design Feasibility Study does not commit IRWD to participating in the Discovery Garden project. Any future funding for the project would be separately authorized by the Board.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

This item was reviewed at the Water Resources Policy and Communications Committee on November 9, 2010.

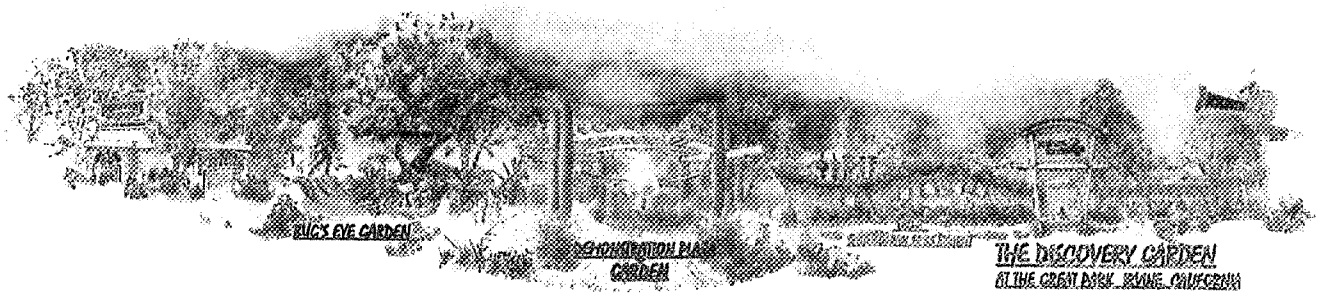
RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE ADDITION OF \$85,000 TO THE FISCAL YEAR 2010-11 OPERATING BUDGET USING UNDESIGNATED OVER-ALLOCATION USE REVENUES FOR THE RETENTION OF DISCOVERY SCIENCE CENTER FOR \$85,000, TO COMPLETE A DESIGN FEASIBILITY STUDY FOR THE WATER CONSERVATION GARDENS AND WATER EDUCATION PAVILION AT DISCOVERY GARDENS.

LIST OF EXHIBITS:

Exhibit “A” – Discovery Gardens Overall Conceptual Map and Plan  
Exhibit “B” – DSC Design Feasibility Study Scope of Work

# EXHIBIT "A"



## Discovery Gardens at the Great Park



We are pleased to present to the Irvine Ranch Water District the initial concept overview for the Discovery Gardens at the Great Park. In this document you will find the following sections:

- Discovery Gardens Overview
- Initial Concept for Water Conservation Gardens and Pavilion
- Discovery Gardens Concept Details

### Existing Partners



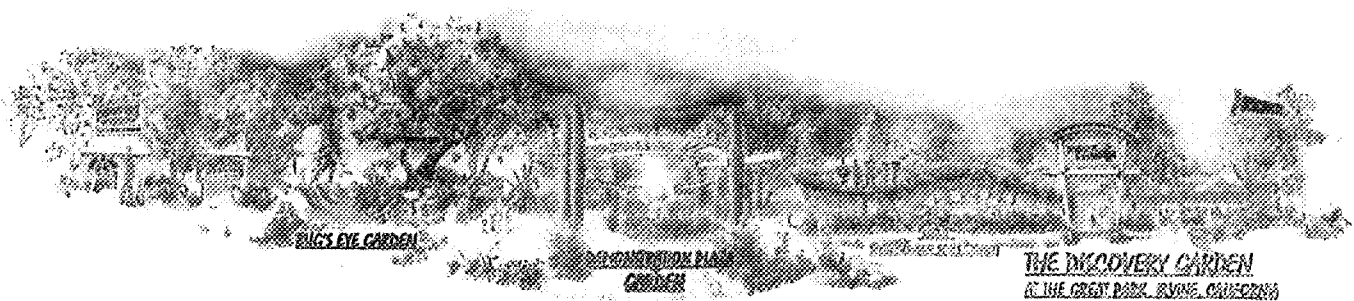
## EXHIBIT "A"

### Overview Discovery Gardens at The Great Park

The Discovery Gardens will be located inside the Great Park in Irvine, California and will be managed and operated by the Discovery Science Center of Santa Ana as a non-profit educational center.

The intent of the Discovery Gardens will be a model Southern California garden that blends the best elements of both a science center and a nature garden. Focusing on nature, science, education, environmental stewardship, water conservation, energy conservation, habitat restoration, and native species reintroduction all in a beautiful garden setting that is unique to Orange County. The Garden will focus on Mediterranean biome plant species, including California native and California friendly plants, and will educate guests through interactive, engaging exhibits on concepts like conservation and protection of the environment.

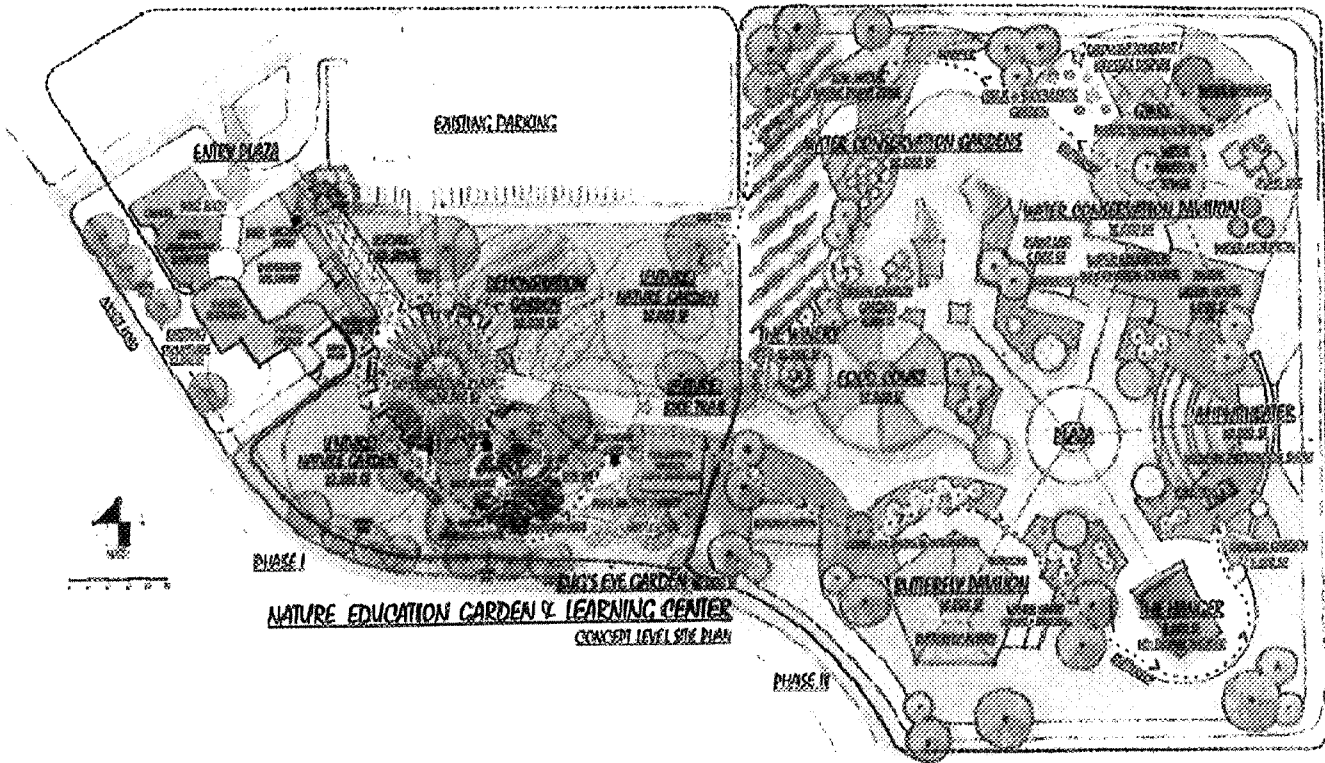
The property will initially contain demonstration gardens, water conservation gardens and pavilion, a science education garden, an ecology garden, a butterfly pavilion, a danger garden, a multi-purpose outdoor classroom, a children's interactive garden and play area, a ranch style market, specialty gift shop, plant nursery, nature education exhibitions, nature exchange program, teacher's resource library, and offer science based field trips for students.





# EXHIBIT "A"

The Discovery Gardens will be located on 12 acres anchored on the West with the existing Officer's Club building (a 22,000 sq. ft. building which will hold offices, ticket booths, traveling exhibits, store, restaurant, and educational facilities). Anchored on the South with a new 40,000 sq. ft. Butterfly Pavilion and Research Center. Anchored on the North with a Water Conservation Pavilion and Gardens. Anchored on the East with a Digital Theater and an Amphitheater for school groups. The Garden is expecting to have over 160,000 annual visitors and over 25,000 students in field trips annually.



Discovery Garden's Concept Plan

### Existing Partners:



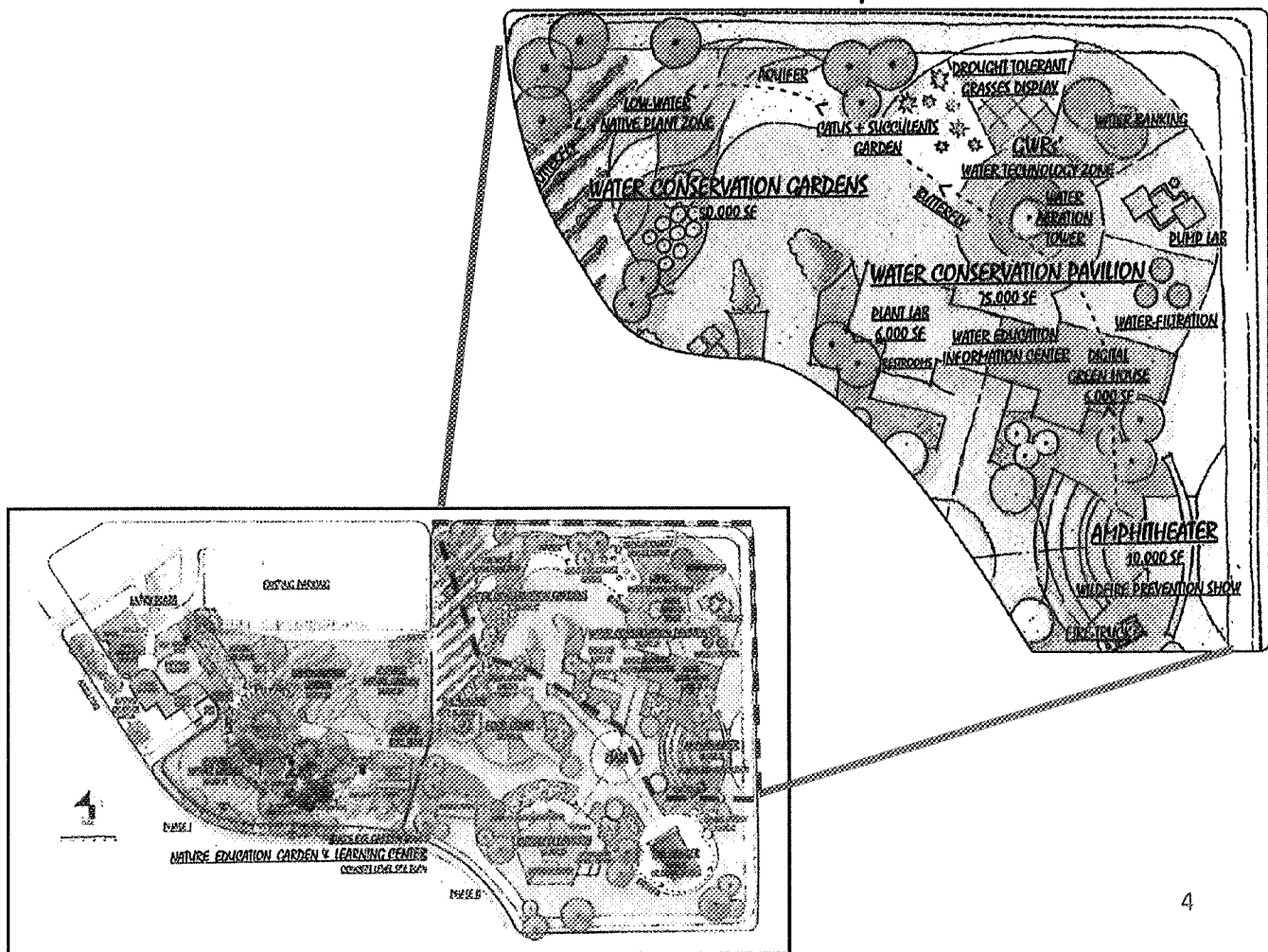
The partners of the project are currently comprised of the Discovery Science Center (providing leadership, design, and operational know-how), the Southern California Edison Company (providing exhibits on energy efficiency and conservancy through the gardens along with funds to make the Officer's Club building have a net zero energy consumption), the Great Park Corporation (providing the land, the Officer's Club building, funding to renovate the building and grant funds for the Bug's Eye Garden), and the Great Park Conservancy (providing funding for the Master Garden area).

# EXHIBIT "A"

## Initial Concept Water Conservation Gardens and Pavilion

One of the main areas inside the Discovery Gardens will be the Water Conservation Gardens and Pavilion. Currently this area is at the concept level of development and is intended to cover many areas from educating the public on the types of grasses for their home and the corresponding water consumption to how science behind the innovations in water purveyance and delivery. This area will include interactive demonstration gardens along with technology showcases, a plant lab to understand the science behind drought tolerant plants and more!

### Water Conservation Gardens and Pavilion – Concept Sketch



Discovery Garden's Concept Plan  
A - 4

**DISCOVERY**  
SCIENCE CENTER

**Title of Project:** Design Feasibility Study for Water Conservation Gardens and Water Education Pavilion of Discovery Gardens sponsored by Irvine Ranch Water District

**Date:** November 1, 2010

**Organization:** Discovery Science Center

**Address:** 2500 North Main Street, Santa Ana, CA 92705

**Contact:** Janet Yamaguchi, Vice President, Education      **Phone:** 714-913-5005

**Email:** [jyamaguchi@discoverycube.org](mailto:jyamaguchi@discoverycube.org)      **Fax:** 714-542-2828

**Budget:** \$85,000

**Organization Profile:**

*The mission of Discovery Science Center is to educate young minds, assist educators to teach science and technology in an increasingly compelling manner; and increase public understanding and appreciation of science, math, and technology through interactive exhibits and programs.*

Each year, over 290,000 students experience Discovery Science Center's educational programs; over 220,000 of these students experience these programs in their own classrooms from Science Center staff that bring the programs into the schools. Visitors to the Center will reach over 400,000 this year. All educational program content delivered through Discovery Science Center programs is designed to:

- Impart science concepts and educational subject material that are aligned with California Science Content Standards for K – 12<sup>th</sup> grades.
- Motivate students to seek additional knowledge after participating with the exhibits or in the programs and share the information they learned with their parents, siblings, and friends.
- Ignite an interest in pursuing science or engineering as an option for higher education or a career.
- Encourage behavioral changes, such as conserving water, reducing landfill usage and modifying their diet, toward the betterment of the community, the environment and themselves.

**DISCOVERY  
SCIENCE CENTER**

The Center currently is the largest provider of water education programs in Southern California, instructing about 112,000 students within Orange and LA Counties. One of our most successful educational partnerships is with Irvine Ranch Water District.

Discovery Science Center also provides professional development programs for teachers, helping to increase educator proficiency in teaching science and math, and in creating lesson plans and curriculum. Each year Discovery Science Center works with over 600 teachers who in turn impact thousands of students during their teaching career.

**Scope of Work:**

Discovery Science Center is requesting \$85,000 from Irvine Ranch Water District to develop a Design Feasibility Study for the Water Conservation Gardens and Water Education Pavilion of Discovery Gardens to be located adjacent to the Officer's Club at the Great Park. The Design Feasibility Study will be completed in four months time from start date and will result in a compilation of exhibit designs (Design Book) ready to be sent to exhibit fabrication firms for bid to build. The Design Book will include designs for the following areas, as well as the educational content that will be associated with these exhibits:

- 1000 sq. ft. Welcome Center and accompanying exhibits
- 6000 sq. ft. Virtual Greenhouse
- 2000 sq. ft. Indoor Plant Lab
- 5000 sq. ft. Water Conservation Garden and Tech Lab (this is the estimated combined footprint of the collection of outdoor exhibits that will be on display, scattered among the plants throughout the actual 2-acre garden area).

Suggested topic areas for the Water Conservation and Tech Lab include (1) basics of the water cycle and Southern California's natural scarcity of water, (2) how to conserve and protect our water sources, (3) how aerators, reverse osmosis, microfiltration, and DATS work, and (4) how water is captured, stored, and transported, both locally and across distances. Topic areas such as these enable the Center to teach mandated California Science Content as described by the California Department of Education to specific grade levels (see section on Science Standards).

**Deliverables and Timeline:**

In order to develop the Design Feasibility Study and Design Book, a minimum of once a month meetings between the Science Center team and the IRWD staff will occur to ensure that the exhibit concepts reflect the best practices and key educational messages of IRWD.

## **DISCOVERY**

### **SCIENCE CENTER**

The Science Center team will include Joe Adams (President), Kellee Preston (Vice President, Exhibits and Operations), Janet Yamaguchi (Vice President, Education) and Toby Gant (Director of Environmental Education); each team member will spend a minimum of 40 hours per month on this project. In addition, Discovery Science Center will engage West Office Exhibition Design to create and compile the exhibit designs in a Design Book, ready to be sent to exhibit fabrication firms for bid to build. The process will take four months at a cost, not to exceed \$85,000.

It is anticipated that the resulting Design Book will contain exhibit designs for approximately 3 acres of exhibitry and gardens. At that time, Discovery Science Center will begin to seek funding for these exhibits, using the Design Book as a fund-raising tool. Along with other entities, IRWD will be approached for a request to fund the fabrication and installation of a portion of the designed exhibits.

#### **California Science Content Standards**

##### Kindergarten Physical Science / Earth Science:

- Water Cycle: melting, freezing, evaporating
- Resource [Water] conservation

##### First Grade Physical Science / Earth Science:

- Water Cycle: heating, cooling, changing from one form into another
- Weather: rain, snow

##### Second Grade Earth Science:

- Soils retain water
- Water is a resource

##### Third Grade Physical Science / Social Science:

- [Water Cycle]: solid, liquid, and gas; evaporation and melting.
- Identify local and regional geophysical features: oceans [Watershed]
- Understand the use of resources of the local region and the modifications of the physical environment, such as dams, aqueducts, etc.

##### Fourth Grade Life Science / Earth Science / Social Science:

- Ecosystems [necessity of water]
- Adaptations of plants and animals [drought-tolerant]
- Watershed: erosion, transportation, deposition
- [Natural scarcity of water in Southern California]
- Location of the Pacific Ocean, and major rivers and features [aqueducts]

**DISCOVERY**  
SCIENCE CENTER

Fifth Grade Earth Science:

- Water sources: ocean, freshwater: rivers, lakes, underground sources, and glaciers
- Water is limited and its availability can be extended by recycling and decreasing the use of water.
- Know the origin of the water used by the local community.

Sixth Grade Ecology (Life Science) / Shaping Earth's Surface (Earth Science) / Resources:

- Organisms depend on resources, such as water
- Watershed
- Understand resources, including freshwater and how to classify these resources as renewable and nonrenewable.

High School Ecology / California Geology:

- Understand the role that water plays on the population of plants and animals; how water cycles between abiotic and organic matter in an ecosystem
- Understand the importance of resources [water] and its relation to CA geology [watershed. Aquifers, aqueducts, amount of precipitation]
- Know the importance of water to society, the origins of California; freshwater, and the relationships between supply and need.

November 22, 2010

Prepared by: Tanja Fournier/Rob Jacobson

Submitted by: Debby Cherney

Approved by: Paul Jones

## PUBLIC HEARING

### 2010 GENERAL OBLIGATION BOND ISSUANCE

#### SUMMARY:

Pursuant to the California Water Code, the IRWD Board is required to hold a public hearing and make findings pertaining to the issuance of consolidated improvement district (ID) bonds. At the conclusion of the public hearing, staff is requesting the Board adopt the Resolution Making Findings Relative to the Bonds, attached as Exhibit "A".

At its meeting on October 25, 2010, the IRWD Board adopted a Resolution of Intent to Issue Consolidated Series Bonds for a maximum amount of \$300 million. A subsequent and companion item on today's agenda recommends that the Board take an action to adopt the Resolution of Issuance on \$175,000,000 of general obligation bonds which includes approval of the Indenture of Trust, the Preliminary Official Statement, and authorizing and ratifying certain related actions.

#### PUBLIC HEARING – OUTLINE OF PROCEEDINGS

**President:** Declare this to be the time and place for a hearing of the Board of Directors of the Irvine Ranch Water District regarding the proposed Resolution of Issuance of Consolidated Bonds for Improvement District Nos. 105, 112, 113, 121, 130, 161, 182, 184, 188, 212, 221, 230, 250, 261, 282, and 284 in an amount up to \$300 million, and to declare the hearing open. Ask the District Secretary how the hearing was noticed.

**Secretary:** Resolution No. 2010-39 declaring the Board's intention to issue bonds was published for two successive weeks in the Orange County Register on November 8, 2010 and November 15, 2010 and posted at the District office on November 8, 2010. Additionally, on November 5, 2010 Resolution No. 2010-39 was posted in three public places within each Improvement District. Present Proof of Publication and Affidavit of Posting to be received and filed.

**President:** Request Legal Counsel to describe the nature of the proceedings.

**Legal Counsel:** Describe the proceedings.

**President:** Request staff to provide a summary of the proposed bond issue and requested findings

**Director of Finance:** Provide a summary of the proposed bond issue and requested findings



President: Inquire of the Secretary whether there have been any written communications.

Secretary: Respond.

President: Inquire whether there is anyone present who wishes to address the Board concerning the matter.

President: Inquire whether there are any comments or questions from members of the Board. State that the hearing will be closed and ask for a recommendation to close the hearing and to adopt resolutions.

Board: RECOMMENDATION: THAT THE HEARING BE CLOSED AND THE FOLLOWING RESOLUTION BE ADOPTED BY TITLE:

RESOLUTION NO. 2010- \_\_\_\_

RESOLUTION OF THE BOARD OF DIRECTORS OF THE  
IRVINE RANCH WATER DISTRICT MAKING FINDINGS  
RELATIVE TO CONSOLIDATED BONDS  
(SERIES 2010-A AND 2010-B)

PUBLIC HEARING AND REQUIRED FINDINGS:

On October 25, 2010, the Board adopted Resolution 2010-39 declaring its intent to issue consolidated general obligation bonds for Improvement District Nos. 105, 112, 113, 121, 130, 161, 182, 184, 188, 212, 221, 230, 250, 261, 282, and 284 in an amount not to exceed \$300 million. At this meeting the Board also approved the Resolution of Issuance (as to form), and set November 22, 2010 for a public hearing on the matter. As part of the hearing process, the Board is required to make the following findings relative to the issuance of the bonds:

- That the consolidated sale of the bonds will not increase the cost that any improvement district will pay had its bonds been sold separately, and
- That the features utilized in the bond issuance will not increase the cost that any Improvement District will pay over the cost that it would have paid had the bonds been sold without those features.

To assist the Board in making its findings, Goldman, Sachs & Co, has prepared a letter, attached as Exhibit “B”, which outlines the advantages of a consolidated sale and the use of a negotiated transaction versus competitive bid sale of the bonds.

FISCAL IMPACTS:

Issuing bonds in a par amount of \$175 million will result in approximately \$1,100,000 in cost of issuance, including \$847,000 in underwriting fees and expenses, \$115,000 for co-bond counsel, \$108,000 for rating agency fees, and \$30,000 in other miscellaneous costs of issuance expenses.



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:

The 2010 general obligation bond issuance was reviewed and approved by the Finance and Personnel Committee on October 5, 2010 and November 2, 2010 and by the Board on October 8, 2010, October 25, and November 8, 2010.

EXHIBITS:

Exhibit “A” – Resolution Making Findings

Exhibit “B” – Goldman Sachs Letter regarding the Consolidated Bond Sale



## Exhibit "A"

RESOLUTION NO. 2010-\_\_\_\_\_

### RESOLUTION OF THE BOARD OF DIRECTORS OF THE IRVINE RANCH WATER DISTRICT MAKING FINDINGS RELATIVE TO CONSOLIDATED BONDS (SERIES 2010A AND 2010B)

WHEREAS, by Resolution No. 2010-39 adopted October 25, 2010, the Board of Directors of Irvine Ranch Water District ("IRWD") declared its intention that portions of the remaining authorized bonds of Improvement District Nos. 105, 112, 113, 121, 130, 161, 182, 184, 188, 212, 221, 230, 250, 261, 282 and 284 (the "Included Improvement Districts") be issued as consolidated bonds pursuant to Sections 36447 and following of the California Water Code and Section 53541 of the California Government Code, in two series (hereinafter the series of the bonds, each in the principal amount to be determined and otherwise as described in the forms of the documents relating to such series on file with the Secretary as recited below and in the resolution providing for issuance, are individually referred to as the "Series A Bonds" and the "Series B Bonds" and collectively as the "Bonds"); and

WHEREAS, by said resolution, the Board of Directors approved as to form a resolution providing for the issuance of the Bonds and set Monday, the 22<sup>nd</sup> day of November, 2010, at the hour of 5:00 p.m. of said day (or as soon thereafter as is reasonably practicable) in the Board of Directors Room of Irvine Ranch Water District, 15600 Sand Canyon Avenue, Irvine, California as the time and place for a hearing on the proposed resolution of issuance and directed the publication and posting of notice thereof; and

WHEREAS, the duly noticed public hearing was held and all persons interested, including all persons owning land in the Included Improvement Districts or any persons otherwise interested in the Bonds, were given an opportunity to be heard concerning any matters set forth in Resolution No. 2010-39 and the proposed resolution of issuance or any matters material thereto, including the question of whether the burden on the lands of any of the Included Improvement Districts would be increased over the burden that would be borne by the Included Improvement District were its bonds sold separately; and

WHEREAS, there have been placed on file with the Secretary of IRWD the forms of an indenture and a contract of purchase relating to the Bonds, and this Board of Directors has been presented with the proposed resolution providing for the issuance of the Bonds;

NOW, THEREFORE, the Board of Directors of IRWD does hereby RESOLVE, DETERMINE AND ORDER as follows:

Section 1. In accordance with Section 36447.6 of the California Water Code, the Board of Directors determines that no protests signed by owners of land in any of the Included Improvement Districts have been submitted against the issuance of the Bonds or either series of the Bonds.

Section 2. In accordance with Sections 36447.1(b) and 36447.7 of the Water Code, the Board of Directors finds that the sale of the Series A Bonds as consolidated bonds pursuant to Sections 36447 and following of the Water Code will not increase the cost that any Included Improvement District will pay for its included bonds over the cost it would have paid had its bonds been sold separately, and further finds that the sale of the Series A Bonds at private sale without advertising for bids as permitted by Section 36447.9 and the use of credit enhancement and other arrangements for the Series A Bonds as permitted by Section 36447.10 will not increase the cost that any Included Improvement District will pay over the cost that it would have paid had the Series A Bonds been sold without those features, and further, that the foregoing determinations are supported by substantial evidence contained in the record of IRWD concerning the Series A Bonds.

Section 3. In accordance with Sections 36447.1(b) and 36447.7 of the Water Code, the Board of Directors finds that the sale of the Series B Bonds as consolidated bonds pursuant to Sections 36447 and following of the Water Code will not increase the cost that any Included Improvement District will pay for its included bonds over the cost it would have paid had its bonds been sold separately, and further finds that the sale of the Series B Bonds at private sale without advertising for bids as permitted by Section 36447.9 and the use of credit enhancement and other arrangements for the Series B Bonds as permitted by Section 36447.10 will not increase the cost that any Included Improvement District will pay over the cost that it would have paid had the Series B Bonds been sold without those features, and further, that the foregoing determinations are supported by substantial evidence contained in the record of IRWD concerning the Series B Bonds.

ADOPTED, SIGNED AND APPROVED THIS \_\_\_\_\_ day of \_\_\_\_\_, 2010.

\_\_\_\_\_  
President/Vice President  
IRVINE RANCH WATER DISTRICT  
and of the Board of Directors  
thereof

\_\_\_\_\_  
Secretary/Assistant Secretary  
IRVINE RANCH WATER DISTRICT  
and of the Board of Directors  
thereof

APPROVED AS TO FORM:

BOWIE, ARNESON,  
WILES & GIANNONE  
Legal Counsel - IRWD

By \_\_\_\_\_  
155163/ 111710



**Memorandum**

**Date:** November 16, 2010

**To:** Irvine Ranch Water District

**From:** Tim Romer (310) 407-5886  
 Chris Higgins (310) 407-5937  
 Simon Wirecki (310) 407-5712  
**Goldman, Sachs & Co.**

**Subject:** Bonds of the Irvine Ranch Water District, Series 2010 A&B

The purpose of this memo is to provide a brief outline of the financing structure considered for the 2010 Consolidated General Obligation Bond issue and to highlight the reasons for issuing as Consolidated GO Bonds versus selling separate Improvement District Bonds. It is our understanding that the Board of Directors is required by the California State Water Code to make the finding noted below in connection with the General Obligation Bonds:

*1. Code Section: 36447.1(b) -- The Board is further required to find that the "included bonds as consolidated bonds shall not increase the cost that any improvement district will pay for its included bonds over the cost it would have paid had its bonds sold separately."*

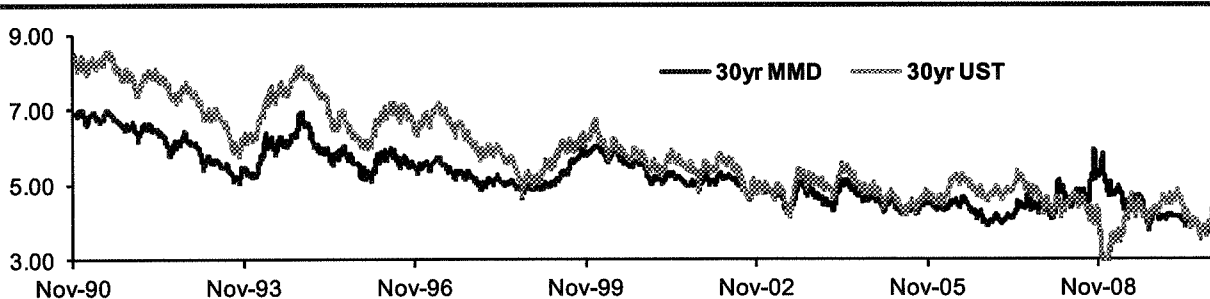
Additionally, we describe below the rationale and benefit behind providing credit enhancement in the form of a pledge of revenues of the District as allowed by the recent SB 613, which was approved by the CA state legislature and signed by the Governor.

To assist the Board of Directors of the District in making the findings with respect to the planned consolidated General Obligation bonds, we provide the following analyses.

**Market Considerations**

In the current market, long term fixed rates as represented by the 30-year MMD index and the 30-year Treasury are at historically low levels. The graph below shows historic data for these indices and indicates that long-term tax-exempt rates (as measured by the 30-year MMD) have been lower only 12% of the time over the last 20 years and long-term taxable rates (as measured by the 30-year Treasury) have been lower only 10% of the time during that same period.

**Long-Term Rates Municipal (MMD) and Treasury Rates  
 Past 20 Years**



As the graph above shows, issuing fixed rate debt in the current market will lock in long-term fixed rates that are very low from a historical perspective.

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## Market Access

For most Improvement Districts, the sole underlying security of the General Obligation (GO) credit is the pledge of an unlimited *ad valorem* tax upon real property within the individual improvement districts. Heretofore, there was no ability (in the case of most districts) to pledge revenues of the system to GO bondholders, and therefore (absent some form of 3<sup>rd</sup>-party credit enhancement) the rating agencies and investors will base their credit analysis off an improvement district-by-improvement district pledge of *ad valorem* tax revenue. If the District were to pursue separate Improvement District level issuances, accessing the capital markets would be more costly, by virtue of needing to incur costs for each issuance rather than aggregating into one consolidated issuance. More importantly, the individual Improvement District issuances would vary in size and rating creating additional cost and administrative burden for the District. Some of the individual issuances would be very small and therefore not attract the same level of attention an aggregated consolidated issuance would command. Additionally, the smaller individual issuances would each require their own unique rating (most, if not all, of which would not reflect the strong credit quality of the overall District). Therefore issuing via a Consolidated G.O. transaction provides economies of scale and creates a larger more liquid debt offering that will result in higher investor participation and lower overall borrowing cost than if each were done on a stand-alone basis.

## Credit Enhancement

With the recent passage into law of SB 613 by the legislature and subsequent signature by the Governor, the District now has the ability to elect to create a “double-barrel” pledge of both *ad valorem* taxes within each improvements district, and revenues of the system for its Consolidated GO bond issuances. Absent the application of SB 613 to the Series 2010 A and B Bonds we believe it would be very challenging to achieve an underlying rating reflecting the credit quality of the overall District and necessary to attract the universe of buyers required to produce the lowest cost of funding. By applying the pledge of revenues of the District to the 2010 A and B Bonds, the District will be able to achieve high Aa1/AAA level ratings which will result in best execution and lowest cost of borrowing. The most efficient and cost effective way to utilize SB 613 is to apply it to a consolidated issuance which aggregates to a meaningful issuance size that will maximize the universe of investors and minimize the overall cost of financing.

## Issuance Alternatives

Please see the table below which compares the current market cost of the proposed Consolidated General Obligation bonds which include the pledge of net revenues (as provided for and enhanced by SB 613) with assumed ratings of Aa1/AAA/AAA) with Consolidated General Obligation bonds without the net revenue pledge (with assumed ratings of A3/A-).

	Fixed Rate Bonds with SB 613	Fixed Rate Bonds w/o SB 613
Par	\$175,000,000	\$175,000,000
Estimated All-in TIC	3.998%	4.799%

## Negotiated Sale

The market for the remainder of calendar year 2010 is expected to be heavy with supply of municipal debt offerings. As an example, the week of November 15 is expected to see roughly \$15 billion of supply. The weekly average supply for municipal debt in 2010 has been roughly \$7 billion. While municipal bond fund flows have been positive most of the year (indicating there has been decent demand for municipal bonds) it is expected that the anticipated level of supply will require that increased efforts be made to proactively differentiate an issuers credit. By pursuing the sale via a negotiated sale process, the District will have its underwriter working in anticipation of the sale date to garner the appropriate level of attention and maximize participation in the District’s bond offering to obtain the lowest cost of funds. It is additionally important, in this market characterized by heavy supply, to have the ability to change the sale date if necessary given various factors such as competing supply, volatile market moves, etc. This differs from a competitive sale where the District does not have an underwriter working on its behalf prior to the sale but rather asks for a “bid” on a given date. The competitive sale approach results in less flexibility and ability to maximize investor interest in the transaction.



November 22, 2010

Prepared by: Tanja Fournier/Rob Jacobson

Submitted by: Debby Cherney

Approved by: Paul Jones

## ACTION CALENDAR

### 2010 GENERAL OBLIGATION BOND ISSUANCE: DOCUMENT APPROVAL AND MARKET UPDATE

#### SUMMARY:

At its meeting on October 25, 2010, the IRWD Board adopted a Resolution of Intent to Issue Consolidated Series Bonds for a maximum amount of \$300 million. A Public Hearing to make the required findings under California Water Code is agendized prior to this item; the Board is required to hold a public hearing and make findings pertaining to the issuance of consolidated improvement district (ID) bonds. At the conclusion of that public hearing, staff has requested that the Board adopt a Resolution Making Findings Relative to the Bonds.

Staff now recommends that the Board take an action to adopt the Resolution of Issuance on \$175,000,000 of general obligation bonds which includes approval of the Indenture of Trust, the Preliminary Official Statement, and authorizing and ratifying certain actions, attached as Exhibit "A".

#### BACKGROUND:

##### Sizing and Timing of Bond Issue:

On October 25, 2010, the Board approved proceeding with the steps necessary to issue bonds for reimbursement and future capital needs in an amount up to \$300 million with a maturity term of up to 40 years. While the capital expenditures are estimated at \$290 million over the next three years, staff recommends a bond issuance in the amount of \$175 million due to the following factors:

- Historically only 75% to 80% percent of the IRWD capital budget has been expended each year. Staff applied a 30% (\$87 million) reduction to the three-year cash flow projections to avoid potential penalties for failure to expend the funds.
- Some IDs have insufficient or no bond authorization remaining, resulting in a \$28 million reduction from the total three-year capital projections. Those IDs need to fund their capital from other sources.

Staff focused its analysis on the timing of the projects and estimated cash flows to ensure that the bond proceeds will be expended in three years in order to avoid potential spending requirement penalties and potential loss of the 35% Build America Bond subsidy. The Finance and Personnel Committee reviewed and concurs with staff's recommendation

The Indenture of Trust, including the form of a first supplemental indenture of trust, and the Preliminary Official Statement are on file with the District Secretary in substantially final form. Ratings have been received from Moody's (Aa1) and are expected from Fitch Ratings and



Action Calendar - 2010 General Obligation Bond Issuance: Document Approval and Market Update

November 22, 2010

Page 2

Standard and Poor's on or before November 23, 2010. The bond issuance is expected to price on or about December 9 and to close on December 16, 2010. This timing may shift back by one week depending on market conditions.

Staff and representatives from Goldman Sachs & Co. will provide an update on market conditions and rates at the Board meeting.

Pledge of Net Revenues – Governing Criteria:

On November 8, 2010, the Board adopted Resolution 2010-40 establishing a four part criterion when evaluating the use of a net revenue pledge in lieu of, or in combination with, other credit enhancement and liquidity options available to the District for its general obligation debt issuances. The use of the District net revenue pledge must meet one or more of the Board-adopted criterion. The proposed structure of the 2010 bond issuance meets three of the four stated criterion, and staff is recommending the use of the pledge in connection with the 2010 bond issuance. A matrix summarizing the Board-approved criterion is attached as Exhibit "B", and outlines the benefits of utilizing the pledge of net revenues in connection with the issuance of the 2010 general obligation bonds.

FISCAL IMPACTS:

Issuing bonds in a par amount of \$175 million will result in approximately \$1,100,000 in cost of issuance, including \$847,000 in underwriting fees and expenses, \$115,000 for co-bond counsel, \$108,000 for rating agency fees, and \$30,000 in other miscellaneous costs of issuance expenses.

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:

The 2010 bond issuance was reviewed and approved by the Finance and Personnel Committee on October 5, 2010 and November 2, 2010 and by the Board on October 8, 2010, October 25, and November 8, 2010.

RECOMMENDATION:

THAT THE FOLLOWING RESOLUTION BE ADOPTED BY TITLE:

RESOLUTION NO. 2010- \_\_\_\_

RESOLUTION OF THE BOARD OF DIRECTORS OF THE IRVINE RANCH WATER DISTRICT PROVIDING FOR THE ISSUANCE OF CONSOLIDATED BONDS OF SAID DISTRICT, APPROVING DOCUMENTS AND AUTHORIZING AND RATIFYING CERTAIN ACTIONS (SERIES 2010-A AND 2010-B)

EXHIBITS:

Exhibit "A" – Resolution of Issuance

Exhibit "B" – Matrix of Criteria for Utilization of District Net Revenue Pledge



Exhibit "A"

RESOLUTION NO. \_\_

RESOLUTION OF THE BOARD OF DIRECTORS OF  
THE IRVINE RANCH WATER DISTRICT PROVIDING  
FOR THE ISSUANCE OF CONSOLIDATED BONDS  
OF SAID DISTRICT, APPROVING DOCUMENTS AND  
AUTHORIZING AND RATIFYING CERTAIN ACTIONS  
(SERIES 2010A AND SERIES 2010B)

WHEREAS, the below-recited authorized, unissued bonds of improvement districts of Irvine Ranch Water District ("IRWD") may be issued as consolidated bonds;

Improvement District No. 105

WHEREAS, pursuant to Resolution No. 1978-62 adopted by the Board of Directors of IRWD on April 17, 1978, a special election was conducted in Improvement District No. 105 of IRWD on June 19, 1978, at which election there was submitted to the qualified voters of said Improvement District the following bond proposition:

**BOND PROPOSITION:** Shall the Irvine Ranch Water District incur an indebtedness and issue general obligation bonds for Improvement District No. 105 thereof in the amount of \$140,827,000 at a maximum interest rate of eight percent (8%) per annum, to acquire and construct works and facilities for the acquisition, collection, storage and distribution of water and water rights, to enable said District to utilize a water supply furnished under the State Water Resources Development System (commonly known as the "State Water Project") pursuant to Section 12944.5 of the Water Code of the State of California, including dams, reservoirs, storage tanks, treatment facilities, pipes, pumping equipment and all necessary equipment and property therefor, acquiring funds to fulfill contractual commitments to carry out the powers and purposes of the District contained in contracts, including contracts with other agencies, and the payment of operating and other costs of the District and the establishment of all or part of the bond reserve fund out of the proceeds of the sale of said bonds, all in accordance with the Supplement to the Plan of Works for Improvement District No. 105?

WHEREAS, more than one-half of the votes cast at said election were cast in favor of incurring said indebtedness and issuing said general obligation bonds and IRWD was authorized to issue bonds in the amount and for the purpose set forth in said proposition;

WHEREAS, of said authorized amount of \$140,827,000, the principal amounts of \$10,960,000 comprising a portion of consolidated bonds designated "BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 1984," \$5,688,000 comprising a portion of consolidated bonds designated "BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 1991," \$5,600,000 comprising a portion of consolidated bonds designated "BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES

1993,” \$10,050,600 comprising a portion of consolidated bonds designated “BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 1995,” \$17,000,000 comprising a portion of consolidated bonds designated “BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 2006,” \$37,173,000 comprising a portion of consolidated bonds designated “BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 2007,” \$15,250,000 comprising a portion of consolidated bonds designated “BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 2009A” and \$15,250,000 comprising a portion of consolidated bonds designated “BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 2009B” have been issued and sold;

Improvement District No. 112

WHEREAS, pursuant to Resolution No. 2008-29 adopted by the Board of Directors of IRWD on May 27, 2008, a special election was conducted in Improvement District No. 112 of IRWD on August 26, 2008, at which election there was submitted to the qualified voters of said Improvement District the following bond proposition:

BOND PROPOSITION: Shall the Irvine Ranch Water District incur an indebtedness and issue general obligation bonds for Improvement District No. 112 thereof in the amount of \$28,512,300 at a maximum interest rate of twelve percent (12%) per annum, to acquire and construct works and facilities for the acquisition, collection, storage, distribution and treatment of water and water rights, including dams, reservoirs, storage tanks, treatment facilities, pipes, pumping equipment, urban runoff diversion and treatment systems, and all necessary equipment and property therefor, reconstruction, replacements and additions to said facilities, acquiring funds to fulfill contractual commitments to carry out the powers and purposes of the District contained in contracts, including contracts with other agencies, all in accordance with the Plan of Works for Improvement District No. 112?

WHEREAS, more than two-thirds of the votes cast at said election were cast in favor of incurring said indebtedness and issuing said general obligation bonds and IRWD was authorized to issue bonds in the amount and for the purpose set forth in said proposition;

WHEREAS, of said authorized amount of \$28,512,300, the principal amounts of \$1,370,000 comprising a portion of consolidated bonds designated “BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 2009A” and \$1,370,000 comprising a portion of consolidated bonds designated “BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 2009B” have been issued and sold;

Improvement District No. 113

WHEREAS, pursuant to Resolution No. 2004-21 adopted by the Board of Directors of IRWD on June 14, 2004, a special election was conducted in Improvement District No. 113 of IRWD on August 31, 2004, at which election there was submitted to the qualified voters of said Improvement District the following bond proposition:

**BOND PROPOSITION:** Shall the Irvine Ranch Water District incur an indebtedness and issue general obligation bonds for Improvement District No. 113 thereof in the amount of \$25,769,500 at a maximum interest rate of twelve percent (12%) per annum, to acquire and construct works and facilities for the acquisition, collection, storage, distribution and treatment of water and water rights, including dams, reservoirs, storage tanks, treatment facilities, pipes, pumping equipment, urban runoff diversion and treatment systems, and all necessary equipment and property therefor, reconstruction, replacements and additions to said facilities, acquiring funds to fulfill contractual commitments to carry out the powers and purposes of the District contained in contracts, including contracts with other agencies, all in accordance with the Plan of Works for Improvement District No. 113?

WHEREAS, more than two-thirds of the votes cast at said election were cast in favor of incurring said indebtedness and issuing said general obligation bonds and IRWD was authorized to issue bonds in the amount and for the purpose set forth in said proposition;

WHEREAS, of said authorized amount of \$25,769,500, the principal amount of \$1,500,000 comprising a portion of consolidated bonds designated "BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 2006," \$5,000,000 comprising a portion of consolidated bonds designated "BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 2007," \$1,500,000 comprising a portion of consolidated bonds designated "BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 2009A" and \$1,500,000 comprising a portion of consolidated bonds designated "BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 2009B" have been issued and sold;

Improvement District No. 121

WHEREAS, pursuant to Resolution No. 1978-58 adopted by the Board of Directors of IRWD on April 17, 1978, a special election was conducted in Improvement District No. 121 of IRWD on June 19, 1978, at which election there was submitted to the qualified voters of said Improvement District the following bond proposition:

**BOND PROPOSITION:** Shall the Irvine Ranch Water District incur an indebtedness and issue general obligation bonds for Improvement District No. 121 thereof in the amount of \$35,437,000 at a maximum interest rate of eight percent (8%) per annum, to acquire and construct works and facilities for the acquisition, collection, storage and distribution of water and water rights, to enable said District to utilize a water supply furnished under the State Water Resources Development System (commonly known as the "State Water Project") pursuant to Section 12944.5 of the Water Code of the State of California, including dams, reservoirs, storage tanks, treatment facilities, pipes, pumping equipment and all necessary equipment and property therefor, acquiring funds to fulfill contractual commitments to carry out the powers and purposes of the District contained in contracts, including contracts with other agencies, and the payment of operating and other costs of the District and the establishment of all or

part of the bond reserve fund out of the proceeds of the sale of said bonds, all in accordance with the Plan of Works for Improvement District No. 121?

WHEREAS, more than one-half of the votes cast at said election were cast in favor of incurring said indebtedness and issuing said general obligation bonds and IRWD was authorized to issue bonds in the amount and for the purpose set forth in said proposition;

WHEREAS, of said authorized amount of \$35,437,000, the principal amounts of \$1,350,000 of bonds designated "WATERWORKS BONDS, ELECTION 1978, SERIES A, OF IRVINE RANCH WATER DISTRICT FOR IMPROVEMENT DISTRICT NO. 121," \$9,850,000 comprising a portion of consolidated bonds designated "BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 1984," \$782,000 comprising a portion of consolidated bonds designated "BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 1985," \$2,900,000 comprising a portion of consolidated bonds designated "BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 2009A" and \$2,900,000 comprising a portion of consolidated bonds designated "BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 2009B" have been issued and sold;

Improvement District No. 130

WHEREAS, pursuant to Resolution No. 1977-37 adopted by the Board of Directors of IRWD on April 18, 1977, a special election was conducted in Improvement District No. 103 of IRWD on May 31, 1977, at which election there was submitted to the qualified voters of said Improvement District the following bond proposition:

**BOND PROPOSITION:** Shall the Irvine Ranch Water District incur an additional indebtedness and issue general obligation bonds for Improvement District No. 103 thereof in the amount of \$19,345,000 at a maximum interest rate of eight percent (8%) per annum, to acquire and construct works and facilities for the acquisition, collection, storage and distribution of water and water rights, including dams, reservoirs, storage tanks, treatment facilities, pipes, pumping equipment and all necessary equipment and property therefor, acquiring funds to fulfill contractual commitments to carry out the powers and purposes of the District contained in contracts, including contracts with other agencies, and the payment of operating and other costs of the District and the establishment of all or part of the bond reserve fund out of the proceeds of the sale of said bonds, all in accordance with the Plan of Works for Improvement District No. 103 as heretofore amended by and described in Resolution No. 1977-36 of the Board of Directors of the District?

WHEREAS, more than two-thirds of the votes cast at said election were cast in favor of incurring said indebtedness and issuing said general obligation bonds and IRWD was authorized to issue bonds in the amount and for the purpose set forth in said proposition;

WHEREAS, of said authorized amount of \$19,345,000, the principal amounts of \$6,530,000 comprising a portion of the bonds designated "WATERWORKS BONDS, SERIES B, OF THE IRVINE RANCH WATER DISTRICT FOR IMPROVEMENT DISTRICT NO.

103,” \$275,000 of bonds designated “WATERWORKS BONDS, SERIES C, OF THE IRVINE RANCH WATER DISTRICT FOR IMPROVEMENT DISTRICT NO. 103,” \$4,450,000 of bonds designated “WATERWORKS BONDS, SERIES D, OF THE IRVINE RANCH WATER DISTRICT FOR IMPROVEMENT DISTRICT NO. 103,” \$3,750,000 of bonds designated “WATERWORKS BONDS, SERIES E, OF THE IRVINE RANCH WATER DISTRICT FOR IMPROVEMENT DISTRICT NO. 103” and \$470,000 of bonds designated “WATERWORKS BONDS, ELECTION 1977, SERIES F, OF THE IRVINE RANCH WATER DISTRICT FOR IMPROVEMENT DISTRICT NO. 103” were issued and sold prior to the below-recited consolidation of Improvement District No. 103;

WHEREAS, pursuant to Resolution No. 1978-59 adopted by the Board of Directors of IRWD on April 17, 1978, a special election was conducted in Improvement District No. 103 of IRWD on June 19, 1978, at which election there was submitted to the qualified voters of said Improvement District the following bond proposition:

**BOND PROPOSITION:** Shall the Irvine Ranch Water District incur an indebtedness and issue general obligation bonds for Improvement District No. 103 thereof in the amount of \$7,381,000 at a maximum interest rate of eight percent (8%) per annum, to acquire and construct works and facilities for the acquisition, collection, storage and distribution of water and water rights, to enable said District to utilize a water supply furnished under the State Water Resources Development System (commonly known as the “State Water Project”) pursuant to Section 12944.5 of the Water Code of the State of California, including dams, reservoirs, storage tanks, treatment facilities, pipes, pumping equipment and all necessary equipment and property therefor, acquiring funds to fulfill contractual commitments to carry out the powers and purposes of the District contained in contracts, including contracts with other agencies, and the payment of operating and other costs of the District and the establishment of all or part of the bond reserve fund out of the proceeds of the sale of said bonds, all in accordance with the Supplement to the Plan of Works for Improvement District No. 103?

WHEREAS, more than one-half of the votes cast at said election were cast in favor of incurring said indebtedness and issuing said general obligation bonds and IRWD was authorized to issue bonds in the amount and for the purpose set forth in said proposition;

WHEREAS, no bonds of said authorized amount of \$7,381,000 were issued and sold prior to the below-recited consolidation of Improvement District No. 103;

WHEREAS, pursuant to Resolution No. 1978-64 adopted by the Board of Directors of IRWD on April 17, 1978, a special election was conducted in Improvement District No. 109 of IRWD on June 19, 1978, at which election there was submitted to the qualified voters of said Improvement District the following bond proposition:

**BOND PROPOSITION:** Shall the Irvine Ranch Water District incur an indebtedness and issue general obligation bonds for Improvement District No. 109 thereof in the amount of \$73,194,000 at a maximum interest rate of eight percent (8%) per annum, to acquire and construct works and facilities for the



acquisition, collection, storage and distribution of water and water rights, to enable said District to utilize a water supply furnished under the State Water Resources Development System (commonly known as the "State Water Project") pursuant to Section 12944.5 of the Water Code of the State of California, including dams, reservoirs, storage tanks, treatment facilities, pipes, pumping equipment and all necessary equipment and property therefor, acquiring funds to fulfill contractual commitments to carry out the powers and purposes of the District contained in contracts, including contracts with other agencies, and the payment of operating and other costs of the District and the establishment of all or part of the bond reserve fund out of the proceeds of the sale of said bonds, all in accordance with the Supplement to the Plan of Works for Improvement District No. 109?

WHEREAS, more than one-half of the votes cast at said election were cast in favor of incurring said indebtedness and issuing said general obligation bonds and IRWD was authorized to issue bonds in the amount and for the purpose set forth in said proposition;

WHEREAS, of said authorized amount of \$73,194,000, the principal amounts of \$4,800,000 of bonds designated "WATERWORKS BONDS, ELECTION 1978, SERIES A, OF IRVINE RANCH WATER DISTRICT FOR IMPROVEMENT DISTRICT NO. 109," \$1,200,000 comprising a portion of consolidated bonds designated "BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 1984" and \$6,141,000 comprising a portion of consolidated bonds designated "BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 1985" were issued and sold prior to the below-recited consolidation of Improvement District No. 109;

WHEREAS, by Resolution No. 2008-56 adopted on October 13, 2008, the Board of Directors of IRWD ordered the consolidation of Improvement District Nos. 103 and 109 into a single improvement district designated "Improvement District No. 130," and pursuant to Section 36438 of the California Water Code, the authorized but unissued bonds of Improvement District Nos. 103 and 109 permitted to be issued and sold as the bonds of Improvement District No. 130 totaled \$72,304,000 upon said consolidation;

WHEREAS, of said consolidated authorized amount of \$72,304,000, the principal amounts of \$2,650,000 comprising a portion of consolidated bonds designated "BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 2009A" and \$2,650,000 comprising a portion of consolidated bonds designated "BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 2009B" have been issued and sold;

*Improvement District No. 161*

WHEREAS, pursuant to Resolution No. 1978-63 adopted by the Board of Directors of IRWD on April 17, 1978, a special election was conducted in Improvement District No. 161 of IRWD on June 19, 1978, at which election there was submitted to the qualified voters of said Improvement District the following bond proposition:

**BOND PROPOSITION:** Shall the Irvine Ranch Water District incur an indebtedness and issue general obligation bonds for Improvement District No. 161 thereof in the amount of \$40,786,000 at a maximum interest rate of eight percent (8%) per annum, to acquire and construct works and facilities for the acquisition, collection, storage and distribution of water and water rights, to enable said District to utilize a water supply furnished under the State Water Resources Development System (commonly known as the "State Water Project") pursuant to Section 12944.5 of the Water Code of the State of California, including dams, reservoirs, storage tanks, treatment facilities, pipes, pumping equipment and all necessary equipment and property therefor, acquiring funds to fulfill contractual commitments to carry out the powers and purposes of the District contained in contracts, including contracts with other agencies, and the payment of operating and other costs of the District and the establishment of all or part of the bond reserve fund out of the proceeds of the sale of said bonds, all in accordance with the Plan of Works for Improvement District No. 161?

WHEREAS, more than one-half of the votes cast at said election were cast in favor of incurring said indebtedness and issuing said general obligation bonds and IRWD was authorized to issue bonds in the amount and for the purpose set forth in said proposition;

WHEREAS, of said authorized amount of \$40,786,000, the principal amounts of \$735,000 of bonds designated "WATERWORKS BONDS, ELECTION 1978, SERIES A, OF IRVINE RANCH WATER DISTRICT FOR IMPROVEMENT DISTRICT NO. 161," \$1,100,000 comprising a portion of consolidated bonds designated "BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 2006," \$1,800,000 comprising a portion of consolidated bonds designated "BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 2009A" and \$1,800,000 comprising a portion of consolidated bonds designated "BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 2009B" have been issued and sold;

*Improvement District No. 182*

WHEREAS, pursuant to Resolution No. 1988-11 adopted by the Board of Directors of IRWD on January 25, 1988, a special election was conducted in Improvement District No. 182 of IRWD on March 1, 1988, at which election there was submitted to the qualified voters of said Improvement District the following bond proposition:

**BOND PROPOSITION:** Shall the Irvine Ranch Water District incur an indebtedness and issue general obligation bonds for Improvement District No. 182 thereof in the amount of \$74,653,000 at a maximum interest rate of twelve percent (12%) per annum, to acquire and construct works and facilities for the acquisition, collection, storage and distribution of water and water rights, to enable the Irvine Ranch Water District to utilize a water supply furnished under the State Water Resources Development System (commonly known as the "State Water Project"), including dams, reservoirs, storage tanks, treatment facilities, pipes, pumping equipment and all necessary equipment and property therefor,

acquiring funds to fulfill contractual commitments to carry out the powers and purposes of the District contained in contracts, including contracts with other agencies, all in accordance with the Plan of Works for Improvement District No. 182?

WHEREAS, more than two-thirds of the votes cast at said election were cast in favor of incurring said indebtedness and issuing said general obligation bonds and IRWD was authorized to issue bonds in the amount and for the purpose set forth in said proposition;

WHEREAS, of said authorized amount of \$74,653,000, the principal amounts of \$7,350,000 of bonds designated "WATERWORKS BONDS, ELECTION 1988, SERIES A, OF IRVINE RANCH WATER DISTRICT FOR IMPROVEMENT DISTRICT NO. 182," \$357,000 comprising a portion of consolidated bonds designated "BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 2006," \$850,000 comprising a portion of consolidated bonds designated "BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 2009A" and \$850,000 comprising a portion of consolidated bonds designated "BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 2009B" have been issued and sold;

Improvement District No. 184

WHEREAS, pursuant to Resolution No. 1988-30 adopted by the Board of Directors of IRWD on March 14, 1988, a special election was conducted in Improvement District No. 184 of IRWD on April 19, 1988, at which election there was submitted to the qualified voters of said Improvement District the following bond proposition:

**BOND PROPOSITION:** Shall the Irvine Ranch Water District incur an indebtedness and issue general obligation bonds for Improvement District No. 184 thereof in the amount of \$79,065,000 at a maximum interest rate of twelve percent (12%) per annum, to acquire and construct works and facilities for the acquisition, collection, storage and distribution of water and water rights, to enable the Irvine Ranch Water District to utilize a water supply furnished under the State Water Resources Development System (commonly known as the "State Water Project"), including dams, reservoirs, storage tanks, treatment facilities, pipes, pumping equipment and all necessary equipment and property therefor, acquiring funds to fulfill contractual commitments to carry out the powers and purposes of the District contained in contracts, including contracts with other agencies, all in accordance with the Plan of Works for Improvement District No. 184?

WHEREAS, more than two-thirds of the votes cast at said election were cast in favor of incurring said indebtedness and issuing said general obligation bonds and IRWD was authorized to issue bonds in the amount and for the purpose set forth in said proposition;

WHEREAS, of said authorized amount of \$79,065,000, the principal amounts of \$600,000 comprising a portion of consolidated bonds designated "BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 2009A" and \$600,000 comprising a portion of

consolidated bonds designated “BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 2009B” have been issued and sold;

Improvement District No. 188

WHEREAS, pursuant to Resolution No. 1989-28 adopted by the Board of Directors of IRWD on April 24, 1989, a special election was conducted in Improvement District No. 188 of IRWD on June 13, 1989, at which election there was submitted to the qualified voters of said Improvement District the following bond proposition:

**BOND PROPOSITION:** Shall the Irvine Ranch Water District incur an indebtedness and issue general obligation bonds for Improvement District No. 188 thereof in the amount of \$8,174,000 at a maximum interest rate of twelve percent (12%) per annum, to acquire and construct works and facilities for the acquisition, collection, storage and distribution of water and water rights, to enable the Irvine Ranch Water District to utilize a water supply furnished under the State Water Resources Development System (commonly known as the “State Water Project”), including dams, reservoirs, storage tanks, treatment facilities, pipes, pumping equipment and all necessary equipment and property therefor, acquiring funds to fulfill contractual commitments to carry out the powers and purposes of the District contained in contracts, including contracts with other agencies, all in accordance with the Plan of Works for Improvement District No. 188?

WHEREAS, more than two-thirds of the votes cast at said election were cast in favor of incurring said indebtedness and issuing said general obligation bonds and IRWD was authorized to issue bonds in the amount and for the purpose set forth in said proposition;

WHEREAS, of said authorized amount of \$8,174,000, the principal amounts of \$2,957,010 comprising a portion of consolidated bonds designated “BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 1989,” \$90,000 comprising a portion of consolidated bonds designated “BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 2009A” and \$90,000 comprising a portion of consolidated bonds designated “BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 2009B” have been issued and sold;

Improvement District No. 212

WHEREAS, pursuant to Resolution No. 2008-30 adopted by the Board of Directors of IRWD on May 27, 2008, a special election was conducted in Improvement District No. 212 of IRWD on August 26, 2008, at which election there was submitted to the qualified voters of said Improvement District the following bond proposition:

**BOND PROPOSITION:** Shall the Irvine Ranch Water District incur an indebtedness and issue general obligation bonds for Improvement District No. 212 thereof in the amount of \$108,711,800 at a maximum interest rate of twelve percent (12%) per annum, to acquire and construct works and facilities for the collection, treatment and disposal of sewage and the storage and distribution of

reclaimed water, including dams, reservoirs, storage tanks, treatment facilities, pipes, pumping equipment and all necessary equipment and property therefor, reconstruction, replacements and additions to said facilities, acquiring funds to fulfill contractual commitments to carry out the powers and purposes of the District contained in contracts, including contracts with other agencies, all in accordance with the Plan of Works for Improvement District No. 212?

