

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

February 13, 2017

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 three minutes per speaker on each subject. Consent Calendar items will be acted upon by one motion, without discussion, unless a request is made for specific items to be removed from the Calendar for separate action.

COMMUNICATIONS TO THE BOARD

1. A. Written:

B. Oral:

2. ITEMS RECEIVED TOO LATE TO BE AGENDIZED

Recommendation: Determine the need to discuss and/or take immediate action on item(s).

CONSENT CALENDAR

Resolution No. 2017-5

Items 3-5

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

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

4. MINUTES OF REGULAR BOARD MEETING

Recommendation: That the minutes of the January 23, 2017 Regular Board Meeting be approved as presented.

CONSENT CALENDAR – Continued

Items 3-5

5. PETERS CANYON WASH CHANNEL WATER CAPTURE AND REUSE PIPELINE FINAL ACCEPTANCE

Recommendation: That the Board authorize the General Manager to accept construction of Peters Canyon Wash Channel Water Capture and Reuse Pipeline, project 4985; authorize the General Manager to file a Notice of Completion; and authorize the release of retention 35 days after filing of the Notice of Completion.

ACTION CALENDAR

6. PENSION PLAN FUNDING AND UPDATE

Recommendation: That the Board approve the additional contribution of \$11 million to the IRWD Section 115 Retirement Trust.

7. RESOLUTION TO RESCIND DECLARATION OF WATER SHORTAGE LEVEL ONE

Recommendation: That the Board authorize staff to transition IRWD's messaging and outreach to long-term water use efficiency and adopt a resolution to rescind Resolution No. 2016-17 and rescind Water Shortage Level One (Shortage Warning).

Reso. No. 2017

8. BUREAU OF RECLAMATION 2017 GRANT APPLICATION

Recommendation: That the Board authorize staff to submit an application for a Reclamation WaterSMART Program Grant for the UCI Cooling Tower Conversion Project and authorize the General Manager to execute a related agreement to receive grant funding and to provide matching funds, and adopt a resolution authorizing submission of a grant application for the UCI Cooling Towers Conversion Project to the Department of the Interior, Bureau of Reclamation, Policy and Administration.

Reso. No. 2017-

ACTION CALENDAR - Continued

9. BARNES AND BERGER PROPERTY PURCHASE

Recommendation: That the Board find that all matters currently identified with regard to the condition of title, physical condition and suitability of the Barnes and Berger property for the uses contemplated are acceptable; approve the addition of the project, "Purchase PVID Barnes and Berger Property," to the FY 2016-17 Capital Budget in the amount of \$9,186,000; find that the property acquisition is exempt from CEQA; approve the project and authorize staff to post and file the Notices of Exemption in Orange and Riverside Counties; and authorize the General Manager, Treasurer and each other officer of the District, each acting singly, to execute and deliver any and all documents, assignments, certificates, instructions and instruments necessary or proper for carrying out and closing the real estate purchase transaction for the acquisition of the property.

OTHER BUSINESS

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

10. A. General Manager's Report

B. Directors' Comments

C. CLOSED SESSION CONFERENCE WITH LEGAL COUNSEL RELATIVE TO EXISTING LITIGATION - Government Code Section 54956.9(d)(1) IRWD v. OCWD (Case No.30-2016-00858584-CU-WM-CJC).

D. Open Session

E. Adjourn

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.

February 13, 2017

Prepared and

Submitted by: L. Bonkowski

Approved by: P. Cook



CONSENT CALENDAR

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

SUMMARY:

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

Events/Meetings

Steven LaMar

January 31	Irvine Chamber of Commerce 2017 Business Outlook
February 2	South Orange County Watershed Management Area Exec. Meeting
February 9	Retirement Reception for Frances Spivy-Weber
February 16	Inland Empire Utilities Agency Water Assoc. Leadership Breakfast
February 16	OCBC Annual Dinner
March 13-14	OCBC Advocacy Trip, Sacramento
March 20-22	NWRA 2017 Federal Water Issues Conference, Washington D.C.
May 9-12	ACWA 2017 Spring Conference, Monterey

John Withers

January 31	Irvine Chamber of Commerce 2017 Business Outlook
February 9	Retirement Reception for Frances Spivy-Weber
February 14	City of Irvine Mayor Donald Wagner's State of the City Address
February 16	Inland Empire Utilities Agency Water Assoc. Leadership Breakfast
March 19-20	2017 WaterReuse California Annual Conference
May 9-12	ACWA 2017 Spring Conference, Monterey

Douglas Reinhart

February 13	Monthly Discussion of District Activities with the General Manager
May 9-12	ACWA 2017 Spring Conference, Monterey

Mary Aileen Matheis:

January 27	Southern California Water Committee Quarterly Luncheon
January 31	Irvine Chamber of Commerce 2017 Business Outlook
February 2	South Orange County Watershed Management Area Exec. Meeting
February 16	Inland Empire Utilities Agency Water Assoc. Leadership Breakfast
March 7-8	ACWA 2017 Legislative Symposium, Sacramento
March 19-21	WaterReuse Annual Conference, San Diego

Consent Calendar: Ratify/Approve Board of Directors' Attendance at Meetings and Events
February 13, 2017
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March 22-23	Water Education Foundation 34 th Annual Exec. Briefing, Sacramento
May 9-12	ACWA 2017 Spring Conference, Monterey

Peer Swan

January 31	Irvine Chamber of Commerce 2017 Business Outlook
February 8-10	Urban Water Institute's Spring Conference, Palm Springs
February 13	Monthly Discussion of District Activities with the General Manager
May 9-12	ACWA 2017 Spring Conference, Monterey

RECOMMENDATION:

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

LIST OF EXHIBITS:

None.

February 13, 2017

Prepared and

Submitted by: L. Bonkowski

Approved by: P. Cook




CONSENT CALENDAR

MINUTES OF BOARD MEETING

SUMMARY:

Provided are the minutes of the January 23, 2017 Regular Board Meeting for approval.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

Not applicable.

RECOMMENDATION:

THAT THE MINUTES OF THE JANUARY 23, 2017 REGULAR BOARD MEETING BE APPROVED AS PRESENTED.

LIST OF EXHIBITS:

Exhibit "A" – January 23, 2017 Minutes

EXHIBIT "A"

MINUTES OF REGULAR MEETING – JANUARY 23, 2017

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 January 23, 2017 in the District office, 15600 Sand Canyon Avenue, Irvine, California.

Directors Present: Swan, Matheis, Reinhart, LaMar and Withers (arrived at 5:17 p.m.)

Directors Absent: None.

Also Present: General Manager Cook, Executive Director of Finance Clary, Executive Director of Water Policy Weghorst, Executive Director of Operations Shields, Executive Director of Engineering and Water Quality Burton, Director of Water Resources Sanchez, Director of Public Affairs Beeman, Director of Human Resources Roney, Director of Treasury and Risk Management Jacobson, Legal Counsel Arneson (via teleconference), Director of Recycling Zepeda, Director of Water Operations Roberts, Secretary Bonkowski, Government Relations Officer Compton, Principle Engineer Akiyoshi, Mr. Allen Shinbashi, Ms. Amy McNulty, Ms. Sunny Lee, Mr. Mark Tettemer, Mr. Ian Swift, Ms. Kellie Welch, Ms. Emilyn Zuniga, Mr. Jim Reed, Ms. Rubina Karimi, and Mr. Hal Furman.

ORAL AND WRITTEN COMMUNICATIONS: None.

ITEMS TOO LATE TO BE AGENDIZED: None.

PRESENTATION

FEDERAL LEGISLATIVE ACTIVITIES UPDATE

Mr. Hal Furman, the District's federal affairs consultant, provided an update on 2017 federal legislative activities.

CONSENT CALENDAR

On MOTION by LaMar, seconded and unanimously carried, CONSENT CALENDAR ITEMS 4 THROUGH 13 WERE APPROVED AS FOLLOWS:

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

Recommendation: That the Board ratify/approve the meetings and events for Steven LaMar, Douglas Reinhart, Mary Aileen Matheis and John Withers as described.

CONSENT CALENDAR (CONTINUED)

5. MINUTES OF REGULAR BOARD MEETING

Recommendation: That the minutes of the January 9, 2017 Regular Board Meeting and the January 13, 2017 Adjourned Regular Board Meeting be approved as presented.

6. 2017 LEGISLATIVE UPDATE

Recommendation: Receive and file.

7. RATIFICATION OF MEMORANDUM RELATIVE TO THE OFFICERS OF THE BOARD, COMMITTEES, AND OTHER ASSIGNMENTS

Recommendation: That the Board ratify the memorandum dated January 23, 2017 entitled Memorandum Relative to Officers of the Board, Committees, and Other Assignments; approve attendance for meetings and events for the Board's representation for Calendar Year 2017 as delineated, appoint Christine Compton as Assistant Secretary effective January 23, 2017; and adopt the following resolution by title rescinding Resolution No. 2016-1 and revising the assignment of Directors to Committees of the Board.

RESOLUTION NO. 2017-4

RESOLUTION OF THE BOARD OF DIRECTORS OF IRVINE
RANCH WATER DISTRICT, RESCINDING RESOLUTION NO. 2016-1
AND REVISING THE ASSIGNMENT OF DIRECTORS TO
COMMITTEES OF THE BOARD

8. DECEMBER 2016 TREASURY REPORTS

Recommendation: That the Board receive and file the Treasurer's Investment Summary Report, the Monthly Interest Rate Swap Summary for December 2016, and Disclosure Report of Reimbursements to Board Members and Staff; approve the December 2016 Summary of Payroll ACH payments in the total amount of \$1,687,698 and approve the December 2016 accounts payable Disbursement Summary of warrants 373188 through 373831, Workers' Compensation distributions, wire transfers, payroll withholding distributions and voided checks in the total amount of \$29,358,217.

9. 2017 INDEX TENDER NOTES REMARKETING

Recommendation: That the Board approve the 2017 Index Tender Notes Remarketing Statements and adopt a resolution approving the Remarketing Statements to Unscheduled Mandatory Tenders (Refunding Series 2011 A-1 and Refunding Series 2011 A-2).

RESOLUTION NO. 2017- 3

RESOLUTION OF THE BOARD OF DIRECTORS OF THE IRVINE
RANCH WATER DISTRICT APPROVING REMARKETING
STATEMENTS RELATING TO UNSCHEDULED MANDATORY
TENDERS (REFUNDING SERIES 2011A-1 AND REFUNDING SERIES 2011A-2)

CONSENT CALENDAR (CONTINUED)

10. AMENDMENT NO. 1 TO AMENDED AND RESTATED AGREEMENT FOR OPERATION AND MAINTENANCE OF THE BAKER PIPELINE

Recommendation: That the Board approve and authorize the execution of Amendment No. 1 to Amended and Restated Agreement for Maintenance and Operation of the Baker Pipeline.

11. DYER ROAD WELLFIELD WELL 7 AND IRVINE DESALTER PROJECT WELL 107 REHABILITATION CONSTRUCTION AWARD

Recommendation: That the Board authorize the General Manager to execute a construction contract with Best Drilling and Pump in the amount of \$886,835 for the Dyer Road Wellfield Well 7 Rehabilitation and Irvine Desalter Project Well 107 Rehabilitation, projects 7093 and 7589.

12. MEMORANDUM OF UNDERSTANDING FOR SMART TIMER DISTRIBUTION PROGRAM

Recommendation: That the Board authorize the General Manager to execute the Memorandum of Understanding between IRWD and Moulton Niguel Water District for the Smart Timer Distribution Program that commits funding in the amount of \$100,000 which will be reimbursed to IRWD through the water-energy grant with the California Department of Water Resources.

13. VARIANCE NO. 2 TO AGREEMENT WITH SYNERGY COMPANIES

Recommendation: That the Board authorize the General Manager to execute Variance No. 2 to the Agreement for Non-Consultant Services between IRWD and Synergy Companies in the amount of \$500,000 to be reimbursed through the Water-Energy Grant with the California Department of Water Resources.

ACTION CALENDAR

WATER EFFICIENCY TACTICAL INCENTIVE FUNDING AUTHORIZATION

General Manager Cook reported that IRWD's Water Use Efficiency Program includes a "Tactical Incentives" element to encourage customers to install water conservation devices. Mr. Cook said that in 2015, IRWD executed a multi-year agreement with the Municipal Water District of Orange County (MWDOC) to administer IRWD's incentives for regional rebate programs.

