

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

January 25, 2021

Due to COVID-19, this meeting will be conducted as a teleconference pursuant to the provisions of the Governor's Executive Orders N-25-20 and N-29-20, which suspend certain requirements of the Ralph M. Brown Act. Members of the public may not attend this meeting in person.

Participation by members of the Board of Directors will be from remote locations. Public access and participation will only be available telephonically/electronically.

To virtually attend the meeting and to be able to view any presentations or additional materials provided at the meeting, please join online via Webex using the link and information below:

Via Web: <https://irwd.webex.com/irwd/j.php?MTID=mb64c1f1b214185eeb48f26ac3e144c97>

Meeting Number (Access Code): 146 400 4576

Meeting Password: 9CNmtsmfd73

After joining the meeting, in order to ensure all persons can participate and observe the meeting, please select the "Call in" option and use a telephone to access the audio for the meeting by using the call-in information and attendee identification number provided.

As courtesy to the other participants, please mute your phone when you are not speaking.

PLEASE NOTE: Participants joining the meeting will be placed into the Webex lobby when the Board enters closed session. Participants who remain in the "lobby" will automatically be returned to the open session of the Board once the closed session has concluded. Participants who join the meeting while the Board is in closed session will receive a notice that the meeting has been locked. They will be able to join the meeting once the closed session has concluded.

CALL TO ORDER 5:00 p.m.

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

PUBLIC COMMENT NOTICE

If you wish to address the Board of Directors on any item, please submit a request to speak via the "chat" feature available when joining the meeting virtually. Remarks are limited to three minutes per speaker on each subject. You may also submit a public comment in advance of the meeting by emailing comments@irwd.com before 12:00 p.m. on Monday, January 25, 2021.

ALL VOTES SHALL BE TAKEN BY A ROLL CALL VOTE.

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, ITEMS 3-9

(Next Resolution No. 2021-3)

3. BOARD MEETING MINUTES

Recommendation: That the minutes of the January 11, 2021 Regular Board meeting be approved as presented.

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

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

5. IRWD STRATEGIC MEASURES

Recommendation: Receive and file.

6. DECEMBER 2020 TREASURY REPORT

Recommendation: That the Board receive and file the Treasurer's Investment Summary Report, the Summary of Fixed and Variable Rate Debt, and Disclosure Report of reimbursements to Board members and staff, approve the December 2020 Summary of Payroll ACH payments in the total amount of \$2,214,181, and approve the December 2020 Accounts Payable Disbursement Summary Of Warrants 413651 through 414651, Workers' Compensation distributions, wire transfers, payroll withholding distributions and voided checks in the total amount of \$17,781,264.

7. 2021 INDEX TENDER NOTES REMARKETING

Recommendation: That the Board approve the 2021 Index Tender Notes Remarketing Statement and adopt a resolution approving the remarketing statement relating to Unscheduled Mandatory Tenders (Refunding Series 2011A-1 and Refunding Series 2011A-2).

Reso. No. 2021-3

CONSENT CALENDAR, ITEMS 3-9 (Continued)

8. 2021 LEGISLATIVE AND REGULATORY UPDATE

Recommendation: That the Board adopt an “OPPOSE” position on AB 59 (Gabriel), a “SEEK AMENDMENTS” position on SB 55 (Stern), and a “SUPPORT IN CONCEPT” position on the legislative concept to allocating a portion of California’s federal COVID-19 relief funding equitably to water districts across the state to assist customers with their outstanding debt.

9. HEATING, VENTILATION AND AIR CONDITIONING MAINTENANCE THREE-YEAR CONTRACT

Recommendation: That the Board authorize the General Manager to execute a three-year contract with Ram Air Engineering, Inc. for Commercial HVAC services for a total amount of \$685,620.

ACTION CALENDAR

10. SEWAGE TREATMENT MASTER PLAN UPDATE, BUDGET ADDITION, AND BUDGET INCREASE

Recommendation: That the Board authorize the addition of the MWRP Tributary Gravity Diversion, Project 11832, in the amount of \$2,942,000 to the FY 2020-21 Capital Budget and authorize a budget increase in the amount of \$193,130,250, from \$20,975,000 to \$214,105,250, for the LAWRP Treatment Modernization, Project 01477.

11. OPERATIONS CENTER COMPRESSED NATURAL GAS, DIESEL, AND GASOLINE FUELING FACILITY BUDGET INCREASE AND CONSULTANT SELECTION

Recommendation: That the Board authorize a budget increase in the amount of \$1,882,000, from \$748,000 to \$2,630,000, for Project 07881 and in the amount of \$4,509,000, from \$748,000 to \$5,257,000, for Project 07882, and authorize the General Manager to execute a Professional Services Agreement with AECOM in the amount of \$701,560 for engineering design services for the Operations Center Compressed Natural Gas, Diesel, and Gasoline Fueling Facility, Projects 07881 and 07882.

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, and 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.

12. General Manager's Report
13. Directors' Comments
14. Receive oral update(s) from District liaison(s) regarding communities within IRWD's service area and provide information on relevant community events.
15. Closed Sessions:
 - 1) CLOSED SESSION CONFERENCE WITH LEGAL COUNSEL — EXISTING LITIGATION — Pursuant to Government Code Section 54956.9(d)(1): *Filanc-Balfour Beatty, JV v. IRWD*, Case No. 30-2019-01048770-CU-BC-CXC
 - 2) CLOSED SESSION CONFERENCE WITH LEGAL COUNSEL — ANTICIPATED LITIGATION. Significant exposure to litigation pursuant to Government Code Section 54956.9(d)(2): (1 case)
16. Open Session.
17. 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 above-named Board in connection with a matter subject to discussion or consideration at an open meeting of the Board 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 electronically via the Webex meeting noted. Upon request, the District will provide for written agenda materials in appropriate alternative formats, and reasonable disability-related modification or accommodation to enable individuals with disabilities to participate in and provide comments at public meetings. Please submit a request, including your name, phone number and/or email address, and a description of the modification, accommodation, or alternative format requested at least two days before the meeting. Requests should be emailed to comments@irwd.com. Requests made by mail must be received at least two days before the meeting. Requests will be granted whenever possible and resolved in favor of accessibility.

January 25, 2021
Prepared and
submitted by: L. Bonkowski
Approved by: Paul A. Cook



CONSENT CALENDAR

BOARD MEETING MINUTES

SUMMARY:

Provided are the minutes of the January 11, 2021 Regular Board meeting for approval.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

Not applicable.

RECOMMENDATION:

THAT THE MINUTES OF THE JANUARY 11, 2021 REGULAR BOARD MEETING BE APPROVED AS PRESENTED.

LIST OF EXHIBITS:

Exhibit "A" – January 11, 2021 Minutes

Note: This page is intentionally left blank.

EXHIBIT "A"

MINUTES OF REGULAR MEETING – January 11, 2021

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 11, 2021 via teleconference pursuant to the provisions of the Governor's Executive Orders N-25-20 and N-29-20 due to COVID-19. Members of the public did not attend this meeting in person.

Directors Present: Withers, Swan, McLaughlin, LaMar and Reinhart.

Directors Absent: None.

Also Present: General Manager Cook, Executive Director of Technical Services Burton, Executive Director of Water Policy Weghorst, Executive Director of Finance and Administration Clary, Director of Treasury and Risk Management Jacobson, Executive Director of Operations Chambers, Director of Recycling Operations Zepeda, Director of Information Services Malone, Director of Water Resources Sanchez, Director of Maintenance Mykitta, Government Relations Officer/Deputy General Counsel Compton, Secretary Bonkowski, General Counsel Collins, Special Legal Counsel Robinson, and members of staff and the public.

WRITTEN AND ORAL COMMUNICATIONS: None.

ITEMS RECEIVED TOO LATE TO BE AGENDIZED: None.

PRESENTATIONS

General Manager Cook presented proclamations to Beth Beeman, retired Director of Public Affairs for her 18 years of service to the District, Jeff Bertsch, retired Networking and Cybersecurity Manager, for his 27 years of service to the District, and Tanja Fournier, retired Treasury Manager, for her 28 years of service to the District.

CONSENT CALENDAR

On MOTION by Withers, seconded by Swan, and unanimously carried by a roll call vote (5-0) Withers, McLaughlin, Swan, LaMar and Reinhart voting aye, and 0 noes, ITEMS 4 THROUGH 9 WERE APPROVED AS FOLLOW:

4. BOARD MEETING MINUTES

Recommendation: That the minutes of the December 14, 2020 Regular Board meeting be approved as presented.

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

Recommendation: That the Board ratify/approve the meetings and events for Karen McLaughlin, Steve LaMar and John Withers, as described.

CONSENT CALENDAR (CONTINUED)

6. MEMORANDUM ON OFFICERS OF THE BOARD, COMMITTEE APPOINTMENTS AND OTHER ASSIGNMENTS

Recommendation: That the Board receive and file the memorandum dated January 11, 2021, titled Officers of the Board, Committee Appointments and Other Assignments and approve attendance for meetings and events for the Board's representation for calendar year 2021 as delineated.

7. SAND CANYON OFFICE SPACE IMPROVEMENT PROJECT FINAL ACCEPTANCE

Recommendation: That the Board accept construction of the Sand Canyon Office Space Improvement, Projects 01257, 01336, and 01549, 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.

8. INTEREST RATE SWAPS – LIBOR INDEX TRANSITION

Recommendation: That the Board approve adherence to the International Swap and Derivatives Association 2020 LIBOR Fallback Protocol for IRWD's \$60 million notional fixed payer interest rate swaps and authorize the Treasurer to take steps to adhere to the ISDA Protocol prior to January 25, 2021.

9. FINAL INITIAL STUDY/MITIGATED NEGATIVE DECLARATION FOR THE SAN JOAQUIN RESERVOIR FILTRATION FACILITY PROJECT

Recommendation: That the Board find on the basis of the whole record before it (including the Final Initial Study/Mitigated Negative Declaration and the comments received) that there is no substantial evidence that the San Joaquin Reservoir Filtration Facility Project will have a significant effect on the environment and that the Final Mitigated Negative Declaration reflects IRWD's independent judgment and analysis, adopt the proposed Final Mitigated Negative Declaration for the San Joaquin Reservoir Filtration Facility Project and the associated Mitigation Monitoring and Reporting Program, approve the San Joaquin Reservoir Filtration Facility Project, and authorize staff to post and file a Notice of Determination.

ACTION CALENDAR

FINAL ENVIRONMENTAL IMPACT REPORT FOR KERN FAN GROUNDWATER STORAGE PROJECT

Using a PowerPoint Presentation, Director of Water Resources Sanchez reported that the Groundwater Banking Joint Powers Authority (The Authority) as the Lead Agency, in consultation with Rosedale-Rio Bravo Water Storage District (Rosedale) and IRWD as Responsible Agencies, proposes the development of the Kern Fan Groundwater Storage Project. The proposed project would provide a regional water bank to capture, recharge and store water for later use in providing water supply reliability for IRWD and Rosedale. The proposed project would also provide ecosystem and other benefits in exchange for Water Storage Investment

Program funding from the State of California. The proposed project will allow Rosedale and IRWD to manage sources of water supply more effectively by using available underground storage in the local San Joaquin Valley Groundwater Basin.

Ms. Sanchez provided highlights and said that the proposed Project would: 1) include the construction of up to 1,300 acres of recharge basin facilities and up to 12 recovery wells on project properties, 2) consist of a canal, pipelines, pump stations and a new turnout at the California Aqueduct to convey water between the project facilities and the California Aqueduct, 3) be operated such that surplus surface water from the State Water Project, Central Valley Project, Kern River and other available water sources could be recharged and stored for subsequent recovery and use, and 4) be able to recharge and store up to 100,000 acre-feet of water.

Ms. Sanchez said that pursuant to the requirements of California Environmental Quality Act (CEQA) Guidelines, a Notice of Preparation was publicly circulated for 30 days on April 8, 2020 and a public scoping meeting was held on April 29, 2020 with the purpose of the meeting to provide the public and governmental agencies information on this process and to give further opportunities to identify environmental issues and alternatives for consideration in the Environmental Impact Report (EIR). She said that on October 19, 2020, Rosedale filed a Notice of Completion of a Draft Environmental Impact Report for the proposed project with the Governor's Office of Planning and Research for the 45-day public review period. A Notice of Availability of the Draft EIR was posted on October 16, 2020 with the County Clerks in Kern County and Orange County and a public meeting held at Rosedale in Bakersfield on November 4, 2020. No comments were offered from the audience at the public meeting. She further said that nine letters providing comments on the Draft EIR were received during the public review period. The agencies that provided comments are the California Department of Water Resources, California Department of Water Resources Division of Safety of Dams, California Department of Fish and Wildlife, West Kern Water District, Kern County Water Agency, Kern Water Bank Authority, Metropolitan Water District of Southern California, Dudley Ridge Water District and City of Bakersfield. She said that the Authority, in consultation with Rosedale and IRWD, reviewed all the written comments received on the Draft EIR and prepared detailed responses to comments directed to any significant environmental issues. She then described the key comments and noted that they related to the need for clarification or detail, and misconceptions. She said that written responses were provided to the commenting agencies, and that some revisions were made to the text in the Draft EIR.

Ms. Sanchez said that on December 28, 2020, the Authority adopted a resolution certifying the Final EIR, and that as a responsible agency, IRWD must comply with CEQA by considering the EIR that was prepared and certified by the Authority. She said that IRWD's consideration must be given to the environmental effects of the Project prior to reaching a decision on the Project, and that additionally, IRWD must approve findings related to the Project and file a Notice of Determination.

Director Swan reported that The Authority reviewed this item in December 2020 with a considerable discussion, and reviewed various issues with certification. Following discussion, on MOTION by Swan, seconded by Reinhart, and unanimously carried by a roll call vote (5-0) Withers, McLaughlin, Swan, LaMar and Reinhart voting aye, and 0 noes, THE BOARD DIRECTED STAFF TO INCORPORATE INTO THE DRAFT FINDINGS AS PRESENTED IN THIS MEETING SUCH REVISIONS AS MAY BE NECESSARY TO CONFORM THE FINDINGS TO ANY INFORMATION THAT MAY BE RECEIVED AFTER PREPARATION

OF SAID FINDINGS AND PRIOR TO THIS ACTION, INCLUDING ANY CHANGES MADE IN THE FINDINGS BY THE AUTHORITY IN ADOPTING THE FINAL ENVIRONMENTAL IMPACT REPORT AND COMMENTS FROM THE BOARD AT THIS MEETING; DIRECTED THAT THE FINDINGS, AS SO REVISED, BE ATTACHED TO THE BELOW-MENTIONED RESOLUTION, AND ADOPTED THE FOLLOWING RESOLUTION BY TITLE:

RESOLUTION NO. 2021 -1

RESOLUTION OF THE BOARD OF DIRECTORS OF THE IRVINE RANCH WATER DISTRICT RELATIVE TO ITS CONSIDERATION OF THE FINAL ENVIRONMENTAL IMPACT REPORT FOR THE KERN FAN GROUNDWATER STORAGE PROJECT; ADOPTING WRITTEN FINDINGS PURSUANT TO THE CALIFORNIA ENVIRONMENTAL QUALITY ACT; ADOPTING A MITIGATION, MONITORING AND REPORTING PROGRAM; APPROVING THE PROJECT; AND AUTHORIZING THE FILING OF A NOTICE OF DETERMINATION TO PROCEED WITH THE PROJECT

REVISED PERSONNEL POLICIES AND PROCEDURES: PERSONNEL POLICY NO. 44 AND NO. 46

Government Relations Officer / Deputy General Counsel Compton reported that the District has adopted Personnel Policies and Procedures to consistently address personnel-related issues at IRWD and to keep these policies current, staff regularly reviews and recommends updates and revisions when appropriate. Ms. Compton said that staff recently undertook an evaluation of IRWD Personnel Policies and Procedures related to the use of the District's computer systems, email, and public records to ensure compliance with current employment and labor laws and regulations, and as a result of the review, it was determined that Policy No. 44 – Electronic Mail and Policy No. 46 – Access and Use of the Internet should be updated to reflect the District's current use of computer systems, electronic messaging platforms, and other technology. She said that additionally, the review revealed that IRWD's Personnel Policies and Procedures currently did not address the use of personal computers and accounts for District business, so the existing policies were updated to address the use of personal computers and accounts, and to address Public Records Act requests related to public records on personal computer systems and accounts. She said that the resolutions and policies are provided in the exhibit, and that when changes are made to policies, that all personal policies are readopted as a unit.

Director Swan reported that this item was reviewed by the Finance and Personnel Committee on January 5, 2021. Following discussion, on MOTION by Swan, seconded by LaMar and unanimously carried by a roll call vote (5-0) Withers, McLaughlin, Swan, LaMar and Reinhart voting aye, and 0 noes, THE BOARD ADOPTED THE FOLLOWING RESOLUTION BY TITLE:

RESOLUTION NO. 2021 -2

RESOLUTION OF THE BOARD OF DIRECTORS
OF IRVINE RANCH WATER DISTRICT,
SUPERSEDING RESOLUTION NO. 2019-7
AND ESTABLISHING REVISED PERSONNEL
POLICIES AND PROCEDURES

GENERAL MANAGER'S REPORT

For the COVID-19 update, General Manager Cook reported that IRWD staff was impacted by the holiday surge in COVID cases; thankfully, none of the exposures appear to have occurred at work. He said that a couple of crews were together over the weekend and unfortunately one of the employees tested positive, so those crews are now in quarantine. Mr. Cook said that staff has updated the IRWD Business Continuation Plan to reflect the current notification criteria due to recent legislation.

Mr. Cook said that the District has now \$1.6 million in outstanding receivables from customers, and that staff is beginning to receive more calls from customers interested in making payment arrangements and applying for temporary variances during this time. IRWD's customer satisfaction rate remains high at 93%. He further reported that Customer Service staff are working proactively with residents to deal with the recent wildfires and adjusting monthly bills.

Mr. Cook updated the Board relative to Williams Canyon where in 2009 rains washed away a portion of the creek. He said that this area now requires more rip-rap and repairs due to ongoing erosion in advance of mudslide that could come as a result of the recent fires. Staff is working with the community and is also obtaining necessary permits for making road repairs.

Mr. Cook updated the Board on a request from Supervisor Wagner's office to potentially partner for a USDA conservation grant if a nexus is found.

Mr. Cook said that he was contacted by the Los Angeles Times relative to IRWD's perspective on the Huntington Beach Poseidon project.

Using a PowerPoint presentation, Mr. Cook provided the Board an overview of the Sand Canyon headquarters "refresh" project with photos.

DIRECTOR COMMENTS

Director LaMar reported on his attendance at a MWDOC Board Workshop with MWD Directors, a WACO meeting, and a Southern California Water Committee annual meeting.

Director Withers reported on his attendance at the Chapman University Annual Economic Forecast, an Elected Official Outreach and Local Government Public Affairs meeting, an ISDOC Executive Committee meeting, a WACO meeting, and an OCWD webinar on stormwater in southern California.

Director Swan reported on his attendance at various MWDOC meetings, a WACO meeting, an OCBC Government Affairs meeting, a Special Groundwater Water meeting on Kern Fan, a variety of meetings at the San Joaquin Wildlife Sanctuary, a Newport Bay Watershed Committee meeting, and an OCWD stormwater capture webinar.

Director McLaughlin reported on her attendance at an orientation meeting with General Manager Cook and a WACO meeting.

Director Reinhart reported on his attendance at MWDOC and OCWD meetings, a SOCWA Board meeting, a Chapman University Economic Forecast, a WACO meeting and a kickoff meeting relative to MWDOC's South County open seat where he is a member of the Selection Committee.

President Reinhart asked that tonight's meeting be closed in memory of both Mr. Raymond Miller, a former SOCWA Board member, and Mr. Brian Ragland, the Water Manager from the City of Huntington Beach. Present Reinhart reflected on Mr. Miller's many years of service to the water industry in Orange County and beyond. Mr. Cook related how thoughtful and generally well-liked Mr. Ragland was, especially among the Orange County Groundwater Producer Agencies.

CLOSED SESSION

General Manager Cook said that the CLOSED SESSION CONFERENCE WITH LEGAL COUNSEL — ANTICIPATED LITIGATION. Significant exposure to litigation pursuant to Government Code Section 54956.9(d)(2): (1 case) would not be held this evening.

Legal Counsel Collins said that CLOSED SESSION CONFERENCE WITH LEGAL COUNSEL — EXISTING LITIGATION – Pursuant to Government Code Section 54956.9(d)(1): *Kessner, et al. v. City of Santa Clara, IRWD, et al.*, Santa Clara County Superior Court Case No. 20CV364054 would be held this evening.

OPEN SESSION

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

ADJOURNMENT

There being no further business President Reinhart adjourned the meeting in memory of Mr. Raymond Miller and Mr. Brian Ragland.

APPROVED and SIGNED this 25th day of January 2021.

President, IRVINE RANCH WATER DISTRICT

Secretary IRVINE RANCH WATER DISTRICT

APPROVED AS TO FORM:

Claire Hervey Collins, General Counsel
Hanson Bridgett LLP

January 25, 2021
Prepared and
submitted by: K. Swan
Approved by: Paul A. Cook



CONSENT CALENDAR

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

SUMMARY:

Pursuant to Resolution 2006-29 adopted on August 28, 2006, the following events and meetings require approval by the Board of Directors:

Steven LaMar

January 6 Virtual MWD OC Workshop Meeting of the Board of Directors with MWD Directors
January 27 Sites Authority Virtual Town Hall
January 27 Form 700 Refresher Workshop Webinar

Karen McLaughlin

January 20 Orange County Water Association's Monthly Industry Insight Virtual Presentation
January 21 Orange County Economic Update for Public Leaders Webinar
January 26 SOCWMA New Committee Member Briefing with Amanda Carr
January 27 OCWD Webinar: Reverse Osmosis—Getting the Credit it Deserves
February 19 SCWC Webinar: Water Quality Matters, Understanding & Addressing PFAS in our Water

Douglas Reinhart

January 13 South County MWD Selection Committee Meeting
January 18 South County MWD Selection Committee Meeting
January 21 South County MWD Selection Committee Meeting

Peer Swan

January 8 Orange County Business Council's Government Affairs Committee Meeting via teleconference
January 27 Sites Authority Virtual Town Hall
February 2 Orange County Business Council's Annual Virtual Dinner

John Withers

January 21 Orange County Economic Update for Public Leaders Webinar
February 19 SCWC Webinar: Water Quality Matters, Understanding & Addressing PFAS in our Water

RECOMMENDATION:

THAT THE BOARD RATIFY/APPROVE THE MEETINGS AND EVENTS FOR STEVEN LAMAR, KAREN MCLAUGHLIN, DOUGLAS REINHART, PEER SWAN, AND JOHN WITHERS AS DESCRIBED HEREIN.

LIST OF EXHIBITS:

None.

January 25, 2021

Prepared by: D. Pardee / C. Smithson

Submitted by: C. Clary

Approved by: Paul A. Cook



CONSENT CALENDAR

IRWD STRATEGIC MEASURES

SUMMARY:

Provided as Exhibit “A” are the IRWD Strategic Measures and informational items for the Board’s review. These measures are intended to reflect the critical performance measures that gauge the District’s key business objectives.

BACKGROUND:

The proposed strategic measures document summarizes a number of operating performance, financial, customer and other key measures important to the ongoing operation of the District. These measures were selected and designed to provide a “snapshot” view of the measures that would be of interest to the Board.

FISCAL IMPACTS:

Not applicable.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

RECOMMENDATION:

RECEIVE AND FILE.

LIST OF EXHIBITS:

Exhibit “A” – Q2 2021 Strategic Measures

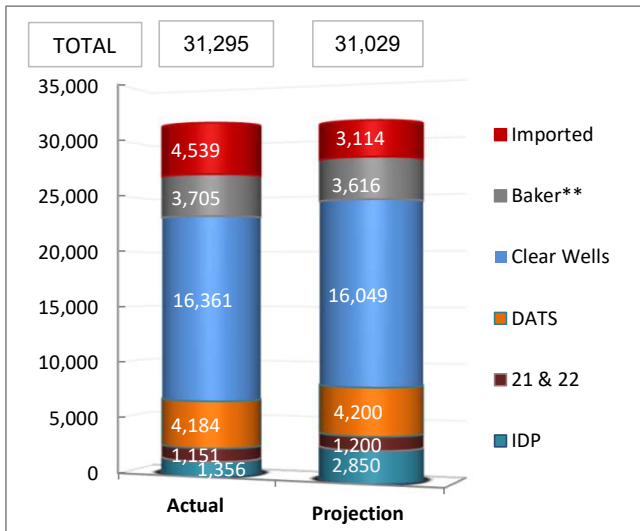
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IRVINE RANCH WATER DISTRICT

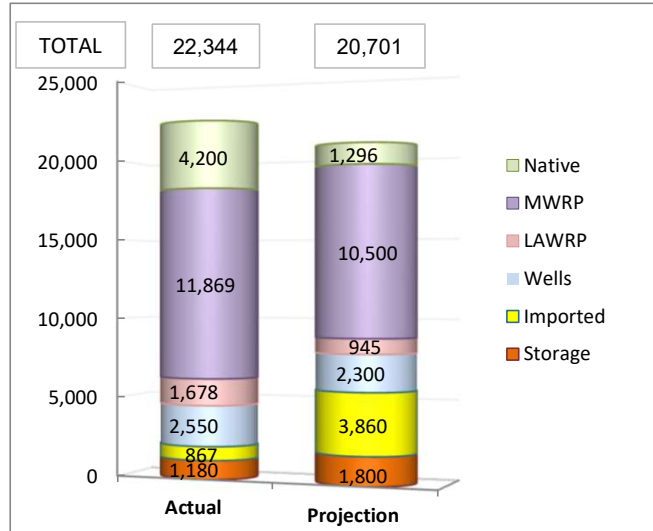
Operational Performance Measures

Data as of December 31, 2020

Potable Water Production FYTD (AF)



Non-Potable Water Production FYTD (AF)

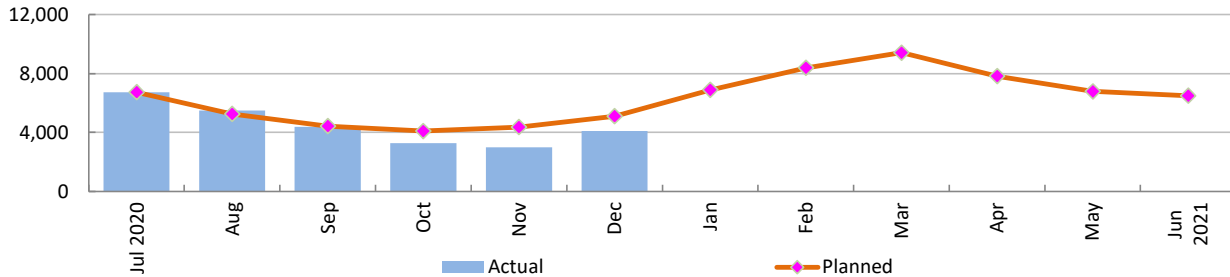


** Baker was supplied with 1,675 AF of native water. IRWD received 404 AF (24.1%) This is included in both potable and non potable production.

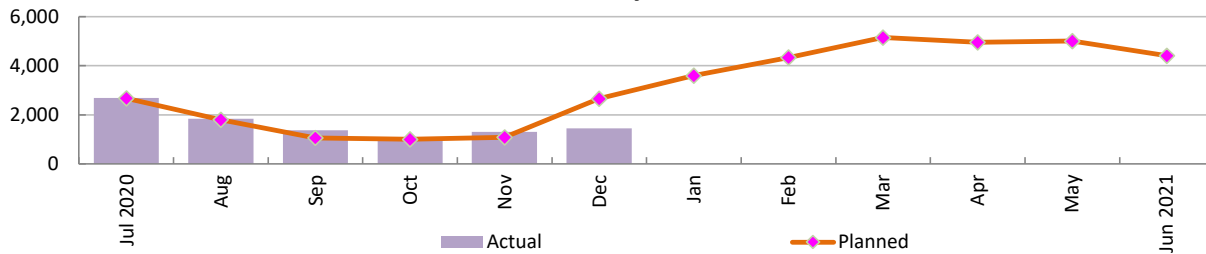
Non-Potable Reservoir Storage

(AF)

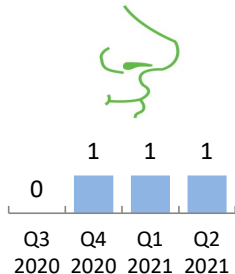
Irvine Lake



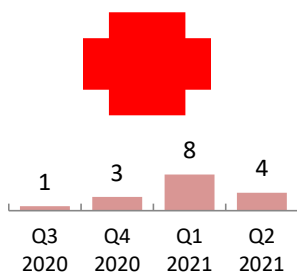
Recycled



Odor Complaints (FY by quarter)




OSHA Recordables Incidents



Regulatory Compliance Incidents

Category	Q3 2020	Q4 2020	Q1 2021	Q2 2021
AQMD	4	0	6	3
Plants	1	1	1	0
Sewer Spills	0	0	1	1

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January 25, 2021
Prepared by: J. Davis
Submitted by: R. Jacobson / C. Clary
Approved by: Paul A. Cook 

CONSENT CALENDAR

DECEMBER 2020 TREASURY REPORT

SUMMARY:

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

- A. The December 2020 Investment Summary Report. This Investment Summary Report conforms with the 2020 Investment Policy and provides sufficient liquidity to meet estimated expenditures during the next six months, as outlined in Exhibit "A";
- B. The Summary of Fixed and Variable Rate Debt as of December 31, 2020, as outlined in Exhibit "B";
- C. The Monthly Interest Rate Swap Summary as of December 31, 2020, as outlined in Exhibit "C";
- D. The December 31, 2020 Disbursement Summary of warrants 413651 through 414651, wire transfers, Workers' Compensation distributions, payroll withholding distributions, and voided checks in the total amount of \$17,781,264, as outlined in Exhibit "D";
- E. The Summary of Payroll ACH payments in the total amount of \$2,214,181, as outlined in Exhibit "E"; and
- F. The Disclosure Report of Reimbursements to Board members and staff for December 2020, detailing payments or reimbursements for individual charges of \$100.00 or more per transaction, as outlined in Exhibit "F".

FISCAL IMPACTS:

As of December 31, 2020, the book value of the investment portfolio was \$424,140,181, with a 0.96% rate of return and a market value of \$426,021,589. Based on IRWD's December 31, 2020 quarterly real estate investment rate of return of 10.96%, the weighted average return for the fixed income and real estate investments was 2.88%. The weighted average return decreased by 0.26%, primarily due to the updated real estate quarterly rate of return as of December 31, 2020 which reflected the payoff of the Serrano Summit/Lennar note and an increase to cash/fixed income balances from the note proceeds and property tax receipts.

As of December 31, 2020, the outstanding principal amount of fixed and variable rate debt was \$646,245,000. The monthly weighted average all-in variable rate was 0.36%. Including IRWD's weighted average fixed rate bond issues of 3.69% and the previous month's negative cash accruals from fixed payer interest rate swaps, which hedge a portion of the District's variable rate debt, the total average debt rate was 2.91%.

Payroll ACH payments totaled \$2,214,181, and wire transfers, all other ACH payments, and checks issued for debt service, accounts payable, payroll, and water purchases for December totaled \$17,781,264.

ENVIRONMENTAL COMPLIANCE:

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

COMMITTEE STATUS:

This item was not submitted to a Committee; the investment and debt reports are submitted to the Finance and Personnel Committee on a monthly basis.

RECOMMENDATION:

THAT THE BOARD RECEIVE AND FILE THE TREASURER'S INVESTMENT SUMMARY REPORT, THE SUMMARY OF FIXED AND VARIABLE RATE DEBT, AND DISCLOSURE REPORT OF REIMBURSEMENTS TO BOARD MEMBERS AND STAFF, APPROVE THE DECEMBER 2020 SUMMARY OF PAYROLL ACH PAYMENTS IN THE TOTAL AMOUNT OF \$2,214,181, AND APPROVE THE DECEMBER 2020 ACCOUNTS PAYABLE DISBURSEMENT SUMMARY OF WARRANTS 413651 THROUGH 414651, WORKERS' COMPENSATION DISTRIBUTIONS, WIRE TRANSFERS, PAYROLL WITHHOLDING DISTRIBUTIONS AND VOIDED CHECKS IN THE TOTAL AMOUNT OF \$17,781,264.

LIST OF EXHIBITS:

Exhibit "A" – Investment Summary Report

Exhibit "B" – Summary of Fixed and Variable Debt

Exhibit "C" – Monthly Interest Rate Swap Summary

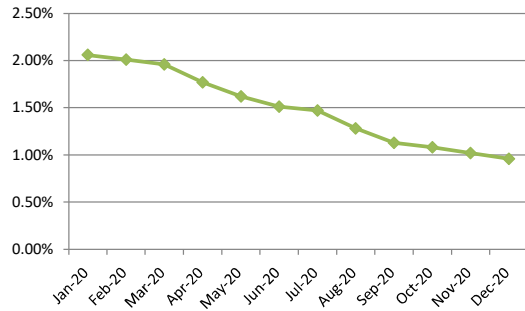
Exhibit "D" – Monthly Summary of District Disbursements

Exhibit "E" – Monthly Payroll ACH Summary

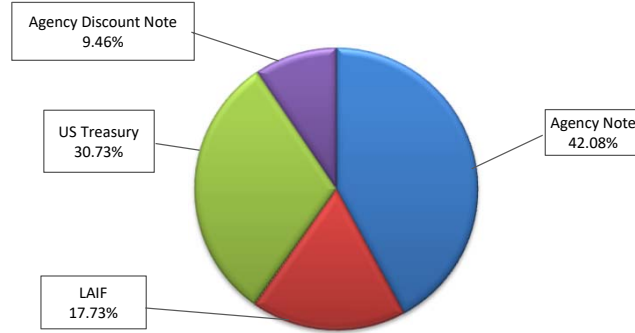
Exhibit "F" – Disclosure of Reimbursements to Board Members and Staff

Exhibit "A"
**Irvine Ranch Water District
Investment Portfolio Summary
December 2020**

Monthly Fixed Income Yield



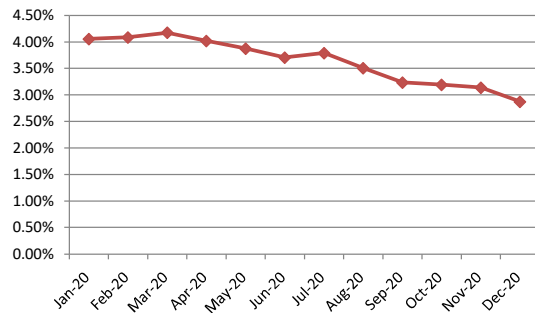
Portfolio Distribution



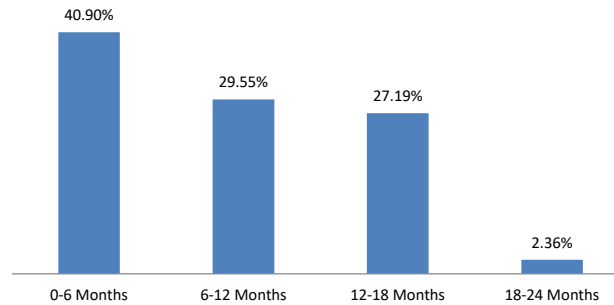
Investment Summary

Type	PAR	Book Value	Market Value
Agency Note	178,000,000	178,548,391	179,449,390
US Treasury	130,000,000	130,616,301	131,481,550
LAIF	75,000,000	75,000,000	75,170,349
Agency Discount Note	40,000,000	39,975,490	39,920,300
Grand Total	423,000,000	424,140,181	426,021,589

**Weighted Average Return
Including Real Estate Portfolio**



Maturity Distribution



Top Issuers

Issuer	PAR	% Portfolio
US Treasury	130,000,000	30.73%
Fed Home Loan Bank	95,000,000	22.46%
Fed Farm Credit Bank	80,000,000	18.91%
State of California Tsy.	75,000,000	17.73%
Fed Home Loan Mortgage Corp	25,000,000	5.91%
Fed Natl Mortgage Assoc	18,000,000	4.26%
Grand Total	423,000,000	100.00%

IRVINE RANCH WATER DISTRICT
INVESTMENT SUMMARY REPORT

12/31/20

SETTLMT	Call Schedule	Initial Call	Maturity Date	Rating	INVESTMENT TYPE	INSTITUTION / ISSUER	PAR Amount	COUPON DISCOUNT	YIELD	ORIGINAL COST	CARRY VALUE	MARKET VALUE ⁽¹⁾ 12/31/2020	UNREALIZED ⁽²⁾ GAIN/(LOSS)
07/24/20			01/01/21		LAIF	State of California Tsy.	\$75,000,000		0.540%	\$75,000,000.00	\$75,000,000.00	75,170,348.85	170,348.85
03/31/20	NA	NA	01/19/21	NR	FHLB - Discount Note	Fed Home Loan Bank	5,000,000	0.200%	0.204%	4,991,833.33	4,997,777.78	4,999,850.00	2,072.22
10/12/18	NA	NA	01/31/21	Aaa/NR/AAA	Treasury - Note	US Treasury	10,000,000	1.375%	2.890%	9,664,843.76	9,988,058.57	10,009,100.00	21,041.43
12/14/18	NA	NA	02/16/21	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	2.375%	2.806%	4,954,750.00	4,996,357.23	5,013,400.00	17,042.77
08/13/20	NA	NA	02/25/21	Aaa/NR/AAA	Treasury - Bill	US Treasury	10,000,000	0.110%	0.112%	9,994,011.11	9,998,319.44	9,999,000.00	680.56
12/14/18	NA	NA	02/28/21	Aaa/NR/AAA	Treasury - Note	US Treasury	5,000,000	2.000%	2.755%	4,919,515.95	4,992,420.34	5,014,050.00	21,629.66
02/12/19	NA	NA	03/12/21	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	10,000,000	2.500%	2.516%	9,996,500.00	9,999,677.21	10,044,200.00	44,522.79
02/25/19	NA	NA	03/12/21	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	2.375%	2.549%	4,982,700.00	4,998,376.68	5,021,550.00	23,173.32
06/17/19	NA	NA	03/17/21	Aaa/AA+/NR	FFCB - Note	Fed Farm Credit Bank	5,000,000	1.950%	1.938%	5,001,050.00	5,000,123.24	5,018,900.00	18,776.76
02/28/20	NA	NA	04/13/21	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	3,000,000	2.500%	1.185%	3,043,950.00	3,021,010.24	3,019,890.00	(1,120.24)
11/24/20	NA	NA	04/27/21	NR	FHLB - Discount Note	Fed Home Loan Bank	5,000,000	0.075%	0.076%	4,998,395.83	4,998,791.66	4,998,400.00	(391.66)
11/25/20	NA	NA	04/27/21	NR	FHLB - Discount Note	Fed Home Loan Bank	5,000,000	0.075%	0.076%	4,998,406.25	4,998,791.67	4,998,400.00	(391.67)
06/14/19	NA	NA	04/30/21	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.750%	1.913%	4,985,000.00	4,997,397.96	5,026,850.00	29,452.04
12/05/19	NA	NA	04/30/21	Aaa/NR/AAA	Treasury - Note	US Treasury	5,000,000	2.250%	1.650%	5,041,406.25	5,009,623.72	5,034,550.00	24,926.28
09/13/19	NA	NA	05/15/21	Aaa/NR/AAA	Treasury - Note	US Treasury	5,000,000	2.625%	1.757%	5,071,093.75	5,015,617.32	5,045,700.00	30,082.68
11/18/20	NA	NA	05/27/21	NR	FHLB - Discount Note	Fed Home Loan Bank	5,000,000	0.080%	0.081%	4,997,888.89	4,998,377.78	4,998,000.00	(377.78)
03/02/20	NA	NA	05/31/21	Aaa/NR/AAA	Treasury - Note	US Treasury	10,000,000	2.125%	1.186%	10,115,711.10	10,061,288.74	10,081,300.00	20,011.26
06/11/20	NA	NA	06/09/21	NR	FHLB - Discount Note	Fed Home Loan Bank	5,000,000	0.190%	0.193%	4,990,420.85	4,995,804.17	4,997,850.00	2,045.83
09/18/19	NA	NA	06/11/21	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	2.250%	1.786%	5,039,300.00	5,010,011.55	5,045,650.00	35,638.45
01/16/20	NA	NA	06/30/21	Aaa/NR/AAA	Treasury - Note	US Treasury	5,000,000	1.125%	1.594%	4,966,406.25	4,988,612.29	5,025,000.00	36,387.71
12/31/20	NA	NA	07/01/21	Aaa/NR/AAA	Treasury - Bill	US Treasury	10,000,000	0.090%	0.090%	9,995,450.00	9,995,450.00	9,995,450.00	(25.00)
07/26/19	NA	NA	07/19/21	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	1.875%	1.927%	4,995,000.00	4,998,625.69	5,049,500.00	50,874.31
08/13/20	NA	NA	08/12/21	NR	FFCB - Discount Note	Fed Farm Credit Bank	10,000,000	0.140%	0.142%	9,985,844.44	9,991,327.78	9,932,300.00	(59,027.78)
08/13/20	NA	NA	08/13/21	Aaa/NR/NR	FHLB - Note	Fed Home Loan Bank	10,000,000	0.125%	0.133%	9,999,220.00	9,999,521.32	9,993,900.00	(5,621.32)
08/01/19	NA	NA	08/31/21	Aaa/NR/AAA	Treasury - Note	US Treasury	5,000,000	1.125%	1.816%	4,929,687.50	4,977,640.44	5,034,000.00	56,359.56
09/17/20	NA	NA	09/17/21	NA	FHLB - Note	Fed Home Loan Bank	5,000,000	0.125%	0.132%	4,999,660.00	4,999,758.74	5,000,150.00	391.26
08/13/20	NA	NA	09/30/21	Aaa/AA+/NR	Treasury - Note	US Treasury	10,000,000	1.125%	0.133%	10,112,109.38	10,073,834.75	10,075,400.00	1,565.25
09/30/20	NA	NA	09/30/21	NA	FHLB - Note	Fed Home Loan Bank	10,000,000	0.125%	0.122%	10,000,336.80	10,000,250.99	10,003,000.00	2,749.01
08/13/20	NA	NA	10/07/21	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	10,000,000	1.375%	0.143%	10,141,500.00	10,093,996.43	10,095,400.00	1,403.57
10/11/19	NA	NA	10/15/21	Aaa/AA+/NR	Treasury - Note	US Treasury	5,000,000	2.875%	1.540%	5,131,640.63	5,051,402.53	5,107,600.00	56,197.47
10/22/19	NA	NA	10/15/21	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	1.400%	1.642%	4,976,500.00	4,990,684.39	5,051,600.00	60,915.61
10/29/20	NA	NA	10/19/21	Aaa/NR/NR	FHLB - Note	Fed Home Loan Bank	10,000,000	0.125%	0.127%	9,999,800.00	9,999,836.06	10,002,700.00	2,863.94
10/27/20	NA	NA	10/26/21	NR	FFCB - Discount Note	Fed Farm Credit Bank	5,000,000	0.130%	0.132%	4,993,427.78	4,994,619.45	4,995,500.00	880.55
11/05/19	NA	NA	11/15/21	Aaa/NR/AAA	Treasury - Note	US Treasury	5,000,000	2.875%	1.610%	5,125,585.94	5,053,895.18	5,118,750.00	64,854.82
11/08/19	NA	NA	11/30/21	Aaa/AA+/NR	Treasury - Note	US Treasury	5,000,000	1.750%	1.680%	5,007,031.25	5,003,109.44	5,073,850.00	70,740.56
09/28/20	NA	NA	12/03/21	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	0.150%	0.120%	5,001,765.00	5,001,375.96	5,000,800.00	(575.96)
10/30/20	NA	NA	12/15/21	Aaa/NR/AAA	Treasury - Note	US Treasury	5,000,000	2.625%	0.127%	5,140,429.69	5,118,903.97	5,118,950.00	46.03
04/23/20	NA	NA	12/20/21	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	10,000,000	1.625%	0.309%	10,217,480.00	10,140,680.13	10,146,800.00	6,119.87
11/25/19	NA	NA	12/31/21	Aaa/NR/AAA	Treasury - Note	US Treasury	5,000,000	2.000%	1.619%	5,039,062.50	5,018,538.14	5,093,350.00	74,811.86
11/25/19	NA	NA	01/13/22	Aaa/NA/NR	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	2.375%	1.635%	5,077,250.00	5,037,337.50	5,115,600.00	78,262.50
08/14/20	NA	NA	01/13/22	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	2.375%	0.147%	5,157,297.23	5,114,702.24	5,115,600.00	897.76
03/08/19	NA	NA	01/15/22	Aaa/AA+/NR	Treasury - Note	US Treasury	5,000,000	2.500%	2.460%	5,005,468.75	5,001,985.30	5,122,450.00	120,464.70
10/21/20	Continuous after	04/21/21	01/21/22	Aaa/AA+/NR	FFCB - Note	Fed Farm Credit Bank	5,000,000	0.150%	0.150%	5,000,000.00	5,000,000.00	5,000,250.00	250.00
12/19/19	NA	NA	01/31/22	Aaa/NR/AAA	Treasury - Note	US Treasury	5,000,000	1.875%	1.641%	5,024,218.75	5,012,359.70	5,094,550.00	82,190.30
03/21/19	NA	NA	02/03/22	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	2.030%	2.361%	4,954,350.00	4,982,696.48	5,103,000.00	120,303.52
11/13/20	Continuous after	05/04/21	02/04/22	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	0.140%	0.150%	4,999,390.00	4,999,456.72	5,000,250.00	793.28
12/19/19	NA	NA	02/15/22	Aaa/NR/AAA	Treasury - Note	US Treasury	5,000,000	2.500%	1.652%	5,089,453.13	5,046,483.88	5,133,000.00	86,516.12
11/13/20	NA	NA	02/28/22	Aaa/NR/AAA	Treasury - Note	US Treasury	5,000,000	1.875%	0.139%	5,112,304.69	5,100,645.94	5,101,550.00	904.06
11/19/20	NA	NA	02/28/22	Aaa/NR/AAA	Treasury - Note	US Treasury	5,000,000	1.750%	0.126%	5,103,710.94	5,094,141.05	5,094,550.00	408.95
03/08/19	NA	NA	03/11/22	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	2.500%	2.549%	5,002,750.00	5,001,085.99	5,141,500.00	140,414.01
12/23/20	NA	NA	03/22/22	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	10,000,000	0.090%	0.090%	10,000,000.00	10,000,000.00	10,054,900.00	54,900.00
12/19/19	NA	NA	03/31/22	Aaa/NR/AAA	Treasury - Note	US Treasury	5,000,000	1.875%	1.645%	5,025,585.94	5,013,944.80	5,109,400.00	95,455.20