WHEREAS, more than two-thirds of the votes cast at said election were cast in favor of incurring said indebtedness and issuing said general obligation bonds and IRWD was authorized to issue bonds in the amount and for the purpose set forth in said proposition;

WHEREAS, of said authorized amount of \$108,711,800, the principal amounts of \$3,650,000 comprising a portion of consolidated bonds designated "BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 2009A" and \$3,650,000 comprising a portion of consolidated bonds designated "BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 2009B" have been issued and sold;

Improvement District No. 221

WHEREAS, pursuant to Resolution No. 1978-65 adopted by the Board of Directors of IRWD on April 17, 1978, a special election was conducted in Improvement District No. 221 of IRWD on June 19, 1978, at which election there was submitted to the qualified voters of said Improvement District the following bond proposition:

**BOND PROPOSITION:** Shall the Irvine Ranch Water District incur an indebtedness and issue general obligation bonds for Improvement District No. 221 thereof in the amount of \$50,452,000 at a maximum interest rate of eight percent (8%) per annum, to acquire and construct works and facilities for the collection, treatment and disposal of sewage, and the acquisition, storage and treatment of reclaimed water, including dams, reservoirs, storage tanks, treatment facilities, pipes, pumping equipment and all necessary equipment and property therefor, acquiring funds to fulfill contractual commitments to carry out the powers and purposes of the District contained in contracts, including contracts with other agencies, and the payment of operating and other costs of the District and the establishment of all or part of the bond reserve fund out of the proceeds of the sale of said bonds, all in accordance with the Plan of Works for Improvement District No. 221?

WHEREAS, more than two-thirds of the votes cast at said election were cast in favor of incurring said indebtedness and issuing said general obligation bonds and IRWD was authorized to issue bonds in the amount and for the purpose set forth in said proposition;

WHEREAS, of said authorized amount of \$50,452,000, the principal amounts of \$8,980,000 of bonds designated "SEWER BONDS, ELECTION 1978, SERIES A, OF IRVINE RANCH WATER DISTRICT FOR IMPROVEMENT DISTRICT NO. 261," \$11,660,000 comprising a portion of consolidated bonds designated "BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 1984," \$8,314,000 comprising a portion of consolidated bonds designated "BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED

SERIES 1985,” \$7,800,000 comprising a portion of consolidated bonds designated “BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 2009A” and \$7,800,000 comprising a portion of consolidated bonds designated “BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 2009B” have been issued and sold;

Improvement District No. 230

WHEREAS, pursuant to Resolution No. 1971-25 adopted by the Board of Directors of IRWD on June 18, 1971, Improvement District No. 3<sup>a</sup> of IRWD was formed and general obligation bonds of IRWD for Improvement District No. 3 in the amount of \$23,630,000 were authorized in proceedings taken pursuant to the provisions of Chapter 3.5 of Part 6 of Division 13 of the California Water Code;

WHEREAS, of said authorized amount of \$23,630,000, the principal amount of \$9,090,000 of bonds designated “BONDS OF IRVINE RANCH WATER DISTRICT FOR IMPROVEMENT DISTRICT NO. 3, 1971 SEWER BONDS, SERIES A” was issued and sold prior to the below-recited consolidation of Improvement District No. 3;

WHEREAS, pursuant to Resolution No. 1978-66 adopted by the Board of Directors of IRWD on April 17, 1978, a special election was conducted in Improvement District No. 3(203) of IRWD on June 19, 1978, at which election there was submitted to the qualified voters of said Improvement District the following bond proposition:

**BOND PROPOSITION:** Shall the Irvine Ranch Water District incur an indebtedness and issue general obligation bonds for Improvement District No. 3(203) thereof in the amount of \$56,662,000 at a maximum interest rate of eight percent (8%) per annum, to acquire and construct works and facilities for the collection, treatment and disposal of sewage, and the acquisition, storage and treatment of reclaimed water, including dams, reservoirs, storage tanks, treatment facilities, pipes, pumping equipment and all necessary equipment and property therefor, acquiring funds to fulfill contractual commitments to carry out the powers and purposes of the District contained in contracts, including contracts with other agencies, and the payment of operating and other costs of the District and the establishment of all or part of the bond reserve fund out of the proceeds of the sale of said bonds, all in accordance with the Supplement to the Plan of Works for Improvement District No. 3(203)?

WHEREAS, more than two-thirds of the votes cast at said election were cast in favor of incurring said indebtedness and issuing said general obligation bonds and IRWD was authorized to issue bonds in the amount and for the purpose set forth in said proposition;

WHEREAS, of said authorized amount of \$56,662,000, the principal amounts of \$1,285,000 of bonds designated “SEWER BONDS, ELECTION 1978, SERIES A, OF IRVINE RANCH WATER DISTRICT FOR IMPROVEMENT DISTRICT NO. 3(203)” and \$3,475,000 comprising a portion of consolidated bonds designated “BONDS OF IRVINE RANCH WATER

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<sup>a</sup> Subsequently renamed Improvement District No. 3(203).

DISTRICT, CONSOLIDATED SERIES 1984” were issued and sold prior to the below-recited consolidation of Improvement District No. 3(203);

WHEREAS, pursuant to Resolution No. 1978-71 adopted by the Board of Directors of IRWD on April 17, 1978, a special election was conducted in Improvement District No. 290 of IRWD on June 19, 1978, at which election there was submitted to the qualified voters of said Improvement District the following bond proposition:

**BOND PROPOSITION:** Shall the Irvine Ranch Water District incur an indebtedness and issue general obligation bonds for Improvement District No. 290 thereof in the amount of \$78,231,000 at a maximum interest rate of eight percent (8%) per annum, to acquire and construct works and facilities for the collection, treatment and disposal of sewage, and the acquisition, storage and treatment of reclaimed water, including dams, reservoirs, storage tanks, treatment facilities, pipes, pumping equipment and all necessary equipment and property therefor, acquiring funds to fulfill contractual commitments to carry out the powers and purposes of the District contained in contracts, including contracts with other agencies, and the payment of operating and other costs of the District and the establishment of all or part of the bond reserve fund out of the proceeds of the sale of said bonds, all in accordance with the Plan of Works for Improvement District No. 290?

WHEREAS, more than two-thirds of the votes cast at said election were cast in favor of incurring said indebtedness and issuing said general obligation bonds and IRWD was authorized to issue bonds in the amount and for the purpose set forth in said proposition;

WHEREAS, of said authorized amount of \$78,231,000, the principal amounts of \$905,000 of bonds designated “SEWER BONDS, ELECTION 1978, SERIES A, OF THE IRVINE RANCH WATER DISTRICT FOR IMPROVEMENT DISTRICT NO. 290,” \$500,000 comprising a portion of consolidated bonds designated “BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 1984,” \$7,422,000 comprising a portion of consolidated bonds designated “BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 1985” and \$3,195,000 comprising a portion of consolidated bonds designated “BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 1991” were issued and sold prior to the below-recited consolidation of Improvement District No. 290;

WHEREAS, by Resolution No. 2008-56 adopted on October 13, 2008, the Board of Directors of IRWD ordered the consolidation of Improvement District Nos. 3(203) and 290 into a single improvement district designated “Improvement District No. 230,” and pursuant to Section 36438 of the California Water Code, the authorized but unissued bonds of Improvement District Nos. 3(203) and 290 permitted to be issued and sold as the bonds of Improvement District No. 230 totaled \$132,651,000 upon said consolidation;

WHEREAS, of said consolidated authorized amount of \$132,651,000, the principal amounts of \$8,350,000 comprising a portion of consolidated bonds designated “BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 2009A” and \$8,350,000 comprising a portion of consolidated bonds designated “BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 2009B” have been issued and sold;

Improvement District No. 250

WHEREAS, pursuant to Resolution No. 1978-69 adopted by the Board of Directors of IRWD on April 17, 1978, a special election was conducted in Improvement District No. 250 of IRWD on June 19, 1978, at which election there was submitted to the qualified voters of said Improvement District the following bond proposition:

**BOND PROPOSITION:** Shall the Irvine Ranch Water District incur an indebtedness and issue general obligation bonds for Improvement District No. 250 thereof in the amount of \$286,727,000 at a maximum interest rate of eight percent (8%) per annum, to acquire and construct works and facilities for the collection, treatment and disposal of sewage, and the acquisition, storage and treatment of reclaimed water, including dams, reservoirs, storage tanks, treatment facilities, pipes, pumping equipment and all necessary equipment and property therefor, acquiring funds to fulfill contractual commitments to carry out the powers and purposes of the District contained in contracts, including contracts with other agencies, and the payment of operating and other costs of the District and the establishment of all or part of the bond reserve fund out of the proceeds of the sale of said bonds, all in accordance with the Plan of Works for Improvement District No. 250?

WHEREAS, more than two-thirds of the votes cast at said election were cast in favor of incurring said indebtedness and issuing said general obligation bonds and IRWD was authorized to issue bonds in the amount and for the purpose set forth in said proposition;

WHEREAS, of said authorized amount of \$286,727,000, the principal amounts of \$7,590,000 of bonds designated "SEWER BONDS, ELECTION 1978, SERIES A, OF THE IRVINE RANCH WATER DISTRICT FOR IMPROVEMENT DISTRICT NO. 250," \$7,980,000 comprising a portion of consolidated bonds designated "BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 1984," \$29,526,000 comprising a portion of consolidated bonds designated "BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 1985," \$10,217,000 comprising a portion of consolidated bonds designated "BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 1991," \$9,900,000 comprising a portion of consolidated bonds designated "BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 1993," \$15,071,160 comprising a portion of consolidated bonds designated "BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 1995," \$19,884,000 comprising a portion of consolidated bonds designated "BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 2006," \$42,000,000 comprising a portion of consolidated bonds designated "BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 2007," \$15,650,000 comprising a portion of consolidated bonds designated "BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 2009A" and \$15,650,000 comprising a portion of consolidated bonds designated "BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 2009B" have been issued and sold;

Improvement District No. 261



WHEREAS, pursuant to Resolution No. 1978-70 adopted by the Board of Directors of IRWD on April 17, 1978, a special election was conducted in Improvement District No. 261 of IRWD on June 19, 1978, at which election there was submitted to the qualified voters of said Improvement District the following bond proposition:

**BOND PROPOSITION:** Shall the Irvine Ranch Water District incur an indebtedness and issue general obligation bonds for Improvement District No. 261 thereof in the amount of \$46,364,000 at a maximum interest rate of eight percent (8%) per annum, to acquire and construct works and facilities for the collection, treatment and disposal of sewage, and the acquisition, storage and treatment of reclaimed water, including dams, reservoirs, storage tanks, treatment facilities, pipes, pumping equipment and all necessary equipment and property therefor, acquiring funds to fulfill contractual commitments to carry out the powers and purposes of the District contained in contracts, including contracts with other agencies, and the payment of operating and other costs of the District and the establishment of all or part of the bond reserve fund out of the proceeds of the sale of said bonds, all in accordance with the Plan of Works for Improvement District No. 261?

WHEREAS, more than two-thirds of the votes cast at said election were cast in favor of incurring said indebtedness and issuing said general obligation bonds and IRWD was authorized to issue bonds in the amount and for the purpose set forth in said proposition;

WHEREAS, of said authorized amount of \$46,364,000, the principal amounts of \$1,275,000 of bonds designated "SEWER BONDS, ELECTION 1978, SERIES A, OF IRVINE RANCH WATER DISTRICT FOR IMPROVEMENT DISTRICT NO. 261," \$1,100,000 comprising a portion of consolidated bonds designated "BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 2006," \$3,950,000 comprising a portion of consolidated bonds designated "BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 2009A" and \$3,950,000 comprising a portion of consolidated bonds designated "BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 2009B" have been issued and sold;

Improvement District No. 282

WHEREAS, pursuant to Resolution No. 1988-13 adopted by the Board of Directors of IRWD on January 25, 1988, a special election was conducted in Improvement District No. 282 of IRWD on March 1, 1988, at which election there was submitted to the qualified voters of said Improvement District the following bond proposition:

**BOND PROPOSITION:** Shall the Irvine Ranch Water District incur an indebtedness and issue general obligation bonds for Improvement District No. 282 thereof in the amount of \$59,101,000 at a maximum interest rate of twelve percent (12%) per annum, to acquire and construct works and facilities for the collection, treatment and disposal of sewage and the storage and distribution of reclaimed water, including dams, reservoirs, storage tanks, treatment facilities, pipes, pumping equipment and all necessary equipment and property therefor,

acquiring funds to fulfill contractual commitments to carry out the powers and purposes of the District contained in contracts, including contracts with other agencies, all in accordance with the Plan of Works for Improvement District No. 282?

WHEREAS, more than two-thirds of the votes cast at said election were cast in favor of incurring said indebtedness and issuing said general obligation bonds and IRWD was authorized to issue bonds in the amount and for the purpose set forth in said proposition;

WHEREAS, of said authorized amount of \$59,101,000, the principal amounts of \$5,000,000 of bonds designated "SEWER BONDS, ELECTION 1988, SERIES A, OF IRVINE RANCH WATER DISTRICT FOR IMPROVEMENT DISTRICT NO. 282," \$490,000 comprising a portion of consolidated bonds designated "BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 2009A" and \$490,000 comprising a portion of consolidated bonds designated "BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 2009B" have been issued and sold;

Improvement District No. 284

WHEREAS, pursuant to Resolution No. 1988-14 adopted by the Board of Directors of IRWD on January 25, 1988, a special election was conducted in Improvement District No. 284 of IRWD on March 1, 1988, at which election there was submitted to the qualified voters of said Improvement District the following bond proposition:

**BOND PROPOSITION:** Shall the Irvine Ranch Water District incur an indebtedness and issue general obligation bonds for Improvement District No. 284 thereof in the amount of \$92,590,000 at a maximum interest rate of twelve percent (12%) per annum, to acquire and construct works and facilities for the collection, treatment and disposal of sewage and the storage and distribution of reclaimed water, including dams, reservoirs, storage tanks, treatment facilities, pipes, pumping equipment and all necessary equipment and property therefor, acquiring funds to fulfill contractual commitments to carry out the powers and purposes of the District contained in contracts, including contracts with other agencies, all in accordance with the Plan of Works for Improvement District No. 284?

WHEREAS, more than two-thirds of the votes cast at said election were cast in favor of incurring said indebtedness and issuing said general obligation bonds and IRWD was authorized to issue bonds in the amount and for the purpose set forth in said proposition;

WHEREAS, of said authorized amount of \$92,590,000, the principal amounts of \$7,650,000 of bonds designated "SEWER BONDS, ELECTION 1988, SERIES A, OF IRVINE RANCH WATER DISTRICT FOR IMPROVEMENT DISTRICT NO. 284," \$850,000 comprising a portion of consolidated bonds designated "BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 2009A" and \$850,000 comprising a portion of consolidated bonds designated "BONDS OF IRVINE RANCH WATER DISTRICT, CONSOLIDATED SERIES 2009B" have been issued and sold;

WHEREAS, the Board of Directors has evaluated the various factors associated with the issuance of portions of the above-described authorized, unissued bonds as consolidated bonds and has found that the sale of the bonds of the Included Improvement Districts, as defined below, as consolidated bonds will not increase the cost that any Included Improvement District will pay for its bonds over the cost it would have paid had its bonds been sold separately;

WHEREAS, the Board of Directors of IRWD deems it proper that portions of the above-described authorized, unissued bonds of the Included Improvement Districts be issued as the consolidated several general obligations of the Included Improvement Districts pursuant to Section 36447 *et seq.* of the California Water Code, and pursuant to Section 53541 of the California Government Code, said bonds to be issued in two series;

WHEREAS, pursuant to Chapter 624 of the California Statutes of 2010, there has been added to the Water Code Section 36447.15 thereof, effective January 1, 2011, authorizing IRWD to provide credit enhancement in connection with the issuance or carrying of consolidated general obligation bonds for improvement districts by pledging and applying all or any part of the revenues of IRWD to the payment or security of any or all of the principal and redemption price of the bonds and the interest thereon in the manner and upon terms that the Board of Directors may deem advisable;

WHEREAS, it is in the interest of IRWD to secure the timely payment of the principal and redemption price of and interest on the bonds by covenanting to pledge certain revenues of IRWD;

WHEREAS, subdivision (f) of Section 36447.15 will require that, prior to the use of the authority set forth in Section 36447.15, the Board of Directors of IRWD shall have adopted criteria to govern its determinations to use pledges pursuant to said section, including evaluation of the use of a pledge in lieu of or in combination with other credit enhancement and liquidity options available to the Board;

WHEREAS, the Board of Directors has, by adoption of Resolution No. 2010-40, adopted criteria to govern its determinations to use pledges and has duly considered such criteria in regard to the use of a pledge of certain revenues of IRWD in connection with the proposed bonds;

WHEREAS, there has been placed on file with the Secretary of IRWD the form of an indenture for the bonds, pursuant to which the above-described transactions will be accomplished, as well as the form of a contract of purchase relating to the bonds and this Board desires to approve the form and authorize the execution thereof;

WHEREAS, the bonds will be offered for sale using an official statement;

WHEREAS, this Board desires to authorize the selection of the initial trustee with respect to the bonds, and such other agents as may be required or permitted to perform the duties described under the indenture;

WHEREAS, the form of the indenture and other documents on file with the Secretary as described in this resolution set forth or describe the terms of each series of the bonds and/or the

sale thereof, and the terms pursuant to which the above-described transactions will be accomplished;

WHEREAS, this Board finds that the sale of each series of the bonds on such terms is in the best interest of IRWD and each of the Included Improvement Districts and finds that such sale of each series of the bonds on such terms will not cause any Included Improvement District to pay more than it would have paid had its bonds been sold separately;

WHEREAS, this Board desires to authorize the execution and delivery of any and all documents and instruments and the performance of any and all acts and things necessary or proper for carrying out the transactions contemplated by this resolution and the indenture, including, but not limited to, any and all documents, instruments, acts and things necessary or proper for securing and maintaining a rating or ratings with respect to the bonds.

NOW, THEREFORE, the Board of Directors of IRWD DOES HEREBY RESOLVE, DETERMINE AND ORDER as follows:

Section 1. Pursuant to Division 13 of the California Water Code, consolidated bonds of IRWD in two series (hereinafter referred to individually as the “Series A Bonds” and the “Series B Bonds” and collectively as the “Bonds”), in a combined aggregate principal sum of not to exceed \$300,000,000, with a total interest cost (net of interest reimbursement by the United States of America) not to exceed five percent (5%) per annum, and maturing on or before 40 years from their date, shall be issued for the purposes set forth in the recitals hereof. The Series A Bonds shall be issued as tax-exempt obligations under the provisions of Sections 103, 148 and 149 of the Internal Revenue Code of 1986. The Series B Bonds shall be issued as taxable Qualified Direct Payment Build America Bonds under the provisions of the American Recovery and Reinvestment Act of 2009. Subject to the preceding limitations in this Section, the Treasurer is authorized, at the time of sale of the Bonds, to determine and set forth in a certificate(s) delivered by the Treasurer at the time of closing and delivery of the Bonds the principal amounts, dates of maturity, sinking fund payments and interest rates of the Bonds and the allocation of the Bonds between the Series A Bonds and the Series B Bonds, that will in his judgment optimize the cost of funds to IRWD. Pursuant to Section 36447 *et seq.* of the Water Code, the Bonds of each series shall constitute, when originally issued, the several consolidated general obligations, in the proportions determined by the Treasurer and set forth in a certificate(s) delivered by the Treasurer at the time of closing and delivery of the Bonds, of Improvement District Nos. 105, 112, 113, 121, 130, 161, 182, 184, 188, 212, 221, 230, 250, 261, 282 and 284 (collectively, the “Included Improvement Districts” and each, an “Included Improvement District”), whose remaining authorized amounts of bonds, described in the recitals hereof, shall be reduced by such respective amounts. Upon execution and delivery of the first supplemental indenture as provided in Section 6, the Bonds of each series shall constitute obligations of IRWD payable from certain net revenues and secured by a pledge of revenues of IRWD as provided therein, as well as the consolidated several general obligations of the Included Improvement Districts.

Section 2. The Series A Bonds shall be designated “BONDS OF IRVINE RANCH WATER DISTRICT, SERIES 2010A” and further designated as provided in the Indenture (defined below), and the Series B Bonds shall be designated “BONDS OF IRVINE RANCH WATER DISTRICT, SERIES 2010B” and further designated as provided in the Indenture, and the Bonds of each series shall be numbered as determined by the Trustee (defined below). The

Series A Bonds and the Series B Bonds shall be of the denominations specified in the Indenture. The Series A Bonds and the Series B Bonds shall be dated, be issued in the form, be subject to redemption, and have such other terms and be in other respects as provided in the Indenture, and shall bear interest at the rates, have such sinking fund payments and mature on the dates and in the aggregate principal amounts to be determined by the Treasurer as provided above.

Section 3. Pursuant to Section 5050 et seq. of the Government Code, the President of the Board of Directors of IRWD is hereby authorized and directed to sign all of said Bonds by his manual or facsimile signature and the Secretary of IRWD is hereby authorized and directed to affix thereto the seal of IRWD by facsimile or otherwise and to attest thereto by her manual or facsimile signature.

Section 4. The Bonds shall be issued pursuant to an indenture of trust (the "Indenture") by and between IRWD and the Trustee, as defined herein. The Indenture, including the form of the respective series of Bonds, is hereby approved in the form on file with the Secretary upon adoption of this resolution, and the President and Secretary of IRWD are authorized and directed to execute it in such form, with such changes, insertions and deletions as are approved by, and on the date for closing and delivery established by, the Treasurer with the concurrence of the President of IRWD, which approval will be conclusively evidenced by execution and delivery thereof. The form of the Indenture as so executed and delivered is incorporated herein as of its date, by this reference. This resolution, each Bond and the Indenture shall together constitute the contract between IRWD and the owner of such Bond, and reference is hereby made to this resolution, each Bond and the Indenture for a complete statement of such contract. U.S. Bank National Association is hereby selected as the initial Trustee (the "Trustee").

Section 5. The Bonds of each series shall be the several consolidated obligations of the Included Improvement Districts in the proportions that the respective amounts of Bonds of that series attributed to each Included Improvement District determined by the Treasurer as set forth in Section 1 hereof bear to the aggregate principal amount of Bonds of that series being issued. The Bonds of each series shall be payable from the following sources: (1) ad valorem assessments on taxable land in the Included Improvement Districts, (2) water and sewer charges which in the discretion of the Board of Directors of IRWD are fixed and collected in the Included Improvement Districts in lieu of assessments, (3) proceeds from the sale of property in the Included Improvement Districts for delinquent assessments, all such amounts referred to in clauses (1), (2) and (3) to be collected and applied as the several obligations of the Included Improvement Districts as provided herein, (4) all moneys and earnings thereon held in the funds and accounts created under the terms of the Indenture (except the Rebate Fund, as that term is defined in the Indenture), and (5) net revenues when pledged as provided in Section 6.

Section 6. IRWD covenants hereby to impose and collect or cause the imposition and collection of the annual assessments in the Included Improvement Districts, or charges for water and sewer service in the Included Improvement Districts in lieu thereof, and delinquent assessments and proceeds from the sale of property therefor, in the amounts necessary to satisfy the requirements stated in the Indenture. The assessments and charges levied upon and collected within any Included Improvement District shall not exceed the amount required to pay such Included Improvement District's proportional share of the principal of and interest on each series of the Bonds, which share shall correspond to the portion of the total par value of each series of the Bonds comprised by the par value included on behalf of such Included Improvement District,

as specified in Section 1 hereof. Any provision of this resolution to the contrary notwithstanding, IRWD may, to the extent permitted by law, but except as provided in the next paragraph, shall not be obligated to, apply funds of IRWD to the payment of principal of, redemption price, and premium (if any) and interest on the Bonds.

IRWD hereby further covenants that, to the extent legally authorized to do so pursuant to Chapter 624, Statutes of 2010, or other provision of law then in effect, at the first meeting of the Board of Directors of IRWD held after January 1, 2010, but in no event later than January 31, 2010, IRWD will approve, execute and deliver a first supplemental indenture of trust in the form attached to the Indenture with only such changes from such form as will not materially adversely affect the interests of the owners of the Bonds, for the purpose of making a pledge of revenues to the Bonds in accordance with the terms and conditions set forth in such form of the first supplemental indenture of trust and in accordance with Section 36447.15 of the Water Code referenced in the recitals hereof.

Section 7. There shall be created and funded pursuant to the Indenture a general obligation bond fund designated, "BONDS OF THE IRVINE RANCH WATER DISTRICT, SERIES 2010A AND SERIES 2010B, GENERAL OBLIGATION BOND FUND" or as otherwise provided in the Indenture (the "General Obligation Bond Fund").

Moneys deposited in the General Obligation Bond Fund shall be apportioned within the fund according to each Included Improvement District's proportional share thereof determined as specified in Section 1 hereof. The General Obligation Bond Fund shall be applied for the purposes provided in the Indenture, and all taxable land within each Included Improvement District having a proportional share thereof shall be and remain liable to be assessed for such purposes. The assessments and charges levied upon and collected within any such Included Improvement District shall not exceed the amount required to pay such Included Improvement District's proportional share of the principal of and interest on the Bonds, which share shall correspond to the portion of the total par value of the Bonds comprised by the par value included on behalf of such Included Improvement District. Moneys raised by each Included Improvement District for this purpose shall be deposited to the Included Improvement District's account within the General Obligation Bond Fund and shall be used solely for the purpose of paying such Included Improvement District's proportional share of the interest and principal on the Bonds.

Section 8. There shall be created such other funds and accounts as are required under the Indenture. Any moneys deposited in any such fund or account that is apportioned to Included Improvement Districts shall be obtained from and apportioned within the fund or account according to each Included Improvement District's proportional share in accordance with Section 36447.1 of the Water Code. Moneys in any fund or account that is apportioned to Included Improvement Districts shall be disbursed only to the extent of the share apportioned therein to the Included Improvement District on whose behalf they are disbursed. Any charges and annual assessments used to establish any fund or account under the Indenture that is apportioned to Included Improvement Districts shall be set aside within such fund or account to the account of the Included Improvement District from which they were obtained.

Section 9. The contract of purchase for the Bonds, by and between IRWD and Goldman, Sachs & Co., as underwriter (the "Underwriter"), to be dated as of such date as may be established by the Treasurer of IRWD, is hereby approved in the form on file with the Secretary

upon adoption of this resolution, and the Treasurer of IRWD is authorized and directed to execute it in such form, with such changes, insertions and deletions as are approved by, and on the date for delivery established by, the Treasurer, which approval will be conclusively evidenced by execution and delivery thereof. The form of the contract of purchase relating to the Bonds, as so executed and delivered (the "Contract of Purchase") is incorporated herein as of its date, by this reference.

Section 10. In accordance with Sections 36447.7 and 36447.9 of the California Water Code, and after review of the terms and provisions of each series of the Bonds (including the terms of the sale of each series of the Bonds under the proposed form of the Contract of Purchase), the Board of Directors hereby finds that the sale of the Bonds at private sale without advertising for bids will be consistent with the prudent management of IRWD's fiscal affairs and will produce a lower interest cost on the Bonds.

Section 11. The preliminary official statement relating to the Bonds (the "Preliminary Official Statement"), in substantially the form presented to the Board at this meeting, is hereby approved with such changes, insertions and deletions as the Treasurer with the concurrence of the President of IRWD shall approve; such approval shall be conclusively evidenced by the Treasurer's execution and delivery of a "deemed final" certificate under the Securities and Exchange Act of 1934, as amended, with respect to the Preliminary Official Statement, which execution and delivery are hereby authorized and approved. The Board hereby approves the use of the Preliminary Official Statement by the Underwriter in connection with the offering and sale of the Bonds. An official statement relating to the Bonds to be dated the date determined by the Treasurer (the "Official Statement"), in substantially the form of the Preliminary Official Statement with such changes thereto as are necessary or appropriate to reflect the terms of the Bonds and satisfy the requirements of the Contract of Purchase and with such other changes as the Treasurer with the concurrence of the President shall approve (such approval to be conclusively evidenced by execution and delivery thereof), is hereby approved, and the Board hereby approves the use of the Official Statement by the Underwriter in connection with the offering and sale of the Bonds, and the Board hereby further approves the use by the Underwriter of any supplement or amendment to the Official Statement which the Treasurer shall determine is necessary so that the Official Statement does not include any untrue statement of a material fact and does not omit to state a material fact necessary to make the statements therein not misleading. The Treasurer of IRWD is hereby authorized and directed to execute the Official Statement and any amendment or supplement thereto, in the name and on behalf of IRWD and thereupon to cause the Official Statement and any such amendment or supplement to be delivered to the Underwriter.

Section 12. The distribution of the Preliminary Official Statement and the Official Statement, inclusive of the above-authorized changes, is hereby authorized.

Section 13. The Treasurer, with the concurrence of the President of IRWD, is hereby authorized and directed to select and appoint, or approve the selection and appointment of, such initial paying agents and other agents as may be required or permitted to perform the duties described under the Indenture.

Section 14. Upon the payment of the purchase price for the Bonds as provided for in the Contract of Purchase, the Trustee is hereby authorized and directed to authenticate and deliver

the Bonds as provided in the Contract of Purchase, in the amounts, maturities and denominations as provided in the Indenture.

Section 15. The provisions hereof authorizing the issuance of the Bonds as the Series A Bonds and the Series B Bonds and any other provisions hereof referring to two series notwithstanding, either one of the contemplated series of the Bonds may comprise all of the Bonds if so determined by the Treasurer pursuant to Section 1, and in that event such single series shall be designated as provided in the Indenture.

Section 16. The President, the Treasurer, the Secretary and each other officer of IRWD, acting singly, be and each of them hereby is authorized and directed to execute and deliver any and all documents and instruments, and to do and cause to be done any and all acts and things necessary or proper for carrying out the transactions contemplated by this resolution, the Indenture, and the other documents and instruments approved or authorized by this resolution including, but not limited to, continuing disclosure agreements and any and all documents, instruments, acts and things necessary or proper for securing and maintaining a rating or ratings with respect to the Bonds.

Section 16. This resolution shall take effect immediately upon its adoption.

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ADOPTED, SIGNED AND APPROVED this \_\_\_\_ day of \_\_\_\_\_, 2010.

\_\_\_\_\_  
President/Vice President  
IRVINE RANCH WATER DISTRICT  
and of the Board of Directors  
thereof

\_\_\_\_\_  
Secretary/Assistant Secretary  
IRVINE RANCH WATER DISTRICT  
and of the Board of Directors  
thereof



Exhibit “B”

IRVINE RANCH WATER DISTRICT

CRITERION EVALUATED FOR THE USE OF DISTRICT REVENUE PLEDGE

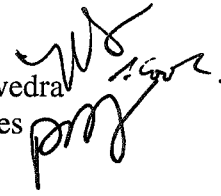
2010 BOND ISSUANCE

Pursuant to Resolution 2010-40 the use of District net revenue pledge must meet one or more of the following criterion:

Pledge Criterion	Evaluation	Comments
<p>Use of the pledge provides an opportunity for reduced Total Interest Cost (TIC) for proposed new debt issuances due to anticipated enhanced credit ratings when compared with conventional non-enhanced general obligation structures.</p>	<p>Absent the use of the net revenue pledge for the Series 2010 A and B Bonds, it would be very challenging to achieve an underlying rating reflecting the credit quality of the overall District. This higher credit rating and stronger credit quality provides the opportunity to materially reduce the TIC of the issuance as compared to not using the net revenue pledge.</p>	<p>Meets Criteria</p>
<p>Use of the pledge provides an enhancement to previously non-rated or rated based on letter of credit enhancement, consolidated general obligation bond issues with expected lower unenhanced ratings due to conventional general obligation structures and strength of underlying improvement districts.</p>	<p>N/A</p>	<p>N/A</p>
<p>Use of the pledge provides access to debt issue structures not previously available to the District, or not previously providing a cost effective TIC to the District due to the expected credit rating with its standard general obligation tax pledge. Such alternative structures should either diversify the District’s debt portfolio risk or lower interest cost, or both.</p>	<p>Use of the net revenue pledge will allow the District to issue the bonds in a fixed rate mode with high stand-alone ratings reflecting the strong credit quality of the District. Absent the use of this net revenue pledge, similar long-term stand-alone ratings needed to sell the bonds in this mode could not be achieved. This structure will both diversify the District’s debt portfolio and provide for a lower cost relative to not utilization of the pledge of net revenues.</p>	<p>Meets Criteria</p>
<p>Use of the pledge reduces cost of enhancement and/or liquidity, interest rate risk, third party credit risk, and/or third party enhancement renewal availability and cost risk.</p>	<p>Use of the net revenue pledge will allow the District to issue the bonds in a fixed rate mode utilizing the good credit of the District thereby eliminating the need and cost of third party credit enhancement.</p>	<p>Meets Criteria</p>



November 22, 2010  
Prepared and  
Submitted by: N. Savedra  
Approved by: P. Jones



CONSENT CALENDAR

MINUTES OF REGULAR BOARD MEETING

SUMMARY:

Provided are the minutes of the November 8, 2010 Regular Board Meeting for approval.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

Not applicable.

RECOMMENDATION:

THAT THE MINUTES OF THE REGULAR BOARD MEETING OF NOVEMBER 8, 2010 BE APPROVED AS PRESENTED.

LIST OF EXHIBITS:

Exhibit "A" – November 8, 2010 Regular Board Meeting



Exhibit "A"

MINUTES OF REGULAR MEETING – NOVEMBER 8, 2010

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 Reinhart on November 8, 2010 in the District office, 15600 Sand Canyon Avenue, Irvine, California.

Directors Present: Matheis, LaMar, Swan, Withers, and Reinhart

Directors Absent: None

Also Present: General Manager Jones, Assistant General Manager Cook, Director of Planning/Water Resources Heiertz, Director of Engineering Burton, Director of Finance Cherney, Director of Operations Pedersen, Assistant Secretary Savedra, Legal Counsel Arneson, Treasurer Jacobson, Director of Human Resources Wells, Director of Public Affairs Beeman, Director of Administrative Services Mossbarger, Mr. Eric Akiyoshi, Mr. Mike Hoolihan, Mr. Paul Weghorst, Ms. Kirsten McLaughlin, and her guest Mr. Andrew DeBlock, Mr. Jim Reed, Mr. Eric Tracy of MCS, Mr. Andy Bohn of Neptune, Mr. John Porteous of Dudek, and other members of the public and staff.

WRITTEN COMMUNICATIONS: None.

ORAL COMMUNICATION:

Mrs. Joan Irvine Smith addressed the Board of Directors with respect to the Dyer Road Wellfield. Mrs. Smith said it was her understanding that currently wells C-8, C-9, and 10 will operate in accordance with the District's annual pumping plan. Wells 2, 4, 15 and 17 will operate a portion of the week. Wells 1, 3, 5, 6, 7, 11, 12, 13, 14, 16 and 18 will be off. The District's currently planned pumping for November is 3,045 AF. This was confirmed by Mr. Jones, 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. Jones.

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, the 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

Exhibit "A"

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. Jones.

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 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. Jones.

ITEMS TOO LATE TO BE AGENDIZED – None

CONSENT CALENDAR

Vice President Swan asked that Consent Calendar Items 4, 6 and 12 be moved to the Action Calendar for discussion. There being no objections, on MOTION by Matheis, seconded and unanimously carried, CONSENT CALENDAR ITEMS 3, 5, 7 THROUGH 11, AND 13 THROUGH 15 WERE APPROVED AS FOLLOWS:

3. MINUTES OF REGULAR BOARD MEETING

Recommendation: That the minutes of the October 25, 2010 Regular Board Meeting and the October 29, 2010 Adjourned Regular Board Meeting be approved as presented.

5. DENTAL AND VISION INSURANCE COVERAGE FOR 2011 CALENDAR YEAR

Recommendation: That the Board authorize the General Manager to extend the contract with ACWA Services Corp. for Delta DPO Plan A with child and adult orthodontic coverage and with EyeMed Vision Care for the 2011 calendar year.

7. LONG-TERM DISABILITY, LIFE, AND DEPENDENT LIFE INSURANCE COVERAGE FOR CALENDAR YEAR 2011

Recommendation: That the Board authorize the General Manager to execute a contract for the calendar year 2011 with Principal Financial for life, dependent life and long-term disability coverage.

8. PURCHASE OF ORACLE TECHNOLOGY LICENSES

Recommendation: That the Board approve the procurement of technology licenses from Oracle, authorize the General Manager to execute the necessary purchase contract and agreements with Oracle, and approve a budget increase and Expenditure Authorizations of \$400,000 each for projects 11521 and 21521.

9. CENTRAL ZONE 1 RESERVOIR EXTERIOR PAINTING CONSTRUCTION AWARD

Recommendation: That the Board approve an Expenditure Authorization in the amount of \$258,500 for project 11025, Central Zone 1 Reservoir Exterior Painting; authorize the General Manager to execute a construction contract with Advanced Industrial Services, Inc. in the amount of \$209,000 for project 11025; and authorize a decrease of \$270,600 to the FY 2010-11 Capital Budget for project 11025, from \$648,500 to \$377,900.

10. THREE-YEAR JANITORIAL SERVICES CONTRACT

Recommendation: That the Board authorize the General Manager to execute a three-year janitorial services contract with Pacific Building Care, Inc. in the amount of \$383,882.67.

11. NETWORK SERVER RELIABILITY IMPROVEMENTS

Recommendation: That the Board approve the procurement and implementation of network server reliability improvements and authorize the addition of projects 11555 and 21555 to the FY 2010-11 Capital Budget and accompanying Expenditure Authorizations in the amount of \$99,000 each.

13. WATER SUPPLY VERIFICATION FOR VESTING TENTATIVE TRACT MAP 17277, PLANNING AREA 40

Recommendation: That the Board approve the water supply verification for Vesting Tentative Tract Map 17277, Planning Area 40.

14. UPCOMING PROJECTS STATUS REPORT

Recommendation: Receive and file.

15. SANTIAGO CANYON AREA BOOSTER PUMP STATION PERMANENT GENERATORS – CONSULTANT SELECTION

Recommendation: That the Board approve an Expenditure Authorization in the amount of \$221,100 for project 11476; and authorize the General Manager to execute a Professional Services Agreement with Psomas in the amount of \$178,757 to complete the design for the Santiago Permanent Generators, project 11476.

ACTION CALENDAR

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

Vice President Swan requested the Upper Newport Bay Ecosystem Restoration Project Dedication event dated November 6, 2010 be removed from the list of meetings attended by him. On MOTION by Matheis, seconded and unanimously carried, THE BOARD RATIFIED AND APPROVED THE MEETINGS AND EVENTS FOR STEVEN LaMAR, MARY AILEEN MATHEIS, DOUG REINHART, AND PEER SWAN.

PROPOSED CONSUMER PRICE INDEX CHANGES TO SALARY GRADE SCHEDULE AND EMPLOYEE COST OF LIVING ADJUSTMENTS

General Manager Jones reported that the Bureau of Labor Statistics has released the Consumer Price Index (CPI) for the period ending September 2010, which reflects a 0.36% increase from September 2009 to September 2010. Last year, the Board agreed to carry forward the negative 0.98% adjustment in the 2009 annual Cost of Living Adjustment (COLA) for one year and apply the negative 0.98% adjustment, plus an additional reduction based on the District's investment return for the present value of the deferred salary reduction to the 2010 COLA. This would result in a negative 0.62% adjustment for the 2010 COLA. Mr. Jones that staff is requesting that the Board 1) Continue the freeze of the Salary Range Schedule at the December 1, 2008 level, and 2) Carry forward the negative 0.62% adjustment in the annual Cost of Living Adjustment (COLA) for another year and apply the negative 0.62% adjustment, plus an additional reduction based on the District's investment return for the present value of the deferred salary reduction to the 2011 COLA.

Vice President Swan said that this item was reviewed by the Finance and Personnel Committee on November 2, 2010. The Committee recommended deferring the cost of living adjustment. On MOTION by Swan, seconded and unanimously carried, THE BOARD APPROVED MAINTAINING SALARY GRADE RANGES AT THE DECEMBER 1, 2008 LEVELS, AND CARRYING FORWARD THE 0.62% DECREASE IN THE COST OF LIVING ADJUSTMENT TO EMPLOYEE SALARIES TO THE DECEMBER 1, 2011 COST OF LIVING ADJUSTMENT, PLUS AN ADDITIONAL REDUCTION BASED ON THE DISTRICT'S INVESTMENT RETURN FOR THE PRESENT VALUE OF THE DELAYED SALARY ADJUSTMENTS.

ADVANCED METERING INFRASTRUCTURE PILOT STUDY BID REJECTION

At the request of Vice President Swan this item was moved to the Action Calendar due to presence of Mr. Eric Tracy, Director of Sales of Measurement Control Systems and Mr. Andy Bohn, Sales Manager of Neptune who both bid for the project. Each wished to introduce themselves to the Board and to address the subject agenda item and stated they supported the Board's decision to decline their proposed bid, but hope to work with the District as it studies the alternative approaches.

Vice President Swan remarked that the Board had been anxious to execute this project, however after further consideration and discussion at the Strategic Planning Workshop on October 29, 2010,



the Board elected not to move forward on this project, but to continue to monitor advancements in AMI technology. General Manager Jones further added that the discussion included the history and recent advances in meter reading technology, advantages and disadvantages of the current technology, the bidding process for the pilot study, implementation costs, timing of going forward with AMI, and staff's recommendations. Mr. Jones reiterated that IRWD would delay implementation of the AMI project until additional advancements are made in the AMI technology. On MOTION by Swan, seconded and unanimously carried, THE BOARD REJECTED THE BIDS RECEIVED FOR THE ADVANCED METERING INFRASTRUCTURE PILOT STUDY, PROJECTS 11439 AND 31439.

### SYPHON RESERVOIR GEOTECHNICAL AND ENGINEERING FEASIBILITY CONSULTANT SELECTION

General Manager Jones reported that staff solicited proposals to complete the environmental feasibility and documentation to increase the storage capacity of the recently acquired Syphon Reservoir. A Request for Proposal (RFP) was issued and four consultant teams responded. Each team was evaluated and ranked based on its written proposal, interview, and reference checks.

In January 2010, IRWD completed the purchase of Syphon Reservoir from the Irvine Company. Since January, staff has been developing plans to integrate Syphon Reservoir into the recycled water system, both on an interim basis in its current configuration, and with an expanded capacity, reconstructed dam and conveyance facilities.

Using a PowerPoint presentation, Principle Engineer Hoolihan provided an overview of the Syphon Reservoir Geotechnical and Environmental Feasibility. Mr. Hoolihan stated that two sets of RFPs were developed to evaluate both the engineering/geotechnical as well as the environmental feasibility of expanding the Syphon Reservoir storage capacity. This item addresses the Geotechnical and Engineering Feasibility Study on the expansion of the Syphon Reservoir from 500 to 5,500 acre-feet; and to identify funding opportunities (WRDA); and to complete necessary CEQA/NEPA documentation. The major tasks of the Geotechnical and Engineering Feasibility Study RFP include the following:

1. Site Characterization and Reservoir Optimization;
2. Geotechnical Exploration plan;
3. Non-potable water facility onsite and offsite improvements; and
4. Cost Estimate and Phasing.

Mr. Hoolihan stated the RFP was issued to eight engineering/geotechnical firms, and that the District received proposal from four teams for each RFP. The consultant teams were evaluated in a two-step process: (1) evaluation of written proposals, and (2) interviews of the top three teams. He said after completing a thorough evaluation of the four teams staff recommended awarding the engineering and geotechnical contract to GEI Consultants. Several key strengths of the GEI team and proposal are listed below.

- GEI submitted a well rounded project team that includes geotechnical expertise and local experience (e.g., San Vicente Dam Raise) as well as teaming with Stantec and Dudek which brings an in-depth knowledge of IRWD non-potable distribution system.

## Exhibit "A"

- The project team is extremely experienced and cohesive. It has worked together to successfully complete several other dam feasibility projects, and is highly recommended by prior clients.
- The project manager, Tom Keller, and geotechnical task lead, Jeff Brown, have a combined experience of more than 60 years in dam design and geotechnical exploration. Additionally, team member Steve Verigin, was the former Chief of the California Division of Safety of Dams.
- GEI's proposal and interview demonstrated a thorough understanding of issues related to coordinating with the California Division of Safety of Dams as well as the United States Army Corp of Engineers.
- GEI showed an excellent understanding of the geologic setting, challenges, and was able to best articulate these, as well as potential opportunities on the site.
- GEI was able to draw on recent experiences such as the successful feasibility phase of the San Vicente Dam Raise project to help show lessons learned, and articulate specific solutions to help ensure a minimum of project delays as IRWD progresses towards design and construction.
- Jeff Dunn (Stantec) and Bob Ohlund (Dudek) bring experience with IRWD's Irvine and Lake Forest area non-potable distribution systems that will help integrate the reservoir.

Mr. Hoolihan stated the GEI geotechnical exploration plan in the amount of \$513,900, while being the most expensive of the all the proposers, offers the following benefits and exhibits GEI's understanding of USACE and DSOD requirements:

- GEI has anticipated a potential 75-foot dam raise and designed the core and auger boring plan to meet the needs of both the USACE and DSOD. The depth (up to 180 feet), frequency of downhole sampling, and location of the borings showed the most well thought-out plan. Other proposals either did not have explanations for shallow borings, or did not have as strategic locations for borings. For example, Kleinfelder proposal in the amount of \$351,200 had more borings, but only to depths of 60 to 90 feet. Given that the alluvium layer is estimated to be 30 feet thick and the existing dam is 50 feet tall, with a potential 75-foot raise, the depth of Kleinfelder's borings appear to be shallow. Similarly, Geopentech proposal in the amount of \$289,300 had borings of 30 to 80 feet shallower than GEI: both firms proposed fewer seismic refraction surveys (which help characterize borrow site material).
- Although existing topographic information exists for the project site, GEI recommended developing a new, 40-scale / 1-foot contour map of the project area. Other proposers recommended minimal updates to the topographic information. It is estimated that this update provides good value for the project.
- Due to lack of clear published DSOD guidelines for design geotechnical exploration plans, the presence of Steve Verigin (former DSOD chief) on GEI's team is a unique asset that no other team included.

Mr. Hoolihan stated that GEI also identified several value added tasks in its proposal that showed initiative and understanding: screening level evaluation of offsite facilities to assist in the environmental documentation and sediment sampling in the existing Syphon Reservoir. These

## Exhibit "A"

tasks were not identified in other proposals and have been identified as, “Optional Value Added Tasks” to help compare the proposals.

- Off-site alternatives analysis – In this task, GEI would assist in evaluating offsite alternatives for the purpose of supporting the environmental documentation process.
- Reservoir Sediment Sampling – GEI was the only team to propose sampling the sediment in the existing reservoir. This would address any potential environmental issues associated with accumulated sediment in the existing reservoir.
- Dam Breach Study for Existing Dam – Although all proposals included dam breach analysis for the final proposed dam, GEI was the only proposer that included completely redoing the existing dam breach study based on new regulations and requirements.

Mr. Hoolihan stated the negotiated cost to perform the work by GEI Consultants is \$896,853. Optional Value Added Tasks will be evaluated as the project proceeds.

Director Withers reported that this item was reviewed and approved by the Engineering and Operations Committee on October 19, 2010. On MOTION by Withers, seconded and unanimously carried, THE BOARD AUTHORIZED THE GENERAL MANAGER TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT WITH GEI CONSULTANTS IN THE AMOUNT OF \$896,853 FOR THE SYPHON RESERVOIR ENGINEERING FEASIBILITY AND GEOTECHNICAL STUDY PROJECT, AND APPROVE AN EXPENDITURE AUTHORIZATION IN THE AMOUNT OF \$2,436,800 FOR PROJECT 32308.

### SYPHON RESERVOIR ENVIRONMENTAL FEASIBILITY AND DOCUMENTATION CONSULTANT SELECTION

General Manager Jones reported that staff solicited proposals to complete the environmental feasibility and documentation to increase the storage capacity of the recently acquired Syphon Reservoir. A Request for Proposal (RFP) was issued and four consultant teams responded. Each team was evaluated and ranked based on its written proposal, interview, and reference checks.

In January 2010, IRWD completed the purchase of Syphon Reservoir from the Irvine Company. Since January, staff has been developing plans to integrate Syphon Reservoir into the recycled water system, both on an interim basis in its current configuration, and with an expanded capacity, reconstructed dam and conveyance facilities.

Using a PowerPoint presentation, Principle Engineer Hoolihan provided an overview of the Syphon Reservoir Geotechnical and Environmental Feasibility. Mr. Hoolihan stated that two sets of RFPs were developed to evaluate both the engineering/geotechnical as well as the environmental feasibility of expanding the Syphon Reservoir storage capacity. This item addresses the Environmental Feasibility and Documentation. The major tasks of the Environmental Feasibility and Documentation Feasibility Study RFP include the following:

1. Develop Environmental Permitting Strategy;
2. Prepare Final CEQA Documentation for Project;
3. Procure Environmental and Regulatory Permitting; and
4. Identify Project Funding Alternatives.

## Exhibit "A"

Mr. Hoolihan stated the RFP was issued to seven environmental firms, and that the District received proposal from four teams for each RFP. After completing a thorough evaluation of the three top teams based on written proposals, interviews, and reference checks, staff recommends awarding the environmental contract to Dudek. Dudek submitted a team with expertise in all the areas necessary for the environmental feasibility/permitting and CEQA/NEPA documentation. Several key strengths of the Dudek team and proposal are listed below. Dudek:

- Successful experience on local projects: SMWD Upper Chiquita Reservoir and San Joaquin Reservoir;
- Identified key issues such as the Natural Communities Conservation Plan/Habitat Conservation Plan (NCCP/HCP) and teaming with Rod Meade, the author of the Orange County Central/Coastal NCCP/HCP; and
- Demonstrated the most comprehensive understanding of IRWD's environmental strategy: NCCP/HCP, leverage IRWD's relationships with resource agencies, and identifies sensitive receptors early in the process;

Mr. Hoolihan stated the negotiated fee for Dudek's scope of work is \$792,435.

Director Withers reported that this item was reviewed and approved by the Engineering and Operations Committee on October 19, 2010. On MOTION by Withers, seconded and unanimously carried, THE BOARD AUTHORIZED THE GENERAL MANAGER TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT WITH DUDEK IN THE AMOUNT OF \$792,435 FOR THE SYPHON RESERVOIR ENVIRONMENTAL FEASIBILITY AND DOCUMENTATION PROJECT 32308.

### CIENEGA SELENIUM AND NITRATE REMOVAL PROJECT DESIGN VERIFICATION TESTS, DESIGN VARIANCE AND CONTRACT AWARD

General Manager Jones reported that the Cienega Selenium and Nitrate Removal Project, located at the Peters Canyon Wash adjacent to Barranca Parkway is being designed to utilize the GE Water and Process Technologies ABMet System. Staff recommends field testing of the ABMet and ozonation systems to verify the performance of these systems as they are incorporated into the design of the Project.

Principal Water Resources Manager Weghorst reported that the Cienega Selenium and Nitrate Removal Project consists of the construction of a selenium and nitrate removal system at Peters Canyon Wash located on Barranca Parkway. The Project will implement GE's proprietary ABMet System. The project is currently under design with completion scheduled for February 2011. Following is a description of additional testing that is necessary to verify the design for the Project, a proposal from GE to provide and operate a demonstration scale ABMet system, and a variance with HDR to provide demonstration scale ozone treatment equipment, testing support and additional design tasks. Mr. Weghorst said the pilot testing of the ABMet system and a separate preliminary bench scale test of the proposed secondary ozonation system were conducted from April 2010 through August 2010. The design of the Project incorporates ABMet reactors and ozonation facilities that were sized based on information collected in the pilot and bench tests. Staff has determined that field verification tests of these technologies are appropriate to verify the

## Exhibit "A"

design of the treatment process facilities. These verification tests will occur through the operation of demonstration scale versions of each treatment process to be incorporated into the full-scale project design. The verification tests are expected to confirm that:

- The ABMet process effectively reduces total selenium concentrations to target levels at hydraulic loading rates and empty bed contact times in which the system is designed to operate;
- The use of ozone as a secondary treatment process will effectively reduce the concentration of all selenium species and bacteria to levels below baselines found in Peters Canyon Wash; and
- The Project effectively removes other water quality constituents of interest in the San Diego Creek watershed including arsenic, copper, and zinc.

The verification tests will require an agreement with GE to provide and operate a demonstration scale ABMet system, a variance with HDR to provide a demonstration scale ozone treatment system and to assist with the tests, and staff time to support the operation of the demonstration scale facilities.

Mr. Weghorst said that GE will provide a demonstration scale ABMet unit that will allow a hydraulic loading rate and empty bed contact time that closely match the parameters specified in the Preliminary Design Report for a not-to-exceed cost of \$133,416. GE's scope of services includes one week of commissioning, two months of operational time, an option to test for an additional four weeks, transportation costs to and from the site, and weekly analytical testing of selenium and selenium compounds. GE will also provide 30 days of on-site operations support and technical support during the testing period to ensure the completion of a successful design verification study. GE will provide over \$30,000 of consulting services and constructing the demonstration scale ABMet unit valued at \$120,000 at no cost to IRWD. He said HDR's Tasks 3 will assist GE and IRWD to perform the design verification project for a not-to-exceed cost of \$296,000. HDR's scope of work includes an ozone treatment design study, expanded bench scale analysis of the ozone system by WEDECO, and the rental of a demonstration scale ozone generator and deconstruction unit from WEDECO for the on-site verification tests. The HDR scope of work also includes coordination with IRWD, GE, and WEDECO, design of the verification test system, setup, trouble shooting, and sample collection for the eight-week test with an option to add four additional weeks. The HDR scope also includes time for data analysis, review of test results and weekly coordination meetings.

Mr. Weghorst said that additional work items have been identified by HDR as being required for the design of the project. This work includes 1) Design of an ozonation system in lieu of the UV disinfection system originally proposed in HDR's scope of work for the design of the full-scale project; 2) Design of a recycled water pipeline to facilitate flushing the sewer force main through which backwash water is pumped into the sewer; 3) Design of an intake connection point for future additional sources of water with high selenium to be imported through pipelines to the Project for treatment, including water generated from at least two dewatering projects located near Warner Avenue and Edinger Avenue; 4) Design of a right turn pocket on Barranca Parkway for an access driveway to the Project site, including the relocation of an existing storm drain catch basin; 5) Preparation of a separate plan set for the proposed restroom facility for Division of State Architects review; 6) Design of a landscape and irrigation plan around the facility to match the

landscaping of the existing school district facility; and 7) Acquisition of the necessary easement and encroachment permits from the County for the access driveway to the Project site.

Mr. Weghorst stated that GE will have primary responsibility for the verification testing and IRWD operations staff will provide operational support. Staff will also gain valuable experience that will translate directly to the District's future operation of the Project. IRWD will also be responsible for site preparation, installation of plumbing lines to and from the verification test unit, providing an electrical supply, installing backwash facilities, handling the equipment during mobilization and demobilization. He said that IRWD's Water Quality Laboratory will be responsible for analyzing selenium and selenium species twice a week along with over 60 other water quality constituents of interest in the San Diego Creek watershed.

Director Withers reported that this item was reviewed and approved by the Engineering and Operations Committee on November 4, 2010. Director Swan asked what the Board's previous parameters were in regard to operating costs and funding agencies' participation. Following discussion, staff was asked to provide the Board with the operations costs for NTS and what the Board had approved to date. On MOTION by Withers, seconded and unanimously carried, THE BOARD APPROVED THE BUDGET INCREASE OF \$655,000, FROM \$19,838,700 TO \$20,493,700, FOR PROJECT 10867; APPROVED AN EXPENDITURE AUTHORIZATION OF \$655,000 FOR PROJECT 10867; AUTHORIZED THE GENERAL MANAGER TO EXECUTE A SOLE SOURCE CONTRACT WITH GE WATER IN THE AMOUNT OF \$133,416; AND AUTHORIZED THE GENERAL MANAGER TO APPROVE VARIANCE NO. 1 WITH HDR IN THE AMOUNT OF \$484,000.

#### 2010 DEBT ISSUANCE AND ADOPTION OF CRITERIA OUTLINED IN SENATE BILL 613

General Manager Jones reported that staff is taking the steps necessary to issue taxable/tax-exempt hybrid fixed rate bonds for future capital expenditures over the next three years and eligible capital fund advances that have occurred since the last bond issuance in May 2009. Mr. Jones said that staff is recommending a bond issuance of approximately \$175 million, which will include approximately \$20 million for reimbursable project expenditures since the last bond issuance and \$155 million for project expenditures estimated over the next three years. Additionally, staff reviewed the proposed criteria for the Board to adopt in order to govern its determinations to use a pledge of revenues pursuant to Senate Bill 613 (SB 613).

Vice President Swan said that this item was reviewed by the Finance and Personnel Committee on November 2, 2010. Director Swan also added that he would like to participate in the pricing of these bonds. On MOTION by Swan, seconded and unanimously carried, THE BOARD ADOPTED A RESOLUTION ADOPTING CRITERIA TO GOVERN DETERMINATIONS TO USE PLEDGES OF REVENUE OF THE DISTRICT IN CONNECTION WITH THE ISSUANCE OR CARRYING OF GENERAL OBLIGATION BONDS; AND AUTHORIZED VICE PRESIDENT SWAN TO BE IN ATTENDANCE AT THE PRICING OF THE BONDS.

#### PROPOSED ADDITIONAL BUDGETED POSITION FOR FISCAL YEAR 2010/11

General Manager Jones reported that during the Fiscal Year 2010/11 budget development process, the Board directed staff to include \$200,000 in the Budget for succession planning purposes.

## Exhibit "A"

Mr. Jones said the use of \$96,500 of these funds will be to add two full-time, regular positions: a Water Maintenance Technician (WMT) I and a WMT II, both in Department 40. This action will result in an estimated net annual savings of \$260,000 by eliminating contract services for mini-bulk sodium hypochlorite chemical deliveries and eliminating one position currently being filled through temporary contract labor.

Director of Water Operations Pedersen reported that over the past few years IRWD's wastewater treatment facilities have transitioned from the use of gas chlorine as their primary method of disinfection to sodium hypochlorite. IRWD now purchases sodium hypochlorite for use at these two facilities in bulk, generally defined as deliveries in excess of 3,000 gallons. Mr. Pedersen said that IRWD's vendor for the bulk sodium hypochlorite deliveries, Olin Chlor Alkali Products, has provided beneficial pricing for this chemical purchase and delivery through a multi-agency purchasing agreement which includes IRWD, the South Orange County Wastewater Authority (SOCWA), El Toro Water District and other water agencies in south Orange County. The current price for sodium hypochlorite delivered in bulk to IRWD is \$0.78 per gallon.

He said that IRWD also operates 18 other facilities, including disinfection stations and reservoir management systems, which utilize sodium hypochlorite. Olin is unable to make deliveries to these sites due to the size of its delivery trucks and access limitations at these facilities. Since 1999 IRWD has contracted with other vendors to supply and deliver mini-bulk quantities of sodium hypochlorite. IRWD's current vendor for mini-bulk deliveries, Chem-Tech International, provides sodium hypochlorite at a rate of \$2.72 per gallon, which is a 248% premium for the mini-bulk delivery service. As both the number of mini-bulk delivery sites and the unit cost for the supply and delivery of mini-bulk sodium hypochlorite have increased over time, staff undertook an analysis to determine a more economical method for procuring this chemical for these sites.

Mr. Pederson said that after completing its analysis, staff is proposing to add one WMT II position whose primary job function would be to deliver sodium hypochlorite from IRWD's bulk delivery sites to all of the mini-bulk delivery sites. By bringing this delivery service in-house, staff estimates that this position will result in an estimated annual savings of \$275,000. In order for staff to perform this service in-house, a one-time initial investment of \$30,000 is required. This initial investment includes reconfiguring an existing crew truck slated for replacement with a flatbed, three 500-gallon chemical tanks and the necessary appurtenances at an estimated cost of \$20,000. Minor modifications will also be made to the sodium hypochlorite facility piping at the MWRP and the LAWRP at an estimated total cost of \$10,000 to allow the District employee to fill the chemical truck from the existing storage tanks. The addition of this position will be funded with approximately \$52,100 of the \$200,000 in succession planning funds included in the approved Fiscal Year 2010/11 Operating budget. Future fully-burdened annual cost for the WMT II position is expected to be \$89,300.

Mr. Pedersen stated that the two temporary WMT I positions were created in Construction and Repair Services to replace the employees cross-training with System Operations and to support the Department's on-going construction and repair workload. The recruiting effort yielded two excellent temporary employees. The addition of a WMT I position will enable one of these temporary employees to be retained as a full-time, regular employee in the future, and will allow the elimination of the temporary position. It is anticipated that the second temporary employee will also be retained due to a vacancy that will be created as the result of an upcoming planned

## Exhibit "A"

retirement. The addition of this position will be funded with approximately \$44,400 of the \$200,000 in succession planning funds included in the approved FY 2010-11 Operating Budget. Future fully-burdened annual cost for the WMT I position is expected to be \$76,200. The net annualized cost increase for the regular full-time WMT I position will be approximately \$15,000.