Ms. Amy McNulty reported that addendums to the agreement have been prepared for the residential, commercial, and turf removal programs that specify the device rebate funding levels for FY 2016-17. Ms. McNulty said that these addendums are provided in the exhibits and that based on prior customer participation rates and regional funding, the addendums allocate IRWD's tactical incentive funding among the programs, also shown in the exhibits.

Director LaMar said that this item was reviewed and approved by the Water Resources Policy and Communications Committee on January 12, 2017. On MOTION by LaMar, seconded and unanimously carried, THE BOARD AUTHORIZED THE GENERAL MANAGER TO ALLOCATE \$1,250,000 IN FUNDING TO THE FY 2016-17 REBATE PROGRAMS ADMINISTERED THROUGH THE MULTI-YEAR WATER CONSERVATION PARTICIPATION AGREEMENT BETWEEN MWDOC AND IRWD USING EXISTING AND FUTURE ADDENDUMS TO THE AGREEMENT AS MAY BE NECESSARY TO ALLOCATE FUNDS BASED ON ACTUAL PARTICIPATION RATES AND REGIONAL PROGRAM FUNDING.

MICHELSON WATER RECYCLING PLANT SECURITY UPGRADES

Director of Human Resources Roney reported that in April 2015, a security assessment of District facilities and report of findings was completed by IRWD's consultant, TelSec, Inc. and that a significant security risk to the District identified was the open-campus nature of the 45-acre Michelson Water Recycling Plant (MWRP) which includes a water recycling plant, a biosolids dewatering facility (currently under construction), maintenance buildings and equipment, a state-of-the-art water quality laboratory, warehousing, supply and equipment storage, and administrative offices that also serve as IRWD's primary Emergency Operations Center. Ms. Roney said that factors that contribute to the security concerns at the MWRP facility include: 1) significant increase in value of facilities, equipment and assets located at the MWRP; 2) encroaching urbanism surrounding the MWRP site resulting in an increase in security breaches; and 3) significant increase in traffic through the MWRP access points; up to 4,500 vehicles per week as measured by an August 2016 traffic study.

Ms. Roney said that TelSec's assessment reports suggested alternatives to mitigate the identified MWRP security risks including: 1) construction of a controlled access point into and out of the MWRP campus; 2) segregation of the plant operation facilities from the parking and administrative components of the campus via fencing and locked gates; and 3) locking all entrance gates at all times which would require the installation of sophisticated intercom systems to provide staff a method to grant access to visitors and contractors when needed.

Ms. Roney said that staff has reviewed and evaluated these alternatives and concluded that the most secure and efficient method to mitigate security risks to the MWRP is to implement Telsec's recommendation to construct a guardhouse, vehicle barrier gates and lighting adjacent to Tree Hill's parking area and staff the guardhouse with full-time contract security services. She said that it is anticipated that implementation of this recommended alternative will include construction of a small building consisting of a workspace, restroom and storage and electrical/communication room, extension of water sewer and power and communication utilities from the Operations Center, security gates and monitoring equipment. This project would also include minor grading and street improvements adjacent to Tree Hill's parking area and asphalt replacement surrounding the guardhouse's perimeter and along the utility trenches. She further said that staff will be preparing a Request for Proposal for engineering services to evaluate and then design the facilities. A Preliminary Design Report will be presented to the Engineering and Operations Committee for review prior to commencing with the final design. The award of a Professional Services Agreement for the preliminary and final design services is anticipated to be within the authority of the General Manager.

Director LaMar said that this item was reviewed and approved by the Engineering and Operations Committee on January 17, 2017.

Vice President Swan made recommendations for other alternatives, such as installing cameras in key locations and hiring additional security. He then made a motion to table this item. His motion was not seconded or carried, and failed passage for deferral. Following discussion, on MOTION by LaMar, seconded and unanimously carried, THE BOARD AUTHORIZED THE ADDITION OF THE MICHELSON WATER RECYCLING PLANT SECURITY PROJECTS 7824, 7825 AND 7826 TO THE FY 2016-17 CAPITAL BUDGET IN THE AMOUNT OF \$99,000 EACH, FOR A TOTAL OF \$297,000 FOR THE DESIGN AND CONSTRUCTION OF A GUARDHOUSE KIOSK, VEHICLE BARRIER GATES AND LIGHTING AT THE MWRP CAMPUS.

WILLIAMS PROPERTY PURCHASE

Executive Director of Water Policy Weghorst reported that the District is pursuing the purchase of property in Riverside County that is located within Palo Verde Irrigation District (PVID). Mr. Weghorst said that as an owner of land within PVID, IRWD would be able to participate in water conservation programs implemented by Metropolitan Water District of Southern California (Metropolitan) and PVID. He said that conservation programs such as land fallowing make water available for other uses. He said that in the future, IRWD would work with Metropolitan and Municipal Water District of Orange County (MWDOC) to develop mutually beneficial agreements through which IRWD would receive increased water supply reliability during periods of drought and supply interruptions in consideration of the water conserved on IRWD land in PVID.

Mr. Weghorst said that on December 13, 2016, the District executed Purchase and Sale Agreements to purchase the Williams Property comprised of approximately 1,368 water toll acres (1,510 gross acres) within PVID, and that on December 23, 2016, the agreements were amended to add 76 water toll acres (105 gross acres). He further provided an overview of the Williams Property, due diligence work conducted on the Property, the existing Metropolitan and PVID Fallowing Program and recommendations for the purchase of the Property. He said that there are approximately 50 acres included in the proposed purchase that are located on PVID mesa lands that have third priority Colorado River water rights and voting rights within PVID. There are 1,444 water toll acres with first priority water rights, which are currently enrolled in the existing Palo Verde Land Management, Crop Rotation and Water Supply Program (Fallowing Program). There are also numerous existing structures on the overall Property including four single-family homes and four apartment rental units.

Director of Treasury and Risk Management Jacobson provided a summary of the plan for this property noting that in the near term, land purchased by IRWD in the PVID service area would continue to be farmed essentially as it is today and that residential leases and tenant farm leases which would generate income for IRWD would be secured and maintained on the Property. He said that the farming operations would be supervised by District staff and consultants; and as a landowner and therefore a participant in the existing Metropolitan/PVID Fallowing Program, IRWD would receive fallowing payments from Metropolitan. He then discussed the long-term plan, and said that the IRWD-owned land within PVID would be utilized as follows: 1) the land would continue to be cultivated through tenant farm leases; 2) as a landowner, IRWD could

participate in any fallowing and other water conservation programs developed and implemented by Metropolitan and PVID; and 3) IRWD would work with Metropolitan and MWDOC to develop mutually beneficial programs and agreements through which IRWD would receive increased water supply reliability during periods of drought and supply interruptions in exchange for water conserved on IRWD-owned lands in PVID.

Mr. Jacobson said that the Purchase Agreement provides for a 60-day due diligence period in which there is an opportunity to conduct any studies, tests and inspections that are deemed necessary prior to the acquisition of the Property. He said that due diligence work completed to date shows the Williams Property is currently farmed with designated fields fallowed under the Fallowing Program. The Williams Property farms are well managed with no recognized onsite environmental conditions. Approximately 955 acres are currently leased for farming through October 31, 2017. The properties have been primarily planted with alfalfa and the current crop appears to be in very good condition. The fields are uniform and free from weeds. Similar to the other PVID properties, there are drainage channels and concrete irrigation ditches for providing water onto the Property. He said that the other structures on the property include hay barns, an equipment yard, four residences, four rental apartment units, old corrals and a mobile home. One of the residences owned by former PVID Trustee, Mrs. Johnson, will be vacated within 60 days after close of escrow, one home is vacant, one home is a life estate and the fourth residence is leased on a month-to-month basis. The owner of the life estate is absentee and the property is rented. Two of the four rental apartment units are vacant and the other two are leased on a month-to-month basis.

Director Swan reported that this item was reviewed and approved by the Supply Reliability Programs Committee on November 17, 2016. Following recommendation by the Board relative to the condition of the rentals, on MOTION by Swan, seconded and unanimously carried, THE BOARD FOUND THAT ALL MATTERS CURRENTLY IDENTIFIED WITH REGARD TO THE CONDITION OF TITLE, PHYSICAL CONDITION AND SUITABILITY OF THE WILLIAMS PROPERTY FOR THE USES CONTEMPLATED ARE ACCEPTABLE SUBJECT TO SUBJECT TO THE SELLERS' REMOVAL OF PERSONAL PROPERTY AND DESIGNATED UNSERVICEABLE STRUCTURES, AND SUBJECT TO THE DISTRICT NOT DISCOVERING ANY SIGNIFICANT FINDINGS THROUGH THE COMPLETION OF THE DUE DILIGENCE PERIOD; APPROVED THE ADDITION OF PROJECT 7844 TO THE FY 2016-17 CAPITAL BUDGET IN THE AMOUNT OF \$25,340,000 FOR THE PURCHASE OF THE PROPERTY; FOUND THAT THE PROPERTY ACQUISITION IS EXEMPT FROM CEQA; APPROVED THE PROJECT AND AUTHORIZED STAFF TO POST AND FILE THE NOTICES OF EXEMPTION IN ORANGE AND RIVERSIDE COUNTIES; AND AUTHORIZED THE GENERAL MANAGER, TREASURER AND EACH OTHER OFFICER OF THE DISTRICT, EACH ACTING SINGLY, TO EXECUTE AND DELIVER ANY AND ALL DOCUMENTS, ASSIGNMENTS, CERTIFICATES, INSTRUCTIONS AND INSTRUMENTS NECESSARY OR PROPER FOR CARRYING OUT AND CLOSING THE REAL ESTATE PURCHASE TRANSACTION FOR THE ACQUISITION OF THE PROPERTY.

COOLING TOWER CONVERSION AGREEMENT WITH THE UNIVERSITY OF CALIFORNIA, IRVINE

Using a PowerPoint presentation, Mr. Mark Tettemer provided an overview of staff's efforts working with UCI towards the conversion of its Central Plant cooling towers to recycled water to help UCI meet its potable water conservation goals. Once completed, the conversion will result in a savings of approximately 125 acre-feet of potable water per year. The use of recycled water at this facility will require construction of a new pipeline as well as on-site improvements within the Central Plant. Mr. Tettemer said that staff has worked with UCI in preparing the agreement terms of the agreement which include: 1) installing 3,550 feet of recycled water pipeline that will have a capacity to convey 1,500 gallons per minute estimated at approximately \$1,000,000; 2) UCI's implementation of on-site plant improvements which will include the piping needed to deliver recycled water within the Central Plant as well as a pre-treatment system; 3) a potential Bureau of Reclamation Grant of \$300,000; and 4) IRWD to fund UCI's \$1,060,000 in costs for its on-site improvements with an approximately 22-year reimbursement plan based on the current potable and recycled water commodity rates escalating at 3% annually.

Director LaMar said that this item was reviewed by the Water Resources Policy and Communications Committee on December 10, 2015, where they authorized staff to prepare an agreement for consideration by the Board of Directors. On MOTION by LaMar, seconded and unanimously carried, THE BOARD AUTHORIZED THE GENERAL MANAGER TO EXECUTE THE AGREEMENT BETWEEN IRVINE RANCH WATER DISTRICT AND THE REGENTS OF THE UNIVERSITY OF CALIFORNIA ON BEHALF OF ITS IRVINE CAMPUS FOR RECYCLED WATER CONVERSION OF THE UCI CENTRAL PLANT, SUBJECT TO NON-SUBSTANTIVE CHANGES; AND AUTHORIZED UP TO \$1,060,000 FROM THE WATER CONSERVATION FUND TO FUND THE ON-SITE IMPROVEMENTS AT UCI'S CENTRAL PLANT TO BE REIMBURSED UNDER THE TERMS OF THE EXECUTED AGREEMENT.

GENERAL MANAGER'S REPORT

General Manager Cook asked Executive Director of Operations Shields to provide an update on how the District fared with the recent storm events. Mr. Shields provided an overview of recycled storage levels, the diversion of flows to the OCSD, SOCWA and GAP, that the Sand Canyon Reservoir overflowed, along with other issues.