IRVINE RANCH WATER DISTRICT
INVESTMENT SUMMARY REPORT

12/31/20

SETTLMT	Call Schedule	Initial Call	Maturity Date	Rating	INVESTMENT TYPE	INSTITUTION / ISSUER	PAR Amount	COUPON DISCOUNT	YIELD	ORIGINAL COST	CARRY VALUE	MARKET VALUE ⁽¹⁾ 12/31/2020	UNREALIZED ⁽²⁾ GAIN/(LOSS)
02/21/20	NA	NA	04/14/22	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	1.400%	1.414%	4,998,500.00	4,998,969.35	5,081,750.00	82,780.65
04/23/20	NA	NA	04/21/22	Aaa/AA+/NR	FFCB - Note	Fed Farm Credit Bank	10,000,000	1.580%	0.320%	10,250,200.00	10,165,998.08	10,186,400.00	20,401.92
05/28/20	One Time	05/26/21	05/26/22	Aaa/NR/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	0.270%	0.270%	5,000,000.00	5,000,000.00	5,001,400.00	1,400.00
01/15/20	NA	NA	07/15/22	Aaa/AA+/NR	FFCB - Note	Fed Farm Credit Bank	5,000,000	1.600%	1.594%	5,000,750.00	5,000,460.53	5,113,000.00	112,539.47
05/28/20	One Time	05/26/21	08/26/22	Aaa/NR/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	0.300%	0.300%	5,000,000.00	5,000,000.00	5,001,450.00	1,450.00
TOTAL INVESTMENTS							\$423,000,000			\$424,345,943.66	\$424,140,181.48	\$426,021,588.85	\$1,881,407.37
					Petty Cash					3,400.00			
					Ck Balance	Bank of America		ECR	0.19%	11,752,995.25			
										\$436,102,338.91			

<p>⁽¹⁾ LAIF market value is as of the most recent quarter-end as reported by LAIF. Security market values are determined using Bank of New York ("Trading Prices"), Bloomberg and/or broker dealer pricing.</p> <p>⁽²⁾ Gain (loss) calculated against carry value using the trading value provided by Bank of New York/or Brokers</p> <p>⁽³⁾ Real estate rate of return is based on most recent quarter end return</p>	<p>Outstanding Variable Rate Debt \$251,100,000</p> <p>Net Outstanding Variable Rate Debt (Less \$60 million fixed-payer swaps) \$191,100,000</p> <p>Investment Balance: \$436,102,339</p> <p>Investment to Variable Rate Debt Ratio: 228%</p> <p>Portfolio - Average Number of Days To Maturity 219</p>																
<table border="1"> <thead> <tr> <th></th> <th>Investment Portfolio</th> <th>Real Estate⁽³⁾ Portfolio</th> <th>Weighted Avg. Return</th> </tr> </thead> <tbody> <tr> <td>December</td> <td>0.96%</td> <td>10.96%</td> <td>2.88%</td> </tr> <tr> <td>November</td> <td>1.02%</td> <td>7.80%</td> <td>3.14%</td> </tr> <tr> <td>Change</td> <td>-0.06%</td> <td></td> <td>-0.26%</td> </tr> </tbody> </table>			Investment Portfolio	Real Estate ⁽³⁾ Portfolio	Weighted Avg. Return	December	0.96%	10.96%	2.88%	November	1.02%	7.80%	3.14%	Change	-0.06%		-0.26%
	Investment Portfolio	Real Estate ⁽³⁾ Portfolio	Weighted Avg. Return														
December	0.96%	10.96%	2.88%														
November	1.02%	7.80%	3.14%														
Change	-0.06%		-0.26%														
<p>This Investment Summary Report is in conformity with the 2020 Investment Policy and provides sufficient liquidity to meet the next six months estimated expenditures.</p> <p>*S - Step up</p>																	

IRVINE RANCH WATER DISTRICT
SUMMARY OF MATURITIES

12/31/20

DATE	TOTAL	%	LAIF	Agency Notes	Agency Discount Notes	Municipal Bonds	US Treasury
12/20	\$75,000,000	17.73%	\$75,000,000				
01/21	15,000,000	3.55%			5,000,000		10,000,000
02/21	20,000,000	4.73%		5,000,000			15,000,000
03/21	20,000,000	4.73%		20,000,000			
04/21	23,000,000	5.44%		8,000,000	10,000,000		5,000,000
05/21	20,000,000	4.73%			5,000,000		15,000,000
06/21	15,000,000	3.55%		5,000,000	5,000,000		5,000,000
07/21	15,000,000	3.55%		5,000,000			10,000,000
08/21	25,000,000	5.91%		10,000,000	10,000,000		5,000,000
09/21	25,000,000	5.91%		15,000,000			10,000,000
10/21	35,000,000	8.27%		25,000,000	5,000,000		5,000,000
11/21	10,000,000	2.36%		-			10,000,000
SUB-TOTAL	\$298,000,000	70.45%	\$75,000,000	\$93,000,000	40,000,000		\$90,000,000
13 Months - 3 YEARS							
12/01/2021 - 2/28/2022	75,000,000	17.73%		40,000,000			35,000,000
03/01/2022 - 5/31/2022	40,000,000	9.46%		35,000,000			5,000,000
06/01/2022 - 08/31/2022	10,000,000	2.36%		10,000,000			
09/01/2022 +	-						
	-						
	-						
	-						
	-						
	-						
TOTALS	\$423,000,000	100.00%	\$75,000,000	\$178,000,000	\$40,000,000		\$130,000,000

% OF PORTFOLIO 17.73% 42.08% 9.46% 30.73%

Irvine Ranch Water District
Summary of Real Estate - Income Producing Investments
12/31/2020

	ACQUISITION DATE	PROPERTY TYPE	OWNERSHIP INTEREST	ORIGINAL COST	MARKET VALUE 6/30/2020	ANNUALIZED RATE OF RETURN QUARTER ENDED 12/31/2020
Sycamore Canyon	Dec-92	Apartments	Fee Simple	\$ 43,550,810	\$ 152,340,625	19.83%
Wood Canyon Villas	Jun-91	Apartments	Limited Partner	\$ 6,000,000	\$ 30,432,947	8.51%
ITC (230 Commerce)	Jul-03	Office Building	Fee Simple	\$ 5,739,845	\$ 11,964,600	9.15%
Waterworks Business Pk.	Nov-08	Research & Dev.	Fee Simple	\$ 8,630,577	\$ 9,363,600	6.73%
Sand Canyon Professional Center - Medical Office	Jul-12	Medical Office	Fee Simple	\$ 8,648,594	\$ 11,444,400	8.76%
Sand Canyon Professional Center - General Office	Sep-20	Office Building	Fee Simple	\$ 25,985,968	\$ 28,770,000	-0.79%
Total - Income Properties				\$ 98,555,794	\$ 244,316,172	10.96%

IRVINE RANCH WATER DISTRICT INVESTMENT SUMMARY REPORT
INVESTMENT ACTIVITY
Dec-20

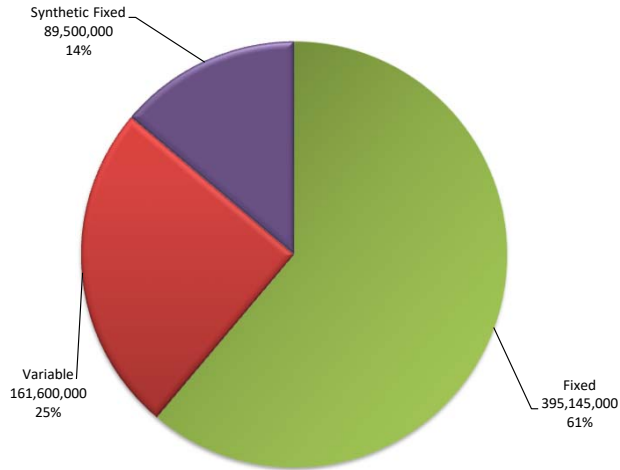
MATURITIES/SALES/CALLS

PURCHASES

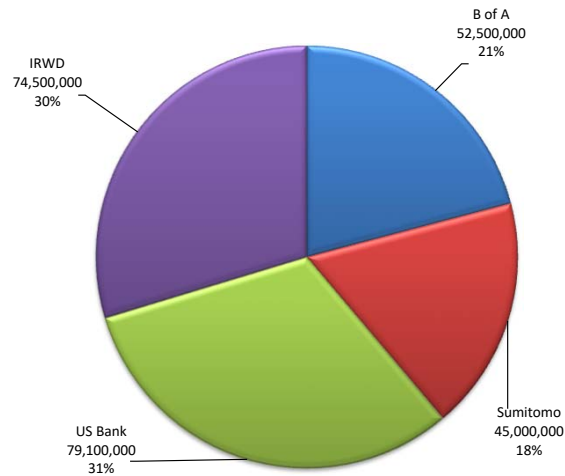
DATE	SECURITY TYPE	PAR	YIELD	Settlement Date	Maturity Date	SECURITY TYPE	PAR	YIELD TO MATURITY
12/28/2020	FNMA - Note	\$5,000,000	2.02%	12/23/2020	3/22/2022	FFCB - Note	\$10,000,000	0.09%
12/31/2020	US Treasury	\$5,000,000	2.96%	12/31/2020	7/1/2021	US Treasury	\$10,000,000	0.09%

Exhibit "B"
Irvine Ranch Water District
Summary of Fixed and Variable Rate Debt
December 2020

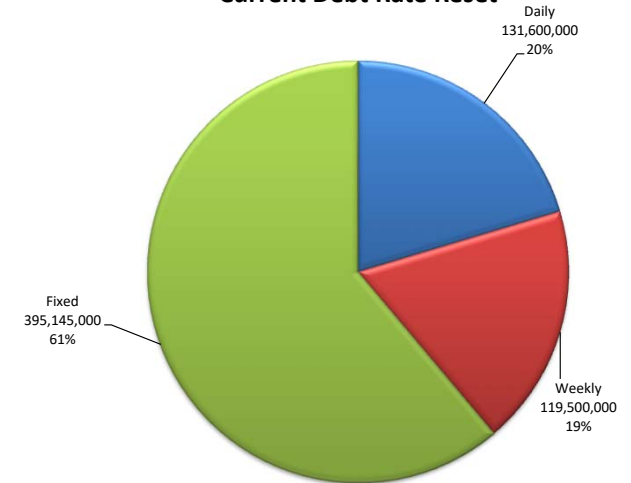
Current Debt Mix By Type



Letters of Credit / Support



Current Debt Rate Reset



Outstanding Par by Series

Series	Issue Date	Maturity Date	Remaining Principal	Percent	Letter of Credit/Support	Rmkt Agent	Mode	Reset
Series 1993	05/19/93	04/01/33	\$26,600,000	4.12%	US Bank	BAML	Variable	Daily
Series 2008-A Refunding	04/24/08	07/01/35	\$45,000,000	6.96%	Sumitomo	BAML	Variable	Weekly
Series 2011-A-1 Refunding	04/15/11	10/01/37	\$44,700,000	6.92%	IRWD	Goldman	Variable	Weekly
Series 2011-A-2 Refunding	04/15/11	10/01/37	\$29,800,000	4.61%	IRWD	Goldman	Variable	Weekly
Series 2009 - A	06/04/09	10/01/41	\$52,500,000	8.12%	US Bank	US Bank	Variable	Daily
Series 2009 - B	06/04/09	10/01/41	\$52,500,000	8.12%	B of A	Goldman	Variable	Daily
2016 COPS	09/01/16	03/01/46	\$116,745,000	18.07%	N/A	N/A	Fixed	Fixed
2010 Build America Taxable Bond	12/16/10	05/01/40	\$175,000,000	27.08%	N/A	N/A	Fixed	Fixed
Series 2016	10/12/16	02/01/46	\$103,400,000	16.00%	N/A	N/A	Fixed	Fixed
Total			\$646,245,000	100.00%				

IRVINE RANCH WATER DISTRICT
SUMMARY OF FIXED & VARIABLE RATE DEBT

December-20

ITN
Daily
Weekly

GENERAL BOND INFORMATION							LETTER OF CREDIT INFORMATION										TRUSTEE INFORMATION									
VARIABLE RATE ISSUES	Issue Date	Maturity Date	Principal Payment Date	Payment Date	Original Par Amount	Remaining Principal	Letter of Credit	Reimbursement Agreement Date	L/C Exp. Date	MOODY'S	S&P	FITCH	LOC Stated Amount	LOC Fee	Annual LOC Cost	Rmkt Agent	Reset	Rmkt Fees	Annual Cost	Trustee						
SERIES 1993	05/19/93	04/01/33	Apr 1	5th Bus. Day	\$38,300,000	\$26,600,000	US BANK	05/07/15	12/15/21	Aa3/VMIG1	AA-/A-1+	N/R	\$26,958,553	0.3300%	\$88,963	BAML	DAILY	0.10%	\$26,600	BANK OF NY						
SERIES 2008-A Refunding	04/24/08	07/01/35	Jul 1	5th Bus. Day	\$60,215,000	\$45,000,000	SUMITOMO	04/01/11	07/21/21	A1/P-1	A/A-1	A/F1	\$45,665,753	0.3150%	\$143,847	BAML	WED	0.07%	\$31,500	BANK OF NY						
SERIES 2011-A-1 Refunding	04/15/11	10/01/37	Oct 1	1st Bus. Day	\$60,545,000	\$44,700,000	N/A	N/A	N/A	Aa1/VMIG1	A-1+	AAA/F1+	N/A	N/A	N/A	Goldman	WED	0.13%	\$55,875	BANK OF NY						
SERIES 2011-A-2 Refunding	04/15/11	10/01/37	Oct 1	1st Bus. Day	\$40,370,000	\$29,800,000	N/A	N/A	N/A	Aa1/VMIG1	A-1+	AAA/F1+	N/A	N/A	N/A	Goldman	WED	0.13%	\$37,250	BANK OF NY						
SERIES 2009 - A	06/04/09	10/01/41	Oct 1	1st Bus. Day	\$75,000,000	\$52,500,000	US BANK	04/01/11	12/15/21	Aa2/VMIG 1	AA-/A-1+	AA/F1+	\$53,086,849	0.3300%	\$175,187	US Bank	DAILY	0.07%	\$36,750	US BANK						
SERIES 2009 - B	06/04/09	10/01/41	Oct 1	1st Bus. Day	\$75,000,000	\$52,500,000	B of A	04/01/11	05/16/22	Aa2/VMIG 1	A/A-1	A1/F1+	\$53,086,849	0.3000%	\$159,261	Goldman	DAILY	0.10%	\$52,500	US BANK						
					\$349,430,000	\$251,100,000	SUB-TOTAL VARIABLE RATE DEBT																			
							\$178,798,005										0.3173%	\$567,258								
							(Wt. Avg)										(Wt. Avg)									
FIXED RATE ISSUES																										
2010 GO Build America Taxable Bonds	12/16/10	05/01/40	May (2025)	May/Nov	\$175,000,000	\$175,000,000	N/A	N/A	N/A	Aa1	AAA	NR	N/A	N/A	N/A	N/A	N/A	N/A	N/A	US BANK						
2016 COPS	09/01/16	03/01/46	Mar (2021)	Mar/Sept	\$116,745,000	\$116,745,000	N/A	N/A	N/A	NR	AAA	AAA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	US BANK						
SERIES 2016	10/12/16	02/01/46	Feb (2022)	Feb/Aug	\$103,400,000	\$103,400,000	N/A	N/A	N/A	NR	AAA	AAA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	BANK OF NY						
					\$395,145,000	\$395,145,000	SUB-TOTAL FIXED RATE DEBT																			
					\$744,575,000	\$646,245,000	TOTAL- FIXED & VARIABLE RATE DEBT																			

Remarketing Agents			GO VS COP's		
Goldman	127,000,000	51%	GO:	529,500,000	82%
BAML	71,600,000	29%	COPS:	116,745,000	18%
US Bank	52,500,000	21%	Total	<u>646,245,000</u>	
	<u>251,100,000</u>				

LOC Banks		Breakdown Between Variable & Fixed Rate Mode	
SUMITOMO	45,000,000	Daily Issues	131,600,000 20%
BANK OF AMERICA	52,500,000	Weekly Issues	45,000,000 7%
US BANK	79,100,000	ITN Issues	74,500,000 12%
	<u>176,600,000</u>	Sub-Total	<u>251,100,000</u>
		Fixed Rate Issues	\$395,145,000 61%
		Sub-Total - Fixed	<u>395,145,000</u>
		TOTAL DEBT	
		FIXED & VAR.	<u>646,245,000</u> 100%

IRVINE RANCH WATER DISTRICT
SUMMARY OF DEBT RATES
Dec-20

Rmkt Agent Mode	GOLDMAN DAILY	GOLDMAN WEEKLY	GOLDMAN WEEKLY	MERRILL LYNCH DAILY	MERRILL LYNCH WEEKLY	US BANK DAILY
Bond Issue	2009 - B	2011 A-1	2011 A-2	1993	2008-A	2009-A
Par Amount	52,500,000	44,700,000	29,800,000	26,600,000	45,000,000	52,500,000
Bank	BOFA	(SIFMA -6)	(SIFMA -6)	US BANK	Sumitomo	US BANK
Reset		Wednesday	Wednesday		Wednesday	
12/1/2020	0.03%	0.05%	0.05%	0.03%	0.12%	0.05%
12/2/2020	0.02%	0.05%	0.05%	0.02%	0.12%	0.03%
12/3/2020	0.02%	0.04%	0.04%	0.01%	0.10%	0.03%
12/4/2020	0.01%	0.04%	0.04%	0.01%	0.10%	0.02%
12/5/2020	0.01%	0.04%	0.04%	0.01%	0.10%	0.02%
12/6/2020	0.01%	0.04%	0.04%	0.01%	0.10%	0.02%
12/7/2020	0.01%	0.04%	0.04%	0.01%	0.10%	0.02%
12/8/2020	0.01%	0.04%	0.04%	0.01%	0.10%	0.01%
12/9/2020	0.01%	0.04%	0.04%	0.01%	0.10%	0.01%
12/10/2020	0.01%	0.03%	0.03%	0.01%	0.10%	0.01%
12/11/2020	0.01%	0.03%	0.03%	0.01%	0.10%	0.01%
12/12/2020	0.01%	0.03%	0.03%	0.01%	0.10%	0.01%
12/13/2020	0.01%	0.03%	0.03%	0.01%	0.10%	0.01%
12/14/2020	0.01%	0.03%	0.03%	0.01%	0.10%	0.01%
12/15/2020	0.01%	0.03%	0.03%	0.01%	0.10%	0.01%
12/16/2020	0.01%	0.03%	0.03%	0.01%	0.10%	0.02%
12/17/2020	0.01%	0.03%	0.03%	0.02%	0.09%	0.03%
12/18/2020	0.02%	0.03%	0.03%	0.05%	0.09%	0.05%
12/19/2020	0.02%	0.03%	0.03%	0.05%	0.09%	0.05%
12/20/2020	0.02%	0.03%	0.03%	0.05%	0.09%	0.05%
12/21/2020	0.03%	0.03%	0.03%	0.04%	0.09%	0.05%
12/22/2020	0.03%	0.03%	0.03%	0.04%	0.09%	0.06%
12/23/2020	0.05%	0.03%	0.03%	0.09%	0.09%	0.07%
12/24/2020	0.07%	0.03%	0.03%	0.09%	0.09%	0.08%
12/25/2020	0.07%	0.03%	0.03%	0.09%	0.09%	0.08%
12/26/2020	0.07%	0.03%	0.03%	0.09%	0.09%	0.08%
12/27/2020	0.07%	0.03%	0.03%	0.09%	0.09%	0.08%
12/28/2020	0.07%	0.03%	0.03%	0.09%	0.09%	0.07%
12/29/2020	0.07%	0.03%	0.03%	0.09%	0.09%	0.06%
12/30/2020	0.06%	0.03%	0.03%	0.09%	0.09%	0.06%
12/31/2020	0.06%	0.03%	0.03%	0.08%	0.08%	0.06%
Avg Interest Rates	0.03%	0.03%	0.03%	0.04%	0.10%	0.04%
Rmkt Fee	0.10%	0.13%	0.13%	0.10%	0.07%	0.07%
LOC Fee	0.30%			0.33%	0.32%	0.33%
All-In Rate	0.43%	0.16%	0.16%	0.47%	0.48%	0.44%
Par Amount	97,200,000		29,800,000	71,600,000		52,500,000

Interest Rate Mode	Percent of Total Variable Rate Debt	Par Outstanding	Weighted All-In Average Rate	Base Rate Average
Daily	52.41%	131,600,000	0.44%	0.04%
Weekly	47.59%	119,500,000	0.28%	0.06%
	100.00%	\$ 251,100,000	0.36%	0.05%
Fixed				
COPS 2016	29.54%	116,745,000	2.90%	
BABS 2010	44.29%	175,000,000	4.44%	(1)
SERIES 2016	26.17%	103,400,000	3.32%	
	100.00%	\$ 395,145,000	3.69%	
All-In Debt Rate Including \$60 Million Notional Amount of Swaps				2.91%

(1) Rate adjusted up from 4.35% as a result of sequestration reducing BAB's subsidy by 5.7%

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Exhibit "C"
Irvine Ranch Water District
Interest Rate Swap Summary
December 2020

	Prior Mo.	Current Mo.	12-Mo Avg
LIBOR Avg %	0.14%	0.15%	0.52%

Current Fiscal Year Active Swaps								Cash Flow				(Since 3/07)	Mark to Market	
Effective Date	Maturity Date	Years to Maturity	Counter Party	Notional Amt	Type	Base Index	Fixed Rate	Prior Month	Current Month	Fiscal YTD	Cumulative Net Accrual	Current Mark to Market	Notional Difference	

Fixed Payer Swaps - By Effective Date

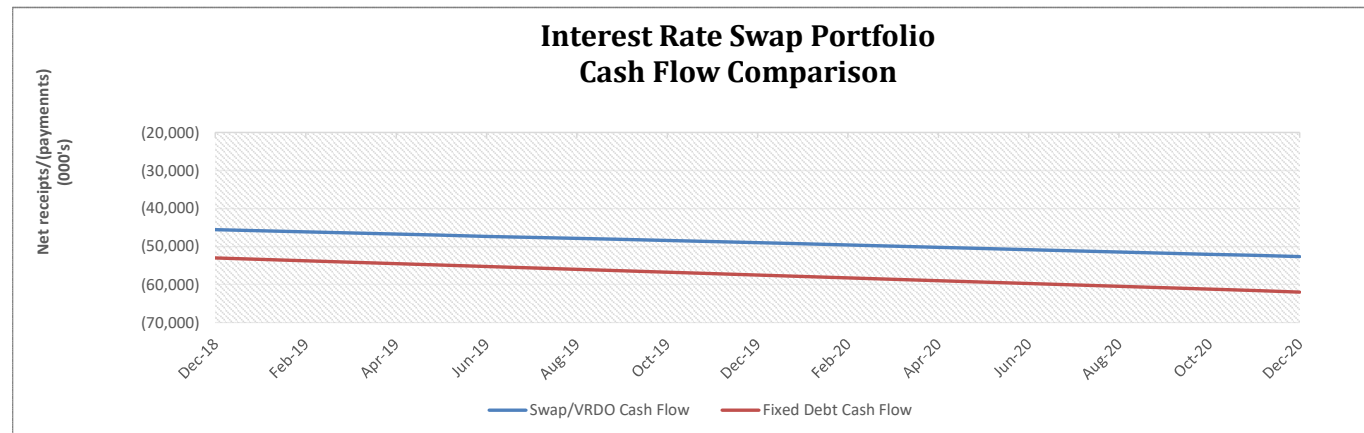
3/10/2007	3/10/2029	8.2	ML	30,000,000	FXP	LIBOR	5.687%	(138,699)	(143,246)	(833,761)	(18,858,903)	17,832,089	(12,167,911)
3/10/2007	3/10/2029	8.2	CG	30,000,000	FXP	LIBOR	5.687%	(138,699)	(143,246)	(833,761)	(18,858,903)	17,834,500	(12,165,500)
Totals/Weighted Avgs		8.2		\$ 60,000,000			5.687%	\$ (277,399)	\$ (286,492)	\$ (1,667,521)	\$ (37,717,806)	\$ 35,666,589	\$ (24,333,411)
Total Current Year Active Swaps				\$ 60,000,000				\$ (277,399)	\$ (286,492)	\$ (1,667,521)	\$ (37,717,806)	\$ 35,666,589	\$ (24,333,411)

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

Total Current Year Terminated Swaps				\$ -				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
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Current Fiscal Year - Total Swaps								Cash Flow				Mark to Market	
								Prior Month	Current Month	Fiscal YTD	Cumulative Net Accrual	Current Mark to Market	Notional Difference

Total Current Year Active & Terminated Swaps				\$ 60,000,000				\$ (277,399)	\$ (286,492)	\$ (1,667,521)	\$ (37,717,806)	\$ 35,666,589	\$ (24,333,411)
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Cash Flow Comparison	
Synthetic Fixed vs. Fixed Rate Debt	
Cash Flow to Date	
Synthetic Fixed =	\$52,658,529
Fixed Rate =	\$61,980,647
Assumptions:	
- Fixed rate debt issued at 4.93% in Mar-07 (estimated TE rate - Bloomberg)	
- 'Synthetic' includes swap cash flow + interest + fees to date	

Note: This page is intentionally left blank.

Exhibit "D"
IRVINE RANCH WATER DISTRICT
AP DISBURSEMENTS AND VOIDS FOR DECEMBER 2020

CHECK OR ELECTRONIC #	SUPPLIERS	PAYMENT DATE	PAYMENT AMOUNT	PAYMENT METHOD	Status
413651	Dillman, Tyler	3-Dec-20	90.00	IRWD Check	Reconciled
413652	Oldewage, Lars D (Lars)	3-Dec-20	118.51	IRWD Check	Reconciled
413653	Pan, Jenny W (Jenny)	3-Dec-20	171.79	IRWD Check	Reconciled
413654	Perez, David M (David)	3-Dec-20	559.00	IRWD Check	Reconciled
413655	Spangenberg, Carl W (Carl)	3-Dec-20	115.00	IRWD Check	Reconciled
413656	Stontz, Adam J	3-Dec-20	4.25	IRWD Check	Negotiable
413657	Swift, Ian P (Ian)	3-Dec-20	200.00	IRWD Check	Reconciled
413658	A&Y ASPHALT CONTRACTORS, INC.	3-Dec-20	47,278.40	IRWD Check	Reconciled
413659	ABC ICE, INC	3-Dec-20	111.58	IRWD Check	Reconciled
413660	ABM INDUSTRY GROUPS, LLC	3-Dec-20	18,374.01	IRWD Check	Reconciled
413661	ADAM'S FALCONRY SERVICE, LLC	3-Dec-20	1,560.00	IRWD Check	Reconciled
413662	AECOM TECHNICAL SERVICES, INC.	3-Dec-20	82,851.16	IRWD Check	Reconciled
413663	AGILENT TECHNOLOGIES, INC.	3-Dec-20	306.78	IRWD Check	Reconciled
413664	AIR TECHNOLOGY LABORATORIES	3-Dec-20	717.00	IRWD Check	Negotiable
413665	AIRGAS, INC.	3-Dec-20	739.23	IRWD Check	Reconciled
413666	ALBERTSON'S LLC	3-Dec-20	47,500.00	IRWD Check	Reconciled
413667	AMADOR, JASON	3-Dec-20	30.38	IRWD Check	Reconciled
413668	AMAZON CAPITAL SERVICES, INC.	3-Dec-20	3,018.48	IRWD Check	Reconciled
413669	ANDERSONPENNA PARTNERS, INC.	3-Dec-20	25,410.00	IRWD Check	Reconciled
413670	ANTHONY N. LARSEN	3-Dec-20	450.00	IRWD Check	Reconciled
413671	APEX SYSTEMS, LLC	3-Dec-20	78.00	IRWD Check	Reconciled
413672	AQUA-METRIC SALES COMPANY	3-Dec-20	29,808.27	IRWD Check	Reconciled
413673	ARCADIS U.S., INC.	3-Dec-20	1,655.50	IRWD Check	Reconciled
413674	AT&T	3-Dec-20	1,296.68	IRWD Check	Reconciled
413675	AT&T	3-Dec-20	57.46	IRWD Check	Reconciled
413676	AT&T	3-Dec-20	357.48	IRWD Check	Reconciled
413677	AUTOZONE PARTS, INC.	3-Dec-20	1,890.76	IRWD Check	Reconciled
413678	AVI INTERNATIONAL INC	3-Dec-20	5,148.00	IRWD Check	Reconciled
413679	AVISTA TECHNOLOGIES, INC	3-Dec-20	5,483.07	IRWD Check	Reconciled
413680	AXA EQUITABLE LIFE INSURANCE COMPANY	3-Dec-20	9,780.00	IRWD Check	Reconciled
413681	BATTERY SYSTEMS INC	3-Dec-20	130.26	IRWD Check	Reconciled
413682	BEADOR CONSTRUCTION COMPANY, INC.	3-Dec-20	1,381.28	IRWD Check	Reconciled
413683	BECK, RYAN	3-Dec-20	11.80	IRWD Check	Reconciled
413684	BECKMAN, DAVID J	3-Dec-20	220.92	IRWD Check	Reconciled
413685	BERZUELA, GERALD LOU	3-Dec-20	20.49	IRWD Check	Reconciled
413686	BIGWIG MONSTER, LLC	3-Dec-20	300.00	IRWD Check	Negotiable
413687	BILL'S SWEEPING SERVICE INC	3-Dec-20	1,940.25	IRWD Check	Reconciled
413688	BILLINGTON, NILES	3-Dec-20	205.39	IRWD Check	Negotiable
413689	BLACK & VEATCH CORPORATION	3-Dec-20	129,815.31	IRWD Check	Reconciled
413690	BODILY, DEANNA	3-Dec-20	351.61	IRWD Check	Reconciled
413691	BOYD & ASSOCIATES	3-Dec-20	119.60	IRWD Check	Reconciled
413692	BRENNTAG PACIFIC INC	3-Dec-20	5,675.20	IRWD Check	Reconciled
413693	BRETSCHGER, PETER E	3-Dec-20	1,137.70	IRWD Check	Reconciled
413694	BROWN AND CALDWELL	3-Dec-20	8,221.05	IRWD Check	Reconciled
413695	C WELLS PIPELINE MATERIALS INC	3-Dec-20	22,386.99	IRWD Check	Reconciled
413696	CALIFORNIA BARRICADE RENTAL, INC.	3-Dec-20	24,107.85	IRWD Check	Reconciled
413697	CALKINS, IAN	3-Dec-20	534.69	IRWD Check	Negotiable
413698	CALVO, RUDY	3-Dec-20	36.83	IRWD Check	Negotiable
413699	CANNON CORPORATION	3-Dec-20	11,312.00	IRWD Check	Reconciled
413700	CANON SOLUTIONS AMERICA, INC.	3-Dec-20	43.34	IRWD Check	Reconciled
413701	CAROLLO ENGINEERS, INC	3-Dec-20	16,042.24	IRWD Check	Reconciled
413702	CART MART INC.	3-Dec-20	116.80	IRWD Check	Reconciled
413703	CHAIREL CUSTOM HAY, INC.	3-Dec-20	5,224.31	IRWD Check	Reconciled
413704	CHAPLIN, CYNTHIA	3-Dec-20	18.44	IRWD Check	Negotiable
413705	CHARLES P CROWLEY COMPANY INC	3-Dec-20	2,203.11	IRWD Check	Reconciled
413706	CHEM SERVICE INC.	3-Dec-20	140.80	IRWD Check	Reconciled
413707	CHEM TECH INTERNATIONAL INC	3-Dec-20	11,750.50	IRWD Check	Reconciled

**IRVINE RANCH WATER DISTRICT
AP DISBURSEMENTS AND VOIDS FOR DECEMBER 2020**

CHECK OR ELECTRONIC #	SUPPLIERS	PAYMENT DATE	PAYMENT AMOUNT	PAYMENT METHOD	Status
413708	CHEN, TIFFANY	3-Dec-20	39.39	IRWD Check	Reconciled
413709	CHIANG, KWAN	3-Dec-20	170.59	IRWD Check	Reconciled
413710	CHIU, TIMOTHY	3-Dec-20	248.13	IRWD Check	Reconciled
413711	CHUNG DAHM AMERICA, INC	3-Dec-20	70.96	IRWD Check	Negotiable
413712	CITY OF NEWPORT BEACH	3-Dec-20	1,717.38	IRWD Check	Reconciled
413713	CITY OF SANTA ANA	3-Dec-20	306.48	IRWD Check	Reconciled
413714	CITY OF TUSTIN	3-Dec-20	761.25	IRWD Check	Reconciled
413715	CLA-VAL COMPANY	3-Dec-20	18,420.46	IRWD Check	Reconciled
413716	COLONIAL LIFE & ACCIDENT INSURANCE CO.	3-Dec-20	1,103.26	IRWD Check	Reconciled
413717	COMMERCIAL DOOR OF ORANGE COUNTY, INC.	3-Dec-20	18,783.00	IRWD Check	Reconciled
413718	CONSTELLATION NEWENERGY, INC.	3-Dec-20	26,033.64	IRWD Check	Reconciled
413719	COOMBS SERVICE GROUP	3-Dec-20	68,600.00	IRWD Check	Reconciled
413720	COUNTY CIRCUIT BREAKERS	3-Dec-20	1,891.12	IRWD Check	Reconciled
413721	COUNTY OF ORANGE	3-Dec-20	1,668.87	IRWD Check	Reconciled
413722	COVILL, CASSANDRA	3-Dec-20	29.34	IRWD Check	Reconciled
413723	COX COMMUNICATIONS, INC.	3-Dec-20	3,357.74	IRWD Check	Reconciled
413724	D & G SIGNS	3-Dec-20	2,555.83	IRWD Check	Reconciled
413725	DEKUYPER, HENRY	3-Dec-20	143.48	IRWD Check	Reconciled
413726	DEMARIA ELECTRIC MOTOR SERVICES, INC.	3-Dec-20	23,960.45	IRWD Check	Reconciled
413727	DENALI WATER SOLUTIONS LLC	3-Dec-20	15,864.23	IRWD Check	Reconciled
413728	DG INVESTMENT INTERMEDIATE HOLDINGS 2, INC.	3-Dec-20	2,647.00	IRWD Check	Reconciled
413729	DIRECTV INC	3-Dec-20	139.54	IRWD Check	Reconciled
413730	ECO SERVICES LLC	3-Dec-20	5,469.78	IRWD Check	Reconciled
413731	ELECTRABOND	3-Dec-20	673.44	IRWD Check	Reconciled
413732	ELEMENTAL SCIENTIFIC, INC.	3-Dec-20	256.61	IRWD Check	Reconciled
413733	ENVIRONMENTAL EXPRESS INC	3-Dec-20	1,214.29	IRWD Check	Reconciled
413734	ENVIRONMENTAL RESOURCE ASSOCIATES	3-Dec-20	381.33	IRWD Check	Reconciled
413735	ENVIRONMENTAL SCIENCE ASSOCIATES	3-Dec-20	66,449.68	IRWD Check	Reconciled
413736	FAITHCO INC.	3-Dec-20	34,940.00	IRWD Check	Reconciled
413737	FEDEX	3-Dec-20	170.99	IRWD Check	Reconciled
413738	FERGUSON ENTERPRISES, LLC	3-Dec-20	31,551.36	IRWD Check	Reconciled
413739	FIDELITY SECURITY LIFE INSURANCE COMPANY	3-Dec-20	108.74	IRWD Check	Reconciled
413740	FIDELITY SECURITY LIFE INSURANCE COMPANY	3-Dec-20	800.56	IRWD Check	Reconciled
413741	FIDELITY SECURITY LIFE INSURANCE COMPANY	3-Dec-20	6,941.38	IRWD Check	Reconciled
413742	FIONA HUTTON & ASSOCIATES, INC.	3-Dec-20	22,766.25	IRWD Check	Reconciled
413743	FISHER SCIENTIFIC COMPANY LLC	3-Dec-20	500.87	IRWD Check	Reconciled
413744	FLEET SOLUTIONS LLC	3-Dec-20	4,466.22	IRWD Check	Reconciled
413745	FOUGHT, CYNTHIA J.	3-Dec-20	3,217.94	IRWD Check	Reconciled
413746	FRANCHISE TAX BOARD	3-Dec-20	1,015.51	IRWD Check	Reconciled
413747	FRONTIER CALIFORNIA INC.	3-Dec-20	612.94	IRWD Check	Reconciled
413748	FUEL SERV	3-Dec-20	476.95	IRWD Check	Negotiable
413749	FURLONG, RYAN	3-Dec-20	23.73	IRWD Check	Reconciled
413750	FUSCOE ENGINEERING, INC.	3-Dec-20	4,350.00	IRWD Check	Reconciled
413751	GANAHL LUMBER CO.	3-Dec-20	21,662.95	IRWD Check	Reconciled
413752	GEI CONSULTANTS INC	3-Dec-20	6,558.50	IRWD Check	Reconciled
413753	GODBE, DOUGLAS	3-Dec-20	37.74	IRWD Check	Negotiable
413754	GOTO, KEISUKE	3-Dec-20	29.09	IRWD Check	Reconciled
413755	GRAINGER	3-Dec-20	10,008.82	IRWD Check	Reconciled
413756	GRANICUS, LLC	3-Dec-20	1,732.08	IRWD Check	Reconciled
413757	GRAYBAR ELECTRIC COMPANY	3-Dec-20	668.36	IRWD Check	Reconciled
413758	GROSSMAN, JUDITH	3-Dec-20	45.21	IRWD Check	Reconciled
413759	GUO, CHUNLIANG	3-Dec-20	46.41	IRWD Check	Reconciled
413760	GUO, HUILI	3-Dec-20	53.65	IRWD Check	Reconciled
413761	HAAKER EQUIPMENT COMPANY	3-Dec-20	14,954.66	IRWD Check	Reconciled
413762	HACH COMPANY	3-Dec-20	21,541.89	IRWD Check	Reconciled
413763	HANSON BRIDGETT LLP	3-Dec-20	63,941.73	IRWD Check	Reconciled
413764	HARRINGTON INDUSTRIAL PLASTICS LLC	3-Dec-20	4,664.02	IRWD Check	Reconciled