Vice President Swan said that this item was reviewed by the Finance and Personnel Committee on November 2, 2010. On MOTION by Swan, seconded and unanimously carried, THE BOARD APPROVED THE ADDITION OF TWO FULL-TIME, REGULAR POSITIONS, A WATER MAINTENANCE TECHNICIAN I AND II , TO THE FISCAL YEAR 2010/11 OPERATING BUDGET USING \$96,500 OF THE \$200,000 SUCCESSION PLANNING FUNDS INCLUDED IN THE APPROVED BUDGET.

### IRWD NATURAL TREATMENT SYSTEMS AND SAN JOAQUIN MARSH FACILITIES THREE-YEAR LANDSCAPE MAINTENANCE CONTRACT

Director Withers reported that this item was reviewed and approved by the Engineering and Operations Committee on November 4, 2010. On MOTION by Withers, seconded and unanimously carried, THE BOARD AUTHORIZED THE GENERAL MANAGER TO EXECUTE A THREE-YEAR LANDSCAPE MAINTENANCE CONTRACT FOR THE IRWD NATURAL TREATMENT SYSTEMS AND SAN JOAQUIN MARSH FACILITIES WITH TRUGREEN LANDCARE IN THE AMOUNT OF \$1,476,000.

### GENERAL MANAGER'S REPORT

The IRWD San Joaquin Marsh & Wildlife Sanctuary was presented with the International Making Cities Liveable Award's "Green Places Commendation" in recognition of the low key campus in an extensive wetlands restoration, offering quiet exploration of nature and a rich educational program for children and adults teaching environmental responsibility.

### DIRECTORS' COMMENTS

Director LaMar reported that he attended a MWDOC Board meeting, WACO, and a MWD Water Policy forum held Thursday night. He also said he will attend the OCBC Infrastructure Committee Meeting and a MWD Water Summit being held in Los Angeles this week.

Director Withers congratulated Board Directors LaMar and Swan and President Reinhart are their election to the Board. He also requested that letters of congratulations be sent to the newly elected officials in the cities of Irvine, Tustin, Lake Forest, Orange, and Newport Beach in addition to offering them a tour of the District's facilities. He reported on the LAFCO meeting, and vacant seats that will need to be filled on the Commission.

Director Matheis reported that she attended an ISDOC Executive Committee Meeting last week and is looking forward to attending the MWD Water Summit in Los Angeles on Wednesday.

Director Swan reported that he attended an OCWD meeting, an MWDOC Water Policy forum, WACO, Newport Bay Government affairs meeting, West Basin Caucus meeting, Newport Bay Ecosystem Restoration Project dedication, Sea & Sage breakfast, and the Southern California



## Exhibit "A"

Water Dialogue meeting. He also said he will attend an OCBC Infrastructure Committee meeting and the MWD Water Summit this week.

Director Reinhart reported that he attended a meeting with Supervisor Campbell relative to OPA and MWDOC issues. He also said he attended a MWDOC Water Policy forum and Waco meeting.

### CLOSED SESSION

President Reinhart said that the following Closed Sessions would be held:

- a) With Legal Counsel relative to initiation of litigation (Government Code Section 54956.9(c)) - involving three potential cases; and
- b) With Real Property Negotiator relative to property (Government Code Section 54956.8)  
Property: APN 160-020-23 and APN160-020-12 in Kern County, CA.  
Agency negotiator: Paul Jones  
Negotiating parties: Grimmway Farms (Jeff Meger, President)  
Under negotiation: Price and terms of payment

### OPEN SESSION

Following the Closed Session, the meeting was reconvened with Directors Withers, LaMar, Matheis, Swan and Reinhart present. No action was reported.

### DUE DILIGENCE AND NOTICE OF EXEMPTION FOR KERN COUNTY LAND ACQUISITION

General Manager Jones reported that IRWD submitted a Letter of Intent to purchase the Diamond Farming Company's Stockdale West Ranch property comprised of 325.49 acres of land within the unincorporated area of Kern County. Mr. Jones said that the Letter of Intent has been signed by the property owners.

Principal Water Resources Manager Weghorst reported that in its continuing effort to acquire land suitable for the expansion of the District's water banking programs, staff has been in discussions with certain land owners regarding their properties including the Grimmway Farms, Inc. (Grimmway) that owns (through its subsidiary known as Diamond Farming Company) Stockdale West Ranch located adjacent to Strand Ranch. Mr. Weghorst said that on October 25, 2010, the Board directed staff to submit a Letter of Intent (LOI) to purchase the Grimmway property. The property owners approved and executed the LOI on October 29, 2010. Staff and legal counsel will finalize a Purchase and Sale Agreement to include terms for a 45-day due diligence period in which IRWD can perform a Baseline Property Assessment.

Mr. Weghorst stated that staff has been in contact with Dee Jaspar & Associates (DJA) to develop and negotiate a scope of work to complete the Baseline Property Assessment. DJA has extensive knowledge of IRWD's water banking programs and provides a wide range of engineering and land resource expertise. Previously, DJA completed similar work for the Jackson Ranch property

Exhibit "A"

acquisition. A draft of the Baseline Property Assessment report is required to be completed within 30 days of the issuance of a notice of award. DJA has provided a scope of work for the Baseline Property Assessment in the amount of \$71,400 and staff has found it to be fair and reasonable.

This item was not reviewed by a Committee. There being no further discussion, On MOTION by Reinhart, seconded and unanimously carried, THE BOARD AUTHORIZED AN INCREASE TO THE FISCAL YEAR 2010/11 CAPITAL BUDGET FOR PROJECT 11368 IN THE AMOUNT OF \$2,435,000, FROM \$4,766,300 TO \$7,201,300; APPROVED AN EXPENDITURE AUTHORIZATION FOR PROJECT 11368 FOR \$6,942,800; APPROVED VARIANCE NO. 1 TO DEE JASPAR & ASSOCIATES CONTRACT IN THE AMOUNT NOT-TO-EXCEED \$71,400 TO COMPLETE THE BASELINE PROPERTY ASSESSMENT; AUTHORIZED STAFF TO EXECUTE A PURCHASE AND SALE AGREEMENT FOR THE PROPERTY CONSISTENT WITH THE TERMS OF THE LETTER OF INTENT AND UPON EXECUTION, THE DEPOSIT OF \$50,000 INTO ESCROW FOR THE PROPERTY; AND AUTHORIZED STAFF TO FILE A NOTICE OF EXEMPTION FOR THE PURCHASE OF THE PROPERTY.

ADJOURNMENT

President Reinhart adjourned the meeting at 6:50 p.m.

APPROVED and SIGNED this 22<sup>nd</sup> day of November, 2010.

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President/Vice President,  
IRVINE RANCH WATER DISTRICT

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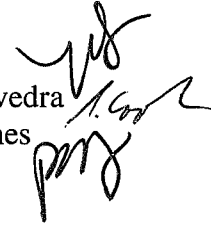
Secretary/Assistant Secretary,  
IRVINE RANCH WATER DISTRICT

APPROVED AS TO FORM:

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Legal Counsel - Bowie, Arneson, Wiles & Giannone

November 22, 2010  
Prepared and  
Submitted by: N. Savedra  
Approved by: P. Jones



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

11/17/10	Meeting w/SMWD and MWDOC regarding MWDOC Agreement
11/30-12/3/10	ACWA Fall Conference
12/15-17/10	Colorado River Water Users Association Annual Conference

Mary Aileen Matheis

11/29-12/3/10	ACWA Fall Conference
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Doug Reinhart

11/14-18/10	WaterReuse and Desalination Conference
11/24/10	Irvine Lake Issues Briefing and Site Visit
11/30-12/3/10	ACWA Fall Conference

Peer Swan

11/16/10	WACO Planning Committee Meeting
11/24/10	Irvine Lake Issues Briefing and Site Visit
11/29-12/3/10	ACWA Fall Conference
12/7-9/10	2010 Bond Issuance

John Withers

11/30-12/3/10	ACWA Fall Conference
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RECOMMENDATION:

RATIFY/APPROVE THE MEETINGS AND EVENTS FOR STEVEN LaMAR, MARY AILEEN MATHEIS, DOUG REINHART, PEER SWAN AND JOHN WITHERS AS DELINEATED ABOVE.

LIST OF EXHIBITS:

None



November 22, 2010  
Prepared and Submitted by: Various  
Approved by: Paul Jones



CONSENT CALENDAR

STRATEGIC MEASURES DASHBOARDS

SUMMARY:

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

RECOMMENDATION:

RECEIVE AND FILE THE STRATEGIC MEASURES DASHBOARDS AND INFORMATION ITEMS.

EXHIBITS:

- Exhibit "A" – Strategic Measures Dashboards
- Exhibit "B" – Dyer Road Wellfield Status
- Exhibit "C" – Reservoir Data

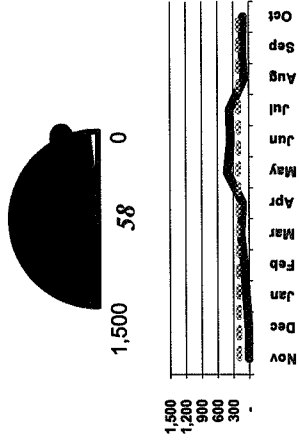


October 2010

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

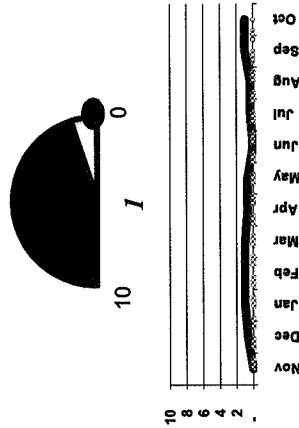
**Reliability-Potable/Nonpotable**

Target = 200 customer hours out of service this month



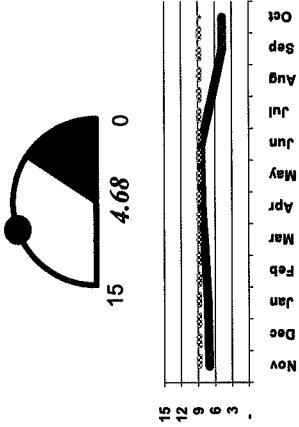
**Sewer Spills**

Target = 0 Spills this month



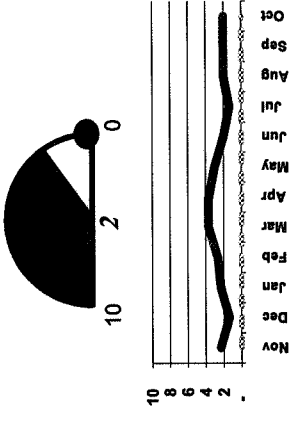
**OCSD CORF Flows**

Target = 8.80 MGD CORF flow to OCSD this month



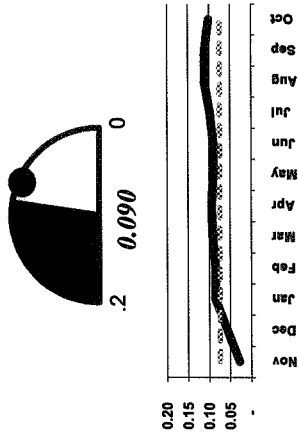
**OSHA Recordables**

Target = 0 reportable accidents this month



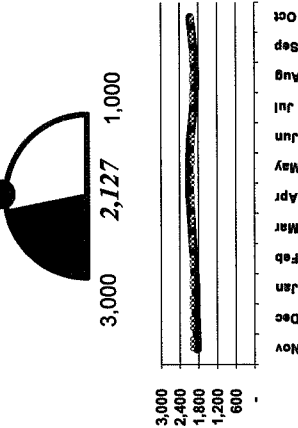
**MWRP Energy Cost per kWh**

Target = .0792 cost per kWh this month



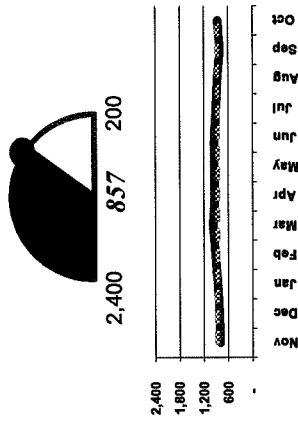
**Wastewater Cost**

Target = \$1,998/MG processed this month



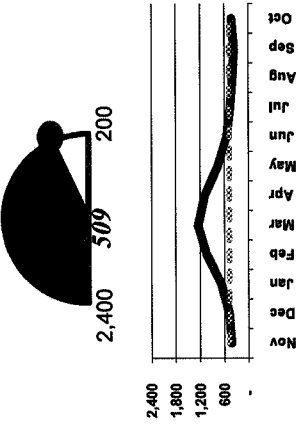
**Water System Cost--Potable**

Target = \$669/ac-ft delivered this month



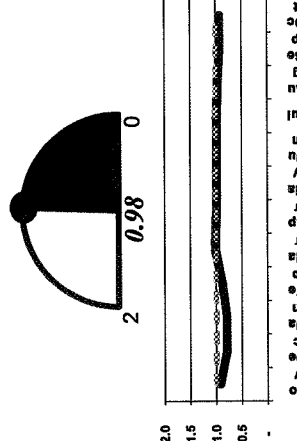
**Water System Cost--Nonpotable**

Target = \$474/ac-ft delivered this month



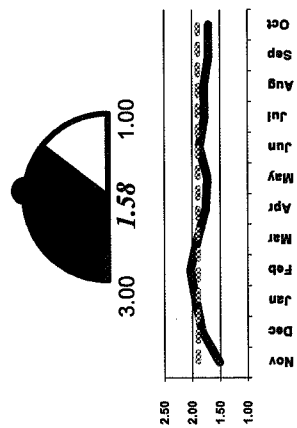
**Enterprise Return**

Target = 1.0 (net income/goal) last month



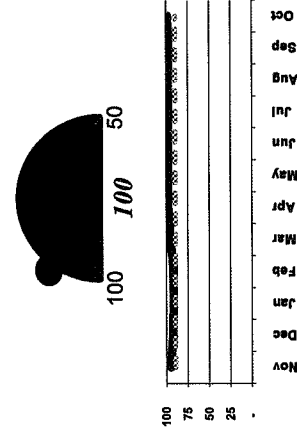
**Overhead Ratio**

Target = 1.95 (G&A expenses/direct labor) this month



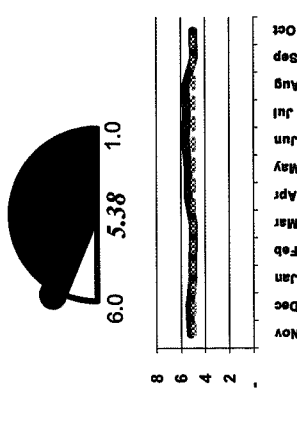
**Customer Satisfaction**

Target = 90% satisfaction this month

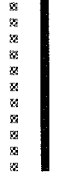


**Employee Satisfaction**

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>	<b>From:</b> November 2009
November 2009	12.50		<b>Thru:</b> October 2010
December 2009	28.50		<b>Goal:</b> 200.00
January 2010	129.40		
February 2010	133.80		
March 2010	208.50		
April 2010	26.20		
May 2010	1,026.25		
June 2010	0		
July 2010	106.10		
August 2010	184.00		
September 2010	95.80		
October 2010	57.80		



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 CSR's or emergency calls.

Current Issues

1. Collections Systems experienced a SSO on October 8th, located within the City of Irvine. Approximately 200 gallons of sewage was spilled, with all sewage was contained and returned all 200 gallons to the collection system. The cause of the SSO was due to root intrusion impacting IRWD's collection system. Staff notified all required regulatory agencies.

MONTHLY DATA

<u>Month</u>	<u>Value</u>	<u>Goal</u>	<i>From:</i> November 2009
November 2009	0		<i>Thru:</i> October 2010
December 2009	2.00		<i>Goal:</i> 0
January 2010	1.00		
February 2010	0		
March 2010	2.00		
April 2010	0		
May 2010	0		
June 2010	0		
July 2010	1.00		
August 2010	0		
September 2010	2.00		
October 2010	1.00		

IRVINE RANCH WATER DISTRICT  
STRATEGIC MEASURES

***OCSD CORF Flows***

**MONTHLY STATUS REPORT**

Metric Owner: Richard Kelly

Plant Operations Analyst

Definition of Measure:

Actual OCSD CORF flows. CORF ownership is currently 8.8 MGD.

Method:

CORF value is calculated as the average of the four highest flow months of the current and prior three fiscal years.

Data Collection

Data collected from the Main Street flow meters is used for this measure.

Current Issues

1. None

**MONTHLY DATA**

<u>Month</u>	<u>Value</u>	<u>Goal</u>	<i>From:</i> November 2009
November 2009	7.22		<i>Thru:</i> October 2010
December 2009	7.27		<i>Goal:</i> 8.80
January 2010	7.40		
February 2010	8.00		
March 2010	8.41		
April 2010	8.42		
May 2010	8.43		
June 2010	8.43		
July 2010	4.68		
August 2010	4.68		
September 2010	4.69		
October 2010	4.68		

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. Plant operator III incurred puncture wound to left hand palm using retaining ring
2. Network Administrator repetitive work incurred right elbow tendonitis

MONTHLY DATA

<u>Month</u>	<u>Value</u>	<u>Goal</u>	<b>From:</b> November 2009
November 2009	1.00		<b>Thru:</b> October 2010
December 2009	2.00		<b>Goal:</b> 0
January 2010	4.00		
February 2010	2.00		
March 2010	5.00		
April 2010	4.00		
May 2010	0		
June 2010	2.00		
July 2010	2.00		
August 2010	2.00		
September 2010	2.00		
October 2010	2.00		

IRVINE RANCH WATER DISTRICT  
STRATEGIC MEASURES

***MWRP Energy Cost per kWh***

**MONTHLY STATUS REPORT**

Metric Owner: Richard Kelly

Plant Operations Analyst

Definition of Measure:

Actual MWRPCost 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. October 2010: Net Savings: \$92,057 ; Total Savings: \$2,302,626

**MONTHLY DATA**

<u>Month</u>	<u>Value</u>	<u>Goal</u>	<i>From:</i> November 2009
November 2009	.09		<i>Thru:</i> October 2010
December 2009	.09		<i>Goal:</i> .08
January 2010	.08		
February 2010	.09		
March 2010	.10		
April 2010	.09		
May 2010	.07		
June 2010	.11		
July 2010	.12		
August 2010	.11		
September 2010	.10		
October 2010	.09		

IRVINE RANCH WATER DISTRICT  
STRATEGIC MEASURES

***Wastewater Cost***

**MONTHLY STATUS REPORT**

Metric Owner: Richard Kelly

Plant Operations Analyst

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> November 2009
November 2009	1,876.00	2,004.00	<i>Thru:</i> October 2010
December 2009	1,901.00	2,000.00	<i>Goal:</i> 1,998.00
January 2010	1,890.00	1,997.00	
February 2010	2,053.00	2,019.00	
March 2010	2,086.00	2,014.00	
April 2010	2,092.00	2,017.00	
May 2010	2,096.00	2,014.00	
June 2010	1,962.00	2,017.00	
July 2010	1,797.00	1,985.00	
August 2010	1,950.00	1,984.00	
September 2010	2,128.00	2,002.00	
October 2010	2,127.00	1,998.00	

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>	<b><i>From:</i></b> November 2009
November 2009	795.36	826.19	<b><i>Thru:</i></b> October 2010
December 2009	855.61	837.83	<b><i>Goal:</i></b> 869.00
January 2010	939.15	837.56	
February 2010	968.43	829.05	
March 2010	1,021.44	820.93	
April 2010	824.78	822.90	
May 2010	988.17	839.59	
June 2010	1,018.23	870.57	
July 2010	701.23	880.40	
August 2010	906.37	814.86	
September 2010	834.75	837.90	
October 2010	857.34	868.51	

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>	<b>From:</b> November 2009
November 2009	457.85	614.98	<b>Thru:</b> October 2010
December 2009	540.57	699.13	<b>Goal:</b> 474.00
January 2010	1,052.36	975.42	
February 2010	1,513.67	1,025.20	
March 2010	1,178.32	904.71	
April 2010	577.80	788.59	
May 2010	535.78	546.32	
June 2010	510.12	604.98	
July 2010	326.47	383.34	
August 2010	376.24	397.83	
September 2010	393.78	405.18	
October 2010	508.51	473.71	

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 October measure is below budget at 0.98%. The leasing market continues to be weak. Although leasing has improved at the Waterworks Way Business Park, the Irvine Technology Center still has not leased out suite 290 at 4,459 sq. ft. and a portion of suite 250.

**MONTHLY DATA**

<u>Month</u>	<u>Value</u>	<u>Goal</u>	<i>From:</i> November 2009
November 2009	.77		<i>Thru:</i> October 2010
December 2009	.61		<i>Goal:</i> 1.00
January 2010	1.01		
February 2010	1.03		
March 2010	1.01		
April 2010	.96		
May 2010	.99		
June 2010	1.01		
July 2010	.97		
August 2010	.93		
September 2010	.89		
October 2010	.98		



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. The current month actual G&A rate is 1.58 which is lower than the projected rate of 1.95. The YTD G&A rate is 1.67, which brings the over applied G&A to \$1,438,289.13

### MONTHLY DATA

<u>Month</u>	<u>Value</u>	<u>Goal</u>	<i>From:</i> November 2009
November 2009	1.56		<i>Thru:</i> October 2010
December 2009	1.93		<i>Goal:</i> 1.90
January 2010	2.33		
February 2010	1.84		
March 2010	1.55		
April 2010	1.88		
May 2010	1.75		
June 2010	1.99		
July 2010	1.59		
August 2010	1.79		
September 2010	1.73		
October 2010	1.58		

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: 100%  
Satisfaction: 100%  
Timely: 98%  
Phone: 100%  
Field Contact: 100%

MONTHLY DATA

<u>Month</u>	<u>Value</u>	<u>Goal</u>	<i>From:</i> November 2009
November 2009	97.00		<i>Thru:</i> October 2010
December 2009	87.00		<i>Goal:</i> 90.00
January 2010	91.00		
February 2010	96.00		
March 2010	99.00		
April 2010	98.00		
May 2010	97.00		
June 2010	100.00		
July 2010	95.00		
August 2010	100.00		
September 2010	96.00		
October 2010	100.00		

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. In October 2010, 13 surveys were returned of 33 surveys sent (39%). 12 of 13 respondents (92%) rated satisfaction as 5 or 6 on a scale of 1 to 6. In the 12 month period ending October 2010, 119 surveys have been returned of 295 surveys sent (40%). 100 of 295 respondents (84%) rated satisfaction as 5 or 6 on a scale of 1 to 6. 12 month average rating is 5.30.

MONTHLY DATA

<u>Month</u>	<u>Value</u>	<u>Goal</u>	<i>From:</i> November 2009
November 2009	5.67		<i>Thru:</i> October 2010
December 2009	5.25		<i>Goal:</i> 5.00
January 2010	4.25		
February 2010	5.57		
March 2010	5.15		
April 2010	5.54		
May 2010	5.50		
June 2010	5.89		
July 2010	5.23		
August 2010	5.75		
September 2010	3.86		
October 2010	5.38		

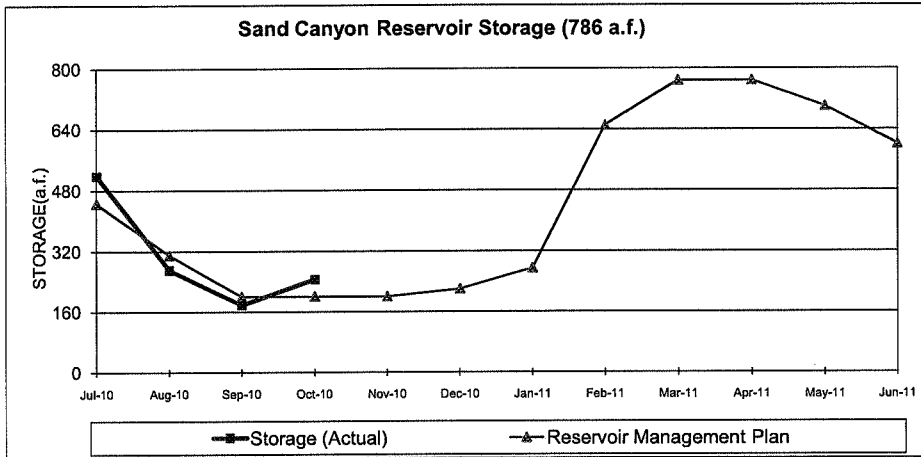


## EXHIBIT "B"

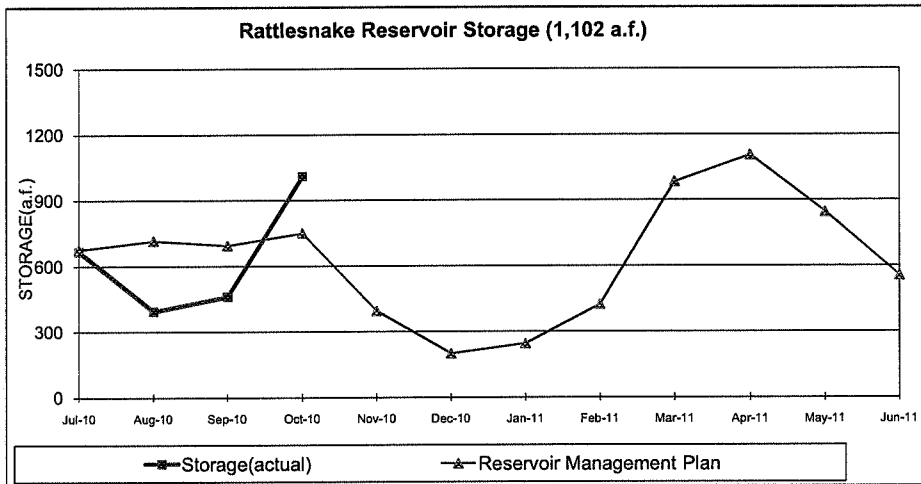
DYER ROAD WELL FIELD STATUS							Oct-2010
Well Number	Production Mo./YTD	Ref. Point Elevation	Depth to Water 9/30/2010	Water Level-MSL	Depth of Bowls	Bowl Setting-MSL	Feet of Water Above Intake
1	76.7 AF 348.9 AF	34	N/A	N/A	270	-236	N/A
				Static			
2	94.4 AF 573.4 AF	37	104	-68	270	-234	166
				Static			
3	0.0 AF 0.6 AF	55	111	-56	215	-160	104
				Static			
4	127.1 AF 685.5 AF	38	106	-68	216	-178	110
				Static			
5	99.4 AF 604.1 AF	48	113	-65	290	-242	177
				Static			
6	15.4 AF 96.2 AF	43	105	-62	250	-207	145
				Static			
7	50.1 AF 387.7 AF	40	114	-74	290	-250	176
				Static			
C-8 DATS	384.6 AF 1,625.6 AF	37	148	-111	305	-268	157
				Static			
C-9 DATS	288.5 AF 1,220.0 AF	23	146	-123	305	-282	159
				Static			
10	315.3 AF 1,309.7 AF	47	104	-57	250	-203	146
				Static			
11	75.0 AF 298.1 AF	40	109	-69	300	-260	191
				Static			
12	127.2 AF 686.4 AF	51	106	-55	300	-249	194
				Static			
13	2.1 AF 168.2 AF	40	102	-62	300	-260	198
				Static			
14	37.0 AF 374.8 AF	47	106	-59	311	-264	205
				Static			
15	331.0 AF 1,484.4 AF	44	105	-61	300	-256	195
				Static			
16	75.9 AF 310.0 AF	47	102	-55	280	-233	178
				Static			
17	262.2 AF 1,113.8 AF	52	105	-54	250	-199	145
				Static			
18	100.0 AF 624.5 AF	45	108	-63	300	-255	192
				Static			
Clear production:	1,788.8 AF for the month						
FYTD:	9,066.3 AF						
DATS production:	673.1 AF for the month						
FYTD:	2,845.6 AF						



**RESERVOIR DATA FY 10-11**

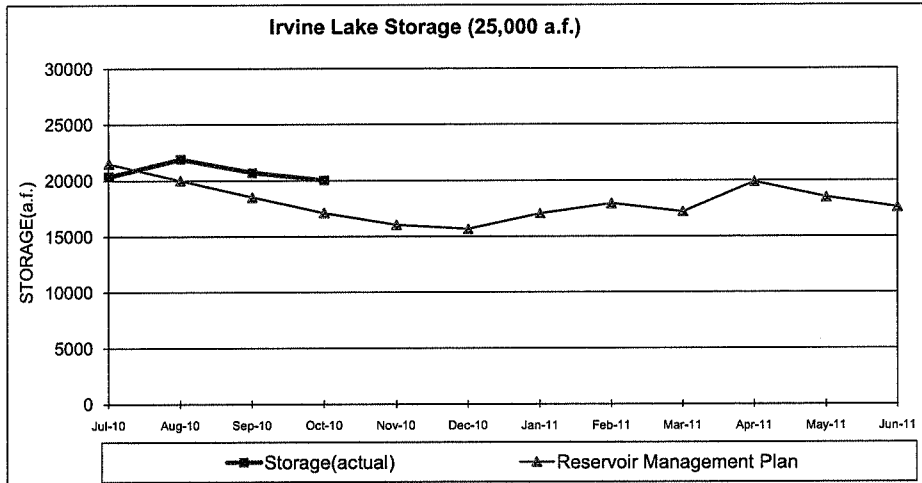


Storage will be under 200 AF by October 1 as required by Regional Board permit. MWRP began drafting down Sand Canyon July 15th.

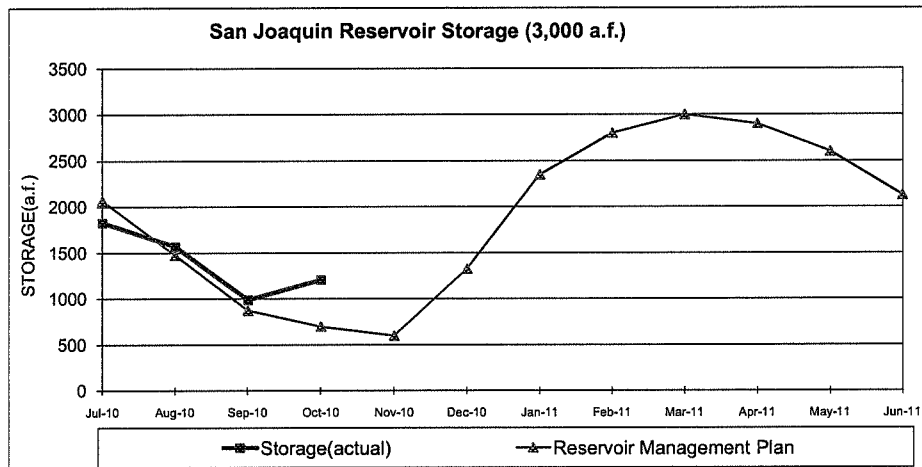


Rattlesnake will begin to draft down as seasonal demands increase during the next few months. Rattlesnake's storage was reduced during the San Joaquin 10-day draw down period.

RESERVOIR DATA FY 10-11



On track as summer time demands draw from Irvine Lake.



LAWRP plant to bypass all flow. Lake Forest reclaimed demand is being supplied from the East Irvine Zone B system. San Joaquin's draw down was less than planned due to the 10-day draw down holding period.

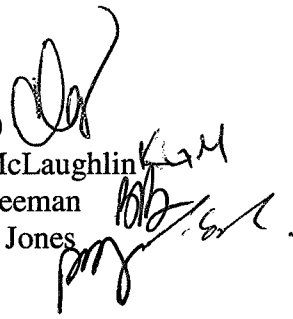


November 22, 2010

Prepared by: K. McLaughlin

Submitted by: B. Beeman

Approved by: Paul Jones



## CONSENT CALENDAR

### 2011 STATE LEGISLATIVE PLANNING UPDATE

#### SUMMARY:

This report provides an update on the upcoming 2011 legislative schedule and potential legislative proposals. More in depth planning analysis and discussions will take place at the Water Resources Planning and Communications Committee legislative planning workshop in December.

#### BACKGROUND:

On December 6, the California Legislature will be sworn in and will commence the first year of a two year legislative session. While Legislators are allowed to introduce bills in December, the purpose of convening is exclusively administrative and no action will be taken on any issues introduced. The official schedule has not yet been released; however, it is expected that the deadline for submitting bills to the Legislative Counsel's Office will be late January; the deadline for introducing bills will be late February; and the policy committee deadline will be late March or early April.

#### Association Planning:

The following provides a brief overview of some preliminary bill proposals being considered by several key statewide associations.

##### *Association of California Water Agencies:*

The Association of California Water Agencies (ACWA) is exploring a legislative proposal from Metropolitan Water District of Southern California (MWD) related to controlling invasive mussels in California. MWD's initial proposal was to establish a uniform statewide boat inspection program with funding provided through a statewide gate fee. After concern was raised that this could undo successful local programs, ACWA and MWD agreed to move forward with an ACWA workgroup to look at issues surrounding boat inspection programs and the implementation of such programs where they do not currently exist. Potential legislation will also include an elimination or extension of the sunset clause on the current authority to conduct mussel inspections which expires in 2012.

##### *WateReuse Association:*

The WateReuse Association (WRA) Board will be meeting on November 19 to set the legislative and regulatory priorities for 2011. Based on discussions by the WRA Legislative / Regulatory Committee, it is likely that WRA will be focusing on implementation of recent legislation – SB 918 and AB 1366 – and regulatory fixes and updates – namely to Title 22 of California Code of

Regulations –in the coming year. WRA will also lead water recycling outreach and education efforts targeting new members of the legislature.

*California Municipal Utilities Association:*

The California Municipal Utilities Association (CMUA) considered two legislative water-related proposals at its planning meeting on November 4.

The first proposal, submitted by the Metropolitan Water District of Southern California, would require the appointment of a local government water conservation expert on the Building Standards Commission and appropriate water committees to help ensure that water conservation and use efficiency measures are included in the review and adoption of California's building standards. CMUA is planning to work with MWD and the California Building Industry Association to craft a proposal for introduction in the 2011 legislative session.

The second proposal, submitted by the City of Corona Department of Water and Power is a reintroduction of AB 1704 (Jeffries) from 2010 to add a California Environmental Quality Act (CEQA) exemption for recycled water pipeline projects less than 3 miles in length within a paved public street, highway or right-of-way. Under current law, projects less than 1 mile in length are exempted under CEQA. AB 1704, which did not get out of its Assembly policy committee, would have exempted any projects under 8 miles in length. The goal of the proposed legislations is to encourage the extension of recycled water distribution systems in existing streets and public right-of-ways. CMUA is not planning to sponsor this legislation at this time due to the fact that bills related to the easing of CEQA requirements are politically charged. However, CMUA will be developing a working group to look at options for streamlining the CEQA process for recycled water retrofit projects in the public right of way.

*California Special Districts Association:*

The California Special Districts Association (CSDA) is not currently considering sponsoring legislation in 2011. However, the Association will continue to play a leadership role in working with legislators and the administration on issues and legislation related to public employee compensation, disclosure and pensions. Currently, CSDA is working, in conjunction with League of California Cities and the California State Association of Counties, to support State Controller Chiang's efforts to collect uniform public compensation information from local government. To date, cities and counties are required to submit this information to the Controller's office and in October, the Controller announced that over the next several months he will be requesting the same information from all of California's special districts. In addition to the Controller's efforts, it is expected that many bills on these topics will be introduced in the 2011 session.

*California Association of Sanitation Agencies:*

To date, the California Association of Sanitation Agencies (CASA) is not considering sponsoring legislation. However a proposal may come out of their Attorney's Committee meeting in November. Additionally, Assembly Member Huffman's office has approached CASA for ideas on a new flushable products bill. AB 2256 (Huffman), introduced in 2010 would have placed

prohibitions on the labeling of “flushable” products. This bill was double referred and held in its Senate policy committees.

Other Potential 2011 Legislative Issues:

*Public Compensation and Disclosure:*

Public compensation, disclosure and transparency issues will continue to be hot topic in the Legislature. Senator Correa has already announced his intention to introduce a new version of his SB 501, which did not pass the Legislature in 2010, to require reporting and posting of public employee compensation information. The Senate Local Government Committee Consultant will be recommending that the bill require all Form 700 filers to also complete a supplemental compensation document that would be filed and reported in the same way as Form 700. The Consultant recommends defining “compensation” to include four categories: salary/stipend; employer cost of benefits; reimbursement for expenses; and other monetary/non-monetary benefits such as housing and car allowances.

*Statewide Water Governance:*

In August, the Little Hoover Commission released a report entitled *Managing for Change: Modernizing California’s Water Governance*, which studies current statewide water governance and makes the following three recommendations:

- Creation of a new Department of Water Management housed within the Natural Resources Agency. The functions of this new Department would include the current water management and planning functions of DWR in addition to the water rights functions currently housed in the State Board, and the in-stream flow group of the Department of Fish and Game;
- Tasking the California Water Commission with oversight for all current and future natural resources bond expenditures; and
- Creation of the California Water Authority to operate the State Water Project as an independent enterprise authority.

Assembly Member Huffman has already put language into the Legislative Counsel’s Office in anticipation of potential legislation related to the Little Hoover Commission’s report. ACWA is planning a session on the report at its upcoming conference in Indian Wells.

*Public Goods Charge for Water:*

In July, a UC Berkeley policy analysis report completed on behalf of the California Public Utilities Commission and the Water Energy Team of the Climate Action Team entitled, *Implementing a Public Goods Charge for Water*, was released. The report recommends the passage of state legislation requiring all water providers assess a volumetric public goods surcharge on all water bills, similar to an energy public goods charge. The funds would support the water supply targets adopted in SB 7x7 (Steinberg) and would fund the dual energy and water conservation programs specified in AB 32. Several legislators and committee consultants

are reportedly interested in introducing legislation related to this proposed public goods charge for water.

*2010 Legislative Issues:*

During the 2010 legislative session there were a variety of issues that IRWD worked on with water industry and local government partners that failed to move forward or passed in a watered down form. These include limiting and/or prohibiting long term water transfers; sub-metering requirements in multi-family dwellings; prohibitions on gaseous chlorine use and transport; rainwater capture; and changes to public contracting laws. Staff will monitor bill introductions and developments on these issues and will provide updates and recommendations to the Committee as appropriate.

FISCAL IMPACTS:

Not applicable.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

This item was reviewed at the Water Resources and Policy Communications Committee on November 9, 2010.

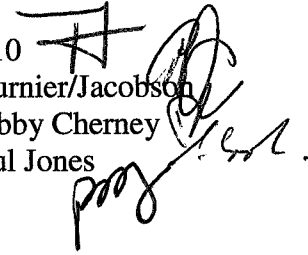
RECOMMENDATION:

Receive and file.

LIST OF EXHIBITS:

None.

November 22, 2010  
Prepared by: Fournier/Jacobson  
Submitted by: Debby Cherney  
Approved by: Paul Jones



CONSENT CALENDAR

OCTOBER 2010 FINANCIAL REPORTS

SUMMARY:

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

- A. The Investment Summary Report for October 2010. This Investment Summary Report is in conformity with the 2010 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 October 31, 2010, as outlined in Exhibit "B".
- C. The Summary of Wire Transfers and ACH payments in the total amount of \$12,550,713.93, as outlined in Exhibit "C".
- D. The October 2010 tabulation of Warrant Nos. 314776 through 315529, Workers' Compensation distributions, and voided checks in the total amount of \$5,475,199.74, as outlined in Exhibit "D".

FISCAL IMPACTS:

As of October 31, 2010, the book value of the investment portfolio was \$272,138,445 with a 0.50% rate of return and a market value of \$272,466,032. Based on the District's September 30, 2010 real estate investment rate of return of 9.56%, the District's weighted average return for the fixed income and real estate investments is 2.22%.

As of October 31, 2010, the total notional amount of the interest rate swap portfolio was \$130 million of fixed payer swaps. Cash flow in October from all swaps was a negative \$596,158 and a negative \$2,427,467 fiscal year to date. The mark-to-market value of all swaps was approximately \$89.0 million at month-end.

Wire transfers, ACH payments, and checks issued for debt service, accounts payable, payroll and water purchases for October totaled \$18,025,914.

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:

RECEIVE AND FILE THE TREASURER'S INVESTMENT SUMMARY REPORT AND THE MONTHLY INTEREST RATE SWAP SUMMARY FOR OCTOBER 2010; APPROVE THE OCTOBER 2010 SUMMARY OF WIRE TRANSFERS AND ACH PAYMENTS IN THE TOTAL AMOUNT OF \$12,550,713.93; AND APPROVE THE OCTOBER 2010 WARRANTS NOS. 314776 THROUGH 315529, WORKERS' COMPENSATION DISTRIBUTIONS AND VOIDED CHECKS IN THE TOTAL AMOUNT OF \$5,475,199.74.

LIST OF EXHIBITS:

Exhibit "A" - Investment Summary Report

Exhibit "B" - Monthly Interest Rate Swap Summary

Exhibit "C" - Monthly Summary of Wire and ACH Transfers

Exhibit "D" - Tabulation of Warrants

Exhibit "A"

10/31/10

INTEREST PERIOD	NEXT PERIOD	CALL DATE	MAIORITY DATE	RATING	INVESTMENT TYPE	INSTITUTION / ISSUER	PAR Amount	COUPON	YIELD	YTC	ORIGINAL COST	CARRY VALUE	MARKET VALUE 10/31/2010	UNREALIZED GAIN/(LOSS)2
SETTLEMENT	FROM	THROUGH	RESET											
10/26/10			11/01/10		LAIF	State of California Tsy.	\$49,000,000		0.049%		\$49,000,000.00	\$49,000,000.00	49,093,827.65	93,827.65
07/15/10			11/01/10		LAIF-JPA	State of California Tsy.	50,000,000		0.049%		\$50,000,000.00	\$50,000,000.00	50,095,742.50	95,742.50
10/15/10			11/05/10		LAIF-2009A	State of California Tsy.	15,132,867		0.049%		\$15,132,867.34	\$15,132,867.34	15,161,844.51	28,977.17
10/15/10			11/05/10		LAIF-2009B	State of California Tsy.	15,132,867		0.049%		\$15,132,867.34	\$15,132,867.34	15,161,844.51	28,977.17
10/31/10	10/31/10	11/01/10	11/01/10		B of A Tsy. Reserves	Bank of America	1,983,044		0.009%		1,983,044.49	1,983,044.49	1,983,044.49	
06/08/09			01/14/11	Aaa/AAA/AAA	FAMCA - Note	Fed Agricultural Mortgage Corp	9,900,000	4.875%	1.570%		10,414,800.00	9,965,120.00	9,995,906.25	30,786.25
05/25/10			11/17/11	Aaa/AAA/NR	FHLB - Note	Fed Home Loan Bank	2,500,000	0.500%	0.500%		2,500,000.00	2,500,000.00	2,500,000.00	
04/21/10	Step-up		11/23/11	Aaa/AAA/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.000%	0.841%		5,012,550.00	5,008,359.47	5,037,500.00	29,140.53
06/15/10			12/23/10	Aaa/AAA/AAA	FNMA - Note	Fed Natl Mortgage Assoc	4,000,000	1.150%	1.070%	0.868%	4,005,840.00	4,004,642.92	4,005,000.00	357.08
09/22/10			12/08/10	Aaa/AAAe/NR	FFCB - Note	Fed Farm Credit Bank	5,000,000	0.640%	0.640%	0.640%	5,000,000.00	5,000,000.00	5,001,562.50	1,562.50
09/21/10			12/13/10	Aaa/AAA/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	0.550%	0.550%		5,000,000.00	5,000,000.00	5,001,562.50	1,562.50
09/17/10			03/17/11	Aaa/AAAe/NR	FFCB - Note	Fed Farm Credit Bank	8,000,000	0.700%	0.700%		8,000,000.00	8,000,000.00	8,012,500.00	12,500.00
10/25/10			01/25/11	Aaa/AAA/AAA	FHLB - Note	Fed Home Loan Bank	5,000,000	0.550%	0.575%	0.750%	4,997,500.00	4,997,523.94	5,001,562.50	4,038.56
09/18/08	09/29/10	10/05/10	10/06/10	(4) Aa1/AAA/NR	VRDO	East Bay MUD	9,800,000		0.280%		9,800,000.00	9,800,000.00	9,800,000.00	
09/25/08	09/30/10	10/06/10	10/07/10	Aa3/AAA/AA-	VRDO	Bay Area Toll Authority	10,375,000		0.230%		10,370,331.25	10,375,000.00	10,375,000.00	
08/09/10	09/29/10	10/05/10	10/06/10	(4) Aaa/AAA/NR	VRDO	Chino Basin Fio	11,620,000		0.290%		11,620,000.00	11,620,000.00	11,620,000.00	
10/09/08	09/30/10	10/06/10	10/07/10	(4) Aa3/AAA/WD	VRDO	Ca Water Series C	2,000,000		0.300%		2,000,000.00	2,000,000.00	2,000,000.00	
09/01/10	09/29/10	10/05/10	10/06/10	(4) Aa3/ANR	VRDO	Rancho California WtrD	6,700,000		0.290%		6,700,000.00	6,700,000.00	6,700,000.00	
08/20/09	09/29/10	10/05/10	10/06/10	(4) A3/AAA/AAA	VRDO	Rancho California WtrD	3,000,000		0.240%		3,000,000.00	3,000,000.00	3,000,000.00	
07/20/10	09/30/10	10/06/10	10/07/10	(4) Aa1/AAA/AAA	VRDO	Metropolitan Water	10,000,000		0.320%		10,000,000.00	10,000,000.00	10,000,000.00	
08/16/10	09/29/10	10/05/10	10/06/10	(4) Aaa/AAA/NR	VRDO	Sacramento WTR	10,000,000		0.250%		10,000,000.00	10,000,000.00	10,000,000.00	
08/27/10	09/30/10	10/06/10	10/07/10	(4) AAA/NR/NR	VRDO	Metropolitan Water	5,000,000		0.280%		5,000,000.00	5,000,000.00	5,000,000.00	
08/30/10	09/30/10	10/06/10	10/07/10	(4) AAA/NR/NR	VRDO	Orange Cnty Wtr	5,800,000		0.280%		5,800,000.00	5,800,000.00	5,800,116.00	116.00
10/27/10	10/20/10	10/26/10	10/27/10	(4) Aa1/AAA/AAA	VRDO	Orange Cnty Wtr	5,000,000		0.230%		5,000,000.00	5,000,000.00	5,000,000.00	
<b>SUB-TOTAL</b>							<b>\$254,943,779</b>				<b>\$255,019,425.50</b>	<b>\$255,347,013.41</b>	<b>\$327,587.91</b>	
<b>RESTRICTED CASH (Swap, Collateral Deposits)</b>														
10/01/10	10/01/10	10/31/10			Collateral Deposit	Citi-Group	\$12,779,019		0.191%		\$12,779,019.00	\$12,779,019.00	12,779,019.00	
08/30/10	10/01/10	10/31/10			Collateral Deposit	Merrill Lynch	\$4,340,000				\$4,340,000.00	\$4,340,000.00	4,340,000.00	
<b>SUB-TOTAL</b>							<b>\$17,119,019</b>				<b>\$17,119,019.00</b>	<b>\$17,119,019.00</b>	<b>\$17,119,019.00</b>	
<b>TOTAL INVESTMENTS</b>							<b>\$272,588,819.42</b>				<b>\$272,138,444.50</b>	<b>\$272,466,032.41</b>	<b>\$392,955,000</b>	
							3,300.00						\$262,955,000	
							(1,885,089.54)						\$270,707,030	
							<b>\$270,707,029.88</b>							103%

Investment Portfolio	Investment Portfolio	Real Estate Portfolio (3)	Weighted Avg. Return
Outstanding Variable Rate Debt			
Net Outstanding Variable Rate Debt (Less \$130 million fixed-payer swaps)			
Investment Balance:			
Investment to Variable Rate Debt Ratio:			
Portfolio - Average Number of Days To Maturity			78
	Investment Portfolio	Real Estate Portfolio (3)	Weighted Avg. Return
	0.50%	9.56%	2.22%
	0.52%	9.56%	2.26%
	-0.02%		

(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  
(4) No call Notice  
(5) Partial call

This Investment Summary Report is in conformity with the 2010 Investment Policy and provides sufficient liquidity to meet the next six months estimated expenditures.

IRVINE RANCH WATER DISTRICT

SUMMARY OF MATURITIES  
10/31/10

PORTFOLIO \$272,062,798

DATE	TOTAL	%	LAIF	AGENCIES	MUNI	MONEY MARKET SAVINGS & SWEEP	Collateral * Deposit
11/10	\$227,662,798	83.68%	\$129,265,735		79,295,000	1,983,044	\$17,119,019
12/10							
1/11	\$9,900,000	3.64%		9,900,000			
2/11							
3/11							
4/11							
5/11							
6/11							
7/11							
8/11							
9/11							
10/11							
<b>SUB-TOTAL</b>	<b>\$237,562,798</b>	<b>87.32%</b>	<b>\$129,265,735</b>	<b>9,900,000</b>	<b>79,295,000</b>	<b>1,983,044</b>	<b>\$17,119,019</b>
<b>13 Months - 2 YEARS</b>							
11/1/2011 - 12/31/2011	\$7,500,000	2.76%		7,500,000			
1/1/2012 - 3/31/2012							
4/1/2012 - 6/30/2012	\$14,000,000	5.15%		14,000,000			
7/1/2012 - 9/30/2012	\$8,000,000	2.94%		8,000,000			
10/1/2012 - 12/31/2012	\$5,000,000	1.84%		5,000,000			
<b>TOTALS</b>	<b>\$272,062,798</b>	<b>100.00%</b>	<b>\$129,265,735</b>	<b>44,400,000</b>	<b>79,295,000</b>	<b>1,983,044</b>	<b>\$17,119,019</b>

% OF PORTFOLIO 47.51% 16.32% 29.15% 0.73% 6.29%

\* Return of posted collateral is dependant on interest rates.



**IRVINE RANCH WATER DISTRICT INVESTMENT SUMMARY REPORT**  
**INVESTMENT ACTIVITY**  
 Oct-10

**MATURITIES/SALES**

**PURCHASES**

DATE	SECURITY TYPE	PAR	YIELD	DATE	SECURITY TYPE	PAR	YIELD
10/20/2010	VRDO - Central Basin Water	\$4,895,000	1.25%	10/20/2010	FHLB Note Due 10/21/10	\$7,000,000	0.11%
10/21/2010	FHLB Note Due 10/21/10	\$5,000,000	1.25%	10/21/2010	FHLB Note Due 10/25/10	\$10,000,000	0.11%
10/21/2010	FHLB Note Due 10/21/10	\$7,000,000	0.11%	10/25/2010	FHLB Note Due 10/25/12	\$5,000,000	0.58%
10/21/2010	FHLB Note Due 10/25/10	\$10,000,000	0.11%	10/25/2010	FHLB Note Due 10/27/10	\$5,000,000	0.09%
10/27/2010	FHLB Note Due 10/27/10	\$5,000,000	0.09%	10/27/2010	VRDO - Orange County Water	\$5,000,000	0.24%

**LAIF ACTIVITY**

10/01/10	LAIF	(\$1,400,000)
10/12/10	LAIF	\$1,400,000
10/15/10	LAIF	(\$59,340)
10/15/10	LAIF - JPA	(\$64,589)
10/15/10	LAIF - 2009A	\$19,518
10/15/10	LAIF - 2009B	\$19,518
10/26/10	LAIF	<u>(\$1,000,000)</u>
	Increase/(Decrease)	<u><u>(\$1,084,893)</u></u>

**COLLATERALIZED DEPOSIT ACTIVITY**

Balance Forward	\$18,568,407
CITIGROUP	(\$1,449,388)
MERRILL LYNCH	<u>\$0</u>
Balance at 10/31	<u><u>\$17,119,019</u></u>



**IRVINE RANCH WATER DISTRICT  
INTEREST RATE SWAP MONTHLY SUMMARY REPORT - DETAIL**  
October 31, 2010

Exhibit "B"

Prior Mo.	Current Mo.	12-Mo Avg.
0.26%	0.26%	0.27%

LIBOR Avg %

Current Fiscal Year Active Swaps				Cash Flow (Since 5/05)				Mark to Market		TI Rtn to Dt				
Effective Date	Maturity Date	Years to Maturity	Counter Party	Notional Amt	Type	Base Index	Fixed Rate	Prior Month	Current Month	Fiscal YTD	Cumulative Cash Flow	Current Mark to Market	Unrealized Gain/(Loss)	Net Gain/(Loss)

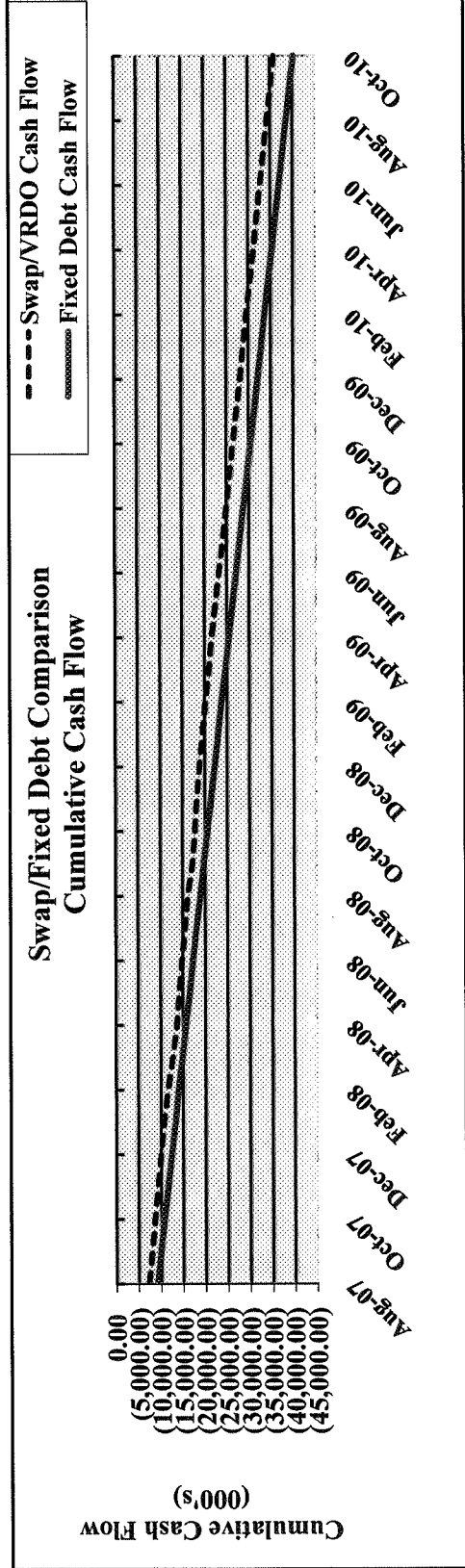
Fixed Payer Swaps - By Effective Date				Cash Flow				Mark to Market		TI Rtn to Dt				
6/4/2006	6/4/2019	8.6	MIL	\$ 20,000,000	FXP	LIBOR	6.200%	\$ (95,492)	\$ (95,757)	\$ (390,053)	\$ (3,054,625)	\$ 14,156,483	\$ (5,843,517)	\$ (8,898,142)
6/4/2006	6/4/2019	8.6	CG	\$ 20,000,000	FXP	LIBOR	6.200%	\$ (95,492)	\$ (95,757)	\$ (390,053)	\$ (3,054,625)	\$ 13,888,552	\$ (6,111,448)	\$ (9,166,073)
6/17/2006	6/17/2019	8.6	CG	\$ 30,000,000	FXP	LIBOR	6.140%	\$ (141,744)	\$ (142,176)	\$ (579,111)	\$ (4,514,146)	\$ 20,960,355	\$ (9,039,645)	\$ (13,563,791)
3/10/2007	3/10/2029	18.4	MIL	\$ 30,000,000	FXP	LIBOR	5.687%	\$ (130,702)	\$ (131,234)	\$ (534,125)	\$ (3,827,821)	\$ 20,006,591	\$ (9,993,409)	\$ (13,821,230)
3/10/2007	3/10/2029	18.4	CG	\$ 30,000,000	FXP	LIBOR	5.687%	\$ (130,702)	\$ (131,234)	\$ (534,125)	\$ (3,827,821)	\$ 20,003,855	\$ (9,996,145)	\$ (13,823,966)
Totals/Weighted Avgs				\$ 130,000,000			5.949%	\$ (594,132)	\$ (596,158)	\$ (2,427,467)	\$ (18,279,039)	\$ 89,015,836	\$ (40,984,164)	\$ (59,263,203)
Total Current Year Active Swaps				\$ 130,000,000				\$ (594,132)	\$ (596,158)	\$ (2,427,467)	\$ (18,279,039)	\$ 89,015,836	\$ (40,984,164)	\$ (59,263,203)

Current Fiscal Year Terminated Swaps				Cash Flow				Mark to Market		TI Rtn to Dt			
Effective Date	Maturity Date	Counter Party	Notional Amt	Type	Base Index	Fixed Rate	Prior Month	Current Month	Fiscal YTD	Cumulative Cash Flow	Current Mark to Market	Unrealized Gain/(Loss)	Net Gain/(Loss)

Total Current Year Terminated Swaps	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
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Current Fiscal Year - Total Swaps				Cash Flow				Mark to Market		TI Rtn to Dt			
Effective Date	Maturity Date	Counter Party	Notional Amt	Type	Base Index	Fixed Rate	Prior Month	Current Month	Fiscal YTD	Cumulative Cash Flow	Current Mark to Market	Unrealized Gain/(Loss)	Net Gain/(Loss)

Total Current Year Active & Terminated Swaps	\$ 130,000,000	\$ (594,132)	\$ (596,158)	\$ (2,427,467)	\$ (18,279,039)	\$ 89,015,836	\$ (40,984,164)	\$ (59,263,203)
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Cash Flow Comparison	
Synthetic Fixed vs. Fixed Rate Debt	Cash Flow to Date
Synthetic Fixed =	\$35,877,528
Fixed Rate =	\$40,296,227
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

OCTOBER  
2010

DATE	AMOUNT	VENDOR	PURPOSE
10/1/2010	13,109.61	BANK OF AMERICA	DEBT SERVICE
10/1/2010	13,089.05	US BANK	DEBT SERVICE
10/1/2010	7,678.03	HELABA	LOC FEES
10/1/2010	75,806.74	STATE STREET	LOC FEES
10/1/2010	158,093.79	LBBW	LOC FEES
10/1/2010	242,261.42	US BANK	LOC FEES
10/1/2010	5,201,011.51	HELABA	DEBT SERVICE
10/5/2010	250.00	US BANK	DRAW FEES
10/5/2010	750.00	STATE STREET	DRAW FEES
10/5/2010	363,610.38	BANK OF AMERICA	LOC FEES
10/7/2010	909.05	HELABA	DEBT SERVICE
10/7/2010	3,545.26	STATE STREET	DEBT SERVICE
10/7/2010	9,900.90	BANK OF AMERICA	DEBT SERVICE
10/7/2010	36,478.36	LBBW	DEBT SERVICE
10/8/2010	715,787.33	BANK OF AMERICA	PAYROLL 10/8/10
10/8/2010	148,907.46	BANK OF AMERICA	FEDERAL TAX LIABILITY
10/8/2010	55,295.34	BANK OF AMERICA	STATE TAX LIABILITY
10/8/2010	30,432.55	OCFTCU	PAYROLL DEDUCTION
10/8/2010	865.00	OCCU	PAYROLL DEDUCTION
10/8/2010	294,455.28	CalPERS	HEALTH INSURANCE PREMIUM
10/11/2010	115,662.87	GREAT WEST	DEFERRED COMP A/O 10/8/10
10/12/2010	39,657.69	BANK OF AMERICA	LOC FEES
10/12/2010	295.00	BANK OF AMERICA	DRAW FEES
10/15/2010	209,517.78	CalPERS	RETIREMENT
10/15/2010	1,125,066.10	MWDOC	WATER PURCHASE
10/20/2010	100,672.00	NATIONAL BANK OF ARIZONA	SCWD EMPLOYEE LIFE INSURANCE AGREEM
10/22/2010	726,772.85	BANK OF AMERICA	PAYROLL 10/23/10
10/22/2010	153,838.90	BANK OF AMERICA	FEDERAL TAX LIABILITY
10/22/2010	56,218.17	BANK OF AMERICA	STATE TAX LIABILITY
10/22/2010	30,432.55	OCFTCU	PAYROLL DEDUCTION
10/22/2010	865.00	OCCU	PAYROLL DEDUCTION
10/22/2010	10,409.58	NAT'L BOND & TRUST	SAVINGS BONDS
10/29/2010	116,764.80	GREAT WEST	DEFERRED COMP A/O 10/23/10
10/26/2010	2,280,229.39	TORREY PINES BANK	MWRP EXPANSION
10/29/2010	212,074.19	CalPERS	RETIREMENT