Mr. Cook reported that the District received an agreement with the State Water Resources Control Board relative to a \$10 million grant to construct a new reservoir and recognized staff on their efforts.

Mr. Cook said that last Friday he received word from the Society of Civil Engineers that the District will be recognized for both the Peters Canyon Project as well as the Baker Treatment Plant.

DIRECTORS' COMMENTS

Director Matheis reported that she attended an ISDOC Executive Committee meeting as well as a retirement celebration for City of Lake Forest's City Manager Bob Dunek along with Director Withers and General Manager Cook. She further said that she will be attending ISDOC's quarterly luncheon this week.

Director LaMar reported that tomorrow he will be attending ACWA's Agricultural Initiative meeting as well as a Federal Affairs Committee meeting on Friday.

Director Withers reported that tomorrow he will be attending a Board of Supervisors' meeting, and Wednesday an OCSD Board meeting.

Director Swan reported that he attended an OCWD Committee meeting, but was unable to attend its Board meeting. He said he also attended a WACO Planning meeting and a three-day CASA conference.

Director Reinhart reported that he attended a MWDOC Board meeting and a MWDOC Administration and Finance Committee meeting, and will be attending its Executive Committee meeting this week.

Mr. Jim Reed provided an update on meetings he attended on behalf of the District.

ADJOURNMENT

President Reinhart adjourned the meeting at 7:12 p.m.

APPROVED and SIGNED this 13th day of February, 2017.

President, IRVINE RANCH WATER DISTRICT

Secretary IRVINE RANCH WATER DISTRICT

APPROVED AS TO FORM:

Legal Counsel - Bowie, Arneson, Wiles & Giannone

February 13, 2017

Prepared by: J. McGehee/R. Mori

Submitted by: K. Burton

Approved by: Paul Cook 

CONSENT CALENDAR

PETERS CANYON WASH CHANNEL WATER CAPTURE AND REUSE PIPELINE FINAL ACCEPTANCE

SUMMARY:

Construction of the Peters Canyon Wash Channel Water Capture and Reuse Pipeline Project is complete. The Contractor, E.J. Meyer Company, has completed the required work and all punch list items, and the project has received final inspection. Staff recommends that the Board authorize the General Manager to accept construction of Peters Canyon Wash Channel Water Capture and Reuse Pipeline, project 4985; authorize the General Manager to file a Notice of Completion; and authorize the release of retention 35 days after filing of the Notice of Completion.

BACKGROUND:

The project will divert nuisance surface and perched groundwater flows with high concentrations of selenium and nitrates from selected tributaries to Peters Canyon Wash Channel and deliver them in a pressure pipeline to the Main Street sewer that discharges to the Orange County Sanitation District (OCSD) for treatment and reuse. The project will discharge to OCSD under the terms of OCSD's Dry Weather Urban Runoff Discharge Program (Resolution No. OCSD 13-09). The City of Irvine, City of Tustin, Orange County Flood Control District, County of Orange and California Department of Transportation (Caltrans) are all "Funding Parties" that have agreed to pay the capital costs to design and construct the project. While IRWD is not contributing to the capital cost of the project, staff is responsible for managing the design and construction phases and for operations and maintenance costs of the constructed project up to a maximum of \$60,000 per year. By participating in the project, IRWD will receive "Nitrogen and Selenium Credits" expected to be generated by the project that can be used throughout the San Diego Creek watershed including the San Joaquin Marsh. Caltrans currently discharges shallow groundwater from its SR-261 dewatering operations at the Caltrans Ground Water Treatment Facility (GWTF) to IRWD's Harvard Avenue Trunk Sewer. This project will also connect to the GWTF, which will allow delivery of the Caltrans' dewatering flows to OCSD through the project pipeline.

The construction contract for the Peters Canyon Wash Channel Water Capture and Reuse Pipeline Project was awarded to E.J. Meyer Company in May 2015. The pipeline and pump stations were placed into operation in July 2016. The contract schedule was extended by 122 days through January 31, 2017 to accommodate unanticipated renovations to the Caltrans GWTF. The planned repairs were successfully completed and tested. In accordance with the cooperative agreement, the partners provided their written acceptance of the project.

Project Title:	Peters Canyon Channel Wash Water Capture and Reuse Pipeline Project
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Project No.:	4985
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Design Engineer:	Tetra Tech
Construction Management by:	IRWD Staff
Contractor:	E.J. Meyer Company
Original Contract Cost:	\$7,877,777.00
Final Contract Cost:	\$8,497,722.13
Original Contract Days:	450
Final Contract Days:	615
Total Project Cost (Est.):	\$12,814,000.00
Final Change Order Approved On:	January 6, 2017

FISCAL IMPACTS:

Project 4985 is included in the FY 2016-17 Capital Budget. The existing budget is sufficient to fund the final payment for the project.

ENVIRONMENTAL COMPLIANCE:

This project is subject to the California Environmental Quality Act (CEQA) and in conformance with California Code of Regulations Title 14, Chapter 3, Article 6, a Notice of Intent to adopt a Mitigated Negative Declaration was filed with the County of Orange on January 15, 2015. Pursuant to State Guideline § 15073, the IS/MND was made available for public review for a period of 30 days from January 15, 2015 through February 13, 2015. The IS/MND was adopted by IRWD Board of Directors at its April 27, 2015 meeting. A Notice of Determination was filed with the Orange County Clerk/Recorder and the CA State Clearinghouse on April 28, 2015.

COMMITTEE STATUS:

This item was not reviewed by a Committee.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO ACCEPT CONSTRUCTION OF PETERS CANYON WASH CHANNEL WATER CAPTURE AND REUSE PIPELINE, PROJECT 4985; AUTHORIZE THE GENERAL MANAGER TO FILE A NOTICE OF COMPLETION; AND AUTHORIZE THE RELEASE OF RETENTION 35 DAYS AFTER FILING OF THE NOTICE OF COMPLETION.

Consent Calendar: Peters Canyon Wash Channel Water Capture and Reuse Pipeline Final
Acceptance
February 13, 2017
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LIST OF EXHIBITS:

None.

February 13, 2017

Prepared by: Rob Jacobson

Submitted by: Cheryl Clary 

Approved by: Paul Cook 

ACTION CALENDAR

PENSION PLAN FUNDING AND UPDATE

SUMMARY:

The District strives to maintain a fully funded or near fully funded pension plan status. The District's pension obligation was fully funded as of June 30, 2016. During the past two years, CalPERS has achieved lower investment returns than anticipated and is also planning a decrease in its actuarial assumed discount rate over the next three years. The result will be an increase in required pension plan contributions and a higher pension liability for all CalPERS agencies in the coming years. Staff recommends that the Board approve a contribution of \$11 million to the IRWD Section 115 Retirement Trust to partially offset the anticipated increase in the CalPERS pension liability.

BACKGROUND:

Recent pension accounting rules require the District to reflect its net pension asset or liability on its balance sheet beginning the fiscal year ended June 2016. In addition, new post-employment accounting rules will require the District to reflect its post-employment (OPEB) net asset or liability on the balance sheet beginning with the fiscal year ending June 2018.

IRWD has taken significant steps over the past few years to address its pension obligation by creating a Section 115 Trust (the Trust) and has contributed more than \$41.2 million to the Trust since its inception. The Trust had a market value of \$47.1 million as of June 30, 2016. As a result, the District's pension obligation was fully funded as of June 30, 2016. A fully funded pension plan means the fair value of the assets are equal to the actuarially determined future liabilities given an assumed discount rate and other key assumptions. A fully funded pension was an important consideration by the rating agencies in providing the District with the highest possible credit rating of "AAA" during the recent debt issuance process.

The District currently has a policy of contributing 25 percent of employee salaries to CalPERS and the Section 115 Trust, with the required annual contribution made to CalPERS and any additional contribution made to the Trust. An initial one-time contribution of \$35 million was made in June 2013 to the Section 115 Trust to fully fund the pension plan. During the past few years, CalPERS has experienced lower investment returns than the assumptions used to determine the pension liability. In addition, CalPERS recently announced plans to decrease the actuarial assumed discount rate from 7.675% to 7.0 % over three years beginning Fiscal Year 2018. The result will be that pension plan contributions and liabilities are expected to significantly increase over the coming years.

Increased Funding of the Pension Plan:

Staff recommends that the District continue to fully fund its pension liability. Current actuarial estimates show that the pension plan will be underfunded by approximately \$23 million as of the fiscal year ending June 2017. In order to achieve full funding, staff recommends making an immediate contribution of \$11 million to the Section 115 Trust, funded from borrowing from the Replacement Fund. Staff will review a possible additional contribution required based on investment returns achieved during the remainder of this fiscal year, and may recommend a possible additional contribution prior to the fiscal year ending June 2017.

FISCAL IMPACTS:

The additional contribution to the Section 115 Retirement Trust was not budgeted. Funding will come from the Replacement Fund, and funds will be invested on a periodic basis as directed by the IRWD Post-employment Benefits Trust Board.

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 reviewed by the Finance and Personnel Committee on February 7, 2017.

RECOMMENDATION:

THAT THE BOARD APPROVE THE ADDITIONAL CONTRIBUTION OF \$11 MILLION TO THE IRWD SECTION 115 RETIREMENT TRUST.

LIST OF EXHIBITS:

None.

February 13, 2017

Prepared by: F. Sanchez

Submitted by: P. Weghorst

Approved by: Paul Cook 

ACTION CALENDAR

RESOLUTION TO RESCIND DECLARATION OF WATER SHORTAGE LEVEL ONE

SUMMARY:

In response to drought conditions, the Governor issued an Executive Order in April 2015 that mandated a 25% statewide reduction in urban potable water use from 2013 levels. Subsequent action by the State Water Resources Control Board established IRWD's specific potable water use conservation target at 16%. In July 2015, the IRWD Board of Directors declared a Level Two Shortage that represents a significant shortage between 10% and 25%. In 2016, IRWD's conservation target was eventually reduced to 0% based on an assessment of IRWD's projected demands and available supplies. Accordingly, the Board adopted Resolution No. 2016-17 that rescinded the previous Level Two Shortage declaration and declared a Water Shortage Level One which represents a low-level shortage condition. Since that time, the state's hydrologic conditions have substantially improved and there is no longer a drought emergency or any potential of a water shortage for IRWD. Staff recommends that the Board adopt a resolution to rescind Resolution No. 2016-17 that declared a Water Shortage Level One authorize staff to transition IRWD's messaging and outreach to long-term water use efficiency and adopt a resolution to rescind Resolution No. 2016-17 that declared a Water Shortage Level One.

BACKGROUND:

California has experienced several years of a severe statewide drought. In response to this multi-year drought, the Governor issued a series of executive orders. In April 2015, the Governor issued Executive Order B-2-15 that mandated a 25% statewide reduction in urban potable water use from 2013 levels. In May 2015, the State Board adopted a Drought Emergency Regulation that assigned potable water use reduction targets to all urban water suppliers to achieve the statewide mandate. IRWD's mandated conservation target for the period June 2015 to February 2016 was 16% which called for a reduction of approximately 8,000 acre-feet (AF) of potable water use. This mandated reduction in potable water use fell within the 10% to 25% Level Two Shortage defined in the IRWD's Water Shortage Contingency Plan (WSCP) which is attached as Exhibit "A". In response to this mandate, the IRWD Board of Directors declared, in July 2015, a Water Shortage Level Two which represents a significant shortage of between 10% and 25%.

In November 2015, the Governor issued an Executive Order directing the State Board to extend the Emergency Regulation until October 2016 based on continued statewide drought conditions. In February 2016, the State Board modified its Drought Emergency Regulation, incorporating credits and adjustments for sustainable supplies, growth and climate. As a result of the adjustments, IRWD's conservation target was reduced to 8% effective March 1, 2016.

On May 18, 2016, the State Board adopted a further revised Drought Emergency Regulation, extending the term of the regulation until February 28, 2017. This extension incorporated a new methodology for calculating water reduction targets that allowed urban water agencies to self-

certify the availability of supplies to meet projected demands. The self-certification process assumed that the next three years would also represent dry conditions. The percentage gap between an agency's supplies and demands in the third year became the water agency's revised conservation target. IRWD's self-certification resulted in a revised target of 0%.