**IRVINE RANCH WATER DISTRICT
AP DISBURSEMENTS AND VOIDS FOR DECEMBER 2020**

CHECK OR ELECTRONIC #	SUPPLIERS	PAYMENT DATE	PAYMENT AMOUNT	PAYMENT METHOD	Status
413765	HARTFORD LIFE AND ACCIDENT INSURANCE COMPANY	3-Dec-20	72.30	IRWD Check	Reconciled
413766	HEIMERL, ROBERT	3-Dec-20	86.07	IRWD Check	Reconciled
413767	HELPMATES STAFFING SERVICES	3-Dec-20	31,325.55	IRWD Check	Reconciled
413768	HERC RENTALS INC.	3-Dec-20	818.18	IRWD Check	Reconciled
413769	HEWITT, JOHN P	3-Dec-20	88.10	IRWD Check	Reconciled
413770	HI-LINE INC	3-Dec-20	350.52	IRWD Check	Reconciled
413771	HILL BROTHERS CHEMICAL COMPANY	3-Dec-20	12,807.17	IRWD Check	Reconciled
413772	HOME DEPOT USA INC	3-Dec-20	225.89	IRWD Check	Reconciled
413773	iLAND INTERNET SOLUTION CORPORATION	3-Dec-20	5,160.00	IRWD Check	Reconciled
413774	IMPERIAL SPRINKLER SUPPLY, INC.	3-Dec-20	2,132.06	IRWD Check	Reconciled
413775	INDUSTRIAL METAL SUPPLY CO	3-Dec-20	1,018.56	IRWD Check	Reconciled
413776	INDUSTRIAL SCIENTIFIC CORPORATION	3-Dec-20	32,379.56	IRWD Check	Reconciled
413777	INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS LOCAL 47	3-Dec-20	2,834.83	IRWD Check	Reconciled
413778	IRVINE PIPE & SUPPLY INC	3-Dec-20	4,776.66	IRWD Check	Reconciled
413779	IRVINE UNIFIED SCHOOL DISTRICT	3-Dec-20	455.40	IRWD Check	Reconciled
413780	JACK DOHENY COMPANIES INC	3-Dec-20	1,108.00	IRWD Check	Reconciled
413781	JIA, XIAOYAN	3-Dec-20	494.82	IRWD Check	Reconciled
413782	JOHNSON, LOUISE	3-Dec-20	37.11	IRWD Check	Negotiable
413783	JOSE MARTINEZ TREE SERVICE INC.	3-Dec-20	2,500.00	IRWD Check	Reconciled
413784	JUST ENERGY SOLUTIONS INC.	3-Dec-20	2,035.04	IRWD Check	Reconciled
413785	KENT DAHLBERG	3-Dec-20	3,375.00	IRWD Check	Reconciled
413786	KEY INFORMATION SYSTEMS, INC.	3-Dec-20	2,050.00	IRWD Check	Reconciled
413787	KIM, ERIC	3-Dec-20	22.82	IRWD Check	Reconciled
413788	KIM, ILWHA	3-Dec-20	7.29	IRWD Check	Reconciled
413789	KIM, MIN SUNG	3-Dec-20	50.83	IRWD Check	Reconciled
413790	KONECRANES INC	3-Dec-20	7,267.50	IRWD Check	Reconciled
413791	KRONICK MOSKOVITZ TIEDEMANN & GIRARD	3-Dec-20	61,879.47	IRWD Check	Reconciled
413792	LA HABRA FENCE COMPANY INC	3-Dec-20	977.00	IRWD Check	Reconciled
413793	LANA BECKETT	3-Dec-20	597.00	IRWD Check	Negotiable
413794	LANDCARE HOLDINGS, INC.	3-Dec-20	35,286.47	IRWD Check	Reconciled
413795	LAYTON CONSTRUCTION COMPANY, LLC	3-Dec-20	328,593.45	IRWD Check	Reconciled
413796	LEE & RO, INC.	3-Dec-20	7,214.30	IRWD Check	Reconciled
413797	LI, ZHAOFENG	3-Dec-20	33.05	IRWD Check	Negotiable
413798	LILLESTRAND LEADERSHIP CONSULTING, INC.	3-Dec-20	6,290.01	IRWD Check	Reconciled
413799	LINE-X OF SOUTH COAST	3-Dec-20	1,255.00	IRWD Check	Reconciled
413800	LIU, TSUITSUI	3-Dec-20	58.67	IRWD Check	Reconciled
413801	LSA ASSOCIATES INC	3-Dec-20	7,147.29	IRWD Check	Reconciled
413802	MADDOX ELECTRIC INC.	3-Dec-20	22,348.00	IRWD Check	Reconciled
413803	MAP COMMUNICATIONS, INC.	3-Dec-20	2,144.42	IRWD Check	Reconciled
413804	MBC AQUATIC SCIENCES, INC.	3-Dec-20	1,350.00	IRWD Check	Reconciled
413805	MBK ENGINEERS	3-Dec-20	3,164.25	IRWD Check	Reconciled
413806	MC FADDEN-DALE INDUSTRIAL	3-Dec-20	154.09	IRWD Check	Reconciled
413807	MC MASTER CARR SUPPLY CO	3-Dec-20	816.13	IRWD Check	Reconciled
413808	MCCLAINS FURNITURE	3-Dec-20	5,500.00	IRWD Check	Reconciled
413809	MCR TECHNOLOGIES INC	3-Dec-20	10,030.45	IRWD Check	Reconciled
413810	MERAGE, VIKI	3-Dec-20	53.46	IRWD Check	Negotiable
413811	MERRIMAC PETROLEUM, INC.	3-Dec-20	14,795.93	IRWD Check	Reconciled
413812	MICAH NAMEROFF AND BRANDON HAYDEN	3-Dec-20	51.98	IRWD Check	Reconciled
413813	MICHAEL BAKER INTERNATIONAL, INC.	3-Dec-20	8,429.00	IRWD Check	Reconciled
413814	MICHAEL J. FRANCIS	3-Dec-20	5,900.00	IRWD Check	Reconciled
413815	MOJICA, JULIA	3-Dec-20	499.71	IRWD Check	Reconciled
413816	MORA, EMILY	3-Dec-20	36.63	IRWD Check	Negotiable
413817	MOTION INDUSTRIES INC	3-Dec-20	71.73	IRWD Check	Reconciled
413818	MRO ELECTRIC & SUPPLY CO.	3-Dec-20	6,193.00	IRWD Check	Reconciled
413819	MSC INDUSTRIAL SUPPLY CO	3-Dec-20	298.74	IRWD Check	Reconciled
413820	MUNICIPAL WATER DISTRICT OF ORANGE COUNTY	3-Dec-20	561.97	IRWD Check	Reconciled
413821	MUTUAL PROPANE	3-Dec-20	227.97	IRWD Check	Reconciled

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CHECK OR ELECTRONIC #	SUPPLIERS	PAYMENT DATE	PAYMENT AMOUNT	PAYMENT METHOD	Status
413822	MYERS & SONS HI-WAY SAFETY, INC.	3-Dec-20	2,605.40	IRWD Check	Reconciled
413823	NALCO US 2 INC	3-Dec-20	690.00	IRWD Check	Reconciled
413824	NATIONAL READY MIXED CONCRETE SALES, LLC	3-Dec-20	604.49	IRWD Check	Reconciled
413825	NESBIT, TRAVIS	3-Dec-20	450.78	IRWD Check	Reconciled
413826	NEW RESOURCES GROUP INC	3-Dec-20	465.12	IRWD Check	Reconciled
413827	NEWPORT WINDOW MAINTENANCE INC	3-Dec-20	2,385.00	IRWD Check	Reconciled
413828	NIKKHAH, JILA	3-Dec-20	41.11	IRWD Check	Negotiable
413829	OFFICE DEPOT INC	3-Dec-20	2,424.38	IRWD Check	Reconciled
413830	OLIN CORPORATION	3-Dec-20	40,127.48	IRWD Check	Reconciled
413831	OLSON REMCHO LLP	3-Dec-20	591.50	IRWD Check	Reconciled
413832	ONESOURCE DISTRIBUTORS LLC	3-Dec-20	24,573.83	IRWD Check	Reconciled
413833	ORACLE AMERICA, INC.	3-Dec-20	809.58	IRWD Check	Reconciled
413834	ORANGE COAST PLUMBING	3-Dec-20	1,921.26	IRWD Check	Reconciled
413835	ORANGE COUNTY AUTO PARTS CO	3-Dec-20	1,826.56	IRWD Check	Reconciled
413836	ORANGE COUNTY FIRE AUTHORITY	3-Dec-20	100.00	IRWD Check	Reconciled
413837	ORANGE COUNTY MOSQUITO AND VECTOR CONTROL DISTRICT	3-Dec-20	4,258.26	IRWD Check	Reconciled
413838	ORANGE COUNTY SHERIFF'S OFFICE	3-Dec-20	36.62	IRWD Check	Reconciled
413839	ORANGE LINE OIL COMPANY	3-Dec-20	2,463.96	IRWD Check	Reconciled
413840	PACIFIC COAST BOLT CORP	3-Dec-20	5,353.00	IRWD Check	Reconciled
413841	PACIFIC PARTS & CONTROLS INC	3-Dec-20	9,389.24	IRWD Check	Reconciled
413842	PACIFIC RESOURCE RECOVERY	3-Dec-20	3,026.97	IRWD Check	Reconciled
413843	PACIFIC STAR CHEMICAL, LLC	3-Dec-20	3,993.52	IRWD Check	Reconciled
413844	PARKHOUSE TIRE INC	3-Dec-20	2,435.48	IRWD Check	Reconciled
413845	PAYNE, MICHELLE	3-Dec-20	592.56	IRWD Check	Reconciled
413846	PERKINELMER HEALTH SCIENCES INC	3-Dec-20	500.67	IRWD Check	Reconciled
413847	PERS LONG TERM CARE	3-Dec-20	538.89	IRWD Check	Reconciled
413848	PETTY, CHRISTINE	3-Dec-20	700.73	IRWD Check	Reconciled
413849	PINNACLE TOWERS LLC	3-Dec-20	779.18	IRWD Check	Reconciled
413850	PLUMBERS DEPOT INC.	3-Dec-20	12,645.15	IRWD Check	Reconciled
413851	POON, ELIZABETH	3-Dec-20	66.22	IRWD Check	Reconciled
413852	PRAXAIR DISTRIBUTION INC	3-Dec-20	1,674.51	IRWD Check	Reconciled
413853	PRE-PAID LEGAL SERVICES, INC.	3-Dec-20	1,056.45	IRWD Check	Reconciled
413854	PRUDENTIAL OVERALL SUPPLY	3-Dec-20	8,223.70	IRWD Check	Reconciled
413855	PTI SAND & GRAVEL INC	3-Dec-20	1,302.43	IRWD Check	Reconciled
413856	QUADIENT FINANCE USA, INC.	3-Dec-20	2,000.00	IRWD Check	Reconciled
413857	R&B AUTOMATION, INC.	3-Dec-20	5,461.53	IRWD Check	Reconciled
413858	R.F. MACDONALD CO.	3-Dec-20	800.00	IRWD Check	Reconciled
413859	R.J. NOBLE COMPANY	3-Dec-20	94,699.50	IRWD Check	Reconciled
413861	RAM AIR ENGINEERING INC	3-Dec-20	578.14	IRWD Check	Reconciled
413862	RED WING SHOE STORE	3-Dec-20	352.39	IRWD Check	Reconciled
413863	REFRIGERATION SUPPLIES DISTRIBUTOR	3-Dec-20	174.72	IRWD Check	Reconciled
413864	ROSS, LAUREN	3-Dec-20	5.19	IRWD Check	Reconciled
413865	SAFECHECKS	3-Dec-20	2,580.70	IRWD Check	Reconciled
413866	SANTA MARGARITA FORD	3-Dec-20	1,352.94	IRWD Check	Reconciled
413867	SANTIAGO AQUEDUCT COMMISSION	3-Dec-20	3,118.02	IRWD Check	Reconciled
413868	SCHINDLER ELEVATOR CORPORATION	3-Dec-20	229.11	IRWD Check	Reconciled
413869	SCHWEDA, PETER	3-Dec-20	38.60	IRWD Check	Negotiable
413870	SCHWEITZER ENGINEERING LABORATORIES, INC.	3-Dec-20	4,016.92	IRWD Check	Reconciled
413871	SERVERSUPPLY.COM INC	3-Dec-20	912.34	IRWD Check	Reconciled
413872	SHADY CANYON INVESTORS, LLC	3-Dec-20	935.33	IRWD Check	Reconciled
413873	SHAMROCK SUPPLY CO INC	3-Dec-20	1,400.01	IRWD Check	Reconciled
413874	SI TESTING	3-Dec-20	7,400.00	IRWD Check	Negotiable
413875	SITEONE LANDSCAPE SUPPLY, LLC	3-Dec-20	460.03	IRWD Check	Reconciled
413876	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	3-Dec-20	4,967.47	IRWD Check	Reconciled
413878	SOUTHERN CALIFORNIA EDISON COMPANY	3-Dec-20	329,614.02	IRWD Check	Reconciled
413879	SOUTHERN COUNTIES LUBRICANTS LLC	3-Dec-20	5,288.95	IRWD Check	Reconciled
413880	SOUTHWEST VALVE & EQUIPMENT INC	3-Dec-20	3,977.33	IRWD Check	Reconciled

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CHECK OR ELECTRONIC #	SUPPLIERS	PAYMENT DATE	PAYMENT AMOUNT	PAYMENT METHOD	Status
413881	SPECTRUM CONSTRUCTION GROUP, INC.	3-Dec-20	1,283.00	IRWD Check	Reconciled
413882	SS MECHANICAL CONSTRUCTION CORP	3-Dec-20	29,500.00	IRWD Check	Reconciled
413883	STANTEC CONSULTING SERVICES INC.	3-Dec-20	3,102.75	IRWD Check	Reconciled
413884	STATE WATER RESOURCES CONTROL BOARD	3-Dec-20	6,604.50	IRWD Check	Reconciled
413885	STERIS CORPORATION	3-Dec-20	271.24	IRWD Check	Reconciled
413886	STETSON ENGINEERS INC.	3-Dec-20	1,561.50	IRWD Check	Reconciled
413887	STRADLING YOCCA CARLSON & RAUTH	3-Dec-20	1,462.00	IRWD Check	Reconciled
413888	SUEZ TREATMENT SOLUTIONS INC.	3-Dec-20	8,926.85	IRWD Check	Reconciled
413889	SUN-STAR ELECTRIC, INC.	3-Dec-20	12,114.16	IRWD Check	Reconciled
413890	SWAINS ELECTRIC MOTOR SERVICE	3-Dec-20	31,243.28	IRWD Check	Negotiable
413891	TANG, ZHESU	3-Dec-20	22.15	IRWD Check	Reconciled
413892	TANKVISIONS, INC	3-Dec-20	30.00	IRWD Check	Reconciled
413893	TED JONES FORD, INC.	3-Dec-20	50,090.95	IRWD Check	Reconciled
413894	TETRA TECH, INC	3-Dec-20	52,235.00	IRWD Check	Reconciled
413895	TEVORA BUSINESS SOLUTIONS, INC.	3-Dec-20	2,395.00	IRWD Check	Negotiable
413896	THE ADT SECURITY CORPORATION	3-Dec-20	800.00	IRWD Check	Reconciled
413897	THE SHERWIN WILLIAMS COMPANY	3-Dec-20	2,947.18	IRWD Check	Reconciled
413898	THOMPSON INDUSTRIAL SUPPLY	3-Dec-20	15,252.46	IRWD Check	Reconciled
413899	THYSSENKRUPP ELEVATOR CORPORATION	3-Dec-20	204.73	IRWD Check	Reconciled
413900	TIC-HYATT	3-Dec-20	12,225.82	IRWD Check	Reconciled
413901	TIC-IPG-COMMON	3-Dec-20	614.40	IRWD Check	Reconciled
413902	TIC-OFFICE PROPERTIES	3-Dec-20	2,184.95	IRWD Check	Reconciled
413903	TIC-RETAIL PROPERTIES	3-Dec-20	17,975.14	IRWD Check	Reconciled
413904	TOTAL RESOURCE MANAGEMENT, INC	3-Dec-20	9,440.00	IRWD Check	Reconciled
413905	TROPICAL PLAZA NURSERY INC	3-Dec-20	2,456.14	IRWD Check	Reconciled
413906	TRUCPARCO	3-Dec-20	51.70	IRWD Check	Reconciled
413907	UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA	3-Dec-20	2,338.10	IRWD Check	Reconciled
413908	UNITED PARCEL SERVICE INC	3-Dec-20	147.98	IRWD Check	Reconciled
413909	UNITED SITE SERVICES OF CALIFORNIA INC	3-Dec-20	835.67	IRWD Check	Reconciled
413910	US BANK NAT'L ASSOCIATION NORTH DAKOTA	3-Dec-20	38,090.46	IRWD Check	Reconciled
413911	VAUGHAN'S INDUSTRIAL REPAIR CO INC	3-Dec-20	7,309.09	IRWD Check	Reconciled
413912	VERIZON WIRELESS SERVICES LLC	3-Dec-20	21,518.72	IRWD Check	Reconciled
413913	VLAGEA, LARRY	3-Dec-20	381.82	IRWD Check	Reconciled
413914	VOYTKO MECHANICAL, INC.	3-Dec-20	6,172.28	IRWD Check	Reconciled
413915	VWR INTERNATIONAL, LLC	3-Dec-20	2,261.46	IRWD Check	Reconciled
413916	WALTERS WHOLESALE ELECTRIC	3-Dec-20	3,237.26	IRWD Check	Reconciled
413917	WANG, ZHAOHONG	3-Dec-20	47.27	IRWD Check	Reconciled
413918	WASTE MANAGEMENT COLLECTIONS AND RECYCLING, INC.	3-Dec-20	3,118.58	IRWD Check	Reconciled
413919	WATER MANAGEMENT GROUP	3-Dec-20	657.00	IRWD Check	Reconciled
413920	WATERLINE TECHNOLOGIES INC	3-Dec-20	3,400.00	IRWD Check	Reconciled
413921	WATERSMART SOFTWARE INC	3-Dec-20	13,547.22	IRWD Check	Reconciled
413922	WAXIE'S ENTERPRISES, INC	3-Dec-20	2,398.31	IRWD Check	Reconciled
413923	WEST COAST SAFETY SUPPLY INC	3-Dec-20	9,952.23	IRWD Check	Reconciled
413924	WESTAMERICA COMMUNICATIONS, INC.	3-Dec-20	600.00	IRWD Check	Reconciled
413925	WILLIAMSON, MONT	3-Dec-20	53.10	IRWD Check	Reconciled
413926	WIN-911 SOFTWARE	3-Dec-20	7,500.00	IRWD Check	Reconciled
413927	WORKFORCE SAFETY LLC	3-Dec-20	3,000.00	IRWD Check	Reconciled
413928	YANG, JIE	3-Dec-20	49.27	IRWD Check	Negotiable
413929	YORKE ENGINEERING, LLC	3-Dec-20	847.00	IRWD Check	Reconciled
413930	ZANDPOUR, AFSHIN	3-Dec-20	246.72	IRWD Check	Reconciled
413931	ZEBRON CONTRACTING INC	3-Dec-20	20,840.00	IRWD Check	Reconciled
413932	ZHOU, HUASSAN	3-Dec-20	70.29	IRWD Check	Negotiable
413933	AFLAC	3-Dec-20	6,745.20	IRWD Check	Reconciled
413934	Cho, Harry K (Harry)	10-Dec-20	294.00	IRWD Check	Reconciled
413935	Corey, Jo Ann K (Jo Ann)	10-Dec-20	122.80	IRWD Check	Reconciled
413936	Guzman, Juan (Juan)	10-Dec-20	40.88	IRWD Check	Reconciled
413937	Nicholson, Darin	10-Dec-20	192.00	IRWD Check	Reconciled

**IRVINE RANCH WATER DISTRICT
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CHECK OR ELECTRONIC #	SUPPLIERS	PAYMENT DATE	PAYMENT AMOUNT	PAYMENT METHOD	Status
413938	Saldana Rodriguez, Cristina	10-Dec-20	125.00	IRWD Check	Reconciled
413939	Sosa, Ives (Ives)	10-Dec-20	200.00	IRWD Check	Reconciled
413940	ABM INDUSTRY GROUPS, LLC	10-Dec-20	37,110.81	IRWD Check	Reconciled
413941	ABSOLUTE STANDARDS, INC.	10-Dec-20	227.50	IRWD Check	Reconciled
413942	ADAM'S FALCONRY SERVICE, LLC	10-Dec-20	1,820.00	IRWD Check	Reconciled
413943	AIRGAS, INC.	10-Dec-20	1,646.94	IRWD Check	Reconciled
413944	AMAZON CAPITAL SERVICES, INC.	10-Dec-20	337.74	IRWD Check	Reconciled
413945	AMETEK BROOKFIELD	10-Dec-20	275.67	IRWD Check	Reconciled
413946	ANDERSON, JO ANN	10-Dec-20	25.05	IRWD Check	Negotiable
413947	APD CONSULTANTS, INC.	10-Dec-20	10,400.00	IRWD Check	Reconciled
413948	APEX SYSTEMS, LLC	10-Dec-20	8,554.00	IRWD Check	Reconciled
413949	ARB, INC.	10-Dec-20	1,379.89	IRWD Check	Reconciled
413950	ARCADIS U.S., INC.	10-Dec-20	18,519.50	IRWD Check	Reconciled
413951	ASSOCIATION OF CALIFORNIA WATER AGENCIES/JPIA	10-Dec-20	38,338.65	IRWD Check	Reconciled
413952	ASSOCIATION OF CALIFORNIA WATER AGENCIES/JPIA	10-Dec-20	817.58	IRWD Check	Reconciled
413953	AT&T	10-Dec-20	4,839.49	IRWD Check	Reconciled
413954	AUTOZONE PARTS, INC.	10-Dec-20	178.28	IRWD Check	Reconciled
413955	BAKER, JASON	10-Dec-20	98.82	IRWD Check	Reconciled
413956	BATTERY SYSTEMS INC	10-Dec-20	2,560.27	IRWD Check	Reconciled
413957	BEST DRILLING AND PUMP, INC.	10-Dec-20	135,388.97	IRWD Check	Reconciled
413958	BGI HOLDINGS I LLC	10-Dec-20	45.23	IRWD Check	Negotiable
413959	BIGWIG MONSTER, LLC	10-Dec-20	150.00	IRWD Check	Negotiable
413960	BLACKMAN, MELINDA	10-Dec-20	20.58	IRWD Check	Reconciled
413961	BLAIRS TOWING INC	10-Dec-20	125.00	IRWD Check	Reconciled
413962	BLOOMBERG FINANCE LP	10-Dec-20	13,305.00	IRWD Check	Reconciled
413963	BRENNTAG PACIFIC INC	10-Dec-20	1,449.16	IRWD Check	Reconciled
413964	BROWN, CEDRIC	10-Dec-20	42.86	IRWD Check	Negotiable
413965	BROWN, COREY	10-Dec-20	42.45	IRWD Check	Reconciled
413966	BSI SERVICES AND SOLUTIONS (WEST) INC.	10-Dec-20	25,834.17	IRWD Check	Reconciled
413967	BUCK, JENNIFER	10-Dec-20	37.51	IRWD Check	Reconciled
413968	C WELLS PIPELINE MATERIALS INC	10-Dec-20	14,019.55	IRWD Check	Reconciled
413969	CAI, JIANYING	10-Dec-20	42.26	IRWD Check	Negotiable
413970	CALIFORNIA BARRICADE RENTAL, INC.	10-Dec-20	23,796.39	IRWD Check	Reconciled
413971	CALIFORNIA DEPARTMENT OF TAX AND FEE ADMINISTRATION	10-Dec-20	1,336.05	IRWD Check	Reconciled
413972	CAPTIVE AUDIENCE MARKETING INC.	10-Dec-20	79.00	IRWD Check	Reconciled
413973	CHARLES P CROWLEY COMPANY INC	10-Dec-20	1,377.48	IRWD Check	Reconciled
413974	CHUN, SEAN	10-Dec-20	51.52	IRWD Check	Reconciled
413975	CITY OF IRVINE	10-Dec-20	6,689.70	IRWD Check	Reconciled
413976	CLA-VAL COMPANY	10-Dec-20	2,628.67	IRWD Check	Reconciled
413977	CLARIS STRATEGY INC.	10-Dec-20	6,150.00	IRWD Check	Reconciled
413978	CLEAN ENERGY	10-Dec-20	3,482.63	IRWD Check	Reconciled
413979	CLIFFORD MORIYAMA	10-Dec-20	4,000.00	IRWD Check	Reconciled
413980	COLUMBIA COURT APTS	10-Dec-20	20.66	IRWD Check	Reconciled
413981	CONSOLIDATED ELECTRICAL DISTRIBUTORS, INC	10-Dec-20	1,486.95	IRWD Check	Reconciled
413982	CONSOLIDATED ELECTRICAL DISTRIBUTORS, INC	10-Dec-20	4,582.07	IRWD Check	Reconciled
413983	CONSTELLATION NEWENERGY, INC.	10-Dec-20	69,986.11	IRWD Check	Reconciled
413984	COOMBS SERVICE GROUP	10-Dec-20	48,700.00	IRWD Check	Reconciled
413985	COX COMMUNICATIONS, INC.	10-Dec-20	270.88	IRWD Check	Reconciled
413986	CR & R INCORPORATED	10-Dec-20	428.34	IRWD Check	Reconciled
413987	CRANE, SUZANNE	10-Dec-20	34.31	IRWD Check	Reconciled
413988	CULLIGAN OF SANTA ANA	10-Dec-20	21,000.00	IRWD Check	Reconciled
413989	D & G SIGNS	10-Dec-20	1,323.17	IRWD Check	Reconciled
413990	D & H WATER SYSTEMS INC.	10-Dec-20	7,325.88	IRWD Check	Reconciled
413991	DAROYA, JOSELA	10-Dec-20	47.57	IRWD Check	Reconciled
413992	DAVIS FARR LLP	10-Dec-20	5,000.00	IRWD Check	Reconciled
413993	DEMARIA ELECTRIC MOTOR SERVICES, INC.	10-Dec-20	3,099.67	IRWD Check	Reconciled
413994	EHS INTERNATIONAL, INC	10-Dec-20	550.00	IRWD Check	Reconciled

**IRVINE RANCH WATER DISTRICT
AP DISBURSEMENTS AND VOIDS FOR DECEMBER 2020**

CHECK OR ELECTRONIC #	SUPPLIERS	PAYMENT DATE	PAYMENT AMOUNT	PAYMENT METHOD	Status
413996	ENVIRONMENTAL RESOURCE ASSOCIATES	10-Dec-20	487.67	IRWD Check	Reconciled
413997	ENVIRONMENTAL SCIENCE ASSOCIATES	10-Dec-20	820.22	IRWD Check	Reconciled
413998	ESCOBAR, DAVID	10-Dec-20	51.48	IRWD Check	Reconciled
413999	ESRI	10-Dec-20	31,400.00	IRWD Check	Reconciled
414000	ESTRADA, LEANDRO	10-Dec-20	81.17	IRWD Check	Negotiable
414001	EVOLVE PARTNERS LLC	10-Dec-20	59,081.20	IRWD Check	Negotiable
414002	FASTBLUE COMMUNICATIONS INC.	10-Dec-20	1,917.00	IRWD Check	Reconciled
414003	FIRST CHOICE SERVICES	10-Dec-20	709.86	IRWD Check	Reconciled
414004	FISHER SCIENTIFIC COMPANY LLC	10-Dec-20	22,908.44	IRWD Check	Reconciled
414005	FLEET SOLUTIONS LLC	10-Dec-20	5,853.12	IRWD Check	Reconciled
414006	FOSTER, BEATRICE	10-Dec-20	263.86	IRWD Check	Reconciled
414007	FUNG, VIVIEN	10-Dec-20	15.09	IRWD Check	Reconciled
414008	GENUINE PROPERTY MANAGEMENT	10-Dec-20	55.19	IRWD Check	Reconciled
414009	GHASSEMI, BAHRAM	10-Dec-20	45.72	IRWD Check	Negotiable
414010	GRAINGER	10-Dec-20	4,133.34	IRWD Check	Reconciled
414011	GSRP ST SOLAR I LLC	10-Dec-20	22,749.15	IRWD Check	Reconciled
414012	GUO, CHENJIA	10-Dec-20	39.03	IRWD Check	Reconciled
414013	GUO, JINGJING	10-Dec-20	56.98	IRWD Check	Reconciled
414014	HAAKER EQUIPMENT COMPANY	10-Dec-20	988.07	IRWD Check	Reconciled
414015	HABITAT RESTORATION SCIENCES, INC.	10-Dec-20	1,183.00	IRWD Check	Reconciled
414016	HACH COMPANY	10-Dec-20	839.06	IRWD Check	Reconciled
414017	HARRINGTON INDUSTRIAL PLASTICS LLC	10-Dec-20	6,897.25	IRWD Check	Reconciled
414018	HATHAWAY DINWIDDIE	10-Dec-20	3,365.67	IRWD Check	Reconciled
414019	HCM PROP MANAGEMENT C/O TOUCAN TRUST	10-Dec-20	56.82	IRWD Check	Negotiable
414020	HDR ENGINEERING INC	10-Dec-20	39,879.75	IRWD Check	Reconciled
414021	HEIMERL, ROBERT	10-Dec-20	89.66	IRWD Check	Reconciled
414022	HELLER, THERESA	10-Dec-20	248.29	IRWD Check	Reconciled
414023	HELPMATES STAFFING SERVICES	10-Dec-20	16,453.55	IRWD Check	Reconciled
414024	HILL BROTHERS CHEMICAL COMPANY	10-Dec-20	10,551.99	IRWD Check	Reconciled
414025	HOLLE, GENE	10-Dec-20	75.45	IRWD Check	Negotiable
414026	HOME DEPOT USA INC	10-Dec-20	1,176.55	IRWD Check	Reconciled
414027	HOWDEN USA COMPANY	10-Dec-20	20,760.03	IRWD Check	Reconciled
414028	HUMANA INSURANCE COMPANY	10-Dec-20	56.60	IRWD Check	Reconciled
414029	HUYNH, VAN	10-Dec-20	44.40	IRWD Check	Negotiable
414030	INDUSTRIAL NETWORKING SOLUTIONS	10-Dec-20	3,516.47	IRWD Check	Reconciled
414031	INNOVATIVE CONSTRUCTION SOLUTIONS	10-Dec-20	1,564.87	IRWD Check	Reconciled
414032	INTEGRITY MUNICIPAL SERVICES LLC	10-Dec-20	2,500.00	IRWD Check	Reconciled
414033	IRON MOUNTAIN INFORMATION MANAGEMENT INC	10-Dec-20	657.02	IRWD Check	Reconciled
414034	IRONCLAD GENERAL ENGINEERING INC	10-Dec-20	1,522.67	IRWD Check	Reconciled
414035	IRVINE PACIFIC	10-Dec-20	576.70	IRWD Check	Reconciled
414036	IRVINE PIPE & SUPPLY INC	10-Dec-20	1,196.80	IRWD Check	Reconciled
414037	IRVINE UNIFIED SCHOOL DISTRICT	10-Dec-20	1,600.33	IRWD Check	Reconciled
414038	IRWD-PETTY CASH CUSTODIAN	10-Dec-20	448.64	IRWD Check	Reconciled
414039	J-SQUARED GENERAL CONTRACTORS INC.	10-Dec-20	993.79	IRWD Check	Negotiable
414040	JACOBS ENGINEERING GROUP INC.	10-Dec-20	30,767.23	IRWD Check	Reconciled
414041	JIG CONSULTANTS	10-Dec-20	11,225.00	IRWD Check	Negotiable
414042	JOHN MICHAEL COVAS	10-Dec-20	210.20	IRWD Check	Reconciled
414043	JONATHAN CHANG AND ESTHER KANG	10-Dec-20	165.56	IRWD Check	Negotiable
414044	KAN VENTURES, INC	10-Dec-20	6,500.00	IRWD Check	Reconciled
414045	KASA CONSTRUCTION	10-Dec-20	1,610.67	IRWD Check	Negotiable
414046	KENT DAHLBERG	10-Dec-20	34,833.12	IRWD Check	Reconciled
414047	KIM, HENRY	10-Dec-20	61.00	IRWD Check	Reconciled
414048	KIM, JAMES	10-Dec-20	55.36	IRWD Check	Reconciled
414049	KONECRANES INC	10-Dec-20	1,920.00	IRWD Check	Reconciled
414050	KORTMAN, BRADLEY	10-Dec-20	162.65	IRWD Check	Reconciled
414051	KUO, WEIYU	10-Dec-20	38.81	IRWD Check	Reconciled
414052	LA HABRA FENCE COMPANY INC	10-Dec-20	9,956.00	IRWD Check	Reconciled

**IRVINE RANCH WATER DISTRICT
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CHECK OR ELECTRONIC #	SUPPLIERS	PAYMENT DATE	PAYMENT AMOUNT	PAYMENT METHOD	Status
414053	LAGUNA BEACH COUNTY WATER DISTRICT	10-Dec-20	4,462.75	IRWD Check	Reconciled
414054	LANDCARE HOLDINGS, INC.	10-Dec-20	56,870.56	IRWD Check	Reconciled
414055	LAU, YITING	10-Dec-20	614.08	IRWD Check	Negotiable
414056	LE, ANTHONY	10-Dec-20	52.39	IRWD Check	Negotiable
414057	LEE & RO, INC.	10-Dec-20	1,021.00	IRWD Check	Reconciled
414058	LENNAR HOMES	10-Dec-20	1,134.16	IRWD Check	Reconciled
414059	LENNAR HOMES OF CALIFORNIA	10-Dec-20	5,200.00	IRWD Check	Reconciled
414060	LINDSAY POLIC CONSULTING, INC.	10-Dec-20	6,600.00	IRWD Check	Reconciled
414061	LS-OC PORTOLA, LLC	10-Dec-20	1,188.54	IRWD Check	Negotiable
414062	LSA ASSOCIATES INC	10-Dec-20	8,354.41	IRWD Check	Reconciled
414063	LU, HARRISON	10-Dec-20	67.48	IRWD Check	Reconciled
414064	MARK KADESH	10-Dec-20	10,000.00	IRWD Check	Reconciled
414065	MARK THOMAS & COMPANY, INC.	10-Dec-20	1,944.50	IRWD Check	Reconciled
414066	MBF CONSULTING, INC.	10-Dec-20	14,750.00	IRWD Check	Reconciled
414067	MC FADDEN-DALE INDUSTRIAL	10-Dec-20	12.78	IRWD Check	Reconciled
414068	MC MASTER CARR SUPPLY CO	10-Dec-20	509.87	IRWD Check	Reconciled
414069	MCDONOUGH, BRIAN	10-Dec-20	991.27	IRWD Check	Reconciled
414070	MCDOWELL, SEAN	10-Dec-20	35.24	IRWD Check	Negotiable
414071	MERRIMAC PETROLEUM, INC.	10-Dec-20	30,573.41	IRWD Check	Reconciled
414072	MIZUTANI, MASAHIRO	10-Dec-20	44.39	IRWD Check	Reconciled
414073	NATIONAL READY MIXED CONCRETE SALES, LLC	10-Dec-20	1,262.22	IRWD Check	Reconciled
414074	NEGOV	10-Dec-20	10,572.44	IRWD Check	Reconciled
414075	NEWPORT REAL ESTATE SERVICES, INC.	10-Dec-20	9,500.00	IRWD Check	Reconciled
414076	NEWTON, JOHN	10-Dec-20	23.98	IRWD Check	Negotiable
414077	NMG GEOTECHNICAL INC	10-Dec-20	19,764.00	IRWD Check	Reconciled
414078	O.C. SUPERIOR CUSTOM CLEANING	10-Dec-20	3,600.00	IRWD Check	Reconciled
414079	OKADA, HIDETOSHI	10-Dec-20	17.39	IRWD Check	Reconciled
414080	OLDENKAMP, RON	10-Dec-20	44.76	IRWD Check	Reconciled
414081	OLIN CORPORATION	10-Dec-20	9,997.01	IRWD Check	Reconciled
414082	ONESOURCE DISTRIBUTORS LLC	10-Dec-20	280.10	IRWD Check	Reconciled
414083	ORACLE AMERICA, INC.	10-Dec-20	225,559.39	IRWD Check	Reconciled
414084	ORANGE COUNTY MOSQUITO AND VECTOR CONTROL DISTRICT	10-Dec-20	93.92	IRWD Check	Reconciled
414085	ORANGE COUNTY WATER ASSOCIATION	10-Dec-20	300.00	IRWD Check	Reconciled
414086	ORIGIN CONSULTING LLC	10-Dec-20	21,977.00	IRWD Check	Reconciled
414087	PACIFIC CITY PROPERTIES	10-Dec-20	57.27	IRWD Check	Reconciled
414088	PACIFIC PARTS & CONTROLS INC	10-Dec-20	1,081.08	IRWD Check	Reconciled
414089	PAPER DEPOT DOCUMENT DESTRUCTION LLC	10-Dec-20	296.00	IRWD Check	Reconciled
414090	PARKHOUSE TIRE INC	10-Dec-20	2,623.62	IRWD Check	Reconciled
414091	PATTEN SYSTEMS, INC.	10-Dec-20	6,840.15	IRWD Check	Negotiable
414092	PAULUS ENGINEERING INC	10-Dec-20	95,368.12	IRWD Check	Reconciled
414093	PAULUS ENGINEERING, INC.	10-Dec-20	158,366.44	IRWD Check	Reconciled
414094	PAVEMENT COATINGS CO	10-Dec-20	1,873.32	IRWD Check	Negotiable
414095	PAYNE & FEARS LLP	10-Dec-20	3,569.50	IRWD Check	Reconciled
414096	PAYNE, HEATHER	10-Dec-20	1,137.94	IRWD Check	Negotiable
414097	PEOPLES, SHANNON	10-Dec-20	85.16	IRWD Check	Reconciled
414099	POURTEMOUR, RENEE	10-Dec-20	44.42	IRWD Check	Negotiable
414100	PRAXAIR DISTRIBUTION INC	10-Dec-20	1,184.98	IRWD Check	Reconciled
414101	PRICE, LYNDA	10-Dec-20	27.56	IRWD Check	Reconciled
414102	PROCARE WORK INJURY CENTER	10-Dec-20	6,008.14	IRWD Check	Reconciled
414103	PYRO-COMM SYSTEMS INC	10-Dec-20	920.00	IRWD Check	Reconciled
414104	RAMOS, OSVALDO	10-Dec-20	40.96	IRWD Check	Reconciled
414105	RANGAN, DEEPA	10-Dec-20	71.09	IRWD Check	Reconciled
414106	RCE CONSULTANTS, INC.	10-Dec-20	213.75	IRWD Check	Reconciled
414107	REACH EMPLOYEE ASSISTANCE INC	10-Dec-20	1,100.40	IRWD Check	Reconciled
414108	RED WING SHOE STORE	10-Dec-20	150.30	IRWD Check	Reconciled
414109	REED, CHRISTINA	10-Dec-20	106.15	IRWD Check	Reconciled
414110	RELIANCE STANDARD LIFE INSURANCE COMPANY	10-Dec-20	31,057.95	IRWD Check	Reconciled