**\$12,550,713.93**

# Exhibit "D"

10/29/2010  
13:33:37

## IRVINE RANCH WATER DISTRICT

Accounts Payable Report to Treasury  
Acct'g Period 2011/04 Ended 10/31/2010

Page 1  
AP238R

Vendor Name	Issued	Voided	Check#	Check Amount
ARNETTE ASHLEY	10/07/10		314776	24.65
BAHRAMI REZA	10/07/10		314777	36.35
BEST BUY/ANTHONY BRUNNING	10/07/10	10/13/10	314778	1,778.69
CALABRESE JACK	10/07/10		314779	61.18
CLCP, LLC	10/07/10		314780	94.70
DORF ADAM	10/07/10		314781	14.53
DOWSING FIA	10/07/10		314782	68.76
HASROUNI ELISA	10/07/10		314783	30.10
HORNBACK LARRY	10/07/10	10/19/10	314784	23.73
KANNA BHANU	10/07/10		314785	39.49
KILEY MIKE	10/07/10		314786	28.27
L & S CONSTRUCTION	10/07/10		314787	559.01
LENNAR HOMES	10/07/10		314788	15.00
LENNAR HOMES	10/07/10		314789	21.31
LIM ANDREW	10/07/10		314790	298.06
MACIEL PRISCELLA	10/07/10		314791	30.10
MARTINEZ JACQUELINE	10/07/10		314792	24.65
MCCRAW CLIFFORD L	10/07/10		314793	34.40
MCGEECHAN STUART J	10/07/10		314794	48.29
PALERMO SHIRI	10/07/10		314795	25.35
PHUNG JENNY	10/07/10		314796	22.32
PLOHR WESLEY	10/07/10		314797	41.47
SERVICE 1ST LIGHTING	10/07/10		314798	30.70
SHEDAROWICH PATRICK	10/07/10		314799	27.38
SOUTH COAST AIR QUALITY	10/07/10		314800	293.21
SOUTH COAST AIR QUALITY	10/07/10		314801	109.00
SYMES DEBBIE	10/07/10		314802	18.69
TANG LENNY T	10/07/10		314803	15.00
TAYLOR WOODROW HOMES	10/07/10		314804	67.13
TAYLOR WOODROW HOMES	10/07/10		314805	73.82
TRI ALPHA ENERGY	10/07/10		314806	42.99
TRI POINT HOMES, INC.	10/07/10		314807	26.47
VALLEY COMMERCIAL CONTRACTORS	10/07/10		314808	861.65
VAUGHAN RONNIE	10/07/10		314809	22.40
AARP HEALTH CARE OPTIONS	10/07/10		314810	205.70
ACTION ELECTRIC CORP	10/07/10		314811	879.40
ACWA HEALTH BENEFITS AUTHORITY	10/07/10		314812	29,000.25
ADS LLC	10/07/10		314813	1,291.00
ADVANTRA RX	10/07/10		314814	41.10
AICPA	10/07/10		314815	205.00
AIRGAS-WEST, INC.	10/07/10		314816	2,742.36
ALHAMBRA FOUNDRY CO LTD	10/07/10		314817	8,658.68
AMERICAN CONSTRUCTION AND	10/07/10		314818	22,234.10
AMERICAN MESSAGING SERVICES	10/07/10		314819	248.75
APPLIED INDUSTRIAL	10/07/10		314820	1,551.71
ASSIFI, ABDUL TAWAB	10/07/10		314821	1,560.00
ASSOCIATED POWER INC	10/07/10		314822	2,610.00
AT&T	10/07/10		314823	48.98
AT&T	10/07/10		314824	2,716.17
AYRES HOTEL AND SUITES (DBA)	10/07/10		314825	96.18
BALLARD, CARL	10/07/10		314826	1,800.00
BIANCHI, DEBRA	10/07/10		314827	36.16
BIOMAGIC INC	10/07/10		314828	8,334.07
BORKMAN, CHARLES E	10/07/10		314829	1,500.00
BRENNTAG PACIFIC INC	10/07/10		314830	5,583.48
BROWN AND CALDWELL	10/07/10		314831	12,286.77
C WELLS PIPELINE MATERIALS INC	10/07/10		314832	402.38

**IRVINE RANCH WATER DISTRICT**

Accounts Payable Report to Treasury  
Acct'g Period 2011/04 Ended 10/31/2010

Vendor Name	Issued	Voided	Check#	Check Amount
CALIFORNIA BARRICADE INC	10/07/10		314833	5,421.38
CALIFORNIA MUNICIPAL UTILITIES	10/07/10		314834	9,491.00
CANON BUSINESS SOLUTIONS INC	10/07/10		314835	7,203.43
CDW LOGISTICS, INC	10/07/10		314836	616.37
CELOTTO, STEVE	10/07/10		314837	41.50
CHAMPION FENCE & IRON	10/07/10		314838	1,745.00
CHEESMAN, ENRIQUE	10/07/10		314839	1,680.00
CHEM TECH INTERNATIONAL INC	10/07/10		314840	17,639.20
COASTAL TRAFFIC SYSTEMS, INC	10/07/10		314841	1,900.00
COMILLAS, TEOFY E	10/07/10		314842	1,800.00
CONTROLLED KEY SYSTEMS INC	10/07/10		314843	90.82
CPI-INTERNATIONAL, INC	10/07/10		314844	1,008.00
CRAWFORD, JOHN P	10/07/10		314845	1,320.00
D & G SIGNS	10/07/10		314846	184.88
DATA CLEAN CORPORATION	10/07/10		314847	500.00
DEAKYNE, SCOTT	10/07/10		314848	750.00
DELPHIN COMPUTER SUPPLY	10/07/10		314849	870.00
DIONEX CORPORATION	10/07/10		314850	63.85
DRUCK INC	10/07/10		314851	1,845.73
DUDEK	10/07/10		314852	21,010.00
EAST ORANGE COUNTY WATER	10/07/10		314853	3,006.08
EDFUND	10/07/10		314854	176.18
ENVIRON INTERNATIONAL CORP.	10/07/10		314855	2,976.56
ENVIRONMENTAL SCIENCE	10/07/10		314856	27,328.75
ERVIN, CRAIG J	10/07/10		314857	1,800.00
EVERGREEN OIL INC	10/07/10		314858	301.50
FARRELL & ASSOCIATES	10/07/10		314859	405.75
FEDEX	10/07/10		314860	255.80
FERGUSON, DAVID	10/07/10		314861	1,800.00
FIDELITY INVESTMENTS	10/07/10		314862	415.00
FIDELITY SECURITY LIFE	10/07/10		314863	5,675.88
FIRST CHOICE SERVICES	10/07/10		314864	1,466.24
FISERV	10/07/10		314865	8,375.24
FISHER SCIENTIFIC COMPANY LLC	10/07/10		314866	3,652.54
FLEET SOLUTIONS, LLC.	10/07/10		314867	4,041.90
FOUNTAIN VALLEY PARTS	10/07/10		314868	793.88
FRANCHISE TAX BOARD	10/07/10		314869	175.00
FRANK LA PLACA EXTERMINATING	10/07/10		314870	175.00
FRONTLINE MANAGEMENT INC	10/07/10		314871	5,620.40
GEOSCIENCE SUPPORT SERVICES	10/07/10		314872	10,893.00
GJ AUTOMOTIVE EQUIPMENT CO INC	10/07/10		314873	5,660.00
GLENNA R ANDERSEN	10/07/10		314874	1,320.00
GRAINGER	10/07/10		314875	3,814.43
HABIGER, STEVE	10/07/10		314876	1,800.00
HACH COMPANY	10/07/10		314877	99.09
HARBOR DIESEL & EQUIPMENT INC	10/07/10		314878	716.19
HARRINGTON INDUSTRIAL PLASTICS	10/07/10		314879	7,410.63
HDR ENGINEERING INC.	10/07/10		314880	83,513.14
HEANEY, DAVID	10/07/10		314881	1,800.00
HILL BROTHERS CHEMICAL COMPANY	10/07/10		314882	12,630.21
HOFF, KATIE	10/07/10		314883	31.02
HOLLIDAY, MARY E	10/07/10		314884	1,200.00
HOME DEPOT USA INC	10/07/10		314885	854.88
HUMANA INSURANCE COMPANY	10/07/10		314886	22.30
HYDRO-SCAPE PRODUCTS INC	10/07/10		314887	516.09
ICF JONES & STOKES ASSOCIATES,	10/07/10		314888	555.00
INDUSTRIAL NETWORKING	10/07/10		314889	702.64

**IRVINE RANCH WATER DISTRICT**

Accounts Payable Report to Treasury  
Acct'g Period 2011/04 Ended 10/31/2010

AP238R

Vendor Name	Issued	Voided	Check#	Check Amount
IRVINE PIPE & SUPPLY INC	10/07/10		314890	6,272.01
JOBS AVAILABLE	10/07/10		314891	385.00
JOHN CRANE, INC.	10/07/10		314892	1,794.56
JOHN G. ALEVIZOS D.O. INC.	10/07/10		314893	799.23
JOHN LISEE PUMPS INC	10/07/10		314894	6,324.90
JOHNSTONE SUPPLY	10/07/10		314895	1,938.68
KAZARIANS & ASSOCIATES, INC.	10/07/10		314896	6,484.29
KILL-N-BUGS TERMITE AND PEST	10/07/10		314897	325.00
KILL-N-BUGS TERMITE AND PEST	10/07/10		314898	2,520.00
KIM, SOON TAE	10/07/10		314899	1,800.00
KLOER, LUPE	10/07/10		314900	1,500.00
KNUTH, MICHAEL C	10/07/10		314901	900.00
KONECRANES INC	10/07/10		314902	320.00
LAGUNA BEACH COUNTY WATER	10/07/10		314903	2,662.10
LENOVO UNITED STATES INC	10/07/10		314904	6,272.02
LEWIS OPERATING CORP	10/07/10		314905	20,336.12
LOOMIS, TERRELL	10/07/10		314906	1,560.00
LYNCH, JAN	10/07/10		314907	1,400.00
MBC APPLIED ENVIRONMENTAL	10/07/10		314908	4,000.00
MC MASTER CARR SUPPLY CO	10/07/10		314909	2,676.29
MCCORMICK, LESTER	10/07/10		314910	1,800.00
MCR TECHNOLOGIES, INC.	10/07/10		314911	1,068.72
MERCHANTS LANDSCAPE SERVICES	10/07/10		314912	14,016.28
MOUSE GRAPHICS	10/07/10		314913	1,667.61
MUMENTHALER SYLVIA	10/07/10		314914	1,680.00
MUNICIPAL WATER DISTRICT	10/07/10		314915	469.80
NATIONAL READY MIXED CONCRETE	10/07/10		314916	1,618.29
NEW WAVE COMPUTER SUPPLY LLC	10/07/10		314917	581.81
NEWBASIS WEST LLC	10/07/10		314918	575.29
NEWPORT BEACH, CITY OF	10/07/10		314919	383.94
OLIN CORPORATION	10/07/10		314920	3,723.87
ON ASSIGNMENT LAB SUPPORT	10/07/10		314921	3,140.41
ONESOURCE DISTRIBUTORS LLC	10/07/10		314922	2,325.02
ORANGE COUNTY VECTOR CONTROL	10/07/10		314923	218.07
PABIS, SHARON	10/07/10		314924	840.00
PARK WEST LANDSCAPE	10/07/10		314925	3,501.00
PAUL E BRADLEY INC	10/07/10		314926	1,710.00
PERKINELMER HEALTH SCIENCES	10/07/10		314927	505.86
PERS LONG TERM CARE	10/07/10		314928	1,826.79
PHAM, BINH T	10/07/10		314929	1,740.00
POWELL, ALLISON	10/07/10		314930	17.75
PRAXAIR DISTRIBUTION INC	10/07/10		314931	2,334.58
PRUDENTIAL OVERALL SUPPLY	10/07/10		314932	779.68
R & S SOIL PRODUCTS INC	10/07/10		314933	848.25
RAM AIR ENGINEERING INC	10/07/10		314934	2,401.83
REED, JAMES D	10/07/10		314935	1,967.14
REGAN, MELISA	10/07/10		314936	62.20
RMC WATER AND ENVIRONMENT	10/07/10		314937	767.50
ROBERTS ROOFING INC	10/07/10		314938	6,800.00
RRM DESIGN GROUP	10/07/10		314939	2,260.12
SANCHEZ, AL	10/07/10		314940	1,620.00
SANTA ANA BLUE PRINT	10/07/10		314941	388.76
SANTA ANA CITY OF	10/07/10		314942	66.96
SCHEAFER, TOM	10/07/10		314943	1,740.00
SEAL ANALYTICAL INC	10/07/10		314944	326.90
SIGMA-ALDRICH INC	10/07/10		314945	615.23
SOUTHERN CALIFORNIA EDISON	10/07/10		314946	37,104.51

**IRVINE RANCH WATER DISTRICT**

Accounts Payable Report to Treasury  
Acct'g Period 2011/04 Ended 10/31/2010

Vendor Name	Issued	Voided	Check#	Check Amount
SOUTHERN COUNTIES LUBRICANTS	10/07/10		314947	2,687.16
SPARKLETTTS	10/07/10		314948	113.57
SUNSET PUBLISHING CORPORATION	10/07/10		314949	302.71
SYNAGRO COMPOSTING COMPANY	10/07/10		314950	14,491.93
TETRA TECH, INC	10/07/10		314951	3,188.00
TRABUCO CANYON WATER DISTRICT	10/07/10		314952	102,653.19
TRANSCAT, INC	10/07/10		314953	706.65
TROPICAL PLAZA NURSERY INC	10/07/10		314954	26,176.08
TRUGREEN LANDCARE	10/07/10		314955	20,844.35
TURBLEX INC	10/07/10		314956	784.30
U.S. DEPARTMENT OF EDUCATION	10/07/10		314957	794.43
ULTRA SCIENTIFIC	10/07/10		314958	965.64
UNITED PARCEL SERVICE INC	10/07/10		314959	24.75
UNITED SITE SERVICES OF	10/07/10		314960	360.85
VA CONSULTING, INC	10/07/10		314961	13,361.15
VELAZQUEZ, LORETTA	10/07/10		314962	1,800.00
VILLEGAS, LINDA L	10/07/10		314963	1,140.00
VORTEX INDUSTRIES INC	10/07/10		314964	773.70
VPSI INC	10/07/10		314965	7,641.00
VU, TO HUU	10/07/10		314966	1,500.00
VWR INTERNATIONAL, LLC	10/07/10		314967	2,244.84
WASTE MGMT OF ORANGE COUNTY	10/07/10		314968	990.86
WECK LABORATORIES INC	10/07/10		314969	2,980.00
WEST COAST SAFETY SUPPLY INC	10/07/10		314970	1,785.57
WILHELMI, DOUGLAS GENE	10/07/10		314971	1,800.00
WOODRUFF, SPRADLIN & SMART APC	10/07/10		314972	145.97
WORKPLACE RESOURCE	10/07/10		314973	3,929.51
DYNAMIC RISK SOLUTIONS, INC.	10/07/10		314974	1,000.00
DEVISE ENGINEERING INC	10/07/10		314975	2,817.50
KRONENBERG ANDREAS & AUDRA	10/11/10		314976	19,411.79
BASTEK FRANKIE	10/14/10		314977	19.81
BEST BUY/ANTHONY BRUNNING	10/14/10		314978	1,778.69
BROOKFIELD PORTOLA LLC	10/14/10		314979	415.18
CASTILLO ROBERT	10/14/10		314980	79.49
CHAO RICKY	10/14/10		314981	153.07
CITY OF LAKE FOREST	10/14/10		314982	97.28
CITY OF LAKE FOREST	10/14/10		314983	303.66
CITY OF LAKE FOREST	10/14/10		314984	45.46
CORNELL COURT APTS	10/14/10		314985	16.66
DCC STUDEBAKER LLC	10/14/10		314986	114.80
DCC STUDEBAKER LLC	10/14/10		314987	15.80
DE LEON WILLIAM	10/14/10		314988	676.19
DEACON, AMOS R.	10/14/10		314989	3,219.71
FRISCH DAVID	10/14/10		314990	29.12
FYDAQ COMPANY, INC	10/14/10		314991	352.46
GULINO ANGELA	10/14/10		314992	11.16
HAJARIZADEH MOJGAN	10/14/10		314993	15.00
HARTMAN KEVIN	10/14/10		314994	99.52
HERMAN WEISSKER INC	10/14/10		314995	791.37
JOHN G. ALEVIZOS D.O. INC.	10/14/10		314996	215.00
KINDNESS GENERAL CONTRACTORS	10/14/10		314997	741.74
LATHROPE BRIAN	10/14/10		314998	96.85
MARTINEZ JESUS	10/14/10		314999	15.00
MEYER WAYNE	10/14/10		315000	27.55
ORANGE COUNTY SANITATION	10/14/10		315001	1,570.00
ORANGE COUNTY SANITATION	10/14/10		315002	1,720.59
PARK EUGENE	10/14/10		315003	15.00



**IRVINE RANCH WATER DISTRICT**

Accounts Payable Report to Treasury  
Acct'g Period 2011/04 Ended 10/31/2010

AP238R

Vendor Name	Issued	Voided	Check#	Check Amount
RAESSNER PHYLLIS	10/14/10		315004	76.08
RANCHO ALISAL APTS	10/14/10		315005	74.12
REALTORS ROMAN	10/14/10		315006	77.43
SABBAGH KARAM	10/14/10		315007	238.81
SANTA CLARA APTS	10/14/10		315008	2,457.17
SMITH SHERMAN	10/14/10		315009	15.00
STORY NICOLE	10/14/10		315010	31.90
TIC-AGRICULTURAL DIV	10/14/10		315011	43,126.77
TIC-OFFICE PROPERTIES	10/14/10		315012	75.90
TIC-RETAIL PROPERTIES	10/14/10		315013	302.68
UNITED STATES POST OFFICE	10/14/10		315014	30,000.00
UNITED STATES POST OFFICE	10/14/10		315015	74.71
WHITE TIMOTHY	10/14/10		315016	31.64
WILLIAM LYON HOMES	10/14/10		315017	22.27
WILLIAM LYON HOMES	10/14/10		315018	15.00
WILLIAM LYON HOMES	10/14/10		315019	15.00
WILLIAM LYON HOMES	10/14/10		315020	15.00
WILLIAMS REBECCA M	10/14/10		315021	575.12
ACTION ELECTRIC CORP	10/14/10		315022	470.11
AEL FINANCIAL LLC	10/14/10		315023	1,441.31
AMERICAN SOCIETY OF CIVIL	10/14/10		315024	510.00
AMERICAN WATER WORKS ASSOC	10/14/10		315025	198.00
ANTHEM BLUE CROSS	10/14/10		315026	1,478.00
APPLIED INDUSTRIAL	10/14/10		315027	26,252.59
AQUA-METRIC SALES COMPANY	10/14/10		315028	5,066.88
AST CORPORATION	10/14/10		315029	152,177.13
AT&T	10/14/10		315030	65.56
AT&T	10/14/10		315031	463.27
AYRES HOTEL AND SUITES (DBA)	10/14/10		315032	3,554.52
BAILEY, MARY	10/14/10		315033	4.10
BANK OF NEW YORK MELLON TRUST	10/14/10		315034	5,000.00
BECERRA, DARLINDA	10/14/10		315035	29.58
BELL PIPE & SUPPLY CO	10/14/10		315036	1,506.25
BHARUCHA, ARSHI	10/14/10		315037	38.34
BILL'S SWEEPING SERVICE INC	10/14/10		315038	825.00
BOWLING, ISAIAH	10/14/10		315039	79.61
BRENNTAG PACIFIC INC	10/14/10		315040	18,588.00
BRITHINEE ELECTRIC	10/14/10		315041	15,079.20
CALIFORNIA BARRICADE INC	10/14/10		315042	2,510.00
CAMPBELL, THOMAS	10/14/10		315043	30.00
CANON BUSINESS SOLUTIONS INC	10/14/10		315044	1,293.09
CANON FINANCIAL SERVICES INC	10/14/10		315045	8,091.68
CAPIN, WENDY	10/14/10		315046	11.64
CAPTIVE AUDIENCE MARKETING	10/14/10		315047	85.91
CARL WARREN & CO	10/14/10		315048	1,372.75
CHAPLIN, BETH	10/14/10		315049	45.24
CHEM TECH INTERNATIONAL INC	10/14/10		315050	15,364.50
CH2M HILL, INC	10/14/10		315051	24,114.68
CITIGROUP GLOBAL MARKETS INC.	10/14/10		315052	737.26
CLA-VAL COMPANY	10/14/10		315053	4,073.51
COASTAL TRAFFIC SYSTEMS, INC	10/14/10		315054	600.00
CONEYBEARE INC	10/14/10		315055	952.00
CORRPRO COMPANIES INC	10/14/10		315056	10,190.00
CREDENTIAL CHECK CORPORATION	10/14/10		315057	224.00
D & G SIGNS	10/14/10		315058	456.76
DATASITE INC	10/14/10		315059	17,878.00
DELL MARKETING LP	10/14/10		315060	3,541.26

**IRVINE RANCH WATER DISTRICT**

Accounts Payable Report to Treasury  
Acct'g Period 2011/04 Ended 10/31/2010

Vendor Name	Issued	Voided	Check#	Check Amount
DISCOVERY SCIENCE CENTER	10/14/10		315061	2,561.10
DUDEK	10/14/10		315062	41,916.50
EAST ORANGE COUNTY WATER	10/14/10		315063	4,107.31
EISEL ENTERPRISES INC	10/14/10		315064	841.95
EMPLOYEE BENEFIT SPECIALIST,	10/14/10		315065	665.00
EVOLVE MEDIA	10/14/10		315066	13,200.00
EXPRESSAIR	10/14/10		315067	62.50
FARRELL & ASSOCIATES	10/14/10		315068	197.99
FAVERSHAM HOUSE GROUP LTD.	10/14/10		315069	119.00
FIRE EXTINGUISHING SAFETY	10/14/10		315070	619.62
FIRST AMERICAN CORELOGIC INC	10/14/10		315071	34.00
FIRST CHOICE SERVICES	10/14/10		315072	421.82
FISHER SCIENTIFIC COMPANY LLC	10/14/10		315073	5,524.72
FLUID CONSERVATION SYSTEMS INC	10/14/10		315074	438.25
GATEWAY PACIFIC CONTRACTORS,	10/14/10		315075	19,369.51
GATEWAY PACIFIC CONTRACTORS,	10/14/10		315076	174,325.61
GCI CONSTRUCTION, INC.	10/14/10		315077	10,079.03
GENTERRA CONSULTANTS INC	10/14/10		315078	257.50
GEORGE T HALL CO INC	10/14/10		315079	1,005.77
GLOBALSTAR INC	10/14/10		315080	167.88
GMU GEOTECHNICAL INC	10/14/10		315081	17,823.00
GRAINGER	10/14/10		315082	1,218.78
GRIFFITH COMPANY	10/14/10		315083	276.70
HACH COMPANY	10/14/10		315084	347.76
HARPER & ASSOCIATES	10/14/10		315085	1,870.00
HARRINGTON INDUSTRIAL PLASTICS	10/14/10		315086	280.13
HDR ENGINEERING INC.	10/14/10		315087	27,477.23
HEARTLAND BUSINESS CREDIT	10/14/10		315088	570.58
HILL BROTHERS CHEMICAL COMPANY	10/14/10		315089	4,901.59
HOME DEPOT USA INC	10/14/10		315090	226.54
HOPKINS TECHNICAL PRODUCTS INC	10/14/10		315091	8,935.22
HPA INC	10/14/10		315092	2,125.00
HUMANSCALE OF CALIFORNIA INC	10/14/10		315093	1,659.78
IDENTICARD SYSTEMS WORLDWIDE	10/14/10		315094	277.64
INDUSTRIAL DISTRIBUTION GROUP	10/14/10		315095	867.63
INDUSTRIAL METAL SUPPLY CO	10/14/10		315096	40.12
INTERNATIONAL RIGHT OF WAY	10/14/10		315097	235.00
IRRIGATION ASSOCIATION	10/14/10		315098	500.00
IRVINE PIPE & SUPPLY INC	10/14/10		315099	891.64
IRVINE, CITY OF	10/14/10		315100	18,000.00
IRWD-PETTY CASH CUSTODIAN	10/14/10		315101	948.91
ISENBERG/O'HAREN	10/14/10		315102	6,592.96
JCI JONES CHEMICALS INC	10/14/10		315103	5,005.00
JOHN MICHAEL COVAS	10/14/10		315104	96.50
KILL-N-BUGS TERMITE AND PEST	10/14/10		315105	1,700.00
KNOBBE, MARTENS, OLSON & BEAR	10/14/10		315106	89.00
KS DIRECT	10/14/10		315107	2,050.11
LEONARD CHAIDEZ TREE SERVICE	10/14/10		315108	1,050.00
LEWIS OPERATING CORP	10/14/10		315109	22,929.62
LSA ASSOCIATES INC	10/14/10		315110	1,123.75
LUBRICATION ENGINEERS, INC.	10/14/10		315111	5,333.11
MARVIN GARDENS LLC	10/14/10		315112	2,593.70
MAYER HOFFMAN MCCANN P.C.	10/14/10		315113	31,070.00
MBC APPLIED ENVIRONMENTAL	10/14/10		315114	1,000.00
MC MASTER CARR SUPPLY CO	10/14/10		315115	2,914.69
MCCALL'S METERS, INC.	10/14/10		315116	1,087.95
MCCROMETER, INC.	10/14/10		315117	719.06

**IRVINE RANCH WATER DISTRICT**

Accounts Payable Report to Treasury  
Acct'g Period 2011/04 Ended 10/31/2010

Vendor Name	Issued	Voided	Check#	Check Amount
MEASUREMENT CONTROL SYSTEMS	10/14/10		315118	659.46
MERCHANTS LANDSCAPE SERVICES	10/14/10		315119	988.07
MOUSE GRAPHICS	10/14/10		315120	520.67
NATIONAL READY MIXED CONCRETE	10/14/10		315121	2,406.70
NEW WAVE COMPUTER SUPPLY LLC	10/14/10		315122	804.75
O.C. FLEET SERVICE	10/14/10		315123	90.26
OC NEWS & PRODUCTIONS	10/14/10		315124	795.00
OLIN CORPORATION	10/14/10		315125	11,611.23
ON ASSIGNMENT LAB SUPPORT	10/14/10		315126	3,056.85
ONESOURCE DISTRIBUTORS LLC	10/14/10		315127	17,349.52
ORANGE COUNTY TREASURER	10/14/10		315128	171.21
ORANGE COUNTY WATER ASSOCIATIO	10/14/10		315129	50.00
ORANGE, COUNTY OF	10/14/10		315130	849.50
PACIFIC TECHNOLOGIES INC	10/14/10		315131	5,099.83
PAUL E BRADLEY INC	10/14/10		315132	877.50
PAULUS ENGINEERING INC	10/14/10		315133	1,954.39
PENHALL COMPANY	10/14/10		315134	338.75
PINNACLE LANDSCAPE COMPANY	10/14/10		315135	8,708.60
PINNACLE TOWERS LLC	10/14/10		315136	526.38
PONTON INDUSTRIES INC	10/14/10		315137	3,067.98
PRINCIPAL LIFE INSURANCE	10/14/10		315138	11,386.26
PRUDENTIAL OVERALL SUPPLY	10/14/10		315139	557.63
PSB THE MARKETING SUPERSOURCE	10/14/10		315140	2,490.00
PSOMAS	10/14/10		315141	689.00
PTI SAND & GRAVEL INC	10/14/10		315142	969.82
QUALITY ENVIRONMENTAL	10/14/10		315143	23.82
RAINBOW DISPOSAL CO INC	10/14/10		315144	437.39
RAININ INSTRUMENT LLC	10/14/10		315145	993.43
RAM AIR ENGINEERING INC	10/14/10		315146	3,243.60
REACH EMPLOYEE ASSISTANCE INC	10/14/10		315147	798.20
REINHART DOUGLAS J	10/14/10		315148	1,972.81
RESTEK CORPORATION	10/14/10		315149	455.12
RIDGE LANDSCAPE ARCHITECTS	10/14/10		315150	65.86
RINGCLEAR LLC	10/14/10		315151	81.64
RRM DESIGN GROUP	10/14/10		315152	14,157.91
SAN DIEGO FLUID SYSTEM TECH	10/14/10		315153	57.77
SANDERS PAVING INC	10/14/10		315154	6,218.00
SANTA ANA BLUE PRINT	10/14/10		315155	154.77
SANTIAGO AQUEDUCT COMMISSION	10/14/10		315156	57,543.06
SENNA TREE COMPANY	10/14/10		315157	23,025.00
SEWER EQUIPMENT CO OF FLORIDA	10/14/10		315158	567.54
SHAMROCK SUPPLY CO INC	10/14/10		315159	840.59
SIGMA-ALDRICH INC	10/14/10		315160	783.68
SOUTH COAST WATER DISTRICT	10/14/10		315161	2,692.44
SOUTHERN CALIFORNIA EDISON	10/14/10		315162	46,448.13
SP CONSULTING GROUP THE	10/14/10		315163	3,399.69
SPATIAL WAVE, INC.	10/14/10		315164	4,696.88
SUNNYHILLS RESTORATION	10/14/10		315165	952.41
SUPERMEDIA LLC	10/14/10		315166	68.25
T AND S LARSEN MAINTENANCE	10/14/10		315167	360.00
TC COSMOTRONIC INC	10/14/10		315168	1,570.00
TESTAMERICA LABORATORIES, INC	10/14/10		315169	94.50
THE GAS COMPANY	10/14/10		315170	126.72
THE GAS COMPANY	10/14/10		315171	34.11
TRANSCAT, INC	10/14/10		315172	88.59
TROPICAL PLAZA NURSERY INC	10/14/10		315173	1,200.00
TRUGREEN LANDCARE	10/14/10		315174	33,840.92

**IRVINE RANCH WATER DISTRICT**

Accounts Payable Report to Treasury  
Acct'g Period 2011/04 Ended 10/31/2010

AP238R

Vendor Name	Issued	Voided	Check#	Check Amount
TUSTIN, CITY OF	10/14/10		315175	84.23
ULTRA SCIENTIFIC	10/14/10		315176	588.00
UNITED PARCEL SERVICE INC	10/14/10		315177	143.09
US PEROXIDE, LLC	10/14/10		315178	5,987.06
USA BLUEBOOK	10/14/10		315179	3,119.25
VERIZON CALIFORNIA INC	10/14/10		315180	207.27
VORTEX INDUSTRIES INC	10/14/10		315181	241.30
VULCAN MATERIALS COMPANY	10/14/10		315182	1,209.18
VWR INTERNATIONAL, LLC	10/14/10		315183	66.12
WALTERS WHOLESALE ELECTRIC	10/14/10		315184	1,949.58
WASTE MGMT OF ORANGE COUNTY	10/14/10		315185	1,254.92
WATER RESEARCH FOUNDATION	10/14/10		315186	4,884.48
WAXIE SANITARY SUPPLY	10/14/10		315187	430.14
WESTERN EXTERMINATOR COMPANY	10/14/10		315188	8,478.50
WIRELESS WATCHDOGS LLC	10/14/10		315189	157.38
WITHERS, JOHN	10/14/10		315190	20.00
WU, SHARON	10/14/10		315191	20.29
YAO, CHEN	10/14/10		315192	20.26
HOSPICE OF SADDLEBACK VALLEY	10/14/10		315193	100.00
BDC SPECIAL WASTE	10/15/10		315194	150.00
ARAGON EDWARD	10/21/10		315195	128.26
CLUCKEY BRENDA M	10/21/10		315196	17.34
FAUL BRIAN	10/21/10		315197	73.58
FRANCHISE TAX BOARD	10/21/10		315198	175.00
HONG CATHERINE	10/21/10		315199	37.05
ICS	10/21/10		315200	734.43
JONES SUSAN	10/21/10		315201	180.77
KLINGEMAN PAUL	10/21/10		315202	22.40
LAU PAULINE	10/21/10		315203	15.00
LEE YEN-YUN	10/21/10		315204	30.71
LIN ANDY	10/21/10		315205	25.69
LIN RUEY YEN	10/21/10		315206	12.33
PACESETTER INVESTMENT CO.	10/21/10		315207	2,401.23
PARR DEBBIE	10/21/10		315208	36.45
RAJENDRAN VENKATESH	10/21/10		315209	29.50
REAL ESTATE ESTABLISHMENT	10/21/10		315210	24.65
SANTA ANA, CITY OF	10/21/10		315211	16,362.66
SANTA ANA, CITY OF	10/21/10		315212	16,362.66
SANTA ANA, CITY OF	10/21/10		315213	16,362.66
SANTA ANA, CITY OF	10/21/10		315214	16,362.66
SOUTH COAST AIR QUALITY	10/21/10		315215	109.00
SOUTH COAST AIR QUALITY	10/21/10		315216	293.21
SOUTH COAST AIR QUALITY	10/21/10		315217	293.21
SOUTH COAST AIR QUALITY	10/21/10		315218	293.21
SOUTH COAST AIR QUALITY	10/21/10		315219	293.21
SOUTH COAST AIR QUALITY	10/21/10		315220	109.00
SOUTH COAST AIR QUALITY	10/21/10		315221	109.00
SOUTH COAST AIR QUALITY	10/21/10		315222	109.00
STANFORD COURT APTS	10/21/10		315223	14.06
STATE BOARD OF EQUALIZATION	10/21/10		315224	1,309.00
STATE BOARD OF EQUALIZATION	10/21/10		315225	618.40
THOMAS VANESSA	10/21/10		315226	14.11
WEINSTOCK JAMES	10/21/10		315227	28.45
WHITMAN TAMARA	10/21/10		315228	1,527.68
WILCOX SANDRA	10/21/10		315229	19.65
ACTION ELECTRIC CORP	10/21/10		315230	932.57
ADT SECURITY SERVICES INC	10/21/10		315231	323.29

**IRVINE RANCH WATER DISTRICT**

Accounts Payable Report to Treasury  
Acct'g Period 2011/04 Ended 10/31/2010

Vendor Name	Issued	Voided	Check#	Check Amount
AEL FINANCIAL LLC	10/21/10		315232	1,128.88
AFLAC	10/21/10		315233	5,017.76
AMERICAN SOCIETY OF CIVIL	10/21/10		315234	255.00
AOSAFETY	10/21/10		315235	104.76
AQUA-METRIC SALES COMPANY	10/21/10		315236	822.13
ASSOCIATED POWER INC	10/21/10		315237	1,833.94
AT&T	10/21/10		315238	1,868.97
AT&T	10/21/10		315239	15.37
AT&T INTERNET SERVICES	10/21/10		315240	299.00
AT&T LONG DISTANCE	10/21/10		315241	40.15
AVO TRAINING INSTITUTE, INC.	10/21/10		315242	350.00
AYRES HOTEL AND SUITES (DBA)	10/21/10		315243	769.44
BDC SPECIAL WASTE	10/21/10		315244	150.00
BELL PIPE & SUPPLY CO	10/21/10		315245	376.83
BIOMERIEUX INC	10/21/10		315246	300.83
BLACK & VEATCH CORPORATION	10/21/10		315247	301,631.25
BORCHARD SURVEYING & MAPPING	10/21/10		315248	10,760.00
BRENTAG PACIFIC INC	10/21/10		315249	14,669.65
BRETT KING	10/21/10		315250	20.50
BRITHINEE ELECTRIC	10/21/10		315251	2,856.88
C WELLS PIPELINE MATERIALS INC	10/21/10		315252	1,255.69
CAL WATER PURIFICATION	10/21/10		315253	80.00
CALIFORNIA BARRICADE INC	10/21/10		315254	1,662.96
CANON BUSINESS SOLUTIONS INC	10/21/10		315255	4,346.24
CANON FINANCIAL SERVICES INC	10/21/10		315256	464.36
CDW GOVERNMENT LLC	10/21/10		315257	2,088.34
CHANG, HYON	10/21/10		315258	68.72
CHEM TECH INTERNATIONAL INC	10/21/10		315259	557.60
CITIGROUP GLOBAL MARKETS INC.	10/21/10		315260	4,820.55
COASTAL TRAFFIC SYSTEMS, INC	10/21/10		315261	600.00
COLONIAL LIFE & ACCIDENT	10/21/10		315262	1,755.44
CONYBEARE INC	10/21/10		315263	3,540.25
CR & R INCORPORATED	10/21/10		315264	49.51
CURT PRINGLE & ASSOCIATES	10/21/10		315265	6,000.00
CUSTOM LASER WORKS INC	10/21/10		315266	1,105.31
DEE JASPAR & ASSOCIATES, INC.	10/21/10		315267	8,018.55
DEE JASPAR & ASSOCIATES, INC.	10/21/10		315268	10,497.20
DIONEX CORPORATION	10/21/10		315269	6,195.16
DIRECTV INC	10/21/10		315270	83.99
DOUGLAS ENVIRONMENTAL GROUP	10/21/10		315271	2,850.00
EDFUND	10/21/10		315272	551.63
EMERGENCY COMMUNICATIONS	10/21/10		315273	160.00
EMERGENCY POWER CONTROLS INC	10/21/10		315274	4,500.00
ENVIRONMENTAL WATER MGT	10/21/10		315275	9,250.00
EVANS-HYDRO INC	10/21/10		315276	25,203.75
EVERGREEN OIL INC	10/21/10		315277	35.00
EVERSOFT INC	10/21/10	10/28/10	315278	195.68
EWLES MATERIALS	10/21/10		315279	9,890.00
FARRELL & ASSOCIATES	10/21/10		315280	328.20
FARWEST CORROSION CONTROL CO	10/21/10		315281	6,605.81
FEDEX	10/21/10		315282	119.09
FIDELITY INVESTMENTS	10/21/10		315283	415.00
FIRST AMERICAN CORELOGIC INC	10/21/10		315284	40.00
FISHER SCIENTIFIC COMPANY LLC	10/21/10		315285	4,497.00
FT ZIEBARTH COMPANY	10/21/10		315286	55,059.23
GARZA INDUSTRIES, INC	10/21/10		315287	1,218.00
GEORGE T HALL CO INC	10/21/10		315288	979.83

**IRVINE RANCH WATER DISTRICT**

Accounts Payable Report to Treasury  
Acct'g Period 2011/04 Ended 10/31/2010

Vendor Name	Issued	Voided	Check#	Check Amount
GEORGE YARDLEY CO INC	10/21/10		315289	581.42
GJ AUTOMOTIVE EQUIPMENT CO INC	10/21/10		315290	258.98
GMU GEOTECHNICAL INC	10/21/10		315291	10,841.61
GODWIN PUMPS OF AMERICA, INC.	10/21/10		315292	16,959.56
GRAINGER	10/21/10		315293	1,311.74
HARMSWORTH ASSOCIATES	10/21/10		315294	1,960.00
HARTFORD LIFE AND ACCIDENT	10/21/10		315295	207.00
HDR ENGINEERING INC.	10/21/10		315296	163,861.87
HILL BROTHERS CHEMICAL COMPANY	10/21/10		315297	10,520.92
HOME DEPOT USA INC	10/21/10		315298	299.14
HYDRO-SCAPE PRODUCTS INC	10/21/10		315299	493.01
II FUELS INC	10/21/10		315300	43,017.48
IRON MOUNTAIN INFORMATION	10/21/10		315301	1,591.84
IRVINE PIPE & SUPPLY INC	10/21/10		315302	1,741.80
JOHN G. ALEVIZOS D.O. INC.	10/21/10		315303	215.00
KARCHER DIGITAL & PRINTING	10/21/10		315304	708.07
KILL-N-BUGS TERMITE AND PEST	10/21/10		315305	1,250.00
KLEINFELDER WEST INC	10/21/10		315306	10,936.50
KS DIRECT	10/21/10		315307	5,731.54
L&S CONSTRUCTION INC	10/21/10		315308	13,219.63
LACY CONSTRUCTION	10/21/10		315309	14,112.56
LEHIGH OUTFITTERS	10/21/10		315310	87.00
LEWIS OPERATING CORP	10/21/10		315311	3,600.00
LUBRICATION ENGINEERS, INC.	10/21/10		315312	387.48
MARKET-THINK, LLC	10/21/10		315313	3,675.00
MAYER HOFFMAN MCCANN P.C.	10/21/10		315314	6,950.00
MC MASTER CARR SUPPLY CO	10/21/10		315315	1,786.46
MCR TECHNOLOGIES, INC.	10/21/10		315316	870.28
MERCHANTS LANDSCAPE SERVICES	10/21/10		315317	3,914.67
MOUSE GRAPHICS	10/21/10		315318	64.30
NAJJARINE, ED	10/21/10		315319	28.29
NATIONAL READY MIXED CONCRETE	10/21/10		315320	1,167.95
NEWPORT BEACH, CITY OF	10/21/10		315321	440.80
NMG GEOTECHNICAL INC	10/21/10		315322	6,773.85
NSHANYAN, ARMINE	10/21/10		315323	169.73
OLIN CORPORATION	10/21/10		315324	19,189.56
ON ASSIGNMENT LAB SUPPORT	10/21/10		315325	3,328.92
ONESOURCE DISTRIBUTORS LLC	10/21/10		315326	253.18
ORANGE COUNTY FIRE AUTHORITY	10/21/10		315327	1,047.00
ORANGE COUNTY HOSE CO.	10/21/10		315328	159.72
ORANGE COUNTY SANITATION	10/21/10		315329	4,640.00
ORKIN INC	10/21/10		315330	5,950.00
PACIFIC HYDROTECH CORPORATION	10/21/10		315331	15,858.61
PACIFIC HYDROTECH CORPORATION	10/21/10		315332	1,762.07
PAPER DEPOT DOCUMENT	10/21/10		315333	249.00
PERS LONG TERM CARE	10/21/10		315334	1,826.79
PRAXAIR DISTRIBUTION INC	10/21/10		315335	409.97
PRE-PAID LEGAL SERVICES INC	10/21/10		315336	1,819.17
PRO GROWERS INC	10/21/10		315337	1,907.03
PRUDENTIAL OVERALL SUPPLY	10/21/10		315338	1,183.45
PTI SAND & GRAVEL INC	10/21/10		315339	534.69
R&B AUTOMATION INC	10/21/10		315340	8,820.00
RAININ INSTRUMENT LLC	10/21/10		315341	331.14
RAM AIR ENGINEERING INC	10/21/10		315342	3,579.28
RESPONSE ENVELOPE, INC	10/21/10		315343	3,520.11
RUTAN & TUCKER, LLP	10/21/10		315344	1,725.00
SAN DIEGO FLUID SYSTEM TECH	10/21/10		315345	36.94

**IRVINE RANCH WATER DISTRICT**

Accounts Payable Report to Treasury  
Acct'g Period 2011/04 Ended 10/31/2010

Vendor Name	Issued	Voided	Check#	Check Amount
SANTA ANA BLUE PRINT	10/21/10		315346	51.66
SARRAF, MAJID	10/21/10		315347	109.20
SHALLAHAMER, KEN	10/21/10		315348	14.23
SHAMROCK SUPPLY CO INC	10/21/10		315349	249.69
SIRIUS COMPUTER SOLUTIONS, INC	10/21/10		315350	3,417.50
SOUTH COAST ANSWERING SERVICE	10/21/10		315351	540.78
SOUTH COAST WATER	10/21/10		315352	40.00
SOUTH ORANGE COUNTY	10/21/10		315353	35,350.00
SOUTHERN CALIFORNIA EDISON	10/21/10		315354	196,792.38
SOUTHERN COUNTIES LUBRICANTS	10/21/10		315355	372.64
SS MECHANICAL CORPORATION	10/21/10		315356	66,987.99
STANDARD & POOR'S	10/21/10		315357	3,500.00
STERIS CORPORATION	10/21/10		315358	3,995.41
STEVEN ENTERPRISES INC	10/21/10		315359	363.21
STUDDERT, GEORGE	10/21/10		315360	151.97
SUN-STAR ELECTRIC LP	10/21/10		315361	22,154.60
TAYLOR WOODROW HOMES	10/21/10		315362	15.00
TAYLOR WOODROW HOMES	10/21/10		315363	15.00
TETRA TECH, INC	10/21/10		315364	36,367.46
THE GAS COMPANY	10/21/10		315365	3,317.42
THE GAS COMPANY	10/21/10		315366	369.76
THOMPSON INDUSTRIAL SUPPLY	10/21/10		315367	4,324.51
TROPICAL PLAZA NURSERY INC	10/21/10		315368	18,531.62
TRUCPARCO	10/21/10		315369	440.38
TRUGREEN LANDCARE	10/21/10		315370	217.00
TRUGREEN LANDCARE	10/21/10		315371	21,006.03
TUSTIN, CITY OF	10/21/10		315372	309.96
U.S. DEPARTMENT OF EDUCATION	10/21/10		315373	794.43
ULTRA SCIENTIFIC	10/21/10		315374	400.77
UNDERGROUND SERVICE ALERT OF	10/21/10		315375	615.00
UNITED SITE SERVICES OF	10/21/10		315376	495.77
US PEROXIDE, LLC	10/21/10		315377	9,931.02
USA MOBILITY WIRELESS INC	10/21/10		315378	8.70
VALVE AUTOMATION & CONTROLS	10/21/10		315379	511.65
VARIAN INC	10/21/10		315380	88.08
VERIZON CALIFORNIA INC	10/21/10		315381	194.15
VORTEX INDUSTRIES INC	10/21/10		315382	968.73
VWR INTERNATIONAL, LLC	10/21/10		315383	810.69
WASTE MGMT OF ORANGE COUNTY	10/21/10		315384	150.68
WATERLINE TECHNOLOGIES INC	10/21/10		315385	11,030.04
WAXIE SANITARY SUPPLY	10/21/10		315386	2,167.05
WECK LABORATORIES INC	10/21/10		315387	225.00
WESTERN HYDRO CORPORATION	10/21/10		315388	3,559.61
WILLIAM M. PERKINS CO. INC.	10/21/10		315389	31,650.00
WILLIAMS, TWYLA	10/21/10		315390	788.50
WORKFLOWONE	10/21/10		315391	2,200.28
YORK INSURANCE SERVICES GROUP	10/21/10		315392	6,585.00
ORANGE COUNTY TREASURER	10/26/10		315393	14.00
TUSTIN, CITY OF	10/26/10		315394	10,000.00
CALIFORNIA DEPT OF PUBLIC	10/28/10		315395	23,939.49
CALVESBERT NEIL	10/28/10		315396	103.51
CLPF BANTING 3 LP	10/28/10		315397	3,750.38
CONNER CHARLES E	10/28/10		315398	77.12
DENNY RAY	10/28/10		315399	33.13
DIEHL, EVANS & COMPANY, LLP	10/28/10		315400	275.00
GRANDVIEW CREST HOA	10/28/10		315401	827.44
HAYDEN ETHEL	10/28/10		315402	219.73

**IRVINE RANCH WATER DISTRICT**

Accounts Payable Report to Treasury  
Acct'g Period 2011/04 Ended 10/31/2010

AP238R

Vendor Name	Issued	Voided	Check#	Check Amount
HIJAZ LANA	10/28/10		315403	25.34
JOHN B EWLES	10/28/10		315404	556.43
KB HOMES	10/28/10		315405	20.55
KERRY SCHULTZ	10/28/10		315406	824.82
LAROCHID TEAM	10/28/10		315407	40.60
LEGAULT, DAN	10/28/10		315408	1,030.28
OCWA	10/28/10		315409	30.00
STANFORD COURT APTS	10/28/10		315410	124.96
SUMABAT FE	10/28/10		315411	20.50
TAKAHATA KAZUO	10/28/10		315412	30.71
TIC-IPG-COMMON	10/28/10		315413	2,162.54
TIC-OFFICE PROPERTIES	10/28/10		315414	355.20
TIC-RETAIL PROPERTIES	10/28/10		315415	409.09
WATER ENVIRONMENT FEDERATION	10/28/10		315416	267.00
AGUILAR, ALEX	10/28/10		315417	1,273.74
AIRE INDUSTRIAL	10/28/10		315418	177.00
AIRGAS-WEST, INC.	10/28/10		315419	110.85
ALEXANDER CONTRACT SERVICES	10/28/10		315420	93,253.50
ANCHEM SCIENTIFIC, INC.	10/28/10		315421	230.00
AQUA-METRIC SALES COMPANY	10/28/10		315422	1,544.25
AT&T	10/28/10		315423	5,792.78
AT&T	10/28/10		315424	5,149.05
AT&T INTERNET SERVICES	10/28/10		315425	825.00
ATECH ENGINEERING & MFG INC	10/28/10		315426	489.38
AYRES HOTEL AND SUITES (DBA)	10/28/10		315427	961.80
BIOMAGIC INC	10/28/10		315428	22,266.57
BUTIER ENGINEERING INC	10/28/10		315429	15,680.00
C WELLS PIPELINE MATERIALS INC	10/28/10		315430	12,958.65
CALIFORNIA BARRICADE INC	10/28/10		315431	2,000.00
CANON BUSINESS SOLUTIONS INC	10/28/10		315432	1,012.50
CDW GOVERNMENT LLC	10/28/10		315433	642.33
COASTAL TRAFFIC SYSTEMS, INC	10/28/10		315434	600.00
CONEYBEARE INC	10/28/10		315435	1,868.30
CONTROLLED KEY SYSTEMS INC	10/28/10		315436	96.50
COX COMMUNICATIONS	10/28/10		315437	173.49
CRUMP & CO, INC.	10/28/10		315438	2,728.17
DE VAUL PAINT COMPANY	10/28/10		315439	1,851.90
DEVISE ENGINEERING INC	10/28/10		315440	1,403.12
DITCH WITCH EL CAJON	10/28/10		315441	3,806.25
DJ NELSON & SON POOL SERVICE	10/28/10		315442	2,251.89
DURANCEAU CONSULTING SERVICES,	10/28/10		315443	1,012.50
ENVIRONMENTAL RESOURCE	10/28/10		315444	383.37
ESA PWA	10/28/10		315445	5,505.95
EXPRESSAIR	10/28/10		315446	63.00
FARRELL & ASSOCIATES	10/28/10		315447	164.28
FEDEX	10/28/10		315448	320.54
FERGUSON WATERWORKS	10/28/10		315449	843.90
FERGUSON, DAVID	10/28/10		315450	4,302.86
FISERV	10/28/10		315451	301.75
FISHER SCIENTIFIC COMPANY LLC	10/28/10		315452	2,773.26
FURMAN GROUP INC., THE	10/28/10		315453	20,200.00
GODWIN PUMPS OF AMERICA, INC.	10/28/10		315454	2,388.15
GOOGLE INC.	10/28/10		315455	973.56
GRAINGER	10/28/10		315456	1,947.83
HACH COMPANY	10/28/10		315457	2,033.43
HILL BROTHERS CHEMICAL COMPANY	10/28/10		315458	4,703.88
HOME DEPOT USA INC	10/28/10		315459	1,854.33



**IRVINE RANCH WATER DISTRICT**

Accounts Payable Report to Treasury  
Acct'g Period 2011/04 Ended 10/31/2010

AP238R

Vendor Name	Issued	Voided	Check#	Check Amount
HOPKINS TECHNICAL PRODUCTS INC	10/28/10		315460	5,926.69
HUNSAKER & ASSOCIATES IRVINE	10/28/10		315461	1,960.00
H2O RESOURCES ENGINEERING INC	10/28/10		315462	5,400.00
IMPERIAL SPRINKLER SUPPLY INC	10/28/10		315463	549.78
INDUSTRIAL ELECTRIC MACHINERY	10/28/10		315464	415.48
INORGANIC VENTURES INC	10/28/10		315465	406.33
IRVINE PIPE & SUPPLY INC	10/28/10		315466	365.23
IRWD-PETTY CASH CUSTODIAN	10/28/10		315467	611.10
J.P. MORGAN SECURITIES, INC.	10/28/10		315468	22,684.93
KERN COUNTY TREASURER TAX	10/28/10		315469	12,374.14
KINDNESS GENERAL CONTRACTORS	10/28/10		315470	227.14
LAB SAFETY SUPPLY, INC.	10/28/10		315471	26.29
LENOVO UNITED STATES INC	10/28/10		315472	1,679.21
MALCOLM PIRNIE INC	10/28/10		315473	54,605.15
MANLEY SOLUTIONS, INC.	10/28/10		315474	602.48
MOBILE MODULAR MANAGEMENT	10/28/10		315475	1,119.04
MOODY'S INVESTORS SERVICE INC	10/28/10		315476	5,000.00
MOUSE GRAPHICS	10/28/10		315477	201.77
OCEAN BLUE ENVIRONMENTAL	10/28/10		315478	4,635.30
OLIN CORPORATION	10/28/10		315479	27,084.89
ON ASSIGNMENT LAB SUPPORT	10/28/10		315480	3,577.88
ONESOURCE DISTRIBUTORS LLC	10/28/10		315481	441.23
ORANGE COUNTY HOSE CO.	10/28/10		315482	31.06
ORANGE COUNTY TREASURER	10/28/10		315483	12,593.48
ORANGE, COUNTY OF	10/28/10		315484	7,275.00
PACIFIC BUILDING CARE INC	10/28/10		315485	2,112.00
PACIFIC COAST BOLT CORP	10/28/10		315486	1,077.71
PERKINELMER HEALTH SCIENCES	10/28/10		315487	73.49
PRAXAIR DISTRIBUTION INC	10/28/10		315488	934.20
PRO-COURIER, INC.	10/28/10		315489	1,176.00
PRUDENTIAL OVERALL SUPPLY	10/28/10		315490	772.18
PTI SAND & GRAVEL INC	10/28/10		315491	350.22
QUALITY ENVIRONMENTAL	10/28/10		315492	150.16
RAM AIR ENGINEERING INC	10/28/10		315493	258.32
RBF CONSULTING	10/28/10		315494	265,743.09
REFRIGERATION SUPPLIES	10/28/10		315495	5,786.82
SANTA ANA WATERSHED PROJECT	10/28/10		315496	28,278.00
SCHALL, JANET	10/28/10		315497	33.74
SCOTT-MARRIN, INC.	10/28/10		315498	12.00
SECURTEC DISTRICT PATROL INC	10/28/10		315499	3,784.00
SEPARATION PROCESSES INC	10/28/10		315500	4,412.50
SIRIUS COMPUTER SOLUTIONS, INC	10/28/10		315501	498,192.80
SOUTH COAST WATER	10/28/10		315502	151.74
SOUTHERN CALIFORNIA EDISON	10/28/10		315503	93,870.23
SOUTHERN COUNTIES LUBRICANTS	10/28/10		315504	1,666.26
SPARKLETT'S	10/28/10		315505	154.64
SPARLING INSTRUMENTS LLC	10/28/10		315506	1,294.51
STANTEC CONSULTING SERVICES	10/28/10		315507	19,721.13
SYNAGRO COMPOSTING COMPANY	10/28/10		315508	17,363.59
THE GAS COMPANY	10/28/10		315509	368.55
TROPICAL PLAZA NURSERY INC	10/28/10		315510	290.00
TRUGREEN LANDCARE	10/28/10		315511	1,099.00
UNITED PARCEL SERVICE INC	10/28/10		315512	1,437.30
UNITED SITE SERVICES OF	10/28/10		315513	126.79
US BANK NAT'L ASSOC N.DAKOTA	10/28/10		315514	62,079.30
US PEROXIDE, LLC	10/28/10		315515	5,892.70
VA CONSULTING, INC	10/28/10		315516	5,097.00

10/29/2010  
13:33:37

# IRVINE RANCH WATER DISTRICT

Accounts Payable Report to Treasury  
Acct'g Period 2011/04 Ended 10/31/2010

Page 14  
AP238R

Vendor Name	Issued	Voided	Check#	Check Amount
VALVE AUTOMATION & CONTROLS	10/28/10		315517	987.90
VERIZON CALIFORNIA INC	10/28/10		315518	145.17
VULCAN MATERIALS COMPANY	10/28/10		315519	1,257.39
WALTERS WHOLESALE ELECTRIC	10/28/10		315520	809.10
WASTE MGMT OF ORANGE COUNTY	10/28/10		315521	1,173.80
WATER ENVIRONMENT FEDERATION	10/28/10		315522	267.00
WATERLINE TECHNOLOGIES INC	10/28/10		315523	5,882.94
WAXIE SANITARY SUPPLY	10/28/10		315524	3,680.53
WEBER, CATHERINE	10/28/10		315525	73.90
WESTERN HYDRO CORPORATION	10/28/10		315526	4,086.48
WIRELESS WATCHDOGS LLC	10/28/10		315527	106.45
ZHAO, HONGLIANG	10/28/10		315528	11.32
PAULUS ENGINEERING INC	10/28/10		315529	502,825.85
A/P Check Total				5,457,526.93
YORK INSURANCE SERVICES GROUP	10/01/10		9100110	7,036.51
YORK INSURANCE SERVICES GROUP	10/04/10		9100410	2,696.69
YORK INSURANCE SERVICES GROUP	10/14/10		9101410	2,489.69
YORK INSURANCE SERVICES GROUP	10/19/10		9101910	3,521.04
YORK INSURANCE SERVICES GROUP	10/26/10		9102610	3,926.98
Workers Compensation Total				19,670.91
BEST BUY/ANTHONY BRUNNING	10/07/10	10/13/10	314778	1,778.69-
HORNBACK LARRY	10/07/10	10/19/10	314784	23.73-
EVERSOFT INC	10/21/10	10/28/10	315278	195.68-
Total Voids				1,998.10-
Report Total				5,475,199.74 ✓

Report Includes Checks numbers from 314776 to 315529 ✓

*Reviewed by  
S  
Nov-1-2010*

November 22, 2010  
Prepared by: C. Kessler/P. Weghorst  
Submitted by: G. Heiertz  
Approved by: Paul Jones

## CONSENT CALENDAR

### SUPPORT OF ACWA'S POLICY PRINCIPLES ON IMPLEMENTATION OF STATE AND FEDERAL ENDANGERED SPECIES ACT

#### SUMMARY:

In July of 2010, the Association of California Water Agencies' (ACWA) Board of Directors adopted policy principles that call for a comprehensive ecosystem-based approach to implementing both the State and Federal Endangered Species Acts (ESA). ACWA is requesting resolutions from its member agencies supporting the policy principles for ESA implementation. Staff concurs with these principles and recommends that the IRWD Board adopt a resolution supporting ACWA's Policy Principles on Implementation of State and Federal Endangered Species Acts.

#### BACKGROUND:

The State and Federal Endangered Species Acts are both powerful pieces of legislation that, depending upon on how they are implemented, can both generate significant benefits and create substantial economic harm. An example of the latter is how these laws have been applied to the San Francisco – San Joaquin River Delta. Recent water diversion restrictions imposed through biological opinions have not only failed to improve the ecosystem, but have also exacerbated economic impacts of the recent drought.

ACWA believes that the current situation in the Delta offers an opportunity to improve the way in which the ESA are implemented. ACWA has adopted eight policy principles, attached as Exhibit "A", that outline a more effective approach to ESA implementation which incorporates equal goals of water supply reliability and ecosystem enhancement. These principles are summarized as follows:

1. Federal and state agencies' implementation of the ESAs should focus on comprehensive, integrated solutions that address all the factors that are or have the potential to adversely affect the viability of endangered or threatened species.
2. Federal and state agencies should recognize that strategies incorporating the co-equal goals of sustainable ecosystems and a reliable water supply have the greatest likelihood for success because they provide stability and certainty, allowing a larger commitment of resources to innovative problem solving.
3. Federal and state agencies should enhance their capacity to utilize real-time data and scientific analysis to address both immediate and long-term solutions in hopes to reduce conflicts that result from competing demands for the same resources.
4. Federal and state agencies should develop and use the "best available science" to justify their biological conclusions and subsequent management recommendations.

5. Federal and state agencies should recognize that there is often a need for adaptive management strategies when implementing actions with incomplete or imperfect information. Additionally, it is vitally important to establish achievable quantified goals and track progress, increase investments where they appear to have higher returns and reduce investments where they do not pay off. Furthermore, when there is credible debate about the methodologies used and conclusions reached by the agencies, an adaptive management approach should be incorporated into the implementation process.
6. Science-based implementation strategies must reflect the fact that we are pursuing species recovery within highly altered ecosystems. While the co-equal goals seek substantial and sustainable improvements for the ecosystem, in most cases, it is simply not possible or desirable to restore ecosystems to their historical natural state.
7. Federal and state agencies should assess their implementation of the ESA in the context of climate change. ESA implementing agencies should ensure that water resource managers have the necessary flexibility and discretion to respond to regulatory mandates in a manner that is achievable and practical, given the magnitude of changes attributable to climate change.
8. Federal and state agencies should recognize that the ESA provides them with significant discretion to develop and implement strategic options to improve a species' viability. This flexibility and discretion should be utilized as a first principle rather than as a last resort in the face of legal or other challenges. The agencies should promote local and regional strategies that can efficiently and effectively address variability in available data, species demographics and ecosystems.

ACWA is requesting that each member agency support this approach by adopting a Resolution. Staff has reviewed the ACWA approach and recommends that the Board adopt a Resolution in support of ACWA's Policy Principles on Implementation of State and Federal Endangered Species Acts as provided in Exhibit "B".