IRWD Water Shortage Contingency Plan:

According to IRWD's WSCP, the response to water supply shortages varies depending on the magnitude and nature of the shortfall. In July 2016, the appropriate level of shortage that reflected local conditions as well as IRWD's reduced target and the continued state drought emergency, was a Water Shortage Level One. The Board adopted Resolution 2016-17 in July 2016 that rescinded the previous Water Shortage Level Two declaration and declared a Water Shortage Level One.

On February 8, 2017, the State Board extended the Drought Emergency Regulation until May 2017 based on the concern that no additional rainfall or snow this winter could threaten water supplies this summer. The State Board voted to extend the regulation over the objections of a majority of urban water agencies that highlighted how hydrologic conditions throughout the state have significantly improved since July 2016. These improved conditions are apparent with the Sierra Nevada snowpack, which supplies water to one-third of the state, being at 173% of normal, the 8-Station precipitation index being at 203% as of February 6 and the California Department of Water Resources' recent declaration of an early 2017 State Water Project SWP Allocation of 60%. This SWP Allocation is expected to increase as additional runoff from the winter storms occurs over the next few months. Many of the state's reservoirs have already shifted to flood control operations.

Projected Conditions for IRWD:

The current improved hydrologic conditions indicate that the possibility of water suppliers throughout the state experiencing water shortages is substantially reduced if not eliminated. The improved conditions have eliminated any risk that IRWD will experience water shortages taking into the self-certification process. Since no IRWD water shortages are projected to occur in the coming years, IRWD's low-level water shortage declaration is no longer warranted. Staff recommends that the Board adopt a resolution to rescind IRWD's Water Shortage Level One, and authorize staff to transition IRWD's messaging and outreach back toward long-term water use efficiency.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

Due to time constraints, this item was not reviewed by the Water Resources Policy and Communications Committee.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE STAFF TO TRANSITION IRWD'S MESSAGING AND OUTREACH TO LONG-TERM WATER USE EFFICIENCY AND ADOPT A RESOLUTION BY TITLE TO RESCIND RESOLUTION NO. 2016-17 THAT DECLARED A WATER SHORTAGE LEVEL ONE (SHORTAGE WARNING):

RESOLUTION NO. 2017 –

RESOLUTION OF THE BOARD OF DIRECTORS OF
IRVINE RANCH WATER DISTRICT RESCINDING RESOLUTION NO 2016-17 AND
RESCINDING WATER SHORTAGE LEVEL ONE (SHORTAGE WARNING)

LIST OF EXHIBITS:

Exhibit "A" – Water Shortage Contingency Plan
Exhibit "B" – Resolution Rescinding Water Shortage Level One

EXHIBIT "A"

WATER SHORTAGE CONTINGENCY PLAN October 2014

PART I: EXECUTIVE SUMMARY

Background

IRWD's response to a water supply shortage varies depending on the magnitude and nature of the shortfall. A supply shortage is defined as a reduction in total supplies, typically resulting from one of two conditions:

- Drought conditions that limit availability of imported water or local supplies.
- System interruptions that result from emergency outage conditions.

IRWD's response to any water supply shortage depends on the cause, severity and anticipated duration of the shortage. Use of local supplies, storage and other supply augmentation measures can mitigate shortages, and are assumed to be in use to the maximum extent possible during declared shortage levels. The resultant net shortage levels can be addressed by demand reduction programs, as described in this Plan. This document is intended primarily to address drought supply shortages, however at the discretion of the Board, this Plan may also be used to address system outages, although these are more explicitly addressed in IRWD's Water Supply Reliability Study (June 2008).

Supply Shortage Conditions

Given the assumption that the level of water supply shortage experienced at any point in time is net of mitigating supply factors, two basic considerations emerge in formulating a water shortage plan: (1) the shortage must be offset by demand reduction, and (2) the demand reduction program must be incremental in nature since shortage conditions are normally progressive. This means that a shortage contingency plan should be designed to address varying levels of supply deficits with recommended actions predicated upon the actual deficit level. Therefore this plan develops a shortage response based upon four levels of supply cutbacks:

- *Level One* is a shortage warning and low level shortage condition with supply reductions of up to 10%.
- *Level Two* is a significant shortage condition indicated by shortages between 10 to 25%.
- *Level Three* is a severe shortage condition indicated by shortages ranging from 25 to 40%.
- *Level Four* is a crisis shortage condition resulting when shortages exceed 40%.

Each shortage level will trigger a set of response measures aimed at reducing demand to the level of supply. Steps taken within each level should be considered cumulative; that is, Level Two responses will include most if not all the responses in Level One plus the additional actions necessary to meet the Level Two condition. Level Three will include most if not all the responses in Level Two plus the additional measures necessary to meet a Level Three condition, and so on.

However, if a shortage condition persisted over an extended period of time, it may be necessary to implement a higher level response to sustain required reductions. Thus both the severity of supply reductions and the duration over which the reductions are experienced will determine the appropriate response.

Supply Shortage Response Measures

In addition to basic measures which are always in effect, there are three types of response measures that can be implemented by the District in the event of a supply shortage.

- Voluntary measures through increased public outreach, education and awareness (V)
- Demand management through the use of the District's allocation-based rate structure (D).
- Mandatory measures through restrictions on use and enforcement (M).

In general terms, voluntary customer responses and demand management through the use of the allocation-based rate structure will be used in all four shortage levels identified in this plan. A combination of voluntary and demand management strategies are likely to be sufficient to address virtually all shortage levels. Responses to shortages in Levels Three and Four may also include restrictions on use and enforcement. Below is a summary of anticipated supply shortage response measures.

Supply Shortage Response Measure	IRWD Supply Shortage Level	Voluntary (V), Demand Management (D) or Mandatory (M)
Public Education	Always In Effect	
Prohibition of Gutter Flooding	Always In Effect	
Prohibition of Leaks	Always In Effect	
Prohibition of Water Waste	Always In Effect	
Enhanced Public Awareness Campaign	Level One	V
Target Over-Allocation Customers for Surveys/Assistance	Level One	V
Review and Adjust Customer Allocations and/or Tiers as necessary	Level One/Two	D
Reduce Potable and Untreated Irrigation and Agricultural Allocations by 30% or other percentage specified in the shortage level declaration	Level Two	D
Reduce Potable and Untreated Irrigation Allocations by 60% or other percentage specified in the shortage level declaration	Level Three	D
Reduce Commercial, Industrial and Institutional Potable Allocations by 10% or other percentage specified in the shortage level declaration	Level Three	D
Increase Rates for Over-Allocation Use Tiers	Level Three/Four	D
Further reduction of allocations, tightening of tiers and rate increases to achieve necessary demand reductions	Level Four	D/M
Eliminate Outdoor Use (100% reduction)	Level Four	D/M
Mandatory restrictions and enforcement	Level Four	M

These response measures may be applied singly or in combination and may vary according to the severity and duration of the shortage. Other measures may be applied in lieu of or in addition to those described in this plan. The application of shortage level response measures or restrictions may vary as to type of water service. In the implementation of measures or restrictions on potable water service through the declaration of a shortage level, the District will determine and set forth how and to what extent, if any, such measures or restrictions, or different measures or restrictions, will be applied to non-potable water services furnished by the District. IRWD's Board of Directors will declare the level of shortage based on water supply conditions.

Imported Water Supply Shortage

An imported water supply shortage represents one of the main causes of a supply shortage for the District. In 2008 approximately one-third of IRWD's water supply was imported through Metropolitan Water District of Southern California (MWD). While potential reductions in imported water deliveries from MWD can be mitigated to some extent by the addition of other local supplies, such as increased pumping from groundwater facilities, or the conversion of certain potable water uses to recycled water (see IRWD's Water Resources Master Plan (WRPM) and Urban Water Management Plan (UWMP)), the range of shortages projected herein is assumed to be net of those supply augmentation measures. That is, supply shortages identified as, say 20%, is the actual shortage confronted by the District's customers after supply augmentation factors have been implemented. This plan is intended to develop a set of options to reduce demand; the development of supply augmentation options is outside the scope of this analysis and is addressed in the WRMP and UWMP.

In February 2008 the MWD adopted a Water Supply Allocation Plan based on its declared level of shortage. IRWD has performed analysis relating to varying hydrologic conditions, availability of supply augmentation measures and additional conservation. Based on the results of the modeling, Table 1 illustrates IRWD water shortage levels correlated with MWD's allocation shortage plan.

Table 1: IRWD Water Shortage Levels Correlated with MWD Allocation Stages:

MWD Stage	MWD Supply Shortage	IRWD Reliability Range	IRWD Shortage Level
1	5%	97-100%	1
2	10%	95-100%	1
3	15%	93-100%	1
4	20%	91-100%	1
5	25%	88-99%	1 or 2
6	30%	86-97%	2
7	35%	84-95%	2
8	40%	82-92%	2
9	45%	79-89%	2
10	50%	77-88%	2 or 3

The above table assumes a dry local hydrology for multiple years and limited access to groundwater. Actual correlations may differ depending on local hydrology at the time of the shortage.

PART II: SHORTAGE RESPONSE STRATEGIES

Basic Measures Always In Effect

The following basic measures are considered good water management practices, and are always in effect regardless of whether a shortage level is declared. These measures are contained in IRWD's Rules and Regulations (Section 15):

- (a) *Gutter Flooding* - No person shall cause or permit any water furnished to any property within the District to run or to escape from any hose, pipe, valve, faucet, sprinkler, or irrigation device into any gutter or otherwise to escape from the property if such running or escaping can reasonably be prevented.
- (b) *Leaks* - No person shall permit leaks of water that he has the authority to eliminate.
- (c) *Washing Hard Surface Areas* - Washing down hard or paved surfaces, including, but not limited to sidewalks, walkways, driveways, parking areas, tennis courts, patios or alleys, is prohibited except when necessary to alleviate safety or sanitary hazards.
- (d) *Waste* - No person shall cause or permit water under his control to be wasted. Wasteful usage includes, but is not limited to, the uses listed in Section 13(a) of Exhibit 1 to the Memorandum of Understanding Regarding Urban Water Conservation in California, dated December 11, 2002, as amended from time to time, or the counterpart of said list contained in any successor document.

Under the District's allocation-based conservation rate structure that is in effect during non-shortage conditions, customer allocations are limited to the amount that is reasonable for the customer's needs and property characteristics, and reflect the exclusion of these types of wasteful water uses.

Water Supply Shortage Response Measures

IRWD would employ a range of measures in response to potential shortages depending on the level and duration. While the measures will be applied incrementally, this Plan builds in a level of flexibility to adopt additional measures to ensure the appropriate level of demand reduction. The use of IRWD's allocation-based rates and the assessment of higher rates for over-allocation or wasteful use provides IRWD with an additional strategy to help achieve demand reductions.

For illustration purposes, Table 2 shows water reductions requirements that would be required during three shortage conditions, using water demand data from 2007 (See Appendix A for total treated and untreated water demands).

Table 2: Water Conservation Requirements – Acre-Feet:

Shortage Percentage	10%	25%	40%
Treated and Untreated Water	6,673	16,683	26,693
Treated Water Only	5,874	14,686	23,497

In order to achieve the necessary demand reductions, IRWD's measures will progress from voluntary reductions to reduction of discretionary uses through financial incentives or restrictions to reduction of non-discretionary uses through financial incentives or restrictions based on the level of the shortage. Most shortages, unless extreme (Level Four or system outage), can be addressed with a combination of voluntary measures and a reduction of discretionary uses through financial incentives.

Response Measures: Voluntary

The single most important step the District can take in implementing voluntary measures is to inform the public consciousness in order to help reduce water demand. It should be noted that the District has implemented on-going water use efficiency and outreach programs since the early 1990's, and those efforts combined with the allocation-based tiered rates, have resulted in somewhat hardened levels of demand. The District will employ additional strategies to achieve the necessary demand reductions in a shortage situation. Most of the effort will be focused on providing additional outreach to high usage tier customers.