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414111	RESTEK CORPORATION	10-Dec-20	174.57	IRWD Check	Reconciled
414112	REZAI, RUSTEEN	10-Dec-20	24.48	IRWD Check	Negotiable
414113	RICHARD C. SLADE & ASSOCIATES LLC	10-Dec-20	3,649.95	IRWD Check	Reconciled
414114	RINCON TRUCK CENTER INC.	10-Dec-20	590.84	IRWD Check	Reconciled
414115	RLG ENTERPRISES, INC	10-Dec-20	270.52	IRWD Check	Reconciled
414116	ROGER LEE & SHIRLEY LEE	10-Dec-20	225.64	IRWD Check	Reconciled
414117	ROSEMOUNT INC.	10-Dec-20	20,879.32	IRWD Check	Reconciled
414118	RYAN, ELIZABETH	10-Dec-20	55.07	IRWD Check	Reconciled
414119	SAN LEON APTS	10-Dec-20	53.46	IRWD Check	Reconciled
414120	SANTA ANA BLUE PRINT	10-Dec-20	107.75	IRWD Check	Reconciled
414121	SANTA MARGARITA FORD	10-Dec-20	44.95	IRWD Check	Reconciled
414122	SHAMROCK SUPPLY CO INC	10-Dec-20	381.19	IRWD Check	Reconciled
414123	SHOZI, DEAN	10-Dec-20	107.09	IRWD Check	Negotiable
414124	SHRECK, CRYSTAL	10-Dec-20	73.16	IRWD Check	Negotiable
414125	SHUM, LING WAI	10-Dec-20	15.80	IRWD Check	Reconciled
414126	SIEROTA, STEPHANIE	10-Dec-20	348.71	IRWD Check	Reconciled
414127	SOFTWAREONE INC	10-Dec-20	168,539.85	IRWD Check	Reconciled
414128	SOUTHERN CALIFORNIA EDISON COMPANY	10-Dec-20	357,107.99	IRWD Check	Reconciled
414129	SOUTHERN CALIFORNIA EDISON COMPANY	10-Dec-20	1,973.06	IRWD Check	Reconciled
414131	SOUTHERN CALIFORNIA GAS COMPANY	10-Dec-20	4,036.96	IRWD Check	Reconciled
414132	SOUTHERN CONTRACTING COMPANY	10-Dec-20	245,201.09	IRWD Check	Reconciled
414133	SOUTHLAND WATER TECHNOLOGIES LLC	10-Dec-20	5,701.07	IRWD Check	Reconciled
414134	SOUTHWEST VALVE & EQUIPMENT INC	10-Dec-20	1,011.14	IRWD Check	Reconciled
414135	SPARKLETTS	10-Dec-20	191.86	IRWD Check	Reconciled
414136	STACY DAN SCOTT	10-Dec-20	36,232.00	IRWD Check	Reconciled
414137	STANFORD COURT APARTMENTS	10-Dec-20	15.66	IRWD Check	Reconciled
414138	STATE NET	10-Dec-20	2,520.00	IRWD Check	Reconciled
414139	STETSON ENGINEERS INC.	10-Dec-20	6,300.00	IRWD Check	Reconciled
414140	SUSAN A. SIROTA	10-Dec-20	4,660.00	IRWD Check	Reconciled
414141	SUSANTO, FRANCISCO	10-Dec-20	147.87	IRWD Check	Reconciled
414142	TALIB, ZUBAIR	10-Dec-20	1,166.76	IRWD Check	Reconciled
414143	TASSIN SCIENTIFIC SERVICES, LLC.	10-Dec-20	1,221.69	IRWD Check	Reconciled
414144	TETRA TECH, INC	10-Dec-20	1,601.25	IRWD Check	Reconciled
414145	THOMAS, CHRIS	10-Dec-20	230.24	IRWD Check	Reconciled
414146	TIC-RETAIL PROPERTIES	10-Dec-20	2,009.96	IRWD Check	Reconciled
414147	TIM MORGAN AND VERONICA MORGAN	10-Dec-20	42.00	IRWD Check	Reconciled
414148	TOLL BROS., INC.	10-Dec-20	54.40	IRWD Check	Reconciled
414149	TOUSEY, STEVEN	10-Dec-20	34.98	IRWD Check	Reconciled
414150	TRAN, LESLEY	10-Dec-20	33.44	IRWD Check	Reconciled
414151	TROPICAL PLAZA NURSERY INC	10-Dec-20	69,126.00	IRWD Check	Reconciled
414152	TROYER, DONALD	10-Dec-20	65.52	IRWD Check	Negotiable
414153	TSOU, ALSION	10-Dec-20	37.25	IRWD Check	Reconciled
414154	U.S. GAIN - A DIVISION OF U.S. VENTURE, INC.	10-Dec-20	523.90	IRWD Check	Reconciled
414155	UNITED HEALTHCARE INSURANCE COMPANY	10-Dec-20	299.75	IRWD Check	Reconciled
414156	UNITED PARCEL SERVICE INC	10-Dec-20	56.29	IRWD Check	Reconciled
414157	URIBE, FEDERICO	10-Dec-20	162.44	IRWD Check	Negotiable
414158	UTILITY CRANE & EQUIPMENT, INC.	10-Dec-20	104,548.74	IRWD Check	Reconciled
414159	V&A CONSULTING ENGINEERS	10-Dec-20	5,589.25	IRWD Check	Reconciled
414160	VANGUNDY, JEFF	10-Dec-20	52.84	IRWD Check	Reconciled
414161	VOGELFANGER, ELLIOT	10-Dec-20	1,498.37	IRWD Check	Reconciled
414162	VWR INTERNATIONAL, LLC	10-Dec-20	611.68	IRWD Check	Reconciled
414163	WALSH, RICHARD	10-Dec-20	37.67	IRWD Check	Negotiable
414164	WANG, JIE	10-Dec-20	29.54	IRWD Check	Negotiable
414165	WASTE MANAGEMENT COLLECTIONS AND RECYCLING, INC.	10-Dec-20	2,648.98	IRWD Check	Reconciled
414166	WAXIE'S ENTERPRISES, INC	10-Dec-20	939.18	IRWD Check	Reconciled
414167	WEST COAST SAFETY SUPPLY INC	10-Dec-20	1,631.77	IRWD Check	Reconciled
414168	WEST YOST & ASSOCIATES	10-Dec-20	2,379.50	IRWD Check	Reconciled

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414169	WEST, SUSAN	10-Dec-20	82.10	IRWD Check	Reconciled
414170	WESTAMERICA COMMUNICATIONS, INC.	10-Dec-20	600.00	IRWD Check	Reconciled
414171	WESTERN AV	10-Dec-20	2,862.92	IRWD Check	Reconciled
414172	WU, CHRISTINA	10-Dec-20	39.51	IRWD Check	Reconciled
414173	XU, BANG	10-Dec-20	79.93	IRWD Check	Negotiable
414174	XU, KAIQING	10-Dec-20	20.32	IRWD Check	Reconciled
414175	YAN, ZUJI E	10-Dec-20	30.28	IRWD Check	Reconciled
414176	YE, HENG	10-Dec-20	37.42	IRWD Check	Reconciled
414177	ZUNIGA, BRANDON	10-Dec-20	75.07	IRWD Check	Negotiable
414178	Bertsch, Frederick J (Jeff)	17-Dec-20	62.66	IRWD Check	Reconciled
414179	Dowling, James K Jr (James)	17-Dec-20	50.50	IRWD Check	Reconciled
414180	Fournier, Tanja L (Tanja)	17-Dec-20	280.77	IRWD Check	Reconciled
414181	Habiger, Steve Jr (Steve)	17-Dec-20	319.53	IRWD Check	Reconciled
414182	Moeder, Jacob J (Jacob)	17-Dec-20	300.00	IRWD Check	Reconciled
414183	Mwe, Nang	17-Dec-20	192.00	IRWD Check	Reconciled
414184	Shinbashi, Allen	17-Dec-20	650.04	IRWD Check	Reconciled
414185	A&Y ASPHALT CONTRACTORS, INC.	17-Dec-20	43,627.00	IRWD Check	Reconciled
414186	AAF INTERNATIONAL	17-Dec-20	990.60	IRWD Check	Reconciled
414187	ACCUSOURCE, INC.	17-Dec-20	461.48	IRWD Check	Reconciled
414188	ADS LLC	17-Dec-20	2,250.00	IRWD Check	Reconciled
414189	ALEXANDER'S CONTRACT SERVICES, INC.	17-Dec-20	125,340.00	IRWD Check	Reconciled
414190	ALSTON & BIRD LLP	17-Dec-20	962,338.77	IRWD Check	Reconciled
414191	ALTERMAN, DENISE	17-Dec-20	26.97	IRWD Check	Reconciled
414192	AMAZON CAPITAL SERVICES, INC.	17-Dec-20	1,948.55	IRWD Check	Reconciled
414193	ANDERSONPENNA PARTNERS, INC.	17-Dec-20	58,351.00	IRWD Check	Reconciled
414194	APEX SYSTEMS, LLC	17-Dec-20	9,087.00	IRWD Check	Reconciled
414195	ARCHROCK SERVICES, L.P.	17-Dec-20	8,695.16	IRWD Check	Reconciled
414196	ARMORCAST PRODUCTS COMPANY	17-Dec-20	14,716.39	IRWD Check	Reconciled
414197	AT&T	17-Dec-20	4,938.12	IRWD Check	Reconciled
414198	AT&T	17-Dec-20	1,681.43	IRWD Check	Reconciled
414199	AT&T	17-Dec-20	81.75	IRWD Check	Reconciled
414200	AUTOZONE PARTS, INC.	17-Dec-20	848.59	IRWD Check	Reconciled
414202	BATTERY SYSTEMS INC	17-Dec-20	224.48	IRWD Check	Reconciled
414203	BELL TOWER FLORIST & GIFTS	17-Dec-20	530.09	IRWD Check	Reconciled
414204	BENNETT, FLOYD	17-Dec-20	86.52	IRWD Check	Negotiable
414205	BIOMAGIC INC	17-Dec-20	9,587.44	IRWD Check	Negotiable
414206	BROWN AND CALDWELL	17-Dec-20	6,849.36	IRWD Check	Reconciled
414207	BURNETT, ELISE	17-Dec-20	32.10	IRWD Check	Negotiable
414208	C WELLS PIPELINE MATERIALS INC	17-Dec-20	57,836.98	IRWD Check	Reconciled
414209	CALIFORNIA BANK & TRUST	17-Dec-20	22,487.92	IRWD Check	Reconciled
414210	CALIFORNIA BARRICADE RENTAL, INC.	17-Dec-20	17,722.12	IRWD Check	Reconciled
414211	CALIFORNIA DEPARTMENT OF TAX AND FEE ADMINISTRATION	17-Dec-20	4,298.00	IRWD Check	Reconciled
414212	CANON FINANCIAL SERVICES, INC	17-Dec-20	8,893.78	IRWD Check	Reconciled
414213	CANON SOLUTIONS AMERICA, INC.	17-Dec-20	4,969.30	IRWD Check	Reconciled
414214	CAROLLO ENGINEERS, INC	17-Dec-20	24,803.00	IRWD Check	Reconciled
414215	CART MART INC.	17-Dec-20	562.41	IRWD Check	Reconciled
414216	CHARLES P CROWLEY COMPANY INC	17-Dec-20	24,707.12	IRWD Check	Reconciled
414217	CHEM TECH INTERNATIONAL INC	17-Dec-20	13,863.48	IRWD Check	Reconciled
414218	CHO, GINA	17-Dec-20	72.82	IRWD Check	Reconciled
414219	CHOW, HENRY	17-Dec-20	53.47	IRWD Check	Negotiable
414220	CITY OF NEWPORT BEACH	17-Dec-20	61,500.00	IRWD Check	Reconciled
414221	CLA-VAL COMPANY	17-Dec-20	2,732.85	IRWD Check	Reconciled
414222	COHN, ROBERT S	17-Dec-20	90.97	IRWD Check	Reconciled
414223	COLLINS, KELLY	17-Dec-20	22.42	IRWD Check	Reconciled
414224	CONSTELLATION NEWENERGY, INC.	17-Dec-20	14,300.37	IRWD Check	Reconciled
414225	COOK, VIJI	17-Dec-20	52.59	IRWD Check	Reconciled
414226	CORE & MAIN LP	17-Dec-20	1,908.56	IRWD Check	Reconciled

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414227	COUNTY OF ORANGE	17-Dec-20	4,011.00	IRWD Check	Reconciled
414228	D & G SIGNS	17-Dec-20	199.34	IRWD Check	Reconciled
414229	D & H WATER SYSTEMS INC.	17-Dec-20	1,445.18	IRWD Check	Reconciled
414230	DAN'S MACHINE TOOL, INC.	17-Dec-20	3,282.28	IRWD Check	Reconciled
414231	DATA CLEAN CORPORATION	17-Dec-20	840.00	IRWD Check	Negotiable
414232	DAVIS FARR LLP	17-Dec-20	19,180.00	IRWD Check	Reconciled
414233	DDB ENGINEERING, INC.	17-Dec-20	3,536.00	IRWD Check	Reconciled
414234	DO, ALEXANDRA	17-Dec-20	35.49	IRWD Check	Negotiable
414235	EAST ORANGE COUNTY WATER DISTRICT	17-Dec-20	2,079.88	IRWD Check	Reconciled
414236	EI&C ENGINEERING INC.	17-Dec-20	60,697.00	IRWD Check	Negotiable
414237	ENVIRONMENTAL ENGINEERING AND CONTRACTING, INC.	17-Dec-20	9,982.50	IRWD Check	Reconciled
414238	ENVIRONMENTAL RESOURCE ASSOCIATES	17-Dec-20	1,018.97	IRWD Check	Reconciled
414239	EUROFINS CALSCIENCE, LLC	17-Dec-20	9,607.50	IRWD Check	Reconciled
414240	EXECUTIVE LIGHTING & ELECTRIC	17-Dec-20	18,449.14	IRWD Check	Reconciled
414241	FAITHCO INC.	17-Dec-20	27,581.00	IRWD Check	Reconciled
414242	FARRELL & ASSOCIATES	17-Dec-20	353.63	IRWD Check	Reconciled
414243	FEDEX	17-Dec-20	902.03	IRWD Check	Reconciled
414244	FERGUSON ENTERPRISES, LLC	17-Dec-20	8,611.39	IRWD Check	Reconciled
414245	FERREIRA CONSTRUCTION COMPANY, INC.	17-Dec-20	56,667.50	IRWD Check	Reconciled
414246	FIONA HUTTON & ASSOCIATES, INC.	17-Dec-20	8,091.25	IRWD Check	Negotiable
414247	FISERV SOLUTIONS, LLC	17-Dec-20	275.00	IRWD Check	Reconciled
414248	FISHER SCIENTIFIC COMPANY LLC	17-Dec-20	15,780.94	IRWD Check	Reconciled
414249	FOOTHILL/EASTERN TRANSPORTATION	17-Dec-20	4,650.00	IRWD Check	Reconciled
414250	FRANCHISE TAX BOARD	17-Dec-20	664.13	IRWD Check	Negotiable
414251	FRONTIER CALIFORNIA INC.	17-Dec-20	58.11	IRWD Check	Reconciled
414252	FUSCOE ENGINEERING, INC.	17-Dec-20	3,000.00	IRWD Check	Reconciled
414253	GEORGE HILLS COMPANY, INC.	17-Dec-20	54.00	IRWD Check	Reconciled
414254	GRAINGER	17-Dec-20	3,958.43	IRWD Check	Reconciled
414255	HACH COMPANY	17-Dec-20	1,667.29	IRWD Check	Reconciled
414256	HARRINGTON INDUSTRIAL PLASTICS LLC	17-Dec-20	1,652.13	IRWD Check	Reconciled
414257	HBI CONSTRUCTION, INC	17-Dec-20	2,907.33	IRWD Check	Negotiable
414258	HDR ENGINEERING INC	17-Dec-20	47,458.50	IRWD Check	Reconciled
414259	HECHT, BEN	17-Dec-20	15.93	IRWD Check	Reconciled
414260	HELPMATES STAFFING SERVICES	17-Dec-20	10,393.34	IRWD Check	Reconciled
414261	HERMITAGE PROPERTY MANAGEMENT	17-Dec-20	50.95	IRWD Check	Reconciled
414262	HILL BROTHERS CHEMICAL COMPANY	17-Dec-20	15,491.54	IRWD Check	Negotiable
414263	HOME DEPOT USA INC	17-Dec-20	1,511.82	IRWD Check	Reconciled
414264	IMPERIAL SPRINKLER SUPPLY, INC.	17-Dec-20	3,476.16	IRWD Check	Reconciled
414265	INFOSEND, INC.	17-Dec-20	32,898.04	IRWD Check	Reconciled
414266	INFOSYS LIMITED	17-Dec-20	26,880.00	IRWD Check	Reconciled
414267	INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS LOCAL 47	17-Dec-20	2,834.83	IRWD Check	Reconciled
414268	IRVINE COMMUNITY DEVELOPMENT COMPANY LLC	17-Dec-20	68,001.63	IRWD Check	Negotiable
414269	IRVINE PACIFIC	17-Dec-20	685.09	IRWD Check	Negotiable
414270	IRVINE PIPE & SUPPLY INC	17-Dec-20	646.59	IRWD Check	Reconciled
414271	IXOM WATERCARE INC	17-Dec-20	8,150.00	IRWD Check	Reconciled
414272	J M ELECTRICAL SERVICES	17-Dec-20	2,900.00	IRWD Check	Negotiable
414273	JOSE MARTINEZ TREE SERVICE INC.	17-Dec-20	21,600.00	IRWD Check	Negotiable
414274	KENT DAHLBERG	17-Dec-20	32,089.00	IRWD Check	Reconciled
414275	KIM, SUSAN	17-Dec-20	47.97	IRWD Check	Reconciled
414276	KONE, ROBB	17-Dec-20	116.77	IRWD Check	Negotiable
414277	KOTHANDARAMAN, SRINIVAS	17-Dec-20	18.86	IRWD Check	Reconciled
414278	KUO, VINCENT	17-Dec-20	31.20	IRWD Check	Negotiable
414279	KUTAK ROCK LLP	17-Dec-20	13,799.26	IRWD Check	Reconciled
414280	LAKE FOREST COMM ASSN	17-Dec-20	7,358.76	IRWD Check	Reconciled
414281	LANDCARE HOLDINGS, INC.	17-Dec-20	17,964.18	IRWD Check	Reconciled
414282	LANDSEA HOLDINGS CORPORATION	17-Dec-20	378.22	IRWD Check	Negotiable
414283	LEE & RO, INC.	17-Dec-20	3,032.00	IRWD Check	Reconciled

**IRVINE RANCH WATER DISTRICT
AP DISBURSEMENTS AND VOIDS FOR DECEMBER 2020**

CHECK OR ELECTRONIC #	SUPPLIERS	PAYMENT DATE	PAYMENT AMOUNT	PAYMENT METHOD	Status
414284	LEE, MI NA	17-Dec-20	29.37	IRWD Check	Reconciled
414285	LI, BOXIONG	17-Dec-20	25.70	IRWD Check	Negotiable
414286	LIU, VINCENT	17-Dec-20	50.00	IRWD Check	Reconciled
414287	MADISON, NICOLE	17-Dec-20	265.07	IRWD Check	Reconciled
414288	MANETTA, EDWARD	17-Dec-20	33.24	IRWD Check	Reconciled
414289	MAP COMMUNICATIONS, INC.	17-Dec-20	1,450.65	IRWD Check	Reconciled
414290	MARK ENTERPRISES TECHNOLOGIES LLC	17-Dec-20	2,200.00	IRWD Check	Reconciled
414291	MC FADDEN-DALE INDUSTRIAL	17-Dec-20	63.15	IRWD Check	Reconciled
414292	MCLAUGHLIN, JUNE	17-Dec-20	17.28	IRWD Check	Negotiable
414293	MCR TECHNOLOGIES INC	17-Dec-20	27,879.19	IRWD Check	Reconciled
414294	MEGGITT SENSING SYSTEMS	17-Dec-20	226.53	IRWD Check	Negotiable
414295	MICROSOFT CORPORATION	17-Dec-20	798.54	IRWD Check	Reconciled
414296	MISSION COMMUNICATIONS, LLC	17-Dec-20	14,552.40	IRWD Check	Reconciled
414297	MOJAB, ALI	17-Dec-20	25.00	IRWD Check	Reconciled
414298	MSA SAFETY INCORPORATED	17-Dec-20	10,079.12	IRWD Check	Reconciled
414299	MUNICIPAL WATER DISTRICT OF ORANGE COUNTY	17-Dec-20	641.47	IRWD Check	Reconciled
414300	MUTUAL PROPANE	17-Dec-20	27.00	IRWD Check	Reconciled
414301	NCH CORPORATION	17-Dec-20	668.05	IRWD Check	Reconciled
414302	NOH, JOHN	17-Dec-20	54.06	IRWD Check	Negotiable
414303	NORTHPARK MAINTENANCE ASSN	17-Dec-20	3,827.63	IRWD Check	Negotiable
414304	OLIN CORPORATION	17-Dec-20	16,732.09	IRWD Check	Reconciled
414305	ONESOURCE DISTRIBUTORS LLC	17-Dec-20	3,718.48	IRWD Check	Reconciled
414306	ORANGE COAST PLUMBING	17-Dec-20	1,964.79	IRWD Check	Reconciled
414307	ORANGE COUNTY MOSQUITO AND VECTOR CONTROL DISTRICT	17-Dec-20	1,920.07	IRWD Check	Negotiable
414308	ORANGE COUNTY SHERIFF'S OFFICE	17-Dec-20	148.78	IRWD Check	Reconciled
414309	PACIFIC HYDROTECH CORPORATION	17-Dec-20	448,923.98	IRWD Check	Reconciled
414310	PACIFIC HYDROTECH CORPORATION	17-Dec-20	23,627.57	IRWD Check	Negotiable
414311	PACIFIC MEDTECHS, INC	17-Dec-20	868.45	IRWD Check	Reconciled
414312	PACIFIC PARTS & CONTROLS INC	17-Dec-20	5,227.86	IRWD Check	Reconciled
414313	PACIFIC STAR CHEMICAL, LLC	17-Dec-20	1,224.21	IRWD Check	Reconciled
414314	PALO VERDE IRRIGATION DISTRICT	17-Dec-20	2,845.00	IRWD Check	Reconciled
414315	PAN, WENWEI	17-Dec-20	29.86	IRWD Check	Reconciled
414316	PARKHOUSE TIRE INC	17-Dec-20	1,609.70	IRWD Check	Reconciled
414317	PERKINELMER HEALTH SCIENCES INC	17-Dec-20	280.16	IRWD Check	Reconciled
414318	PERS LONG TERM CARE	17-Dec-20	538.89	IRWD Check	Reconciled
414319	PIVOT INTERIORS INC	17-Dec-20	5,479.09	IRWD Check	Reconciled
414320	PRAKASH, JOHN PAUL	17-Dec-20	35.49	IRWD Check	Reconciled
414321	PRAXAIR DISTRIBUTION INC	17-Dec-20	1,211.11	IRWD Check	Reconciled
414322	PSOMAS	17-Dec-20	8,824.00	IRWD Check	Reconciled
414323	PTI SAND & GRAVEL INC	17-Dec-20	2,298.98	IRWD Check	Reconciled
414324	PYRO-COMM SYSTEMS INC	17-Dec-20	755.00	IRWD Check	Reconciled
414325	QUADIENT LEASING USA, INC.	17-Dec-20	3,265.46	IRWD Check	Reconciled
414326	QUANYAN LIAO AND HONGWEI GU	17-Dec-20	124.43	IRWD Check	Reconciled
414327	RAFTELIS FINANCIAL CONSULTANTS INC.	17-Dec-20	63,933.75	IRWD Check	Reconciled
414328	RAM AIR ENGINEERING INC	17-Dec-20	10,150.76	IRWD Check	Reconciled
414329	REFRIGERATION SUPPLIES DISTRIBUTOR	17-Dec-20	123.94	IRWD Check	Reconciled
414330	RINCON TRUCK CENTER INC.	17-Dec-20	405.43	IRWD Check	Reconciled
414331	RODNEY HARMSWORTH ASSOCIATES, INC.	17-Dec-20	8,470.00	IRWD Check	Reconciled
414332	ROHAN SOHAIL AND ANNIE ROOHI	17-Dec-20	17.62	IRWD Check	Negotiable
414334	S&S SEEDS INC	17-Dec-20	1,331.30	IRWD Check	Reconciled
414335	SANTA MARGARITA FORD	17-Dec-20	670.19	IRWD Check	Reconciled
414336	SECURITAS SECURITY SERVICES USA, INC.	17-Dec-20	42,628.92	IRWD Check	Reconciled
414337	SHAMROCK SUPPLY CO INC	17-Dec-20	1,440.76	IRWD Check	Reconciled
414338	SHUKLA, ASHA	17-Dec-20	5.62	IRWD Check	Reconciled
414339	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	17-Dec-20	8,118.95	IRWD Check	Negotiable
414340	SOUTH COAST WATER CO.	17-Dec-20	95.00	IRWD Check	Reconciled
414341	SOUTH COAST WATER DISTRICT	17-Dec-20	863.00	IRWD Check	Reconciled

**IRVINE RANCH WATER DISTRICT
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CHECK OR ELECTRONIC #	SUPPLIERS	PAYMENT DATE	PAYMENT AMOUNT	PAYMENT METHOD	Status
414342	SOUTHERN CALIFORNIA COMMISSIONING	17-Dec-20	7,000.00	IRWD Check	Reconciled
414343	SOUTHERN CALIFORNIA EDISON COMPANY	17-Dec-20	4,100.00	IRWD Check	Reconciled
414344	SOUTHERN CALIFORNIA EDISON COMPANY	17-Dec-20	26,552.00	IRWD Check	Reconciled
414345	SOUTHERN CALIFORNIA GAS COMPANY	17-Dec-20	11,213.21	IRWD Check	Reconciled
414346	SOUTHERN COUNTIES LUBRICANTS LLC	17-Dec-20	160.49	IRWD Check	Reconciled
414347	SPARKLETTES	17-Dec-20	190.42	IRWD Check	Reconciled
414348	STATE WATER RESOURCES CONTROL BOARD	17-Dec-20	277,500.00	IRWD Check	Reconciled
414349	STERN-THIERIOT, TAMMY	17-Dec-20	308.82	IRWD Check	Reconciled
414350	STETSON ENGINEERS INC.	17-Dec-20	1,800.00	IRWD Check	Reconciled
414351	STRADLING YOCCA CARLSON & RAUTH	17-Dec-20	280.00	IRWD Check	Negotiable
414352	STREAKWAVE WIRELESS, INC.	17-Dec-20	116.36	IRWD Check	Reconciled
414353	SUKLE ADVERTISING INC.	17-Dec-20	11,966.40	IRWD Check	Negotiable
414354	SURF CITY OPTOMETRY	17-Dec-20	225.00	IRWD Check	Reconciled
414355	SWAINS ELECTRIC MOTOR SERVICE	17-Dec-20	4,763.83	IRWD Check	Negotiable
414356	TALLEY INC	17-Dec-20	568.87	IRWD Check	Reconciled
414357	TERNNG, CHUU-LIAN	17-Dec-20	58.57	IRWD Check	Reconciled
414358	THERMX SOUTHWEST	17-Dec-20	12,528.31	IRWD Check	Reconciled
414359	THOMPSON INDUSTRIAL SUPPLY	17-Dec-20	8,870.54	IRWD Check	Reconciled
414360	TILLEY CRANE INSPECTION SERVICE CO., INC.	17-Dec-20	3,150.00	IRWD Check	Reconciled
414361	TITUS INDUSTRIAL GROUP, INC.	17-Dec-20	13,228.75	IRWD Check	Reconciled
414363	TRIMBLE INC	17-Dec-20	8,387.80	IRWD Check	Reconciled
414364	TROPICAL PLAZA NURSERY INC	17-Dec-20	3,895.31	IRWD Check	Reconciled
414365	UNITED PARCEL SERVICE INC	17-Dec-20	98.55	IRWD Check	Reconciled
414366	UNIVAR SOLUTIONS USA INC.	17-Dec-20	15,512.55	IRWD Check	Reconciled
414367	USA BLUEBOOK	17-Dec-20	1,504.69	IRWD Check	Reconciled
414368	USA WASTE OF CALIFORNIA, INC.	17-Dec-20	450.00	IRWD Check	Reconciled
414369	VIDO ARTUKOVICH & SON, INC./VIDMAR, INC. A JV	17-Dec-20	808,735.00	IRWD Check	Reconciled
414370	VIDO ARTUKOVICH & SON, INC./VIDMAR, INC. A JV	17-Dec-20	42,565.00	IRWD Check	Reconciled
414371	VO, AN	17-Dec-20	46.44	IRWD Check	Reconciled
414372	WANG, JOHN	17-Dec-20	30.93	IRWD Check	Negotiable
414373	WARD, WILLIAM P JR.	17-Dec-20	1,351.80	IRWD Check	Reconciled
414374	WASTE MANAGEMENT COLLECTIONS AND RECYCLING, INC.	17-Dec-20	849.14	IRWD Check	Reconciled
414375	WATER SYSTEMS OPTIMIZATION, INC.	17-Dec-20	2,500.00	IRWD Check	Reconciled
414376	WATERFIELD, BARRON	17-Dec-20	25.00	IRWD Check	Reconciled
414377	WAXIE'S ENTERPRISES, INC	17-Dec-20	425.84	IRWD Check	Reconciled
414378	WECK LABORATORIES INC	17-Dec-20	3,878.00	IRWD Check	Reconciled
414379	WEST YOST & ASSOCIATES	17-Dec-20	1,940.50	IRWD Check	Reconciled
414380	WILLIAM LYON HOMES, INC.	17-Dec-20	59.88	IRWD Check	Negotiable
414381	WILLIAMS, TERRI	17-Dec-20	42.25	IRWD Check	Negotiable
414382	XU, JUNMIN	17-Dec-20	974.19	IRWD Check	Reconciled
414383	YANG, QIN	17-Dec-20	1,868.93	IRWD Check	Negotiable
414384	ZEBRON CONTRACTING INC	17-Dec-20	24,270.00	IRWD Check	Reconciled
414385	ZHENG, SHAOQING	17-Dec-20	47.86	IRWD Check	Negotiable
414386	ROSEDALE - RIO BRAVO WATER STORAGE DISTRICT	17-Dec-20	45,568.94	IRWD Check	Negotiable
414387	Borowski, Michael (Mike)	23-Dec-20	106.00	IRWD Check	Negotiable
414388	Calderon, Alfonso	23-Dec-20	274.77	IRWD Check	Negotiable
414389	Hartoog, Jeremy	23-Dec-20	293.00	IRWD Check	Negotiable
414390	Li, Vladimir	23-Dec-20	763.00	IRWD Check	Reconciled
414391	Lin, Eileen (Eileen)	23-Dec-20	460.00	IRWD Check	Reconciled
414392	Monday, Jason	23-Dec-20	223.08	IRWD Check	Reconciled
414393	Oldewage, Lars D (Lars)	23-Dec-20	384.00	IRWD Check	Reconciled
414394	Van Deusen, Scott A (Scott)	23-Dec-20	288.00	IRWD Check	Reconciled
414395	Wang, Peter (Peter)	23-Dec-20	193.90	IRWD Check	Reconciled
414396	Yue, Andrew R (Andrew)	23-Dec-20	125.00	IRWD Check	Reconciled
414397	36 SOUTH SUR, LLC	23-Dec-20	1,000.00	IRWD Check	Negotiable
414398	ABM INDUSTRY GROUPS, LLC	23-Dec-20	20,204.37	IRWD Check	Reconciled
414399	ADAMS, DREW H	23-Dec-20	105.20	IRWD Check	Negotiable

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414400	AFLAC	23-Dec-20	102.80	IRWD Check	Reconciled
414401	AFLAC	23-Dec-20	102.80	IRWD Check	Reconciled
414402	AIRGAS, INC.	23-Dec-20	70.30	IRWD Check	Reconciled
414403	ALSTON & BIRD LLP	23-Dec-20	47,382.31	IRWD Check	Reconciled
414404	AMAZON CAPITAL SERVICES, INC.	23-Dec-20	135.40	IRWD Check	Reconciled
414405	ANTHEM BLUE CROSS	23-Dec-20	257.88	IRWD Check	Reconciled
414406	ANTHONY N. LARSEN	23-Dec-20	450.00	IRWD Check	Reconciled
414407	APEX SYSTEMS, LLC	23-Dec-20	7,020.00	IRWD Check	Reconciled
414408	APPLIED ENGINEERING CONCEPTS	23-Dec-20	4,950.00	IRWD Check	Reconciled
414409	AQUA-AEROBIC SYSTEMS INC	23-Dec-20	5,091.13	IRWD Check	Reconciled
414410	AQUA-METRIC SALES COMPANY	23-Dec-20	550.59	IRWD Check	Reconciled
414411	ASSOCIATION OF CALIFORNIA WATER AGENCIES/JPIA	23-Dec-20	817.58	IRWD Check	Reconciled
414412	ASSOCIATION OF CALIFORNIA WATER AGENCIES/JPIA	23-Dec-20	38,959.81	IRWD Check	Reconciled
414413	AT&T	23-Dec-20	175.14	IRWD Check	Reconciled
414414	AT&T	23-Dec-20	5,713.46	IRWD Check	Reconciled
414415	ATHENS SERVICES	23-Dec-20	8,149.94	IRWD Check	Reconciled
414416	ATHENS SERVICES	23-Dec-20	1,851.36	IRWD Check	Reconciled
414417	AUTOZONE PARTS, INC.	23-Dec-20	322.69	IRWD Check	Reconciled
414418	BATTERY SYSTEMS INC	23-Dec-20	1,057.11	IRWD Check	Reconciled
414419	BIOMAGIC INC	23-Dec-20	3,183.20	IRWD Check	Reconciled
414420	BOS, LANA	23-Dec-20	40.20	IRWD Check	Reconciled
414421	BOYD & ASSOCIATES	23-Dec-20	3,652.00	IRWD Check	Reconciled
414422	BRAX COMPANY, INC	23-Dec-20	1,689.96	IRWD Check	Reconciled
414423	BROWN AND CALDWELL	23-Dec-20	3,788.75	IRWD Check	Reconciled
414424	C WELLS PIPELINE MATERIALS INC	23-Dec-20	1,288.70	IRWD Check	Negotiable
414425	CALIFORNIA BARRICADE RENTAL, INC.	23-Dec-20	15,902.50	IRWD Check	Reconciled
414426	CANNON CORPORATION	23-Dec-20	7,551.56	IRWD Check	Reconciled
414427	CAROLLO ENGINEERS, INC	23-Dec-20	16,777.50	IRWD Check	Reconciled
414428	CDW GOVERNMENT LLC	23-Dec-20	4,207.98	IRWD Check	Reconciled
414429	CHEM TECH INTERNATIONAL INC	23-Dec-20	12,072.24	IRWD Check	Negotiable
414430	CHEUNG, TIFFANY	23-Dec-20	50.72	IRWD Check	Reconciled
414431	CITY OF SANTA ANA	23-Dec-20	523.85	IRWD Check	Negotiable
414432	CONSTELLATION NEWENERGY, INC.	23-Dec-20	690.88	IRWD Check	Reconciled
414433	CONTROL PRO INC	23-Dec-20	416.93	IRWD Check	Negotiable
414434	CYBRARY, INC.	23-Dec-20	1,600.05	IRWD Check	Negotiable
414435	D & G SIGNS	23-Dec-20	3,010.54	IRWD Check	Negotiable
414436	DARIAN, NISA	23-Dec-20	52.78	IRWD Check	Negotiable
414437	DAYTON CERTIFIED WELDING, INC.	23-Dec-20	6,030.00	IRWD Check	Reconciled
414438	DE LA ROCA, MARIA MILA	23-Dec-20	843.08	IRWD Check	Negotiable
414439	DE VAUL PAINT COMPANY	23-Dec-20	417.35	IRWD Check	Reconciled
414440	DELL MARKETING LP	23-Dec-20	7,159.42	IRWD Check	Reconciled
414441	DICK R. MONOD DE FROIDEVILLE	23-Dec-20	5,075.00	IRWD Check	Reconciled
414442	DIRECTV INC	23-Dec-20	152.24	IRWD Check	Negotiable
414443	DUDEK	23-Dec-20	1,785.00	IRWD Check	Reconciled
414444	DUDLEY RIDGE WATER DISTRICT	23-Dec-20	29,402.35	IRWD Check	Negotiable
414445	EHS INTERNATIONAL, INC	23-Dec-20	550.00	IRWD Check	Reconciled
414446	EISEMAN, TENEA	23-Dec-20	62.27	IRWD Check	Negotiable
414447	ENTERPRISE INFORMATION SYSTEMS, INC.	23-Dec-20	16,920.00	IRWD Check	Negotiable
414448	ENVIRONMENTAL SCIENCE ASSOCIATES	23-Dec-20	5,460.29	IRWD Check	Reconciled
414449	EVERETT DOREY LLP	23-Dec-20	4,220.21	IRWD Check	Reconciled
414450	FARWEST CORROSION CONTROL COMPANY	23-Dec-20	6,144.63	IRWD Check	Reconciled
414451	FERGUSON ENTERPRISES, LLC	23-Dec-20	9,934.56	IRWD Check	Reconciled
414452	FIRE EXTINGUISHING SAFETY & SERVICE	23-Dec-20	1,727.83	IRWD Check	Reconciled
414453	FIRST CHOICE SERVICES	23-Dec-20	764.84	IRWD Check	Reconciled
414454	FISERV SOLUTIONS, LLC	23-Dec-20	48,759.88	IRWD Check	Reconciled
414455	FISHER SCIENTIFIC COMPANY LLC	23-Dec-20	1,467.51	IRWD Check	Reconciled
414456	FRONTIER CALIFORNIA INC.	23-Dec-20	417.18	IRWD Check	Reconciled

**IRVINE RANCH WATER DISTRICT
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414457	FULLER TRUCK ACCESSORIES	23-Dec-20	535.52	IRWD Check	Reconciled
414458	FUSCOE ENGINEERING, INC.	23-Dec-20	9.49	IRWD Check	Negotiable
414459	GANAHL LUMBER CO.	23-Dec-20	2,011.62	IRWD Check	Reconciled
414460	GARY BALE REDI-MIX CONCRETE, INC.	23-Dec-20	1,160.31	IRWD Check	Reconciled
414461	GRAINGER	23-Dec-20	181.96	IRWD Check	Reconciled
414462	HACH COMPANY	23-Dec-20	1,260.71	IRWD Check	Reconciled
414463	HARTFORD LIFE AND ACCIDENT INSURANCE COMPANY	23-Dec-20	72.30	IRWD Check	Reconciled
414464	HELPMATES STAFFING SERVICES	23-Dec-20	15,852.40	IRWD Check	Reconciled
414465	HILL BROTHERS CHEMICAL COMPANY	23-Dec-20	17,203.64	IRWD Check	Negotiable
414466	HOME DEPOT USA INC	23-Dec-20	197.11	IRWD Check	Reconciled
414467	IDEA HALL	23-Dec-20	5,365.00	IRWD Check	Negotiable
414468	IDEXX DISTRIBUTION, INC	23-Dec-20	7,079.13	IRWD Check	Reconciled
414469	IMPERIAL SPRINKLER SUPPLY, INC.	23-Dec-20	488.70	IRWD Check	Reconciled
414470	IMURAYA USA, INC.	23-Dec-20	1,200.00	IRWD Check	Reconciled
414471	INDUSTRIAL NETWORKING SOLUTIONS	23-Dec-20	313.00	IRWD Check	Reconciled
414472	INFOSEND, INC.	23-Dec-20	600.00	IRWD Check	Reconciled
414473	INFOSYS LIMITED	23-Dec-20	53,760.00	IRWD Check	Reconciled
414474	INLAND POTABLE SERVICES, INC.	23-Dec-20	72,191.00	IRWD Check	Reconciled
414475	IRVINE PIPE & SUPPLY INC	23-Dec-20	473.16	IRWD Check	Negotiable
414476	JACKSON TIDUS, A LAW CORPORATION	23-Dec-20	1,386.00	IRWD Check	Reconciled
414477	JASPER ENGINE EXCHANGE, INC.	23-Dec-20	4,415.16	IRWD Check	Reconciled
414478	KRONICK MOSKOVITZ TIEDEMANN & GIRARD	23-Dec-20	29,186.40	IRWD Check	Reconciled
414479	LANDCARE HOLDINGS, INC.	23-Dec-20	2,153.60	IRWD Check	Reconciled
414480	LCS TECHNOLOGIES, INC.	23-Dec-20	5,400.00	IRWD Check	Reconciled
414481	LILLESTRAND LEADERSHIP CONSULTING, INC.	23-Dec-20	5,031.79	IRWD Check	Negotiable
414482	LSA ASSOCIATES INC	23-Dec-20	13,713.18	IRWD Check	Reconciled
414483	MADDOX ELECTRIC INC.	23-Dec-20	12,559.00	IRWD Check	Negotiable
414484	MC FADDEN-DALE INDUSTRIAL	23-Dec-20	37.53	IRWD Check	Reconciled
414485	MC MASTER CARR SUPPLY CO	23-Dec-20	348.02	IRWD Check	Reconciled
414486	MERCER (US) INC.	23-Dec-20	4,300.00	IRWD Check	Reconciled
414487	MILO CONSTRUCTION, INC	23-Dec-20	932.57	IRWD Check	Negotiable
414488	MISSION COMMUNICATIONS, LLC	23-Dec-20	1,690.20	IRWD Check	Reconciled
414489	MITHRIL ENTERPRISES	23-Dec-20	5,149.17	IRWD Check	Reconciled
414490	MRO ELECTRIC & SUPPLY CO.	23-Dec-20	15,008.00	IRWD Check	Reconciled
414491	MUNICIPAL MAINTENANCE EQUIPMENT INC	23-Dec-20	498.64	IRWD Check	Reconciled
414492	MYHAN, KEVIN	23-Dec-20	41.75	IRWD Check	Reconciled
414493	NICHOLAS, BERNARD	23-Dec-20	59.58	IRWD Check	Negotiable
414494	NMG GEOTECHNICAL INC	23-Dec-20	20,471.76	IRWD Check	Negotiable
414495	NOREX, INC.	23-Dec-20	4,230.00	IRWD Check	Reconciled
414496	OCEAN BLUE ENVIRONMENTAL SERVICES INC	23-Dec-20	3,416.52	IRWD Check	Negotiable
414497	OLIN CORPORATION	23-Dec-20	36,546.20	IRWD Check	Reconciled
414498	PACIFIC PARTS & CONTROLS INC	23-Dec-20	1,516.10	IRWD Check	Reconciled
414499	PARKHOUSE TIRE INC	23-Dec-20	2,509.00	IRWD Check	Reconciled
414500	PIVOT INTERIORS INC	23-Dec-20	182,165.01	IRWD Check	Reconciled
414501	POLLARDWATER.COM	23-Dec-20	88.89	IRWD Check	Reconciled
414502	PRE-PAID LEGAL SERVICES, INC.	23-Dec-20	1,056.45	IRWD Check	Negotiable
414503	PROCARE WORK INJURY CENTER	23-Dec-20	422.56	IRWD Check	Reconciled
414504	PTI SAND & GRAVEL INC	23-Dec-20	468.42	IRWD Check	Reconciled
414505	PURCELL, DAVIS	23-Dec-20	34.50	IRWD Check	Negotiable
414506	PURE EFFECT INC	23-Dec-20	7,725.90	IRWD Check	Reconciled
414507	QUINTANA, WATTS & HARTMANN, LLC	23-Dec-20	5,000.00	IRWD Check	Negotiable
414508	RAM AIR ENGINEERING INC	23-Dec-20	1,963.10	IRWD Check	Reconciled
414509	REAL WATER CONSULTANTS INC.	23-Dec-20	12,798.00	IRWD Check	Reconciled
414510	RED WING SHOE STORE	23-Dec-20	987.88	IRWD Check	Reconciled
414511	REFRIGERATION SUPPLIES DISTRIBUTOR	23-Dec-20	908.97	IRWD Check	Reconciled
414512	RELIANCE SAFETY CONSULTANTS, INC.	23-Dec-20	1,600.00	IRWD Check	Reconciled
414513	RINCON TRUCK CENTER INC.	23-Dec-20	1,351.16	IRWD Check	Reconciled