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

This item was reviewed at the Water Resources Policy and Communications Committee on November 9, 2010.

RECOMMENDATION:

That the Committee recommend that the Board adopt the following Resolution by title:

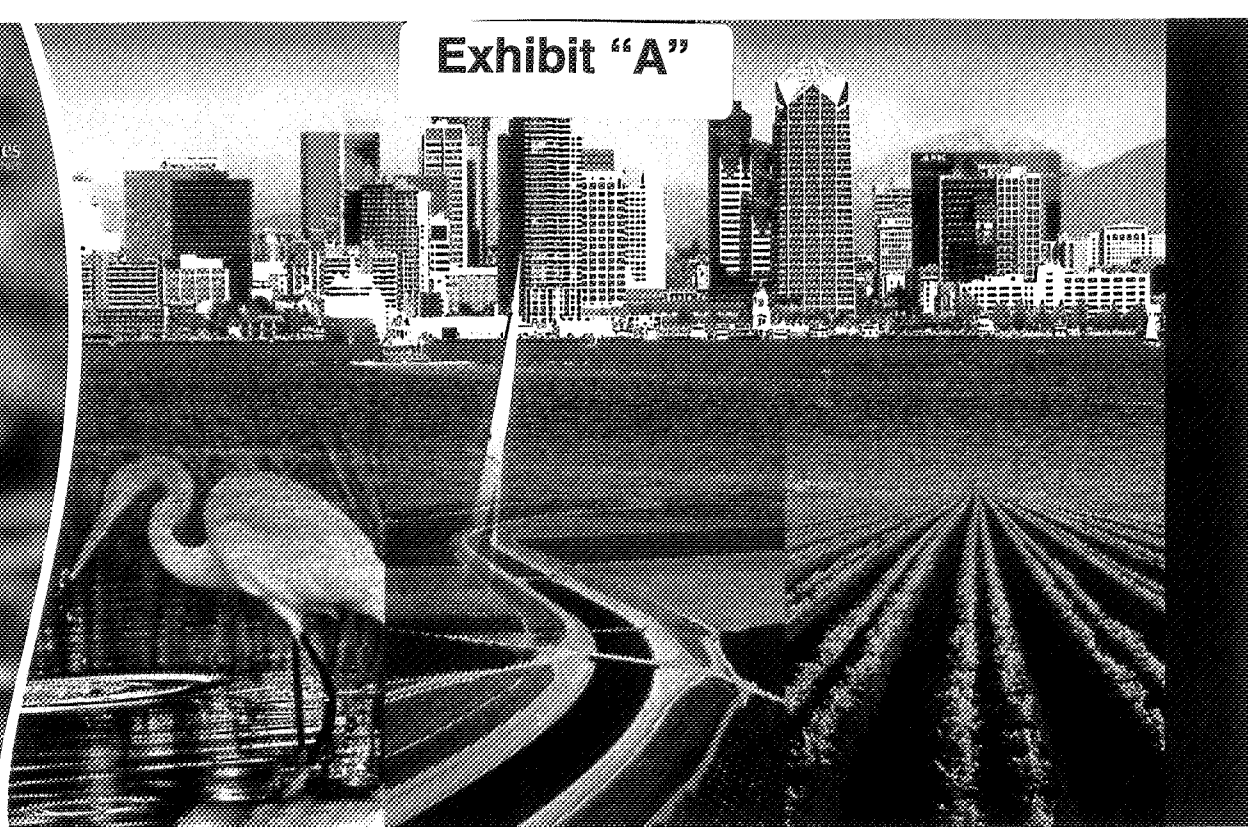
RESOLUTION NO. 2010-

RESOLUTION OF THE BOARD OF DIRECTORS OF  
IRVINE RANCH WATER DISTRICT SUPPORTING THE ASSOCIATION  
OF CALIFORNIA WATER AGENCIES' POLICY PRINCIPLES ON  
IMPLEMENTATION OF STATE AND FEDERAL ENDANGERED SPECIES ACT

LIST OF EXHIBITS:

Exhibit "A" – ACWA Policy Principles on Implementation of State and Federal Endangered Species Act  
Exhibit "B" – Resolution





## ACWA Policy Principles on **Implementation of State and Federal Endangered Species Acts**

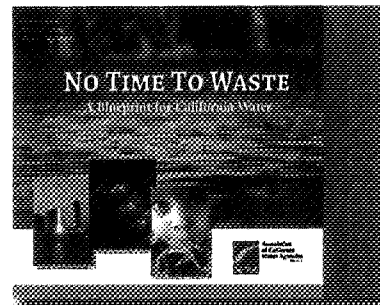
### Preamble

The federal and state Endangered Species Acts (ESA) are among the most powerful pieces of legislation ever enacted to manage the natural resources of California and the nation. Depending upon how these acts are implemented, they can both generate significant benefits and create substantial economic harm.

There are a number of examples of successful implementation of ESA in California. (See sidebar, "Where Has ESA Worked?") The ACWA Blueprint identifies modernization of ESA to improve its implementation as a high priority for California water

management.<sup>1</sup> In particular, the application of these laws in the San Francisco-San Joaquin River Delta has not been as successful. Restrictions on water diversions imposed through the biological opinions have exacerbated the economic impacts of the recent drought, without a corresponding improvement to the ecosystem. (See sidebar, "ESA and Delta Water Supply Reliability.")

ACWA believes the current situation in the Delta provides a significant opportunity to improve the implementation of the ESA. The principles set forth below outline a more effective approach to ESA implementation that incorporates the co-equal goals of water supply reliability and ecosystem enhancement that are the basis of California law. ACWA urges senior management at the ESA implementing resource agencies, with Cabinet-level concurrence, to use these principles to implement a more integrated and diversified approach. Without a fundamental change in implementation strategy, it will be impossible to satisfy the demands required by the ESA while also effectively meeting the needs of California's families, farms, businesses and communities.



<sup>1</sup> *No Time to Waste: A Blueprint for California's Water*. ACWA publication, May 2005. Pages 29-30. The Blueprint encourages "increased habitat-focused species protections through more proactive, collaborative, and incentive-based management agreements with property owners and resource managers."

## Where has ESA Worked?

The ESA has, in fact, been successfully implemented in a variety of circumstances in California. On the North Coast, the Humboldt Bay Municipal Water District recently completed a Habitat Conservation Plan (HCP) that provides 50 years of regulatory certainty for its operations while recovery efforts for salmon and steelhead species are implemented in the Mad River. In the Mokelumne River watershed, East Bay Municipal Utility District has similarly completed a 30-year HCP for terrestrial species that provides operational flexibility and management certainty for its 56,000-acre watershed. In Southern California, water agencies and developers, in cooperation with counties, environmental groups, and others, have implemented long-term HCPs for terrestrial species that have facilitated the construction of major water infrastructure, such as Diamond Valley Lake, and allowed major development projects to proceed in Riverside, Orange, and San Diego Counties.

What do these successes have in common? First, all of them were completed as HCPs, which by their nature require a collaborative approach that embraces the concept of "co-equal goals." Second, these successes embraced a comprehensive approach, focusing on multiple species and using multiple management tools as appropriate. Third, all were supported by a strong commitment to provide the resources necessary to assure both long-term economic and ecosystem success. The challenge is to replicate this successful approach in non-HCP applications of the ESA.

ACWA fully supports the underlying goals of the state and federal ESAs to avoid the extinction of listed species and ultimately ensure species recovery so that a listing is no longer warranted. However, it is critical to recognize that the primary purpose of the ESA, as expressed in the federal statute, is to "provide the means whereby ecosystems upon which endangered species and threatened species depend may be conserved, [and] to provide a program for the conservation of such endangered species and threatened species..." 16 U.S.C.A. 1531(b). The remarkable aspect of this statement is that Congress recognized conservation of ecosystems is the first purpose of the ESA, even before conserving endangered and threatened species themselves.

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**"ACWA fully supports the underlying goals of the state and federal ESAs to avoid the extinction of listed species and ultimately ensure species recovery so that a listing is no longer warranted."**

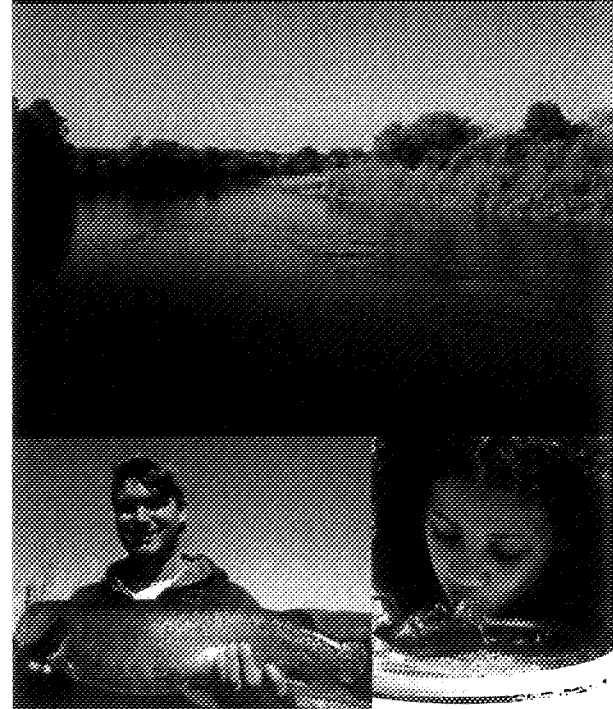
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As the federal and state ESAs are currently administered, the responsible agencies primarily focus their limited resources on single-species approaches and a single action (or set of related actions), as opposed to a comprehensive assessment of all the factors affecting species viability. For example under the federal ESA, the responsible agency limits its consultation to individual federal actions under section 7 of the ESA. The result is narrowly constructed biological opinions, mitigation measures, and, in the case of the federal ESA, often extremely restrictive reasonable and prudent alternatives (RPAs) that may not even be addressing the underlying causes of ecosystem and species declines.

ACWA believes that the agencies have greater discretion to develop comprehensive strategies that also consider economic and social stability. (See sidebar, "Are the Co-Equal Goals Inconsistent with ESA?") We believe such strategies are more likely to ensure that the agencies achieve statutory obligations in both the near and long term, especially if they encourage voluntary participation in solution development and implementation, which is more likely to result in additional resources voluntarily allocated to species protection and restoration. Such an approach will not impede adequate protections for the listed species in the near term, and in fact could enhance effectiveness.

Too few resources are dedicated to analyzing and developing comprehensive and well-coordinated strategies that conserve the ecosystems upon which threatened and endangered species depend. To the contrary, the current approach taken by the agencies fails to: (1) incorporate an evaluation of all the potentially significant stressors to the species and its habitat; (2) prioritize actions to address those factors in a comprehensive manner; and (3) enact an implementation plan that coordinates conservation efforts with other state, federal and local agencies, and private and non-governmental organizations. For example, with respect to application of the ESA to the water export projects, the current approach of trying to protect aquatic species

<sup>2</sup> The recent decision by the federal agencies to consolidate the Delta smelt and salmon biological opinions is a step in the right direction. See letter from Secretary of the Interior Ken Salazar and Secretary of Commerce Gary Locke to Nancy Sutley, Chair of the Council on Environmental Quality, May 3, 2010.





**“The current approach of trying to protect aquatic species through a single action only – restricting water diversions from the south Delta – is not working for either ecosystem sustainability or water supply reliability.”**

through a single action only – restricting water diversions from the south Delta – *is not working for either ecosystem sustainability or water supply reliability.*

Whether dealing with ecosystem management in

the Delta or elsewhere, ACWA calls upon state and federal agencies to adopt a comprehensive, ecosystem-based approach. This will require the agencies to work in a more coordinated manner to address multiple species of concern while utilizing more diverse management tools. We believe this approach will better achieve the goals of the ESA in a more efficient, effective and economic manner.

## ACWA Policy Principles for ESA Implementation

### Principle 1: Comprehensive, Integrated Solutions

Federal and state agencies' implementation of the ESAs, whether listing species, designating critical habitat or developing biological opinions, should focus on comprehensive, integrated solutions that address all the factors that are or have the potential to adversely affect the viability of endangered or threatened species. Furthermore, the agencies need to promote proactive programs that embrace a comprehensive, ecosystem-based integrative methodology, as opposed to the single-species approach that characterizes current ESA implementation.

### Principle 2: Co-Equal Goals

It is critical that the agencies recognize that strategies incorporating the co-equal goals of sustainable ecosystems and a reliable water supply throughout the state have the greatest likelihood for success because they provide stability and certainty, allowing a larger commitment of resources to innovative problem solving.

### Principle 3: Real-Time Solutions

It is essential that the agencies enhance their capacity to utilize real-time data and scientific analysis to address both immediate and long-term solutions. Such approaches can reduce conflicts that result from competing demands for the same resources, providing greater flexibility for resource distribution that can enhance both ecosystem sustainability and water supply reliability.

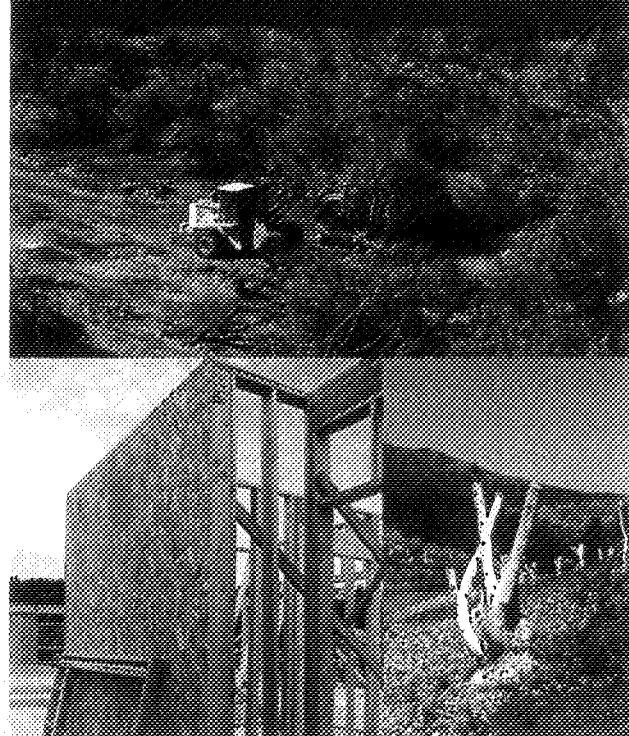
### Principle 4: Science

The agencies must develop and use science that adheres to the highest academic and professional standards to justify their biological conclusions and subsequent management recommendations. While we recognize “best available science” may be limited when decisions are made, the agencies must commit to processes that promote ongoing data gathering and scientific analysis combined with the ability to readily modify management practices when such scientific analysis justifies modification.

## ESA and Delta Water Supply Reliability

During 2010, California experienced statewide precipitation of 115% of normal with a snow pack of nearly 150% of normal, yet final allocations of water supplies to water contractors that rely on water conveyed across the Delta are at “drought-like” levels of only 50%. This fact is telling and a clear indication that “the system is broken.” DWR estimates that operational restrictions due to the ESA since 2007 have reduced contract deliveries to federal and state contractors by about 30% beyond the level natural hydrological conditions would have provided, with larger impacts in wetter years. To make matters worse, the water management tools developed in the 1990s to bolster dry-year supplies – south-of-Delta storage and voluntary water markets – are not working due to the same ESA restrictions that severely reduced the ability to move water through the Delta.

Even in a relatively wet year, it is extremely difficult to put water into storage (surface and groundwater) for protection against future drought years. Moreover, the capacity to move water from voluntary sellers upstream of the Delta to buyers downstream of the Delta has been reduced by approximately 40%. Water conveyed through the Delta supplies drinking water to more than 22 million Californians, irrigation to produce over 45% of the fruits and vegetables consumed in the U.S., and supports over \$500 billion of the California economy. The current water supply situation is not economically sustainable for the large part of California's economy that receives a significant portion of its water supply from water conveyed through the Delta.



## Are the Co-Equal Goals Inconsistent with ESA?

The short answer is "no." There is nothing in the ESA that prevents implementation approaches that seek to promote the goal of water supply reliability. California law now requires that we manage water resources in a manner to accomplish the co-equal goals of "providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem." In recent federal court decisions regarding the Delta smelt and salmon biological opinions, Judge Oliver Wanger ruled that the ESA implementing agencies have a "responsibility to consider alternative remedies . . . that would not only protect the species, but would also minimize the adverse impacts on humans and the human environment."<sup>2</sup> Even such prominent conservationists as former Secretary of the Interior Bruce Babbitt<sup>3</sup> and Michael J. Bean of the Environmental Defense Fund<sup>4</sup> have in the past articulated strong support for ESA implementation approaches that embody the spirit of the co-equal goals. The fact is when regulators seek solutions that provide both environmental and economic benefits – as in the HCP examples described elsewhere – ESA implementation is universally better.

<sup>2</sup> Findings of Fact and Conclusions of Law RE: Plaintiffs' Request for Preliminary Injunction Consolidated Salmon Cases, No. 1:09-cv-1053 (E.D. Cal. May 18, 2010); Consolidated Smelt Cases, No. 1:09-cv-00407 (E.D. Cal. May 27, 2010).

<sup>3</sup> Stevens, *Interior Secretary is Pushing A New Way to Save Species*, New York Times, February 17, 1993.

<sup>4</sup> *The Endangered Species Recovery Act of 1997: Hearings on S. 1180 Before the Senate Committee on Environment and Public Works, 105<sup>th</sup> Cong., 1<sup>st</sup> Sess. 97-99 (1997)* (Statement of Michael J. Bean, on the behalf of the Center for Marine Conservation, Environmental Defense Fund, and World Wildlife Fund).

## Principle 5: Adaptive Management

Adaptive management strategies recognize that often there is a need to implement actions with incomplete or imperfect information. While uncertainty should not be cause for inaction, it is vitally important to establish achievable quantified goals and track progress, increasing investments where they appear to have higher returns and reducing investments where they do not pay off. In addition, when there is credible debate about the methodologies used and conclusions reached by the agencies in developing RPAs and other actions, an adaptive management approach should be incorporated into the implementation process associated with the actions to ensure that new science and technology is integrated into on-the-ground practices.

## Principle 6: Managing Within Highly Altered Ecosystems

Science-based implementation strategies must reflect the fact that we are pursuing species recovery within highly altered ecosystems. This is generally the case in California's rivers and watersheds, particularly in the Delta. The Delta has been dramatically altered over the past two centuries as water ways were dredged and realigned, wetlands were converted to farmland, minerals were mined and timber harvested, and water and other infrastructure was constructed. While the co-equal goals seek substantial and sustainable improvements for the ecosystem, in most cases, it is simply not possible or desirable to restore ecosystems to their historical natural state.

## Principle 7: Accounting for Climate Change

The ESA never anticipated environmental regime changes of the magnitude we are likely to experience as a consequence of climate change. Climate change is already reshaping California's hydrology, and these changes are expected to intensify in coming decades. Without developing and adopting more flexible approaches to the administration of the ESA, these dynamic changes to ecosystems will make the existing statutory mandates of the act highly impractical or impossible to implement.

ACWA urges the responsible federal and state agencies to assess their implementation of the ESA in the context of climate change. ESA implementing agencies should ensure that water resource managers have the necessary flexibility and discretion to respond to regulatory mandates in a manner that is achievable and practical, given the magnitude of changes attributable to climate change.

While the changes associated with climate change present great uncertainty, they also serve as a reminder that the planet's ecosystems are not static, but are constantly changing over time. Measures taken to protect endangered species should be implemented in a manner that reflects and accounts for these ecosystem dynamics.

## Principle 8: Flexible Implementation

The agencies should recognize that the ESA provides them with significant discretion to develop and implement strategic options to improve a species' viability. This flexibility and discretion should be utilized as a first principle rather than as a last resort in the face of legal or other challenges. Given often-limited available data and/or uncertain scientific analysis, as well as the range of temporal, geographic and demographic variability of species and the ecosystem(s) on which they depend, the agencies should promote local and regional strategies that can address such variability most efficiently and effectively.

## **EXHIBIT “B”**

### **RESOLUTION NO. 2010-**

#### **RESOLUTION OF THE BOARD OF DIRECTORS OF IRVINE RANCH WATER DISTRICT SUPPORTING THE ASSOCIATION OF CALIFORNIA WATER AGENCIES’ POLICY PRINCIPLES ON IMPLEMENTATION OF STATE AND FEDERAL ENDANGERED SPECIES ACTS**

**WHEREAS, the Endangered Species Act (ESA) implementation activities in California – particularly in the Delta – have had a major impact on water deliveries in recent years. Restrictions on water diversions to protect Delta smelt and salmon have exacerbated the effects of multiple dry years, resulting in significant economic disruption without a measurable improvement to the Delta ecosystem or affected species; and**

**WHEREAS, the current situation in the Delta provides a significant opportunity to improve the implementation of the state and federal ESA; and**

**WHEREAS, the current approach of trying to protect aquatic species through a single action only – restricting water diversions from the south Delta – is not working for either ecosystem sustainability or water supply reliability; and**

**WHEREAS, local water agencies support the goals of the ESA but believe that the state and federal agencies have greater discretion to develop comprehensive strategies that also consider economic and social stability; and**

**WHEREAS, the timing is critical to make sure the new state administration and the Obama administration understand the importance and broad support among the water community for co-equal goals; and**

**WHEREAS, the Association of California Water Agencies (ACWA) Board of Directors adopted policy principles in July on ESA implementation issues developed by a diverse group of its members; and**

**WHEREAS, these policy principles outline a more effective approach to ESA implementation that incorporates the co-equal goals of water supply reliability and ecosystem enhancement that are the basis of California law; and**

**WHEREAS, these policy principles identify the direction ESA implementation must take to meet the needs of species and the state’s communities, farms and businesses in the 21st century; and**

**WHEREAS, we recognize that California’s water future rests on linking commitment to restoration and supply reliability; and**

**WHEREAS, we urge senior management at the ESA implementing resource agencies to use these principles to implement a more integrated and diversified approach; and**

NOW, THEREFORE, BE IT RESOLVED, that the Board of Directors of the Irvine Ranch Water District believes the principles developed by ACWA can help move the dialog on a path that leads to constructive improvements in ESA implementation at the state and federal levels; and

BE IT FURTHER RESOLVED, that the Board of Directors of the Irvine Ranch Water District supports ACWA's policy principles on "Implementation of State and Federal Endangered Species Act."

APPROVED, SIGNED and ADOPTED this 22nd day of November 2010.

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

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

APPROVED AS TO FORM:  
BOWIE, ARNESON, WILES & GIANNONE

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November 22, 2010

Prepared by: J. McGehee/B. Uematsu

Submitted by: K. Burton

Approved by: Paul Jones

## ACTION CALENDAR

### ORANGE PARK ACRES DOMESTIC WATER TRANSMISSION MAIN CONSTRUCTION PHASE SERVICES

#### SUMMARY:

The construction award for the Orange Park Acres Domestic Water Transmission Main was approved at the October 25, 2010 Board meeting. Staff is requesting various construction phase services for this project. Staff recommends the Board:

- Approve a budget reduction in the amount of \$3,078,600, from \$3,635,200 to \$556,600, for Project 11407;
- Approve Expenditure Authorizations in the amounts of \$22,000 for Project 11407, \$855,700 for Project 11408, \$42,000 for Project 11409, and \$111,600 for Project 11410;
- Authorize the General Manager to execute a Professional Services Agreement in the amount of \$223,598 with Stantec Consulting Services, Inc. (Stantec) for Construction Phase Engineering Services, Projects 11407, 11408, 11409, and 11410;
- Authorize the General Manager to execute a Professional Services Agreement in the amount of \$72,542 with NMG Geotechnical, Inc. for Construction Phase Geotechnical Services, Project 11407, and;
- Authorize the General Manager to execute a Professional Services Agreement in the amount of \$110,288 with Bush and Associates, Inc. for Construction Phase Surveying Services, Project 11407.

#### BACKGROUND:

The project is in the Orange Park Acres (OPA) Service Area within the boundaries of the City of Orange and unincorporated areas of the County of Orange. With the Orange Park Acres Mutual Water Company annexation, the OPA SAMP was completed, and final design of OPA Transmission Main was finished in August 2010. The OPA Transmission Main consists of approximately 23,000 linear feet of pipeline including a parallel distribution main in Rancho Santiago, distribution mains in Jon's Way, Calle Grande, Chapman and the alley between Equestrian and Glen Albyn Lane, three PRV stations, and the connection to the IRWD Zone 5 system at Jamboree Road and Chapman Avenue. A Location Map is included as Exhibit "A".

The ongoing design efforts for the remaining construction packages consists of the three PRV stations, Mead Pump Station upgrades, bi-directional meters for the City of Orange interconnections, East Orange County Water District Turnout modifications, fire flow improvements, and other appurtenances. As a separate effort, staff has also started investigating the OPA groundwater well improvements.

Construction Award:

The project was advertised to ten select bid contractors on August 12. The bid opening was held on October 19. On October 25, the Board awarded Leatherwood Construction, Inc. with the construction contract for the Orange Park Acres Domestic Water Transmission Main in the amount of \$6,786,397.

Construction Phase Engineering Services:

Staff requested a proposal from Stantec for construction support services required for the OPA Transmission Main and the other upcoming OPA construction packages. Stantec was the engineer of record for the SAMP, PDR, and final construction plans and is currently assisting with ongoing coordination efforts with the City of Orange. The support team proposed by Stantec is the same team that designed the final construction plans and understands the critical design issues for the transmission main construction. Stantec is also familiar with the constraints of the OPA service area. Because of these excellent qualifications, staff recommends awarding the contract for the construction phase engineering services to Stantec. Staff has negotiated the scope and fee with Stantec and recommends that it be awarded a Professional Services Agreement in the amount of \$223,598. Stantec's scope of work and fee are attached as Exhibit "B."

Construction Phase Geotechnical Services:

Staff requested proposals from GMU, NMG, and Ninyo & Moore to provide construction phase geotechnical services for the OPA Transmission Main. The proposed geotechnical services include field geotechnical observation services, field and laboratory testing, meeting attendance, and report preparation. The NMG and GMU proposals demonstrated a level of service that was consistent with staff's expectations, while Ninyo and Moore's proposal demonstrated a level of effort that was more than anticipated.

Staff's evaluation of the proposals is summarized in the Consultant Selection Matrix attached as Exhibit "C". Based on previous successful work with IRWD and the competitive fee for the proposed services, staff recommends that a Professional Services Agreement for construction phase geotechnical services be awarded to NMG Geotechnical, Inc. in the amount of \$72,542. NMG Geotechnical's scope of work and fee are attached as Exhibit "D".

Construction Phase Surveying Services:

Staff requested proposals from Bush & Associates, Guida Surveying, and Borchard Surveying to provide construction phase surveying services for the OPA Water Transmission Main. The proposed surveying services include staking for all pipelines, appurtenances, facilities, structures, and potholing, establishing controls, and meeting attendance. Bush & Associate's proposal demonstrated a level of service that was consistent with staff's expectations, while Guida Surveying's proposal demonstrated a level of effort that was significantly less than anticipated.

Borchard Surveying declined to submit due to prior obligations to the Michelson Expansion Project and on-call surveying services with the development services department.

Staff's evaluation of the proposals is summarized in the Consultant Selection Matrix attached as Exhibit "E". Based on previous successful work with IRWD and the competitive fee for the proposed services, staff recommends that a Professional Services Agreement for construction phase surveying services be awarded to Bush & Associates, Inc. in the amount of \$110,288. Bush & Associate's scope of work and fee are attached as Exhibit "F".

FISCAL IMPACTS:

Projects 11407, 11408, 11409, and 11410 are included in the FY 2010-11 Capital Budget. The budget reduction request for project 11407 reflects consolidation of the OPA Transmission Main construction into project 11408 (formerly split between projects 11407 and 11408) as approved at the October 25, 2010 Board meeting. Staff requests the budget reduction and Expenditure Authorizations as shown in the table below and attached as Exhibit "G" for the above mentioned work, project accounting, and staff time.

Project No.	Current Budget	Addition <Reduction>	Total Budget	Existing EA	This EA Request	Total EA Request
11407	\$ 3,635,200	<\$3,078,600>	\$ 556,600	\$ 336,700	\$ 22,000	\$ 358,700
11408	\$10,713,900	\$0	\$10,713,900	\$8,018,400	\$ 855,700	\$8,874,100
11409	\$ 1,132,600	\$0	\$ 1,132,600	\$ 183,700	\$ 42,000	\$ 225,700
11410	\$ 886,600	\$0	\$ 886,600	\$ 180,400	\$ 111,600	\$ 292,000
Totals	\$16,368,300	<\$3,078,600>	\$13,289,700	\$8,719,200	\$1,031,300	\$9,750,500

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 at the Engineering and Operations Committee on November 4, 2010.

RECOMMENDATION:

THAT THE BOARD APPROVE A BUDGET REDUCTION IN THE AMOUNT OF \$3,078,600, FROM \$3,635,200 TO \$556,600, FOR PROJECT 11407; APPROVE EXPENDITURE AUTHORIZATIONS IN THE AMOUNTS OF \$22,000 FOR PROJECT 11407, \$855,700 FOR PROJECT 11408, \$42,000 FOR PROJECT 11409, AND \$111,600 FOR PROJECT 11410; AUTHORIZE THE GENERAL MANAGER TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT IN THE AMOUNT OF \$223,598 WITH STANTEC CONSULTING SERVICES, INC. FOR CONSTRUCTION PHASE ENGINEERING SERVICES; AUTHORIZE THE GENERAL MANAGER TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT IN THE AMOUNT OF \$72,542 WITH NMG GEOTECHNICAL, INC. FOR CONSTRUCTION PHASE GEOTECHNICAL SERVICES; AND AUTHORIZE THE GENERAL MANAGER TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT IN THE AMOUNT OF \$110,288 WITH BUSH & ASSOCIATES, INC. FOR CONSTRUCTION PHASE SURVEYING SERVICES FOR THE ORANGE PARK ACRES DOMESTIC WATER TRANSMISSION MAIN, PROJECTS 11407, 11408, 11409, AND 11410.

LIST OF EXHIBITS:

Exhibit "A" – Location Map

Exhibit "B" – Scope of Work – Stantec Consulting Services, Inc.

Exhibit "C" – Construction Phase Geotechnical Services Consultant Selection Matrix

Exhibit "D" – Scope of Work – NMG Geotechnical, Inc.

Exhibit "E" – Construction Phase Surveying Services Consultant Selection Matrix

Exhibit "F" – Scope of Work – Bush & Associates, Inc.

Exhibit "G" – Expenditure Authorizations









**Stantec Consulting Services Inc.**  
19 Technology Drive Suite 200  
Irvine CA 92618-2334  
Tel: (949) 923-6000  
Fax: (949) 923-6121

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**Stantec**

September 8, 2010  
File: 2040469801

Patty Uematsu  
Irvine Ranch Water District  
15600 Sand Canyon Avenue  
Irvine, CA 92618

**Reference: Orange Park Acres Transmission Main Project – Construction Support Services Proposal**

Dear Patty:

According to previous discussions and agreements, we are providing this budget proposal to provide construction support services related to the Orange Park Acres Transmission Main Project for all three bid packages proposed. The proposal is divided and subtotaled into the three bid packages established. The proposed scope of services proposed is described below.

#### 1.0 Package 1 Plans and Specifications

- 1.1 **Bid Period Assistance:** During the bidding period, Stantec will attend a pre-bid meeting and will assist with providing information and clarification of bid documents to prospective bidders and has provided budget to prepare up to two (2) addenda for all prospective bidders, if so requested by the District.
- 1.2 **Conformed Set of Documents:** After opening of bids, Stantec will prepare a conformed set of construction documents and will incorporate any changes/modifications/additions to the construction bid documents. The entire plan set will require re-stationing from Bond Avenue to Cannon Street, as well as some re-stationing in Chapman Avenue. The re-stationing effort will affect nearly half of the plan and profile sheets, several detail sheets as well as adjusting the **pipeline's profile to match the new stationing. Notes and labeling will also need to be modified** accordingly. QA/QC and project management time is included.
- 1.3 **Project Meetings:** Stantec will attend/conduct the pre-construction meeting and will conduct fifty (50) project meetings of two hours each during the construction phase and provide meeting minutes accordingly.
- 1.4 **Contractor's Request for Information:** Stantec will respond to forty (40) Requests for Information (RFI's).
- 1.5 **Minor Plan Revisions:** Stantec has budgeted project management and coordination time in addition to one hundred (100) hours of staff time including CADD, QA/QC, and project management time for deltas and minor plan revisions to construction drawings.
- 1.6 **Site Visits:** Stantec will budget eight (8) site visits of two hours each during construction.
- 1.7 **Shop Drawing Reviews:** Stantec will review and accept up to forty (40) shop drawing submittals. Included in the review process will be review meetings with District staff. Stantec estimates that approximately 50% of the shop drawings will require a second review.

**Reference: Orange Park Acres Transmission Main Project – Construction Support Services Proposal**

- 1.8 Preparation of Record Drawings: Stantec will prepare record drawings on 24" x 36" mylars at construction completion, using Contractor's and District Inspector's red-line mark-ups. Stantec will deliver final record drawing mylars, reissued signed mylars (as needed), and AutoCAD electronic files of the "red line" mark-ups and record drawings on CDs in accordance with the District's "as-build" record drawing process.
- 1.9 Miscellaneous Tasks and Coordination during Construction – At the direction of the District, an optional blanket task has been included to allow for traffic control bidding assistance, renegotiations and/or redesign of the traffic control plans, discussions pertaining to the hours of operation for the project with the City of Orange and the County of Orange, and additional tasks as may be directed by the District.

**2.0 Package 2 Plans and Specifications**

- 2.1 Bid Period Assistance: During the bidding period, Stantec will attend a pre-bid meeting and will assist with providing information and clarification of bid documents to prospective bidders and has provided budget to prepare two (2) addenda for all prospective bidders, if so requested by the District.
- 2.2 Conformed Set of Documents: After opening of bids, Stantec will prepare a conformed set of construction documents and will incorporate any changes/modifications/additions to the construction bid documents.
- 2.3 Project Meetings: Stantec will attend/conduct the pre-construction meeting and will conduct twenty (20) project meetings of two hours each during the construction phase and provide meeting minutes accordingly.
- 2.4 Contractor's Request for Information: Stantec will respond to approximately thirty (30) Requests for Information (RFI's).
- 2.5 Minor Plan Revisions: Stantec has budgeted eighty (80) hours of staff time for minor plan revisions to construction drawings including project management and coordination time.
- 2.6 Site Visits: Stantec will budget five (5) site visits of two hours each during construction.
- 2.7 Shop Drawing Reviews: Stantec will review and accept up to forty (40) shop drawing submittals. Stantec estimates that approximately 50% of the shop drawings will require a second review.
- 2.8 Preparation of Record Drawings: Stantec will prepare record drawings on 24" x 36" mylars at construction completion, using Contractor's and District Inspector's red-line mark-ups. Stantec will deliver final record drawing mylars, reissued signed mylars (as needed), and AutoCAD electronic files of the "red line" mark-ups and record drawings on CDs in accordance with the District's "as-build" record drawing process.

**3.0 Package 3 Plans and Specifications**

- 3.1 Bid Period Assistance: During the bidding period, Stantec will attend a pre-bid meeting and will assist with providing information and clarification of bid documents to prospective bidders and has provided budget to prepare one (1) addendum for all prospective bidders, if so requested by the District.

## Stantec

September 8, 2010  
Page 3 of 3

**Reference: Orange Park Acres Transmission Main Project – Construction Support Services Proposal**

- 3.2 **Conformed Set of Documents:** After opening of bids, Stantec will prepare a conformed set of construction documents and will incorporate any changes/modifications/additions to the construction bid documents.
- 3.3 **Project Meetings:** Stantec will attend/conduct the pre-construction meeting and will conduct four (4) project meetings of two hours each during the construction phase and provide meeting minutes accordingly.
- 3.4 **Contractor's Request for Information:** Stantec will respond to approximately twenty (20) Requests for Information (RFI's).
- 3.5 **Minor Plan Revisions:** Stantec has budgeted sixty (60) hours of staff time for minor plan revisions to construction drawings.
- 3.6 **Site Visits:** Stantec will budget four (4) site visits of two hours each during construction.
- 3.7 **Shop Drawing Reviews:** Stantec will review and accept up to thirty (30) shop drawing submittals. Stantec estimates that approximately 25% of the shop drawings will require a second review.
- 3.8 **Preparation of Record Drawings:** Stantec will prepare record drawings on 24" x 36" mylars at construction completion, using Contractor's and District Inspector's red-line mark-ups. Stantec will deliver final record drawing mylars, reissued signed mylars (as needed), and AutoCAD electronic files of the "red line" mark-ups and record drawings on CDs in accordance with the District's "as-build" record drawing process.

### Budget

The total budget estimated for the above scope of work and requested for authorization at this time is \$223,598.

If you would like to discuss this request or have any questions, please feel free to call either Bob Seeman or myself.

Sincerely,

**STANTEC CONSULTING SERVICES INC.**

Jeff Dunn, P.E.  
Senior Project Manager  
Tel: (949) 923-6974  
Fax: (949) 923-6121  
jeff.dunn@stantec.com

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**Irvine Ranch Water District**  
**Estimated Cost Breakdown of Total Fee**  
**for**  
**Construction Support Services for the OPA Transmission Main Project**



	Hourly Rate	4	10	4	32	96	176	18	\$2,838		TOTAL
<b>1 Package 1 Plans and Specifications</b>	\$170	4	10	4	32	96	176	18	\$2,838		\$2,838
1.1 Construction Support Services for Package 1		6	40	32					\$22,248	\$475	\$22,723
1.1.1 Bid Period Assistance		2	132						\$20,988	\$450	\$21,438
1.1.2 Confirmed Set of Drawings Incl. QA/QC		2	60		4				\$10,266	\$200	\$10,466
1.1.3 Project Meetings (Pre-Const + 50)		24	24		100				\$18,296		\$18,296
1.1.4 Contractor's Request for Information (40)		8	25		33				\$5,335		\$5,335
1.1.5 Minor Plan Revisions		2	12		8				\$12,983	\$500	\$13,483
1.1.6 Site Visits (6)		2	12		8				\$11,704	\$500	\$12,204
1.1.7 Shop Drawing Reviews (40)		2	12		8				\$35,000		\$35,000
1.1.8 Preparation of Record Drawings		68	348	94					\$133,658	\$2,135	\$135,793
1.1.9 Miscellaneous Tasks and Coordination during Construction											
<b>Subtotal Package 1</b>											\$135,793
<b>2 Package 2 Plans and Specifications</b>											
2.1 Construction Support Services for Package 2		6	8	4	4	12	30	30	\$4,108		\$4,108
2.1.1 Bid Period Assistance (2 Addenda)		8	8	6	20				\$4,204	\$500	\$4,704
2.1.2 Confirmed Set of Drawings		40	40						\$6,360	\$200	\$6,560
2.1.3 Project Meetings (20)		40	40						\$6,360		\$6,360
2.1.4 Contractor's Request for Information (30)		8	8		60				\$9,562	\$100	\$9,662
2.1.5 Minor Plan Revisions		21							\$3,394		\$3,394
2.1.6 Site Visits (5)		5	16						\$12,720	\$500	\$13,220
2.1.7 Shop Drawing Reviews (40)		4	8		36				\$5,666	\$1,200	\$6,866
2.1.8 Preparation of Record Drawings		16	206	10					\$52,434	\$2,569	\$55,003
<b>Subtotal Package 2</b>											\$55,003
<b>3 Package 3 Plans and Specifications</b>											
3.1 Construction Support Services for Package 3		4	6	4	8	8	22	22	\$3,034		\$3,034
3.1.1 Bid Period Assistance (1 Addendum)		8	8	6	16				\$3,768	\$300	\$4,068
3.1.2 Confirmed Set of Drawings		10	10						\$1,615	\$25	\$1,640
3.1.3 Project Meetings (4)		16	16						\$2,544		\$2,544
3.1.4 Contractor's Request for Information (20)		6	6		60				\$7,194	\$100	\$7,294
3.1.5 Minor Plan Revisions		4	4						\$1,952		\$1,952
3.1.6 Site Visits (4)		14	14						\$2,228	\$150	\$2,378
3.1.7 Shop Drawing Reviews (30)		4	6		6				\$3,268	\$850	\$4,118
3.1.8 Preparation of Record Drawings		72	74	10					\$35,205	\$1,225	\$36,430
<b>Subtotal Package 3</b>											\$36,430
<b>TOTAL (hours)</b>		75	622	114	528	1339			\$217,748	\$9,850	\$227,598
<b>TOTAL (positions)</b>		\$12,750	\$98,898	\$16,188	\$54,912						
<b>% of total hours</b>		5.6%	46.5%	8.5%	39.4%						100.0%

Senior CAD/GIS Technician \$104

Tony Ong, PE  
Mechanical Design Engineer \$142

Bob Seeman, PE  
Construction Support Services Manager \$159

Jeff Dunn, PE  
Project Manager \$170

Direct Costs / Materials

# Exhibit "C"

## Orange Park Acres Domestic Water Transmission Main Geotechnical Services During Construction Consultant Selection Matrix

	NMG Geotechnical	GMU Geotechnical	Ninyo & Moore
<b>SCOPE OF SERVICES</b>			
<b>Proposed Hours</b>			
Observation and Testing	579	549	1,108
Administration	80	89	-
Special Services	80	80	80
<b>TOTAL HOURS</b>	<b>739</b>	<b>718</b>	<b>1188</b>
<b>FEE</b>			
1. Observation and Field Testing	\$45,162	\$54,900	\$80,884
2. Laboratory Testing	\$8,520	\$5,950	\$5,370
3. Administration			
a. Meetings	\$3,900	\$5,040	\$5,904
b. Technical Support	\$2,240	\$2,600	\$2,460
c. Project Management	\$1,120	\$4,000	\$2,460
4. Final Report	\$4,000	\$3,050	\$2,653
<b>SUBTOTAL - BASE SERVICES</b>	<b>\$64,942</b>	<b>\$75,540</b>	<b>\$99,731</b>
5. Special Services			
a. Field Technician	\$3,120	\$4,000	\$2,920
b. Geologist/Engineer	\$4,480	\$5,200	\$4,920
<b>TOTAL FEE</b>	<b>\$72,542</b>	<b>\$84,740</b>	<b>\$107,571</b>
<b>AVERAGE FEE PER HOUR</b>	<b>\$98.16</b>	<b>\$118.02</b>	<b>\$90.55</b>
Professional Liability Insurance	YES	YES	YES
General Liability Insurance	YES	YES	YES
<b>RANKINGS:</b>	<b>1 - First</b>	<b>2 - Second</b>	<b>3 - Third</b>





# EXHIBIT "D"



August 31, 2010

Project No. 10167-01

To: Irvine Ranch Water District  
15600 Sand Canyon Avenue  
P.O. Box 57000  
Irvine, California 92619

Attention: Ms. Patty Uematsu

Subject: Proposal for Geotechnical Observation and Testing Services during Construction of Orange Park Acres Domestic Water Transmission Main, Project No's. 11407 and 11408, Orange, California

## INTRODUCTION

At your request, NMG Geotechnical, Inc. (NMG) has prepared this proposal for geotechnical observation and testing services during construction of the proposed domestic water transmission main rehabilitation/replacement project, the majority within the city of Orange with a portion in the County of Orange. We understand that the project will consist of the replacement or addition of approximately 26,500 linear feet of 8-inch to 20-inch pipeline from the intersection of Chapman Avenue and Jamboree Road, through the Orange Park Acres neighborhood, to the intersection of Prospect Street and Bond Avenue. Additional lines are proposed that extend to the reservoir on Calle Grande and within the Jons Way neighborhood. Our proposal and cost estimate are based on:

- Site reconnaissance along the proposed route;
- Request for proposal (RFP) dated August 12, 2010;
- Review of the project plans and accompanying project manual;
- Discussions with representatives of IRWD; and,
- Our experience on other projects with IRWD.

The plans reviewed for the preparation of this proposal included Sheets 1 through 64 of 64 sheets, titled "Construction Plans for the Irvine Ranch Water District, Capital Facilities for Orange Park Acres Domestic Water Transmission Main", dated August 2010 and prepared by Stantec Consulting, Inc.

## **OUR APPROACH TO THIS PROJECT**

NMG has considerable experience with IRWD inspectors on similar projects. Therefore, we have tried to take into account the anticipated level of geotechnical and materials testing/inspection services that may be requested by the district's assigned inspector.

On this project, we expect that the contractor may work multiple crews. However, from our experience, the length of each segment that the contractor is able to ready for compaction testing generally takes precedence over the number of crews working. In other words, we believe it will be rare that more than one segment will require geotechnical testing in a given day. We describe the estimated segment lengths for each type of pipe in our assumptions section.

The two masonry walls are not likely to require inspections or testing but we have included a small number of hours and compression testing, just in case it comes up.

We have devoted more time to the deeper backfill items such as the jack and bore pits and for asphalt inspection and testing, which typically should be done on more of a full time basis.

## **PROJECT STAFFING**

The assigned field technician will tentatively be Mr. Sam Floyd, field supervisor will be Mr. Eric Bentley, the engineer will be Mr. Reza Saberi, and the project manager will be Mr. Ted Miyake. Combined, these professionals have considerable experience with IRWD inspectors and project managers on a variety of IRWD projects. They would be available for the duration of the project.

## **PROPOSAL ASSUMPTIONS**

NMG is proposing to provide on-call geotechnical observation and testing services for the subject project. Based on our review of the project, our assumptions for geotechnical observation and testing services include the following:

- Total allowable duration of the project is 455 calendar days (15 months). The project work is divided into eight segments. Allowable time, according to the milestones for completion through Segment 4, is 200 calendar days. This will include all water lines east of and including the Jons Way neighborhood. We understand that the work included in Segment 8 must be performed during the summer break period for the local school.
- We understand that smaller neighborhood streets are allowed full closure, major thoroughfares are required to be open to traffic both ways (at least one lane) and work within Chapman Avenue must be performed at night.
- Approximately 18,455 linear feet of 20-inch domestic water transmission main pipeline. The pipeline will be CML&C steel pipe with welded joints. The trenches will average 8 to 9 feet in depth with portions at intersections, below existing facilities or near the jack and bore pits that are deeper. We assume that backfill of these trenches will be performed in approximately 300 foot sections.

- Approximately 3,580 linear feet of 16-inch domestic water transmission main pipeline. The majority of the pipeline will be CML&C steel pipe with welded joints with portions that will be ductile iron pipe. The trenches will average 8 feet in depth with portions at intersections or below existing facilities that are deeper. We assume that backfill of these trenches will be performed in approximately 300 foot sections.
- Approximately 1,188 linear feet of 12-inch domestic water main pipeline. The majority of the pipeline will be PVC with portions that will be ductile iron pipe. The trenches will average 6 feet in depth. We assume that backfill of these trenches will be performed in approximately 400 foot sections.
- Approximately 3,330 linear feet of 8-inch domestic water main pipeline. The majority of the pipeline will be PVC with portions that will be ductile iron pipe. The trenches will average 5 to 6 feet in depth. We assume that backfill of these trenches will be performed in approximately 500 foot sections.
- Approximately 1,368 linear feet of 16-inch pipeline will be removed and backfilled. Additional abandonments include pipelines that will be replaced with domestic water lines included above and pipelines that will be abandoned in-place and slurry filled.
- Two areas are proposed to be installed with the jack and bore system. One area includes the pipeline across Hewes within the Segment 7 portion of the project. This area will have jack and bore pits to a depth of approximately 22 and 15 feet at the ends. The other area is below the channel on Cannon Street. The bore pits will be approximately 14 feet deep.
- The trenches for the larger pipelines are assumed to be approximately 5 feet wide.
- Miscellaneous pipelines, services and laterals observation and testing will include:
  - Jack and bore pits
  - Lateral and service replacements
  - Connection excavations
  - Pipe removal abandonments
- Miscellaneous appurtenances, facilities and structures requiring observation and testing will include:
  - Curb and gutter replacement subgrade
  - Sidewalk replacement subgrade
  - Slope anchor subgrade
  - Masonry wall foundation subgrade
- Little to no concrete and masonry materials testing for two masonry walls.
- The aggregate base placement and asphalt concrete paving for 26,553 linear feet of trench repair will be observed and tested by NMG. The pavement will extend one foot beyond the trench width on each side and the asphalt concrete section will be one inch thicker than the existing section. We assume that the base course of trench repair paving operations will be performed in 1,500 foot sections (average). Cap paving after grinding and preparation will be performed in sections that will average 5,000 feet.

- We anticipate that field visits will generally be at the direction of, and coordination with, the IRWD project inspector. Field visits will also be coordinated with the contractor based on field needs.
- Observation and testing services will be conducted in conformance with IRWD standards for trench backfills, subgrades and asphalt repair. The testing for the project will be in accordance with ASTM test methods. We assume that both the City and County will defer inspection and testing roles to the District.

## SCOPE OF SERVICES AND COST ESTIMATE

The estimated costs described herein are dependent upon the construction schedule, geotechnical conditions, sequence, and efficiency of the construction contractor(s). The not-to-exceed estimates below are based upon your RFP and our experience working with IRWD inspectors on similar projects.

We propose to perform our services on a time-and-materials basis in accordance with the attached 2009 Professional Fee Schedule. A breakdown of our scope of work and the associated estimate for the cost of our services per the RFP is provided below.

### 1. Observation and Field Testing

20-Inch Domestic Water Pipeline	56 days @ 4 hours/day	\$ 17,472
16-Inch Domestic Water Pipeline	10 days @ 4 hours/day	\$ 3,120
12-Inch Domestic Water Pipeline	3 days @ 4 hours/day	\$ 936
8-Inch Domestic Water Pipeline	6 days @ 4 hours/day	\$ 1,872
16-Inch Pipeline Removal	3 days @ 4 hours/day	\$ 936
Jack and Bore Pit Backfill	5 days @ 8 hours/day	\$ 3,120
Misc. Laterals, Services and Connections	12 days @ 3 hours/day	\$ 2,808
Misc. Concrete Subgrade	6 days @ 3 hours/day	\$ 1,404
Masonry/Concrete Materials Testing	2 days @ 4 hours/day	\$ 624
Aggregate Base Pavement	15 days @ 3 hours/day	\$ 3,510
Asphalt Concrete Pavement	20 days @ 6 hours/day	\$ 9,360

**Subtotal: \$ 45,162**

### 2. Laboratory Testing

Sand Equivalent Test	10 samples @ \$75 per sample	\$ 750
Maximum Density Soils (ASTM)	8 samples @ \$195 per sample	\$ 1,560
Aggregate Base Maximum Density	6 samples @ \$195 per sample	\$ 1,170
Asphalt Concrete Maximum Density	22 samples @ \$220 per sample	\$ 4,840
Concrete or Grout Compression Strength	8 cylinders @ \$25 per cylinder	\$ 200

**Subtotal: \$ 8,520**

3. **Geologist/Engineer/Office Support/Administration**

A.	<b>Meetings (2 hours each @ \$78 per hour)</b> (pre-construction, 15 monthly, 10 additional site meetings)	\$ 3,900
B.	<b>Technical Support</b> Project Engineer (20 hours @ \$112 per hour)	\$ 2,240
C.	Administration (10 hours @ \$112 per hour)	<u>\$ 1,120</u>
	<b>Subtotal:</b>	<b>\$ 7,260</b>

4. **Final Report (3 copies)**

(one for IRWD library and one each for agency and/or city) **Subtotal: \$ 4,000**

**Subtotal, Base Fee: \$ 64,942**

5. **Special Services**

Work under this task will only be performed as requested and authorized by IRWD.

5A.	Field Technician – 10 working days @ 4 hours per day	\$ 3,120
5B.	Geologist/Engineer – 10 working days @ 4 hours per day	\$ 4,480

**Subtotal, Special Services: \$ 7,600**

**Base Fee: \$ 64,942**

**Special Services: \$ 7,600**

**TOTAL FEE: \$ 72,542**

Please note, that our hourly prevailing wage rate of \$78 per hour for field work includes all equipment and vehicle fees. NMG does not charge extra for overtime or night work. We also do not have minimum charges.

If you have any questions regarding this proposal, please contact our office. We appreciate this opportunity to offer our services.

Respectfully submitted,

NMG GEOTECHNICAL, INC.

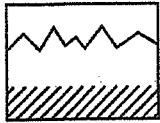


Ted Miyake, RCE 44864  
Principal Engineer

GF/TM

Attachment: 2009 Professional Fee Schedule

Distribution: (2) Addressee  
(1) Mr. Joseph Mc Gehee, IRWD



## 2009 PROFESSIONAL FEE SCHEDULE

### HOURLY RATES BY STAFF CATEGORY

Principal and Associate Engineer/Geologist.....	\$135
Project Engineer/Geologist .....	\$112
Senior Staff Engineer/Geologist.....	\$ 95
Supervisory Technician .....	\$ 95
Staff Engineer/Geologist .....	\$ 85
Senior Project Technician .....	\$ 85
Project Technician.....	\$ 78
Staff Technician.....	\$ 69
CAD Drafter/Technical Illustrator .....	\$ 69
Word Processor.....	\$ 62
Technical Assistant .....	\$ 50

### LABORATORY TESTING

Moisture Content.....	\$ 14	Consolidation .....	\$185
Moisture Content & Density.....	\$ 24	- For time-rate, add \$35/increment	
Atterberg Limits .....	\$135	- For remolded, add \$50/specimen	
Particle-Size Sieve Analysis .....	\$ 85	- For reload, add \$100/cycle	
Finer than No. 200 Sieve.....	\$ 55	Hydroconsolidation/Collapse .....	\$110
Hydrometer Analysis .....	\$ 90	Undisturbed Direct Shear .....	\$170
Maximum Dry Density .....	\$195	Undisturbed Direct Shear – Slow.....	\$275
Maximum Dry Density with Oversize Particle.....	\$230	Remolded Direct Shear .....	\$225
Caltrans 216 Maximum Density .....	\$180	Remolded Direct Shear – Slow.....	\$350
Sand Equivalent .....	\$ 75	Residual Direct Shear .....	\$550
Soluble Sulfate Content.....	\$ 55	R-Value.....	\$220
Expansion Index.....	\$145	Asphalt Maximum Density .....	\$220
Concrete, Mortar or Grout Compression (per cylinder/cube/prism).....	\$ 25	Gunite/Shotcrete Panel Coring & Testing.....	\$100
CMU Grouted Prisms			
- Compression Test ≤8" x 8" x 16" .....	\$ 180		
- Compression Test >8" x 8" x 16".....	\$ 250		

### NOTES

1. No additional charges for field vehicle usage, nuclear gauge, or overtime work.
2. Heavy equipment (i.e. drill rig, backhoe, CPT) charges will be invoiced at cost.
3. Delivery and outside reproduction charges will be invoiced at cost.
4. Outside laboratory test charges will be invoiced at cost.





**Orange Park Acres Domestic Water Transmission Mai.  
 Surveying Services During Construction  
 Consultant Selection Matrix**

	Bush & Associates	Guida	Borchard
			DECLINED TO SUBMIT
<b>SCOPE OF SERVICES</b>			
IRWD Pipelines	384	186	
Office Support / Administration	-	-	
Special Services	80	80	
<b>TOTAL HOURS</b>	<b>464</b>	<b>266</b>	
<b>FEE</b>			
IRWD Pipelines	66,816	42,240	
Office Support / Administration	32,032	15,960	
<b>SUBTOTAL - BASE SERVICES</b>	<b>\$98,848</b>	<b>\$58,200</b>	
Special Services	11,440	16,400	
<b>TOTAL FEE</b>	<b>\$110,288</b>	<b>\$74,600</b>	
<b>AVERAGE FEE PER HOUR</b>	<b>\$237.69</b>	<b>\$280.45</b>	
Professional Liability Insurance	YES	YES	
General Liability Insurance	YES	YES	
<b>RANKINGS:</b>	<b>1 - First</b>	<b>2 - Second</b>	<b>3 - Third</b>



**Bush & Associates Inc.**

---

Land Surveyors

August 30, 2010

Irvine Ranch Water District  
ATTN: Patty Uematsu  
15600 Sand Canyon Avenue  
Irvine, CA 92619

Orange Park Acres Domestic Water Transmission Main, PR 11407 and 11408  
Construction Survey Staking

Bush & Associates, Inc. is pleased to submit this proposal to provide construction surveying services for the subject project in response to your request.

We will provide the following services upon 48 hours notice in advance of need:

- A. All construction staking will be performed in accordance with the plans and specifications for this project. This includes vertical control where necessary.
- B. Provide three sets of cut sheets to District inspector on a regular basis during construction. Indicate cut elevation on stakes as directed by District inspector.
- C. Attend a preconstruction meeting as requested.
- D. Produce monthly billings in a form acceptable to the District. This item is to include separate billings for any restaking chargeable to the prime contractor.
- E. Provide a chronological set of all accomplished field surveys to the District at the end of construction.

Bush & Associates, Inc. will provide the services noted on the attached "Work Delineation and Fee Proposal" form.

Irvine Ranch Water District  
August 30, 2010  
Page Two

All work will be billed at the following rates:

<b>Hourly Rates</b>	
Licensed Surveyor	\$112.00
2-Party Survey Crew	\$174.00
3-Party Survey Crew	\$214.00

Bush & Associates, Inc. is a general land survey firm providing services to both public and private sector clientele. We were established in 1983 and have extensive experience in pipeline and reservoir surveying, including projects for Irvine Ranch Water District, Santa Margarita Water District, Orange County Water District and El Toro Water District among numerous others.

David A. Bush, LS, will provide supervision of the field crew assigned to the project. The project is estimated to take 48 working days for staking, spread out over the entire construction period, and we anticipate no scheduling problem in providing service in a timely manner.

If you have any questions, or I can be of any further assistance, please call.

BUSH & ASSOCIATES, INC.



David A. Bush, LS  
President

**Proposal Format and Requested Information**  
**Orange Park Acres Domestic**  
**Water Transmission Main, PR 11407 and 11408**

Submitted by: Bush and Associates, Inc. *D & A Blm 8-30-10*  
 David Bush, President

**WORK DELINEATION AND FEE PROPOSAL**

(state any assumptions for contractors production rates, number of days/hours and cost for each of the following tasks, include appurtenances with the main task they are associated)

**1. IRWD Pipelines**

(list identifiable items, add additional items as necessary, and total number of site visits)

Potholing 20/16/12" DW Pipeline	- 5.0 work days at 8 hours days.	Subtotal \$ 6960
Stake 20/16/12" DW Pipeline	- 21.0 work days at 8 hours days.	Subtotal \$29232
Potholing 8/6" DW Pipeline	- 2.0 work days at 8 hours days.	Subtotal \$ 2784
Stake 8/6" DW Pipeline	- 4.0 work days at 8 hours days.	Subtotal \$ 5568
Stake laterals and Bore & Jack pit	- 5.0 work days at 8 hours days.	Subtotal \$ 6960
Stake misc. facilities and structures	- 4.0 work days at 8 hours days.	Subtotal \$ 5568
Stake PRV's	- 2.0 work days at 8 hours days.	Subtotal \$ 2784
Establish survey control	- 5.0 work days at 8 hours days.	Subtotal \$ 6960
Site Visits	70	

**2. Office Support / Administration**

A. Meetings (pre-construction)	Subtotal \$ 224
B. Technical Support – Office Calculations	Subtotal \$24300
C. Administration	Subtotal \$ 7508

**Base Services \$98,848**

**3. Special Services**

(work under this task will only be performed as needed and requested by IRWD)  
 (provide a budget for the following stipulated tasks and time allowances)

A. Field Crew – 10 working days at 4 hours day	Subtotal \$ 6960
B. Surveyor – 10 working days at 4 hours day	Subtotal \$ 4480

**Subtotal Special Services \$11,440**

<b>BASE SERVICES</b>	<b>\$ 98,848</b>
<b>SPECIAL SERVICES</b>	<b>\$ 11,440</b>
<b>TOTAL FEE</b>	<b>\$110,288</b>



# IRVINE RANCH WATER DISTRICT

EXHIBIT "G"

## Expenditure Authorization

Project Name: OPA - TRANSMISSION MAIN - PACKAGE 1 (OPA SHARE)

Project No: 11407 EA No: 5

ID Split: Miscellaneous

Project Manager: UEMATSU, PATRICIA

Project Engineer: MCGEHEE, JOSEPH

Request Date: October 26, 2010

### Improvement District (ID) Allocations

ID No.	Allocation %	Source of Funds
156	100.0	CAPITAL FUND
<b>Total</b>	<b>100.0%</b>	

### Summary of Direct Cost Authorizations

Previously Approved EA Requests:	\$336,700
This Request:	\$22,000
<b>Total EA Requests:</b>	<b>\$358,700</b>
Previously Approved Budget:	\$3,635,200
Budget Adjustment Requested this EA:	(\$3,078,600)
<b>Updated Budget:</b>	<b>\$556,600</b>
<b>Budget Remaining After This EA</b>	<b>\$197,900</b>

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	12/10
ENGINEERING - PLANNING OUTSIDE	0	10,000	10,000	0	15,000	15,000	11/09	12/10
ENGINEERING DESIGN - IRWD	0	30,000	30,000	0	30,000	30,000	11/08	12/10
ENGINEERING DESIGN - OUTSIDE	20,000	200,000	220,000	20,000	200,000	220,000	11/08	12/10
DESIGN STAFF FIELD SUPPORT	0	0	0	0	10,000	10,000	4/10	11/11
ENGINEERING - CA&I IRWD	0	2,500	2,500	0	66,000	66,000	1/10	11/11
ENGINEERING - CA&I OUTSIDE	0	5,000	5,000	0	88,000	88,000	1/10	11/11
CONSTRUCTION FIELD SUPPORT	0	1,500	1,500	0	20,000	20,000	4/10	11/11
CONSTRUCTION	0	45,000	45,000	(2,818,700)	2,863,700	45,000	4/10	11/11
LEGAL	0	2,000	2,000	0	2,000	2,000	4/10	11/11
Contingency - 10.00% Subtotal	\$2,000	\$30,700	\$32,700	(\$279,900)	\$330,500	\$50,600		
<b>Subtotal (Direct Costs)</b>	<b>\$22,000</b>	<b>\$336,700</b>	<b>\$358,700</b>	<b>(\$3,078,600)</b>	<b>\$3,635,200</b>	<b>\$556,600</b>		
Estimated G/A - 195.00% of direct labor*	\$0	\$85,800	\$85,800	\$0	\$265,200	\$265,200		
<b>Total</b>	<b>\$22,000</b>	<b>\$422,500</b>	<b>\$444,500</b>	<b>(\$3,078,600)</b>	<b>\$3,900,400</b>	<b>\$821,800</b>		
Direct Labor	\$0	\$44,000	\$44,000	\$0	\$136,000	\$136,000		

\*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:

 10/26/10

Department Director:

 10/26/10

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 \$839,000. The above-captioned project is further described in the attached staff report and additional documents, if any, which are hereby incorporated by reference. The official intent to reimburse costs of the above-captioned project is made under Treasury Regulation Section 1.150-2.