1. *Public Outreach:* An outreach program will educate the public and local leaders on the water supply situation; what actions are proposed; what the intended achievements are; and how these actions are to be implemented. This will be accomplished by having key District personnel present to groups such as the city council, community associations, chambers of commerce, business groups, etc. An endorsement of proposed District plans by these groups will assist in obtaining the public support essential in confronting water shortages.

The public at large will be informed through press releases, billing inserts, water conservation booths, community association meetings, newsletters, church groups, etc. Literature will be provided on the shortage condition, conservation methods, and water-saving devices and be distributed through the fire and police stations, libraries, city hall, schools, shopping center,

recreation facilities, etc. Certain behavior modifications, such as those listed below, can help address the need for immediate conservation.

- Survey plumbing every two months and eliminate water loss resulting from leaky plumbing fixtures.
 - Restrict showers to five minutes or less; fill the bath tub no more than one-quarter full.
 - Do not run water unnecessarily while shaving, brushing teeth, bathing, preparing food, etc.
 - Run only full loads of laundry and dishes.
 - Reduce landscape watering.
 - Fill swimming pools to a lower level to minimize water loss due to splashing.
2. *Education Programs:* School programs will focus on the water shortage situation. In addition to the usual District background information, the supply situation and conservation methods will be highlighted. Demonstrations using sample water-saving devices can be given; literature will be distributed.
3. *Logo:* A water conservation or shortage response logo will be adopted and vigorously promoted as a symbol to influence public attitudes toward water use.
4. *Media:* Extensive use of all available forms of media will be employed and coordinated with other agencies. This includes public service messages on radio and television and press releases in local newspapers. The messaging and level of response will be correlated with the need for demand reductions.
5. *Target Over-Allocation Customers:* District staff will ramp up its ongoing outreach efforts to more aggressively target over-allocation customers. Over-allocation use is considered wasteful use; customers in these tiers will be contacted via letter, telephone, e-mail and other means. On-site assistance/audits will help identify the source of the over-allocation use and provide recommendations to address the problem.
6. *Customer Service:* Customers will be encouraged to work together to save water and to call IRWD's water use efficiency experts if assistance is needed to help find water leaks or to use water more water efficiently. If someone observing water waste within IRWD's service area is

unsure who the property owner is they can call in to IRWD's Customer Service Department for assistance. IRWD staff will contact the customer associated with the property and offer on-site assistance and recommendations to address the problem.

Response Measures: Demand Management and Use of Allocation-Based Rates

The allocation-based tiered rate structure adopted by IRWD in 1991 is intended to function as a tool to promote ongoing water use efficiency. Water is allocated on an individual customer basis established upon specific indoor uses and outdoor irrigation needs. The structure includes a five-tiered system for residential customers and a four-tiered system for non-residential customers, and charges progressively higher rates for progressively higher amounts of water used. Use within a customer's allocation is encouraged through a significantly tiered commodity pricing system which discourages wasteful use. The allocation-based tiered rates provide IRWD with an effective mechanism to alter demand through pricing.

Analysis of Usage and Tiers

A detailed analysis of the usage and tiers, with the most recently available data, is one of the first steps that should be undertaken in developing demand management strategies, including potential adjustments to the tiers and allocations. Appendix A: 2007 Annual Usage and Tier Break-Down shows the annual usage and tier break-down information for treated and untreated water sources, based on data from calendar year 2007. The first two tiers shown (1 and 2) indicate usage within allocation. Tiers 3 to 5 indicate over-allocation use.

Basic water allocations should be reviewed on a periodic basis taking into consideration changes since the most recent review of these allocations, including changes to the plumbing code that improve water use efficiency, water conservation devices and more efficient irrigation systems available to the average customer. Beyond this, there are several mechanisms that can be employed either separately or in combination to achieve the necessary level of demand reductions.

Allocation Adjustment Strategies for Demand Management

1. Adjusting the Tier Thresholds: This strategy does not adjust the actual allocation formula itself, but rather adjusts the percentage thresholds for the over-allocation tiers. The current tiers and thresholds for the various account types are shown in Table 3. Adjusting the tier thresholds downward would have the effect of shifting more use into the higher over-allocation tiers. Customers in these tiers would be subjected to increased rates depending on the extent of their use (percentage of use above allocation). Reducing the tier thresholds would send stronger price signals by moving over-using customers into the higher tiers.

Table 3: Allocation-Based Rates Tier Thresholds

Tier	Percentage of Allocation		
	Residential	Irrigation	Non-Residential
Low Volume	0-40%	0-40 %	N/A
Base	41-100%	41 – 100%	0-100%
Inefficient	101 – 150%	101 – 110%	101 – 110%
Excessive	151 -200%	111 -120%	111 -120%
Wasteful	201% +	121% +	121% +

2. Allocation Adjustments: An adjustment to the allocation entails refining the allocation formula. This can be done either as a simple percentage adjustment or by adjusting a specific portion of the formula. For example, residential allocations are made up of an indoor plus an outdoor allocation component. It is possible to adjust the outdoor component downward to allow for less outdoor irrigation or eliminate it altogether depending on the need for demand reductions. Water allocations could also be set to levels that would eliminate all outdoor water use including irrigation, car washing, pool filing, agricultural use of non-recycled water etc. Under this scenario the indoor component could be left the same or could be altered as necessary.
3. Rate Increases for Over-Allocation Use: This approach entails adopting higher rates for over-allocation use, and would be linked to purchases of imported water at Metropolitan's penalty rates, among other things.

These three types of allocation adjustments can be established and refined based on customer response in such a way that specified uses are discouraged. The allocations can be established in such a way that

certain uses are not included in the allocation. Customers engaging in these uses would receive over-allocation tier charges on their water bill.

In Levels One and Two, a combination of adjusting the tier thresholds and/or the allocations, as necessary, is likely to be sufficient to achieve the required demand reductions. In Levels Three and Four, those strategies, plus the use of rate increases with stronger price signals for over-allocation use, could be used to achieve further demand reductions. In all cases, adjustments to the allocations, tiers and rates will be at the discretion of the Board, and will be based on an assessment of the supply shortage, customer response and need for demand reductions.

Enforcement Mechanism:

Application of any or a combination of the allocation adjustment strategies will place customers into the higher usage tiers, which acts as a reporting and enforcement mechanism by creating a strong financial incentive for customers to reduce demands. The higher rates for above allocation use reflect and incorporate the cost of additional demand management measures, as well as the additional cost to IRWD of acquiring water supplies in a shortage.

Response Measures: Mandatory

Extreme shortage conditions (severe Level Three and Level Four) may require that the District adopt restrictions and/or ration water for health and safety purposes only. A system outage requires a rapid response based on the fact that there is typically a need for more immediate action to deal with an emergency situation. In a system outage emergency, the IRWD Board of Directors will declare a shortage based upon the projected impact of the system outage. Since adjustments to tiers and allocations typically have a time lag in implementation and effect, those measures will be of limited usefulness in a system outage. Therefore, in addition to the measures always in effect, the Board may impose any combination of the following mandatory measures and rationing to alleviate demands.

1. *Potable Irrigation Ban:* Outdoor irrigation would be the initial target for any demand reductions. Demand reductions or eliminations that cannot be met through voluntary measures and financial incentives related to adjustments in the allocation based rate structure, would be attained through a ban on potable irrigation. Table 4 indicates the potential demand reductions that could be

attained from 30%, 60% and complete elimination of outdoor irrigation. This includes dedicated landscapes, mixed use commercial accounts and residential outdoor irrigation.

Table 4: Potential Water Savings (AF) Based on Irrigation Cutbacks:

% Irrigation Cutback	30%	60%	100%
Potable Irrigation	8,980	17,959	29,932
Untreated Irrigation	351	701	1,169
Total	9,330	18,660	31,101

2. *Ban on car-washing and pool-filling:* Demand reductions on car-washing and pool filling that cannot be achieved through voluntary measures and financial incentives related to adjustments in the allocation-based rate structure would be attained through a ban on these actions.

Enforcement Measures

1. *Flow restrictors:* Under extreme conditions of noncompliance, the District could install flow restrictors in individual service lines. Thus, water would be available for drinking, cooking, sponge baths, and slow fill of toilet tanks, but showers and other high volume type uses would not be possible. Under these conditions individual customer reaction would be severe. It would probably be necessary to augment the customer service field service staff to maintain surveillance of these services to assure that unauthorized changes are not made by the customer.
2. *Mandatory Restrictions and Fines:* The District's ability to establish restrictions on water use and to possibly discontinue non-health and safety related service in the case of repeat violators is provided for under the Water Code of the State of California Chapters 3 and 3.5).

PART III: SHORTAGE RESPONSE PLAN

IRWD Water Supply Shortage Levels

In the event of a shortage, IRWD's Board of Directors, in accordance with the provisions of the California Water Code, will determine and declare the shortage level based on an assessment of the available supplies and demands, and may adjust the measures applied based on response in order to achieve the appropriate level of reduction. The following are the levels of shortage which may be declared; the approximate ranges of conditions the levels represent; and the reductions to be achieved:

Level One (Shortage Warning - up to 10% shortage):

Measures selected would be designed to achieve the following objectives:

Objectives:

- Public awareness of water supply situation and conservation opportunities
- Encourage diligent repair of water leaks
- Reduce over-allocation use
- Reduce outdoor over-irrigation

Measures: The measures used in Level One are primarily voluntary actions that modify customer behavior resulting from an enhanced public awareness campaign. In addition, increased outreach targeted toward over-allocation customers to help them identify the source of their overuse, and correct the problem should be sufficient to meet the objectives in Level One.

Costs and Outcomes: Based on 2007 data, a supply shortage of 10% represents approximately 6,600 AF. Information from the 2007 Annual Usage and Tier Break-Down presented in Appendix A indicates that over allocation use (sum of usage in tiers 3-5) accounts for approximately 4,200 AF of non-recycled water usage. Therefore, reducing the over-allocation use, combined with a strong public awareness campaign is expected to be sufficient to achieve the necessary reductions in Level One. The cost to implement voluntary responses is minimal, especially considering the return in reduced demand on the investment. None of the recommended steps would be difficult to implement or administer. The District has the basic infrastructure to pursue most voluntary measures through the Public Affairs and Conservation Departments. However, the District may need to conduct training and adjust its staff resources to effectively provide additional outreach to high usage tier customers.

Level Two (Significant Shortage Condition - 10-25% shortage): Measures selected would be designed to incorporate the objectives listed under Level One, and achieve the following further reduction in use:

Objectives:

- Review of allocations and potential adjustments to reduce outdoor irrigation and agricultural uses by 30%, or a percentage to be specified in the shortage declaration, based on a supply and demand analysis.
- Discourage filling of fountains, pools and water features and other discretionary uses.

Measures: Use of allocation and tier threshold adjustments is expected to be sufficient to achieve the necessary demand reduction objectives in a Level Two shortage. Adjustments to the allocations would employ the demand management/allocation adjustment strategies described in Part II of the document (pages 8-9).

Costs and Outcomes: A Level Two shortage can be offset by voluntary public response and perhaps minimal additional measures, such as reducing water allocations for non-crucial water uses including irrigation demands. Again using the 2007 Annual Usage and Tier Break-Down in Appendix A, a 30% reduction in potable irrigation and agricultural use (potable and untreated) would reduce the demands by an additional 9,300 AF, which combined with the Level One measures would result in a reduction in total demand of approximately 25%. Currently, there are some agricultural users using treated water within IRWD's service area. However, in the future, this demand is anticipated to decline to zero, in which case additional measures and adjustments to the allocations may be necessary to achieve the necessary Level 2 reductions. Depending on the duration and severity of the Level Two shortage, additional temporary staff in water conservation may be required to increase water awareness campaigns and assist customers with reduced irrigation allocations.

Level Three (Severe Shortage Condition - 25-40% shortage): Measures selected would be designed to incorporate the objectives listed under Level Two, and achieve the following further reduction in use.

Objectives:

- Further reductions in and/or eliminations of non-essential uses.
- Further reduce outdoor irrigation and agricultural uses by 60%, or a percentage to be specified in the shortage declaration, based on an analysis of supply and demand.
- Reduction in commercial, industrial and institutional use by 10%, or a percentage to be specified in the shortage declaration, based on an analysis of supply and demand.