**IRVINE RANCH WATER DISTRICT
AP DISBURSEMENTS AND VOIDS FOR DECEMBER 2020**

CHECK OR ELECTRONIC #	SUPPLIERS	PAYMENT DATE	PAYMENT AMOUNT	PAYMENT METHOD	Status
414514	RODNEY HARMSWORTH ASSOCIATES, INC.	23-Dec-20	11,126.00	IRWD Check	Reconciled
414515	SANTA ANA BLUE PRINT	23-Dec-20	79.35	IRWD Check	Negotiable
414516	SANTA MARGARITA FORD	23-Dec-20	505.51	IRWD Check	Reconciled
414517	SCHINDLER ELEVATOR CORPORATION	23-Dec-20	229.11	IRWD Check	Reconciled
414518	SCHUTT, CYNTHIA	23-Dec-20	37.67	IRWD Check	Negotiable
414519	SCOTT BOYD & MODZNA JAINAL	23-Dec-20	122.24	IRWD Check	Reconciled
414520	SEAL ANALYTICAL INC	23-Dec-20	1,807.96	IRWD Check	Reconciled
414521	SERRANO WATER DISTRICT	23-Dec-20	10,090.37	IRWD Check	Reconciled
414522	SOUTH COAST WATER DISTRICT	23-Dec-20	1,217.15	IRWD Check	Reconciled
414523	SOUTHERN CALIFORNIA EDISON COMPANY	23-Dec-20	999,338.47	IRWD Check	Reconciled
414524	SOUTHERN CALIFORNIA GAS COMPANY	23-Dec-20	11.35	IRWD Check	Reconciled
414525	SOUTHLAND WATER TECHNOLOGIES LLC	23-Dec-20	2,442.38	IRWD Check	Negotiable
414526	SOUTHSIDE TOWING	23-Dec-20	875.00	IRWD Check	Negotiable
414527	SOUTHWEST VALVE & EQUIPMENT INC	23-Dec-20	2,962.00	IRWD Check	Negotiable
414528	STANTEC CONSULTING SERVICES INC.	23-Dec-20	297,780.65	IRWD Check	Reconciled
414529	STATE WATER RESOURCES CONTROL BOARD	23-Dec-20	4,084.00	IRWD Check	Negotiable
414530	TEKDRAULICS	23-Dec-20	2,210.84	IRWD Check	Reconciled
414531	THE ADT SECURITY CORPORATION	23-Dec-20	10,183.49	IRWD Check	Reconciled
414532	THOMPSON INDUSTRIAL SUPPLY	23-Dec-20	2,961.43	IRWD Check	Reconciled
414533	TOTAL RESOURCE MANAGEMENT, INC	23-Dec-20	4,590.00	IRWD Check	Reconciled
414534	TROPICAL PLAZA NURSERY INC	23-Dec-20	64,242.00	IRWD Check	Reconciled
414535	TRUONG, ALEX	23-Dec-20	1,014.48	IRWD Check	Reconciled
414536	UNITED PARCEL SERVICE INC	23-Dec-20	262.59	IRWD Check	Reconciled
414537	WASTE MANAGEMENT COLLECTIONS AND RECYCLING, INC.	23-Dec-20	606.88	IRWD Check	Reconciled
414538	WATERLINE TECHNOLOGIES INC	23-Dec-20	1,081.60	IRWD Check	Reconciled
414539	WAXIE'S ENTERPRISES, INC	23-Dec-20	3,323.88	IRWD Check	Reconciled
414540	WORKFORCE SAFETY LLC	23-Dec-20	3,000.00	IRWD Check	Negotiable
414541	YANEZ, DAVID	23-Dec-20	36.78	IRWD Check	Negotiable
414542	ZEBRON CONTRACTING INC	23-Dec-20	2,300.00	IRWD Check	Negotiable
414543	AFLAC	23-Dec-20	6,738.00	IRWD Check	Negotiable
414544	JCI JONES CHEMICALS INC	23-Dec-20	4,924.92	IRWD Check	Reconciled
414546	Beltran, Benjamin Vega	30-Dec-20	1,356.68	IRWD Check	Negotiable
414547	Beltran, Benjamin Vega	30-Dec-20	1,356.68	IRWD Check	Negotiable
414548	Hoffman, Michael S (Mike)	30-Dec-20	101.00	IRWD Check	Negotiable
414549	Reynoso, Pio (Pio)	30-Dec-20	3,000.00	IRWD Check	Negotiable
414550	Schulze, Richard W (Richard)	30-Dec-20	192.00	IRWD Check	Negotiable
414551	Spangenberg, Carl W (Carl)	30-Dec-20	120.00	IRWD Check	Negotiable
414552	ADAM'S FALCONRY SERVICE, LLC	30-Dec-20	1,560.00	IRWD Check	Negotiable
414553	AECOM TECHNICAL SERVICES, INC.	30-Dec-20	96,978.05	IRWD Check	Negotiable
414554	AIRGAS, INC.	30-Dec-20	106.16	IRWD Check	Reconciled
414555	ALSTON & BIRD LLP	30-Dec-20	434,691.94	IRWD Check	Negotiable
414556	ANDERSON'S NU POWER CO., INC	30-Dec-20	600.00	IRWD Check	Negotiable
414557	AQUA-METRIC SALES COMPANY	30-Dec-20	2,358.99	IRWD Check	Negotiable
414558	AT&T	30-Dec-20	201.29	IRWD Check	Negotiable
414559	AT&T	30-Dec-20	227.40	IRWD Check	Negotiable
414560	AUTOZONE PARTS, INC.	30-Dec-20	68.93	IRWD Check	Negotiable
414561	BATTERY SYSTEMS INC	30-Dec-20	935.82	IRWD Check	Negotiable
414562	BRUCE-LYLE, LESLIE	30-Dec-20	473.57	IRWD Check	Negotiable
414563	CALIFORNIA BARRICADE RENTAL, INC.	30-Dec-20	8,304.75	IRWD Check	Negotiable
414564	CHAIREL CUSTOM HAY, INC.	30-Dec-20	1,160.00	IRWD Check	Negotiable
414565	CHEMGLASS LIFE SCIENCES, LLC	30-Dec-20	878.02	IRWD Check	Negotiable
414566	CITY OF NEWPORT BEACH	30-Dec-20	1,694.69	IRWD Check	Negotiable
414567	CITY OF ORANGE	30-Dec-20	200.20	IRWD Check	Negotiable
414568	CLA-VAL COMPANY	30-Dec-20	3,481.28	IRWD Check	Negotiable
414569	COLONIAL LIFE & ACCIDENT INSURANCE CO.	30-Dec-20	1,103.26	IRWD Check	Negotiable
414570	CONSTELLATION NEWENERGY, INC.	30-Dec-20	7,577.27	IRWD Check	Negotiable
414571	COUNTY OF ORANGE	30-Dec-20	2,611.10	IRWD Check	Negotiable

**IRVINE RANCH WATER DISTRICT
AP DISBURSEMENTS AND VOIDS FOR DECEMBER 2020**

CHECK OR ELECTRONIC #	SUPPLIERS	PAYMENT DATE	PAYMENT AMOUNT	PAYMENT METHOD	Status
414572	COX COMMUNICATIONS, INC.	30-Dec-20	3,261.97	IRWD Check	Negotiable
414573	DEPARTMENT OF INDUSTRIAL RELATIONS STATE OF CALIFORNIA	30-Dec-20	14,927.48	IRWD Check	Negotiable
414574	DEVELOPMENT AND CONSERVATION MANAGEMENT, INC.	30-Dec-20	3,000.00	IRWD Check	Negotiable
414575	DISCOVERY SCIENCE CENTER OF ORANGE COUNTY	30-Dec-20	37,384.80	IRWD Check	Negotiable
414576	E&M ELECTRIC AND MACHINERY, INC.	30-Dec-20	12,560.00	IRWD Check	Negotiable
414577	EI ELECTRONICS LLC	30-Dec-20	1,950.00	IRWD Check	Negotiable
414578	ENVIRONMENTAL SCIENCE ASSOCIATES	30-Dec-20	18,005.83	IRWD Check	Negotiable
414579	FEDEX	30-Dec-20	203.43	IRWD Check	Negotiable
414580	FERGUSON ENTERPRISES, LLC	30-Dec-20	2,824.62	IRWD Check	Negotiable
414581	FIDELITY SECURITY LIFE INSURANCE COMPANY	30-Dec-20	6,964.50	IRWD Check	Negotiable
414582	FIDELITY SECURITY LIFE INSURANCE COMPANY	30-Dec-20	108.74	IRWD Check	Negotiable
414583	FIDELITY SECURITY LIFE INSURANCE COMPANY	30-Dec-20	896.11	IRWD Check	Negotiable
414584	FISERV SOLUTIONS, LLC	30-Dec-20	288.35	IRWD Check	Negotiable
414585	FISHER SCIENTIFIC COMPANY LLC	30-Dec-20	6,153.23	IRWD Check	Negotiable
414586	FRANCHISE TAX BOARD	30-Dec-20	330.00	IRWD Check	Negotiable
414587	FRONTIER CALIFORNIA INC.	30-Dec-20	498.34	IRWD Check	Negotiable
414588	GRAINGER	30-Dec-20	3,063.66	IRWD Check	Negotiable
414589	HAAKER EQUIPMENT COMPANY	30-Dec-20	2,524.17	IRWD Check	Negotiable
414590	HACH COMPANY	30-Dec-20	3,337.36	IRWD Check	Negotiable
414591	HARRINGTON INDUSTRIAL PLASTICS LLC	30-Dec-20	151.13	IRWD Check	Negotiable
414592	HELPMATES STAFFING SERVICES	30-Dec-20	6,401.37	IRWD Check	Negotiable
414593	HOPKINS TECHNICAL PRODUCTS INC	30-Dec-20	3,414.33	IRWD Check	Negotiable
414594	HUMANA INSURANCE COMPANY	30-Dec-20	65.30	IRWD Check	Negotiable
414595	IDEXX DISTRIBUTION, INC	30-Dec-20	1,876.86	IRWD Check	Negotiable
414596	INTEGRITY MUNICIPAL SERVICES LLC	30-Dec-20	2,500.00	IRWD Check	Negotiable
414597	INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS LOCAL 47	30-Dec-20	2,834.56	IRWD Check	Negotiable
414598	IRVINE PIPE & SUPPLY INC	30-Dec-20	217.30	IRWD Check	Negotiable
414599	IRWD-PETTY CASH CUSTODIAN	30-Dec-20	585.39	IRWD Check	Reconciled
414600	JCI JONES CHEMICALS INC	30-Dec-20	2,704.80	IRWD Check	Negotiable
414601	JUST ENERGY SOLUTIONS INC.	30-Dec-20	3,056.37	IRWD Check	Negotiable
414602	KEY INFORMATION SYSTEMS, INC.	30-Dec-20	2,050.00	IRWD Check	Negotiable
414603	KIMBALL MIDWEST	30-Dec-20	4,384.86	IRWD Check	Negotiable
414604	LANDCARE HOLDINGS, INC.	30-Dec-20	842.50	IRWD Check	Negotiable
414605	LIEBERT CASSIDY WHITMORE	30-Dec-20	3,425.00	IRWD Check	Negotiable
414606	LUSTRE-CAL NAMEPLATE CORPORATION	30-Dec-20	1,195.83	IRWD Check	Negotiable
414607	MARK THOMAS & COMPANY, INC.	30-Dec-20	1,566.50	IRWD Check	Negotiable
414608	MBC AQUATIC SCIENCES, INC.	30-Dec-20	1,350.00	IRWD Check	Negotiable
414609	MC MASTER CARR SUPPLY CO	30-Dec-20	633.88	IRWD Check	Negotiable
414610	MERRIMAC PETROLEUM, INC.	30-Dec-20	21,459.01	IRWD Check	Negotiable
414611	MONTROSE ENVIRONMENTAL GROUP, INC.	30-Dec-20	1,600.00	IRWD Check	Negotiable
414612	NATIONAL SPECIALITY ALLOYS LLC	30-Dec-20	1,389.98	IRWD Check	Negotiable
414613	NEW PIG CORPORATION	30-Dec-20	558.93	IRWD Check	Negotiable
414614	OLIN CORPORATION	30-Dec-20	13,073.47	IRWD Check	Negotiable
414615	ONESOURCE DISTRIBUTORS LLC	30-Dec-20	949.25	IRWD Check	Negotiable
414616	ORANGE COUNTY AUTO PARTS CO	30-Dec-20	504.33	IRWD Check	Negotiable
414617	OTA, FRANCIS	30-Dec-20	198.10	IRWD Check	Negotiable
414618	PACIFIC RESOURCE RECOVERY	30-Dec-20	5,141.88	IRWD Check	Negotiable
414619	PAULUS ENGINEERING, INC.	30-Dec-20	60,962.66	IRWD Check	Negotiable
414620	PERS LONG TERM CARE	30-Dec-20	538.89	IRWD Check	Negotiable
414621	PORTACRAFT INC	30-Dec-20	968.67	IRWD Check	Negotiable
414622	PROCARE WORK INJURY CENTER	30-Dec-20	3,137.60	IRWD Check	Negotiable
414623	PTI SAND & GRAVEL INC	30-Dec-20	2,787.54	IRWD Check	Negotiable
414624	RELIANCE STANDARD LIFE INSURANCE COMPANY	30-Dec-20	31,073.88	IRWD Check	Negotiable
414625	RINCON TRUCK CENTER INC.	30-Dec-20	131.34	IRWD Check	Negotiable
414626	RLG ENTERPRISES, INC	30-Dec-20	162.90	IRWD Check	Negotiable
414627	ROSEMOUNT INC.	30-Dec-20	804.78	IRWD Check	Negotiable
414628	SAFETY-KLEEN SYSTEMS, INC	30-Dec-20	370.00	IRWD Check	Negotiable

**IRVINE RANCH WATER DISTRICT
AP DISBURSEMENTS AND VOIDS FOR DECEMBER 2020**

CHECK OR ELECTRONIC #	SUPPLIERS	PAYMENT DATE	PAYMENT AMOUNT	PAYMENT METHOD	Status
414629	SITES PROJECT JOINT POWERS AUTHORITY	30-Dec-20	168,500.00	IRWD Check	Negotiable
414630	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	30-Dec-20	1,399.46	IRWD Check	Negotiable
414631	SOUTH ORANGE COUNTY WASTEWATER AUTHORITY	30-Dec-20	50,198.00	IRWD Check	Negotiable
414632	SOUTHERN CALIFORNIA EDISON COMPANY	30-Dec-20	123.63	IRWD Check	Negotiable
414633	SOUTHERN CALIFORNIA EDISON COMPANY	30-Dec-20	107,532.27	IRWD Check	Negotiable
414634	SOUTHERN CALIFORNIA SECURITY CENTERS, INC.	30-Dec-20	496.36	IRWD Check	Negotiable
414635	SUKLE ADVERTISING INC.	30-Dec-20	46,661.17	IRWD Check	Negotiable
414636	TETRA TECH, INC	30-Dec-20	2,787.50	IRWD Check	Negotiable
414637	THE CLIMATE REGISTRY	30-Dec-20	3,000.00	IRWD Check	Negotiable
414638	THOMPSON INDUSTRIAL SUPPLY	30-Dec-20	111.10	IRWD Check	Negotiable
414639	TITUS INDUSTRIAL GROUP, INC.	30-Dec-20	27,944.25	IRWD Check	Negotiable
414640	TOTAL RESOURCE MANAGEMENT, INC	30-Dec-20	4,250.00	IRWD Check	Negotiable
414641	TREE OF LIFE NURSERY	30-Dec-20	1,834.44	IRWD Check	Negotiable
414642	TRENCH SHORING COMPANY	30-Dec-20	5,966.66	IRWD Check	Negotiable
414643	TROPICAL PLAZA NURSERY INC	30-Dec-20	521.00	IRWD Check	Negotiable
414644	TRUCPARCO	30-Dec-20	180.29	IRWD Check	Negotiable
414645	ULINE INC	30-Dec-20	125.32	IRWD Check	Negotiable
414646	US BANK NAT'L ASSOCIATION NORTH DAKOTA	30-Dec-20	47,885.60	IRWD Check	Negotiable
414647	VULCAN MATERIALS COMPANY	30-Dec-20	1,509.22	IRWD Check	Negotiable
414648	VWR INTERNATIONAL, LLC	30-Dec-20	4,182.03	IRWD Check	Negotiable
414649	WATER TREATMENT CHEMICALS INC	30-Dec-20	11,962.56	IRWD Check	Negotiable
414650	WISCONSIN STATE LABORATORY OF HYGIENE	30-Dec-20	660.00	IRWD Check	Negotiable
414651	WOODARD & CURRAN INC	30-Dec-20	27,445.01	IRWD Check	Negotiable
SUB-TOTAL CHECK DISBURSEMENTS			13,398,069.88		

14094	YORK INSURANCE SERVICES GROUP INC - CA	1-Dec-20	5,104.96	IRWD Wire	Negotiable
14095	CHARD SNYDER & ASSOCIATES, INC.	7-Dec-20	44,977.80	IRWD Wire	Negotiable
14096	CHARD SNYDER & ASSOCIATES, INC.	7-Dec-20	4,777.65	IRWD Wire	Negotiable
14097	CHARD SNYDER & ASSOCIATES, INC.	7-Dec-20	2,855.66	IRWD Wire	Negotiable
14098	CHARD SNYDER & ASSOCIATES, INC.	7-Dec-20	3,787.51	IRWD Wire	Negotiable
14099	INTERNAL REVENUE SERVICE	7-Dec-20	242,358.56	IRWD Wire	Negotiable
14100	EMPLOYMENT DEVELOPMENT DEPARTMENT	7-Dec-20	9,542.97	IRWD Wire	Negotiable
14101	FRANCHISE TAX BOARD	7-Dec-20	74,601.49	IRWD Wire	Negotiable
14102	EMPLOYMENT DEVELOPMENT DEPARTMENT	7-Dec-20	10,589.50	IRWD Wire	Negotiable
14103	CALIFORNIA DEPARTMENT OF CHILD SUPPORT SERVICES	7-Dec-20	2,156.63	IRWD Wire	Negotiable
14104	GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY	7-Dec-20	152,411.25	IRWD Wire	Negotiable
14105	CALPERS	7-Dec-20	248,467.77	IRWD Wire	Negotiable
14106	YORK INSURANCE SERVICES GROUP INC - CA	8-Dec-20	4,089.06	IRWD Wire	Negotiable
14107	BANK OF NEW YORK MELLON TRUST COMPANY NA	8-Dec-20	3,012.57	IRWD Wire	Negotiable
14108	U.S. BANK NATIONAL ASSOCIATION	8-Dec-20	2,223.42	IRWD Wire	Negotiable
14109	BANK OF AMERICA	8-Dec-20	2,209.03	IRWD Wire	Negotiable
14110	CALIFORNIA DEPARTMENT OF CHILD SUPPORT SERVICES	8-Dec-20	2.50	IRWD Wire	Negotiable
14111	CHARD SNYDER & ASSOCIATES, INC.	8-Dec-20	1,513.45	IRWD Wire	Negotiable
14112	CALPERS	9-Dec-20	544,611.04	IRWD Wire	Negotiable
14113	CALPERS	9-Dec-20	2,952.19	IRWD Wire	Negotiable
14114	CHARD SNYDER & ASSOCIATES, INC.	14-Dec-20	318.44	IRWD Wire	Negotiable
14115	CHARD SNYDER & ASSOCIATES, INC.	14-Dec-20	5,463.67	IRWD Wire	Negotiable
14116	WELLS FARGO BANK, N.A.	14-Dec-20	6,929.15	IRWD Wire	Negotiable
14117	YORK INSURANCE SERVICES GROUP INC - CA	15-Dec-20	5,502.37	IRWD Wire	Negotiable
14118	CALPERS	15-Dec-20	659.19	IRWD Wire	Negotiable
14119	MUNICIPAL WATER DISTRICT OF ORANGE COUNTY	17-Dec-20	1,166,167.21	IRWD Wire	Negotiable
14120	CALPERS	17-Dec-20	247,546.98	IRWD Wire	Negotiable
14121	INTERNAL REVENUE SERVICE	17-Dec-20	248,637.09	IRWD Wire	Negotiable
14122	FRANCHISE TAX BOARD	17-Dec-20	78,946.53	IRWD Wire	Negotiable
14123	EMPLOYMENT DEVELOPMENT DEPARTMENT	17-Dec-20	10,494.19	IRWD Wire	Negotiable
14124	CALIFORNIA DEPARTMENT OF CHILD SUPPORT SERVICES	17-Dec-20	2,156.63	IRWD Wire	Negotiable
14125	GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY	17-Dec-20	150,241.80	IRWD Wire	Negotiable

**IRVINE RANCH WATER DISTRICT
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CHECK OR ELECTRONIC #	SUPPLIERS	PAYMENT DATE	PAYMENT AMOUNT	PAYMENT METHOD	Status
14126	IRWD	17-Dec-20	63,000.00	IRWD Wire	Negotiable
14127	CHARD SNYDER & ASSOCIATES, INC.	21-Dec-20	5,207.39	IRWD Wire	Negotiable
14128	CHARD SNYDER & ASSOCIATES, INC.	21-Dec-20	9,657.17	IRWD Wire	Negotiable
14129	YORK INSURANCE SERVICES GROUP INC - CA	22-Dec-20	580.00	IRWD Wire	Negotiable
14130	SUMITOMO MITSUI BANKING CORPORATION	23-Dec-20	4,524.59	IRWD Wire	Negotiable
14131	U.S. BANK NATIONAL ASSOCIATION	23-Dec-20	1,424.45	IRWD Wire	Negotiable
14132	FILANC-BALFOUR BEATTY JV	23-Dec-20	100,500.00	IRWD Wire	Negotiable
14133	CHARD SNYDER & ASSOCIATES, INC.	28-Dec-20	1,709.87	IRWD Wire	Negotiable
14134	CHARD SNYDER & ASSOCIATES, INC.	28-Dec-20	9,353.85	IRWD Wire	Negotiable
14135	BANK OF AMERICA MERRILL LYNCH	28-Dec-20	36,505.04	IRWD Wire	Negotiable
14136	BANK OF NEW YORK MELLON TRUST COMPANY NA	28-Dec-20	25.00	IRWD Wire	Negotiable
14137	YORK INSURANCE SERVICES GROUP INC - CA	29-Dec-20	5,104.96	IRWD Wire	Negotiable
14138	INTERNAL REVENUE SERVICE	29-Dec-20	221,982.84	IRWD Wire	Negotiable
14139	FRANCHISE TAX BOARD	29-Dec-20	67,568.52	IRWD Wire	Negotiable
14140	EMPLOYMENT DEVELOPMENT DEPARTMENT	29-Dec-20	19,895.96	IRWD Wire	Negotiable
14141	CALIFORNIA DEPARTMENT OF CHILD SUPPORT SERVICES	29-Dec-20	2,151.63	IRWD Wire	Negotiable
14142	GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY	29-Dec-20	182,558.40	IRWD Wire	Negotiable
14143	BANK OF AMERICA MERRILL LYNCH	30-Dec-20	14,040.11	IRWD Wire	Negotiable
14144	CALPERS	30-Dec-20	59,590.20	IRWD Wire	Negotiable
14145	CALPERS	30-Dec-20	246,372.68	IRWD Wire	Negotiable
SUB-TOTAL ELECTRONIC DISBURSEMENTS			4,337,060.92		
SUB-TOTAL AP CHECK AND ELECTRONIC DISBURSEMENTS			17,735,130.80		
413860	RAHROUH, SARAH	3-Dec-20	62.36	IRWD Check	Voided
413877	SOUTHERN CALIFORNIA EDISON COMPANY	3-Dec-20	36.59	IRWD Check	Voided
413995	ELDEN AVENUE MAINTENANCE ASSOCIATION	10-Dec-20	229.36	IRWD Check	Voided
414098	PHA-VU, MY-LEANNE	10-Dec-20	43.12	IRWD Check	Voided
414130	SOUTHERN CALIFORNIA EDISON COMPANY	10-Dec-20	68.19	IRWD Check	Voided
414201	BALDWIN & SONS HOMES	17-Dec-20	20.30	IRWD Check	Voided
414333	ROSEDALE - RIO BRAVO WATER STORAGE DISTRICT	17-Dec-20	45,565.94	IRWD Check	Voided
414362	TRI POINTE HOMES, INC.	17-Dec-20	107.47	IRWD Check	Voided
414545	CITY OF IRVINE	30-Dec-20	-	IRWD Check	Voided
SUB-TOTAL CHECK AND ELECTRONIC ISSUED AND VOIDED IN DEC 2020			46,133.33		
TOTAL AP DISBURSEMENTS AND VOIDS FOR DEC 2020			17,781,264.13		

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Exhibit "E"

MONTHLY SUMMARY OF PAYROLL ACH PAYMENTS

**December
2020**

	AMOUNT	VENDOR	PURPOSE
12/4/2020	1,112,246.35	BANK OF AMERICA	ACH Payments for Payroll
12/18/2020	1,101,934.37	BANK OF AMERICA	ACH Payments for Payroll
	<u><u>\$2,214,180.72</u></u>		

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Exhibit "F"

IRWD Gov Code 53065.5 Disclosure Report

Payment or Reimbursements for Individual charges of \$100 or more per transaction for services or product received.

01-DEC-20 to 31-DEC-20

NAME	CHECK NO.	CHECK DATE	AMOUNT	ITEM DESCRIPTION	EXPENSE JUSTIFICATION
Borowski, Mike	414387	23-Dec-20	106.00	Certification Renewal	CWEA Electrical Technician Grade IV
Calderon, Alfonso	414388	23-Dec-20	177.79	Other(Misc)	Safety shoe allowance
Cho, Harry	413934	10-Dec-20	294.00	Membership Renewal	AWWA membership
Fournier, Tanja	414180	17-Dec-20	199.00	Other(Misc)	Morningstar Investment Management Publication
Habiger, Steve	414181	17-Dec-20	155.00	Membership Renewal	SWRCB Water Distribution Grade V
Habiger, Steve	414181	17-Dec-20	164.53	Certification Renewal	SWRCB Water Distribution Grade V and CEU
Hartog, Jeremy	414389	23-Dec-20	101.00	Certification Renewal	CWEA Collection System Maintenance Grade III
Hartog, Jeremy	414389	23-Dec-20	192.00	Membership Renewal	CWEA membership
Hoffman, Mike	414548	30-Dec-20	101.00	Certification Renewal	CWEA Collections Systems Maintenance Grade III
Li, Vladimir	414390	23-Dec-20	258.00	Membership Renewal	APA Membership
Li, Vladimir	414390	23-Dec-20	505.00	Registration Fees	APA Webinar Training Course
Lin, Eileen	414391	23-Dec-20	460.00	Other(Misc)	GFOA Award Fiscal Year 2020
Moeder, Jacob	414182	17-Dec-20	300.00	Membership Renewal	ASCE renewal
Monday, Jason	414392	23-Dec-20	223.08	Certification Renewal	SWRCB Wastewater Grade I
Mwe, Nang	414183	17-Dec-20	192.00	Membership Renewal	CWEA membership
Nicholson, Darin	413937	10-Dec-20	192.00	Membership Renewal	CWEA membership
Oldewage, Lars	413652	3-Dec-20	118.51	Other(Misc)	Safety shoe allowance
Oldewage, Lars	414393	23-Dec-20	106.00	Certification Renewal	CWEA Laboratory Analyst Grade IV
Pan, Jenny	413653	3-Dec-20	171.79	Other(Misc)	Misc meeting supplies
Perez, David	413654	3-Dec-20	367.00	Certification Renewal	CWEA Collections Grade I
Perez, David	413654	3-Dec-20	192.00	Membership Renewal	CWEA membership
Saldana Rodriguez, Cristina	413938	10-Dec-20	125.00	Other(Misc)	Safety shoe allowance
Schulze, Richard	414550	30-Dec-20	192.00	Membership Renewal	CWEA membership
Shinbashi, Allen	414184	17-Dec-20	400.00	Other(Misc)	Securitas Performance Recognition
Sosa, Ives	413939	10-Dec-20	200.00	Other(Misc)	Safety shoe allowance
Spangenberg, Carl	413655	3-Dec-20	115.00	Membership Renewal	Professional Engineers License renewal
Spangenberg, Carl	414551	30-Dec-20	120.00	Certification Renewal	California Drinking Water Treatment Operator
Swift, Ian	413657	3-Dec-20	200.00	Other(Misc)	Safety shoe allowance
Van Deusen, Scott	414394	23-Dec-20	192.00	Membership Renewal	CWEA membership
Wang, Peter	414395	23-Dec-20	193.90	Other(Misc)	Safety shoe allowance
Yue, Andrew	414396	23-Dec-20	125.00	Other(Misc)	Safety shoe allowance
Total Amount:			\$6,438.60		

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January 25, 2021
Prepared by: J. Davis
Submitted by: R. Jacobson / C. Clary
Approved by: Paul A. Cook



CONSENT CALENDAR

2021 INDEX TENDER NOTES REMARKETING

SUMMARY:

IRWD's Index Tender Note (ITN) debt issues (2011 A-1 and 2011 A-2), originally issued in April 2011, are within their annual remarketing period. Staff, along with IRWD's underwriter (Goldman Sachs) and legal counsel, have prepared the required Remarketing Statement. Staff recommends the Board approve the 2021 Index Tender Notes Remarketing Statement and adopt a resolution.

BACKGROUND:

IRWD currently has \$74.5 million of ITNs, the 2011 A-1 issue of \$44.7 million and 2011 A-2 issue of \$29.8 million, which are remarketed by Goldman Sachs. The ITNs are remarketed annually based on a spread to the Securities Industry and Financial Markets Association (SIFMA) tax-exempt variable rate index. The last annual interest rate reset for the ITNs was in February 2020 at the SIFMA weekly index with a spread of minus six basis points, resulting in an all-in rate for 2020 of 0.64%. The all-in rate includes the net interest rate (the index and spread) and annual remarketing fees of approximately 0.13%. The new interest rate spread to the SIFMA index will be determined on February 2, 2021.

Staff and legal counsel have prepared the Remarketing Statement reflecting the District's most recent financial information, updated disclosure information and other pertinent updates for the 2011 A-1 and 2011 A-2 issues, which is provided as Exhibit "A". Staff recommends the Board adopt a resolution approving the updated Remarketing Statement, which is provided as Exhibit "B".

FISCAL IMPACTS:

The current outstanding principal amount for the 2011 A-1 and A-2 ITN bond issues is \$74.5 million. The ITNs are priced at a spread to the SIFMA tax-exempt variable rate index. Pricing for the upcoming period is scheduled for February 2, 2021.

COMMITTEE STATUS:

This item was not reviewed by a Committee due to the timing of re-pricing the ITN debt issues. The Remarketing Statement was provided to Finance and Personnel Committee members on January 18, 2021.

RECOMMENDATION:

THAT THE BOARD APPROVE THE 2021 INDEX TENDER NOTES REMARKETING STATEMENT, AND ADOPT THE FOLLOWING RESOLUTION BY TITLE:

RESOLUTION NO. 2021-3

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

LIST OF EXHIBITS:

Exhibit "A" – Remarketing Statement for Series 2011 A-1 and 2011 A-2

Exhibit "B" – Resolution Approving the Remarketing Statement

Exhibit "A"

Stradling Yocca Carlson & Rauth
Draft of 1/18/21

REOFFERING – NOT A NEW ISSUE – BOOK-ENTRY ONLY

RATINGS: See the caption “RATINGS”

On April 15, 2011, Orrick, Herrington & Sutcliffe LLP and Bowie, Arneson, Wiles & Giannone, Co-Bond Counsel to the District, delivered their respective opinions in connection with the issuance of the Series 2011A Bonds. Such opinions stated that, based on an analysis of existing laws, regulations, rulings and court decisions, and assuming, among other matters, the accuracy of certain representations and compliance with certain covenants, interest on the Series 2011A Bonds was excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986 and was exempt from State of California personal income taxes. Further, the opinions of Co-Bond Counsel stated that interest on the Series 2011A Bonds was not a specific preference item for purposes of the federal individual or corporate alternative minimum taxes, although Co-Bond Counsel observed that such interest was included in adjusted current earnings when calculating corporate alternative minimum taxable income. Co-Bond Counsel expressed no opinion regarding any other tax consequences related to the ownership or disposition of, or the accrual or receipt of interest on, the Series 2011A Bonds. Bond Counsel, Orrick, Herrington & Sutcliffe LLP, has not taken and does not intend to take any action to update such opinions or to determine if interest on the Series 2011A Bonds is presently excluded from gross income for federal income tax purposes or exempt from State of California personal income taxes. Effective January 1, 2018, the corporate alternative minimum tax has been repealed. See the caption “TAX MATTERS” herein.

[IRWD LOGO]

\$44,700,000
BONDS OF IRVINE RANCH WATER DISTRICT
REFUNDING SERIES 2011A-1
CUSIP†: 4636324Q9

\$29,800,000
BONDS OF IRVINE RANCH WATER DISTRICT
REFUNDING SERIES 2011A-2
CUSIP†: 4636324R7

Date of Initial Delivery: April 15, 2011 Scheduled Mandatory Tender Date: March 2, 2022 Due: October 1, 2037
Price: 100% Call Protection Date: September 3, 2021

This Remarketing Statement replaces the Remarketing Statement dated January 28, 2020, as supplemented on February 4, 2020, in its entirety.

Pursuant to the provisions of two Indentures of Trust, each dated as of April 1, 2011, by and between the District and The Bank of New York Mellon Trust Company, N.A., as trustee, relating to the Series 2011A-1 Bonds and the Series 2011A-2 Bonds, respectively, as amended, the District has exercised its option to effect an Unscheduled Mandatory Tender of the Series 2011A-1 Bonds and the Series 2011A-2 Bonds on February 4, 2021.

Upon the purchase of the Series 2011A Bonds pursuant to such Unscheduled Mandatory Tenders, the Series 2011A Bonds: (i) will be remarketed in the Index Mode for a Tender Period commencing on February 4, 2021 with the Scheduled Mandatory Tender Date on March 2, 2022; and (ii) will bear interest at an Index Tender Rate (which is equal to the sum of: (a) the SIFMA Average Index Rate calculated for each Index Rate Accrual Period; and (b) the applicable Index Spread for such Tender Period). Promptly after the Remarketing Agent determines the Index Spread relating to the applicable series of Series 2011A Bonds for the Tender Period commencing on February 4, 2021, the District will publish it by supplementing this Remarketing Statement and posting the supplement on the EMMA system.

The Purchase Price of the tendered Series 2011A Bonds will be paid on February 4, 2021 from moneys held by the Trustee, consisting of immediately available funds on deposit in the Remarketing Proceeds Account, as more fully described herein.

The Series 2011A Bonds were issued by the Irvine Ranch Water District and constitute the consolidated, several general obligations of Improvement District Nos. 113, 125, 213 and 225, which are geographical subdivisions of the District through which the District funds capital improvements. The Series 2011A Bonds are payable from the following sources: (i) Assessment Proceeds of each Improvement District, consisting of *ad valorem* assessments on taxable land, In Lieu Charges and proceeds from the sale of property for the enforcement of delinquent assessments collected from within each Improvement District and applied by the District to pay such Improvement District’s Included Amount of the principal, Purchase Price and Redemption Price of, and interest on, all Outstanding Series 2011A Bonds; (ii) Net Revenues of the District, consisting of water, sewer and recycled water rates and charges imposed by the District remaining after payment of Operation and Maintenance Expenses; and (iii) certain monies and investment earnings in certain funds and accounts created under the Indentures. See the caption “SECURITY FOR THE SERIES 2011A BONDS—Pledge of Assessment Proceeds and Revenues.” The obligation of the District to pay the principal, Purchase Price upon the Scheduled Mandatory Tender and Redemption Price of, and interest on, the Series 2011A Bonds from Net Revenues is payable on a parity with certain Parity Obligations described under the caption “SECURITY FOR THE SERIES 2011A BONDS—Limitations on Parity and Superior Obligations—Obligations on a Parity with the Series 2011A Bonds.”

See the caption “INTRODUCTION—Improvement Districts—Improvement District Nos. 125 and 225” and Appendix A under the caption “THE IMPROVEMENT DISTRICTS—Improvement District Nos. 125 and 225” for a discussion of the consolidation of Improvement District Nos. 105 and 250, the Assessment Proceeds of which were pledged to payment of the Series 2011A Bonds at the time of their initial issuance, into Improvement District Nos. 125 and 225, respectively.

The Series 2011A Bonds were issued pursuant to the respective Indentures for the purposes of: (i) providing a portion of the funds to refund the then-outstanding Bonds of Irvine Ranch Water District, Consolidated Refunding Series 2008B; and (ii) paying costs of issuance with respect to the Series 2011A Bonds.

The Series 2011A Bonds were issued in fully registered form and are registered in the name of Cede & Co., as nominee of The Depository Trust Company, New York, New York. Purchasers of the Series 2011A Bonds will not receive physical certificates representing their beneficial ownership in the Series 2011A Bonds purchased. The principal, Purchase Price and Redemption Price of, and interest on, the Series 2011A Bonds are payable by the Trustee to Cede & Co. and such principal, Purchase Price, Redemption Price and interest payments are to be disbursed to the beneficial owners of the Series 2011A Bonds through their nominees.

† CUSIP® is a registered trademark of the American Bankers Association. CUSIP Global Services (CGS) is managed on behalf of the American Bankers Association by S&P Capital IQ. Copyright© 2021 CUSIP Global Services. All rights reserved. CUSIP® data herein is provided by CUSIP Global Services. This data is not intended to create a database and does not serve in any way as a substitute for the CGS database. CUSIP® numbers are provided for convenience of reference only. Neither the District nor the Remarketing Agent take any responsibility for the accuracy of such numbers.

While the Series 2011A Bonds are in the Index Mode, interest on the Series 2011A Bonds will be payable on the first Business Day of each month. The Series 2011A Bonds will be subject to a Scheduled Mandatory Tender on March 2, 2022. The failure of the District to pay the Purchase Price of a series of Series 2011A Bonds upon any Scheduled Mandatory Tender would constitute an Event of Default under the applicable Indenture. See the caption “THE SERIES 2011A BONDS—Mandatory Tender for Purchase—Scheduled Mandatory Tender for Purchase.” The Series 2011A Bonds are also subject to mandatory tender on an Unscheduled Mandatory Tender Date at the option of the District as described herein. The failure of the District to pay the Purchase Price of a series of Series 2011A Bonds upon such Unscheduled Mandatory Tender would not constitute an Event of Default under the applicable Indenture. See the caption “THE SERIES 2011A BONDS—Mandatory Tender for Purchase—Unscheduled Mandatory Tender for Purchase.” While in the Index Mode, individual purchases of Series 2011A Bonds will be made in principal amounts of \$100,000 and integral multiples of \$5,000 in excess thereof.