# IRVINE RANCH WATER DISTRICT

## Expenditure Authorization

Project Name: EAST ORANGE REGIONAL TRANSMISSION MAIN

Project No: 11408 EA No: 6

ID Split: Miscellaneous

Project Manager: UEMATSU, PATRICIA

Project Engineer: MCGEHEE, JOSEPH

Request Date: October 26, 2010

### 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**
<b>Total</b>	<b>100.0%</b>	

### Summary of Direct Cost Authorizations

Previously Approved EA Requests:	\$8,018,400
This Request:	\$855,700
<b>Total EA Requests:</b>	<b>\$8,874,100</b>
Previously Approved Budget:	\$10,713,900
Budget Adjustment Requested this EA:	\$0
<b>Updated Budget:</b>	<b>\$10,713,900</b>
<b>Budget Remaining After This EA</b>	<b>\$1,839,800</b>

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	0	10,000	10,000	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	100,000	300,000	400,000	0	443,600	443,600	11/08	7/10
DESIGN STAFF FIELD SUPPORT	10,000	0	10,000	0	10,000	10,000	4/10	11/11
ENGINEERING - CA&I IRWD	245,000	5,000	250,000	52,000	198,000	250,000	4/10	11/11
ENGINEERING - CA&I OUTSIDE	406,500	7,500	414,000	150,000	264,000	414,000	4/10	11/11
CONSTRUCTION FIELD SUPPORT	16,500	3,500	20,000	0	20,000	20,000	4/10	11/11
CONSTRUCTION	0	6,921,400	6,921,400	(202,000)	8,747,300	8,545,300	4/10	11/11
LEGAL	0	2,000	2,000	0	2,000	2,000	4/10	11/11
LAND	0	0	0	0	0	0	10/10	11/11
Contingency - 10.00% Subtotal	\$77,700	\$729,000	\$806,700	\$0	\$974,000	\$974,000		
<b>Subtotal (Direct Costs)</b>	<b>\$855,700</b>	<b>\$8,018,400</b>	<b>\$8,874,100</b>	<b>\$0</b>	<b>\$10,713,900</b>	<b>\$10,713,900</b>		
Estimated G/A - 195.00% of direct labor*	\$529,400	\$94,600	\$624,000	\$101,400	\$522,600	\$624,000		
<b>Total</b>	<b>\$1,385,100</b>	<b>\$8,113,000</b>	<b>\$9,498,100</b>	<b>\$101,400</b>	<b>\$11,236,500</b>	<b>\$11,337,900</b>		
Direct Labor	\$271,500	\$48,500	\$320,000	\$52,000	\$268,000	\$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:

 10/26/10

Department Director:

 10/26/10

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 \$11,565,000. The above-captioned project is further described in the attached staff report and additional documents, if any, which are hereby incorporated by reference. The intent to reimburse costs of the above-captioned project is made under Treasury Regulation Section 1.150-2.



# IRVINE RANCH WATER DISTRICT

## Expenditure Authorization

Project Name: OPA - MECHANICAL - PACKAGE 2 (OPA SHARE)

Project No: 11409 EA No: 4

ID Split: Miscellaneous

### Improvement District (ID) Allocations

Project Manager: UEMATSU, PATRICIA

Project Engineer: MCGEHEE, JOSEPH

Request Date: October 26, 2010

### ID No. Allocation % Source of Funds

156	100.0	CAPITAL FUND
<b>Total</b>	<b>100.0%</b>	

### Summary of Direct Cost Authorizations

Previously Approved EA Requests:	\$183,700
This Request:	\$42,000
<b>Total EA Requests:</b>	<b>\$225,700</b>
Previously Approved Budget:	\$1,132,600
Budget Adjustment Requested this EA:	\$0
<b>Updated Budget:</b>	<b>\$1,132,600</b>
<b>Budget Remaining After This EA</b>	<b>\$906,900</b>

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	5,000	5,000	10,000	11/09	7/10
ENGINEERING - PLANNING OUTSIDE	0	10,000	10,000	0	10,000	10,000	11/09	7/10
ENGINEERING DESIGN - IRWD	0	20,000	20,000	5,000	15,000	20,000	11/08	7/10
ENGINEERING DESIGN - OUTSIDE	38,200	127,000	165,200	120,000	45,200	165,200	11/08	7/10
DESIGN STAFF FIELD SUPPORT	0	0	0	0	5,000	5,000	4/10	7/11
ENGINEERING - CA&I IRWD	0	0	0	0	20,200	20,200	4/10	7/11
ENGINEERING - CA&I OUTSIDE	0	0	0	0	26,900	26,900	4/10	7/11
CONSTRUCTION FIELD SUPPORT	0	0	0	0	10,000	10,000	4/10	7/11
CONSTRUCTION	0	0	0	(130,000)	890,400	760,400	4/10	7/11
LEGAL	0	0	0	0	2,000	2,000	4/10	7/11
Contingency - 10.00% Subtotal	\$3,800	\$16,700	\$20,500	\$0	\$102,900	\$102,900		
<b>Subtotal (Direct Costs)</b>	<b>\$42,000</b>	<b>\$183,700</b>	<b>\$225,700</b>	<b>\$0</b>	<b>\$1,132,600</b>	<b>\$1,132,600</b>		
Estimated G/A - 195.00% of direct labor*	\$3,000	\$55,500	\$58,500	\$19,400	\$107,800	\$127,200		
<b>Total</b>	<b>\$45,000</b>	<b>\$239,200</b>	<b>\$284,200</b>	<b>\$19,400</b>	<b>\$1,240,400</b>	<b>\$1,259,800</b>		
Direct Labor	\$0	\$30,000	\$30,000	\$10,000	\$55,200	\$65,200		

\*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: \_\_\_\_\_ 10/26/10

Department Director: Kevin L. Burton 10/26/10

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 \$1,285,000. The above-captioned project is further described in the attached staff report and additional documents, if any, which are hereby incorporated by reference. The official intent to reimburse costs of the above-captioned project is made under Treasury Regulation Section 1.150-2

# IRVINE RANCH WATER DISTRICT

## Expenditure Authorization

Project Name: OPA - FINAL PRESSURE - PACKAGE 3 (OPA SHARE)

Project No: 11410 EA No: 4

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

Improvement District (ID) Allocations

Project Manager: UEMATSU, PATRICIA

Project Engineer: MCGEHEE, JOSEPH

Request Date: October 26, 2010

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**
<b>Total</b>	<b>100.0%</b>	

### Summary of Direct Cost Authorizations

Previously Approved EA Requests:	\$180,400
This Request:	\$111,600
<b>Total EA Requests:</b>	<b>\$292,000</b>
Previously Approved Budget:	\$886,600
Budget Adjustment Requested this EA:	\$0
<b>Updated Budget:</b>	<b>\$886,600</b>
<b>Budget Remaining After This EA</b>	<b>\$594,600</b>

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	5,000	5,000	10,000	11/09	9/10
ENGINEERING - PLANNING OUTSIDE	0	10,000	10,000	0	10,000	10,000	11/09	9/10
ENGINEERING DESIGN - IRWD	0	20,000	20,000	5,000	15,000	20,000	11/08	9/10
ENGINEERING DESIGN - OUTSIDE	32,700	124,000	156,700	120,000	36,700	156,700	11/08	9/10
DESIGN STAFF FIELD SUPPORT	5,000	0	5,000	0	5,000	5,000	4/10	7/11
ENGINEERING - CA&I IRWD	16,400	0	16,400	0	16,400	16,400	4/10	7/11
ENGINEERING - CA&I OUTSIDE	0	0	0	0	21,800	21,800	4/10	7/11
CONSTRUCTION FIELD SUPPORT	10,000	0	10,000	0	10,000	10,000	4/10	7/11
CONSTRUCTION	50,000	0	50,000	(129,900)	722,400	592,500	4/10	7/11
LEGAL	0	0	0	0	2,000	2,000	4/10	7/11
Contingency - 5.00% Subtotal	(\$2,500)	\$16,400	\$13,900	(\$100)	\$42,300	\$42,200		
<b>Subtotal (Direct Costs)</b>	<b>\$111,600</b>	<b>\$180,400</b>	<b>\$292,000</b>	<b>\$0</b>	<b>\$886,600</b>	<b>\$886,600</b>		
Estimated G/A - 195.00% of direct labor*	\$64,300	\$55,500	\$119,800	\$19,400	\$100,400	\$119,800		
<b>Total</b>	<b>\$175,900</b>	<b>\$235,900</b>	<b>\$411,800</b>	<b>\$19,400</b>	<b>\$987,000</b>	<b>\$1,006,400</b>		
Direct Labor	\$31,400	\$30,000	\$61,400	\$10,000	\$51,400	\$61,400		

\*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:

*[Signature]*

10/26/10

Department Director:

*[Signature]*

10/26/10

Finance:

Board/General Manager:

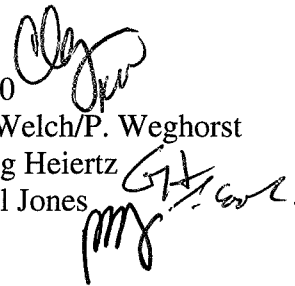
\*\* IRWD hereby declares that it reasonably expects those expenditures marked with two asterisks to be reimbursed with proceeds of future debt to be incurred by IRWD in a maximum principal amount of \$1,027,000. The above-captioned project is further described in the attached staff report and additional documents, if any, which are hereby incorporated by reference. The project is made under Treasury Regulation Section 1.150-2.

November 22, 2010

Prepared By: K. Welch/P. Weghorst

Submitted By: Greg Heiertz

Approved By: Paul Jones



## ACTION CALENDAR

### LONG-TERM EXCHANGE PROGRAM AGREEMENT WITH BUENA VISTA WATER STORAGE DISTRICT

#### SUMMARY:

The District has entered into a Pilot Exchange Program (Pilot) with Buena Vista Water Storage District (BVWSD) that allows BVWSD to store a portion of its high-flow Kern River water at the Strand Ranch Integrated Banking Project (Strand Ranch Water Bank) in exchange for allocating half of the water to the District. Staff will present an overview of a Long-term Exchange Program Agreement that has been prepared jointly between staff, legal counsel and BVWSD. Staff recommends the Board authorize the General Manager to execute the proposed Agreement for a negotiated term length of between 15 and 28 years.

#### BACKGROUND:

BVWSD holds both the right to use of State Water Project (SWP) Table A water and pre-1914 water rights. These pre-1914 water rights give BVWSD an average annual entitlement of 158,000 AF of Kern River water. BVWSD is allowed to change the point of use of its high-flow Kern River water without the approval of the State Water Resources Control Board. The California Water Code, Section 1706, allows BVWSD to change the point of diversion, place of use, or purpose of use if others are not injured by such changes.

#### BVWSD's Water Management Program:

In December 2009, BVWSD certified a Final Environmental Impact Report (BVWSD FEIR) for the Buena Vista Water Management Program. The BVWSD EIR includes a Water Exchange Project component for which BVWSD is seeking partnerships that can assist in storing up to 100,000 AF of its high-flow Kern River supplies. Through unbalanced exchanges, BVWSD would deliver a portion of its surplus high-flow Kern River supplies to entities with water banking storage facilities. These entities would later return to BVWSD an unbalanced quantity of regulated water back to BVWSD. These partnerships would be formed through exchange program agreements.

#### Pilot Exchange Program:

On June 14, 2010, the Board approved a one-year Pilot Exchange Program (Pilot Program) with BVWSD that allows BVWSD to store up to 5,000 AF of high-flow Kern River at the Strand Ranch Water Bank in exchange for at least fifty percent of the water being allocated to Irvine Ranch Water District (IRWD). On August 4, 2010, the Committee authorized the General Manager to execute an amendment to the Pilot Program agreement that allows Buena Vista Water Storage District to increase the amount of water to be delivered from 5,000 acre-feet to 10,000 acre-feet. As a result of this amendment, BVWSD will be delivering 9,243 AF of water by the end of December 2010. The recharge of this water is in progress at the Strand Ranch Water Bank.

Previously Approved Exchange Program Terms:

The terms for a Long-Term Exchange Program were negotiated in advance of execution of the Pilot Program agreement and were presented to the Board on June 14, 2010. The term sheet is provided as Exhibit "A". The terms are summarized as follows:

- BVWSD would deliver up to 17,500 AFY (100 cfs) of Exchange Water to the Strand Ranch;
- IRWD would provide Return Water up to 6,667 AFY (40 cfs) to BVWSD;
- BVWSD and IRWD long-term program would have a maximum cumulative storage balance of 40,000 AF (20,000 AF for BVWSD and 20,000 AF for IRWD);
- BVWSD and IRWD would share equally in the banking losses (11 to 15 percent);
- BVWSD would absorb all Operation, Maintenance, Power and Replacement (OMP&R) costs and duties to deliver Exchange Water to IRWD;
- IRWD would absorb all OMP&R costs and duties to deliver return water to BVWSD;
- IRWD would return one-half of the exchanged water less one-half of any losses back to BVWSD (Return Water) by the end of the 4th year after the associated recharge event. The other one-half of the Exchange Water less one-half of any losses would be transferred to IRWD. The Return Water to BVWSD could remain in storage beyond the end of the 4th year in exchange for a greater percent being transferred to IRWD as compensation for the additional storage benefits in accordance with the following table:

<b>Year Following Recharge Event</b>	<b>Percent Transferred to IRWD*</b>	<b>Percent Returned to BVWSD if Returned During or Before the Indicated Year*</b>
1	50	50
2	50	50
3	50	50
4	50	50
5	60	40
6	70	30
7	80	20
8	90	10
9	100	0

\* All amounts shown exclude banking losses per the Strand Ranch project Memorandum of Understanding (11-15%) which are divided equally among IRWD and BVWSD.

- IRWD would compensate BVWSD for any water transferred from BVWSD to IRWD in excess of 50% per the table at BVWSD's then current SWP Table Variable Operations, Maintenance, Power and Replacement unit cost rate for water which is currently estimated at \$23 per AF; and
- The term length of the agreement would be 15 years.

Additional Exchange Program Terms:

Staff has negotiated with BVWSD additional terms to be incorporated into the agreement for the Long-term Exchange Program. These additional terms are as follows:

- Upon mutual agreement of the parties, additional storage, recharge and recovery capacity can be dedicated to the Exchange Program through IRWD's decision to make available other water banking facilities that it holds through ownership or participation rights; and
- IRWD has the right to reduce storage capacity, recharge and/or recovery capacity dedicated to the Exchange Program if BVWSD fails to exercise its rights to recharge water in a reasonable manner.

Term Length Extension:

The term length of the agreement has been negotiated with BVWSD and as described above is set at 15 years. Staff recommends that the Board authorize staff to negotiate (prior to execution of the Long-Term Program Agreement) an increase in the term length for up to 28 years consistent with the time remaining in the Rosedale-Rio Bravo Water Storage District and IRWD Water Banking and Exchange Program Agreement (Rosedale Agreement). The Rosedale Agreement will terminate on January 11, 2039.

Long-term Exchange Program Agreement:

An agreement for the Long-Term Exchange Program has been jointly developed between BVWSD, staff and legal counsel. This agreement is provided as Exhibit "B". The agreement incorporates the terms provided in Exhibit "A" plus the additional terms described above. The term length of the agreement will be adjusted beyond 15 years consistent with successful negotiations with BVWSD. Staff recommends that the Board authorize the General Manager to execute the Long-Term Exchange Program Agreement.

FISCAL IMPACTS:

The total cost of IRWD's share of the water under the program is currently estimated to range from \$7 to \$63 per acre-foot depending on whether or not BVWSD's share of the water is returned by exchange or by groundwater extraction. IRWD would also bear the cost of recovery of its 50% share of water. If after year four, BVWSD has not recovered water, IRWD shall compensate BVWSD for any water transferred from BVWSD to IRWD in excess of 50% per the

table above at BVWSD's then current SWP Table Variable Operations, Maintenance, Power and Replacement unit cost rate for water. The current estimated cost of the additional water is approximately \$23 per acre-foot.

ENVIRONMENTAL COMPLIANCE:

A Final Environmental Impact Report (Strand Ranch FEIR) for the Strand Ranch Integrated Water Banking Project has been prepared, certified and the project approved 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. The banking of the BVWSD high-flow Kern River water available from their pre-1914 water rights is consistent with the sources water evaluated in the Strand Ranch FEIR. The Strand Ranch FEIR addressed the recovery and delivery of such water from the bank to IRWD's service area. A Final EIR for the Buena Vista Water Management Program has been prepared, certified, and the project approved in compliance with the 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. The BVWSD FEIR covers the delivery of BVWSD high-flow Kern River water to water banking facilities such as the Strand Ranch Integrated Water Banking Project and including Rosedale-Rio Bravo Water Storage District facilities.

COMMITTEE STATUS:

This item was reviewed at the Water Banking Ad Hoc Committee on November 16, 2010.

RECOMMENDATION:

**THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXECUTE THE LONG-TERM WATER EXCHANGE PROGRAM AGREEMENT WITH BVWSD, SUBJECT TO NON-SUBSTANTIVE CHANGES, WITH A NEGOTIATED TERM LENGTH OF A MINIMUM OF FIFTEEN YEARS AND NOT TO EXCEED TWENTY-EIGHT YEARS.**

EXHIBITS:

Exhibit "A" – Buena Vista Water Storage District / Irvine Water District Summary of Proposed Program Terms

Exhibit "B" – Agreement for Water Acquisition by Irvine Ranch Water District from Buena Vista Water Storage District

# Exhibit “A”

## **BUENA VISTA WATER STORAGE DISTRICT IRVINE RANCH WATER DISTRICT Summary of Proposed Program Terms**

### **GENERAL TERMS**

- Entities:** Irvine Ranch Water District (the “IRWD”); Buena Vista Water Storage District (the “BVWSD”)
- Description:** The IRWD seeks to enter into an Exchange Project described within the BVWSD Water Management Program and as described in this Summary of Proposed Terms (“Term Sheet”) from BVWSD on a long-term basis pursuant to a Program Agreement (as defined below).
- Effective Date:** July 1, 2010.
- Term:** 15 years from the Effective Date terminating on June 30, 2025.
- IRWD’s Strand Ranch:** The IRWD Strand Ranch Water Banking Project (Water Bank) is owned by IRWD and operated by Rosedale-Rio Bravo Water Storage District (Rosedale). IRWD’s holds the first priority rights to use of the Strand Ranch recharge facilities except for when the Kern River Watermaster offers water to all takers willing to sign a notice/order or the Kern River Watermaster offers Kern River water to the California Aqueduct / Kern River Intertie. Under such conditions, Rosedale has first priority right to the use of the recharge facilities. IRWD holds first priority rights to use of the Strand Ranch Recovery facilities. IRWD’s water banking capacity limitations are as follows:
- Recharge Capacity: About 100 cfs and 17,500 acre-feet per year
  - Recharge Area: 502 acres
  - Recovery Capacity: About 40 cfs and 17,500 acre-feet per year
  - Storage Capacity: 50,000 acre-feet

Cross Valley Canal Turnouts: 200 cfs

- Non-Binding Effect:** This Term Sheet is intended to be a non-binding statement of the terms of the proposed transaction. It is subject to the negotiation, execution and delivery of the Program Agreements by IRWD and BVWSD not inconsistent with the basic terms and conditions set forth herein (“Program Agreements”). Full execution of this Term Sheet does not create a binding agreement between IRWD and BVWSD; that will occur only upon the execution and delivery of the Program Agreements. However, BVWSD and IRWD may by separate letter agreement, enter into a one year pilot program consistent with the terms contained within this document.
- Representations:** BVWSD and IRWD will provide usual and customary representations and warranties including: 1) title to Exchange Water; 2) the adequacy of the Exchange Water; 3) authority to transfer Exchange Water pursuant to the Exchange Agreement.
- General Expenses:** Each party shall be responsible for its own fees and expenses arising out of the negotiation and execution of agreements related to this transaction, obtaining necessary approvals, and the like.
- CEQA Compliance:** Both parties shall comply with CEQA and cooperate with one another with respect to CEQA compliance for the proposed Exchange Project. BVWSD was the lead agency with respect to CEQA compliance for its Water Management Program, which included the Water Exchange Project, and adopted a Final EIR on January 12, 2010. IRWD shall be solely responsible for all fees and costs associated with future or additional CEQA compliance regarding its participation in the Exchange Project, whether incurred by IRWD or BVWSD, including litigation expenses if any.



**Permit Costs:** IRWD shall be responsible for any and all regulatory and permitting fees and costs associated with the water transfer and transportation of water supplies.

**Water Rights:** It is expressly agreed, understood, and acknowledged by IRWD that any existing or future sale or transfer of water to it by BVWSD shall not result in or be considered a sale or transfer of BVWSD's Kern River water rights(s) or any of BVWSD's other water right(s), and notwithstanding anything to the contrary contained within this Term Sheet, by executing this Term Sheet, IRWD expressly covenants, represents, and warrants that it shall not at any time make any claim of any type or character that is inconsistent with, contrary to, or adverse to BVWSD's existing or claimed Kern River Water Rights or any of BVWSD's other water right(s).

**Program Agreement:** Contract language to be incorporated into the final Program Agreement.

### **EXCHANGE PROJECT TERMS**

**Source of Water:** BVWSD will supply water (Exchange Water) to IRWD from the Water Exchange Project component of the BVWSD Water Management Program high-flow supplies available to BVWSD.

**Quantity:** Up to 17,500 acre-feet water in any given year, in BVWSD's discretion, with a maximum cumulative account balance of 40,000 acre-feet at any one time being available to the Exchange Project. Although not intended as a project commitment, BVWSD presently anticipates water will be available for delivery to IRWD when the hydrology of the Kern River for the April-July runoff is at 125% of normal or higher. IRWD will dedicate 40,000 acre-feet of storage capacity within the Water Bank to the Exchange Project with 20,000 acre-feet being dedicated to storing water to be returned to BVWSD and 20,000 acre-feet being dedicated for

storage of the water transferred to IRWD. The remaining 10,000 acre-feet of storage capacity in the Water Bank would be reserved for IRWD's use in its other programs.

Quality: (i) If and to the extent that either party delivers water to and into the California Aqueduct by exchange (See Delivery Point, priority i below), the quality of water will be as noted in item ii below and the parties agree to accept the same without further treatment or improvement by the other party.

(ii) It is understood that the quality of water meets the water quality standards established by DWR for pump-in to the California Aqueduct as of the date of this Agreement.

Availability: The Exchange Water is available as per Delivery Schedule below and upon completion of environmental review, permits, and facilities for the programs contemplated by this agreement. The availability of Exchange Water will be determined in BVWSD's sole discretion.

Delivery Point/Method: BVWSD will deliver Kern River water to the IRWD point of delivery (IRWD POD) which will be the Strand Ranch Turnouts on the Cross Valley Canal or other Rosedale-Rio Bravo Water Storage District diversion locations, or thereabouts and IRWD will deliver water to the BVWSD point of delivery (BVWSD POD) which will be Check 28 of the California Aqueduct or thereabouts. Water that IRWD delivers will occur by either (i) an exchange of water for State Water Project ("SWP" herein) water already in the California Aqueduct, or (ii) recovery of water from Water Bank wells with subsequent delivery through the Cross Valley Canal to the California Aqueduct, or (iii) other source(s) available and acceptable to the Parties.

**Delivery Schedule:** BVWSD may deliver up to 17,500 acre-feet of Exchange Water in any given year when favorable water supply conditions exist such that BVWSD has determined that it has high-flow water available for the program. IRWD and BVWSD shall agree to a delivery schedule in a quantity of approximately 4,375 acre-feet per month, or as otherwise agreed.

IRWD shall provide Return Water at time when requested by BVWSD at a rate of no more than 6,667 acre-feet in any given year. IRWD and BVWSD shall agree to a delivery schedule in a quantity of approximately 1,667 acre-feet per month.

**Consideration:** IRWD shall remit one-half of the exchanged supply less one-half of any losses back to BVWSD (Return Water) by the end of the 4th year after the associated recharge event. The other one-half of the water less one-half of any losses would be deemed transferred to IRWD. Water to be remitted back to BVWSD could remain in storage beyond the end of the 4th year in exchange for a greater percent being transferred to IRWD as compensation for the additional storage benefits in accordance with the following table:

<b>Year Following Recharge Event</b>	<b>Percent Transferred to IRWD</b>	<b>Percent Returned to BVWSD if Returned During or Before the Indicated Year</b>
1	50	50
2	50	50
3	50	50
4	50	50
5	60	40
6	70	30
7	80	20
8	90	10
9	100	0

In addition to providing the additional storage benefits, IRWD shall also compensate BVWSD for any water transferred from BVWSD to IRWD in excess of 50% per the table; IRWD shall compensate BVWSD for this water at BVWSD's then current SWP Table Variable Operations, Maintenance, Power and Replacement unit cost rate for water.

Facility Construction: BVWSD shall construct all necessary facilities necessary to deliver Exchange Water to the IRWD POD and likewise IRWD shall construct all necessary facilities to deliver Return Water to the BVWSD POD.

Facility OMP&R: BVWSD shall assume all OMP&R duties of all facilities necessary to deliver Exchange Water to IRWD POD and likewise IRWD shall assume all necessary OMP&R duties to deliver Return Water to BVWSD POD.

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(Signature) (Date)

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(Signature) (Date)

# EXHIBIT "B"

11-11-2010

## AGREEMENT FOR WATER ACQUISITION BY IRVINE RANCH WATER DISTRICT FROM BUENA VISTA WATER MANAGEMENT PROGRAM

THIS AGREEMENT ("Agreement") is made and entered into as of the Effective Date by and between IRVINE RANCH WATER DISTRICT ("IRWD"), and the BUENA VISTA WATER STORAGE DISTRICT ("BV"). BV and IRWD are sometimes referred to individually as a "Party" and collectively as the "Parties."

### INTRODUCTION

BV will operate a project under the BV Water Management Program – Water Exchange Project. This Agreement sets forth the terms and conditions for IRWD to participate in the availability of water made available through the BV Water Management Program – Water Exchange Project.

### DEFINITIONS

1. **AF, AFY:** Acre-feet, or acre-feet of water per year.
2. **CFS:** Cubic feet per second.
3. **CVC:** Cross Valley Canal
4. **BV Exchange Water:** Water provided to IRWD pursuant to the BV Water Management Program – Water Exchange Project and this Agreement.
5. **IRWD Return Water:** Water returned to BV from the Strand Ranch Integrated Banking Project and pursuant to this Agreement.
6. **POD:** Point of Delivery.
7. **CEQA:** California Environmental Quality Act and its implementing guidelines, as presently existing and any amendments thereto.
8. **OMP&R:** operation, maintenance, power and repair

### RECITALS

1. BV is a public agency organized in accordance with California Water Storage District Law (Division 14, commencing with Section 39000, of the California Water Code).

11-11-2010

2. IRWD is a public agency organized in accordance with California Water District Law (Division 13, commencing with Section 34000, of the California Water Code).
3. BV desires to operate its BV Water Management Program – Water Exchange Project to develop more regulated water supplies.
4. IRWD desires to participate in the availability of water pursuant to the BV Water Management Program – Water Exchange Project by using the Strand Ranch Integrated Banking Project to accept and bank BV Exchange Water.
5. BV is authorized to sell, distribute, and otherwise dispose of water not necessary for the uses and purposes of the District (Water Code Section 43001).
6. BV is the owner of the BV Exchange Water and has the right to divert, transport, and transfer such waters to IRWD pursuant to the terms as set forth in this Agreement as described in the terms and conditions set forth herein.
7. IRWD has entered into an agreement with the Rosedale-Rio Bravo Water Storage District (“RRBWSD”) for the development and operation of a water banking project (the “Integrated Banking Project”), consisting of recharge, storage and recovery facilities that are located on its property in Kern County known as “Strand Ranch” and on other property and integrated into RRBWSD’s water banking program, thereby allowing for the use of such recharge, storage and recovery facilities, together with available RRBWSD facilities, to provide IRWD with a means for acquiring and regulating, through basin storage, water supplies. IRWD’s contemplated sources of water for banking in the Integrated Banking Project include State Water Project water and non-State Water Project water, such as high-flow Kern River Water and other exportable supplies.

NOW, THEREFORE, IN CONSIDERATION of the following obligations, benefits, and the mutual promises of the Parties as set forth herein, it is agreed as follows:

## **AGREEMENT**

### **1. General Description of Project and Obligations.**

- A. BV Water Management Program.** The BV Water Management Program (Program) consists of four components (projects) that are designed to more effectively and beneficially manage BV’s water resources and facilities. These four components, the Groundwater Recharge and Recovery Project, the Water Exchange Project, the Conservation Easement Water Acquisition and Management Project, and the Brackish Groundwater Remediation Project, are discussed in detail the Final Environmental Impact Report (EIR) for the BV Water Management Program.

- B. BV Water Exchange Project.** The second component of the BV Water Management Program (the “Water Exchange Project”) provides for BV to deliver portions of its water supplies to other entities in exchange for the later return of more regulated water supplies.
- C. IRWD Strand Ranch Integrated Banking Project.** Pursuant to an agreement between RRBWSD and IRWD dated as of January 13, 2009 (together with such amendments, supplements and exhibits thereto as may become effective from time to time, the “Banking Agreement”), IRVINE RANCH holds recharge rights, including storage rights, and recovery rights, subject to the terms and conditions of the Banking Agreement , providing first priority rights to use of the Strand Ranch Integrated Banking Project recharge facilities except for when the Kern River Watermaster offers water to all takers willing to sign a notice/order or the Kern River Watermaster offers Kern River water to the California Aqueduct / Kern River Intertie. Under such conditions, Rosedale has first priority right to the use of the recharge facilities. IRWD holds first priority rights to use of the Strand Ranch Water Bank Recovery facilities. IRWD’S water banking capacity limitations are generally described as follows, subject to the terms and conditions of the Banking Agreement:

Recharge Capacity:	About 100 CFS and 17,500 AFY
Recharge Area:	About 502 Acres
Recovery Capacity:	About 40 CFS and 17,500 AFY
Storage Capacity:	50,000 AF
CVC Turnout(s) Capacity:	200 CFS

- D. General Expenses.** Each party shall be responsible for its own fees, costs, and expenses arising out of the negotiation and execution of this agreement, any other agreements related to or made necessary by this transaction, obtaining necessary approvals, and the like, with the exception of Permit Costs as referenced in Section 1 (F), below.
- E. CEQA Compliance.** Both parties shall comply with CEQA and cooperate with one another with respect to CEQA compliance for the proposed Water Exchange Project. BV was the lead agency with respect to CEQA compliance for its Water Management Program, which includes the BV Water Exchange Project, and certified a Final EIR on January 12, 2010. On May 27, 2008 RRBWSD certified an environmental impact report (“Project EIR”) for the Strand Ranch Integrated Banking Project and subsequently on said date IRWD approved the Project EIR as a responsible agency.
- F. Permit Costs.** IRWD shall be responsible for any and all regulatory and permitting fees and costs associated with the water transfer and transportation of water supplies pursuant to this Agreement.

**G. Water Rights.** It is expressly agreed, understood, and acknowledged by IRWD that any existing or future sale or transfer of water to it by BV shall not result in or be considered a sale or transfer of BV's Kern River water right(s) or any of BV's other water right(s), and notwithstanding anything to the contrary contained within this Agreement, IRWD expressly covenants, represents, and warrants that it shall not at any time make any claim of any type or character that is inconsistent with, contrary to, or adverse to BV's existing or claimed Kern River Water Rights or any of BV's other water right(s).

**2. Water Exchange Project Terms.**

**A. IRWD Water Exchange Project.** BV will provide BV Exchange Water to IRWD for delivery into the Strand Ranch Water Bank and IRWD will provide IRWD Return Water to BV in accordance with and pursuant to this Agreement, and the following:

- i. **Source of Water.** BV will supply BV Exchange Water to IRWD pursuant to the Water Exchange Project component of the BV Water Management Program.
- ii. **Water Quantity.** BV may supply up to 17,500 AF of water in any given year, in BV's sole and absolute discretion. Although not intended as a project commitment, BV presently anticipates BV Exchange Water will be available for delivery to IRWD when the hydrology of the Kern River for the April-July runoff is at 125% of normal or higher. IRWD shall dedicate and make available 40,000 AF of storage capacity within the Integrated Banking Project to the BV Water Exchange Project, with 20,000 AF being dedicated to storing water to be returned to BV (IRWD Return Water) and 20,000 AF being dedicated for storage of the water transferred to IRWD. IRWD reserves the right to reduce the 40,000 AF of dedicated storage space if [after 3 years?] BV is not able to deliver the BV Exchange Water in a timely manner. IRWD may, but shall not be obligated to, expand the capacities described in Section 1(C) and, in that event, the annual BV Exchange Water delivery amount and the dedicated capacity set forth in this Section (and corresponding amounts in subsection vi below) may be increased to such amounts as the parties may mutually agree. .
- iii. **Water Quality.** If and to the extent that either party delivers water to and into the California Aqueduct, the Party delivering the water will be responsible to ensure the quality of water meets the water quality standards established by DWR for pump-in to the California Aqueduct as of the date of delivery.
- iv. **Water Availability.** The availability of BV Exchange Water will be determined in BV's sole discretion. IRWD Return Water will be made available pursuant to the schedule set forth in 2 A. vi, below.



- v. **Point of Delivery.** BV will deliver BV Exchange Water to the IRWD point of delivery (IRWD POD) which will be the Strand Ranch Integrated Banking Project Turnouts on the CVC or other Rosedale-Rio Bravo Water Storage District diversion locations located on the CVC, or at some other mutually agreeable location, and IRWD will deliver IRWD Return Water to the BV point of delivery (BV POD) which will be Check 28 of the California Aqueduct or at some other mutually agreeable location. IRWD Return Water will be delivered to the BV POD by either (1) an exchange for State Water Project (“SWP” herein) water or other water already in the California Aqueduct, or (2) recovery of water from Strand Ranch Integrated Banking Project wells with subsequent delivery through the CVC to the California Aqueduct, or (3) other source(s) available and acceptable to both of the Parties.
  
- vi. **Delivery Schedule.** BV may deliver up to 17,500 AF of Exchange Water in any given year when favorable water supply conditions exist such that BV has determined that it has water available for its Water Exchange Project and this project, in particular. Subject to the Banking Agreement, when BV Exchange Water is made available to IRWD pursuant to this Agreement, IRWD and BV shall agree to a delivery schedule of BV Exchange Water in a quantity of approximately 4,375 AF per month, or as may otherwise be agreed. Subject to the Banking Agreement, IRWD shall provide IRWD Return Water at time(s) when requested by BV at a rate of no more than 6,667 AF in any given year. IRWD and BV shall agree to a delivery schedule in a quantity of approximately 1,667 AF per month, or as may otherwise be agreed.
  
- vii. **Consideration.** IRWD shall remit one-half of the exchanged supply less one-half of reasonable and customary losses back to BV (IRWD Return Water) no later than December 31st of the 4th year following the associated recharge event. The other one-half of the water, less one-half of any reasonable and customary losses would be deemed transferred to IRWD. Water to be remitted back to BV may, at BV’s option, remain in storage in the Strand Ranch Integrated Banking Project beyond the end of the 4th year, in exchange for a greater percent being transferred to IRWD as compensation for the additional storage benefits, in accordance with the following table:

<b>Year Following Recharge Event</b>	<b>Percent Transferred to IRWD</b>	<b>Percent Returned to BV if Returned During or Before the Indicated Year</b>
1	50	50
2	50	50
3	50	50
4	50	50
5	60	40

6	70	30
7	80	20
8	90	10
9	100	0

In addition to providing the additional storage benefits, IRWD shall also compensate BV for any water transferred from BV to IRWD in excess of 50% as referenced in the table. IRWD shall compensate BV for each AF of such transferred water (the quantity in excess of 50%) at an amount equal to BV's then current unit cost per AF of BV's SWP Table A water's Variable Operations, Maintenance, Power and Replacement rate, which is currently estimated to be less than \$20.00 per AF.

- viii. **Facility Construction.** To the extent necessary, BV shall construct all facilities necessary to deliver BV Exchange Water to the IRWD POD, and likewise IRWD shall construct all necessary facilities to deliver IRWD Return Water to the BV POD. The construction of IRWD's Strand Ranch Integrated Banking Project recovery facilities is not yet completed, and IRWD estimates the recovery facilities will be available for use by February 2012. To the extent IRWD is unable to provide requested IRWD Return Water to BV because Strand Ranch Water Bank recovery facilities are not completed, the time during which BV may schedule return of the water, and the percent to be returned to BV in accordance with the Table, shall be equitably adjusted.
- ix. **Facility OMP&R.** BV shall assume all OMP&R duties of all BV facilities necessary to deliver Exchange Water to the IRWD POD and likewise IRWD shall assume all necessary OMP&R duties of all IRWD or Rosedale facilities necessary to deliver IRWD Return Water to the BV POD.

**3. Insurance, Representations, Warranties, Reliance, and Covenants.**

**A. Insurance.**

- i. BV has and, at all times during the term of this Agreement shall have, insurance coverage for its facilities and operations, including those facilities and operations involved in the BV Water Exchange Project, delivery of BV Exchange Water and receipt of IRWD Return Water.
- ii. IRWD has and, at all times during the term of this Agreement shall have, insurance coverage for its facilities and operations, including those facilities and operations involved in the receipt of BV Exchange Water and delivery of IRWD Return Water.

**B. Representations, Warranties, Covenants, and Reliance.**

- i. **BV represents and warrants as follows:**
  - (1) BV has, prior to commencement of the delivery of BV Exchange Water pursuant hereto, completed an environmental review under CEQA with

respect to BV's Water Management Program, including the Water Exchange Project component thereof, and certified its EIR on June 12, 2010. To BV's knowledge, no actions or proceeding have been initiated attacking the validity of such EIR

- (2) The BV Water Management Program includes, as a component project, the ability to acquire, transport, and deliver BV Exchange Water to entities such as IRWD under this Agreement and pursuant to the Program.
  - (3) BV has legally enforceable rights to BV Exchange Water, which may include water from the Kern River and its tributaries, and to divert, transport, spread, recharge, bank, extract and deliver water to IRWD as set forth in the BV Water Management Program, and to carry out its performance under the terms of this Agreement. The BV Exchange Water transferred to IRWD is water that is exportable outside Kern County by IRWD to IRWD's service area, provided, that the foregoing shall not constitute a representation and warranty as to IRWD's contractual or other rights to transport or wheel such water.
  - (4) BV represents and warrants that entry into this Agreement does not create or result in the breach of any other agreement to which BV is a party or to which BV is otherwise subject to or bound.
  - (5) BV represents and warrants that, to its knowledge at the time BV executed this Agreement, there is no pending or threatened litigation involving BV that will affect this agreement.
- ii. **IRWD represents and warrants as follows:**
- (1) IRWD represents and warrants that entry into this Agreement does not create or result in the breach of any other agreement to which IRWD is a party or to which IRWD is otherwise subject to or bound.
  - (2) IRWD has legally enforceable rights to the Strand Ranch Integrated Banking Project and its facilities, and to carry out its performance under the terms of this Agreement. IRWD is currently able to, and shall, make capacity available in the Strand Ranch Integrated Banking Project as is necessary pursuant to this Agreement.
  - (3) IRWD represents and warrants that, to its knowledge at the time IRWD executed this Agreement, there is no pending or threatened litigation involving IRWD that will affect this agreement.

- (4) It is expressly agreed, understood, and acknowledged by IRWD that any existing or future Exchange or transfer of water to it by BV shall not result in or be considered an Exchange or transfer of BV's Kern River water rights(s) or any of BV's other water right(s), and notwithstanding anything to the contrary contained within this Agreement, by executing this Agreement, IRWD expressly covenants, represents, and warrants that it shall not at any time, now or in the future, make any claim of any type or character that is adverse to BV's existing or claimed Kern River Water Rights.
- (5) Prior to commencement of the delivery of BV Exchange Water pursuant hereto, there has been completed an environmental review under CEQA with respect to the Strand Ranch Integrated Banking Project and the use of water therein by IRWD, and the Project EIR was certified on May 27, 2008. To IRWD's knowledge, no actions or proceeding have been initiated attacking the validity of such Project EIR.

iii. **Reliance.** The Parties have relied on the forgoing representations, warranties, and covenants as a material inducement to execute this Agreement, and should any material representation not be correct or true, it shall constitute a material breach of this Agreement.

**4. Term and Termination.**

- A. The term of this Agreement shall commence January 1, 2011 ("Effective Date") and shall continue to December 31, 2025 (the "Term"). The term may be extended by the mutual agreement of the parties to the termination date of the Banking Agreement.
- B. Either Party may terminate this Agreement if the other Party breaches any material obligation under this Agreement and such breach continues for a period of sixty (60) days, or such other period as may be reasonable under the circumstances, after the date on which written notice is issued by the non-breaching Party. The non-breaching Party shall be entitled to seek any and all legal or equitable damages and/or remedies as a result of the breaching Party's breach.

**5. Conditions Precedent/Subsequent.**

- A. **IRWD Conditions Precedent.** IRWD's obligation to accept BV Exchange Water hereunder is subject to satisfaction or express written waiver by IRWD of each of the following conditions precedent. Failure of any of the following conditions to be met to the satisfaction of, or waived by, IRWD shall entitle IRWD to terminate this Agreement. IRWD shall timely communicate such failure to BV in writing.
  - i. There are no material, adverse changes to the representations and warranties made by BV in Section 3 B (i).

**B. BV Conditions Precedent.** BV's obligation to deliver the BV Exchange Water hereunder is subject to satisfaction or express written waiver by BV of each of the following conditions precedent. Failure of any of the following conditions to be met to the satisfaction of or waived by BV shall entitle BV to terminate this Agreement. BV shall timely communicate such failure to IRWD in writing.

- i. There are no material, adverse changes to the representations and warranties made by IRWD in Section 3 B (ii).

**6. Material Default.** In the event that either IRWD or BV is in material default of this Agreement, the non-defaulting Party shall provide written notice to the defaulting Party, identifying with reasonable specificity the nature of the claimed default. If the defaulting Party has not cured the event(s) of material default which is (are) identified in the notice required by this section within 10 business days after receipt of written notification, or such other period as is reasonable under the circumstances, the non-defaulting Party shall be entitled to any and all remedies which may be available to it at law or in equity. This provision is not intended to provide a separate termination right, which is set forth in Section 4.B. above.

**7. Dispute Resolution.** For matters involving other than a material default of this Agreement, the following provisions shall apply:

**A. Mediation.** The Parties agree that any and all disputes, claims or controversies arising under this Agreement, whether for breach, enforcement, or interpretation thereof, shall be submitted to mediation in a mutually agreeable venue and if the matter is not resolved through mediation, then it may, upon agreement of both Parties, be submitted to arbitration as provided in Section 7.B. below. Either Party may commence mediation by providing the other Party a written request for mediation, setting forth the subject of the dispute and the relief requested. The Parties shall cooperate with one another in selecting a mediator and in scheduling the mediation proceedings. The Parties covenant that they shall participate in the mediation in good faith, and that they shall share equally in costs charged by the mediator. All offers, promises, conduct and statements, whether oral or written, made in the course of the mediation by either of the Parties, their agents, employees, experts and attorneys, and by the mediator or any of the mediator's employees, are confidential, privileged and inadmissible for any purpose, including impeachment, in any arbitration or other proceeding involving the Parties, provided that evidence that is otherwise admissible or discoverable shall not be rendered inadmissible or non-discoverable as a result of its use in the mediation. Either Party may request arbitration with respect to the matters submitted to mediation by filing a written request for arbitration at any time following the initial mediation session or 45 days after the date of filing the written request for mediation, whichever occurs first. The mediation may continue after the commencement of arbitration if the Parties so desire. Unless otherwise agreed by the Parties, the mediator shall be disqualified from serving as arbitrator in the case. The provisions

of this Section may be enforced by any Court of competent jurisdiction, and the Party seeking such enforcement shall, if such Party prevails, be entitled to an award of all costs, fees and expenses, including attorneys' fees, to be paid by the Party against whom such enforcement is ordered.

**B. Arbitration.** Any dispute, claim or controversy arising under this Agreement, whether for breach, enforcement, or interpretation thereof, including the determination of the scope or applicability of this agreement to arbitrate, which could not be resolved through the mediation process set forth above, may with the agreement of both Parties, be submitted to non-binding or binding arbitration, before a sole arbitrator, in accordance with the laws of the State of California for agreements made in and to be performed in that State. Judgment on the binding arbitration award, if any, may be entered in any court having jurisdiction. The arbitrator may allocate all of the costs of the arbitration, including the fees of the arbitrator and the reasonable attorneys' fees of the prevailing Party, against the Party who did not prevail.

**C. Selection of Mediator/Arbitrator.** The Parties shall first attempt to mutually agree to a mediator or arbitrator. If the Parties fail to agree on the mediator or arbitrator, the Parties shall each nominate and exchange with each other the names of three persons to resolve the dispute. From this group of nominated mediators or arbitrators, the Parties shall select the Mediator or Arbitrator. If each of the Parties selects the same Mediator or Arbitrator, that person shall be the Mediator or Arbitrator. In the event two or more same persons are selected by the Parties, the person whose name precedes the other(s) alphabetically shall be the Mediator or Arbitrator. If the Parties do not select the same person, then each Party shall eliminate two of the other's selection and the remaining names shall be randomly drawn in order by either Party. The first drawn shall be the Mediator or Arbitrator unless there is a conflict of interest or the mediator or arbitrator cannot serve because of scheduling conflicts. In that case, the second name drawn shall be the Mediator or Arbitrator. No Mediator or Arbitrator shall be nominated or selected if they have any actual or perceived conflict of interest. If necessary, this process can be repeated to nominate or select a mediator or arbitrator if the final two selected Mediators or Arbitrators have any actual or perceived conflict of interest.

**8. Liability Regarding Distribution Water.**

**A. IRWD Liability.** IRWD and its officers, agents, or employees shall not be liable for the control, carriage, handling, use, disposal, or distribution of BV Exchange Water upstream of the IRWD Point of Delivery, or for the control, carriage, handling, use, disposal, or distribution of IRWD Return Water downstream of the BV Point of Delivery, nor for any claim of damage of any nature whatsoever, including but not limited to property damage, personal injury or death, arising out of or connected with the control, carriage, handling, use, disposal or distribution of such water, unless such damages or claims are a result of negligent, intentional or reckless misconduct on the part of IRWD.

**B. BV Liability.** BV and its officers, agents, and employees shall not be liable for the control, carriage, handling, use, disposal, or distribution of BV Exchange Water downstream of IRWD Point of Delivery or for the control, carriage, handling, use, disposal, or distribution of IRWD Return Water upstream of the BV Point of Delivery, nor for any claim of damage of any nature whatsoever, including, but not limited to, property damage, personal injury or death, arising out of or connected with the control, carriage, handling, use, disposal, or distribution of such water, unless such damages or claims are a result of negligent, intentional or reckless misconduct on the part of BV.

**9. Indemnity and Hold Harmless.**

**A. BV Indemnity.** BV shall at all times indemnify, defend and save IRWD, its Board of Directors, officers, representatives, consultants, contractors, agents and employees free and harmless from, and pay in full, any and all claims, demands, losses, damages or expenses, including reasonable attorney fees and costs that IRWD, its Board of Directors, officers, representatives, consultants, contractors, agents and/or employees may sustain or incur in any manner relating to, arising out of or connected with BV's negligent, intentional, or reckless acts or omissions or non-performance of its obligations under the terms of this Agreement, excepting any loss, damage or expense and claims for loss, damage or expense resulting in any manner from the negligent or unlawful act or acts of IRWD, its Board of Directors, officers, representatives, consultants, contractors, agents or employees.

**B. IRWD Indemnity.** IRWD shall at all times indemnify, defend and save BV, its Board of Directors, officers, representatives, consultants, contractors, agents and employees free and harmless from, and pay in full, any and all claims, demands, losses, damages, or expenses, including reasonable attorney fees and costs that BV, its Board of Directors, officers, representatives, consultants, contractors, agents and/or employees may sustain or incur in any manner relating to, arising out of or connected with IRWD's negligent, intentional, or reckless acts or omissions or non-performance of its obligations under the terms of this Agreement, excepting any loss, damage or expense and claims for loss, damage or expense resulting in any manner from the negligent or unlawful act or acts of BV, its Board of Directors, officers, representatives, consultants, contractors, agents, or employees. IRWD shall be solely responsible for all fees and costs including reasonable litigation expenses, if any, whether incurred by IRWD or BV, associated with any future or additional CEQA compliance (in addition to the Project EIR) regarding IRWD's participation in the Water Exchange Project.

**C. Stored Water Quality.** Neither IRWD nor BV shall be liable to the other for any claims related to the impairment of the quality of water as a result of storage in the Strand Ranch Water Bank or its aquifer from any cause.

D. **Additional Indemnity.** Each Party shall at all times indemnify, defend and save the other Party free and harmless from, and pay in full, any and all causes of action, claims, liabilities, obligations, demands, losses, judgments, damages or expenses, including reasonable attorney fees and costs (“claims”) in any manner arising out of or connected with the indemnifying Party’s activities in its performance under this Agreement or ,except to the extent it is relieved of responsibility therefrom under Section 8.A or 8.B, its diversion, control, carriage, handling, use, disposal or distribution of water into and out of storage, excepting any loss, damage or expense and claims for loss, damage or expense resulting in any manner from the negligent act or acts of the other Party, or its Boards of Directors, officers, representatives, consultants, contractors, agents or employees.

E. **Claim Notice.** In the event a Party entitled to indemnification is made a party to any action, lawsuit, or other adversarial proceeding alleging negligent or wrongful conduct on the part of an indemnifying Party, then (1) the indemnifying Party shall provide a defense to the other or, at the indemnitee’s option, reimburse the indemnitee its costs of defense, including reasonable attorneys’ fees, incurred in defense of such claims, and (2) the indemnifying Party shall promptly pay any final judgment or portion thereof rendered against the Indemnitee(s).

10. **Notices.** All written notices required to be given pursuant to the terms hereof shall be either (i) personally delivered, (ii) deposited in the United States express mail or first class mail, registered or certified, return receipt requested, postage prepaid, or (iii) delivered by overnight courier service, or (iv) delivered by facsimile transmission provided that the original of such notice is sent by certified United States mail, postage prepaid, no later than one (1) business day following such facsimile transmission. All such notices shall be deemed delivered upon actual receipt (or upon first attempt at delivery pursuant to the methods specified in clauses (i), (ii) or (iii) above if the intended recipient refuses to accept delivery). All such notices shall be delivered to the following addresses or to such other address as the receiving Party may from time to time specify by written notice to the other Party:

<p>To IRWD:</p> <p>Irvine Ranch Water District 15600 Sand Canyon Avenue Irvine, CA 92619 Attn: Paul Jones, General Manager</p> <p>Telephone: 949-453-5632 Facsimile: 949-453-1228</p>	<p>To BV:</p> <p>Buena Vista Water Storage District P. O. Box 756 525 North Main Street Buttonwillow, CA 93206 Attn: Dan W. Bartel, Engineer Manager</p> <p>Telephone: 661-324-1101 Facsimile: 661-764-5053</p>
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11-11-2010

11. **Counterparts**. This Agreement may be executed in counterparts, each of which shall be deemed an original, and all of which, taken together, shall constitute one and the same instrument. Signatures sent by facsimile shall be deemed originals and treated in all respects as originals. As may be necessary for any dispute resolution process required or permitted under this Agreement, a copy of this Agreement shall be deemed to be an original for the purposes of satisfying the California and/or Federal Rules of Evidence.
12. **Authority**. In signing below, each of the Parties represents and warrants to each of the other Parties that each is a duly organized or constituted entity, with all requisite power to carry out its obligations under this Agreement, and that the execution, delivery and performance of this 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.
13. **Governing Law**. This Agreement shall be construed and enforced in accordance with the laws of the State of California.
14. **Amendments**. No amendment of this Agreement shall be binding upon the Parties unless it is in writing and executed by all of the Parties.
15. **Further Action**. The Parties agree to and shall take such further action and execute and deliver such additional documents as may be reasonably required to effectuate the terms and conditions of this Agreement and to the extent consistent with the terms hereof.
16. **Assignment**. Neither Party shall assign, delegate, or otherwise transfer any of its rights or obligations under this Agreement without the prior written consent of the other Party. All covenants and agreements contained in this Agreement shall bind and inure to the benefit of the Parties' respective successors and permitted assigns.
17. **Force Majeure; Change in Law**. The respective obligations of each Party hereto shall be suspended while it is prevented from complying by acts of God; war; riots; civil insurrection; acts of civil or military authority; fires; floods; earthquakes; labor accidents or incidents; rules and regulations of any federal, state, or other governmental agency (other than the Parties themselves); changes in law, rules, or regulations of any federal, state or other governmental agency (other than the Parties themselves); or other cause of the same or other character any of which are beyond the reasonable control of such Party (collectively, "Force Majeure"). In the event of a suspension due to the foregoing, the Party whose obligations are suspended shall promptly notify the other Party in writing of such suspension and the cause and estimated duration of such suspension.

The Party providing such notice shall be excused from fulfilling its obligations under this Agreement until such time as the Force Majeure has ceased to prevent performance

11-11-2010

or other remedial action is taken, at which time the Party shall promptly notify the other Party of the resumption of its obligations under this Agreement. Any Party rendered unable to fulfill any of its obligations by reason of a Force Majeure shall exercise due diligence to remove such inability with reasonable dispatch within a reasonable time period and mitigate the effects of the Force Majeure. The relief from performance shall be of no greater scope and of no longer duration than is required by the Force Majeure.

- 18. Joint Drafting and Negotiation.** This Agreement has been jointly negotiated and drafted. The language of this Agreement shall be construed as a whole according to its fair meaning and without regard to or aid of Civil Code Section 1654 or similar judicial rules of construction. Each Party acknowledges that it has had the opportunity to seek the advice of experts and legal counsel prior to executing this Agreement and that it is fully aware of and understands all of its terms and the legal consequences thereof.
- 19. Headings.** Headings used in this Agreement are for reference only and shall not affect the construction of this Agreement.
- 20. No Third Party Beneficiaries.** No third party beneficiaries are intended by the Parties hereto, and no third party shall be entitled to claim or enforce any rights under this Agreement.
- 21. Severability.** In the event that any provision of this Agreement is determined by a court to be invalid, the court shall reform the provision in a manner that is both consistent with the terms of this Agreement taken as a whole and legally valid. The remainder of this Agreement shall not be affected thereby.
- 22. Successors and Permitted Assigns.** All covenants and agreements contained in this Agreement by or on behalf of any of the Parties shall bind and inure to the benefit of their respective successors and permitted assigns under Article 16, whether so expressed or not.

IN WITNESS WHEREOF, each Party has executed this Agreement on the date set forth below, said Agreement to be effective on the Effective Date stated above.

IRVINE RANCH WATER DISTRICT

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

Title: \_\_\_\_\_

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

11-11-2010

BUENA VISTA WATER STORAGE DISTRICT

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

Title: \_\_\_\_\_

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

APPROVED AS TO FORM.

McMURTREY, HARTSOCK and WORTH

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

ROBERT W. HARTSOCK  
Attorneys for Buena Vista Water Storage District



November 22, 2010

Prepared by: K. Welch/R. Mori

Submitted by: G. Heiertz

Approved by: Paul Jones

*[Handwritten signatures and initials: K. Welch, R. Mori, G. Heiertz, Paul Jones, and a signature that appears to be "G.H. Mori"]*

## ACTION CALENDAR

### METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA LOCAL RESOURCES PROGRAM FUNDING AGREEMENT FOR THE WELLS 21 AND 22 DESALTER PROJECT

#### SUMMARY:

On October 22, 2009, the District submitted a proposal for the Wells 21 and 22 Desalter Project to Metropolitan Water District of Southern California (MWD) for funding under the Local Resources Program (LRP). Staff has been working with MWD staff on obtaining its recommendation for an LRP agreement for the Wells 21 and 22 Desalter Project. MWD staff has forwarded a draft LRP Agreement for IRWD review and Board approval. Staff will be negotiating with MWD on the final agreement terms. The agreement will be executed by MWD, Municipal Water District of Orange County (MWDOC), and IRWD.

#### BACKGROUND:

MWD's LRP provides a funding mechanism to water utilities that encourages local development of recycled water and recovered groundwater projects. The LRP emphasizes cost-efficiency to MWD while timing new production according to regional water supply needs. MWD provides assistance of up to \$250 per acre-foot of production to its LRP partners with agreement terms of up to 25 years.

For the past several months, staff has been working with MWD and MWDOC to obtain staff approval and recommendation of the Wells 21 and 22 Desalter Project for the LRP funding. IRWD is requesting funding of up to \$250 per acre-foot for up to 6,400 acre-feet per year of potable water from the Wells 21 and 22 Desalter Treatment Plant. MWD staff has prepared a draft agreement for Board approval by IRWD and then MWDOC. This draft agreement is attached as Exhibit "A". MWD also requires a resolution be adopted by IRWD's Board which is attached as Exhibit "B".

#### FISCAL IMPACTS:

Upon execution, the LRP agreement will provide MWD funding for IRWD's Wells 21 and 22 Desalter Project up to \$250 per AF of project potable water yield.

#### 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 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.

During the application stage of the LRP process, MWD requested that IRWD prepare and adopt an Addendum to the Mitigated Negative Declaration/Initial Study/Environmental Assessment (MND/IS/EA) that identifies MWD as a Responsible Agency. On March 8, 2010, the Board approved an Addendum to the CEQA for the Wells 21 and 22 Desalter Project which identified MWD as a Responsible Agency and covers the financial participation by MWD on the Wells 21 and 22 Desalter Project. As a Responsible Agency, MWD's Board of Directors will review and consider IRWD's LRP proposal and the MND/IS/EA, including the Addendum, in determining whether or not to approve financial assistance for the Wells 21 and 22 Desalter Project.

Committee Status:

This item was reviewed at the Water Resources Policy and Communications meeting on November 9, 2010.