- Elimination of specific municipal uses such as street cleaning, hydrant flushing, water-based recreation, etc.
- Activation of a District Task Force to investigate and consult with high-volume users (i.e. public authorities, universities, community associations, etc.) to assist in reducing the water demands of their properties.

Measures: Again, use of the demand management/allocation-based rate adjustment strategies described in Part II of this document (pages 8-9) will be used as a key tool to achieve these objectives. For example, allocations can be reduced to minimize outdoor use and other discretionary uses by excluding those types of uses from the allocation. If necessary, higher rates for over-allocation use could also be adopted, at the discretion of the Board.

Costs and Outcomes: While it is difficult to precisely estimate the total reduction in demand that would be realized from the cumulative measures taken in Levels One, Two and Three, a Level Three shortage condition could entail significant adjustments to allocations and the implementation of mandatory measures to meet the District's reduction needs. In addition to increasing over-allocation tier charges, all common area landscape irrigation and agricultural irrigation should be reduced drastically, or eliminated completely if necessary by adjusting the water use allocations. Reduction of allocations of treated and untreated water serving irrigation (including residential landscapes) by 60% would reduce total demand by approximately 27% (see Appendix A: 2007 Annual Usage and Tier Break-Down). When one meter serves both internal use and landscaping, monitoring and public support would be needed to ensure that no irrigation takes place. An expanded irrigation group would be effective in these efforts. Untreated or recycled water use would only be reduced as needed based on the impact of reduced wastewater flows to recycled water production. Commercial, industrial and institutional customer allocations would be reduced by up to 10%.

Level Four (Crisis Shortage Condition - more than 40% shortage): Measures selected would be designed to incorporate the objectives listed under Level Three, and achieve the following further reductions in use:

Objectives:

- Cease all outdoor water uses for landscape and agriculture, subject to reserved rights relating to local wells.

Measures: A Level Four shortage would likely require further adjustments to allocations and the use of all the Demand Management/Allocation-Based Rates strategies described in Part II (pages 8-9) at the discretion of the Board. In addition, the Board may determine that it is necessary to use mandatory restrictions and possible discontinuation of non-health and safety related service in order to achieve the necessary demand reductions in a Level Four shortage.

Costs and Outcomes: If over-allocation charges had been previously avoided, this tool would almost certainly be needed at this level of supply deficiencies. Increasing the over-allocation tier charge, formulated upon projected penalty charges imposed by outside supply agencies, could be added to the allocation-based tiered rate structure, sufficient to encourage demand reduction to required levels, pay for an equivalent water conservation project designed to meet the required reduction in demands and provide a source of revenue to purchase additional supplies at penalty rates. Over-allocation usage tier charges would also offset the additional administrative and implementation costs to the district including increased staffing to address shortages and enhancement and expansion of the District's water conservation programs and projects.

Appendix A

2007 Annual Treated and Untreated Water Usage and Tier Break-Down

USER DESCRIPTION	TOTAL (AFY)	Allocation Tier (AFY)				
		1	2	3	4	5
AG-TREATED	975	975	0	0	0	0
AG-UNTREATED	6,669	6,669	0	0	0	0
COMM-TREATED	8,431	8,153	163	114		0
COMM-UNTREATED	9	9	0	0	0	0
CONSTRUCTION	882	882	0	0	0	0
INDUST-TREATED	5,273	5,034	50	32	156	0
LAKE	141	141	0	0	0	0
IRRIG-TREATED	6,313	4,442	1,450	81	60	280
IRRIG-UNTREATED	1,164	647	396	22	16	83
MULTI-RESIDENTIAL	10,681	6,608	3,473	425	93	82
PUBLIC AUTHORITY-TREATED	2,652	2,463	26	21	142	0
SINGLE-RESIDENTIAL	23,537	13,138	7,784	1,878	450	287
TOTAL Acre-Feet	66,731	49,166	13,341	2,575	917	733
Percentage	100%	75%	20%	4%	2%	1%

EXHIBIT "B"

RESOLUTION NO. 2016-17

RESOLUTION OF THE BOARD OF DIRECTORS OF IRVINE RANCH WATER DISTRICT RESCINDING RESOLUTION NO. 2016-17 AND RESCINDING WATER SHORTAGE LEVEL ONE (SHORTAGE WARNING)

WHEREAS, Irvine Ranch Water District ("IRWD") has adopted its Rules and Regulations For Water, Sewer, Recycled Water, and Natural Treatment System Service (the "Rules and Regulations"); and

WHEREAS, Section 15 of the Rules and Regulations, entitled "Water Conservation and Water Supply Shortage Program and Regulations" was adopted by this Board of Directors on February 9, 2009, following a public hearing held upon notice duly given and based on findings of necessity for the adoption of the water conservation program contained in said Section 15 of the Rules and Regulations, set forth as Section 15.1.2 thereof, and Section 15 was duly published following adoption, in accordance with California Water Code Sections 375 and 376; and

WHEREAS, the Board of Directors has adopted an amended Water Shortage Contingency Plan, which serves as the resource and supporting document for the implementation of Section 15 of the Rules and Regulations; and

WHEREAS, Section 15.5 of the Rules and Regulations provides that the Board of Directors may declare levels of shortage and describes four levels of shortage with approximate ranges of conditions and the corresponding water use reductions to be achieved; and

WHEREAS, on January 17, 2014 Governor Brown declared a drought State of Emergency in California due to severe drought conditions (Proclamation 1-17-2014); and

WHEREAS, in April 2015, Governor Brown issued Executive Order B-2-15 that mandated a 25 percent statewide reduction in urban potable water use from 2013 levels.

WHEREAS, on May, 5, 2015 the State Water Resources Control Board (SWRCB) adopted a Drought Emergency Regulation that included a mandatory statewide reduction in potable water use for urban suppliers, with Irvine Ranch Water District's (IRWD) target reduction set at sixteen percent (16%); and

WHEREAS, in response to this mandated reduction target, the IRWD Board of Directors declared, in July 2015, a Water Shortage Level Two which represents a significant shortage of between 10 percent and 25 percent; and

WHEREAS, in November 2015, the Governor issued an Executive Order directing the SWRCB to extend the Emergency Regulation until October 2016 based on continued statewide drought conditions. In February 2016, the SWRCB modified the regulation, incorporating credits and adjustments for sustainable supplies, growth and climate, and IRWD's conservation target was reduced to 8 percent effective March 1, 2016; and

WHEREAS, on May 18, 2016, the State Board adopted a further revised regulation, extending the term of the regulation until February 28, 2017 and incorporating a new self-

certification methodology for calculating water reduction targets based on the availability of supplies to meet projected demands, assuming another three dry years. IRWD's self-certification resulted in a revised target of 0 percent; and

WHEREAS, the State Board's regulation is expected to remain in effect until the State formally declares the drought emergency over; and

WHEREAS, in July 2016, the appropriate level of shortage that reflected local conditions, IRWD's reduced target and the continued state drought emergency, was a Water Shortage Level One. The Board adopted Resolution 2016-17 in July 2016 to rescind Water Shortage Level Two and declare a Water Shortage Level One which represent a low level shortage; and

WHEREAS, hydrologic conditions throughout the state have significantly improved since July 2016. The Sierra Nevada snowpack, which supplies water to one-third of the state, is at 173% of normal to date, and 116% of the April 1 average as of February 6, 2017. The 8-Station precipitation index is at 203% as of February 6, and 113% of an average year. The Department of Water Resources estimated the 2017 State Water Project Allocation is at 60% of Table A on January 18, 2017, and likely will be increased based on the additional runoff from the winter storms; and

WHEREAS, the improved hydrologic conditions mean that the possibility of water suppliers throughout the state experiencing a water shortage is very remote. The improved statewide conditions also further improve IRWD's reliability from its self-certification level; and

WHEREAS, IRWD's customers responded effectively by reducing cumulative demands to meet IRWD's initial sixteen percent reduction and have successfully maintained an overall demand reduction of fifteen percent when compared to 2013 levels even though IRWD's target was reduced to zero percent in 2016; and

WHEREAS, IRWD seeks to maintain credibility with its customers in view of the significantly improved hydrologic conditions and transition from drought messaging back to long-term water use efficiency. This may consist of general conservation efforts including dedicated pages on IRWD's website, information provided in the *Pipelines* customer newsletter, and presentations to groups such as city councils, community associations, chambers of commerce, business groups, and schools, as well as targeted conservation efforts whereby customers in the inefficient and wasteful tiers will be contacted via letter, telephone, e-mail and other means; and on-site assistance/audits will be offered to help identify the source of the over-allocation use and provide recommendations to address the problem; and

WHEREAS, because the water reduction mandate only applies to potable water, IRWD's response measures in this declaration address potable water; and

WHEREAS, Section 15 of the Rules and Regulations is intended to complement and be used in tandem with the allocation-based tiered pricing structure implemented as a demand management measure on an ongoing basis as part of the District's rates and charges; and

WHEREAS, as contemplated in Section 15 of the Rules and Regulations and the Water Shortage Contingency Plan, the Board has, by separate action, implemented demand management measures through adjustments in the allocation-based pricing structure.

NOW, THEREFORE, THE BOARD OF DIRECTORS OF IRVINE RANCH WATER DISTRICT DOES HEREBY RESOLVE, DETERMINE AND ORDER AS FOLLOWS:

Section 1. The Board of Directors hereby finds that a shortage warning and low level shortage condition, involving a shortage up to 10%, no longer exists.

Section 2. The declaration of water shortage condition Level One, made by this Board of Directors on July 11, 2016, is hereby rescinded.

ADOPTED, SIGNED and APPROVED this _____ day of February, 2016.

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

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

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

061316

February 13, 2017

Prepared by: J. Corey/K. Welch

Submitted by: F. Sanchez/P. Weghorst

Approved by: Paul A. Cook 

ACTION CALENDAR

BUREAU OF RECLAMATION 2017 GRANT APPLICATION

SUMMARY:

The Bureau of Reclamation is accepting applications for grant funding under its 2017 WaterSMART Drought Response Program which awards funding to projects that increase the reliability of water supplies. Staff has prepared an application for the University of California, Irvine Cooling Tower Conversion Project requesting \$300,000 in grant funding with an IRWD cost share of \$1,060,000. Staff recommends that the Board adopt a resolution to authorize staff to submit an application for a Bureau of Reclamation WaterSMART Program Grant for the UCI Cooling Tower Conversion Project and authorize the General Manager to execute the related agreement to receive grant funding and to provide matching funds.

BACKGROUND:

The Bureau of Reclamation is providing up to \$2 million in funding for water reliability projects in the western United States through its 2017 WaterSMART grant program. Under the program, there are two funding groups. Funding Group I is for projects up to \$300,000 and completed within two years. Funding Group II provides for projects up to \$750,000 and completed within three years. There is a minimum match of 50% of project costs. The Bureau expects to award a greater number of Funding Group I projects, whereas projects in Funding Group II will be funded on an annual basis contingent upon future appropriations. Applications are due on February 14, 2017, and awards will be announced in May 2017 or later based on the enactment of Fiscal Year 2017 appropriations.

UCI Cooling Towers Conversion Project:

Staff evaluated several potential projects for Bureau of Reclamation grant funding and determined that a water supply reliability project best meets the eligibility criteria. In order to bolster potable water conservation efforts, staff has been working with UCI toward the conversion of its Central Plant cooling towers to recycled water, which is estimated to save approximately 125 acre-feet per year of potable water. Staff developed an agreement with UCI which designates roles and responsibilities in facilitating the design, construction, operation and maintenance of the facilities associated with the recycled water conversion. The Board approved the agreement on January 23, 2017.

The proposed project includes the construction of approximately 3,550 feet of new pipeline to deliver recycled water to the cooling towers. Construction will also include a treatment system which will treat recycled water to optimize its use in the cooling towers. The terms of the agreement call for IRWD to fund UCI's costs for its on-site Central Plant improvements in the amount of \$1,060,000. The agreement calls for UCI to pay the prevailing potable water rate for any recycled water delivered to the Central Plant. UCI would reimburse IRWD through the difference between the applicable prevailing potable water commodity rate and the applicable

prevailing recycled water commodity rate until the funded amount is fully repaid. Per the agreement, any funds received from the WaterSMART grant would be split equally between IRWD and UCI.