This Remarketing Statement describes the Series 2011A Bonds while in the Index Mode and for the Tender Period commencing on February 4, 2021 and ending on the Scheduled Mandatory Tender Date set forth above. There are significant differences in the terms of the Series 2011A Bonds while they bear interest in a Mode other than an Index Mode. This Remarketing Statement is not intended to provide information with respect to the Series 2011A Bonds bearing interest in a Mode other than the Index Mode or in another Tender Period. Owners and prospective owners of the Series 2011A Bonds should not rely on this Remarketing Statement for information in connection with any Change in Mode or any other Tender Period, but should look solely to the offering document to be used in connection with any such Change in Mode or other Tender Period.

The Series 2011A Bonds are subject to optional and mandatory redemption prior to maturity as more fully described under the caption “THE SERIES 2011A BONDS—Redemption of Series 2011A Bonds.”

THE SERIES 2011A BONDS DO NOT CONSTITUTE AN OBLIGATION OF THE STATE OF CALIFORNIA OR ANY POLITICAL SUBDIVISION OF THE STATE OF CALIFORNIA OTHER THAN THE DISTRICT AND THE IMPROVEMENT DISTRICTS AS PROVIDED IN THE INDENTURES. NO FUNDS OF THE DISTRICT OR THE IMPROVEMENT DISTRICTS, OTHER THAN THE FUNDS INCLUDED IN THE TRUST ESTATE, ARE LIABLE FOR THE PAYMENT OF THE PRINCIPAL, REDEMPTION PRICE OR PURCHASE PRICE OF, OR INTEREST ON, THE SERIES 2011A BONDS. EXCEPT AS PROVIDED IN THE INDENTURES WITH RESPECT TO THE TRUST ESTATE, NEITHER THE FAITH AND CREDIT NOR THE TAXING POWER OF THE DISTRICT IS LIABLE FOR OR PLEDGED TO THE PAYMENT OF THE PRINCIPAL, REDEMPTION PRICE OR PURCHASE PRICE OF, OR INTEREST ON, THE SERIES 2011A BONDS.

This cover page contains certain information for general reference only. It is not intended to be a summary of the security or terms of the Series 2011A Bonds. Investors are advised to read the entire Remarketing Statement to obtain information essential to the making of an informed investment decision. Capitalized terms have the meanings given such terms in this Remarketing Statement.

Certain legal matters in connection with the reoffering of the Series 2011A Bonds will be passed upon by Orrick, Herrington & Sutcliffe LLP, as Bond Counsel to the District, by Hanson Bridgett LLP, as general counsel to the District, and for the Remarketing Agent by Stradling Yocca Carlson & Rauth, a Professional Corporation. The Series 2011A Bonds are available through the facilities of The Depository Trust Company. Goldman Sachs & Co. LLC is serving as Remarketing Agent for the Series 2011A Bonds and will remarket the Series 2011A Bonds on February 4, 2021 following their mandatory tender.

Goldman Sachs & Co. LLC
Remarketing Agent

Dated: January 27, 2021

No dealer, broker, salesperson or other person has been authorized by the District or the Remarketing Agent to give any information or to make any representation other than as set forth herein and, if given or made, such other information or representation must not be relied upon as having been authorized by the District or the Remarketing Agent. This Remarketing Statement does not constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of the Series 2011A Bonds by a person in any jurisdiction in which it is unlawful for such person to make such an offer, solicitation or sale.

This Remarketing Statement is not to be construed as a contract with the purchasers of the Series 2011A Bonds. Statements contained in this Remarketing Statement which involve estimates, forecasts or matters of opinion, whether or not expressly so described herein, are intended solely as such and are not to be construed as representations of facts.

The Remarketing Agent has provided the following sentence for inclusion in this Remarketing Statement:

The Remarketing Agent has reviewed the information in this Remarketing Statement in accordance with, and as part of, its responsibilities to investors under the federal securities laws as applied to the facts and circumstances of this transaction, but the Remarketing Agent does not guarantee the accuracy or completeness of such information.

The information set forth in this Remarketing Statement has been obtained from official sources and other sources which are believed to be reliable, but it is not guaranteed as to accuracy or completeness and is not to be construed as a representation by the Remarketing Agent. The information and expressions of opinion herein are subject to change without notice, and neither the delivery of this Remarketing Statement nor any sale made hereunder shall under any circumstances create any implication that there has been no change in the affairs of the District since the date hereof.

IN CONNECTION WITH THIS OFFERING, THE REMARKETING AGENT MAY OVERALLOT OR EFFECT TRANSACTIONS WHICH STABILIZE OR MAINTAIN THE MARKET PRICE OF THE SERIES 2011A BONDS AT A LEVEL ABOVE THAT WHICH MIGHT OTHERWISE PREVAIL IN THE OPEN MARKET. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME.

CERTAIN STATEMENTS CONTAINED IN THIS REMARKETING STATEMENT REFLECT NOT HISTORICAL FACTS BUT FORECASTS AND “FORWARD-LOOKING STATEMENTS.” NO ASSURANCE CAN BE GIVEN THAT THE FUTURE RESULTS DISCUSSED HEREIN WILL BE ACHIEVED, AND ACTUAL RESULTS MAY DIFFER MATERIALLY FROM THE FORECASTS DESCRIBED HEREIN. IN THIS RESPECT, THE WORDS “ESTIMATE,” “PROJECT,” “ANTICIPATE,” “EXPECT,” “INTEND,” “BELIEVE” AND SIMILAR EXPRESSIONS ARE INTENDED TO IDENTIFY FORWARD-LOOKING STATEMENTS. ALL PROJECTIONS, FORECASTS, ASSUMPTIONS, EXPRESSIONS OF OPINIONS, ESTIMATES AND OTHER FORWARD-LOOKING STATEMENTS ARE EXPRESSLY QUALIFIED IN THEIR ENTIRETY BY THE CAUTIONARY STATEMENTS SET FORTH IN THIS REMARKETING STATEMENT. THE PROJECTIONS CONTAINED IN THIS REMARKETING STATEMENT WILL NOT BE UPDATED AS PART OF THE DISTRICT’S CONTINUING DISCLOSURE OBLIGATIONS FOR THE SERIES 2011A BONDS.

THE SERIES 2011A BONDS HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, IN RELIANCE UPON AN EXEMPTION CONTAINED IN SUCH ACT. THE SERIES 2011A BONDS HAVE NOT BEEN REGISTERED OR QUALIFIED UNDER THE SECURITIES LAWS OF ANY STATE.

The District maintains a website. However, the information presented there is not part of this Remarketing Statement and should not be relied upon in making an investment decision with respect to the Series 2011A Bonds.

IRVINE RANCH WATER DISTRICT
Orange County, California

Board of Directors

Douglas J. Reinhart, *President*
John B. Withers, *Vice President*
Steven E. LaMar
Peer A. Swan
Karen McLaughlin

Management

Paul A. Cook, *General Manager*
Cheryl Clary, *Executive Director of Finance and Administration*
Robert Jacobson, *Treasurer*
Leslie Bonkowski, *Secretary*

District General Counsel

Hanson Bridgett LLP
Los Angeles, California

Bond Counsel

Orrick, Herrington & Sutcliffe LLP
Los Angeles, California

Trustee

The Bank of New York Mellon Trust Company, N.A.
Los Angeles, California

[REGIONAL MAP]

[MAP OF WATER IMPROVEMENT DISTRICTS]

[MAP OF SEWER IMPROVEMENT DISTRICTS]

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REMARKETING STATEMENT

\$44,700,000	\$29,800,000
BONDS OF IRVINE RANCH WATER DISTRICT REFUNDING SERIES 2011A-1	BONDS OF IRVINE RANCH WATER DISTRICT REFUNDING SERIES 2011A-2

INTRODUCTION

This Remarketing Statement replaces the Remarketing Statement dated January 28, 2020, as supplemented on February 4, 2020, in its entirety.

Pursuant to the provisions of two Indentures of Trust, each dated as of April 1, 2011 (each, an “Original Indenture”), by and between the District and The Bank of New York Mellon Trust Company, N.A., as trustee (the “Trustee”), as amended by two First Supplemental Indentures of Trust, each dated as of February 1, 2014 (each, a “First Supplemental Indenture”) and by two Second Supplemental Indentures of Trust, each dated as of April 1, 2020 (each, a “Second Supplemental Indenture” and, together with the Original Indentures and the First Supplemental Indentures, the “Indentures”), by and between the District and the Trustee, relating to the Bonds of Irvine Ranch Water District Refunding Series 2011A-1 (the “Series 2011A-1 Bonds”) and the Bonds of Irvine Ranch Water District Refunding Series 2011A-2 (the “Series 2011A-2 Bonds” and, together with the Series 2011A-1 Bonds, the “Series 2011A Bonds”), respectively, the Irvine Ranch Water District (the “District”) has exercised its option to effect an Unscheduled Mandatory Tender of the Series 2011A-1 Bonds and the Series 2011A-2 Bonds on February 4, 2021. The Indentures are substantially similar.

Upon the purchase of the Series 2011A Bonds pursuant to such Unscheduled Mandatory Tenders, the Series 2011A Bonds: (i) will be remarketed in the Index Mode for a Tender Period commencing on February 4, 2021 with the Scheduled Mandatory Tender Date of March 2, 2022; and (ii) will bear interest at an Index Tender Rate (which is equal to the sum of: (a) the SIFMA Average Index Rate calculated for each Index Rate Accrual Period; and (b) the applicable Index Spread for such Tender Period), all as more fully described herein.

Promptly after the Remarketing Agent determines the Index Spread relating to each series of Series 2011A Bonds for the Tender Period commencing on February 4, 2021, the District will publish it by supplementing this Remarketing Statement and posting the supplement with the Municipal Securities Rulemaking Board through its Electronic Municipal Market Access System (“EMMA”).

The Purchase Price of the tendered Series 2011A Bonds will be paid on February 4, 2021 from moneys held by the Trustee, consisting of immediately available funds on deposit in the applicable Remarketing Proceeds Account, as more fully described herein.

This Introduction is subject in all respects to the more complete information contained and referenced elsewhere in this Remarketing Statement. The remarketing of the Series 2011A Bonds to potential investors is made only by means of the entire Remarketing Statement.

Purpose

The purpose of this Remarketing Statement, which includes the cover page and appendices hereto, is to set forth certain information concerning the District and Improvement District Nos. 113, 125, 213 and 225 (collectively, the “Improvement Districts” or individually, an “Improvement District”), which are geographical subdivisions of the District through which the District funds capital improvements, in connection with the remarketing of \$44,700,000 aggregate principal amount of the Series 2011A-1 Bonds and \$29,800,000 aggregate principal amount of the Series 2011A-2 Bonds, which Series 2011A Bonds constitute

the consolidated several general obligations of Improvement District Nos. 113, 125, 213 and 225. In addition, the District has pledged Revenues to the repayment of the Series 2011A Bonds. See the caption “SECURITY FOR THE SERIES 2011A BONDS—Pledge of Assessment Proceeds and Revenues.”

The Series 2011A Bonds were issued pursuant to the respective Indentures for the purposes of: (i) providing a portion of the funds to refund the then-outstanding Bonds of Irvine Ranch Water District, Consolidated Refunding Series 2008B; and (ii) paying costs of issuance with respect to the Series 2011A Bonds. Capitalized terms used herein and not otherwise defined have the meanings ascribed to them in Appendix C—“SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURES.”

This Remarketing Statement describes the Series 2011A Bonds only while in the Index Mode and for the Tender Period commencing February 4, 2021. There are significant differences in the terms of the Series 2011A Bonds while they bear interest in a Mode other than an Index Mode. This Remarketing Statement is not intended to provide information with respect to the Series 2011A Bonds bearing interest in a Mode other than the Index Mode or in another Tender Period. Owners and prospective owners of the Series 2011A Bonds should not rely on this Remarketing Statement for information in connection with any Change in Mode or any other Tender Period, but should look solely to the offering document to be used in connection with any such Change in Mode or other Tender Period.

Although the District has the right under the Indentures to enter into a Liquidity Facility in connection with the applicable series of Series 2011A Bonds, the District has not elected to enter into a Liquidity Facility in connection with the remarketing of the Series 2011A Bonds for the Tender Period commencing February 4, 2021. This Remarketing Statement is not intended to provide information with respect to any series of Series 2011A Bonds supported by a Liquidity Facility. Owners and prospective owners of the Series 2011A Bonds should not rely on this Remarketing Statement for information in connection with the Series 2011A Bonds supported by a Liquidity Facility, but should look solely to the offering document to be used in connection with any future entry of the District into a Liquidity Facility with respect to the Series 2011A Bonds.

The District

The District is a California water district, formed in 1961 under the authority of the California Water District Law, constituting Division 13 of the California Water Code (the “Act”). Currently there are eight water improvement districts and ten sewer improvement districts formed pursuant to the Act, which are geographical subdivisions of the District through which the District funds capital improvements. See Appendix A—“IRVINE RANCH WATER DISTRICT.”

The Series 2011A Bonds

Each series of Series 2011A Bonds is being remarketed in an Index Mode for a Tender Period commencing on February 4, 2021 with the Scheduled Mandatory Tender Date of March 2, 2022 and will bear interest at an Index Tender Rate (which is equal to the sum of: (a) the SIFMA Average Index Rate calculated for each Index Rate Accrual Period; and (b) the applicable Index Spread for such Tender Period, all as more fully described under the caption “THE SERIES 2011A BONDS”). While in the Index Mode, interest on the Series 2011A Bonds will be payable on the first Business Day of each month. The Series 2011A Bonds will be subject to a Scheduled Mandatory Tender on March 2, 2022. The failure of the District to pay the Purchase Price of a Series 2011A Bond upon any Scheduled Mandatory Tender would constitute an Event of Default under the applicable Indenture. See the caption “THE SERIES 2011A BONDS—Remarketing and Purchase of Series 2011A Bonds in Connection with Scheduled Mandatory Tender—Consequences of a Scheduled Mandatory Tender Failure.” The Series 2011A Bonds are also subject to mandatory tender on an Unscheduled Mandatory Tender Date established at the option of the District as described herein. See the caption “THE SERIES 2011A BONDS—Mandatory Tender for Purchase—Unscheduled Mandatory Tender for Purchase.”

While in the Index Mode, individual purchases of Series 2011A Bonds will be made in principal amounts of \$100,000 and integral multiples of \$5,000 in excess thereof.

Improvement Districts

Set forth below are brief descriptions of the Improvement Districts for which the Series 2011A Bonds constitute the consolidated, several general obligations. For more complete information with respect to the Improvement Districts, see Appendix A—“IRVINE RANCH WATER DISTRICT” under the caption “THE IMPROVEMENT DISTRICTS.”

Improvement District Nos. 125 and 225. At the time of their initial issuance on April 15, 2011, the Series 2011A Bonds constituted the consolidated, several general obligations of Improvement District Nos. 105, 113, 213 and 250. Pursuant to the Indentures, the District covenanted to fix and collect *ad valorem* assessments on taxable land within such improvement districts in amounts sufficient to pay principal of and interest on the applicable series of Series 2011A Bonds. See the caption “—Security for the Series 2011A Bonds—Assessment Proceeds.”

Beginning in 2011, the District undertook a long-term review of its capital funding plan. As a result of such review, the Board of Directors of the District determined that it was in the District’s best interest to consolidate certain improvement districts to support differing capital infrastructure needs within developed and undeveloped areas of the District. Accordingly, by resolutions adopted on October 14, 2013, October 28, 2013 and November 11, 2013, the Board of Directors undertook the following actions:

- Certain lands were annexed into Improvement District Nos. 105 and 250 in accordance with Section 36428 *et seq.* of the Act. The annexed lands were declared to be liable for debt service on the outstanding bonds of Improvement District Nos. 105 and 250, including each such Improvement District’s Included Amount (as such term is defined under the caption “—Security for the Series 2011A Bonds—General”) of the Series 2011A Bonds.
- Certain lands generally constituting large permanent open space parcels were detached from Improvement District Nos. 105 and 250 in accordance with Section 36442 *et seq.* of the Act. The detached lands were declared to be relieved of liability for debt service on the outstanding bonds of Improvement District Nos. 105 and 250, including each such Improvement District’s Included Amount of the Series 2011A Bonds of each series to the extent permitted by law.
- Improvement District No. 105 and ten other water improvement districts were consolidated into a new improvement district, Improvement District No. 125, in accordance with Section 36454 *et seq.* of the Act. Pursuant to Section 36454.1 of the Act, Improvement District No. 105’s Included Amount of the Series 2011A Bonds of each series was assumed by and became the liability of Improvement District No. 125.
- Improvement District No. 250 and nine other sewer improvement districts were consolidated into a new improvement district, Improvement District No. 225, in accordance with Section 36454 *et seq.* of the Act. Pursuant to Section 36454.1 of the Act, Improvement District No. 250’s Included Amount of the Series 2011A Bonds of each series was assumed by and became the liability of Improvement District No. 225.

As a result of the foregoing actions:

- The Series 2011A Bonds currently constitute the consolidated, several general obligations of Improvement District Nos. 113, 125, 213 and 225. Pursuant to the Act, Improvement District Nos. 125 and 225 are authorized to levy and collect the assessments and charges necessary to satisfy the obligations of their predecessor improvement districts, including the assessments and charges necessary to satisfy payment of the Series 2011A Bonds for Improvement District Nos. 105 and 250, respectively.

- As of December 31, 2020: (i) Improvement District No. 125 had \$305,517,268 aggregate principal amount of authorized but unissued *ad valorem* assessment bonds and \$175,153,624 aggregate principal amount of outstanding *ad valorem* assessment bonds, including the Series 2011A Bonds; and (ii) Improvement District No. 225 had \$363,338,887 aggregate principal amount of authorized but unissued *ad valorem* assessment bonds and \$246,469,903 aggregate principal amount of outstanding *ad valorem* assessment bonds, including the Series 2011A Bonds. See Table 3 under the caption “THE IRVINE RANCH WATER DISTRICT—Outstanding Indebtedness—Improvement District Indebtedness” in Appendix A.

Improvement District No. 125 (water) covers approximately 35,438 acres of the District, including several contiguous and non-contiguous areas in the central and coastal parts of the District. Improvement District No. 225 (sewer) covers approximately 32,862 acres of the District, including several contiguous and non-contiguous areas in the central part of the District. Currently, the majority of the land within Improvement District Nos. 125 and 225 consists of developed residential and commercial property. However, the District expects certain areas within Improvement District Nos. 125 and 225 to be subject to infill development and redevelopment in the future. The District expects such additional development in Improvement District Nos. 125 and 225 to continue through at least 2024. The Fiscal Year 2021 assessed value of the land in Improvement District No. 125 is \$48,290,836,261, while the Fiscal Year 2014 assessed value of the land in Improvement District No. 105 before its consolidation into Improvement District No. 125 was \$7,099,866,552. The Fiscal Year 2021 assessed value of the land in Improvement District No. 225 is \$41,383,837,339, while the Fiscal Year 2014 assessed value of the land in Improvement District No. 250 before its consolidation into Improvement District No. 225 was \$6,776,400,622.

See Table 3 under the caption “THE IRVINE RANCH WATER DISTRICT—Outstanding Indebtedness—Improvement District Indebtedness” in Appendix A for a description of the *ad valorem* assessment bonds, including the Series 2011A Bonds, attributable to Improvement District Nos. 125 and 225, respectively.

Improvement District Nos. 113 and 213. Improvement District No. 113 (water) and Improvement District No. 213 (sewer) are coterminous and are located in portions of the Cities of Tustin and Irvine. Improvement District Nos. 113 and 213 are comprised of approximately 1,629 acres of the land formerly known as Marine Corps Air Station Tustin. The boundaries of Improvement District Nos. 113 and 213 are Harvard Avenue on the southeast, Barranca Parkway on the southwest, Red Hill Avenue on the northwest and Edinger Avenue on the northeast. The former helicopter base, now known as Tustin Legacy, is currently being redeveloped with residential, commercial, institutional and recreational uses. The District expects development in Improvement District Nos. 113 and 213 to continue through 2024. The District expects that the development will consist of approximately 7,200 dwelling units and approximately 9,700,000 square feet of commercial, institutional and recreational uses when completed. The Fiscal Year 2021 assessed value of the land in coterminous Improvement District Nos. 113 and 213 is \$1,283,110,993.

Security for the Series 2011A Bonds

General. The Series 2011A Bonds constitute the consolidated, several general obligations of the Improvement Districts payable from the following sources, each as further described under the caption “SECURITY FOR THE SERIES 2011A BONDS”: (i) Assessment Proceeds collected from within each Improvement District and applied by the District to pay such Improvement District’s Included Amount (as defined below) of the principal, Purchase Price and Redemption Price of, and interest on, all Outstanding Series 2011A Bonds of the applicable series; (ii) Net Revenues of the District; and (iii) certain monies and investment earnings in certain funds and accounts created under the respective Indentures.

The principal amount of the Series 2011A Bonds of a series allocated to an Improvement District is referred to as such Improvement District’s “**Included Amount**” and an Improvement District’s Included Amount divided by the total principal amount of the Series 2011A Bonds of such series is referred to as such Improvement District’s “**Included Percentage**.”

Assessment Proceeds. The District has covenanted in the Indentures that, to the extent necessary to provide Assessment Proceeds sufficient to pay when due, together with the other funds available for such payment, the principal of and interest on the Included Amount for each respective Improvement District, the District will: (a) fix and collect, or cause the fixing and collection of, *ad valorem* assessments on taxable land within the applicable Improvement District; (b) pursue any remedy available to collect, or cause the collection of, delinquent *ad valorem* assessments and apply amounts realized from the sale of any property for the enforcement of delinquent *ad valorem* assessments to the payment of principal of and interest on the Included Amount of the Series 2011A Bonds of each series of the applicable Improvement District; or (c) in its discretion, impose and collect, or cause the imposition and collection of, In Lieu Charges (which constitute charges for water or sewer service, as applicable, in the applicable Improvement District in lieu of *ad valorem* assessments). See the caption “SECURITY FOR THE SERIES 2011A BONDS—General—Covenant to Collect Assessment Proceeds.”

As among the Improvement Districts, Assessment Proceeds collected in any Improvement District will not be available to pay any other Improvement District’s share of debt service of the Series 2011A Bonds of a series. Each Improvement District’s Included Amount and Included Percentage will be as set forth below:

SERIES 2011A-1 BONDS

<i>Improvement District No.</i>	<i>Included Amount</i>	<i>Included Percentage</i>
113	\$ 2,235,000	5.00%
125	20,874,900	46.70
213	2,816,100	6.30
225	<u>18,774,000</u>	<u>42.00</u>
Total	<u>\$ 44,700,000</u>	<u>100.00%</u>

SERIES 2011A-2 BONDS

<i>Improvement District No.</i>	<i>Included Amount</i>	<i>Included Percentage</i>
113	\$ 1,490,000	5.00%
125	13,916,600	46.70
213	1,877,400	6.30
225	<u>12,516,000</u>	<u>42.00</u>
Total	<u>\$ 29,800,000</u>	<u>100.00%</u>

The Included Amount for each Improvement District with respect to each series of Series 2011A Bonds and any other outstanding or future District general obligation bonds issued for such Improvement District are equally secured by the *ad valorem* assessments and any charges for water or sewer service, as applicable, imposed and collected in lieu of *ad valorem* assessments, collected within such Improvement District. The *ad valorem* assessments are levied only on land and are based on the land value of parcels in the Improvement District without regard to the value of any improvements thereon. See Appendix A—“IRVINE RANCH WATER DISTRICT” under the captions “THE IMPROVEMENT DISTRICTS—Improvement District Nos. 125 and 225” and “THE IMPROVEMENT DISTRICTS—Improvement District Nos. 113 and 213.”

During the term of the Series 2011A Bonds of each series, the Included Amounts and Included Percentages for any Improvement District may be adjusted as a result of the purchase or redemption of Series 2011A Bonds of such series allocated to one or more Improvement Districts, pursuant to calculations made by the District and delivered to the Trustee pursuant to the applicable Indenture, without need for any amendment of or supplement to such Indenture.

Net Revenues. The Series 2011A Bonds are also payable from the Net Revenues of the District and are secured by a pledge of the Revenues of the District, subject to the application of the Revenues as provided in the Indentures. Net Revenues for any period consist of the Revenues of the District less the Operation and Maintenance Expenses of the District for such period, as such terms are defined under the caption “SECURITY FOR THE SERIES 2011A BONDS—Pledge of Assessment Proceeds and Revenues—Net Revenues.”

Net Revenues collected within any improvement district of the District, including the Improvement Districts, are available to make debt service payments on the Series 2011A Bonds.

The obligation of the District to pay the principal, Redemption Price and Purchase Price (other than the Purchase Price due on an Unscheduled Mandatory Tender) of, and interest on, the Series 2011A Bonds from Net Revenues is payable on a parity with the District’s obligations under certain Parity Obligations. See the caption “SECURITY FOR THE SERIES 2011A BONDS—Existing Parity Obligations.” The District may enter into additional Parity Obligations in accordance with the terms of the Indentures. See the caption “SECURITY FOR THE SERIES 2011A BONDS—Limitations on Parity and Superior Obligations—Obligations on a Parity with the Series 2011A Bonds.”

The District has covenanted in the Indentures, to the fullest extent permitted by law, to fix, prescribe and collect Revenues which, together with any *ad valorem* assessments available to pay Debt Service on Parity Obligations which are not applied as a credit against Debt Service, will be at least sufficient to yield during each Fiscal Year Net Revenues which are at least equal to 125% of Aggregate Debt Service payable during such Fiscal Year. The District may make adjustments from time to time in such rates and charges and may make such classifications thereof as it deems necessary, but will not reduce the rates and charges then in effect unless the Net Revenues from such reduced rates and charges will at all times be sufficient to meet the requirements of the rate covenant with respect to all outstanding Parity Obligations. See the caption “SECURITY FOR THE SERIES 2011A BONDS—General—Revenue Rate Covenant.”

Limited Obligations. THE SERIES 2011A BONDS DO NOT CONSTITUTE AN OBLIGATION OF THE STATE OF CALIFORNIA OR ANY POLITICAL SUBDIVISION OF THE STATE OF CALIFORNIA OTHER THAN THE DISTRICT AND THE IMPROVEMENT DISTRICTS AS PROVIDED IN THE INDENTURES. NO FUNDS OF THE DISTRICT OR THE IMPROVEMENT DISTRICTS, OTHER THAN THE FUNDS INCLUDED IN THE TRUST ESTATE, ARE LIABLE FOR THE PAYMENT OF THE PRINCIPAL, REDEMPTION PRICE OR PURCHASE PRICE OF, OR INTEREST ON, THE SERIES 2011A BONDS. EXCEPT AS PROVIDED IN THE INDENTURES WITH RESPECT TO THE TRUST ESTATE, NEITHER THE FAITH AND CREDIT NOR THE TAXING POWER OF THE DISTRICT IS LIABLE FOR OR PLEDGED TO THE PAYMENT OF THE PRINCIPAL, REDEMPTION PRICE OR PURCHASE PRICE OF, OR INTEREST ON, THE SERIES 2011A BONDS.

COVID-19 Outbreak

The District has not experienced to date, and does not expect to experience in the future, a material impact on its finances or operations as a result of the COVID-19 outbreak. See Appendix A under the caption “THE IRVINE RANCH WATER DISTRICT—COVID-19 Outbreak” for a discussion of the impact of the COVID-19 outbreak on the District.

Professionals Involved in the Remarketing

The Bank of New York Mellon Trust Company, N.A. serves as Trustee under the Indentures. Certain legal matters in connection with the reoffering of the Series 2011A Bonds will be passed upon by Orrick, Herrington & Sutcliffe LLP, as Bond Counsel to the District, by Hanson Bridgett LLP, as general counsel to

the District (“**General Counsel**”), and for Goldman Sachs & Co. LLC (the “**Remarketing Agent**”) by Stradling Yocca Carlson & Rauth, a Professional Corporation.

Summaries Not Definitive

The summaries and references to all documents, statutes, reports and other instruments referred to herein do not purport to be complete, comprehensive or definitive, and each such summary or reference is qualified in its entirety by reference to each such document, statute, report or instrument. The capitalization of any word not conventionally capitalized or otherwise defined herein indicates that such word is defined in the Indentures and, as used herein, has the meaning given to it in the Indentures. Unless otherwise indicated, all financial and statistical information herein has been provided by the District.

All references to and summaries of the Indentures, documents, statutes, reports and other instruments referred to herein are qualified in their entirety by reference to the full Indentures, and each such document, statute, report or instrument, respectively. Forward-looking statements in this Remarketing Statement are subject to risks and uncertainties. Actual results may vary from forecasts or projections contained herein because events and circumstances do not occur as expected, and such variances may be material. The projections contained in this Remarketing Statement will not be updated as part of the District’s continuing disclosure obligations for the Series 2011A Bonds.

Additional Information

Copies of the Indentures and audited financial statements of the District are available for inspection at the offices of the District in Irvine, California, and will be available from the Trustee upon request and payment of costs. Additional information regarding this Remarketing Statement may be obtained by contacting the District, at the following address:

Treasurer
Irvine Ranch Water District
15600 Sand Canyon Avenue
Irvine, California 92618
(949) 453-5300

THE SERIES 2011A BONDS

This Remarketing Statement describes the Series 2011A Bonds while in the Index Mode and for the Tender Period described herein only. There are significant differences in the terms of the Series 2011A Bonds while they bear interest in a Mode other than an Index Mode. This Remarketing Statement is not intended to provide information with respect to the Series 2011A Bonds bearing interest in a Mode other than the Index Mode or in another Tender Period. Owners and prospective owners of the Series 2011A Bonds should not rely on this Remarketing Statement for information in connection with any Change in Mode or any other Tender Period, but should look solely to the offering document to be used in connection with any such Change in Mode or other Tender Period.

General

The Series 2011A Bonds mature on October 1, 2037. The Series 2011A Bonds are being remarketed in an Index Mode for a Tender Period commencing on February 4, 2021 with the Scheduled Mandatory Tender Date set forth on the front cover page hereof and will bear interest at an Index Tender Rate (which is equal to the sum of: (a) the SIFMA Average Index Rate calculated for each Index Rate Accrual Period; and (b) the applicable Index Spread for such Tender Period). Notice of the Index Spread for the Tender Period commencing on February 4, 2021 will be given as described under the caption “—Determination of Index Tender Rates and Index Rate Accrual Periods for Series 2011A Bonds in Index Mode—Index Spread;

Adjustment of Index Spread.” All Outstanding Series 2011A Bonds of a series will be in the same Mode. Any Mode, other than a Fixed Rate Mode, may be changed to any other Mode at the times and in the manner provided in the applicable Indenture.

While in the Index Mode, the Series 2011A Bonds of a series will be subject to all of the terms of the Indenture relating to such series of Series 2011A Bonds in the Index Mode, including provisions that require the Owners to tender their Series 2011A Bonds for purchase on the Scheduled Mandatory Tender Date and on other dates as described in this Remarketing Statement, and provisions that permit the District to effect an Unscheduled Mandatory Tender (which Unscheduled Mandatory Tender is subject to rescission and successful remarketing as described under the caption “—Remarketing and Purchase of Series 2011A Bonds in Connection with Unscheduled Mandatory Tender—Rescission”). See the captions “—Mandatory Tender for Purchase” and “—Purchase of Series 2011A Bonds.”

While in the Index Mode, the Series 2011A Bonds are not subject to tender for purchase at the option of the Owners.

Each series of the Series 2011A Bonds are in the form of fully registered bonds and are registered in the name of Cede & Co., as nominee of The Depository Trust Company, New York, New York (“DTC”). DTC will act as securities depository for the Series 2011A Bonds. While the Series 2011A Bonds are in the Index Mode, individual purchases of Series 2011A Bonds will be made in principal amounts of \$100,000 and integral multiples of \$5,000 in excess thereof. See the caption “—Book-Entry Only System” and Appendix E hereto.

Payment of Interest

Interest on the Series 2011A Bonds in an Index Mode will be calculated on the basis of a 365/366-day year for the actual number of days elapsed. Interest on the Series 2011A Bonds in an Index Mode and for the Tender Period commencing February 4, 2021 is payable on the first Business Day of each calendar month, commencing March 1, 2020, and on each applicable Mandatory Purchase Date, Scheduled Mandatory Tender Date and Unscheduled Mandatory Tender Date on which all outstanding Series 2011A Bonds of a series are purchased (each, an “**Interest Payment Date**”).

During the Index Mode, payment will be made on each Interest Payment Date for unpaid interest accrued from and including each Interest Accrual Date, which is the first day of each Tender Period and each Interest Payment Date thereafter. The amount of interest payable on each such Interest Payment Date will be determined in accordance with the provisions described under the caption “—Determination of Index Tender Rates and Index Rate Accrual Periods for Series 2011A Bonds in Index Mode—Duration of Tender Period”) and, thereafter, the first Business Day of each month during such Tender Period (each, an “**Interest Accrual Date**”) to but excluding such Interest Payment Date. Notwithstanding any provision of the Indentures, at no time may the rate of interest on any Series 2011A Bond exceed the Maximum Rate.

Determination of Index Tender Rates and Index Rate Accrual Periods for Series 2011A Bonds in Index Mode

Determination of SIFMA Average Index Rate and Index Tender Rate. During each Tender Period, no later than 11:00 a.m.* on the Business Day immediately preceding each Interest Payment Date while the Series 2011A Bonds of a series bear interest in the Index Mode, the Trustee will deliver written notice to the District and the Remarketing Agent specifying the SIFMA Average Index Rate and the Index Tender Rate for, and the aggregate amount of interest that accrued during, the Index Rate Accrual Period ending on the day preceding such Interest Payment Date together with a detailed calculation of the foregoing. All percentages resulting from the calculation of the SIFMA Average Index Rate will be rounded, if necessary, to the nearest

* Unless otherwise expressly stated, all times referred to in this Remarketing Statement are New York City time.

ten-thousandth of a percentage point with five hundred thousandths of a percentage point rounded upward, and all dollar amounts used in or resulting from such calculation of interest on such series of Series 2011A Bonds while bearing interest in an Index Mode will be rounded to the nearest cent (with one-half cent being rounded upward).

Notwithstanding anything set forth in the Indentures to the contrary with respect to the calculation of the SIFMA Average Index Rate, the Index Tender Rate for the Series 2011A Bonds shall never be less than 0%.

Index Spread; Adjustment of Index Spread. Promptly after the Remarketing Agent determines the Index Spread for the Tender Period commencing on February 4, 2021, the District will publish it by supplementing this Remarketing Statement and posting the supplement with EMMA. With respect to subsequent Tender Periods, the Index Spread will be determined by the Remarketing Agent and adjusted as described under the captions “—Remarketing and Purchase of Series 2011A Bonds in Connection with Scheduled Mandatory Tender” and “—Remarketing and Purchase of Series 2011A Bonds in Connection with Unscheduled Mandatory Tender.” During each Tender Period, the Index Spread with respect to such Tender Period will apply to all Series 2011A Bonds of a series.

Duration of Tender Period. A Tender Period will commence on February 4, 2021 and will have a Scheduled Mandatory Tender Date of March 2, 2022. Thereafter, each Tender Period will commence on the first to occur of: (i) the Scheduled Mandatory Tender Date of the immediately preceding Tender Period; (ii) an Unscheduled Mandatory Tender Date in connection with any Unscheduled Mandatory Tender if all Series 2011A Bonds of a series are actually purchased as described under the caption “—Remarketing and Purchase of Series 2011A Bonds in Connection with Unscheduled Mandatory Tender—Purchase of Series 2011A Bonds;” and (iii) the effective date of a Change in Mode to an Index Mode. Each Tender Period will terminate on the first to occur of: (a) the Scheduled Mandatory Tender Date; (b) an Unscheduled Mandatory Tender Date in connection with any Unscheduled Mandatory Tender if all Series 2011A Bonds are actually purchased as described under the caption “—Remarketing and Purchase of Series 2011A Bonds in Connection with Unscheduled Mandatory Tender—Purchase of Series 2011A Bonds;” (c) the first date on which the Series 2011A Bonds of a series bear interest in a Mode other than the Index Mode; or (d) the date on which all Series 2011A Bonds of a series are redeemed in accordance with the terms of the applicable Indenture or all principal and accrued interest on all Series 2011A Bonds of such series are otherwise paid in full.

Mandatory Tender for Purchase

Scheduled Mandatory Tender for Purchase. Unless the Series 2011A Bonds subject to a Tender Period have been purchased (including in connection with a Change in Mode or an Unscheduled Mandatory Tender) or redeemed prior to the Scheduled Mandatory Tender Date for such Tender Period, the Owners of all of the Series 2011A Bonds of such series will tender for purchase, and the District will purchase, all of the Series 2011A Bonds of such series on the Scheduled Mandatory Tender Date for such Tender Period. The Trustee will give notice of each Scheduled Mandatory Tender to the Owners of the Series 2011A Bonds of a series as provided in the applicable Indenture not less than seven days prior to the Scheduled Mandatory Tender Date. With respect to the Tender Period commencing on February 4, 2021, the Scheduled Mandatory Tender Date is March 2, 2022 and, with respect to each subsequent Tender Period, the Scheduled Mandatory Tender Date will be determined as described under the caption “—Determination of Index Tender Rates and Index Rate Accrual Periods for Series 2011A Bonds in Index Mode—Duration of Tender Period.” Failure of the District to pay the Purchase Price for the Series 2011A Bonds of a series on a Scheduled Mandatory Tender Date constitutes an Event of Default under the applicable Indenture. See the caption “—Remarketing and Purchase of Series 2011A Bonds in Connection with Scheduled Mandatory Tender—Consequences of a Scheduled Mandatory Tender Failure” below.

Unscheduled Mandatory Tender for Purchase. While the Series 2011A Bonds of a series bear interest in an Index Mode, at its option, the District may require, during each Tender Period, the Owners of all

(but not less than all) of the Series 2011A Bonds of such series to tender their Series 2011A Bonds to the District for purchase, from the source of funds described under the caption “—Remarketing and Purchase of Series 2011A Bonds in Connection with Unscheduled Mandatory Tender—Purchase of Series 2011A Bonds” on any Business Day from and after the Call Protection Date for such Tender Period. The Call Protection Date for the Tender Period commencing February 4, 2021 is set forth on the front cover page hereof. To exercise such option, the District will deliver to the Trustee at its Corporate Trust Office and the Remarketing Agent, no later than 10 days before the Unscheduled Mandatory Tender Date, the written notice of Unscheduled Mandatory Tender described under the caption “—Remarketing and Purchase of Series 2011A Bonds in Connection with Unscheduled Mandatory Tender—Effect of a Successful Remarketing.” The Trustee will give notice of each Unscheduled Mandatory Tender to the Owners of the Series 2011A Bonds of a series as provided in the applicable Indenture not less than seven days prior to the Unscheduled Mandatory Tender Date. Except as provided under the captions “—Remarketing and Purchase of Series 2011A Bonds in Connection with Unscheduled Mandatory Tender—Rescission” and “—Remarketing and Purchase of Series 2011A Bonds in Connection with Unscheduled Mandatory Tender—Failure to Meet Conditions,” the Trustee will pay to the Owners of the Series 2011A Bonds 100% of the principal amount of the Series 2011A Bonds from the proceeds of the remarketing of such Series 2011A Bonds as described under the caption “—Remarketing and Purchase of Series 2011A Bonds in Connection with Unscheduled Mandatory Tender—Purchase of Series 2011A Bonds.” If all outstanding Series 2011A Bonds of a series are purchased, the Unscheduled Mandatory Tender Date is also an Interest Payment Date for the Series 2011A Bonds of such series and the District will pay the unpaid accrued interest on the Series 2011A Bonds of such series on such date. The failure to pay the purchase price of Series 2011A Bonds of a series in connection with an Unscheduled Mandatory Tender does not constitute an Event of Default under the applicable Indenture and the purchase of the Series 2011A Bonds of such series subject to mandatory tender will be cancelled and the Index Mode Tender Period will continue. See the caption “—Remarketing and Purchase of Series 2011A Bonds in Connection with Unscheduled Mandatory Tender—Failure to Meet Conditions.”

Purchase of Series 2011A Bonds

The Remarketing Agent has agreed to use its best efforts to remarket the Series 2011A Bonds pursuant to the applicable Indenture at the minimum interest rate available in the marketplace (but under no circumstances less than 0%) to permit the Remarketing Agent to remarket the Series 2011A Bonds of such series on the Purchase Date, Mandatory Purchase Date, Scheduled Mandatory Tender Date or Unscheduled Mandatory Tender Date, as applicable, at the principal amount thereof; provided that the remarketing of the Series 2011A Bonds in connection with a Scheduled Mandatory Tender or an Unscheduled Mandatory Tender will be as provided under the captions “—Remarketing and Purchase of Series 2011A Bonds in Connection with Scheduled Mandatory Tender” and “—Remarketing and Purchase of Series 2011A Bonds in Connection with Unscheduled Mandatory Tender,” respectively. Series 2011A Bonds subject to purchase on a Mandatory Purchase Date, Scheduled Mandatory Tender Date or Unscheduled Mandatory Tender Date will be purchased from the Owners thereof at the Purchase Price which will be payable solely from the following sources in the order listed, except that the Purchase Price in connection with an Unscheduled Mandatory Tender is payable solely from the source described in clause (i) below:

- (i) Immediately available funds on deposit in the Remarketing Proceeds Account; and
- (ii) Immediately available funds on deposit in the District Purchase Account.

See Appendix C under the caption “DEFINITIONS” for a description of the Remarketing Proceeds Account and District Purchase Account.