RECOMMENDATION:

THAT THE BOARD APPROVE AND AUTHORIZE EXECUTION OF THE LOCAL RESOURCES PROGRAM AGREEMENT WITH METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA AND METROPOLITAN WATER DISTRICT OF ORANGE COUNTY, SUBJECT TO NON-SUBSTANTIVE CHANGES APPROVED BY THE GENERAL MANAGER AND LEGAL COUNSEL; AND ADOPT THE FOLLOWING RESOLUTION BY TITLE:

RESOLUTION NO. 2010-

RESOLUTION OF THE BOARD OF DIRECTORS OF IRVINE RANCH WATER DISTRICT APPROVING AND AUTHORIZING EXECUTION OF WELLS 21 AND 22 DESALTER PROJECT LOCAL RESOURCES PROGRAM AGREEMENT AMONG METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA, MUNICIPAL WATER DISTRICT OF ORANGE COUNTY AND IRVINE RANCH WATER DISTRICT

LIST OF EXHIBITS:

Exhibit "A" – Draft Agreement No. 91700 IRWD Wells 21 and 22 Desalter Project 2007 Local Resources Program Agreement Among the Metropolitan Water District of Southern California, Municipal Water District of Orange County and Irvine Ranch Water District

Exhibit "B" – Resolution

# **Exhibit “A”**

AGREEMENT No. 91700  
IRWD WELLS 21&22 DESALTER PROJECT  
2007 LOCAL RESOURCES PROGRAM AGREEMENT  
AMONG  
THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA,  
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY AND  
IRVINE RANCH WATER DISTRICT

DRAFT 11/4/10

AGREEMENT No. 91700  
 IRWD WELLS 21&22 DESALTER PROJECT  
 2007 LOCAL RESOURCES PROGRAM AGREEMENT  
 AMONG  
 THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA,  
 MUNICIPAL WATER DISTRICT OF ORANGE COUNTY AND  
 IRVINE RANCH WATER DISTRICT

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
RECITALS .....	3
Section 1: Definitions.....	4
Section 2: Representations and Warranties.....	5
Section 3: Ownership and Responsibilities.....	6
Section 4: Invoicing Process .....	6
Section 5: Reconciliation Process .....	7
Section 6: Record Keeping and Audit.....	8
Section 7: Rate Structure Integrity .....	9
Section 8: Term and Amendments.....	11
Section 9: Hold Harmless and Liability .....	12
Section 11: Successors and Assigns.....	13
Section 12: Severability .....	13
Section 13: Integration .....	13
Section 14: Governing Law .....	14

Exhibits

- Exhibit A (Project Description)
- Exhibit B (Annualized Capital Component)
- Exhibit C (Operation and Maintenance Component)
- Exhibit D (Performance Provisions)
- Exhibit E (MWD Administrative Code Section 4401(c))



AGREEMENT No. 91700  
IRWD WELLS 21&22 DESALTER PROGRAM  
2007 LOCAL RESOURCES PROGRAM AGREEMENT  
AMONG  
THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA,  
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY AND  
IRVINE RANCH WATER DISTRICT

THIS AGREEMENT (Agreement) is made and entered into as of \_\_\_\_\_, 2011 by and among The Metropolitan Water District of Southern California (Metropolitan), Municipal Water District of Orange County (MWDOC), and the Irvine Ranch Water District (IRWD). Metropolitan, MWDOC, and IRWD may be collectively referred to as "Parties" and individually as "Party".

RECITALS

- A. Metropolitan's Board of Directors, at its April 2007 meeting, established terms and conditions for the 2007 LRP, which provides financial incentives up to \$250 per acre-foot (AF) for local resource development projects within Metropolitan's service area for the purposes of improving regional water supply reliability.
- B. Metropolitan was incorporated under the Metropolitan Water District Act (Act) for the purpose of developing, storing, and distributing water for domestic and municipal purposes.
- C. The Act empowers Metropolitan to acquire water and water rights within or without the state; develop, store and transport water; provide, sell and deliver water at wholesale for municipal and domestic uses and purposes; set the rates for water; and acquire, construct, operate and maintain any and all works, facilities, improvements and property necessary or convenient to the exercise of the powers granted by the Act.
- D. MWDOC, as a member public agency of Metropolitan under the Act, is a wholesale purchaser within its service area of water developed, stored, and distributed by Metropolitan.
- E. IRWD is a member public agency of MWDOC and provides water services within MWDOC's service area.
- F. Metropolitan has determined to take all reasonable and necessary steps to provide its service area with adequate and reliable water to meet present and future needs in an environmentally and economically responsible way, including providing financial incentives to water recycling and groundwater recovery projects under its LRP. IRWD seeks to enhance its local water supplies and reduce reliance on imported water by providing a direct replacement of imported water with recovered groundwater for potable uses.

- G. IRWD is currently planning to construct facilities collectively known as the “IRWD Wells 21 & 22 Desalter Project” to deliver up to 6,400 acre-feet per year of treated potable water for within its service area.
- H. Metropolitan, MWDOC, and IRWD have determined that it is mutually beneficial for local water projects originating in the service area of MWDOC to be developed as a supplement to Metropolitan’s imported water supplies in order to meet future water needs.
- I. Metropolitan desires to assist in increasing production and distribution of recovered groundwater by providing a financial incentive to IRWD to implement the Project.
- J. IRWD believes that Metropolitan’s continued financial contribution toward the cost of the Project will make the Project operation economically viable, and is committed to implementation of the Project.
- K. The Parties believe the development of treated potable water by the Project will benefit the local community within MWDOC and the region served by Metropolitan.

NOW, THEREFORE, in consideration of the promises and covenants hereinafter set forth, the Parties do agree as follows:

Section 1: Definitions

The following words and terms, unless otherwise expressly defined in their context, shall be defined to mean:

- 1.1 “Allowable Yield” shall mean the amount of Recovered Groundwater delivered to End Users by IRWD from the Project in a Fiscal Year that is eligible to receive Metropolitan’s financial assistance. Allowable Yield shall be used for potable uses through direct deliveries to End Users. Allowable Yield shall not exceed Ultimate Yield and shall exclude other waters that Metropolitan reasonably determines will not reduce MWDOC or IRWD’s demand for Metropolitan’s imported water. Unless otherwise approved in writing by Metropolitan, Allowable Yield shall exclude: (1) The first 40,000 acre-feet per year produced by IRWD from the Orange County Groundwater Basin; (2) Recovered Groundwater provided by existing projects, (3) Allowable Yield from other projects with active or terminated LRP or Groundwater Recovery Program agreements; (4) surface water, or recycled water; (5) Recovered Groundwater delivered to environmental and recreational impoundments; and (6) brine.
- 1.2 “End User” shall mean each user that purchases Allowable Yield furnished by this Project.
- 1.3 “Estimated LRP Contribution” shall mean the advanced financial contribution in dollars per acre-foot, not to exceed \$250 per acre-foot, Metropolitan pays for Allowable Yield to IRWD for monthly billing purposes until the Final LRP Contribution is calculated pursuant to procedures in Section 5.

- 1.4 “Final LRP Contribution” shall mean the financial contribution, not to exceed \$250 per acre-foot, by Metropolitan to the Project for Allowable Yield. The Final LRP Contribution for the Project is equal to the Project Unit Cost minus Metropolitan’s prevailing full service treated water rate.
- 1.5 “Fiscal Year” shall mean a Metropolitan Fiscal Year which begins on July 1 and ends on June 30 of the following calendar year.
- 1.6 “Project” shall mean the IRWD Wells 21 & 22 Desalter Project, being developed by IRWD to produce the Ultimate Yield as defined in Exhibit A attached hereto and incorporated herein by this reference. IRWD shall notify Metropolitan prior to making any changes to the Project that requires new environmental documentation other than addendum to the existing environmental documentation. Metropolitan shall inform MWDOC and IRWD of Metropolitan’s decision to include or exclude the Project change to this Agreement.
- 1.7 “Project Unit Cost” shall mean the actual cost to produce and distribute an acre-foot of Recovered Groundwater by the Project and is comprised of an Annualized Capital Component and an Operation and Maintenance Component, as specified in Exhibits B and C attached hereto and incorporated herein by this reference.
- 1.8 “Recycled Water” shall mean treated wastewater which, subject to regulatory requirements, is suitable for beneficial uses.
- 1.9 “Recovered Water” shall mean all types of water including groundwater, or other water delivered through Project facilities in a Fiscal Year.
- 1.10 “Ultimate Yield” is 6,400 acre-feet per Fiscal Year and subject to reduction provisions outlined in Exhibit D, incorporated herein by this reference.

Section 2: Representations and Warranties

- 2.1 IRWD warrants that it is able and has a right to sell Allowable Yield from the Project.
- 2.2 IRWD warrants that neither it nor any of its agents discriminate against employees or against any applicant for employment because of ancestry, creed, religion, age, sex, color, national origin, denial of family and medical care leave, marital status, medical condition, mental or physical disability (including HIV and AIDS), and further warrants that it requires all contractors and consultants performing work on the Project to comply with all laws and regulations prohibiting discrimination against employees or against any applicant for employment because of ancestry, creed, religion, age, sex, color, national origin, denial of family and medical care leave, marital status, medical condition, mental or physical disability (including HIV and AIDS).
- 2.3 IRWD warrants that it has or will comply with the provisions of the California Environmental Quality Act for each and all components of the Project facilities.

### Section 3: Ownership and Responsibilities

- 3.1 IRWD shall be the sole owner of Project facilities. Metropolitan and MWDOC shall have no ownership right, title, security interest or other interest in the Project facilities.
- 3.2 IRWD shall be solely responsible for all design, environmental compliance, right-of-way acquisitions, permits, construction, and cost of the Project and all modifications thereof.
- 3.3 IRWD shall be solely responsible for operating and maintaining the Project, in accordance with all applicable local, state, and federal laws. Metropolitan and MWDOC shall have no rights, duties or responsibilities for operation and maintenance of Project facilities.
- 3.4 IRWD shall install, operate and maintain metering devices for the purpose of measuring the quantity of Recovered Water and Allowable Yield delivered to each End User.
- 3.5 IRWD shall also provide electrical metering devices to accurately measure the energy used for the Project to determine incurred operation and maintenance costs. Metropolitan shall not pay for electrical energy costs if IRWD fails to install electrical metering devices.
- 3.6 IRWD shall at all times during the term of this Agreement, use its best efforts to operate the Project facilities to maximize Allowable Yield on a sustained basis.
- 3.7 IRWD shall assist Metropolitan in its effort to forecast future Project production and cost.
- 3.8 IRWD shall notify and provide Metropolitan with a copy of relevant agreements and payments if IRWD decides to convey water using Project facilities to any party that is not an End User.

### Section 4: Invoicing Process

- 4.1 IRWD shall notify Metropolitan in writing no less than 30 days prior to the start of Project operation. Before the first invoice, MWDOC, IRWD and Metropolitan shall meet to coordinate the agreement administration requirements and to determine the Estimated LRP Contribution based on historical cost data and expected Project activities. After the first year of operation, the Estimated LRP Contribution will be determined during the annual reconciliation process pursuant to Section 5.
- 4.2 After the start of Project operation, IRWD shall invoice Metropolitan monthly for the Estimated LRP Contribution based upon Allowable Yield delivered during the previous month. Metropolitan shall pay IRWD for invoiced Estimated LRP Contribution by means of a credit included on the next monthly water service invoice issued to MWDOC in accordance with Metropolitan's Administrative Code. Upon receiving the Metropolitan invoice, MWDOC shall include the full amount of the credit received from Metropolitan pursuant to the preceding sentence as a credit on its next water service invoice to IRWD.
- 4.3 Pursuant to Metropolitan's Administrative Code, invoices for Estimated LRP Contribution must be received by Metropolitan before 3:00 p.m. on the third working day after the end of the month

to receive credit for any preceding month on the next monthly water service invoices issued to MWDOC. Metropolitan will not pay for any invoiced Estimated LRP Contribution received more than six months following the end of any month in which a credit is claimed.

- 4.4 Metropolitan, MWDOC and IRWD have entered into agreements for development of local water resources projects. Each agreement contains specific terms and conditions to determine project yield, payment process, and project performance and any adjustments to contractual yield and incentive payments. Unless approved in writing by Metropolitan, these agreements are independent from each other and, therefore, the yield produced under one agreement shall not be used to fulfill the performance requirements under other agreements. These provisions shall also apply to all future incentive agreements between Metropolitan, MWDOC or IRWD.

#### Section 5: Reconciliation Process

- 5.1 After the start of Project operation and by December 31 of each year, IRWD shall provide Metropolitan with the following reconciliation data for the previous Fiscal Year: (a) records of Recovered Water and Allowable Yield; (b) supporting documentation of the actual cost of the Project required to perform the calculations prescribed in Exhibits B and C; (c) records of water deliveries to End Users; (d) terms and schedule of payments of the Project's financing instruments; (e) a description of any changes to the Project's financing instruments; and (f) all contributions pursuant to Section 5.4.
- 5.2 If reconciliation data is not submitted by December 31 in accordance with Section 5.1, Metropolitan will assess a late penalty charge to IRWD as prescribed in Metropolitan's Administration Code, currently set at \$2,500 in Section 4507 (K). Metropolitan may suspend its payment of Estimated LRP Contribution if IRWD fails to provide reconciliation data by the ensuing April 1. During the suspension period, IRWD shall continue to invoice Metropolitan for the Estimated LRP Contribution based upon the Allowable Yield for water accounting purposes. Metropolitan will resume payment of the monthly Estimated LRP Contribution once complete data is received and the corresponding reconciliation is complete pursuant to Section 5.3. In the event IRWD fails to provide reconciliation data by December 31 of the following Fiscal Year, which is 18 months after the end of the Fiscal Year for which a reconciliation is required, this Agreement shall automatically terminate without notice or action by any Party and IRWD shall repay Metropolitan all Estimated LRP Contributions for which no reconciliation data was provided within 90 days of termination.
- 5.3 Within 180 days after Metropolitan receives complete data from IRWD, pursuant to Section 5.1, Metropolitan shall calculate the Final LRP Contribution for the Fiscal Year. The Final LRP Contribution shall then apply retroactively to all Allowable Yield for the applicable Fiscal Year. An adjustment shall be computed by Metropolitan for over- or under-payment for the Allowable Yield and included on the next invoice issued to MWDOC. MWDOC shall pass through the full amount of the adjustment on its next billing to IRWD. As part of this reconciliation, Metropolitan shall also consult with IRWD to determine the Estimated LRP Contribution for the following year based on expected cost and Project deliveries.

- 5.4 The Parties agree that all contributions other than LRP incentives under this Agreement and contributions by MWDOC, including but not limited to grants provided by the U.S. Bureau of Reclamation and funding by private parties received prior to and during the term of this Agreement that offset eligible Project costs, shall be deducted from all respective cost components. During the reconciliation process, following receipt of such contributions, the Parties shall determine the equitable apportionment of such contributions for capital and/or operational purposes.

Section 6: Record Keeping and Audit

- 6.1 IRWD shall establish and maintain accounting records of all costs incurred for the construction, operation and maintenance, and replacement parts of the Project as described in Exhibits B and C. Accounting for the Project shall utilize generally accepted accounting practices and be consistent with the terms of this Agreement. IRWD's Project accounting records must clearly distinguish all costs for the Project from IRWD's other water production, treatment, and distribution costs. IRWD's records shall also be adequate to determine Allowable Yield and Recovered Water to accomplish all cost calculations contemplated in this Agreement.
- 6.2 IRWD shall establish and maintain accounting records of all contributions including grants that offset eligible Project capital costs, operation and maintenance costs, and/or replacement costs, as outlined in Section 5.4.
- 6.3 IRWD shall collect Recovered Water and Allowable Yield data for each Fiscal Year of Project operation and retain records of that data based on the metering requirements in Section 3.4. In addition, IRWD shall collect and retain records of the total annual amount of water conveyed outside of IRWD's service area using Project facilities.
- 6.4 Metropolitan shall have the right to audit Project costs and other data relevant to the terms of this Agreement for a period of three years following the termination of this Agreement. Metropolitan may elect to have such audits conducted by its staff or by others, including independent accountants, designated by Metropolitan. IRWD shall make available for inspection to Metropolitan or its designee, upon 30 days advance notice, all records, books and other documents, including all billings and costs incurred by contractors, relating to the construction, operation and maintenance of the Project; any grants and contributions, as described in Exhibits B and C, and capital cost financing. Upon 30 days advance notice and at Metropolitan's request, IRWD shall also allow Metropolitan's staff or its designee to accompany IRWD staff in inspecting IRWD's contractors' records and books for the purpose of conducting audits of Project costs.
- 6.5 In lieu of conducting its own audit(s), Metropolitan shall have the right to direct IRWD to have an independent audit conducted of all Project costs incurred in any Fiscal Year(s) pursuant to this Agreement. IRWD shall then have an audit performed for said Fiscal Year(s) by an independent certified public accounting firm and provide Metropolitan copies of the audit report within six months after the date of the audit was request. The cost of any independent audit performed

under this Agreement shall be paid by IRWD and is an allowable Project operation and maintenance cost pursuant to Exhibit C.

- 6.6 IRWD shall retain an independent auditor satisfactory to Metropolitan to conduct an initial audit of the Project costs and accounting record keeping practices and submit the results to Metropolitan with the first reconciliation data as outlined in Section 5.
- 6.7 IRWD shall keep all Project records for at least three years following the termination of this Agreement.
- 6.8 If an audit of IRWD's reported Project costs cannot be provided, then those costs are not eligible under this Agreement. Based on the results of any project cost audit, an adjustment for over- or under-payment of Allowable Yield for each applicable Fiscal Year shall be completed by Metropolitan and included in the next invoice issued to MWDOC. MWDOC shall pass through the full amount of the adjustment on its next billing to IRWD.

#### Section 7: Rate Structure Integrity

- 7.1 IRWD and MWDOC agree and understand that Metropolitan's rate structure as of January 1, 2004 ("Existing Rate Structure") provides the revenue necessary to support the development of new water supplies by local agencies through incentive payments in the Local Resources Program (LRP), Conservation Credits Program (CCP), and the Seawater Desalination Program (SDP). In particular, the Water Stewardship Rate is the component of Existing Rate Structure that provides revenue for the LRP, CCP and SDP. Further, IRWD and MWDOC acknowledge that Existing Rate Structure and all components within that rate structure were developed with extensive public input and member agency participation, and that the elements of Existing Rate Structure have been properly adopted in accordance with Metropolitan's rules and regulations.
- 7.2 (a) IRWD and MWDOC agree that Metropolitan's rates set under the Existing Rate Structure may be reset throughout the term of this Agreement to account for the cost of service, and that IRWD and MWDOC will address any and all future issues, concerns and disputes relating to Existing Rate Structure, through administrative opportunities available to them pursuant to Metropolitan's public board process. As such, IRWD and MWDOC agree if they file or participate in litigation or support legislation to challenge or modify Existing Rate Structure, including changes in overall rates and charges that are consistent with the current cost-of-service methodology, Metropolitan may initiate termination of this Agreement consistent with Section 7.4. below. Metropolitan agrees that any change in Existing Rate Structure, including changes in cost-of-service philosophy or methodology would be enacted only after collaboration and discussion with its member public agencies, and Metropolitan's public board review and approval process.  
  
(b) Notwithstanding the foregoing, IRWD and MWDOC retain the right to file and/or participate in litigation and/or to support legislation without triggering the termination of this Agreement if there are material changes to Existing Rate Structure or changes in cost-of-service methodology used to set rates by future Metropolitan board action. IRWD and MWDOC also

retain the right to file and/or support litigation should Metropolitan, in setting rates under Existing Rate Structure, fail to comply with public notice, open meeting, or other legal requirements associated with the process of setting water rates and related taxes, fees, and charges. IRWD and MWDOC agree that they will not file or participate in litigation, nor will they support legislation affecting Metropolitan's rate structure after any such change in rate structure or violation of the law regarding rate setting processes until, and unless, they have exhausted all administrative opportunities available to them pursuant to Metropolitan's public board process.

- 7.3 IRWD and MWDOC agree that all users of the Metropolitan conveyance and distribution system should support the LRP, CCP, and SDP, that such projects provide benefits to Metropolitan and the users of the system by making existing distribution and conveyance capacity available for additional delivery, and that under Existing Rate Structure, the Water Stewardship Rate is an element of charges properly adopted by the Metropolitan Board and properly applied to water wheeled through the Metropolitan conveyance and distribution system.
- 7.4 Should IRWD or MWDOC file or support litigation, or sponsor or support legislation, that would challenge or be adverse to Existing Rate Structure, as described in Paragraph (a) of Section 7.2, Metropolitan's Chief Executive Officer may file a 90-day notice of intent to terminate this Agreement with Metropolitan's Executive Secretary, with copies to all members of Metropolitan's Board of Directors, and contemporaneously provide IRWD and MWDOC with a copy of the notice. Within 30 days of receipt of such notice, IRWD and MWDOC shall have the right to request, in writing, mediation of the dispute by a neutral third party with expertise in finance and rate setting. The mediator shall be selected by agreement of the Parties, or failing agreement within 60 days of such request for mediation, a mediator shall be selected by the Metropolitan Board of Directors from a list of at least four candidates, one each from IRWD and MWDOC, and two of which will be supplied by Metropolitan's Chief Executive Officer. The cost of the mediation shall be borne equally by the Parties. The request for mediation shall also serve to stay the 90-day notice of intent to terminate, but for no more than 90 days beyond the filing of the notice of request for mediation, unless otherwise agreed in writing by the Parties. If mediation does not result in an agreement acceptable to each party to this Agreement within the time provided herein, the notice of intent to terminate shall be reinstated. The Metropolitan Board of Directors shall act to approve or disapprove termination of this Agreement, and all of Metropolitan's obligations hereunder shall terminate if approved, on or before the ninetieth day following filing of the notice to terminate or, if mediation has been requested as described above, the ninetieth day following the request for mediation (or other date agreed in writing by the Parties.)
- 7.5 Metropolitan, IRWD and MWDOC agree that should litigation or legislation brought forth or sponsored by third parties result in changes to Existing Rate Structure, this Agreement will continue in effect unless mutually agreed in writing by the parties.
- 7.6 Should Metropolitan and its member agencies agree on an alternative rate and revenue structure that obviates the need for this section on Rate Structure Integrity, this Section shall be amended or deleted to conform to such action.



7.7 Notwithstanding the foregoing, Metropolitan shall have no power or authority under this Section to terminate this Agreement, and Metropolitan's Chief Executive Officer shall not file a 90-day notice of intent to terminate this Agreement, if MWDOC (but not IRWD) files or participates in any litigation or supporting legislation to challenge or modify Existing Rate Structure, but IRWD transmits a writing to Metropolitan's Chief Executive Officer within thirty (30) days of request therefore from Metropolitan, stating that IRWD has not participated directly or indirectly in the filing or prosecution of any litigation or the drafting or advocacy of any legislation to challenge or modify Existing Rate Structure, and indicates support for Existing Rate Structure."

#### Section 8: Term and Amendments

8.1 The Agreement shall commence on the first date herein written and shall terminate 25 years after the date IRWD notifies Metropolitan that the Project has begun operation, subject to provisions outlined in Exhibit D. The provisions regarding reconciliation and audit shall remain in effect until three years after Agreement termination.

8.2 This Agreement may be amended at any time by the written mutual agreement executed by each of the Parties.

8.3 In addition to the automatic termination provided for in Section 5.2 and Exhibit D, Metropolitan may terminate this Agreement, upon thirty (30) days notice to IRWD on the occurrence of one the following:

a. A material breach of this Agreement by any Party other than Metropolitan; provided that upon a Party's receipt of written notice of material breach from Metropolitan, the breaching Party shall have a period of sixty (60) days to cure and shall not be in material breach nor shall such termination by Metropolitan be permitted so long as the Party has cured within such period, or if such cure is not reasonably possible within such period, has commenced within such period and is diligently pursuing such cure; or

b. Payments are not required to be made under this Agreement by Metropolitan to IRWD for a five-consecutive-year period subsequent to initiation of Project operations.

8.4 Effective six (6) months after written notice to the Parties, this Agreement shall terminate with regard to all Parties upon the occurrence of the two events described in Subsection 8.4(a.) and Subsection 8.4(b.):

- a. Metropolitan determines that it will no longer:
- i. Provide incentives or other financial support to its member agencies for seawater desalination, water recycling, or groundwater recovery projects through the Local Resources Program, Seawater Desalination Program, or similar programs;
- or

- ii. Utilize the Water Stewardship Rate or a similar charge to fund the Local Resources Program, Seawater Desalination Program, or other similar programs; or
  - iii. Include the Water Stewardship Rate as a charge for all water conveyed on the system; and
- b. A member of the MWDOC delegation to the Board of Directors of the Metropolitan Water District of Southern California votes in favor of the determination described in Subsection 8.4(a.).

8.5 The termination provisions of Section 8.4 shall remain in effect only so long as all Metropolitan Local Resources Program, Seawater Desalination Program, or similar program agreements approved by Metropolitan's Board of Directors after November 10, 2009 contain termination provisions materially in accord with Section 8.4 of this Agreement.

Section 9: Hold Harmless and Liability

9.1 IRWD agrees at its sole cost and expense to protect, indemnify, defend, and hold harmless Metropolitan and its Board of Directors, officers, representatives, agents and employees from and against any and all claims and liability of any kind (including, but not limited to, any claims or liability for injury or death to any person, damage to property, natural resources or the environment, or water quality problems) that arise out of or relate to IRWD's approval, construction, operation, repair or ownership of the Project, including any use, sale, exchange or distribution of Project water. Such indemnity shall include all damages and losses related to any claim made, whether or not a court action is filed, and shall include attorney fees, administrative and overhead costs, engineering and consulting fees and all other costs related to or arising out of such claim of liability

9.2 IRWD shall include the following language, or something similar, in any agreement with any consultant or contractor retained to work on the Project, to the extent applicable:

“(Consultant) agrees at its sole cost and expense to protect, indemnify, defend, and hold harmless Metropolitan and its Board of Directors, officers, representatives, agents and employees from and against any and all claims and liability of any kind (including, but not limited to, any claims or liability for injury or death to any person, damage to property, natural resources or the environment, or water quality problems) that arise out of or relate to IRWD's approval, construction, operation, repair or ownership of the Project. Such indemnity shall include all damages and losses related to any claim made, whether or not a court action is filed, and shall include attorney fees, administrative and overhead costs, engineering and consulting fees and all other costs related to or arising out of such claim of liability.”

Section 10: Notice

Any notice, payment or instrument required or permitted to be given hereunder shall be deemed received upon personal delivery or 24 hours after deposit in any United States post office, first class postage prepaid and addressed to the Party for whom intended, as follows:

If to Metropolitan:

The Metropolitan Water District of Southern California  
Post Office Box 54153  
Los Angeles, California 90054-0153  
Attention: Water Resource Management Group Manager

If to MWDOC:

Municipal Water District of Orange County  
18700 Ward Street  
P.O. Box 20895  
Fountain Valley, CA 92728  
Attention: General Manager

If to IRWD:

Irvine Ranch Water District  
P.O. Box 57000  
Irvine, CA 92619-7000  
Attention: General Manager

Any Party may change such address by notice given to each of the other Parties as provided in this section.

Section 11: Successors and Assigns

This Agreement shall inure to the benefit of and be binding upon the successors and assigns of the Parties hereto. This Agreement and any portion thereof shall not be assigned or transferred to any entity not an original Party to this Agreement, nor shall any of the duties be delegated, without the express written consent of all Parties. Any attempt to assign or delegate this Agreement or any of the obligations or benefits of this Agreement without the express written consent of all Parties shall be void and of no force or effect.

Section 12 Severability

The partial or total invalidity of one or more sections of this Agreement shall not affect the validity of this Agreement.

Section 13: Integration

This Agreement comprises the entire integrated understanding between the Parties concerning the IRWD Wells 21 & 22 Desalter Project, and supersedes all prior negotiations, representations, or agreements.

Section 14: Governing Law

The law governing this Agreement shall be the laws of the state of California and the venue of any action brought hereunder shall be in Los Angeles County, California.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement effective as of the date first hereinabove written.

APPROVED AS TO FORM:

THE METROPOLITAN WATER DISTRICT  
OF SOUTHERN CALIFORNIA

Karen L. Tachiki  
General Counsel

Jeffrey Kightlinger  
General Manager

By: \_\_\_\_\_  
Setha E. Schlang  
Deputy General Counsel

By: \_\_\_\_\_  
Deven N. Upadhyay  
Manager, Water Resource Management

APPROVED AS TO FORM:

MUNICIPAL WATER DISTRICT OF  
ORANGE COUNTY

By: \_\_\_\_\_  
General Counsel

By: \_\_\_\_\_  
Kevin P. Hunt  
General Manager

APPROVED AS TO FORM:

IRVINE RANCH WATER DISTRICT

By: \_\_\_\_\_  
General Counsel

By: \_\_\_\_\_  
Paul D. Jones II  
General Manager

**EXHIBIT A**  
**IRWD Wells 21&22 Desalter**  
**PROJECT DESCRIPTION**  
**(TO BE COMPLETED WITH NEW INFO)**

**Overview**

The Irvine Ranch Water District (IRWD) owns wells 21 and 22 located within the city of Tustin in an area where the groundwater contains high levels of nitrate (over 67 mg/L), hardness and total dissolved solids (TDS) over 500 mg/L. The proposed Wells 21&22 Project (Project) would recover, treat, and deliver up to 6,400 acre feet per year (AFY) of recovered groundwater from the Orange County Groundwater Basin for municipal use in IRWD's service area. The Project, which will be owned and operated by IRWD, would supplement IRWD's current potable supplies, reduce demand for imported water, and increase regional supply reliability.

**Project Facilities**

The Project involves the construction or rehabilitation of at least two groundwater wells (Wells 21 and 22), about 2.5 miles of raw water conveyance, finished water transmission, and disposal pipelines, and treatment facilities. The treatment facilities include pretreatment with cartridge filters and reverse osmosis membrane treatment.

**Source of Project Water**

The source of groundwater is the Orange County Groundwater Basin (Basin). Orange County Water District (OCWD) has agreed to exempt the project water from paying the basin equity assessment (BEA) because the Project would help clean up of the Orange County basin, increase IRWD's pumping and create room for more storage in the basin. BEA is assessed to pumpers for any water pumped over the basin pumping percentage (BPP) allocated by OCWD's board every year. Based on the BEA exemption, the Project has the capacity to maintain operation for three years without requiring replenishment from Metropolitan.

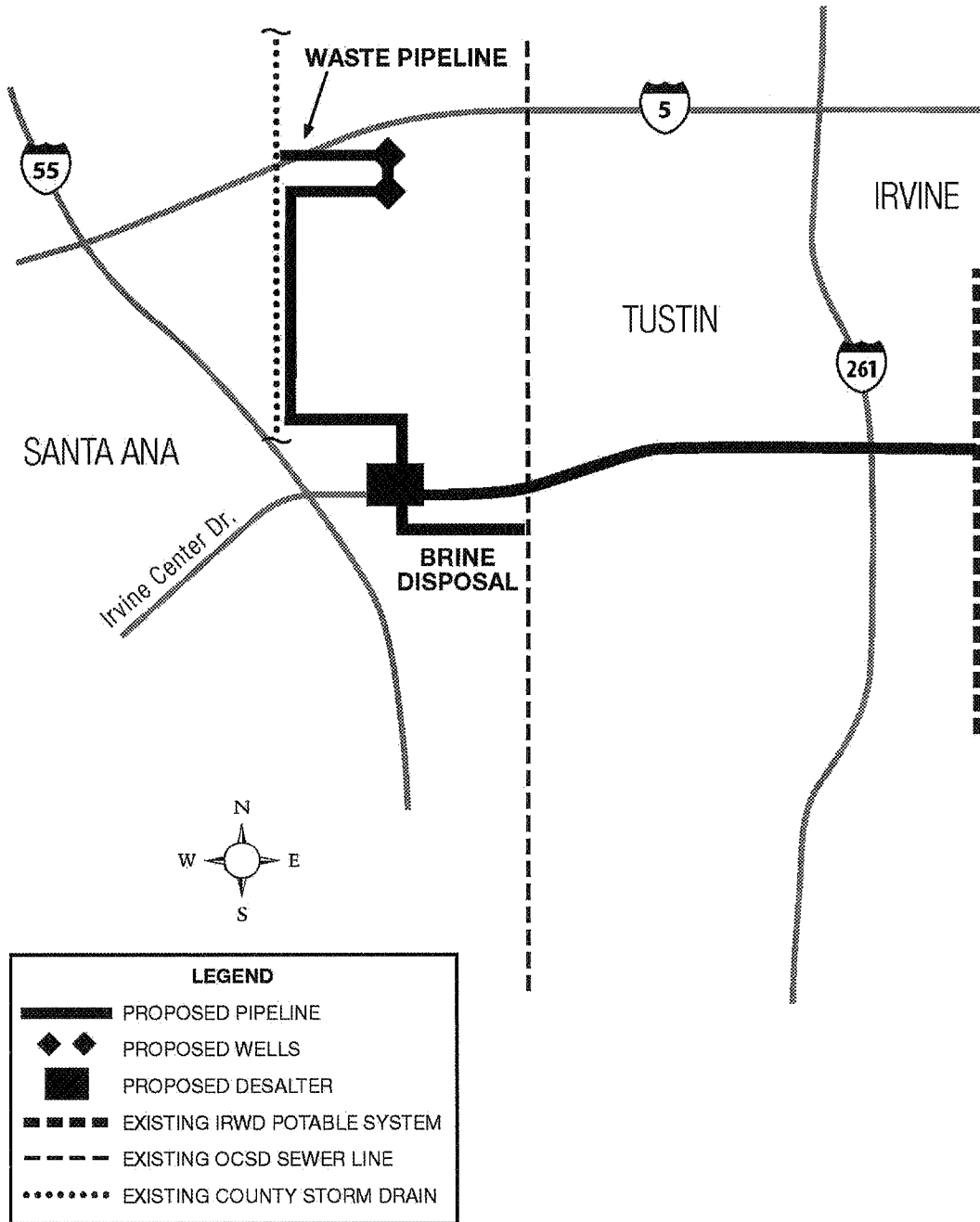
**End Users**

Project water would be delivered for potable uses to customers within IRWD's service area.

**Points of Connection**

Project facilities shall terminate at the point of connection to the existing potable distribution system and at the point of discharge of the concentrate into the sewer system.

**FIGURE 1  
IRWD WELLS 21 & 22 DESALTER**



Map not to scale

## **EXHIBIT B**

### **ANNUALIZED CAPITAL COMPONENT**

1. The Annualized Capital Component shall be computed using only the following incurred costs by IRWD for the Project:
  - a. Design (including preliminary design) and construction management services.
  - b. Construction of Project facilities, more particularly described in Exhibit A.
  - c. IRWD administration of the Project design, construction, and start-up, not to exceed three (3) percent of construction costs unless otherwise approved in writing by Metropolitan.
  - d. Permits, including required data collection.
  - e. Land, right-of-way and easements for the Project described in Exhibit A.
  - f. Environmental documentation and mitigation measures directly related to the implementation or operation of the project and required to comply with applicable environmental permits and laws, including but not limited to the California Environmental Quality Act, National Environmental Policy Act, and the California and Federal Endangered Species Acts. Environmental documentation costs shall commence with the Notice of Preparation (NOP) and conclude with the filing of the Notice of Determination. Environmental documentation costs incurred prior to the NOP that are directly related to the environmental clearance of the Project may also be eligible, subject to review and approval by Metropolitan.
  - g. All contributions as outlined in Section 5.4 of this Agreement shall be treated as negative capital cost values for the purpose of computing the Annualized Capital Component.
2. Cost of the following items shall not be used to calculate the Annualized Capital Component:
  - a. Storm drains, sewer collection systems, and treatment and distribution facilities beyond the Project's points of connection.
  - b. Existing facilities, land, right-of-way, and easements.
  - c. Feasibility studies.
  - d. Deposit of any reserve funds required as a condition of financing.
  - g. Payments made to another department or element of IRWD and MWDOC, unless otherwise approved in writing by Metropolitan.



- h. Public outreach, education, and water marketing activities including but not limited to preparing brochures and handout materials, training, meetings, and workshops.
- i. All others costs not specified in Section 1 of this Exhibit, unless otherwise approved in writing by Metropolitan.

3. Annualized Capital Cost (ACCost) in dollars per year shall be computed using the following procedure:

- a. For fixed-interest rate financing:

$$ACCost = CRF_1 \times P_1 + CRF_2 \times P_2 + \dots + CRF_j \times P_j$$

Where:

$P_j$  is each portion of incurred capital cost for Project with a distinct financing arrangement.

$CRF_j$  is the capital recovery factor for each distinct financing arrangement, as follows:

$$CRF_j = [i \times (1+i)^n] / [(1+i)^n - 1]$$

where:

$i$  is the interest rate (%).

$n$  is the term of financing (in years) commencing in the first Fiscal Year of Project operation. For all capital financing, cash expenditures, and grants and contributions received after the Project begins operation, annual payments shall be calculated, using above process, beginning in the Fiscal Year the costs occur.

$j$  is the number of each separate financing element.

In the first Fiscal Year and Fiscal Year  $n+1$  of production of Allowable Yield, each amortization for the calculation of ACCost shall be prorated by the number of days needed to achieve exactly  $n$  years of amortization following the first day of production of Allowable Yield.

- b. For variable-interest rate financing, annual payments shall be computed based on the actual payments made in the applicable Fiscal Year according to IRWD's financing documents. Any principal payments toward the Project capital cost before the Project operation will be treated as cash. IRWD shall provide Metropolitan with the accumulated paid principal pursuant to Section 5.1.

- c. For fixed-interest rate financing with a non-uniform annual payment schedule, an economically-equivalent uniform annual payment schedule shall be calculated based on an “Internal Rate of Return” analysis to establish the annualized capital cost.
- d. Project capital costs not covered by a financing arrangement described above and all grants and contributions as defined in Section 5.3 shall be amortized over 25 years at an interest rate equal to the lesser of:
  - a) Metropolitan’s most recent weighted cost of long-term debt on June 30 in the year the capital expenditure occurred; or
  - b) The Fiscal Year average of the 25-bond Revenue Bond Index (RBI) as published in the Bond Buyer, or such other index that may replace the RBI, over the most recent Fiscal Year prior to the date the replacement cost was incurred.

All grants or contributions shall be amortized as negative capital cost values beginning in the year that money was received.

- e. After the first Fiscal Year of operation, only refinancing changes which lower the Annualized Capital Component shall be included in the Annualized Capital Component calculation of each subsequent Fiscal Year.
  - f. If the Project capital cost is part of a broad financing arrangement, annual payments shall be calculated by prorating the annual payments of the broad financing using the ratio of the Project capital cost to the initial principal of the broad financing arrangement.
4. The Annualized Capital Component (ACCom) in dollars per acre-foot for purposes of determining the Project Unit Cost each Fiscal Year shall be calculated using the following formula:

$$ACCom = ACCost / \text{Recovered Water}$$

## EXHIBIT C

### OPERATION AND MAINTENANCE COMPONENT

1. The Operation and Maintenance Component shall be computed using only the following incurred costs by IRWD during the applicable Fiscal Year.
  - a. Professional consulting services for Project operation, maintenance and audit, excluding daily Project operation.
  - b. IRWD labor costs and/or contract labor costs for production of up to 6,400 AFY equal to:  
$$(\$250,000) \times (\text{CPI} / \text{CPI}_{2010})$$

Where, CPI is the All Urban Consumers Consumer Price Index published by the U.S. Bureau of Labor Statistics in July for Los Angeles, Riverside and Orange County, CA for the applicable Fiscal Year and CPI<sub>2010</sub> is the CPI published for July 2010. Between July 1 and December 30 in the year 2013, and every third year thereafter, any Party may request Parties to revise the allowable labor cost. Labor cost in the first year of production of Allowable Yield and the last year of this Agreement shall be prorated based on the number of days of production of Allowable Yield.
  - c. Chemicals and supplies for Project operation and maintenance.
  - d. Net electrical energy (recovered energy shall be deducted from energy purchased) for Project operations. Metropolitan shall not pay for electrical energy cost if IRWD fails to install electrical metering devices.
  - e. Contractor services and supplies for Project facilities, operation, maintenance and repair to maintain reliable system operation and achieve regulatory compliance.
  - f. Monitoring required by permits, including water quality sampling and analysis of Recovered water produced by the Project.
  - g. All contributions as outlined in Section 5.4 of this Agreement shall be treated as negative operation and maintenance cost values for the purpose of computing the Operation and Maintenance Component.
  - i. Replacement costs of Project parts.
2. Costs of the following items shall not be used to calculate the Operation and Maintenance Component:
  - a. Operation and maintenance of any facilities beyond the Project's points of connection.

- b. Payments made to another department or element of IRWD and MWDOC, unless otherwise approved in writing by Metropolitan.
  - c. Public outreach, education, and water marketing activities including but not limited to preparing brochures and handout materials, training, meetings, and workshops.
  - d. Fines, penalties, settlements, or judgments due to Project operation.
  - e. All others costs not specified in Section 1 of this Exhibit, unless otherwise approved in writing by Metropolitan.
3. The Annualized Operation and Maintenance Component (O&MC) in dollars per acre-foot for purposes of determining the actual Project Unit Cost each Fiscal Year shall be calculated using the following formula:

$$\text{O\&MC} = (\text{Actual Annual Cost of O\&M}) / (\text{Recovered Water})$$

**EXHIBIT D**

**PERFORMANCE PROVISIONS**

1. The following performance provisions apply:
  - a. Metropolitan will terminate this Agreement if construction has not commenced within two years after Agreement execution. As opposed to Provision 1(b.) below, there is no established appeal process for this outcome.
  - b. Metropolitan will terminate this Agreement if Allowable Yield is not delivered within five years after Agreement execution. The Project sponsor(s) may appeal this decision to Metropolitan’s Board of Directors.
  - c. If the Allowable Yield during Fiscal Years 4 through 7 after Agreement execution does not reach the target yield of 50% of the Ultimate Yield, then Metropolitan will reduce the Ultimate Yield by the target shortfall using the highest Allowable Yield produced in that four year period. For example, the Ultimate Yield of a project with the following performance will be reduced to 6,200 AFY for Scenario 1 while there would be no adjustment under Scenario 2:

Project Ultimate Yield = 6,400 AFY

Fiscal Year	Scenario 1 Allowable Yield (AFY)	Scenario 2 Allowable Yield (AFY)
4	1,500	1,800
5	2,900	2,100
6	2,800	3,000
7	3,000	3,300

50% of the Ultimate Yield =  $0.50 \times 6,400 = 3,200$  AFY

Scenario 1: Shortfall =  $3,200 - 3,000 = 200$  AFY  
Revised Ultimate Yield =  $6,400 - 200$  AFY = 6,200 AFY

Scenario 2: Since, the Allowable Yield in the Fiscal Year 7 is greater than 3,200 AFY, no adjustment is required. Ultimate Yield remains at 6,400 AFY.

- d. If the Allowable Yield during Fiscal Years 8 through 11 after Agreement execution does not reach the target yield of 75% of the Ultimate Yield or the Revised Ultimate Yield, then Metropolitan will reduce the Ultimate Yield (or the Revised Ultimate Yield) by the target shortfall using the highest Allowable Yield produced in that period. For Example, the Ultimate Yield of the project in this example with the following performance will be

reduced to 5,500 AFY for Scenario 1 while there would be no adjustment under Scenario 2:

	Scenario 1	Scenario 2
Fiscal Year	Allowable Yield (AFY)	Allowable Yield (AFY)
8	3,550	4,550
9	3,600	4,600
10	3,500	4,700
11	3,950	4,900

Scenario 1: Revised Ultimate Yield = 6,200 AFY (see above calculations)  
 75% of Ultimate Yield =  $0.75 \times 6,200 = 4,650$  AFY  
 Shortfall =  $4,650 - 3,950 = 700$  AFY  
 Revised Ultimate Yield =  $6,200 - 700 = 5,500$  AFY

Scenario 2: Ultimate Yield = 6,400 AFY  
 75% of ultimate Yield =  $0.75 \times 6,400 = 4,800$  AFY  
 Since, the Allowable Yield in the Fiscal Year 11 is greater than 4,800 AFY, no adjustment is required.

- e. If the Allowable Yield during Fiscal Years 12 through 15 after Agreement execution (and every four-year period thereafter) does not reach the target yield of 75% of the Ultimate Yield or revised Ultimate Yield, then Metropolitan will reduce the Ultimate Yield (or the Revised Ultimate Yield) by the target shortfall using the highest Allowable Yield produced in that period. The adjustment will be made using the same methodology shown in the above examples.

(The text in this exhibit cannot be modified. It is a quote taken from MWD's Admin Code)

### **EXHIBIT E**

MWD Administrative Code Section 4401 (c)

#### **§ 4401. Rates.**

(c) For purposes of agreements existing under the Local Resource Program, Local Project Program, Groundwater Recovery Program and other similar programs, references to the "full service water rate," "full service treated water rate," "treated non-interruptible water rate" or "other prevailing rate" or to the "reclaimed water rate" or "recycled service rate" shall be deemed to refer to the sum of the System Access Rate, Water Stewardship Rate, System Power Rate, the expected weighted average of Tier 1 Supply Rate and Tier 2 Supply Rate (equal to the estimated sales revenues expected from the sale of water at the Tier 1 and Tier 2 Supply Rates divided by the total District sales in acre-feet expected to be made at the Tier 1 and Tier 2 Supply Rates), a Capacity Charge expressed on a dollar per acre-foot basis and Treatment Surcharge.

**EXHIBIT "B"**

RESOLUTION NO. 2010-

RESOLUTION OF THE BOARD OF DIRECTORS OF  
IRVINE RANCH WATER DISTRICT APPROVING AND AUTHORIZING  
EXECUTION OF WELLS 21 AND 22 DESALTER PROJECT LOCAL  
RESOURCES PROGRAM AGREEMENT AMONG  
METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA,  
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY AND  
IRVINE RANCH WATER DISTRICT

WHEREAS, on October 22, 2009, the Irvine Ranch Water District (District) submitted a Local Resources Program proposal for the Metropolitan Water District's (MWD) Local Resources Program Funding for water produced and distributed from the Wells 21 and 22 Project; and

WHEREAS, staff has presented and recommended approval of a Wells 21 and 22 project Local Resources Program Agreement with MWD and the Municipal Water District of Orange County (MWDOC) providing for MWD funding of up to \$250 per acre-foot of water for up to 6,400 acre-feet per year of water produced by the Wells 21 and 22 project and subject to minor changes approved by the District's General Manager and Legal Counsel.

NOW, THEREFORE, the Board of Directors of the Irvine Ranch Water District does hereby approve and authorize execution of the *Wells 21 and 22 Project Local Resources Program Agreement* with MWD and MWDOC subject to the changes described herein, and upon approval as to form and content by the District's General Manager and Legal Counsel.

APPROVED, SIGNED and ADOPTED this 22th day of November 2010.

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President/Vice President  
IRVINE RANCH WATER DISTRICT  
and of the Board of Directors thereof

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Secretary/Assistant Secretary  
IRVINE RANCH WATER DISTRICT  
and of the Board of Directors thereof

APPROVED AS TO FORM:  
BOWIE, ARNESON, WILES & GIANNONE



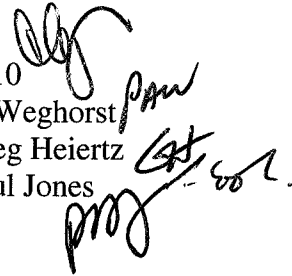


November 22, 2010

Prepared By: P. Weghorst

Submitted By: Greg Heiertz

Approved By: Paul Jones



## ACTION CALENDAR

### COORDINATED OPERATING, WATER STORAGE, EXCHANGE AND DELIVERY AGREEMENT WITH METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

#### SUMMARY:

Staff has completed negotiations with Metropolitan Water District of Southern California (Metropolitan) and Municipal Water District of Orange County (MWDOC) and prepared a Coordinated Operating, Water Storage, Exchange and Delivery Agreement (Agreement) that will accommodate the recharge, storage and recovery of State Water Project (SWP) at the District's Strand Ranch Integrated Banking Project (Water Bank) and the delivery by exchange of this water to the Irvine Ranch Water District (IRWD) service area. Staff recommends the Board authorize the General Manager to execute the Agreement subject to changes approved by the General Manager and legal counsel.

#### BACKGROUND:

IRWD will be securing and placing into storage water in the Strand Ranch Integrated Banking Project water that will come from multiple sources. These sources of water will be categorized as either SWP or Non-SWP water. The delivery by exchange of any water recovered from the Water Bank to IRWD's service area requires the cooperation of both Metropolitan and MWDOC. Metropolitan requires MWDOC's participation in an agreement for the delivery of such water as the Metropolitan member agency that provides representation on behalf of IRWD.

Metropolitan's SWP Water Supply Contract with the California Department of Water Resources prohibits the import of SWP water originating from other SWP Contractors into Metropolitan's service area unless Metropolitan provides its consent. Therefore, the delivery of SWP water secured by IRWD from other SWP Contractors to IRWD's service area must meet specific principles established by Metropolitan to obtain their consent.

The delivery by Metropolitan of SWP water secured by IRWD to IRWD's service area will be precedent setting and will require an agreement between IRWD, Metropolitan and MWDOC. In May 2009, the Water Banking Ad-Hoc Committee directed staff to work with Metropolitan and MWDOC to finalize terms for an agreement that will facilitate the recovery, exchange and delivery of SWP water from the Water Bank to IRWD's service area. Since that time, staff has held numerous negotiation sessions with executive staff of both Metropolitan and MWDOC and a final set of terms were developed. On July 13, 2010, the Metropolitan Board of Directors authorized the execution of an Agreement based on these final terms. The Metropolitan Board Action Letter is presented as Exhibit "A" and includes the final terms of the Agreement. The terms of the Agreement reflect Metropolitan's principles for SWP being secured by an agency within its service area.

Subsequent to approval of the final terms by the Metropolitan Board, IRWD staff and legal counsel worked with both Metropolitan and MWDOC in the preparation of the Coordinated Operating, Water Storage, Exchange and Delivery Agreement. This Agreement is provided as Exhibit "B". The MWDOC Board of Directors is expected to take up consideration of the Agreement in December. Execution of an agreement consistent with the approved terms has already been authorized by the Metropolitan Board, so no further Board action by Metropolitan will be required.

Benefits of the Agreement:

The Agreement will enhance IRWD's Water Banking Program by providing access to the expanded storage capabilities of Metropolitan's reservoirs at no cost to IRWD. This access will occur through the coordinated operation of IRWD's Water Bank and Metropolitan's storage assets. Furthermore, the Agreement will facilitate the delivery by exchange of SWP supplies secured by IRWD into IRWD's service area through access to Metropolitan's unused capacity in SWP conveyance, Kern County conveyance facilities, and Metropolitan's distribution system.

The Agreement will also provide regional benefits by facilitating the delivery of additional supplies into the Metropolitan service area and by providing the ability of Metropolitan to Borrow IRWD's SWP supplies either from water stored in Metropolitan's system or from the Water Bank.

Terms of Agreement:

The agreement will be in effect until November 4, 2035 which is the corresponding termination date of Metropolitan's SWP Contract. The terms of the Agreement are divided into categories that reflect: i) Metropolitan's principles for SWP water; ii) Storage, crediting, and conveyance of water; iii) IRWD's use of SWP water; iv) Metropolitan's borrowing of water; and v) The financial aspects of the Agreement. The following are the terms of the Agreement by category.

*Metropolitan Principles:*

1. Metropolitan maintains control of all SWP supplies entering its service area;
2. Metropolitan needs to provide its consent before IRWD may enter into agreements with other SWP Contractors for supplies that Metropolitan is not actively pursuing;
3. SWP supplies can only be secured by IRWD thorough unbalanced exchanges. Operational exchanges that facilitate the recharge, recovery and export of water are allowed;
4. Metropolitan receives the benefit of being able to borrow SWP water secured by IRWD;

5. The SWP supplies secured by IRWD will qualify as extraordinary supply during periods when the Metropolitan Water Supply Allocation Plan is in force, provided that IRWD's Water Bank is operated consistently with Metropolitan's Board adopted principles for extraordinary supply; and
6. Metropolitan's investments in the SWP are protected by not causing a reduction in revenue received by Metropolitan for payment of SWP fixed charge obligations.

*Storage, Crediting and Conveyance:*

1. As SWP water is made available by IRWD, Metropolitan will decide whether to store it in either Metropolitan's Southern California reservoirs or in IRWD's Water Bank;
2. IRWD will receive a credit for all SWP water secured by IRWD that Metropolitan chooses to store in Southern California. IRWD can redeem the credits at any time for a equivalent amount of water at its service connections;
3. IRWD will receive access to Metropolitan's unused capacity in SWP conveyance, Kern County conveyance facilities, and Metropolitan's distribution system; and
4. IRWD is responsible for storage losses in the Water Bank. IRWD is not responsible for losses in the Metropolitan's distribution system and reservoirs.

*IRWD's Use of Water:*

1. IRWD has first priority to use of SWP water that is secured by IRWD and stored in either the Water Bank or in Metropolitan's reservoirs;
2. IRWD can use SWP water secured by IRWD and stored in the Water Bank or in Metropolitan's reservoirs at any time;
3. IRWD's recovery of SWP water secured by IRWD from the Water Bank or Metropolitan's reservoirs is limited by the Water Bank annual recovery capacity of 17,500 AFY;
4. Delivery of IRWD's SWP water to IRWD will not count against MWDOC's annual Tier 1 limit; and
5. IRWD's use of its Non-SWP and SWP water will qualify as extraordinary production during periods when the Metropolitan Water Supply Allocation Plan is in effect.

*Metropolitan's Borrowing of Water:*

1. Non-SWP supplies stored in the Water Bank will not be available for borrowing by Metropolitan;
2. Metropolitan can borrow IRWD secured SWP supplies including SWP water stored in IRWD's Water Bank. Metropolitan must return borrowed water within three years. IRWD cannot redeem credits to the borrowed water until the water is replaced by Metropolitan or the end of three years, whichever comes first;
3. Metropolitan's borrowing is limited to the lesser of 17,500 AF per year or one-third of IRWD's total SWP water holdings in the Water Bank and in Metropolitan's Southern California reservoirs; and
4. Metropolitan cannot borrow any SWP water if IRWD's total balance of both Non-SWP and SWP water in storage in the Water Bank and Southern California is less than 17,500 AF.

*Financial Terms:*

1. IRWD will pay (through MWDOC) the Metropolitan Full Service water rate at the time IRWD's SWP water is delivered to IRWD by exchange from the Water Bank or from the redemption of a credits at IRWD's service connections;
2. IRWD will pay all its costs associated with storing SWP water in the Water Bank and IRWD will receive an equivalent credit from Metropolitan when the water is delivered to IRWD's service connections;
3. IRWD will pay MWDOC its current or future customary charges to recover administrative costs incurred by MWDOC in connection with delivering imported water to its contracting agencies;
4. Metropolitan will be responsible for SWP costs when IRWD's SWP water is moved into Metropolitan's service area. Metropolitan will recover its costs through IRWD's payment of Metropolitan's Full Service water rate;
5. IRWD will be responsible for actual recovery costs when using water from the Water Bank; and
6. Metropolitan will be responsible for actual recovery costs when borrowing water from the Water Bank.

Delivery of Non-SWP Water:

The delivery of Non-SWP water from the Water Bank to IRWD by exchange will occur through execution of “Wheeling” agreements consistent with Metropolitan’s Administrative Code and “Wheeling” policies. There are existing agreements with other Metropolitan member agencies that will serve as a precedent for IRWD’s future “Wheeling” of Non-SWP water. Staff is working with Metropolitan staff in the development of a template “Wheeling” agreement that IRWD can use on a case-by-case basis when recovering Non-SWP from its Water Bank.

FISCAL IMPACTS:

The majority of the SWP water that is secured by IRWD will be stored by Metropolitan in its reservoirs. IRWD’s cost of redeeming a credit for SWP water stored in Metropolitan’s reservoirs (with water being taken at IRWD’s service connection) based on Metropolitan’s Full Service Treated Tier 1 rate to be effective on January 1, 2011 will be \$744 per acre-foot.

IRWD’s cost of recovery and exchange delivery of SWP water from the Water Bank to IRWD’s service area using current groundwater production estimates, Cross Valley Canal power costs, Rosedale-Rio Bravo Water Storage District administration fees and Metropolitan’s Full Service Treated Tier 1 rate will be \$819 per acre-foot.

IRWD’s cost of recovery, “Wheeling” and treatment of Non-SWP water from the Water Bank using current groundwater production estimates, Cross Valley Canal power costs, Rosedale-Rio Bravo Water Storage District administration fees, SWP power costs to the East Branch of the California Aqueduct and Metropolitan’s System Access, Water Stewardship and Treatment rates will be \$757 per acre-foot.

ENVIRONMENTAL COMPLIANCE:

A Final Environmental Impact Report (FEIR) for the Strand Ranch Integrated Banking Project has been prepared, certified and the project approved 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. The FEIR considers the recharge, storage, recovery and delivery of Non-SWP and SWP water to IRWD’s service area through the use of Metropolitan facilities.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXECUTE THE COORDINATED OPERATING, WATER STORAGE, EXCHANGE AND DELIVERY AGREEMENT BETWEEN IRVINE RANCH WATER DISTRICT, METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA AND MUNICIPAL WATER DISTRICT OF ORANGE COUNTY SUBJECT TO NON-SUBSTANTIVE CHANGES APPROVED BY THE GENERAL MANAGER AND LEGAL COUNSEL.

EXHIBITS:

Exhibit "A" - Metropolitan Board Action Letter for Authorizing Execution of Agreement with IRWD and MWDOC

Exhibit "B" - Coordinated Operating, Water Storage, Exchange and Delivery Agreement between IRWD, Metropolitan and MWDOC



- **Board of Directors**  
***Water Planning and Stewardship Committee***

7/13/2010 Board Meeting

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8-7

### **Subject**

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Authorize executing an agreement with the Municipal Water District of Orange County for the delivery of water supplies from Irvine Ranch Water District's Central Valley Storage Program

### **Description**

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The Municipal Water District of Orange County (MWDOC) and one of its member agencies, Irvine Ranch Water District (IRWD), have approached Metropolitan to facilitate delivery of procured supplies stored in the IRWD Strand Ranch Banking Project (Strand Ranch Project). These supplies may consist of third party water and some State Water Project (SWP) supplies. Non-SWP supplies would be transported using Metropolitan's existing wheeling policy and pay the applicable System Access Rate. The SWP supplies would only be obtained through unbalanced exchanges with State Water Contractors. As part of the unbalanced exchange, IRWD retains up to 50 percent of the stored water in exchange for regulating the supply in the Strand Ranch Project. Staff has developed agreement terms that are consistent with existing policies and the SWP contract while protecting Metropolitan's regional investment. The agreement, which would be between Metropolitan, MWDOC and IRWD, would allow the coordinated operation of the SWP supplies with a member agency storage program. The proposed agreement would not reduce Metropolitan's access to SWP supplies. As a result of the agreement, there will likely be an increase of SWP supplies into the service area.

### **Existing Policy**

Metropolitan's wheeling policy permits the General Manager to make a determination of available system capacity on a case-by-case basis. Member agencies have used the wheeling service to have non-SWP supplies delivered into Metropolitan's service area. While there is no specific policy related to the delivery of SWP supplies into Metropolitan's service area, Metropolitan's SWP contract requires Metropolitan's consent prior to the Department of Water Resources (DWR) delivering SWP supplies originating from other SWP contractors to Metropolitan's service area. Under the proposed agreement, Metropolitan will retain its right to consent. The contract provision protects Metropolitan's investment in the SWP and allows Metropolitan to fully manage SWP supplies within its service area without interference.

### **Strand Ranch Banking Project**

IRWD's Strand Ranch Project is located in the Central Valley west of Bakersfield. The Strand Ranch Project has the capability of storing up to 50,000 acre-feet of water. IRWD proposes to procure water to be stored in the Strand Ranch Project for later use. The agreement recommended in this letter deals with SWP water procured by IRWD through unbalanced exchanges. When IRWD secures SWP water, Metropolitan will have the option of immediately delivering the water to customers within its service area, storing it in any available reservoir capacity or storing it in IRWD's Strand Ranch Project. In return, Metropolitan would be obligated to deliver a like amount of water to MWDOC in future years for IRWD's benefit. Deliveries to MWDOC/IRWD would most likely occur in years in which Metropolitan's Water Supply Allocation Plan (WSAP) is triggered, and would be limited to the extraction capacity of the Strand Ranch Project. In addition, Metropolitan would be allowed to "borrow" SWP stored water in the Strand Ranch Project, subject to return within three years.



### **Preliminary Terms**

The agreement terms (**Attachment 1**) with MWDOC and IRWD provide benefits for the region while providing IRWD a water supply benefit. The terms recognize that Metropolitan maintains control of all SWP supply that would ultimately be delivered to Metropolitan's service area. The member agency gains a water supply benefit by obtaining access to a new supply of water. The water delivered under the program would also qualify as an extraordinary supply if the program is operated consistent with the board-adopted principles for extraordinary supply.

The agreement terms are consistent with Metropolitan's existing policies and practices. MWDOC would obtain access to Metropolitan's unused capacity in the SWP conveyance and Metropolitan's distribution system as determined by the General Manager. Metropolitan's return of water in any year would be limited by the extraction capacity of the Strand Ranch Project and any requirements established by the DWR for the introduction of the water into the California Aqueduct, including any water quality limitations. MWDOC would pay Metropolitan's Full Service water rate at the time the water is delivered at MWDOC's service connection. If MWDOC is in Tier 2 at the time of delivery, then MWDOC will pay the Tier 2 rate. Otherwise, the water will be billed at the fully bundled Tier 1 rate.

IRWD would be responsible for its costs associated with storing and recovering the water from the Strand Ranch Project and any conveyance or storage losses. Metropolitan would be responsible for the SWP costs to deliver the water to MWDOC's service connection. By charging Metropolitan's Full Service water rate, Metropolitan would recover the SWP costs and Metropolitan system costs of delivering the water and also protect the region's investment in the SWP.