Board Resolution:

An official resolution adopted by the applicant's Board of Directors is a required element of IRWD's grant application. The resolution authorizes staff to submit an application for a Bureau of Reclamation WaterSMART grant on behalf of the District, authorizes matching funds of at least 50% of project costs and authorizes the General Manager to enter into a related agreement to receive grant funding. The resolution for grant funding of the UCI Cooling Towers Conversion Project is attached as Exhibit "A".

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

The proposed UCI Cooling Towers Conversion Project is subject to the California Environmental Quality Act (CEQA) and possibly the National Environmental Policy Act (NEPA) should the project be awarded a Bureau of Reclamation grant. In conformance with the California Code of Regulations Title 14, Chapter 3, Section 15004, the appropriate environmental document will be prepared. Preliminary analysis indicates that a Notice of Exemption will be required for the project which will be prepared by UCI.

COMMITTEE STATUS:

This item was not reviewed by the Water Resources Policy and Communications Committee due to the date of the application deadline.

RECOMMENDATION:

THAT THE BOARD ADOPT THE FOLLOWING RESOLUTION BY TITLE AUTHORIZING STAFF TO SUBMIT AN APPLICATION FOR A BUREAU OF RECLAMATION WATERSMART PROGRAM GRANT IN THE AMOUNT OF \$300,000 FOR THE UCI COOLING TOWER CONVERSION PROJECT AND AUTHORIZING THE GENERAL MANAGER TO EXECUTE A RELATED AGREEMENT TO RECEIVE THE GRANT FUNDING AND TO PROVIDE MATCHING FUNDS IN THE AMOUNT OF \$1,060,000:

RESOLUTION NO. 2017 –

RESOLUTION OF THE BOARD OF DIRECTORS OF
IRVINE RANCH WATER DISTRICT AUTHORIZING SUBMISSION OF
A GRANT APPLICATION FOR THE UCI COOLING TOWERS CONVERSION PROJECT
TO THE DEPARTMENT OF THE INTERIOR, BUREAU OF RECLAMATION, POLICY
AND ADMINISTRATION

LIST OF EXHIBITS:

Exhibit "A" – Resolution for the UCI Cooling Towers Conversion Project

EXHIBIT “A”

RESOLUTION NO. 2017 - XXX

RESOLUTION OF THE BOARD OF DIRECTORS OF IRVINE RANCH WATER DISTRICT AUTHORIZING SUBMISSION OF A GRANT APPLICATION FOR THE UCI COOLING TOWERS CONVERSION PROJECT TO THE DEPARTMENT OF THE INTERIOR, BUREAU OF RECLAMATION, POLICY AND ADMINISTRATION

WHEREAS the Department of the Interior, Bureau of Reclamation, Policy and Administration (Reclamation) has released a Funding Opportunity Announcement to provide federal grant funding under the WaterSMART Drought Response Program: Drought Resiliency Projects Grants for Fiscal Year (FY) 2017; and

WHEREAS Reclamation is seeking applications from eligible water or power delivery agencies to cost share 50 percent or more with Reclamation on projects that increase the reliability of water supply; improve water management and protect fish, wildlife and the environment; and

WHEREAS the Irvine Ranch Water District is eligible to submit an application for grant funding up to \$300,000 for its UCI Cooling Towers Conversion Project with a cost share of 50 percent or more of the total project costs.

NOW, THEREFORE, the Board of Directors of IRVINE RANCH WATER DISTRICT DOES HEREBY RESOLVE, DETERMINE and ORDER as follows:

Section 1. The General Manager of the Irvine Ranch Water District or his/her designee is hereby authorized to submit an application to Reclamation for grant funding up to \$300,000 for the UCI Cooling Towers Conversion Project.

Section 2. The Board of Directors of the Irvine Ranch Water District has reviewed and supports the application for a grant from Reclamation for the UCI Cooling Towers Conversion Project.

Section 3. The Irvine Ranch Water District hereby agrees and further confirms that it has the capability to provide its cost share funding (50 percent or more of the total project costs) as specified in the application's project funding plan.

Section 4. The General Manager or his/her designee is hereby authorized to enter into a cooperative agreement and any amendments thereto with Reclamation on behalf of the Irvine Ranch Water District.

Section 5. The General Manager or his/her designee is hereby authorized to work with Reclamation to meet the established deadlines for entering into a cooperative agreement.

Section 6. That the Secretary is hereby authorized to certify a copy of this resolution to accompany the grant application.

ADOPTED, SIGNED AND APPROVED this 13th day of February 2017.

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

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

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

By: _____

February 13, 2017
Prepared by: K. Welch
Submitted by: R. Jacobson/P. Weghorst
Approved by: Paul Cook 

ACTION CALENDAR

BARNES AND BERGER PROPERTY PURCHASE

SUMMARY:

IRWD is pursuing the purchase of property within the Palo Verde Irrigation District (PVID) that will become an element of IRWD's long-term program to increase water supply reliability for its customers during droughts and other potential water supply interruptions. In December 2016, the District executed a Real Property Purchase Agreement (Purchase Agreement) and related amendments for the Barnes and Berger Property, comprised of approximately 555 acres of land within PVID in Riverside County (Property). The Purchase Agreement provides an opportunity to conduct tests, inspections, evaluations and other such due diligence activities as deemed necessary prior to the acquisition of the Property. This report provides the findings of the due diligence work. Staff recommends that the Board:

- Find that all matters currently identified with regard to the condition of title, physical condition and suitability of the Property for the uses contemplated are acceptable;
- Approve the addition of the project "Purchase PVID Barnes and Berger Property" to the FY 2016-17 Capital Budget in the amount of \$9,186,000;
- Determine the acquisition of the Property is exempt from CEQA, approve the project and authorize staff to post and file the Notices of Exemption in Orange and Riverside Counties; and
- Authorize the General Manager, Treasurer and each other officer of the District, each acting singly, to execute and deliver any and all documents, assignments, certificates, instructions and instruments necessary or proper for carrying out and closing the real estate purchase transaction for the acquisition of the Property.

BACKGROUND:

IRWD is pursuing the purchase of property in Riverside County that is located within PVID. PVID is located in Riverside and Imperial Counties adjacent to the Colorado River and has the highest priority water rights from the Colorado River in California. As an owner of land within PVID, IRWD would be able to participate in water conservation programs implemented by Metropolitan Water District of Southern California and PVID. Conservation programs such as land fallowing make water available for other uses. Because Metropolitan owns the rights to any Colorado River water that is conserved as a result of Metropolitan and PVID programs, water conserved from the land owned by IRWD would benefit the Metropolitan service area, which includes IRWD. In the future, IRWD would work with Metropolitan and Municipal Water District of Orange County (MWDOC) to develop mutually beneficial agreements through which IRWD would receive increased water supply reliability during periods of drought and supply interruptions in consideration of the water conserved on IRWD land in PVID.

On December 15, 2016, the District entered into escrow for the purchase of the Barnes and Berger Property. Following is an overview of the Barnes and Berger Property, due diligence

work conducted on the Property, the existing Metropolitan and PVID Fallowing Program and recommendations for the purchase of the Property.

Barnes and Berger Property Overview:

The Barnes and Berger Property is located within PVID in Riverside County and consists of approximately 555 gross acres (or 538 water toll acres) owned by a partnership. A location map is included as Exhibit "A", which includes the Barnes and Berger properties and other IRWD-owned lands in PVID. The Property has first priority water rights and its total acreage is currently enrolled in the existing Palo Verde Land Management, Crop Rotation and Water Supply Program (Fallowing Program). As part of the Purchase Agreement, IRWD has agreed to lease the Property back to the seller for farming purposes. The negotiated lease will be for one year with four additional one-year option terms.

Plan for Barnes and Berger Property:

In the near term, land purchased by IRWD in the PVID service area would continue to be farmed essentially as it is today:

- Tenant farm leases which would generate income for IRWD would be secured and maintained on the Property while the farming operations would be supervised by District staff and consultants, and
- As a landowner and therefore a participant in the existing Metropolitan/PVID Fallowing Program, IRWD would receive fallowing payments from Metropolitan.

In the long term, IRWD-owned land within PVID would be utilized as follows:

- The land would continue to be cultivated through tenant farm leases;
- As a landowner, IRWD could participate in any fallowing and other water conservation programs developed and implemented by Metropolitan and PVID; and
- IRWD would work with Metropolitan and MWDOC to develop mutually beneficial programs and agreements through which IRWD would receive increased water supply reliability during periods of drought and supply interruptions in exchange for water conserved on IRWD-owned lands in PVID.

Due Diligence Investigations:

The Purchase Agreement provides for a 60-day due diligence period during which there is an opportunity to conduct any studies, tests and inspections deemed necessary prior to the acquisition of the Property. Dee Jaspar & Associates (DJA) was retained to oversee the due diligence investigations and to complete a Baseline Property Assessment Report on the Barnes and Berger Property. These investigations for the Property have been completed and include: a Preliminary Title Report review; an Environmental Phase 1 site assessment; examination of surface soils, flood and seismic hazards; a review of mineral rights; a review of the general plan for the area and a review of Williamson Act and zoning designations. DJA is finalizing the mineral rights report, American Land Title Association survey and crop water use study.

Due diligence work completed to date shows the Barnes and Berger Property is currently farmed with designated fields fallowed under the Fallowing Program. The Property looks to be well managed with no recognized onsite environmental conditions. The fields have been primarily planted to alfalfa with about 160 acres planted in recently harvested cotton. The crops appear to be in very good condition. Similar to the other PVID properties, there are drainage channels and concrete irrigation ditches for providing water onto the Property.

Other structures on the property include a mobile home, a small lean-to garage structure and a wood-constructed shed. A subsurface septic tank is also located in this area. As a condition of the sale, the sellers would lease back the Property for farming and agree to remove the mobile home and garage structure and all unserviceable property or other personal property prior to the end of the lease.

Following is a summary of the findings of the due diligence work:

Phase 1 Environmental Site Assessment:

A Phase 1 Environmental Site Assessment was performed by subcontractor Advanced Environmental Concepts, Inc. (AEC). The Phase 1 evaluation identified a recently excavated shallow pit where trash was being disposed and burned. AEC recommends the onsite disposal of trash with incineration be ceased immediately. A soil sample from the ash residue may be collected and sampled for metals and hydrocarbons. In addition, AEC recommends removal of a used battery and a 55-gallon drum of unknown contents which were observed on the property. There is a domestic well and small metal pressure tank on the property adjacent to a remnant cement slab that formerly supported a structure that was constructed prior to 1948 which was likely a former residence. AEC recommends that if water from the well is to be used for domestic purposes at a future date, then a water sample should be collected and analyzed for standard drinking water parameters.

Surface Soils, Flood and Seismic Hazards:

The soils are lean clays, silty sands, sandy silts and clayey sands. Subcontractor Kleinfelder, Inc. performed hand auger borings to seven feet and no groundwater was encountered. Historic groundwater levels in this area range from 8 feet to 10 feet below ground surface. There are no active faults in the area and the Property is included in the Riverside County liquefaction hazard zone, which makes it susceptible to liquefaction hazard. The Property is susceptible to subsidence based on Riverside County subsidence maps.

ALTA Survey:

Subcontractor Cal Vada Surveying, Inc. is finalizing an American Land Title Association (ALTA) survey of the Property that will document all easements. There is no Williamson Act Contract on the Property, and the Property is not located within the boundaries of the Blythe Redevelopment Project Area.

Mineral Rights:

The Purchase Agreement provides for the buyer to acquire any oil, gas or mineral rights (mineral rights) held by the seller. Based on the mineral rights search and the Preliminary Title Report, the seller owns the mineral rights for the Property.

Existing Water Facilities:

Irrigation water is provided to the Property by PVID through a series of water transfer canals and ditches along the property perimeter.

Preliminary Title Report Review:

Staff found no items of record to contest in the review of the Preliminary Title Report.