At or before 3:00 p.m. on the Business Day immediately preceding each Mandatory Purchase Date, Scheduled Mandatory Tender Date or Unscheduled Mandatory Tender Date, the Remarketing Agent: (i) unless otherwise provided in a Representation Letter, is to deliver to the Trustee instructions for registration of Series 2011A Bonds of a series remarketed in accordance with the applicable Indenture; and (ii) is to give Electronic

Notice to the Trustee and the District, specifying the aggregate principal amount of Series 2011A Bonds not remarketed, if any. If the Series 2011A Bonds of a series are registered in the name of a Bond Depository or its nominee, and if the amount of such remarketing proceeds is sufficient to pay the Purchase Price of all Series 2011A Bonds of such series to be purchased on the Mandatory Purchase Date, Scheduled Mandatory Tender Date or Unscheduled Mandatory Tender Date, as applicable, the Remarketing Agent may apply such remarketing proceeds to the appropriate accounts of such Bond Depository to effect payment of the Purchase Price of such series of Series 2011A Bonds in accordance with the procedures established by such Bond Depository.

If the amount of proceeds from the remarketing delivered to the Trustee indicates that Series 2011A Bonds of a series are required to be purchased from moneys provided by the District, the Trustee will give Electronic Notice to the District at or prior to 11:30 a.m. on such date specifying the information set forth in the applicable Indenture. Upon receipt of such notice, on each Mandatory Purchase Date and Scheduled Mandatory Tender Date, the District is to deposit with the Trustee in the District Purchase Account, by 2:00 p.m. on such date, immediately available funds in an amount together with the remarketing proceeds, to enable the Trustee to pay the Purchase Price of the tendered Series 2011A Bonds. Unless otherwise provided in a Representation Letter, on each Mandatory Purchase Date, Scheduled Mandatory Tender Date and, if all Series 2011A Bonds are purchased, each Unscheduled Mandatory Tender Date, all Series 2011A Bonds of such series which have been remarketed will be registered as directed by the Remarketing Agent.

The Trustee will pay from the funds specified in the applicable Indenture, the Purchase Price for each tendered Series 2011A Bond at or prior to 3:00 p.m. on the Mandatory Purchase Date, Scheduled Mandatory Tender Date or, if all Series 2011A Bonds of a series are purchased, the Unscheduled Mandatory Tender Date, as the case may be; provided that the Purchase Price of Series 2011A Bonds in connection with an Unscheduled Mandatory Tender will be payable only from amounts in the Remarketing Proceeds Account. The Purchase Price of any Series 2011A Bond so tendered is payable only upon surrender of such Series 2011A Bond to the Trustee at its Corporate Trust Office for delivery of such Series 2011A Bond, except that payment of the Purchase Price of any Series 2011A Bond tendered for purchase or otherwise purchased pursuant to a Representation Letter will be made in immediately available funds and in such manner as the Bond Depository and the Trustee agree.

Notwithstanding any provision to the contrary contained in the Indentures, all tenders for purchase in connection with an Unscheduled Mandatory Tender are payable only from immediately available funds on deposit in the Remarketing Proceeds Account.

Remarketing and Purchase of Series 2011A Bonds in Connection with Scheduled Mandatory Tender

Remarketing of Series 2011A Bonds. During each Tender Period in the Index Mode, upon establishing the Index Spread for the next succeeding Tender Period (as described below under the caption “—Determination of Index Spread”), the Remarketing Agent will offer for sale and use its best efforts to sell in accordance with the applicable Remarketing Agreement all Series 2011A Bonds of a series at a price equal to the principal amount thereof, such that the Index Spread for the next Tender Period will be adjusted as described below under the caption “—Determination of Index Spread.” The Remarketing Agent will sell any Series 2011A Bonds of the applicable series tendered pursuant to a Scheduled Mandatory Tender at the principal amount thereof; provided that if the District delivers a Favorable Opinion of Bond Counsel, the District has the right to direct the Remarketing Agent to sell any Series 2011A Bonds tendered pursuant to a Scheduled Mandatory Tender at a discount or at a premium.

Determination of Scheduled Mandatory Tender Date. Unless the Series 2011A Bonds subject to a Tender Period have been purchased (including in connection with a Change in Mode or an Unscheduled Mandatory Tender) or redeemed prior to the Scheduled Mandatory Tender Date for such Tender Period, the District, by direction to the other Notice Parties by Electronic Notice or telecopy not later than 10 days before the Scheduled Mandatory Tender Date for each Tender Period, is to determine the Scheduled Mandatory

Tender Date for all Series 2011A Bonds of a series for the Tender Period immediately following the purchase of such Series 2011A Bonds pursuant to a Scheduled Mandatory Tender as provided in the applicable Indenture. Such Scheduled Mandatory Tender Date may be any Business Day during the next Tender Period except that the Scheduled Mandatory Tender Date will not be a date that is earlier than three months after the commencement of the Tender Period. If the District is required to deliver a written direction as provided above but fails to do so, then the Scheduled Mandatory Tender Date for the Tender Period immediately following the purchase of Series 2011A Bonds of such series will be the date that is one year after the commencement of the Tender Period (unless such date is not a Business Day, in which case the Scheduled Mandatory Tender Date will be the first Business Day following such date).

Establishment of Call Protection Date. With respect to any Tender Period commencing on a Scheduled Mandatory Tender Date that the Series 2011A Bonds of a series are purchased pursuant to a Scheduled Mandatory Tender, the Call Protection Date will be the Tender Period Standard Date; provided that if the District delivers to the Trustee a Favorable Opinion of Bond Counsel and specifies such Call Protection Date in the direction as to the Scheduled Mandatory Tender Date, the District may determine that the Call Protection Date for such Tender Period will be any Business Day during the Tender Period. The Call Protection Date with respect to the Tender Period commencing on February 4, 2021 is September 3, 2021.

Determination of Index Spread. Unless the Series 2011A Bonds of a series subject to a Tender Period have been purchased (including in connection with a Change in Mode or an Unscheduled Mandatory Tender) or redeemed prior to the Scheduled Mandatory Tender Date for such Tender Period, no later than 5:00 p.m. on the day that is two Business Days before the Scheduled Mandatory Tender Date for such Tender Period, the Remarketing Agent is to determine the Index Spread with respect to the Tender Period immediately following such Scheduled Mandatory Tender Date. The Index Spread determined by the Remarketing Agent is to be equal to the minimum fixed spread to SIFMA which, if borne by such series of Series 2011A Bonds, would enable the Remarketing Agent to sell all Series 2011A Bonds of such series tendered or deemed tendered pursuant to the Scheduled Mandatory Tender on the Scheduled Mandatory Tender Date at a price equal to the principal amount thereof. With respect to all Series 2011A Bonds of a series sold with an Index Tender Rate based on an Index Spread determined by the Remarketing Agent pursuant to the applicable Indenture, the determination of the Index Spread so determined by the Remarketing Agent will be conclusive and binding on the Notice Parties and the Owners of the Series 2011A Bonds of such series.

Purchase of Series 2011A Bonds. Series 2011A Bonds required to be purchased as described under caption “—Remarketing of Series 2011A Bonds” will be purchased from the Owners thereof, on the Scheduled Mandatory Tender Date at the Purchase Price from the sources and in the order of priority described under the caption “—Mandatory Tender for Purchase—Scheduled Mandatory Tender for Purchase.”

The District is irrevocably obligated to pay the Purchase Price of all Series 2011A Bonds of a series on each Scheduled Mandatory Tender Date.

Consequences of a Scheduled Mandatory Tender Failure. Upon the occurrence of a Scheduled Mandatory Tender Failure on any Scheduled Mandatory Tender Date, the following will occur:

(i) The Trustee will promptly return all Series 2011A Bonds of a series to the Owners thereof together with notice of such failure and the Trustee and the Remarketing Agent will promptly return all remarketing proceeds to the persons providing such moneys without interest;

(ii) The Tender Period then in effect will terminate on such Scheduled Mandatory Tender Date and the Series 2011A Bonds of a series will bear interest at the last Index Tender Rate for the Tender Period so terminated from the applicable Scheduled Mandatory Tender Date to the earliest to occur of the purchase of such series of Series 2011A Bonds by or on behalf of the District or the payment of the principal of such series of Series 2011A Bonds; and

- (iii) An Event of Default under the applicable Indenture will occur.

Effect of a Successful Remarketing. If moneys on deposit with the Trustee are sufficient to pay the Purchase Price of Series 2011A Bonds to be purchased as described under caption “—Remarketing of Series 2011A Bonds” on a Scheduled Mandatory Tender Date, the following will occur:

(i) The Tender Period in effect immediately before such purchase will terminate on the Scheduled Mandatory Tender Date and a new Tender Period will commence on such date; and

(ii) The Index Spread with respect to the applicable Series 2011A Bonds for the new Tender Period will be the Index Spread determined as described above under the caption “—Determination of Index Spread.”

Notification of Scheduled Mandatory Tender Failure. On the date of a Scheduled Mandatory Tender Failure, the Trustee will deliver a notice by mail to: (i) the District; (ii) the respective Owners of any applicable Series 2011A Bonds at their addresses appearing on the Bond Register; (iii) the Remarketing Agent; and (iv) one or more Information Services, which will state: (A) that a Scheduled Mandatory Tender Failure occurred; (B) the Trustee will return all Series 2011A Bonds of such series tendered on the Scheduled Mandatory Tender Date to the Owners thereof; and (C) an Event of Default has occurred under the applicable Indenture.

Remarketing and Purchase of Series 2011A Bonds in Connection with Unscheduled Mandatory Tender

Remarketing of Series 2011A Bonds. Upon receipt of notice of an Unscheduled Mandatory Tender from the District as described under the caption “—Mandatory Tender for Purchase—Unscheduled Mandatory Tender for Purchase,” the Remarketing Agent will offer for sale and use its best efforts to sell in accordance with the applicable Remarketing Agreement all Series 2011A Bonds of a series at a price equal to the principal amount thereof, such that the Index Spread for the next Tender Period will be adjusted as described below under the caption “—Determination of Index Spread.” The Remarketing Agent will sell any Series 2011A Bonds tendered pursuant to an Unscheduled Mandatory Tender at the principal amount thereof; provided that if the District delivers a Favorable Opinion of Bond Counsel, the District has the right to direct the Remarketing Agent to sell any Series 2011A Bonds tendered pursuant to an Unscheduled Mandatory Tender at a discount or at a premium.

Determination of Scheduled Mandatory Tender Date. The District, by direction to the other Notice Parties by Electronic Notice or telecopy not later than ten days before each Unscheduled Mandatory Tender Date, will determine the Scheduled Mandatory Tender Date for the Tender Period immediately following the purchase of Series 2011A Bonds of a series pursuant to an Unscheduled Mandatory Tender, as provided in the applicable Indenture. Such Scheduled Mandatory Tender Date may be any Business Day, except that the Scheduled Mandatory Tender Date may not be a date that is earlier than three months after the commencement of the Tender Period.

Establishment of Call Protection Date. With respect to any Tender Period commencing on an Unscheduled Mandatory Tender Date that all Series 2011A Bonds of a series are purchased pursuant to an Unscheduled Mandatory Tender, the Call Protection Date will be the Tender Period Standard Date; provided that if the District delivers to the Trustee a Favorable Opinion of Bond Counsel and specifies such Call Protection Date in the direction as to the Scheduled Mandatory Tender Date, the District may determine that the Call Protection Date for such Tender Period will be any Business Day during such Tender Period. The Call Protection Date with respect to the Tender Period commencing on February 4, 2021 is September 3, 2021.

Determination of Index Spread. No later than 5:00 p.m. on the day that is two Business Days before each Unscheduled Mandatory Tender Date, the Remarketing Agent will determine the Index Spread with respect to the Tender Period immediately following such Unscheduled Mandatory Tender Date. The

Remarketing Agent will determine the Index Spread which will be equal to the minimum spread to SIFMA which, if borne by the Series 2011A Bonds of a series, would enable the Remarketing Agent to sell all Series 2011A Bonds of such series tendered pursuant to the Unscheduled Mandatory Tender on the Unscheduled Mandatory Tender Date at a price equal to the principal amount thereof. With respect to all Series 2011A Bonds of a series sold with an Index Tender Rate based on an Index Spread determined by the Remarketing Agent pursuant to the applicable Indenture, the determination of the Index Spread so determined by the Remarketing Agent will be conclusive and binding on the Notice Parties and the Owners of such Series 2011A Bonds.

Purchase of Series 2011A Bonds. Subject to the provisions described under the caption “—Rescission” and “—Failure to Meet Conditions,” the District will cause Series 2011A Bonds required to be purchased in an Unscheduled Mandatory Tender to be purchased on each Unscheduled Mandatory Tender Date from the Owners thereof at the Purchase Price from the source indicated under the caption “—Purchase of Series 2011A Bonds.”

Consequences of an Unscheduled Mandatory Tender Failure or a Rescission. If the District rescinds any Unscheduled Mandatory Tender as described under the caption “—Rescission” or if any of the conditions of any Unscheduled Mandatory Tender are not satisfied as described under the captions “—Mandatory Tender for Purchase—Unscheduled Mandatory Tender for Purchase” and “—Failure to Meet Conditions,” then the District will not have any obligation to purchase any Series 2011A Bonds and no purchase of Series 2011A Bonds will occur. In such event, the following will occur:

(i) The Trustee will return all Series 2011A Bonds of a series to the Owners thereof together with notice of the basis for such return and the Trustee and the Remarketing Agent will return all remarketing proceeds to the persons providing such moneys without interest;

(ii) Such Series 2011A Bonds will continue to bear interest at the Index Tender Rate in effect during such Tender Period without change or modification and the Tender Period then in effect will continue until terminated in accordance with the provisions set forth under the caption “—Determination of Index Tender Rates and Index Rate Accrual Periods for Series 2011A Bonds in Index Mode—Duration of Tender Period”; and

(iii) No Event of Default under the applicable Indenture will have occurred.

Rescission. The District has the option to deliver to the Trustee at its Corporate Trust Office and the Remarketing Agent, on or prior to 5:00 p.m. on the Business Day immediately preceding the Unscheduled Mandatory Tender Date for an Unscheduled Mandatory Tender, a notice to the effect that the District elects to rescind such Unscheduled Mandatory Tender. If the District so rescinds an Unscheduled Mandatory Tender, then no purchase will occur, the applicable Series 2011A Bonds will continue to bear interest at the Index Tender Rate in effect during the Tender Period then in effect without change or modification and the Tender Period then in effect will continue until terminated as described under the caption “—Determination of Index Tender Rates and Index Rate Accrual Periods for Series 2011A Bonds in Index Mode—Duration of Tender Period.”

Failure to Meet Conditions. Any Unscheduled Mandatory Tender, if not rescinded, will be conditioned upon: (a) amounts sufficient to pay the Purchase Price of such mandatory tender being on deposit from remarketing proceeds, as described under the caption “—Purchase of Series 2011A Bonds,” with the Trustee on the Unscheduled Mandatory Tender Date; and (b) in connection with any change in the Call Protection Date for the next succeeding Tender Period from the Tender Period Standard Date, the delivery by the District of the Favorable Opinion of Bond Counsel described under the caption “—Remarketing and Purchase of Series 2011A Bonds in Connection with Unscheduled Mandatory Tender—Establishment of Call Protection Date.” If on an Unscheduled Mandatory Tender Date the conditions described in the immediately preceding sentence are not satisfied, then no purchase of Series 2011A Bonds will occur, the Series 2011A

Bonds of such series will continue to bear interest at the Index Tender Rate in effect during the Tender Period then in effect without change or modification and the Tender Period then in effect will continue until terminated as described under the caption “—Determination of Index Tender Rates and Index Rate Accrual Periods for Series 2011A Bonds in Index Mode—Duration of Tender Period.”

Failure by the District to pay or cause to be paid the Purchase Price of Series 2011A Bonds of a series tendered under the Unscheduled Mandatory Tender provisions of the applicable Indenture for any reason does not constitute an Event of Default by the District under the applicable Indenture. No such failure affects the District’s right to require Owners of Series 2011A Bonds to tender their Series 2011A Bonds as described under the caption “—Mandatory Tender for Purchase—Unscheduled Mandatory Tender for Purchase” during the remainder of the Tender Period then in effect or during any subsequent Tender Period.

Effect of a Successful Remarketing. If moneys on deposit with the Trustee are sufficient to pay the Purchase Price of Series 2011A Bonds to be purchased as described under the caption “—Mandatory Tender for Purchase—Unscheduled Mandatory Tender for Purchase” and all other conditions are satisfied, the following will occur:

(i) The Tender Period in effect immediately before such tender will terminate on such Unscheduled Mandatory Tender Date and a new Tender Period will commence on such date; and

(ii) The Index Spread with respect to the applicable Series 2011A Bonds for the new Tender Period will be the Index Spread determined as described above under the caption “—Determination of Index Spread.”

Changes in Mode

Subject to the provisions of the applicable Indenture, the District may effect a Change in Mode with respect to a series of Series 2011A Bonds by delivering to the Trustee, with copies to the other Notice Parties, a Notice of Change in Mode stating: (A) the election to change the Mode to which such series of Series 2011A Bonds are then subject (the “**Current Mode**”) to a different Mode (the “**New Mode**”), the type of which will be specified; (B) the date on which such series of Series 2011A Bonds are required to be purchased pursuant to the provisions described below under the caption “—Mandatory Purchase of Series 2011A Bonds,” which will be the date as of which the New Mode takes effect and a Business Day immediately following the end of an Adjustment Period or the last day of a Tender Period, or a Business Day on which such series of Series 2011A Bonds would be subject to redemption at the option of the District; and (C) a form of notice of mandatory tender for purchase satisfying the requirements described below under the caption “—Mandatory Purchase of Series 2011A Bonds.” In no event will a Change in Mode occur prior to the Call Protection Date set forth on the front cover page hereof.

Not less than seven days prior to a proposed Change in Mode, and in reliance upon a Notice of Change in Mode, the Trustee will give written notice, in the form prepared by the District and delivered to the Trustee pursuant to the immediately preceding paragraph, to the Owners of the mandatory tender for purchase of all Outstanding Series 2011A Bonds of such series as described below under the caption “—Mandatory Purchase of Series 2011A Bonds” in connection with the Change in Mode.

The New Mode will take effect only if the following conditions are satisfied: (i) by 9:00 a.m. on the date of the proposed Change in Mode: (A) if a Liquidity Facility is to be in effect during the New Mode, the interest portion of the Liquidity Facility is in an amount equal to or greater than the Liquidity Facility Interest Amount for the applicable Mode; and (B) if the New Mode is the Fixed Rate Mode, the Trustee and the Remarketing Agent have received a Fixed Rate Terms Certificate; and (ii) the Trustee has received sufficient remarketing proceeds of the Series 2011A Bonds of such series in the New Mode to pay the Purchase Price of the Bonds subject to mandatory tender for purchase in connection with the Change in Mode. If such conditions are satisfied, then the New Mode will take effect on the date of the proposed Change in Mode. If

such conditions are not satisfied, then: (a) all Outstanding Series 2011A Bonds of such series will be purchased on the Mandatory Purchase Date described below under the caption “—Mandatory Purchase of Series 2011A Bonds;” (b) all Outstanding Series 2011A Bonds of such series will continue to be subject to the Index Mode; (c) the Tender Period for all Outstanding Series 2011A Bonds of such series will extend from and including the date on which the New Mode was to take effect to and including the date which is three months after such date (and if such date is not a Business Day, the next day which is followed by a Business Day); (d) the interest on the Series 2011A Bonds of such series for the Index Rate Accrual Period will be the last Index Tender Rate in effect during the immediately preceding Tender Period; and (e) the Trustee will, within five Business Days after the date of the proposed Change in Mode, send notice to the Notice Parties stating that the conditions to the Change in Mode have not all been satisfied and informing them of the consequences thereof, as described in the applicable Indenture.

Mandatory Purchase of Series 2011A Bonds

Except as otherwise provided under the captions “—Remarketing and Purchase of Series 2011A Bonds in Connection with Unscheduled Mandatory Tender—Rescission” and “—Remarketing and Purchase of Series 2011A Bonds in Connection with Unscheduled Mandatory Tender—Failure to Meet Conditions” with respect to an Unscheduled Mandatory Tender, each Series 2011A Bond which is subject to mandatory tender for purchase on a Mandatory Purchase Date, Scheduled Mandatory Tender Date or Unscheduled Mandatory Tender Date as a result of a Change in Mode or as otherwise provided in the applicable Indenture will be purchased on such date at the applicable Purchase Price, but solely from the sources of payment described under the captions “—Purchase of Series 2011A Bonds,” “—Remarketing and Purchase of Series 2011A Bonds in Connection with Scheduled Mandatory Tender—Purchase of Series 2011A Bonds” or “—Remarketing and Purchase of Series 2011A Bonds in Connection with Unscheduled Mandatory Tender—Purchase of Series 2011A Bonds,” as applicable. Subject to the provisions of the applicable Indenture and unless otherwise provided in a Representation Letter, all Series 2011A Bonds required to be purchased on a Mandatory Purchase Date, Scheduled Mandatory Tender Date or Unscheduled Mandatory Tender Date will be tendered for purchase by delivery to the Trustee at its Corporate Trust Office on or prior to the Mandatory Purchase Date, Scheduled Mandatory Tender Date or Unscheduled Mandatory Tender Date, as applicable, and, except as otherwise provided under the caption “—Mandatory Tender for Purchase—Unscheduled Mandatory Tender for Purchase” with respect to an Unscheduled Mandatory Tender, will be purchased, but solely from the sources of payment described under the captions “—Purchase of Series 2011A Bonds,” “—Remarketing and Purchase of Series 2011A Bonds in Connection with Scheduled Mandatory Tender—Purchase of Series 2011A Bonds” or “—Remarketing and Purchase of Series 2011A Bonds in Connection with Unscheduled Mandatory Tender—Purchase of Series 2011A Bonds,” as applicable.

Undelivered Bonds

Any Series 2011A Bond which is subject to mandatory tender for purchase in accordance with the provisions described under the caption “—Mandatory Tender for Purchase” which is not tendered for purchase as required by the applicable Indenture, will constitute an Undelivered Bond and will nonetheless be deemed to have been so tendered and, upon provision for payment of the Purchase Price thereof from the applicable funds specified under the caption “—Purchase of Series 2011A Bonds,” will be deemed to have been purchased on the Mandatory Purchase Date, the Scheduled Mandatory Tender Date or the Unscheduled Mandatory Tender Date, as applicable, after which no interest will accrue on such Series 2011A Bond for the benefit of the Owner required to tender such Series 2011A Bond from and after such Mandatory Purchase Date, Scheduled Mandatory Tender Date or Unscheduled Mandatory Tender Date, as applicable, and such Owner will have no rights under the applicable Indenture as the Owner of such Series 2011A Bond except the right to receive the Purchase Price thereof from the funds available therefor, as described under the caption “—Purchase of Series 2011A Bonds.”

Refinancing and Related Risks

No assurance can be given that the District will have sufficient remarketing proceeds or funds on hand on March 2, 2022 or any other Scheduled Mandatory Tender Date to pay the Purchase Price of the Series 2011A Bonds upon the mandatory tender thereof on such date. The District has not currently provided for any Liquidity Facility to support the payment of the Purchase Price upon mandatory tender of the Series 2011A Bonds. In the event that the District does not have sufficient funds to pay the Purchase Price of the Series 2011A Bonds on such date from remarketing proceeds or other funds on hand, the District's ability to pay such Purchase Price is dependent on the District's ability: (i) to issue and sell refunding obligations to refund Series 2011A Bonds prior to such date; or (ii) to provide for the conversion of such Series 2011A Bonds to another Mode on or prior to such date and to receive sufficient remarketing proceeds upon such conversion to provide for payment of the Purchase Price of the Series 2011A Bonds upon the mandatory tender thereof.

A variety of events could prevent access to the municipal securities market, prohibit the District from issuing such refunding obligations or remarketing such Series 2011A Bonds or make the issuance of refunding obligations or the remarketing of such Series 2011A Bonds prohibitively expensive. No assurance can be given that the District will be able to effect such a refinancing or remarketing on sufficiently favorable terms. Failure of the District to provide sufficient funds to pay the Purchase Price on the Scheduled Mandatory Tender Date constitutes an Event of Default under the applicable Indenture. See the caption "THE SERIES 2011A BONDS—Remarketing and Purchase of Series 2011A Bonds in Connection with Scheduled Mandatory Tender—Consequences of a Scheduled Mandatory Tender Failure."

Redemption of Series 2011A Bonds

Optional Redemption. The Series 2011A Bonds in the Index Mode are subject to redemption at the option of the District in whole or in part, in Authorized Denominations, during any Tender Period, on any Business Day on or after the Call Protection Date for such Tender Period, at a Redemption Price equal to 100% of the principal amount of the Series 2011A Bonds being redeemed plus unpaid accrued interest, if any, to such Redemption Date, without premium. See the captions "—Remarketing and Purchase of Series 2011A Bonds in Connection with Scheduled Mandatory Tender—Establishment of Call Protection Date" and "—Remarketing and Purchase of Series 2011A Bonds in Connection with Unscheduled Mandatory Tender—Establishment of Call Protection Date." The Call Protection Date for the Tender Period commencing on February 4, 2021 is September 3, 2021.

Mandatory Redemption. The Series 2011A-1 Bonds are subject to mandatory redemption in part on October 1, 2021 and on each October 1 thereafter, upon notice as described under the caption "—Notice of Redemption," at a Redemption Price equal to 100% of the principal amount of the Series 2011A-1 Bonds to be redeemed, without premium, in the years and principal amounts as follows:

SERIES 2011A-1 BONDS DUE OCTOBER 1, 2037

<i>Mandatory Redemption Dates (October 1)</i>	<i>Principal Amount of Series 2011A-1 Bonds to be Redeemed</i>
2021	\$1,920,000
2022	1,980,000
2023	2,040,000
2024	2,100,000
2025	2,220,000
2026	2,280,000
2027	2,400,000
2028	2,460,000
2029	2,580,000
2030	2,700,000
2031	2,820,000
2032	2,880,000
2033	3,000,000
2034	3,120,000
2035	3,240,000
2036	3,420,000
2037 (maturity)	3,540,000

The Series 2011A-2 Bonds are subject to mandatory redemption in part on October 1, 2021 and on each October 1 thereafter, upon notice as described under the caption “—Notice of Redemption,” at a Redemption Price equal to 100% of the principal amount of the Series 2011A-2 Bonds to be redeemed, without premium, in the years and principal amounts as follows:

SERIES 2011A-2 BONDS DUE OCTOBER 1, 2037

<i>Mandatory Redemption Dates (October 1)</i>	<i>Principal Amount of Series 2011A-2 Bonds to be Redeemed</i>
2021	\$1,280,000
2022	1,320,000
2023	1,360,000
2024	1,400,000
2025	1,480,000
2026	1,520,000
2027	1,600,000
2028	1,640,000
2029	1,720,000
2030	1,800,000
2031	1,880,000
2032	1,920,000
2033	2,000,000
2034	2,080,000
2035	2,160,000
2036	2,280,000
2037 (maturity)	2,360,000

Upon any purchase and cancellation of Series 2011A Bonds of a series by the District or any redemption of Series 2011A Bonds of a series pursuant to the optional redemption provisions of the applicable Indenture described under the caption “—Optional Redemption,” an amount equal to the aggregate principal

amount of Series 2011A Bonds of such series so purchased or redeemed will be credited toward a part or all of any one or more yearly mandatory redemptions required by the applicable Indenture, as directed in writing by the District, provided that such direction is received by the Trustee at least 45 days before the date of such mandatory redemption. Any such direction will state the years in which and the amounts by which such mandatory redemptions are to be reduced. The portion of any such mandatory redemption remaining after the deduction of any such amounts credited toward the same (or the original amount of any such mandatory redemption if no such amounts have been credited toward the same) constitutes the unsatisfied balance of such mandatory redemption for the purpose of the calculation of payments due on October 1 in any future year.

Selection of Series 2011A Bonds for Redemption

If not otherwise provided in the applicable Indenture, whenever less than all Outstanding Series 2011A Bonds of a maturity are to be redeemed on any one date, the Trustee will select the Series 2011A Bonds of such maturity to be redeemed from the Outstanding Series 2011A Bonds of such maturity by lot, or in such other manner as the Trustee deems fair.

Notice of Redemption

Notice of redemption will be given by Mail by the Trustee to the Remarketing Agent and the Owners of any Series 2011A Bonds designated for redemption in whole or in part no less than 30 days nor more than 60 days prior to the Redemption Date. So long as DTC, or its nominee Cede & Co., is the registered owner of all the Series 2011A Bonds of a series, notices of redemption will be given to DTC. See the caption “—Book-Entry Only System” below.

Each notice of redemption will state the Redemption Date, the redemption place and the Redemption Price, the maturity dates of the Series 2011A Bonds to be redeemed and designate the numbers of the Series 2011A Bonds to be redeemed if less than all of the Outstanding Series 2011A Bonds of a maturity are to be redeemed, will (in the case of any Series 2011A Bond called for redemption in part only) state the portion of the principal amount thereof which is to be redeemed, and state that, if the Trustee holds sufficient available funds to pay the Redemption Price of the Series 2011A Bonds to be redeemed on the Redemption Date, the interest thereon or portions thereof designated for redemption will cease to accrue from and after such Redemption Date and that on such Redemption Date there will become due and payable on the Series 2011A Bonds or portions thereof designated for redemption the Redemption Price thereof. The failure of any Owner to receive such notice will not affect the validity of the redemption of any Series 2011A Bonds.

With respect to any notice of any optional redemption of Series 2011A Bonds, unless at the time such notice is given the Trustee holds sufficient available funds to pay the Redemption Price of the Series 2011A Bonds to be redeemed, such notice will state that such redemption is conditional upon receipt by the Trustee, on or prior to the date fixed for such redemption, of moneys that, together with other available amounts held by the Trustee, are sufficient to pay the Redemption Price of the Series 2011A Bonds to be redeemed, and that if such moneys have not been so received said notice will be of no force and effect and the District will not be required to redeem such Series 2011A Bonds. In the event that a notice of redemption of Series 2011A Bonds contains such a condition and such moneys are not so received, the redemption of such Series 2011A Bonds as described in the conditional notice of redemption will not be made and the Trustee will, within a reasonable time after the date on which such redemption was to occur, give notice to the persons who received such notice of redemption and in the manner in which the notice of redemption was given, that such moneys were not so received and that there will be no redemption of Series 2011A Bonds pursuant to such notice of redemption.

Any notice of redemption mailed as provided in the applicable Indenture will be conclusively presumed to have been given, whether or not actually received by any Owner.

See the caption “—Mandatory Tender for Purchase—Unscheduled Mandatory Tender for Purchase” for information with respect to notice of Unscheduled Mandatory Tenders.

Allocation of Credits for Purchased or Redeemed Series 2011A Bonds

Except as otherwise provided in the applicable Indenture, the principal amount of any Series 2011A Bonds of a series purchased and cancelled by the District, or redeemed by the District, will be credited proportionally to all Improvement Districts and the Included Amount for each Improvement District will be reduced by such Improvement District's Included Percentage (calculated immediately before such purchase or redemption) of the purchased or redeemed Series 2011A Bonds of such series.

In the event that Series 2011A Bonds are purchased for cancellation or redeemed with funds provided by one or more Improvement Districts other than funds provided proportionately with all other Improvement Districts, the principal amount of any Series 2011A Bonds purchased and cancelled by the District, or redeemed by the District, will be credited proportionally to all such contributing Improvement Districts and the Included Amount for each such Improvement District will be reduced by such Improvement District's proportional contribution to the purchase price of such purchased Series 2011A Bonds and the Redemption Price of such redeemed Series 2011A Bonds and the Included Percentage (calculated immediately before such purchase or redemption) of the purchased or redeemed Series 2011A Bonds.

Immediately following each purchase of Series 2011A Bonds by the District for cancellation and each redemption of Series 2011A Bonds and the allocation of credits in connection with such purchase and redemption in accordance with the provisions of the applicable Indenture, as applicable, the Included Percentages for all Improvement Districts will be recomputed for all purposes after such redemption in the following manner:

$$\frac{\text{Improvement District's Included Amount after purchase or redemption}}{\text{Total Amount of Outstanding Series 2011A Bonds after purchase or redemption}} = \text{Included Percentage, as adjusted}$$

Book-Entry Only System

One fully-registered Series 2011A Bond of each series has been issued in the outstanding principal amount of the Series 2011A Bonds of such series. The Series 2011A Bonds are registered in the name of Cede & Co. and have been deposited with DTC. So long as DTC, or its nominee Cede & Co., is the registered owner of all the Series 2011A Bonds of a series, all payments of principal, Purchase Price and Redemption Price of and interest on the Series 2011A Bonds will be made directly to DTC. Disbursement of such payments to the DTC Participants will be the responsibility of DTC. Disbursement of such payments to the Beneficial Owners of the Series 2011A Bonds of such series will be the responsibility of the DTC Participants as more fully described herein. See Appendix E—"BOOK-ENTRY SYSTEM."

The District may decide to discontinue use of the system of book-entry transfers through DTC (or a successor securities depository) for a series of Series 2011A Bonds. In that event, such Series 2011A Bonds will be printed and delivered and will be governed by the provisions of the applicable Indenture with respect to payment of principal, Purchase Price, Redemption Price and interest and rights of exchange and transfer.

The District cannot and does not give any assurances that DTC Participants or others will distribute payments with respect to the Series 2011A Bonds received by DTC or its nominee as the registered Owner, or any redemption or other notices, to the Beneficial Owners, or that they will do so on a timely basis, or that DTC will service and act in the manner described in this Remarketing Statement. See Appendix E hereto for additional information concerning DTC.

SECURITY FOR THE SERIES 2011A BONDS

General

Sources of Payment. The Series 2011A Bonds constitute the consolidated, several general obligations of the Improvement Districts payable from: (i) Assessment Proceeds collected from within each Improvement District and applied by the District to pay such Improvement District's Included Amount of the principal, Purchase Price and Redemption Price of, and interest on, Outstanding Series 2011A Bonds of a series; (ii) Net Revenues of the District; and (iii) certain monies and investment earnings in certain funds and accounts created under the Indentures. See the caption "—Pledge of Assessment Proceeds and Revenues." The District currently expects to pay a portion of scheduled debt service on the Series 2011A Bonds from a combination of Assessment Proceeds and Net Revenues and, to the extent that remarketing proceeds are insufficient, to pay the Purchase Price of the Series 2011A Bonds from Net Revenues.

Authority for Issuance. Elections were held in Improvement District Nos. 105, 113, 213 and 250 at which the qualified voters within each such improvement district authorized the District to incur an indebtedness and issue general obligation bonds for each respective improvement district. See Appendix A under the caption "THE IRVINE RANCH WATER DISTRICT—Outstanding Indebtedness" for a discussion of the bond authorization, amount of outstanding bonds and remaining bond authorization for each of the Improvement Districts, including the bond authorizations of Improvement District Nos. 125 and 225 as the legal successors to former Improvement District Nos. 105 and 250, respectively. The Series 2011A Bonds are authorized for issuance pursuant to the Act and all laws of the State amendatory thereof or supplemental thereto.

Covenant to Collect Assessment Proceeds. The District has covenanted in the Indentures that, to the extent necessary to provide Assessment Proceeds sufficient to pay when due, together with the other funds available for such payment, the principal of and interest on the Included Amount for each respective Improvement District, the District will: (a) fix and collect, or cause the fixing and collection of, *ad valorem* assessments on taxable land within the applicable Improvement District; (b) pursue any remedy available to collect, or cause the collection of, delinquent *ad valorem* assessments and apply amounts realized from the sale of any property for the enforcement of delinquent *ad valorem* assessments to the payment of principal of and interest on the Included Amount of Series 2011A Bonds of a series of the applicable Improvement District; or (c) in its discretion, impose and collect, or cause the imposition and collection of In Lieu Charges for water or sewer service, as applicable, in the applicable Improvement District in lieu of *ad valorem* assessments.

Revenue Rate Covenant. The District has also covenanted in the Indentures, to the fullest extent permitted by law, to fix, prescribe and collect Revenues which, together with any *ad valorem* assessments available to pay Debt Service on Parity Obligations which are not applied as a credit against Debt Service, will be at least sufficient to yield during each Fiscal Year Net Revenues which are at least equal to 125% of Aggregate Debt Service payable during such Fiscal Year. The District may make adjustments from time to time in such rates and charges and may make such classification thereof as it deems necessary, but will not reduce the rates and charges then in effect unless the Net Revenues from such reduced rates and charges will at all times be sufficient to meet the foregoing requirements.

In addition, certain of the Prior Reimbursement Agreements described under the caption "—Existing Parity Obligations" related to outstanding *ad valorem* assessment bonds of the District, and certain swap agreements entered into by the District, have covenants related to the setting of rates and charges with which the District is contractually obligated to comply.

Additional Covenants. See Appendix C—"SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURES" under the caption "CERTAIN COVENANTS" for a summary of additional covenants of the District under the Indentures.

Pledge of Trust Estate. Pursuant to each Indenture, the District has pledged the Trust Estate thereunder to secure the payment of the series of Series 2011A Bonds issued thereunder. The “**Trust Estate**” under each Indenture consists of the following:

(A) The Bond Payment Fund (defined below) established under such Indenture, including all accounts in such fund, and all of the monies in such fund and accounts and the investments, if any, thereof, and all income and proceeds derived from such investments; and

(B) Subject to the application on the terms and conditions contained in such Indenture, Revenues of the District.

Pledge of Assessment Proceeds and Revenues

Subject to the application of the Revenues on the terms and conditions provided in the applicable Indenture, Revenues have been irrevocably pledged to the payment when due of the principal, Purchase Price and Redemption Price of, and interest on, the Outstanding series of Series 2011A Bonds, which pledge will be on a parity with any pledge of Revenues securing other Parity Obligations. Such pledge constitutes a pledge of and charge and lien upon the Revenues for the payment of the principal, Purchase Price upon the Scheduled Mandatory Tender and Redemption Price of, and interest on, the Outstanding Series 2011A Bonds of such series and all other Parity Obligations in accordance with the terms of the applicable Indenture and the applicable series of Series 2011A Bonds after payment from the Revenues of the Operation and Maintenance Expenses, and the funding of contingency reserves therefor, as provided in the applicable Indenture.

THE SERIES 2011A BONDS DO NOT CONSTITUTE AN OBLIGATION OF THE STATE OF CALIFORNIA OR ANY POLITICAL SUBDIVISION OF THE STATE OF CALIFORNIA OTHER THAN THE DISTRICT AND THE IMPROVEMENT DISTRICTS AS PROVIDED IN THE INDENTURES. NO FUNDS OF THE DISTRICT OR THE IMPROVEMENT DISTRICTS, OTHER THAN THE FUNDS INCLUDED IN THE TRUST ESTATE, ARE LIABLE FOR THE PAYMENT OF THE PRINCIPAL, REDEMPTION PRICE OR PURCHASE PRICE OF, OR INTEREST ON, THE SERIES 2011A BONDS. EXCEPT AS PROVIDED IN THE APPLICABLE INDENTURE WITH RESPECT TO THE TRUST ESTATE, NEITHER THE FAITH AND CREDIT NOR THE TAXING POWER OF THE DISTRICT IS LIABLE FOR OR PLEDGED TO THE PAYMENT OF THE PRINCIPAL, REDEMPTION PRICE OR PURCHASE PRICE OF, OR INTEREST ON, THE SERIES 2011A BONDS.

Assessment Proceeds. Assessment Proceeds means, with respect to any Improvement District: (i) *ad valorem* assessments on taxable land in such Improvement District levied pursuant to the Act; (ii) In Lieu Charges, consisting of water or sewer charges, as applicable, which in the discretion of the Board of Directors are fixed and collected in an Improvement District in lieu of *ad valorem* assessments pursuant to the Act; and (iii) proceeds from the sale of property in such Improvement District for the enforcement of delinquent assessments pursuant to the Act.

The Included Amount for each Improvement District with respect to the Series 2011A Bonds of a series and any other outstanding or future District general obligation bonds issued for such Improvement District are equally secured by the *ad valorem* assessments and any charges for water or sewer service, as applicable, imposed and collected in lieu of *ad valorem* assessments, collected within such Improvement District. The *ad valorem* assessments are levied only on land and are based on the land value of parcels in the Improvement District without regard to the value of any improvements thereon. See Appendix A—“IRVINE RANCH WATER DISTRICT” under the captions “THE IMPROVEMENT DISTRICTS—Improvement District Nos. 125 and 225” and “THE IMPROVEMENT DISTRICTS—Improvement District Nos. 113 and 213.”

Net Revenues. Net Revenues for any period consist of the Revenues of the District less the Operation and Maintenance Expenses of the District for such period. “**Revenues**” means:

(1) The water, sewer and recycled water rates and charges imposed by the District in connection with providing water, sewer and recycled water services to retail customers through the Operating Systems (as such term is defined in the Indentures), including commodity, service, standby, material treatment and connection charges, except: (i) such water, sewer and recycled water rates and charges levied in lieu of *ad valorem* assessments pursuant to Sections 36425 and 35975 of the Act; and (ii) customer deposits (together, the “**Utility Rates and Charges**”); and

(2) Other revenues of the District, including, without limiting the generality of the foregoing, the proceeds of any stand-by or natural treatment, connection and water availability charges; together with the District’s share of the Orange County, California 1% *ad valorem* property tax (to the extent not applied by the District to pay principal of and interest on Secured Bonds) and Investment Income;

but excluding in all cases: (i) customer deposits or any other deposits or advances subject to refund until such deposits or advances have become the property of the District; (ii) any proceeds of taxes or *ad valorem* assessments restricted by law to be used by the District to pay bonds issued by the District, and the proceeds of any actions to enforce delinquent *ad valorem* assessments so restricted; and (iii) water, sewer and recycled water rates and charges levied in lieu of *ad valorem* assessments pursuant to Sections 36425 and 35975 of the Act.