### **Regional Benefits**

The proposed agreement would facilitate the delivery of additional supply into the Metropolitan service area. There would be flexibility in coordinating Metropolitan and IRWD storage assets to manage that added supply and minimize groundwater pumping costs. Metropolitan could also borrow water stored in the Strand Ranch Project paying only the actual recovery costs, if any. Metropolitan would be required to return any borrowed water within three years. Metropolitan would not pay any banking fees for borrowing the water and not incur the capital costs for the Strand Ranch Project.

The proposed policy has been structured to provide benefits to both MWDOC and IRWD and the region as a whole. The coordinated operation of the SWP supplies with member agency storage programs would allow Metropolitan another method to cost-effectively manage the region's limited resources, while protecting Metropolitan's and the region's financial interests.

### **Policy**

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Metropolitan Water District Administrative Code Section 4209: Contracts

Metropolitan Water District Administrative Code Section 4405: Wheeling Service

Metropolitan Water District Administrative Code Section 4905: Program Reductions During a Shortage

Contract between The Metropolitan Water District of Southern California and the State of California DWR for a Water Supply and Selected Related Agreements, Article 15(d): Metropolitan's consent is required for State project water deliveries within its boundaries

## California Environmental Quality Act (CEQA)

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CEQA determination for Option #1:

The proposed action is not defined as a project under CEQA because it involves continuing administrative activities, such as general policy and procedure making (Section 15378(b)(2) of the State CEQA Guidelines). In addition, where it can be seen with certainty that there is no possibility that the proposed action in question may have a significant effect on the environment, the proposed action is not subject to CEQA (Section 15061(b)(3) of the State CEQA Guidelines).

The CEQA determination is: Determine that the proposed action is not subject to CEQA pursuant to Sections 15378(b)(2) and 15061(b)(3) of the State CEQA Guidelines.

CEQA determination for Option #2:

None required

## Board Options

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### Option #1

Adopt the CEQA determination and authorize executing agreements, based on the terms described in this letter and **Attachment 1**, with the Municipal Water District of Orange County, the Irvine Ranch Water District and the Department of Water Resources, as appropriate, for the coordinated delivery of procured State Water Project supplies with Irvine Ranch Water District's Strand Ranch Project.

**Fiscal Impact:** The agreement will provide for the more expansive use of water resources and have no negative fiscal impact to Metropolitan. The agreement will have the potential to reduce the region's costs by coordinating the SWP supplies with Irvine Ranch Water District's Strand Ranch Project. The region could benefit financially by reducing the need to operate more costly storage programs and transfer purchases.

**Business Analysis:** This option will improve the reliability of the Municipal Water District of Orange County and Irvine Ranch Water District by providing access to a new water supply. Metropolitan's reliability will also improve by gaining access to the Strand Ranch Project and the ability to borrow water during emergencies and shortages.

### Option #2

Do not adopt the policy.

**Fiscal Impact:** Potential increased water costs by operating more costly storage programs

**Business Analysis:** This option may result in lost opportunities to secure additional State Water Project supplies that would have otherwise been available for the region and member agencies.


**Staff Recommendation**

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Option #1

  
Deven N. Upadhyay  
Manager, Water Resource Management

6/29/2010  
Date

  
Jeffrey Kightlinger  
General Manager

6/30/2010  
Date

**Attachment 1 – Terms for Coordinated Delivery of SWP Supplies with MWDOC Program**

Ref# wrm12604551

## **Terms for Coordinated Delivery of SWP Supplies with MWDOC Program**

### State Water Project

- Metropolitan maintains control of State Water Project (SWP) supplies that will enter into the service area.
- Metropolitan needs to consent before MWDOC/IRWD may enter into agreements with other State Water Contractors to secure State project water that would be moved into Metropolitan's service area.
- Metropolitan would have the option to take delivery of the water to use, store in a reservoir, or opt to have the water stored in the member agency storage program.
- The SWP supplies acquired by MWDOC/IRWD would not be SWP supplies Metropolitan is actively pursuing and would only be obtained through unbalanced exchanges.
- The SWP supplies acquired by MWDOC/IRWD would qualify as extraordinary supply provided that the program is operated consistent with the Board adopted principles for extraordinary supply. IRWD would require an agreement with the MWDOC to pass through any increase in extraordinary production credit.
- The agreement term will not extend beyond November 4, 2035.

### Financial

- MWDOC would pay the Metropolitan Full Service water rate at the time the water is delivered to MWDOC. The water delivery would not count against MWDOC's annual Tier 1 limit, but if MWDOC was in Tier 2 at the time of the delivery, MWDOC pays the Tier 2 water rate.
- IRWD pays all its costs associated with storing and recovering the water in its program. Through MWDOC, IRWD pays the actual SWP costs when water is stored in the program and IRWD receives an equivalent credit from Metropolitan when the water is delivered to the MWDOC/IRWD service connection.
- Metropolitan would be responsible for SWP costs when the water is moved into Metropolitan's service area. Metropolitan recovers its costs through MWDOC's payment of Metropolitan's Full Service water rate.
- Metropolitan would be responsible for reimbursing IRWD for actual storage and recovery costs when using the storage program.

### Conveyance

- MWDOC/IRWD obtain access to Metropolitan's unused capacity in SWP conveyance, Kern County conveyance facilities, and Metropolitan's distribution system as determined by the General Manager.
- MWDOC/IRWD would be limited by the program annual capacity and any requirements established by the Department of Water Resources for the introduction of program water into the California Aqueduct.

### IRWD Program

- IRWD would be responsible for all capital costs associated with its storage program.
- IRWD would be responsible for any conveyance and storage losses as part of its program.
- Metropolitan can use the storage program to recover previously stored SWP supplies for Metropolitan's use. However, Metropolitan must either return the water to the storage program to repay its obligation or incur a future obligation to deliver the water to MWDOC/IRWD's service connection when the water is called by MWDOC/IRWD. Metropolitan must return borrowed water within three years.
- Non-SWP supplies stored in the program would be subject to the existing wheeling policy and would not be available to Metropolitan.



# EXHIBIT "B"

**111710 Draft  
COORDINATED OPERATING,  
WATER STORAGE, EXCHANGE  
AND DELIVERY AGREEMENT**

THIS COORDINATED OPERATING, WATER STORAGE, EXCHANGE AND DELIVERY AGREEMENT ("Agreement") is made and entered into as of \_\_\_\_\_, by and between The Metropolitan Water District of Southern California (hereinafter, "Metropolitan"), the Municipal Water District of Orange County (hereinafter, "MWDOC") and the Irvine Ranch Water District (hereinafter, "IRWD"). Metropolitan MWDOC, and IRWD are sometimes referred to collectively as the "Parties" and each, individually, as a "Party."

## RECITALS

A. IRWD is a California water district formed and existing under the California Water District Law, Sections 34000 *et seq.* of the California Water Code, for the purpose providing water services and certain other services. IRWD's powers and purposes include the acquisition within or without the district in the State of all necessary property or rights in property necessary or proper for the production, storage, transmission and distribution of water for irrigation, domestic, industrial and municipal purposes and the power to contract with one or more public agencies in carrying out any of its powers.

B. Metropolitan is a public agency of the State of California incorporated under the Metropolitan Water District Act, Stats. 1969, ch. 209, as amended, codified at Section 109.1 *et seq.* of Appendix to the California Water Code, engaged in transporting, storing and distributing water in the counties of Los Angeles, Orange, Riverside, San Bernardino, San Diego and Ventura, within the State of California. Metropolitan is a SWP Contractor, as defined below.

C. MWDOC is a municipal water district formed and existing under the California Water District Law, Sections 71000 *et seq.* of the California Water Code, for the purpose providing its contracting agencies in Orange County with a safe, reliable and sufficient supply of imported water.

D. MWDOC is a member agency of Metropolitan.

E. IRWD is within the service areas of Metropolitan and MWDOC and is a contracting agency of MWDOC.

F. IRWD has entered into an agreement with the Rosedale-Rio Bravo Water Storage District (“RRBWSD”) for the development and operation of a water banking project (the “Integrated Banking Project”), consisting of recharge, storage and recovery facilities that are located on its property in Kern County known as “Strand Ranch” and on other property and integrated into RRBWSD’s water banking program, thereby allowing for the use of such recharge, storage and recovery facilities, together with available RRBWSD facilities, to provide IRWD with a means for acquiring, including through exchange, and regulating, through basin storage, water supplies to help meet its dry year and other water requirements.

G. IRWD’s contemplated sources of water for banking in the Integrated Banking Project include State Water Project water and non-State Water Project water, such as high-flow Kern River Water and other exportable supplies.

H. IRWD desires to have a means of securing, exchanging and moving water supplies, including supplies stored in the Integrated Banking Project, to its service area.

I. Metropolitan desires to augment its water supplies and regulatory storage capacity and to insure financial integrity and equity in the use of its delivery system.

J. The coordinated operating and exchange program implemented through this Agreement will facilitate the use of the Integrated Banking Project for storage, recovery, exchange and delivery of water in a manner that satisfies the objectives of, and provides joint benefits of increased water supply reliability and diversification to, IRWD and Metropolitan.

K. MWDOC is willing and able to provide administrative services to assist with payment, crediting and other tracking as provided herein for water delivered by means of this Agreement. MWDOC desires to participate in and affirmatively support the coordinated operating and exchange program contemplated herein by transferring and passing through the water deliveries and financial considerations between IRWD and Metropolitan relative to the rights and obligations set forth in this Agreement, including, without limitation, the recognition of water delivered to IRWD hereunder as

Extraordinary Supply pursuant to Metropolitan's Water Supply Allocation Plan subject to the exceptions to otherwise applicable provisions of said Plan as set forth in this Agreement.

L. On July 13, 2010, Metropolitan's board authorized execution of an agreement with IRWD for the management and use of SWP Water acquired by IRWD for the benefit of IRWD and Metropolitan.

## **AGREEMENT**

NOW, THEREFORE, in consideration of the foregoing recitals and the representations, warranties, covenants and agreements contained in this Agreement and for other good and valuable consideration, the receipt and sufficiency of which the Parties hereby acknowledge, the Parties hereby agree to the following terms and conditions of this Agreement.

### **I.**

#### **DEFINITIONS AND RULES OF CONSTRUCTION**

1.1 Definitions. As used in this Agreement, these terms, including any grammatical variations thereof, have the following meanings:

“Administrative Code” means the Metropolitan Water District Administrative Code in existence on the date of this Agreement, subject to modification to the extent provided in Paragraph 12.12 of this Agreement.

“Bank Operator” means RRBWSD and any successor thereto and any other entities that may perform a comparable function with respect to the Integrated Banking Project.

“Banking Agreement” means collectively the Agreement between RRBWSD and IRWD dated as of January 13, 2009, together with such amendments, supplements and exhibits thereto, and any replacements thereof and other agreements with a Bank Operator or participating interests therein as may become effective from time to time.



“Banking Delivery Point” means any point where water being delivered by or on behalf of IRWD or Metropolitan for recharge and banking in the Integrated Banking Project enters transportation facilities owned or operated by Bank Operator, including the Tupman Turnout (Reach 13B) on the easterly side of the SWP facilities, the Strand Ranch Turnouts in Reach 2 of the CVC, or other points as may be designated under the Integrated Banking Agreement, or, in the case of water delivered to IRWD’s banked water account in the Integrated Banking Project by exchange, the record transfer of water to such account.

“Borrowed Water” means water borrowed as described in Paragraph 3.4(e).

“Call Notice” means a notice given by IRWD pursuant to Paragraph 3.7 of its election to take a Delivery of Program Water from its storage account in the Integrated Banking Project or by redeeming accumulated credits from the Metropolitan Delivery Account, or by a combination thereof.

“credit” means a credit issued to MWDOC for IRWD’s benefit in the Metropolitan Delivery Account pursuant to Paragraph 3.5.

“CVC” means the Cross Valley Canal facilities and appurtenances.

“Delivery of Program Water” means the delivery by Metropolitan of water to IRWD Delivery Point(s) pursuant to a Call Notice.

“DWR” means the Department of Water Resources of the State of California, or its successor agency.

“Effective Date” means the date identified in the preamble clause of this Agreement.

“Extraordinary Supply” means a supply qualifying as an extraordinary supply under the Water Supply Allocation Plan. If Metropolitan shall no longer have a Water Supply Allocation Plan, the Parties shall meet and confer in good faith to amend this definition and the provisions of this Agreement in which it is used, in order to preserve the intent of such provisions and provide an equivalent benefit to IRWD.

“Integrated Banking Project” means the project described in the Banking Agreement and such other banking assets or components or interests as IRWD may determine to operate in conjunction therewith.

“IRWD Delivery Point” means any of the Metropolitan service connections known as CM-01A and OC-7 (from the Orange County Feeder); CM-10, CM-12, OC-38, OC-39, OC-57, OC-58 and OC-63 (from East Orange County Feeder No. 2); OC-68, OC-71, OC-72, OC73/73A, OC-74, OC-75, OC-83, OC-84 and OC-87 (from the Allen-McColloch Pipeline), OC-13/13A and OC-33/33A (from the Baker Pipeline) [*above list to be checked for accuracy and completeness*] any other service connection selected and operated in accordance with applicable operating rules and protocols in effect from time to time with respect to such pipelines, and any service connection used for delivery to any IRWD local storage reservoir or any other storage facility or capacity in which IRWD has a contractual or other legal right to store water.

“Local Delivery Rate” means the prevailing full-service treated volumetric charge set by Metropolitan’s Board of Directors from time to time pursuant to applicable law and regulation, generally applicable to the delivery of water by Metropolitan to its member agencies, excluding any above-allocation penalties but including any applicable pricing tier for purchases by MWDOC in effect during the month in which the relevant Delivery of Program Water is made, or if a rate designated as “Full-Service” is no longer set, the equivalent rate set by Metropolitan.

“Metropolitan Delivery Account” means an account that tracks the credits and debits of Metropolitan Delivery of Program Water.

“Metropolitan Delivery” means delivery of Program Water to Metropolitan within the Metropolitan Service Area pursuant to Paragraph 3.4(a).

“Metropolitan Delivery Notice” means a notice given by Metropolitan pursuant to Paragraph 3.5 of a Metropolitan Delivery.

“Non-SWP Water” means water other than SWP Water.

“OMP&R” means operation, maintenance, power and replacement.

“Program Water” means SWP Water placed under the right and authority of Metropolitan under Paragraph 3.1.

“RRBWS” means the Rosedale-Rio Bravo Water Storage District, or if applicable, other Banking Operator.

“SWP” means the State Water Project.

“SWP Contractor” means any entity that has executed or is an assignee of a contract (“SWP Contract”) with DWR.

“SWP Water” means any Table A Water or Unallocated Article 21 Water.

“Table A Water” means water allocated to a SWP Contractor that is within its “Annual Table A Amount” or “annual entitlement” as those terms are defined in such SWP Contract.

“Termination Date” means November 4, 2035.

“Unallocated Article 21 Water” means water that is determined by DWR to be available and not needed to fulfill required deliveries of Table A Water to SWP Contractors, and that exceeds requests by participating SWP Contractors for allocation thereof and is offered by DWR to SWP Contractors on an unallocated basis.

“Water Supply Allocation Plan” means Metropolitan’s Water Supply Allocation Plan and exhibits thereto, as originally adopted by Metropolitan on February 12, 2008 and as amended from time to time or any equivalent plan that may be adopted by Metropolitan as a replacement thereof.

“Year” means the period commencing on the Effective Date and ending on the immediately following December 31 (the first (1<sup>st</sup>) year) and each consecutive calendar year thereafter during the term of this Agreement.

## 1.2 Rules of Construction.

- (a) Unless the context clearly requires otherwise:
  - (i) Each of the plural and singular forms includes the other;
  - (ii) “Shall,” “will,” “must,” and “agrees” are each mandatory;
  - (iii) “May” is permissive;
  - (iv) “Or” is not exclusive;

- (v) "Includes" and "including" are not limiting;
- (vi) "Between" includes the ends of the identified range.
- (b) Headings in the beginning of Articles, Paragraphs and subparagraphs are solely for the convenience of the Parties, are not a part of this Agreement and shall not be used in construing it.
- (c) The masculine gender shall include the feminine and neuter genders and vice versa.
- (d) The word "person" shall include individual, partnership, corporation, limited liability company, business trust, joint stock company, trust, unincorporated association, joint venture, governmental authority, water district and other entity of whatever nature, except either Metropolitan, MWDOC or IRWD or an officer or employee of any of them.
- (e) Reference to any agreement (including this Agreement), document or instrument means such agreement, document or instrument as amended or modified and in effect from time to time in accordance with the terms thereof and, if applicable, the terms thereof.
- (f) Except as specifically provided herein, reference to any law, statute, regulation or the like means such law as amended, modified, codified or reenacted, in whole or in part, and in effect from time to time, including any rules and regulations promulgated thereunder.

## II

### REPRESENTATIONS AND WARRANTIES

2.1 Representations and Warranties of Metropolitan. As a material inducement to IRWD and MWDOC to enter into this Agreement, Metropolitan represents and warrants as follows:

- (a) Metropolitan is a metropolitan water district, duly organized, validly existing and in good standing under the laws of the State of California, and Metropolitan has all necessary power and authority to perform its obligations hereunder on the terms set forth in this Agreement, and the execution and delivery

hereof by Metropolitan and the performance by Metropolitan of its obligations hereunder will not violate or constitute an event of default under the terms or provisions of any agreement, document or instrument to which Metropolitan is a party or by which Metropolitan is bound.

(b) This Agreement is a valid and binding agreement of Metropolitan, enforceable in accordance with its terms.

2.2 Representations and Warranties of MWDOC. As a material inducement to Metropolitan and IRWD to enter into this Agreement, MWDOC represents and warrants as follows:

(a) MWDOC is a municipal water district, duly organized, validly existing and in good standing under the laws of the State of California, and MWDOC has all necessary power and authority to perform its obligations hereunder on the terms set forth in this Agreement, and the execution and delivery hereof by MWDOC and the performance by MWDOC of its obligations hereunder will not violate or constitute an event of default under the terms or provisions of any agreement, document or instrument to which MWDOC is a party or by which MWDOC is bound.

(b) This Agreement is a valid and binding agreement of MWDOC, enforceable in accordance with its terms.

2.3 Representations and Warranties of IRWD. As a material inducement to Metropolitan and MWDOC to enter into this Agreement, IRWD represents and warrants as follows:

(a) IRWD is a California water district, duly organized, validly existing and in good standing under the laws of the State of California, and IRWD has all necessary power and authority to perform its obligations hereunder on the terms set forth in this Agreement, and the execution and delivery hereof by IRWD and the performance by IRWD of its obligations hereunder will not violate or constitute an event of default under the terms or provisions of any agreement, document or instrument to which IRWD is a party or by which IRWD is bound.

(b) This Agreement is a valid and binding agreement of IRWD, enforceable in accordance with its terms.

2.4 Notification Concerning Representations. After the Effective Date, each Party agrees to notify the other Parties if it discovers that any of its own representations and warranties herein were untrue when made or determines that any of its own representations and warranties will be untrue as of any date during the term of this Agreement.

### III

#### COORDINATED PROGRAM; PROGRAM WATER CREDITS

3.1 Program Water. IRWD may secure Program Water in accordance with the provisions of this Paragraph 3.1.

(a) Sources of Program Water. Program Water shall be SWP Water obtained through unbalanced exchanges by parties participating in IRWD water banking programs, or, subject to Metropolitan's and IRWD's mutual agreement, other exchange transactions. SWP Water shall be deemed to be Program Water whenever IRWD causes such water to be placed under the valid and continuing right and authority of Metropolitan, as transferee or exchangee, to control and/or use such water, with all necessary legal rights, entitlements, approvals and permissions under Metropolitan's SWP Contract and the laws of the State of California, if any, in full force and effect. Anything in this Paragraph to the contrary notwithstanding, no water shall be deemed to constitute Program Water as long as any person or entity other than Metropolitan holds the entitlement to such water as an exchangee or otherwise.

(b) Coordination. IRWD agrees to coordinate with Metropolitan and not to seek SWP Water that Metropolitan is actively attempting to secure on its own behalf.

3.2 Metropolitan Consent Required to Move Program Water To Its Service Area. Any agreement with another SWP Contractor, that contains provisions for Program Water to be moved to Metropolitan's service area as described in Paragraph 3.11, shall require Metropolitan's prior consent. Nothing in this Agreement shall require IRWD to obtain Metropolitan's consent to obtain non-SWP Water. Nothing in this

Agreement shall require IRWD to obtain Metropolitan's consent to obtain SWP Water that is not being moved to the Metropolitan service area, but if IRWD subsequently determines to enter into any transfer, exchange or other transaction to convert such SWP Water to Program Water or to move such water to the Metropolitan service area, Metropolitan's consent to such subsequent transaction shall be required.

3.3 MWDOC Participation. Whenever this Agreement refers to the execution of a transaction by IRWD, to the extent such transaction is legally required to be executed by a Metropolitan member agency in addition to or on behalf of IRWD, each such reference shall be deemed to refer to MWDOC acting jointly with IRWD or MWDOC acting on behalf of IRWD or for IRWD's account, and MWDOC agrees to be a named participant on behalf of or in addition to IRWD and to execute documents as requested by Metropolitan and IRWD for such purpose.

3.4 Metropolitan Options For Use of Program Water. Metropolitan shall be entitled to use or cause Program Water to be used in accordance with the following provisions:

(a) Metropolitan Delivery. Metropolitan may take delivery or cause the delivery of Program Water for immediate use in its service area or to store the Program Water in any water storage reservoir or storage program or capacity therein within the Metropolitan service area. Such delivery shall constitute a Metropolitan Delivery. Metropolitan shall not be required to reserve or make available storage capacity in Metropolitan's distribution system for the storage of Program Water.

(b) Banking. Subject to the limitations of Paragraph 4.1, Metropolitan may take delivery of Program Water to storage in the Integrated Banking Project, by delivering the same to a Banking Delivery Point.

(c) Other Use. Metropolitan may deliver or dispose of Program Water in a manner other than as described in clauses (a) and (b) of this Paragraph subject to the prior mutual agreement of Metropolitan and IRWD.

(d) Limitations and Priorities. IRWD's call for Program Water shall have priority over a Metropolitan Delivery or a Metropolitan delivery to storage in the Integrated Banking Project if IRWD delivers a Call Notice specifying such

water on or before the thirtieth (30<sup>th</sup>) calendar day prior to the transfer of the water into Metropolitan's control within the meaning of Paragraph 3.1(a). IRWD's call for Program Water in storage in the Integrated Banking Project pursuant to a Call Notice delivered on or before June 1 of any Year shall have priority over a Metropolitan Delivery Notice for that Program Water in the same Year to the extent there is insufficient Program Water in storage in the Integrated Banking Project and Metropolitan Delivery Account to satisfy both the Call Notice and the Metropolitan Delivery Notice. The foregoing priority limitations are in addition to the priority limitations on use of recovery facilities and scheduling set forth in Paragraph 4.2.

(e) Metropolitan Borrowing of Water; Borrowing. Anytime Metropolitan receives a Metropolitan Delivery, Metropolitan may designate a portion of the water delivered to be borrowed by Metropolitan pursuant to the limitations in this Paragraph. Any Borrowed Water will accrue to the Metropolitan Delivery Account, but delivery of the Borrowed Water to IRWD through a Delivery of Program Water may be deferred until the Borrowed Water is replaced pursuant to Paragraph 3.6, but not longer than three years. In any Year, Metropolitan shall not borrow more than the lesser of 17,500 acre feet or one-third (1/3) of the aggregate amount at the beginning of the Year of Program Water stored in the Integrated Banking Project and Program Water held in the Metropolitan Delivery Account, and shall be subject to the following further limitations: (i) the borrowing of Program Water shall at any time be permitted only to the extent it would not reduce the combined amount of Program Water and Non-SWP Water then remaining in storage in the Integrated Banking Project and Metropolitan Delivery Account to below the amount of IRWD's maximum annual recovery right from the Integrated Banking Project under the Banking Agreement; and (ii) no borrowing of additional Program Water by Metropolitan shall occur in the third Year after borrowing the Program Water.

### 3.5 Accrual of Program Water in Metropolitan Delivery Account.

MWDOC shall receive, solely and exclusively for IRWD's benefit, credits to the Metropolitan Delivery Account at the time that Metropolitan opts to take delivery of



Program Water under Paragraph 3.4(a). Such credits shall be stated in an acre-foot amount as determined by DWR and/or by other accounting methods as mutually determined by the parties. Upon each Metropolitan Delivery, Metropolitan shall promptly issue a Metropolitan Delivery Notice in writing to MWDOC, with a copy to IRWD, identifying the following determined in the manner specified in this Paragraph: (i) the quantity in acre-feet of Program Water delivered as a Metropolitan Delivery, (ii) whether such Program Water is from the Integrated Banking Project, and (iii) the quantity of Program Water, if any, that is Borrowed Water and the date that it is borrowed pursuant to Paragraph 3.4(e). A Metropolitan Delivery Notice shall be effective as provided in Paragraph 12.5.

3.6 Reduction of Metropolitan Delivery Account Balance by Delivery of Program Water to Integrated Banking Project. Metropolitan may deliver SWP Water to the Integrated Banking Project to replace Borrowed Water or debit the balance of the Metropolitan Delivery Account to the extent that the Integrated Banking Project storage capacity is available. Any water so delivered shall be applied first, to replace any Borrowed Water by debiting the balance of the Metropolitan Delivery Account that constitutes Borrowed Water and second, to debit the balance of the Metropolitan Delivery Account that does not constitute Borrowed Water.

3.7 Use of Program Water By IRWD – Call. IRWD shall be entitled to obtain Delivery of Program Water at IRWD Delivery Point(s) in accordance with the following provisions:

(a) Maximum Use. During any Year, subject to the limitations specified herein, IRWD may call for delivery of Program Water stored in the Integrated Banking Project, from the Metropolitan Delivery Account, or any combination thereof. A call by IRWD for Delivery of Program Water may be made up to the amount of IRWD's then unused annual recovery right (in AFY) for that Year in the Integrated Banking Project, not including Borrowed Water during the period for which delivery to IRWD is deferred pursuant to Paragraph 3.4(e) following the date that it was borrowed.

(b) Call Notice. To exercise its rights under this Paragraph, IRWD shall issue a Call Notice in writing to Metropolitan, with a copy to MWDOC, (i)

identifying in acre-feet the quantity of Program Water to be delivered, (ii) specifying the delivery schedule for the called amount and the IRWD Delivery Points, and (iii) if applicable, identifying another MWDOC contracting agency to which that Program Water is to be delivered with the approval of MWDOC; provided, IRWD shall have no obligation to deliver Program Water to another MWDOC contracting agency. A Call Notice shall be effective as provided in Paragraph 12.5. Unless Metropolitan determines otherwise, called Program Water shall first be taken first from the Integrated Banking Project, and to the extent additional Program Water is needed, from the Metropolitan Delivery Account. Metropolitan shall not be required to provide any Program Water from the Metropolitan Delivery Account to satisfy a Call Notice unless all of Program Water in the Integrated Banking Project has been called by IRWD and/or taken as Metropolitan Deliveries.

(c) Time Limit on Recovery. If and to the extent a Call Notice is issued by IRWD for delivery of Program Water stored in the Integrated Banking Project, IRWD shall complete the recovery of such water from the Integrated Banking Project within the same Year or as otherwise mutually agreed by Metropolitan and IRWD. IRWD shall be entitled to receive the Delivery of Program Water upon giving the Call Notice, subject only to the timing provisions as set forth in Section 5.1. The Delivery of Program Water shall not be delayed or otherwise affected by the timing of such recovery within the same Year or as otherwise mutually agreed by Metropolitan and IRWD.

3.8 Metropolitan Conveyance System Capacity. To the extent necessary to deliver Program Water into or out of the Integrated Banking Project and to make a Program Water Delivery, Metropolitan will use its unused capacity in SWP and Kern County conveyance facilities as well as Metropolitan's transportation system as determined by Metropolitan's General Manager.

3.9 Use of Integrated Banking Project for Storage of Non-SWP Water -- Wheeling The parties understand that IRWD anticipates storing Non-SWP Water for later delivery and use. The parties agree that nothing in this Agreement shall interfere with that use of the Integrated Banking Project unless that would conflict with the terms

of this Agreement. The parties also agree that the use of Metropolitan's transportation system to wheel any Non-SWP water stored by IRWD in the Integrated Banking Project shall be governed by the California Water Code provisions dealing with wheeling, Metropolitan's Administrative Code and Metropolitan's wheeling policies in effect at the time the water is wheeled.

3.10 Program Water Receipt Account Balance. MWDOC shall keep books and records sufficient to track the Delivery of the Program Water to the IRWD Delivery Point, which books and records shall be open to inspection by IRWD and Metropolitan at any time upon reasonable notice. Program Water shall be stated in acre feet (AF).

Metropolitan shall keep books and records sufficient to track Metropolitan Deliveries, Program Water in the Metropolitan Delivery Account and Borrowed Water, which books and records shall be open to inspection by IRWD and MWDOC at any time upon reasonable notice. The accounting for the Metropolitan Delivery Account will be on a first-in, first-out basis.

IRWD shall keep books and records sufficient to track the storage of Program Water in and recovery of Program Water from the Integrated Banking Project, which books and records shall be open to inspection by MWDOC and Metropolitan at any time upon reasonable notice. The accounting for the Integrated Banking Project will be on a first-in, first-out basis.

The Parties agree to cooperate in developing coordinated administrative procedures for the tracking required in this Paragraph and such other recordkeeping and accounting procedures as may be necessary or desirable to implement this Agreement. The Parties agree to exchange such tracking records at the end of each Year.

3.11 Metropolitan Control of Service Area Supplies. Program Water that is delivered to the Metropolitan service area shall be under the control of Metropolitan. Nothing herein shall authorize or entitle Metropolitan to control any Non-SWP Water or any water owned by an IRWD exchange and/or water banking partner.

#### IV

#### USE OF PROGRAM STORAGE

4.1 Storage of Water In the Integrated Banking Project. Storage of water in the Integrated Banking Project shall be in accordance with (a), (b), (c) or (d) of this Paragraph and in each case shall also be subject to (e) and (f) of this Paragraph.

(a) On Behalf of Metropolitan – Program Water. Program Water obtained by IRWD on behalf of Metropolitan may be stored in accordance with Paragraph 3.4(b).

(b) By Metropolitan – Reduction of Metropolitan Delivery Account Balance. Metropolitan may place water into IRWD's storage account in the Integrated Banking Project for the purpose of reducing the amount in the Metropolitan Delivery Account, in accordance with Paragraph 3.6.

(c) By IRWD – SWP Water. IRWD may make Program Water available through exchanges or other transactions that facilitate recharge and/or exportability of water. IRWD may also store SWP Water on behalf of IRWD's exchange and/or water banking partners, including water stored on behalf of other SWP Contractors serving as transferee or exchangee.

(d) By IRWD – Non-SWP Water. IRWD may store Non-SWP Water secured by IRWD on its own behalf, on behalf of assignees permitted under the Banking Agreement, or on behalf of exchange and/or water banking partners, or in any other manner not inconsistent with this Agreement or the Banking Agreement.

(e) Limitation. Storage in the Integrated Banking Project shall be subject to RRBWSD's rights and IRWD's obligations under the Banking Agreement, and shall be limited as of any time to the then-available unused recharge and storage capacity in IRWD's account in the Integrated Banking Project, as determined by IRWD. IRWD is not required to reserve or make available any unused recharge or storage capacity for recharge and/or storage under (a) or (b) of this Paragraph, and nothing herein shall preclude or limit IRWD's or its assignees' use of its Integrated Banking Project rights and the then-available capacity to recharge, store and recover water, or for the benefit of any persons with whom IRWD may transact exchanges and/or water banking partnerships.

(f) Losses. IRWD shall bear the one-time 11% - 15 % storage losses assessed in the Integrated Banking Project, and IRWD shall retain all rights associated with the losses under the Banking Agreement. To the extent not included within the losses described in the preceding sentence, IRWD shall bear conveyance losses with respect to water conveyed to the Integrated Banking Project for recharge. No storage or other losses shall be applied to Program Water in Metropolitan's distribution system. Metropolitan shall be responsible for any conveyance or storage losses associated with the Integrated Banking Project if Metropolitan's cumulative Metropolitan Deliveries cycle the Program Water more than one time through the Integrated Banking Project.

4.2 Recovery of Water From the Integrated Banking Project. Recovery of water from the Integrated Banking Project shall be in accordance with (a), (b) or (c), and in each case shall also be subject to (d), (e) and (f) of this Paragraph.

(a) By Metropolitan. Metropolitan shall have the right to recover only Program Water from the Integrated Banking Project. IRWD shall provide any consents and approvals as may be necessary to facilitate such recovery pursuant to IRWD's recovery rights set forth in the Banking Agreement.

(b) By IRWD – SWP Water. IRWD shall have right to recover any Program Water from the Integrated Banking Project. IRWD may make Program Water available through exchanges or other transactions that facilitate recovery and/or export of water. In addition, IRWD shall have the right to recover SWP Water that was stored in the Integrated Banking Project on behalf of its exchange partners and/or other water banking partners.

(c) By IRWD – Non-SWP Water. IRWD shall retain the sole and exclusive right to recover water from the Integrated Banking Project that constitutes Non-SWP Water under Paragraph 4.1(d).

(d) Preference For Recovery By Exchange. Metropolitan and IRWD agree that in recovering water pursuant to this Paragraph, each shall give preference to making such recoveries by in-lieu exchange rather than by extraction.

(e) Limitations. Metropolitan's recovery under (a) and IRWD's recovery under (b) or (c) of this Paragraph shall be subject to RRBWSD's rights and IRWD's obligations under the Banking Agreement, and shall be limited as of any time to the then-available unused recovery capacity in the Integrated Banking Project, as determined by IRWD. Recovery by delivery under (a), (b) and (c) of this Paragraph shall be further limited by any requirements established by DWR for the introduction of such water into the California Aqueduct.

(f) Priority In Use of Integrated Banking Project Recovery Facilities. Metropolitan's use of the Integrated Banking Project recovery facilities shall be subject to IRWD's first priority use of such recovery facilities on behalf of itself and on behalf of IRWD's exchange and/or water banking partners. Such priority shall be implemented on a coordinated basis in conjunction with IRWD's annual scheduling as required under the Banking Agreement. For such purpose, Metropolitan shall submit to IRWD its desired recovery amount and timing for each Year by March 1 of that Year, in order to permit IRWD to develop and timely submit a preliminary recovery and delivery schedule to RRBWSD. IRWD shall incorporate and reconcile Metropolitan's submittal with IRWD's planned recovery amount and timing for such Year on behalf of itself and its exchange and/or water banking partners, and in such reconciliation IRWD shall resolve any conflicts in accordance with the priority stated in this Paragraph. IRWD shall notify Metropolitan of the resulting coordinated and reconciled recovery schedule upon IRWD's receipt of confirmation of the schedule from RRBWSD. The Parties acknowledge and agree that RRBWSD's obligation to meet such schedules is on a best efforts basis.

## V

### DELIVERED WATER

5.1 Delivery. Metropolitan shall implement the Delivery of Program Water pursuant to a Call Notice subject to the provisions of this Paragraph.

(a) Manner of Delivery. Except as may otherwise be provided in this Agreement, Delivery of Program Water shall be governed by Metropolitan's rules

and regulations for delivery of water set forth in Chapter 5 of Division IV of the Administrative Code in the same manner as other water delivered by Metropolitan to the IRWD Delivery Points.

(b) Delivery Facilities. Delivery of Program Water shall be made at IRWD Delivery Points. Subject to clause (d) below, Metropolitan is not required to use any particular facilities for the Delivery of Program Water. Delivery of Program Water is further subject to Paragraph 3.8 in regard to availability of Metropolitan transportation system capacity.

(c) Temporary Interruption. Metropolitan's Chief Executive Officer shall have the right to control, curtail, interrupt or suspend the Delivery of Program Water in accordance with the Administrative Code. IRWD understands that any number of factors, including emergencies, inspection, maintenance or repair of Metropolitan facilities or State Water Project facilities, may result in a temporary and incidental modification of scheduled Delivery of Program Water. Metropolitan shall notify IRWD through MWDOC of any control, curtailment, interruption, or suspension of Delivery of Program Water in accordance with and to the same extent and manner set forth in the Administrative Code for other water served by Metropolitan to the IRWD Delivery Points. Metropolitan agrees that Delivery of Program Water shall be resumed as soon as possible following any such curtailment, interruption or suspension of delivery. Unless Metropolitan is otherwise relieved of its obligations under the provisions of this Agreement, a curtailment, interruption or suspension of the Delivery of Program Water pursuant to this clause shall not discharge any unperformed obligation for the Delivery of Program Water.

(d) Scheduling. IRWD, in coordination with MWDOC as applicable, shall have the same rights and obligations with respect to ordering, scheduling, curtailing, interrupting, or suspending the Delivery of Program Water as it has with respect to any other water delivered by Metropolitan at the IRWD Delivery Points.

(e) Measurement of Quantity. Delivery of Program Water shall be deemed to be completed by Metropolitan when the quantity delivered, as metered

at the requested IRWD Delivery Points as provided in the Administrative Code, is equal to the quantity specified in the applicable Call Notice. If during any Metropolitan billing period, IRWD receives deliveries of water at the IRWD Delivery Points in an aggregate amount greater than the amount of the Delivery of Program Water to be made pursuant to an outstanding Call Notice, then for billing purposes, the water delivered during such billing period shall be allocated first, to the Call Notice, and second, to Metropolitan/MWDOC deliveries other than under this Agreement.

(f) Quality. Delivery of Program Water shall be governed by the same quality requirements that apply to the quality of any other water that may be delivered by Metropolitan to the IRWD Point(s) of Delivery.

5.2 Independent Local Supply. Irrespective of any Metropolitan pricing tier which may be in effect and applicable to the Local Delivery Rate paid for any Delivery of Program Water, Delivery of Program Water shall not be counted as water delivered by Metropolitan for purposes of aggregating the total of Metropolitan water delivered to MWDOC under a pricing tier.

5.3 Extraordinary Supply; Water Supply Allocation Plan. The Delivery of Program Water shall qualify as Extraordinary Supply provided the Integrated Banking Project is operated consistent with the Water Supply Allocation Plan principles governing Extraordinary Supply. Non-SWP Water recovered from the Integrated Banking Project as contemplated in Paragraph 3.9 shall qualify as Extraordinary Supply provided the Integrated Banking Project is operated consistent with the Water Supply Allocation Plan principles governing Extraordinary Supply.

5.4 Delivery to Extraordinary Supply Programs. If IRWD takes a Delivery of Program Water and directs such water to a Extraordinary Supply program consistent with the principles in the Water Supply Allocation Plan, such as a qualified Extraordinary Supply program using Irvine Lake, a consumptive use of that Delivery of Program Water shall not be deemed to occur until such water is withdrawn by IRWD from the Extraordinary Supply program.



5.5 MWDOC To Pass Through Extraordinary Supply Benefits. MWDOC shall pass through to IRWD the applications of Extraordinary Supply under Paragraph 5.3, without alteration or limitation.

## VI

### WATER STORAGE, RECOVERY AND DELIVERY COSTS

6.1 Costs For Conveyance of Program Water. The costs associated with conveyance of water under this Agreement shall be allocated and paid as provided in this Paragraph.

(a) Delivery to Metropolitan Service Area. All DWR Variable OMP&R charges associated with delivery of Program Water to Metropolitan's service area shall be paid by Metropolitan.

(b) Delivery to Integrated Banking Project. IRWD shall pay all the conveyance charges, including DWR Variable OMP&R charges and CVC power charges associated with delivery of any Program Water to a Banking Delivery Point for storage in the Integrated Banking Project. IRWD shall also pay RRBWSD's applicable charges, including administrative charges, for such delivery. After a Delivery of Program Water is made, IRWD shall be reimbursed by Metropolitan for the actual DWR Variable OMP&R charges that were paid by IRWD for delivery of that Program Water to the Integrated Banking Project. Metropolitan shall be responsible for all conveyance charges, including DWR Variable OMP&R charges, CVC power charges, and RRBWSD's applicable charges, associated with delivery of Program Water to the Integrated Banking Project, if Metropolitan's cumulative Metropolitan Deliveries cycle Program Water more than one time through the Integrated Banking Project.

(c) Recovery From Integrated Banking Project. The Party recovering water from the Integrated Banking Project (Metropolitan under Paragraph 4.2(a) or IRWD under Paragraph 4.2(b) or 4.2(c), as the case may be) shall pay the applicable costs charged by RRBWSD pursuant to the Banking Agreement for recovery by in-lieu exchange or by extraction, including Administrative Charges as specified therein. IRWD shall reimburse Metropolitan for the applicable costs

incurred by Metropolitan to recover the Program Water, should Metropolitan complete the Delivery of Program Water without the same Program Water being returned to the Integrated Banking Project.

(d) Metropolitan's Kern County Conveyance. For purposes of obtaining delivery of Program Water into or out of the Integrated Banking Project, IRWD shall reimburse Metropolitan for the marginal costs to transport Program Water using Metropolitan's rights to Kern County conveyance facilities.

6.4 Capital Costs. Metropolitan shall have no responsibility for the payment of capital costs incurred with respect to the development of the Integrating Banking Project facilities.

## VII

### PAYMENTS FOR WATER DELIVERED TO IRWD

7.1 Local Delivery Rate. MWDOC shall pay Metropolitan the Local Delivery Rate for each acre-foot of Delivery of Program Water. IRWD shall pay MWDOC the Local Delivery Rate for each acre-foot of Delivery of Program Water, plus MWDOC's current or future customary charges used to recover administrative cost incurred by MWDOC in connection with delivering imported water to its contracting agencies, which is currently a surcharge of \$6.75 per acre-foot.

7.2 Metropolitan and MWDOC Invoicing and Payment. Metropolitan shall mail monthly invoices to MWDOC in accordance with the Administrative Code, and MWDOC shall make monthly payments of amounts due pursuant to Paragraph 7.1 in accordance with the Administrative Code. In its invoicing to MWDOC for deliveries of water, Metropolitan shall separately identify any quantities of delivered water constituting Delivery of Program Water, determined as provided in Paragraph 5.1(e). MWDOC shall mail monthly invoices to IRWD in accordance with its generally applicable invoicing procedures, and IRWD shall make monthly payments of amounts due pursuant to Paragraph 7.1 in accordance with MWDOC's generally-applicable procedures. In its invoicing to IRWD for water deliveries, MWDOC shall separately identify any quantities of delivered water constituting Delivery of Program Water, as indicated on Metropolitan's invoice. MWDOC shall pass through the Local Delivery

Rate, as indicated on Metropolitan's invoice, and shall not increase such rates or assess any additional charges except for the applicable MWDOC administrative charges specified in Paragraph 7.1.

7.3 Applicable Procedures. Unless otherwise provided for in this Agreement, all Metropolitan invoicing, billing and crediting processes shall be in accordance with generally applicable rules and regulations established from time to time by Metropolitan as reflected in the Administrative Code, and all MWDOC invoicing, billing and crediting processes shall be in accordance with the generally applicable rules and regulations established from time to time by MWDOC.

7.4 Reimbursement of Costs Between IRWD and Metropolitan.  
The parties may mutually agree to a method for direct reimbursement, without using pass-through invoicing by Metropolitan and MWDOC for water deliveries, in the event of reimbursement by Metropolitan of IRWD for DWR Variable OMP&R costs and any incremental increases to recharge, storage and/or recovery costs resulting from Metropolitan's cumulative Metropolitan Deliveries that cycle Program Water more than one time through the Integrated Banking Project, and IRWD's reimbursement of Metropolitan for actual costs related to the Kern County conveyance facilities.

## VIII

### TERM

8.1 Commencement and Expiration. This Agreement shall become effective on the Effective Date and shall expire on the Termination Date.

8.2 Early Termination. This Agreement may be terminated with the mutual written agreement of the Parties.

8.3 Force Majeure.

(a) If the performance, in whole or in part, of the obligations of the respective Parties, or any of them, to make any Delivery of Program Water under this Agreement is prevented by acts or failures to act of any agency, court or other government authority (other than the Parties), or any other person; by natural disaster (such as earthquake, fire, drought or flood), contamination or outbreak of

a water borne disease, war, strike, lockout, act of God, act of civil or military authority; by the operation of applicable law; or by any other cause beyond the control of the affected Party or Parties, whether similar to the causes specified herein or not, then, in any such circumstances, the obligation of the affected Party or Parties to make such Delivery of Program Water under this Agreement shall be suspended from the time and to the extent that the performance thereof is prevented, but reasonable diligence shall be observed by the affected Party or Parties, so far as it lies in their power, in performing such respective obligations in whole or in part under this Agreement. In the event such performance of any of the Parties under this Agreement is prevented as described above, then during the period of such prevention, performance by the non-affected Party under this Agreement shall be excused until such prevention ceases, at which time all the Parties shall become obligated to resume and continue performance of their respective obligations hereunder during the term of this Agreement.

Notwithstanding the foregoing, no such prevention shall suspend or otherwise affect any payment obligations for Delivery of Program Water actually completed or any obligation of any Party to indemnify the other Parties pursuant to Paragraph 12.10, or shall extend the term of this Agreement beyond the Termination Date, except as provided in clause (b) of this Paragraph.

(b) In the event that the Delivery of Program Water is prevented as described in clause (a) of this Paragraph, the term of this Agreement shall be extended, for a period not to exceed five Years, without the necessity for further action on the part of any Party, unless the Parties mutually agree to a longer period, if and to the extent necessary to permit Metropolitan to return Program Water that was taken as a Metropolitan Delivery pursuant to Paragraph 3.6 or to complete the Delivery of Program Water pursuant to a Call Notice in the quantity required to discharge all Program Water remaining in the Metropolitan Delivery Account balance.

8.4 Survival. Notwithstanding the foregoing or anything to the contrary in this Agreement, any outstanding payment obligation under Articles VI and VII, and the

provisions in Paragraphs 11.6, 12.2, 12.3, 12.8, 12.10 and 12.15 and Articles IX and X shall survive the expiration or termination of this Agreement.

## IX

### ADDITIONAL COVENANTS AND CONDITIONS

9.1 Applicable Laws. This Agreement and the actions described herein are contingent upon and subject to compliance with all applicable laws.

9.2 No Effect on Ownership of Facilities or Capacity in Facilities. Neither IRWD nor MWDOC shall acquire or be deemed to have acquired any ownership, capacity rights, security interest or any dedicated interest in any Metropolitan storage, transmission or other facilities as a result of any provision of this Agreement. Neither Metropolitan nor MWDOC shall acquire or be deemed to have acquired any ownership, capacity rights, security interest or any dedicated interest in any IRWD or RRBWSD water banking or other facilities as a result of any provision of this Agreement.

9.3 Covenants of Good Faith. This Agreement is subject to reciprocal obligations of good faith and fair dealing.

9.4 CEQA Compliance. On May 27, 2008, RRBWSD certified an environmental impact report ("Project EIR") for the Integrated Banking Project and subsequently on said date IRWD approved the Project EIR as a responsible agency. The Project EIR evaluated the delivery of water from the Integrated Banking Project to IRWD for use in the IRWD service area. The Parties agree to cooperate in obtaining further CEQA compliance or any permits, regulatory approvals or agreements to the extent required for the implementation of this Agreement.

9.5 Costs and Expenses. Except as provided in Articles VI and VII, each Party shall bear its own costs and expenses incurred in connection with the negotiation, execution and implementation of this Agreement and in obtaining related agreements, permits and regulatory approvals.

9.6 No Impact on Banking Agreement. Nothing in this Agreement shall be construed to amend the Banking Agreement.

## X

### DISPUTE RESOLUTION

10.1 Reasonable Best Efforts to Resolve by Negotiation. The Parties shall exercise reasonable best efforts to resolve all disputes arising under this Agreement through negotiation. In the event negotiation is unsuccessful, then the Parties reserve their respective rights to all legal and equitable remedies.

## XI

### EVENTS OF DEFAULT; REMEDIES

11.1 Events of Default by IRWD. Each of the following constitutes an Event of Default by IRWD if not cured within 30 days of receiving notice from Metropolitan or MWDOC of such matter:

(a) IRWD fails to perform or observe any term, covenant or undertaking that it is to perform or observe under this Agreement.

(c) Any representation or warranty made by IRWD and contained in this Agreement or in any exhibit, certificate or other document furnished pursuant to this Agreement is on the date made or later proves to be false, misleading or untrue in any material respect.

11.2 Events of Default by Metropolitan. Each of the following constitutes an Event of Default by Metropolitan if not cured within 30 days of receiving notice from IRWD or MWDOC of such matter:

(a) Subject to Paragraphs 8.3 and 9.1, Metropolitan fails to complete a Delivery of Program Water as required under this Agreement.

(b) Metropolitan fails to perform or observe any other term, covenant or undertaking that it is to perform or observe under this Agreement.

(c) Any representation or warranty made by Metropolitan and contained in this Agreement or in any exhibit, certificate or other document furnished pursuant to this Agreement is on the date made or later proves to be false, misleading or untrue in any material respect.

11.3 Events of Default by MWDOC. Each of the following constitutes an Event of Default by MWDOC if not cured within 30 days of receiving notice from IRWD or Metropolitan of such matter:

(a) MWDOC fails to pass through a consideration from Metropolitan to IRWD or from IRWD to Metropolitan as required in this Agreement.

(b) MWDOC fails to perform or observe any other term, covenant or undertaking that it is to perform or observe under this Agreement.

(c) Any representation or warranty made by MWDOC and contained in this Agreement or in any exhibit, certificate or other document furnished pursuant to this Agreement is on the date made or later proves to be false, misleading or untrue in any material respect.

11.4 Remedies Generally. If an Event of Default occurs, a non-breaching Party will have all rights and remedies provided at law or in equity against the breaching Party.

11.5 Specific Performance. Any Event of Default as defined in Paragraph 11.2(a) may be remedied by an order of specific performance.

11.6 Cumulative Rights and Remedies. The Parties do not intend that any right or remedy given to a Party on the breach of any provision of this Agreement be exclusive; each such right or remedy is cumulative and in addition to any other right or remedy provided in this Agreement or otherwise available at law or in equity. If the non-breaching Party fails to exercise or delays in exercising any such right or remedy, the non-breaching Party does not thereby waive that right or remedy. In addition, no single or partial exercise of any right, power or privilege precludes any other or further exercise of a right, power or privilege granted by this Agreement or otherwise.

11.7 Action or Proceeding Among the Parties. Each Party acknowledges that it is a “local agency” within the meaning of Section 394(c) of the California Code of Civil Procedure (“CCP”). Each Party further acknowledges that any action or proceeding commenced by one Party against another Party would, as a matter of law, be subject to

(a) transfer to a “neutral county,” or instead

(b) assignment of a disinterested judge from a “neutral county” by the Chairman of the Judicial Council to hear the action or proceeding.

(c) A “neutral county” is any county other than Kern, Kings, Los Angeles, Orange, Riverside, San Bernardino, San Diego, Santa Barbara and Ventura.

In the event an action is filed by any Party against another Party to enforce this Agreement and to obtain damages for its alleged breach, each Party hereby:

(d) Stipulates to the transfer of the action or proceeding to a “neutral county” or to assignment of a disinterested judge from a “neutral county” to hear the action or proceeding;

(e) Waives the usual notice required under the law-and-motion provisions of Rule 3.1300 of the California Rules of Court;

(f) Consents to having any motion under CCP Section 394(c) heard with notice as an *ex parte* matter under Rule 3.1200-1207 of the California Rules of Court; and

(g) Acknowledges that this Agreement, and in particular this Paragraph, may be submitted to the court as part of the moving papers.

(h) Nothing in this Paragraph, however, shall impair or limit the right of a Party to contest the suitability of any particular county to serve as a “neutral county” or operate as a waiver by a Party of any other right.

## XII

### GENERAL PROVISIONS

12.1 No Third-Party Rights. This Agreement is made solely for the benefit of the Parties and their respective permitted successors and assigns (if any). Except for such a permitted successor or assign, no other person or entity may have or acquire any right by virtue of this Agreement.

12.2 Ambiguities. Each Party and its counsel have participated fully in the drafting, review and revision of this Agreement. No rule of construction to the effect that ambiguities are to be resolved against the drafting Party shall be applied in the interpretation of this Agreement or any amendments or modifications thereof.



12.3 Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of California, without giving effect to conflict of laws provisions.

12.4 Binding Effect; No Assignment. This Agreement is and will be binding upon and will inure to the benefit of the Parties and the legal successors and assigns of their assets and liabilities by operation of law. Other than as contemplated in the preceding sentence, no Party may assign any of its rights or delegate any of its duties under this Agreement. Any assignment or delegation made in violation of this Agreement is void and of no force and effect.

12.5 Notices. All notices, requests, demands, or other communications under this Agreement must be in writing and sent to each Party. Notice will be sufficiently given for all purposes as follows:

- *Personal Delivery.* When personally delivered to the recipient. Notice is effective on delivery.
- *First-Class Mail.* When mailed first-class, postage prepaid, to the last address of the recipient known to the Party giving notice. Notice is effective three days after the postmark date.
- *Certified Mail.* When mailed certified mail, return receipt requested. Notice is effective on receipt, if a return receipt confirms delivery.
- *Overnight Delivery.* When delivered by an overnight delivery service such as Federal Express, charges prepaid or charged to the sender's account. Notice is effective on delivery, if delivery is confirmed by the delivery service.
- *Facsimile Transmission.* Notice is effective on receipt, provided that a copy is mailed by first-class mail on the facsimile transmission date.
- *Electronic Mail.* Notice is effective on receipt, provided that a copy is mailed by first-class mail on the electronic mail date.

Addresses for purposes of giving notice are as follows:

To Metropolitan:	<b>Metropolitan Water District of Southern California</b> Attn: Chief Executive Officer
Address for U.S. Mail	P.O. Box 54153 Los Angeles, CA 90054-0153
Address for personal or	700 North Alameda Street

overnight delivery	Los Angeles, CA 90012-2944 Telephone: 213-217-6950
With a copy delivered by the same means and at the same address to	<b>Metropolitan Water District of Southern California</b> Attn: General Counsel
Address for facsimile	
Address for e-mail	

To MWDOC:	<b>Municipal Water District of Orange County</b> Attn: General Manager
Address for U.S. Mail	
Address for personal or overnight delivery	
With a copy delivered by the same means to	McCormick, Kidman & Behrens
Address for facsimile	
Address for e-mail	

To IRWD:	<b>Irvine Ranch Water District</b> Attn: General Manager
Address for U.S. Mail	P.O. Box 57000 Irvine, CA 92619-7000
Address for personal or overnight delivery	15600 Sand Canyon Avenue Irvine, CA 92618
With a copy delivered by the same means to	Bowie, Arneson, Wiles & Giannone 4920 Campus Drive Newport Beach, CA 92660 Attn: Joan Arneson
Address for facsimile	949-453-1228
Address for e-mail	<u>JONES@irwd.com</u> , with a copy to <u>WEGHORST@irwd.com</u>

(a) A correctly addressed notice that is refused, unclaimed or undeliverable because of an act or omission by the Party to be notified will be deemed effective as of the first date that notice was refused, unclaimed or undeliverable by the postal authorities, messenger, or overnight delivery service.

(b) A Party may change its address by giving the other Parties notice of the change in any manner permitted by this Agreement.

12.6 Entire Agreement. This Agreement constitutes the final, complete and exclusive statement of the terms of the agreement among the Parties pertaining to its

subject matter and supersedes all prior and contemporaneous understandings or agreements of the Parties. No Party has been induced to enter into this Agreement by, nor is any Party relying on, any representation or warranty outside those expressly set forth in this Agreement.

12.7 Time of the Essence. If the day on which performance of any act or the occurrence of any event hereunder is due is not a business day, the time when such performance or occurrence shall be due shall be the first business day (as defined in Section 4507 of the Administrative Code) occurring after the day on which performance or occurrence would otherwise be due hereunder. All times provided in this Agreement for the performance of any act will be strictly construed, time being of the essence of this Agreement.

12.8 Modification.

(a) Written Agreement Required. This Agreement may be supplemented, amended or modified only by the written agreement of the Parties. No supplement, amendment or modification will be binding unless it is in writing and signed by all of the Parties.

(b) Reopening of Agreement. The Parties agree to meet and confer in good faith to negotiate amendments to preserve the intent of this Agreement in the event that a change to the Administrative Code, Metropolitan's rate structure design, Water Supply Allocation Plan, legislative change or other change of an institutional nature materially alters the consideration for this Agreement.

(c) Conformance to Other Agreement. If concurrent with or after the execution of this Agreement by Metropolitan, Metropolitan shall execute any other agreement, with a counterparty who is a Metropolitan member agency and/or an agency providing water service within the service area of Metropolitan and that, on the whole, contains terms more favorable to the counterparty agency than this Agreement, then at IRWD's election, terms comparable to those in the other agreement's more favorable terms shall be deemed to be automatically inserted or substituted, as the case may be, into this Agreement, including elimination of unfavorable terms that are absent from the other agreement.

12.9 Waiver. No waiver of a breach, failure of condition, or any right or remedy contained in or granted by the provisions of this Agreement shall be effective unless it is in writing and signed by the Party waiving the breach, failure, right or remedy. No waiver of a breach, failure of condition, right or remedy is or may be deemed a waiver of any other breach, failure, right or remedy, whether similar or not. In addition, no waiver will constitute a continuing waiver unless the writing so specifies.

12.10 Indemnification.

(a) Metropolitan shall indemnify IRWD and MWDOC pursuant to Section 4502 of the Administrative Code against liability in connection with Metropolitan's Delivery of Program Water to the same extent as is required with respect to water supplied by Metropolitan to a member public agency. Such indemnification shall be in addition to any indemnification rights available under applicable law and to any other remedy provided under this Agreement.

(b) IRWD shall indemnify Metropolitan and MWDOC pursuant to Section 4502 of the Administrative Code against liability in connection with acts of IRWD after Metropolitan's Delivery of Program Water to the same extent as is required with respect to water supplied by Metropolitan to a member public agency. Such indemnification shall be in addition to any indemnification rights available under applicable law and to any other remedy provided under this Agreement.

(c) MWDOC shall indemnify Metropolitan and IRWD pursuant to Section 4502 of the Administrative Code against liability in connection with acts of MWDOC after Metropolitan's Delivery of Program Water to the same extent as is required with respect to water supplied by Metropolitan to a member public agency. Such indemnification shall be in addition to any indemnification rights available under applicable law and to any other remedy provided under this Agreement. In addition, IRWD shall indemnify Metropolitan and MWDOC against any liability in connections with acts of IRWD to obtain, store in the Integrated Banking Project, or make available to Metropolitan the SWP water subject to this Agreement.

(d) Notwithstanding anything in this Agreement to the contrary, each Party agrees to proceed with reasonable diligence and use reasonable good faith efforts to jointly defend any lawsuit or administrative proceeding by any person other than the Parties challenging the legality, validity or enforceability of this Agreement.

(e) [need to discuss releases/indemnification with regard to (1) claims arising from or related to, the control, carriage, handling, use, disposal, or distribution of Program Water – to the Bank, in the Bank, from the Bank, etc (2) quality of water in the Bank]

12.11 Authority of the Legislature. Nothing in this Agreement will limit any authority of the Legislature of the State of California to allocate or reallocate water.

12.12 Right to Amend the Administrative Code. Notwithstanding anything in this Agreement to the contrary, express or implied, Metropolitan shall have the right to amend the Administrative Code at its sole discretion, except that, for purposes of this Agreement, no such amendment shall result in a materially adverse change or modification of IRWD's rights to obtain Program Water from the Integrated Banking Project or Metropolitan's Delivery Account, obtain Delivery of Program Water by Call Notice, or the obligations of Metropolitan hereunder, or be binding on IRWD unless such effect is first approved by the Board of Directors of IRWD.

12.13 Right to Amend Banking Agreement. Notwithstanding anything in this Agreement to the contrary, express or implied, IRWD shall have the right to amend the Banking Agreement at its sole discretion, except that, for purposes of this Agreement, no such amendment shall result in a materially adverse change or modification of Metropolitan's rights with respect to the recharge, storage or recovery of water in the Integrated Banking Project as contemplated hereunder, or be binding on Metropolitan, unless such effect is first approved by the Board of Directors of Metropolitan. The preceding sentence notwithstanding, an amendment of the Banking Agreement to expand the Integrated Banking Project shall not, by itself, be considered to result in a materially adverse change or modification of Metropolitan's rights hereunder.

12.14 Counterparts. This Agreement may be executed in two or more counterparts, each of which, when executed and delivered, shall be an original and all of

which together shall constitute one instrument, with the same force and effect as though all signatures appeared on a single document.

12.15 Audit. Each Party shall be responsible for assuring the accuracy of its books, records and accounts of billings, payments, metering of water and other records (whether on paper or in electronic or other format) evidencing the performance of its obligations pursuant to this Agreement and shall maintain all such records for not less than three years. Each Party will have the right to audit the other Parties' books and records relating to this Agreement for purposes of determining compliance with this Agreement during the term hereof and for a period of three years following termination of this Agreement. Upon reasonable notice, each Party shall cooperate fully with any such audit and shall permit access to its books, records and accounts as may be necessary to conduct such audit.

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the date first written above.

[Signature Blocks]