Existing Fallowing Program:

In 2002, Metropolitan and PVID entered into the 35-year Fallowing Program whereby Metropolitan makes fallowing payments to participating PVID landowners. In May 2005, the sellers entered into Fallowing Agreement #63922 with Metropolitan and PVID that established a fallowing easement that committed water toll acres to the program. Under Agreement #63922, IRWD will own 461 water toll acres with 150 acres included in the easement as a maximum fallowing commitment. In July 2014, the sellers assumed a separate Fallowing Agreement #65353 for 77 water toll acres with 40 acres included in the easement as a maximum fallowing commitment. Staff has had discussions with Metropolitan regarding the assignment of the fallowing easement acres to IRWD under these separate agreements. After the assignments, IRWD will have a total of 190 contract acres established as maximum fallowing commitment acres in the fallowing program. Exhibit "B" provides an overview of the Fallowing Program and the landowner agreement.

FISCAL IMPACTS:

The total purchase cost for the Property is \$9,146,000, plus approximately \$40,000 for closing costs. The cost for the due diligence work including the Baseline Property Assessment, staff and legal time is approximately \$56,000. Sufficient budget exists in Project No. 6245 to cover the due diligence work. Staff requests the addition of the project "Purchase PVID Barnes and Berger Property" to the FY 2016-17 Capital Budget in the amount of \$9,186,000. As shown in the Expenditure Authorization attached as Exhibit "C", this project shall be funded under a Regional Potable Water Split. A new project number will be assigned when the new EBS Upgrade Project is complete.

ENVIRONMENTAL COMPLIANCE:

Any new lands purchased for water supply purposes are subject to compliance with the California Environmental Quality Act of 1970 as amended (CEQA), 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. Pursuant to direction by the Board, staff will file a

Notice of Exemption for the purchase of the Barnes and Berger Property within the Counties of Orange and Riverside. The Notice of Exemption states that the District is not presently contemplating changes in the existing use of the land and therefore no environmental impacts associated with the Property acquisition are expected. The Notice of Exemption states that the District specifically conditions any proposed future change in use of the Property on subsequent CEQA compliance actions.

COMMITTEE STATUS:

This item was reviewed by the Supply Reliability Programs Committee on November 17, 2016.

RECOMMENDATION:

THAT THE BOARD FIND THAT ALL MATTERS CURRENTLY IDENTIFIED WITH REGARD TO THE CONDITION OF TITLE, PHYSICAL CONDITION AND SUITABILITY OF THE BARNES AND BERGER PROPERTY FOR THE USES CONTEMPLATED ARE ACCEPTABLE; APPROVE THE ADDITION OF THE PROJECT "PURCHASE PVID BARNES AND BERGER PROPERTY" TO THE FY 2016-17 CAPITAL BUDGET IN THE AMOUNT OF \$9,186,000; FIND THAT THE PROPERTY ACQUISITION IS EXEMPT FROM CEQA; APPROVE THE PROJECT AND AUTHORIZE STAFF TO POST AND FILE THE NOTICES OF EXEMPTION IN ORANGE AND RIVERSIDE COUNTIES; AND AUTHORIZE THE GENERAL MANAGER, TREASURER AND EACH OTHER OFFICER OF THE DISTRICT, EACH ACTING SINGLY, TO EXECUTE AND DELIVER ANY AND ALL DOCUMENTS, ASSIGNMENTS, CERTIFICATES, INSTRUCTIONS AND INSTRUMENTS NECESSARY OR PROPER FOR CARRYING OUT AND CLOSING THE REAL ESTATE PURCHASE TRANSACTION FOR THE ACQUISITION OF THE PROPERTY.

LIST OF EXHIBITS:

Exhibit "A" – Location Map of Barnes and Berger Property
Exhibit "B" – Following Program Agreement Overview
Exhibit "C" – Expenditure Authorization

EXHIBIT "A"

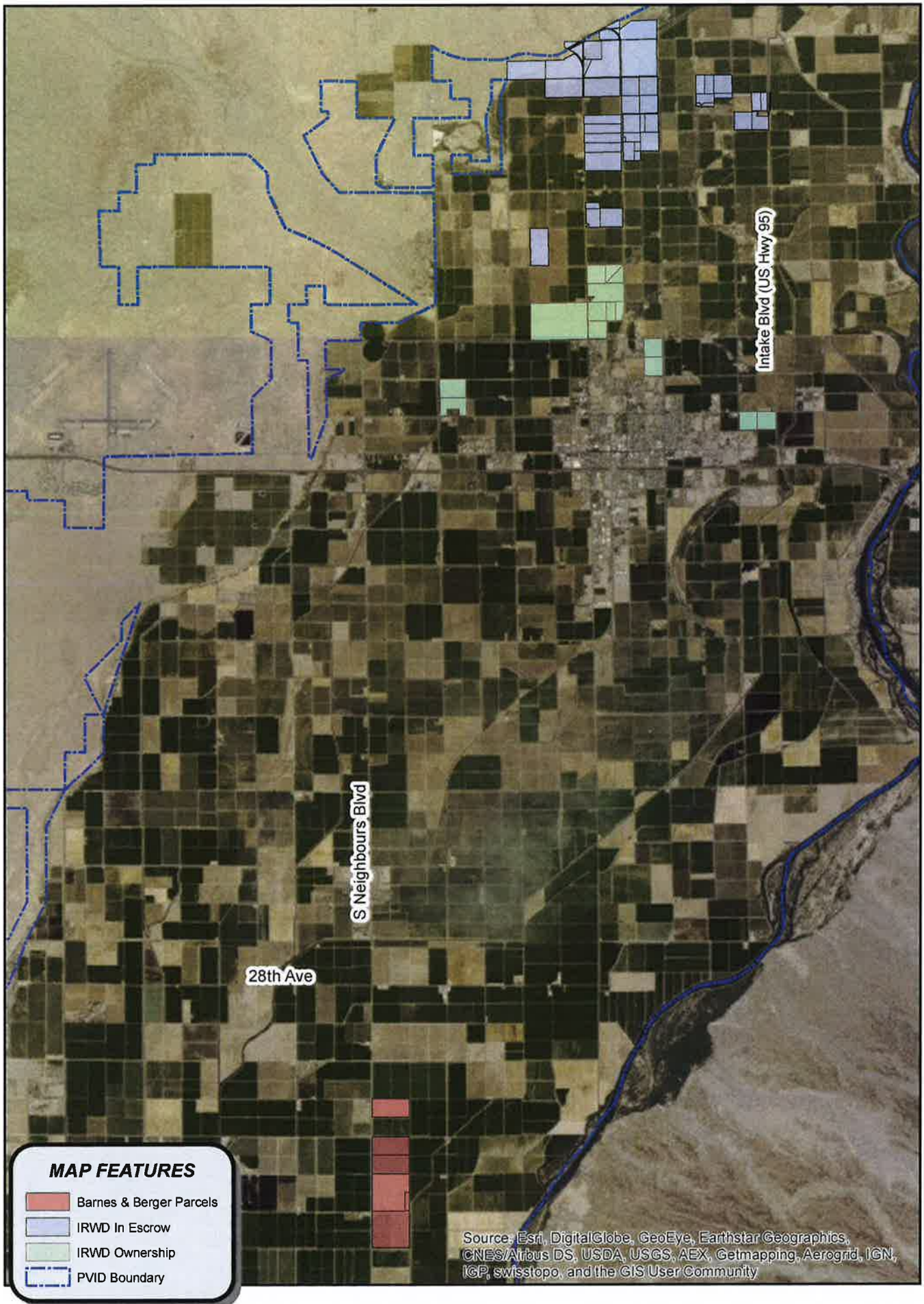


EXHIBIT “B”

Fallowing Program Agreement Overview

Metropolitan Water District of Southern California (Metropolitan) and the Palo Verde Irrigation District developed a 35-year PVID Land Management, Crop Rotation and Water Supply Program (Fallowing Program). The Program expires in 2040. Key provisions of the Fallowing Program include:

- Total fallowing under the Program is limited to a maximum of 26,500 acres or 29% of PVID’s irrigated lands with Priority 1 water rights.
- A minimum base of 6,000 acres (7% of irrigated PVID lands) must be fallowed each contract year.
- The maximum area that would be fallowed each contract year would not exceed 24,000 acres in any 25 years and 26,500 acres in any 10 years during the 35 years.
- Eligible land must have Priority 1 Colorado River water and a history of irrigated crop production for two out of five years preceding Program enrollment.

Barnes and Berger Fallowing Program Agreements:

In May 2005, Barnes and Berger entered into a Landowner Fallowing Program Agreement #63922 (Fallowing Agreement) with Metropolitan and PVID for a total of 861 water toll acres owned by Barnes and Berger with a maximum fallowing commitment of 206 water toll acres. In 2014, Barnes and Berger assumed a separate Fallowing Agreement #65353, which includes 77 water toll acres with a maximum fallowing commitment of 40 water toll acres.

IRWD proposes to acquire a total of 538 water toll acres with a total of 190 acres included in the easement as a maximum fallowing commitment. Under Agreement #63922, IRWD will acquire 461 water toll acres with 150 acres included in the easement as a maximum fallowing commitment. IRWD will fully assume Agreement #65353 for 77 water toll acres with 40 acres included in the easement as a maximum fallowing commitment. Metropolitan will prepare the necessary documents to assign the contract acres from Barnes and Berger to IRWD as follows:

1. Metropolitan will prepare a full assignment of Fallowing Agreement #65353 for a maximum fallowing commitment of 40 water toll acres.
2. Metropolitan will prepare a partial assignment from Fallowing Agreement #63922 for a maximum fallowing commitment of 150 water toll acres to IRWD. Barnes and Berger will retain 56 water toll acres under Fallowing Agreement #63922.
3. Metropolitan will prepare an assignment of the 150 water toll acres from Fallowing Agreement #63922 to IRWD’s new Fallowing Agreement #65353 such that the revised maximum fallowing commitment will be 190 water toll acres.

IRVINE RANCH WATER DISTRICT

EXHIBIT "C"

Expenditure Authorization

Project Name: PURCHASE PVID BARNES AND BERGER PROPERTY
 Project No: EA No: 1 ID Split: Regional Water Split with LAWD (11/08)
 Oracle Project No:
 Project Manager: SANCHEZ, FIONA
 Project Engineer: WELCH, KELLY
 Request Date: February 8, 2017

Improvement District (ID) Allocations

ID No.	Allocation %	Source of Funds
112	3.6	BONDS YET TO BE SOLD**
113	4.4	BONDS YET TO BE SOLD**
115	6.2	CAPITAL FUND
121	12.8	BONDS YET TO BE SOLD**
130	10.0	BONDS YET TO BE SOLD**
135	16.2	BONDS YET TO BE SOLD**
140	3.5	BONDS YET TO BE SOLD**
150	26.1	BONDS YET TO BE SOLD**
153	2.9	BONDS YET TO BE SOLD**
154	1.2	BONDS YET TO BE SOLD**
161	6.7	BONDS YET TO BE SOLD**
182	2.5	BONDS YET TO BE SOLD**
184	2.3	BONDS YET TO BE SOLD**
186	0.8	BONDS YET TO BE SOLD**
188	0.8	BONDS YET TO BE SOLD**
Total	100.0%	

Summary of Direct Cost Authorizations

Previously Approved EA Requests:	\$0
This Request:	\$9,186,000
Total EA Requests:	\$9,186,000
Previously Approved Budget:	\$0
Budget Adjustment Requested by This EA:	\$9,186,000
Updated Budget:	\$9,186,000
Budget Remaining After This EA:	\$0

Comments:

Phase	This EA Request	Previous EA Requests	EA Requests to Date	This Budget Request	Previous Budget	Updated Budget	Start	Finish
LAND	9,186,000	0	9,186,000	9,186,000	0	0	2/17	4/17
Contingency (0%):	0%	\$0	\$0	\$0	\$0	\$0		
Subtotal (Direct Costs)	\$9,186,000	\$0	\$9,186,000	\$9,186,000	\$0	\$0		
Estimated G/A 170% of direct labor*	\$0	\$0	\$0	\$0	\$0	\$0		
Total	\$9,186,000	\$0	\$9,186,000	\$9,186,000	\$0	\$0		
Direct Labor	\$0	\$0	\$0	\$0	\$0	\$0		

*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: Ullie Wilk 2-6-17
 Department Director: _____
 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 \$4,976,000. The above-captioned project is further described in the attached staff report and additional documents, if any, which are hereby incorporated by reference. This declaration of official intent to reimburse costs of the above-captioned project is made under Treasury Regulation Section 1.105-2.