“**Operation and Maintenance Expenses**” consist of the costs and expenses paid or incurred by the District for operating and maintaining the Operating Systems (as such term is defined in the Indentures) including, but not limited to: (a) all costs of water generated or purchased by the District for resale; (b) all costs and expenses of providing services and commodities through or with the Operating Systems; (c) all costs and expenses of management of the Operating Systems; (d) all costs and expenses of maintenance and repair of, and other expenses necessary or appropriate in the judgment of the District to maintain and preserve, any of the Operating Systems in good repair and working order; (e) all administrative and general expenses, such as salaries and wages of employees, overhead, taxes (if any), insurance premiums, retirement benefits and health care benefits; (f) all deposits to be made to a contingency reserve for Operation and Maintenance Expenses; (g) all deposits to be made to a rebate fund established with respect to Parity Obligations to provide for any rebate to the United States required to maintain the tax-exempt status of interest on such Parity Obligations; (h) any cost or expense paid or incurred by the District to comply with requirements of law applicable to any of the Operating Systems or the ownership or operation thereof or any activity in connection therewith; and (i) any other cost or expense which, in accordance with Generally Accepted Accounting Principles, is to be treated as an expense of operating or maintaining any of the Operating Systems; but excluding in all cases depreciation, replacement and obsolescence charges or reserves therefor, and amortization of intangibles.

Net Revenues collected within any improvement district of the District, including the Improvement Districts, are available to make debt service payments on the Series 2011A Bonds. See the caption “SECURITY FOR THE SERIES 2011A BONDS.”

Allocation of Monies Under the Indentures

Allocation of Revenues. In order to carry out and effectuate the pledge and lien on the Revenues contained in the Indentures, the District has agreed and covenanted in each Indenture that all Revenues received by it will be deposited when and as received in the Revenue Fund, which fund has been previously established by the District and which fund the District has agreed and covenanted to maintain as a special fund, separate and apart from other moneys of the District so long as any Series 2011A Bond of the applicable series remains Outstanding. All Revenues will be applied in the following order of priority:

First: to the payment of Operation and Maintenance Expenses (other than the funding of contingency reserves for Operation and Maintenance Expenses) as they become due and payable.

Second: to the funding of contingency reserves for Operation and Maintenance Expenses.

Third: (i) two Business Days before each Interest Payment Date, to a deposit to the Bond Payment Fund in an amount equal to the transfer to the Interest Account and Principal Account to be made on such Interest Payment Date; and (ii) on each date, other than an Interest Payment Date, on which the principal of an Outstanding Series 2011A Bond of a series becomes due, whether by mandatory redemption, acceleration, or otherwise, to a deposit to the Bond Payment Fund in an amount equal to the principal and Redemption Price of, and interest on, the Outstanding Series 2011A Bonds of such series coming due on such date. Notwithstanding the provisions of the immediately preceding sentence, no such deposit to the Bond Payment Fund need be made by the District to the extent that the Trustee then holds, or is concurrently receiving from the District from Assessment Proceeds or other sources that do not constitute Revenues, moneys for such purpose in the Bond Payment Fund, or being deposited in the Bond Payment Fund, available to pay the principal and Redemption Price of, and interest on, the Outstanding Series 2011A Bonds of such series to be paid with such deposit. The District will also pay to the party entitled thereto or transfer or cause to be transferred to any applicable debt service or other payment fund or account for any Parity Obligations (other than the principal and Redemption Price of, and interest on, the Outstanding Series 2011A Bonds of such series), without preference or priority, and in the event of any insufficiency of such moneys ratably without any discrimination or preference, on the dates specified in the proceedings relating to such Parity Obligations, the sum or sums required to be paid or deposited in such debt service or other payment fund or account with respect to principal, premium, if any, and interest (including purchase price) on Parity Obligations (other than the principal and Redemption Price of, and interest on, the Outstanding Series 2011A Bonds of such series) in accordance with the terms of such Parity Obligations.

Fourth: the District will transfer or cause to be transferred to any applicable reserve fund or account for any Parity Obligations for which a separate reserve has been funded, without preference or priority, and in the event of any insufficiency of such moneys ratably without any discrimination or preference, the sum or sums, if any, equal to the amount required to be deposited therein in accordance with the terms of such Parity Obligations.

Fifth: to any lawful purpose of the District, including the payment of any Subordinate Obligations in accordance with the instruments authorizing such Subordinate Obligations, which application will be free and clear of the pledge and lien on Revenues created by the Indentures.

Bond Payment Fund. There have been established and created funds with the Trustee under the Indentures designated the “Bonds of Irvine Ranch Water District, Series 2011A-1 Bond Payment Fund” and the “Bonds of Irvine Ranch Water District, Series 2011A-2 Bond Payment Fund” (each, a “**Bond Payment Fund**”), respectively. The Trustee will transfer money contained in the Bond Payment Fund to the accounts described below at the following times in the manner provided in each Indenture, which accounts the Trustee has agreed to establish and maintain so long as the applicable Indenture is not discharged in accordance with the provisions thereof, and each such account constitutes a trust fund for the benefit of the Owners of the applicable series of Series 2011A Bonds, and the money in each such account will be disbursed only for the purposes and uses authorized in the applicable Indenture.

Interest Account. The Trustee, on each Interest Payment Date, will deposit in the Interest Account from money in the Bond Payment Fund an amount which, together with amounts already on deposit in the Interest Account, will be sufficient to pay interest on the Outstanding Series 2011A Bonds of such series due on such Interest Payment Date. Money in the Interest Account will be used and withdrawn by the Trustee on each Interest Payment Date solely for the payment of interest on the Outstanding Series 2011A Bonds of such series then due.

Principal Account. The Trustee, on each Principal Payment Date, will deposit in the Principal Account from money in the Bond Payment Fund such amount as is sufficient to pay the principal of the Outstanding Series 2011A Bonds of such series due on such Principal Payment Date. Money in the Principal Account will be used and withdrawn by the Trustee on each Principal Payment Date solely for the payment of the principal of Outstanding Series 2011A Bonds of such series then due.

Redemption Account. The Trustee will deposit in the Redemption Account amounts received from the District to pay the Redemption Price of Series 2011A Bonds of such series to be redeemed. Money in such Redemption Account will be used and withdrawn by the Trustee on each Redemption Date solely for the payment of the Redemption Price of Outstanding Series 2011A Bonds of such series upon the redemption thereof.

Existing Parity Obligations

The District has entered into certain Parity Obligations described below. The reimbursement agreements described below relate to outstanding *ad valorem* assessment bonds:

(i) the Fifth Amended and Restated Reimbursement Agreement, dated as of April 1, 2011, by and between the District and Bank of America, N.A.;

(ii) the Reimbursement Agreement, dated May 7, 2015, by and between the District and U.S. Bank National Association;

(iii) the Reimbursement Agreement, dated as of April 1, 2011, by and between the District and Sumitomo Mitsui Banking Corporation;

(iv) the Amended and Restated Reimbursement Agreement, dated as of April 1, 2011, by and between the District and U.S. Bank National Association;

(v) the District's Series 2010B Bonds currently outstanding in the aggregate principal amount of \$175,000,000;

(vi) the Installment Sale Agreement, securing the District's Certificates of Participation Irvine Ranch Water District Series 2016 currently outstanding in the aggregate principal amount of \$116,745,000; and

(vii) the District's Bonds of Irvine Ranch Water District Series 2016 (the "**Series 2016 Bonds**") currently outstanding in the aggregate principal amount of \$103,400,000.

The agreements described in clauses (i) through (iv) above are collectively referred to as the "Prior Reimbursement Agreements."

There are currently no reimbursement obligations outstanding under the Prior Reimbursement Agreements, although the District may incur reimbursement obligations under the Prior Reimbursement Agreements as provided therein.

For a summary of the stated amount of each letter of credit associated with the Prior Reimbursement Agreements, see Appendix A under the caption "THE IRVINE RANCH WATER DISTRICT—Outstanding Indebtedness—Parity Obligations."

Limitations on Parity and Superior Obligations

No Obligations Superior to Series 2011 Bonds. The District has covenanted in the Indentures that it will not create any pledge of, lien on or charge upon the Revenues with a priority prior to or senior to the pledge of the Revenues securing the Series 2011A Bonds and the Parity Obligations.

Obligations on a Parity with the Series 2011A Bonds. Under the Indentures, the District may at any time issue additional Parity Obligations; provided:

(a) The Net Revenues, plus any *ad valorem* assessments available to pay Debt Service on Parity Obligations which are not applied as a credit against Debt Service, for the Applicable Fiscal Year, as evidenced by both a calculation prepared by the District and a special report on such calculation prepared by an Independent Certified Public Accountant or an Independent Financial Consultant on file with the District, are at least equal to 125% of the Aggregate Debt Service for the Applicable Fiscal Year; and

(b) Either of (1) or (2) below:

(1) The Net Revenues for the Applicable Fiscal Year, plus any adjustments to Net Revenues to give effect as of the first day of the Applicable Fiscal Year to increases or decreases in rates and charges of the District approved and in effect as of the date of calculation, plus any *ad valorem* assessments available to pay Debt Service on Parity Obligations which are not applied as a credit against Debt Service, produce an amount at least equal to 125% of the sum of: (i) the Aggregate Debt Service for such Applicable Fiscal Year; plus (ii) the Debt Service which would have accrued on any Parity Obligations issued since the end of the Applicable Fiscal Year assuming such Parity Obligations had been issued at the beginning of the Applicable Fiscal Year; plus (iii) the Debt Service which would have accrued had the additional Parity Obligations to be issued been issued at the beginning of the Applicable Fiscal Year; or

(2) The estimated Net Revenues for each Fiscal Year in the Test Period, plus an allowance for the estimated Net Revenues for each Fiscal Year in the Test Period arising from the completion of any uncompleted projects during the Test Period, plus any *ad valorem* assessments available to pay Debt Service on Parity Obligations which are not applied as a credit against Debt Service, plus any increase in the income, rents, fees, rates and charges estimated to be received by the District and which are economically feasible and reasonably considered necessary based on projected operations for the Test Period, produce an amount in each Fiscal Year in the Test Period which is at least equal to 125% of the sum of: (i) Aggregate Debt Service in each such Fiscal Year on all then Outstanding Parity Obligations; plus (ii) the Debt Service in each such Fiscal Year on the additional Parity Obligations to be issued; plus (iii) the Debt Service in each such Fiscal Year on any additional Parity Obligations estimated by the District to be required to complete all uncompleted projects for which Parity Obligations have been or are being issued, assuming that all such additional Parity Obligations to complete uncompleted projects (other than the Parity Obligations to be issued) have maturities, interest rates and proportionate principal repayment provisions similar to the Parity Obligations then being issued.

(c) Notwithstanding the provisions of clauses (a) and (b), the District may at any time issue additional Parity Obligations to refund Outstanding Parity Obligations without satisfying any of the conditions set forth in such subsections if Aggregate Debt Service after the issuance of such additional Parity Obligations in each Fiscal Year in the Refunding Test Period is not greater than the Aggregate Debt Service in each such Fiscal Year before the issuance of such additional Parity Obligations.

(d) Notwithstanding the provisions of clauses (a) and (b), the District may at any time issue a Parity Obligation constituting a Credit Support Agreement securing a Parity Obligation without satisfying any of the conditions set forth in such subsections if such Credit Support Agreement: (i) replaces a Prior Reimbursement Agreement (or a successor to a Prior Reimbursement Agreement) and does not increase the principal of bonds secured by the letter of credit relating to such Prior Reimbursement Agreement; or (ii)

the Parity Obligations secured by the Credit Support Instrument relating to such Credit Support Agreement have been issued in accordance with clauses (a) and (b).

In addition, certain of the Prior Reimbursement Agreements related to outstanding *ad valorem* assessment bonds of the District, and certain swap agreements entered into by the District, have conditions precedent to the issuance of Parity Obligations that are more stringent than those listed above.

Obligations Subordinate to the Series 2011A Bonds. Nothing in the Indentures prevents the District from issuing Subordinate Obligations or granting a pledge of, lien on or charge upon the Revenues in all respects junior and subordinate to the payment of amounts due with respect to Parity Obligations to secure any such Subordinate Obligations. Nothing in the Indentures limits the District's payment of the Operation and Maintenance Expenses prior to the payment of the Parity Obligations as provided in the Indentures.

Investment of Monies in Funds and Accounts Under the Indentures

So long as the Series 2011A Bonds of a series are Outstanding and no Event of Default has occurred and is continuing, monies on deposit to the credit of the funds held by the Trustee under the applicable Indenture (except for the Remarketing Proceeds Account in the Purchase Fund) will, at the written request of the District, be invested by the Trustee in Permitted Investments. In the absence of written instruction from the District, the Trustee is directed to hold available funds uninvested. The Trustee is entitled to rely conclusively on said instructions for purposes of the applicable Indenture and will have no duty to monitor the compliance thereof with the restrictions set forth in such Indenture. Subject to the limitations contained in Government Code Section 53601, monies in the funds held by the District will be invested by the District in Permitted Investments. All such investments will have maturity dates, or will be subject to redemption, at the option of the holder, on or prior to the dates the monies invested therein will be needed for the purposes of such funds. See Appendix C—"SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURES" under the caption "DEFINITIONS" for the definition of Permitted Investments under the Indentures.

The Trustee may commingle any of the moneys held by it under the Indentures. The Trustee may present for redemption or sell any such deposit or investment whenever necessary in order to provide money to meet any payment of the money so deposited or invested. Any interest or profits on deposits and investments in the Bond Payment Fund received by the Trustee will be deposited in the applicable Interest Account as a credit against interest to come due on the applicable series of Outstanding Series 2011A Bonds.

See Appendix C—"SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURES" under the caption "FUNDS AND ACCOUNTS—Investments."

THE IRVINE RANCH WATER DISTRICT

For a description of the District and each of the Improvement Districts, including the impact of the COVID-19 outbreak on the District, see Appendix A—"IRVINE RANCH WATER DISTRICT."

CONTINUING DISCLOSURE

The District has covenanted in a Continuing Disclosure Certificate dated April 15, 2011 (the "**Continuing Disclosure Certificate**") for the benefit of the Owners and beneficial owners of the Series 2011A Bonds to provide certain financial information and operating data relating to the District (each an "**Annual Report**") by not later than 270 days following the end of the District's fiscal year (which fiscal year ends on June 30), commencing with the Annual Report for Fiscal Year 2011, and to provide notices of the occurrence of certain enumerated events. The Annual Reports will be filed by the District with EMMA for the purpose of S.E.C. Rule 15c2-12(b)(5) (the "**Rule**"). The notices of enumerated events will be filed by the District with EMMA. The specific nature of the information to be made available and to be contained in the notices of enumerated events is contained in Appendix F—"FORM OF CONTINUING DISCLOSURE

CERTIFICATE” hereto. These covenants have been made in order to assist the Remarketing Agent, as Participating Underwriter (as such term is defined in the Continuing Disclosure Certificate), in complying with the Rule.

The District has previously entered into continuing disclosure undertakings under the Rule in connection with the issuance of municipal obligations. The District believes that it is currently in material compliance with all of its continuing disclosure undertakings. However, the Annual Report for Fiscal Year 2013, when originally filed, did not contain updates of information relating to historic water supply, historic water deliveries, historic sewer daily average flow, assessed valuations of certain improvement districts by land use or largest secured taxpayers within such improvement districts. Makeup filings containing the required information were posted to EMMA prior to the date of this Remarketing Statement. Except as disclosed above, the District has not in the past five years failed to comply with its continuing disclosure undertakings in any material respect.

In order to promote compliance by the District with its continuing disclosure undertakings in the future, the District has developed policies and procedures to govern its continuing disclosure practices.

See the caption “INTRODUCTION—Improvement Districts—Improvement District Nos. 125 and 225” for a discussion of the consolidation of Improvement District Nos. 105 and 250 into Improvement District Nos. 125 and 225, respectively. As a result of such consolidations, Improvement District Nos. 125 and 225 are the legal successors to Improvement District Nos. 105 and 250, respectively, and Improvement District Nos. 105 and 250 no longer exist. Accordingly, beginning in Fiscal Year 2014, the Annual Reports will contain information relating to Improvement District Nos. 125 and 225 rather than for Improvement District Nos. 105 and 250.

LITIGATION

General

There is no action, suit or proceeding known to be pending, or to the knowledge of the District, threatened, in any way contesting or affecting the validity of, the Series 2011A Bonds or the Indentures. There is no litigation known to be pending, or to the knowledge of the District, threatened, questioning the existence of the District or the title of the officers of the District to their respective offices.

There exist lawsuits and claims against the District, which are incidental to the ordinary course of operations of the District’s water and sewer systems and related activities, including the litigation that is described below under the caption “—Biosolids Litigation.” In the view of the District’s management and General Counsel, there is no litigation, present or pending, or to the knowledge of the District, threatened, which will individually or in the aggregate materially impair the District’s ability to service its indebtedness or which will have a material adverse effect on the business operations of the District.

Biosolids Litigation

The District is in the completion stages of the construction of the Michelson Water Recycling Plant Biosolids and Energy Recovery Facilities project (the “**Project**”). See Appendix A under the captions “THE SEWER SYSTEM—General” and “FUTURE CAPITAL IMPROVEMENTS—Solids Handling.” Filanc/Balfour Beatty (“**FBB**”) is the general contractor on the Project. On or about February 1, 2019, FBB filed a lawsuit in the Orange County Superior Court against the District for breach of contract, seeking damages exceeding \$25,000. FBB asserts that the District’s Project design was defective and that such defective design caused FBB to incur delays and additional costs to complete the Project. Subsequently, FBB filed a first amended complaint which added new allegations relating to the assertion of “pass-through” claims on behalf of two Project subcontractors, GTE Metal Erectors, Inc. and Morrow Meadows Corporation. The District filed a cross-complaint and, subsequently, a first amended cross-complaint against FBB for breach of

contract and declaratory relief and against FBB's sureties for recovery on performance bonds. The District's cross-complaint seeks the recovery of contractually established liquidated damages. As of the date of this Remarketing Statement, the Project has not been completed and liquidated damages continue to be assessed against FBB.

FBB's first amended complaint does not identify the specific amount of damages that FBB is seeking. However, in June 2019, in a claim submission, FBB alleged to have incurred damages in the amount of \$46,971,797 as a result of the impacts of the aforementioned alleged design defects. This number included damages alleged by its two subcontractors that are part of FBB's claims in the lawsuit, as discussed in the preceding paragraph. In October 2020, FBB updated its claim and now asserts a total damage claim in the amount of \$57,919,406. The additional damages reflect additional costs allegedly incurred by FBB since June 2019.

The allegations in FBB's first amended complaint are very general. A substantial amount of document discovery has occurred, but deposition discovery is just beginning. The District is unable to provide a substantive analysis of FBB's claim or to determine the extent of any potential liability exposure to the District; however, the District believes that, should FBB prevail on some or all of its allegations, any District liability would not materially impair the District's ability to service its indebtedness or have a material adverse effect on the business operations of the District. In addition, the District believes that it may have a potential claim for defective design against the Project designer (Black & Veatch). The District has entered into a tolling agreement and a joint defense agreement with Black & Veatch.

A prior trial date established by the court has been vacated and currently there is no trial date set. The parties conducted a mediation on January 13, 2021 in an attempt to settle the lawsuit, but the matter had not been settled as of the date of the printing of this Remarketing Statement. A subsequent mediation is scheduled for February 9, 2021.

Water Rate Litigation

On February 19, 2020, a class action complaint and petition for writ of mandate (collectively, the "**Water Rate Complaint**") was filed in the matter of *Kessner et al. v. City of Santa Clara et al.* in the Superior Court of California, County of Santa Clara (the "**Court**"), on behalf of 81 purported customer classes (collectively, "**Plaintiffs**"), challenging the rates of 82 public water suppliers, including the District. The Water Rate Complaint alleges that the named defendants and respondents (collectively, "**Defendants**") unlawfully set water rates for retail customers that exceed the cost of service, in violation of Proposition 218. See Appendix A under the caption "CONSTITUTIONAL LIMITATIONS ON APPROPRIATIONS AND CHARGES—Proposition 218" for a discussion of Proposition 218.

As pertinent to the District, Plaintiffs are challenging Defendants' retail water rates on the ground that they allegedly subsidize water service provided for general governmental purposes, including "subsidized public fire hydrant service."

On March 9, 2020, the Court issued an order deeming the case complex and staying discovery and responsive pleading deadlines, which stay continues as of January 2021.

Plaintiffs filed a Petition to Coordinate the Water Rate Complaint with other Proposition 218 cases against water agencies in California. On October 19, 2020, the Court denied the Petition. The Court held a Case Management Conference on December 3, 2020, has ordered a preliminary set of briefing on issues of venue, jurisdiction, and joinder, and has ordered the parties to meet and confer while keeping the discovery stay in place. Another Case Management Conference is set for March 25, 2021.

The District is unable to predict the outcome of this litigation or the timing of any resolution. However, the District believes that its water rates were adopted in compliance with Proposition 218 and does

not currently expect the Water Rate Complaint to have a material adverse effect on its ability to pay the Series 2011A Bonds.

The District notes that, in fall 2020, the Governor of California signed Senate Bill 1386 (“**SB 1386**”), which adds provisions to the California Government Code establishing that the costs of water service chargeable to property owners properly include the cost of infrastructure, e.g., fire hydrants, that provide fire protection for nearby property. The signing of SB 1386 into law is likely to assist the District’s defense of the Water Rate Complaint.

RATINGS

On April 12, 2011, Standard & Poor’s Ratings Group (“**S&P**”), Moody’s Investors Service (“**Moody’s**”) and Fitch Ratings (“**Fitch**”) assigned the Series 2011A Bonds the short-term ratings of “A-1+”, “VMIG 1” and “F1+”, respectively, and Moody’s and Fitch assigned the Series 2011A Bonds the long-term ratings of “Aa1” and “AAA”, respectively.

S&P affirmed the short-term rating of the Series 2011A Bonds of “A-1+” on February 8, 2019. Although S&P has not assigned a long-term rating to the Series 2011A Bonds, S&P also affirmed the long-term rating of “AAA” to the Series 2016 Bonds, which are Parity Obligations, on February 8, 2019.

Fitch affirmed the short-term rating of “F1+” and the long-term rating of “AAA” for the Series 2011A Bonds on August 28, 2020.

The District has made no attempt to seek an update to or affirmation of such ratings from the rating agencies in connection with the remarketing of the Series 2011A Bonds on February 4, 2021. Generally, rating agencies base their ratings on information and material furnished directly to them (which may include information and material from the District which is not included in this Remarketing Statement) and on investigations, studies and assumptions made by them. The ratings reflect only the views of such organizations and an explanation of the significance of such ratings may be obtained from the applicable rating agency. Future events, including the impacts of the COVID-19 pandemic that is described in Appendix A under the caption “THE IRVINE RANCH WATER DISTRICT—COVID-19 Outbreak,” could have an adverse impact on the ratings of the Series 2011A Bonds, and there is no assurance that the ratings will continue for any given period of time or that they will not be revised downward or withdrawn entirely by such rating agencies, if, in the judgment of such rating agencies, circumstances so warrant. There is also no assurance that the criteria required to achieve the ratings on the Series 2011A Bonds will not change during the period that the Series 2011A Bonds remain outstanding. Any such downward revision or withdrawal of such ratings may have an adverse effect on the market price of the Series 2011A Bonds.

TAX MATTERS

Original Opinions

On April 15, 2011, Orrick, Herrington & Sutcliffe LLP and Bowie, Arneson, Wiles & Giannone, Co-Bond Counsel to the District (“**Co-Bond Counsel**”), in connection with the issuance of the Series 2011A Bonds, delivered their respective opinions to the effect that, based on an analysis of existing laws, regulations, rulings and court decisions, and assuming, among other matters, the accuracy of certain representations and compliance with certain covenants, interest on the Series 2011A Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986 (the “**Code**”) and is exempt from State of California personal income taxes. It was the further opinion of Co-Bond Counsel, as of April 15, 2011, that such interest is not a specific preference item for purposes of the federal individual or corporate alternative minimum taxes, although Co-Bond Counsel observed that such interest is included in adjusted current earnings when calculating corporate alternative minimum taxable income. Effective January 1, 2018, the corporate alternative minimum tax has been repealed. A complete copy of the opinions of

Co-Bond Counsel delivered at the original issuance of the Series 2011A Bonds is set forth in Appendix D hereto.

No Updated Co-Bond Counsel Opinions

Orrick, Herrington & Sutcliffe LLP, Bond Counsel to the District (“**Bond Counsel**”) has not taken, and does not intend to take, any action to update its original opinion or to determine if interest on the Series 2011A Bonds is presently excluded from gross income for federal income tax purposes or exempt from State of California personal income taxes.

General Considerations

Notwithstanding the foregoing, investors should be aware of the following information.

The Code imposes various restrictions, conditions and requirements relating to the exclusion from gross income for federal income tax purposes of interest on obligations such as the Series 2011A Bonds. The District has made certain representations and covenanted to comply with certain restrictions, conditions and requirements designed to ensure that interest on the Series 2011A Bonds will not be included in federal gross income. Inaccuracy of these representations or failure to comply with these covenants may result in interest on the Series 2011A Bonds being included in gross income for federal income tax purposes, possibly from the date of original issuance of the Series 2011A Bonds. The opinions of Co-Bond Counsel delivered in connection with the initial issuance of the Series 2011A Bonds assumed the accuracy of these representations and compliance with these covenants. Bond Counsel has not undertaken to determine (or to inform any person) whether any actions taken (or not taken), or events occurring (or not occurring), or any other matters coming to Bond Counsel’s attention after the date of issuance of the Series 2011A Bonds may adversely affect the value of, or the tax status of interest on, the Series 2011A Bonds. Accordingly, the opinions of Co-Bond Counsel delivered in connection with the initial issuance of the Series 2011A Bonds are not intended to, and may not, be relied upon in connection with any such actions, events or matters.

Although Co-Bond Counsel have rendered opinions that interest on the Series 2011A Bonds is excluded from gross income for federal income tax purposes and is exempt from State of California personal income taxes, the ownership or disposition of, or the accrual or receipt of amounts treated as interest on, the Series 2011A Bonds may otherwise affect a Beneficial Owner’s federal, state or local tax liability. The nature and extent of these other tax consequences depends upon the particular tax status of the Beneficial Owner or the Beneficial Owner’s other items of income or deduction. Bond Counsel expresses no opinion regarding any such other tax consequences.

Current and future legislative proposals, if enacted into law, clarification of the Code or court decisions may cause interest on the Series 2011A Bonds to be subject, directly or indirectly, in whole or in part, to federal income taxation or to be subject to or exempted from state income taxation, or otherwise prevent Beneficial Owners from realizing the full current benefit of the tax status of such interest. The introduction or enactment of any such legislative proposals, clarification of the Code or court decisions may also affect, perhaps significantly, the market price for, or marketability of, the Series 2011A Bonds. Prospective purchasers of the remarketed Series 2011A Bonds should consult their own tax advisors regarding the potential impact of any pending or proposed federal or state tax legislation, regulations or litigation, as to which Bond Counsel expresses no opinion.

The opinions of Co-Bond Counsel delivered in connection with the initial issuance of the Series 2011A Bonds were based on legal authority existing as of April 15, 2011, covered certain matters not directly addressed by such authorities, and represented Co-Bond Counsel’s judgment as to the proper treatment of the Series 2011A Bonds for federal income tax purposes. They are not binding on the Internal Revenue Service (the “**IRS**”) or the courts. Furthermore, Bond Counsel cannot give and has not given any opinion or assurance about the past or future activities of the District, or about the effect of future changes in the Code, the

applicable regulations, the interpretation thereof or the enforcement thereof by the IRS. The District has covenanted, however, to comply with the requirements of the Code.

Co-Bond Counsel's engagement with respect to the Series 2011A Bonds ended on April 15, 2011 with the original issuance of the Series 2011A Bonds. Unless separately engaged, Co-Bond Counsel are not obligated to defend the District or the Beneficial Owners regarding the tax-exempt status of the Series 2011A Bonds in the event of an audit examination by the IRS. Under current procedures, parties other than the District and their appointed counsel, including the Beneficial Owners, would have little, if any, right to participate in the audit examination process. Moreover, because achieving judicial review in connection with an audit examination of tax-exempt bonds is difficult, obtaining an independent review of IRS positions with which the District legitimately disagrees may not be practicable. Any action of the IRS, including but not limited to selection of the Series 2011A Bonds for audit, or the course or result of such audit, or an audit of bonds presenting similar tax issues, may affect the market price for, or the marketability of, the Series 2011A Bonds, and may cause the District or the Beneficial Owners to incur significant expense.

REMARKETING AGENT

Goldman Sachs & Co. LLC has been appointed to serve as Remarketing Agent for the Series 2011A Bonds. The Remarketing Agent will carry out the duties and obligations provided for the Remarketing Agent under and in accordance with the provisions of the applicable Indenture and a Remarketing Agreement for the applicable series of 2011A Bonds, each dated as of April 1, 2011, as amended, by and between the District and the Remarketing Agent.

The Remarketing Agent and its affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, principal investment, hedging, financing and brokerage activities. The Remarketing Agent and certain of its affiliates have, from time to time, performed, and may in the future perform, various investment banking services for the District, for which they received or will receive customary fees and expenses.

In the ordinary course of their various business activities, the Remarketing Agent and its affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (which may include bank loans and/or credit default swaps) for their own account and for the accounts of their customers and may at any time hold long and short positions in such securities and instruments. Such investment and securities activities may involve securities and instruments of the District.

APPROVAL OF LEGAL MATTERS

Certain legal matters in connection with the reoffering of the Series 2011A Bonds will be passed upon by Orrick, Herrington & Sutcliffe LLP, as Bond Counsel to the District, by Hanson Bridgett LLP, as general counsel to the District, and for the Remarketing Agent by Stradling Yocca Carlson & Rauth, a Professional Corporation.

INDEPENDENT ACCOUNTANTS

The financial statements of the District at June 30, 2020, included in Appendix B to this Remarketing Statement, have been audited by Davis Farr LLP, independent accountants (the "**Auditor**"), as set forth in their Independent Auditor's Report, which also appears in Appendix B. The Auditor has not reviewed the contents of this Remarketing Statement, and the District has not sought the Auditor's consent to the inclusion of the Auditor's audit letter attached to the District's financial statements in this Remarketing Statement.

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MISCELLANEOUS

References made herein to certain documents and reports are brief summaries thereof and do not purport to be complete or definitive and reference is hereby made to such documents and reports for a full and complete statement of the contents thereof.

Any statements in this Remarketing Statement involving matters of opinion, whether or not expressly so stated, are intended as such and not as representations of fact. This Remarketing Statement is not to be construed as a contract or agreement between the District and registered owners or beneficial owners of any of the Series 2011A Bonds. The delivery and distribution of this Remarketing Statement have been duly authorized by the District.

IRVINE RANCH WATER DISTRICT

By: _____/s/Robert Jacobson_____
Treasurer

APPENDIX A
IRVINE RANCH WATER DISTRICT

APPENDIX B
AUDITED FINANCIAL STATEMENTS

APPENDIX C

SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURES

[TO COME FROM BOND COUNSEL]

APPENDIX D

CO-BOND COUNSEL OPINIONS

Orrick, Herrington & Sutcliffe LLP and Bowie, Arneson, Wiles & Giannone, Co-Bond Counsel to the District, rendered the following final approving opinions dated April 15, 2011 (the “2011 Opinions”) in connection with the initial issuance of the Series 2011A Bonds. Orrick, Herrington & Sutcliffe LLP, Bond Counsel, has made no attempt to update or reaffirm the 2011 Opinions in connection with this Remarketing Statement or the remarketing of the Series 2011A Bonds.

[SEE ATTACHED]

APPENDIX E

BOOK-ENTRY SYSTEM

The information in this section concerning DTC and DTC's book-entry only system has been obtained from sources that the District believes to be reliable, but the District takes no responsibility for the completeness or accuracy thereof. The following description of the procedures and record keeping with respect to beneficial ownership interests in the Series 2011A Bonds, payment of principal, premium, if any, accreted value, if any, and interest with respect to on the Series 2011A Bonds to DTC Participants or Beneficial Owners, confirmation and transfers of beneficial ownership interests in the Series 2011A Bonds and other related transactions by and between DTC, the DTC Participants and the Beneficial Owners is based solely on information provided by DTC.

The Depository Trust Company ("DTC"), New York, NY, acts as securities depository for the Series 2011A Bonds. The Series 2011A Bonds are fully-registered securities registered in the name of Cede & Co. (DTC's partnership nominee) or such other name as may be requested by an authorized representative of DTC. One fully-registered bond was issued for each maturity of the Series 2011A Bonds, each in the aggregate principal amount of such maturity, and will be deposited with DTC.

DTC, the world's largest securities depository, is a limited-purpose trust company organized under the New York Banking Law, a "banking organization" within the meaning of the New York Banking Law, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code, and a "clearing agency" registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934. DTC holds and provides asset servicing for over 3.5 million issues of U.S. and non-U.S. equity issues, corporate and municipal debt issues, and money market instruments (from over 100 countries) that DTC's participants ("Direct Participants") deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities, through electronic computerized book-entry transfers and pledges between Direct Participants' accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation ("DTCC"). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly ("Indirect Participants"). DTC has a Standard & Poor's rating of AA+. The DTC Rules applicable to its Participants are on file with the Securities and Exchange Commission. More information about DTC can be found at www.dtcc.com.

Purchases of Series 2011A Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the Series 2011A Bonds on DTC's records. The ownership interest of each actual purchaser of each Series 2011A Bond ("Beneficial Owner") is in turn to be recorded on the Direct and Indirect Participants' records. Beneficial Owners will not receive written confirmation from DTC of their purchase. Beneficial Owners are, however, expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the Series 2011A Bonds are to be accomplished by entries made on the books of Direct and Indirect Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive bonds representing their ownership interests in Series 2011A Bonds, except in the event that use of the book-entry system for the Series 2011A Bonds is discontinued.

To facilitate subsequent transfers, all Series 2011A Bonds deposited by Direct Participants with DTC are registered in the name of DTC's partnership nominee, Cede & Co., or such other name as may be requested by an authorized representative of DTC. The deposit of Series 2011A Bonds with DTC and their registration in the name of Cede & Co. or such other DTC nominee do not effect any change in beneficial ownership. DTC has no

knowledge of the actual Beneficial Owners of the Series 2011A Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts such Series 2011A Bonds are credited, which may or may not be the Beneficial Owners. The Direct and Indirect Participants will remain responsible for keeping account of their holding on behalf of their customers.

Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time. Beneficial Owners of Series 2011A Bonds may wish to take certain steps to augment the transmission to them of notices of significant events with respect to the Series 2011A Bonds, such as redemptions, tenders, defaults, and proposed amendments to the Series 2011A Bond documents. For example, Beneficial Owners of Series 2011A Bonds may wish to ascertain that the nominee holding the Series 2011A Bonds for their benefit has agreed to obtain and transmit notices to Beneficial Owners. In the alternative, Beneficial Owners may wish to provide their names and addresses to the registrar and request that copies of notices be provided directly to them.

Redemption notices shall be sent to DTC. If less than all of the Series 2011A Bonds within a maturity are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in such maturity to be redeemed.

Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to Series 2011A Bonds unless authorized by a Direct Participant in accordance with DTC's MMI Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to the District as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts Series 2011A Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Redemption proceeds, distributions, and dividend payments with respect to the Series 2011A Bonds will be made to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participants' accounts upon DTC's receipt of funds and corresponding detail information from the District or the Trustee, on a payable date in accordance with their respective holdings shown on DTC's records. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Participant and not of DTC, the Trustee, or the District, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of redemption proceeds, distributions, and dividend payments to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the District or the Trustee, disbursement of such payments to Direct Participants will be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners will be the responsibility of Direct and Indirect Participants.

A Beneficial Owner shall give notice to elect to have its Series 2011A Bonds purchased or tendered, through its Participant, to the Tender Agent, and shall effect delivery of such Series 2011A Bonds by causing the Direct Participant to transfer the Participant's interest in the Series 2011A Bonds, on DTC's records, to the Tender Agent. The requirement for physical delivery of Series 2011A Bonds in connection with an optional tender or a mandatory purchase will be deemed satisfied when the ownership rights in the Series 2011A Bonds are transferred by Direct Participants or DTC's records and followed by book-entry credit of tendered Series 2011A Bonds to the Tender Agent's DTC account.

DTC may discontinue providing its services as depository with respect to the Series 2011A Bonds at any time by giving reasonable notice to the District or the Trustee. Under such circumstances, in the event that a successor depository is not obtained, Series 2011A Bonds are required to be printed and delivered.

The District may decide to discontinue use of the system of book-entry only transfers through DTC (or a successor securities depository). In that event, Series 2011A Bonds will be printed and delivered.

APPENDIX F

FORM OF CONTINUING DISCLOSURE CERTIFICATE

The District entered into a Continuing Disclosure Certificate in the following form in connection with the initial issuance of the Series 2011A Bonds on April 15, 2011:

This Continuing Disclosure Certificate (the “Disclosure Certificate”) is executed and delivered by the Irvine Ranch Water District (the “District”) in connection with the execution and delivery of \$60,545,000 Bonds of Irvine Ranch Water District, Refunding Series 2011A-1 (the “Series 2011A-1 Bonds”) and the \$40,370,000 Bonds of Irvine Ranch Water District, Refunding Series 2011A-2 (the “Series 2011A-2 Bonds,” and together with the Series 2011A-1 Bonds, the “Series 2011A Bonds”) constituting the consolidated, several general obligations of Improvement District Nos. 105, 113, 213 and 250 (collectively, the “Improvement Districts”). The Series 2011A-1 Bonds are being issued pursuant to an Indenture of Trust, dated as of April 1, 2011 (the “Series 2011A-1 Indenture of Trust”), by and between the District and The Bank of New York Mellon Trust Company, N.A., as trustee, and the Series 2011A-2 Bonds are being issued pursuant to an Indenture of Trust, dated as of April 1, 2011 (the “Series 2011A-2 Indenture of Trust,” and together with the Series 2011A-1 Indenture of Trust, the “Indentures of Trust”), by and between the District and The Bank of New York Mellon Trust Company, N.A., as trustee. The District covenants and agrees as follows:

1. Purpose of this Disclosure Certificate. This Disclosure Certificate is being executed and delivered by the District for the benefit of the Holders and Beneficial Owners of the Bonds and in order to assist the Participating Underwriter in complying with the Rule.

2. Definitions. In addition to the definitions set forth in the Indentures of Trust, which apply to any capitalized term used in this Disclosure Certificate unless otherwise defined in this Section, the following capitalized terms shall have the following meanings:

Annual Report. The term “Annual Report” means any Annual Report provided by the District pursuant to, and as described in, Sections 3 and 4 of this Disclosure Certificate.

Beneficial Owner. The term “Beneficial Owner” means any person which: (a) has the power, directly or indirectly, to vote or consent with respect to, or to dispose of ownership of, any Bonds (including persons holding Bonds through nominees, depositories or other intermediaries); or (b) is treated as the owner of any Bonds for federal income tax purposes.

EMMA. The term “EMMA” means the Municipal Securities Rulemaking Board’s Electronic Municipal Market Access System for municipal securities disclosures, maintained on the Internet at <http://emma.msrb.org/>.

Fiscal Year. The term “Fiscal Year” means the one-year period ending on the last day of June of each year.

Holder. The term “Holder” means a registered owner of the Bonds.

Listed Events. The term “Listed Events” means any of the events listed in Sections 5(a) and (b) of this Disclosure Certificate.

Official Statement. The term “Official Statement” means the Official Statement of the District dated April 12, 2011 delivered in connection with the issuance of the Bonds.

Participating Underwriter. The term “Participating Underwriter” means the original underwriters of the Bonds required to comply with the Rule in connection with offering of the Bonds.

Rule. The term “Rule” means Rule 15c2-12 adopted by the Securities and Exchange Commission under the Securities Exchange Act of 1934, as the same may be amended from time to time.

3. Provision of Annual Reports.

(a) The District shall provide not later than 270 days following the end of its Fiscal Year (commencing with the Fiscal Year 2011) to EMMA an Annual Report relating to the immediately preceding Fiscal Year which is consistent with the requirements of Section 4 of this Disclosure Certificate, which Annual Report may be submitted as a single document or as separate documents comprising a package, and may cross-reference other information as provided in Section 4 of this Disclosure Certificate.

(b) If the District is unable to provide to EMMA an Annual Report by the date required in subsection (a), the District shall send to EMMA a notice in substantially the manner prescribed by the Municipal Securities Rulemaking Board.

4. Content of Annual Reports. The Annual Report shall contain or incorporate by reference the following:

(a) The audited financial statements of the District for the prior Fiscal Year, prepared in accordance with generally accepted accounting principles as promulgated to apply to governmental entities from time to time by the Governmental Accounting Standards Board. If the District's audited financial statements are not available by the time the Annual Report is required to be filed pursuant to Section 3(a), the Annual Report shall contain unaudited financial statements in a format similar to the financial statements contained in the final Official Statement, and the audited financial statements shall be filed in the same manner as the Annual Report when they become available.

(b) Principal amount of the Bonds outstanding.

(c) An update of the information in the following tables and/or captions in Appendix A—“IRVINE RANCH WATER DISTRICT” in the Official Statement:

1. “Outstanding Indebtedness” on page A-7;
2. IRVINE RANCH WATER DISTRICT Historic Water Supply In Acre Feet Per Year” under the caption “WATER SUPPLY—Historic and Projected Water Supply” on page A-19;
3. “THE WATER SYSTEM—Historic Water Connections” on page A-21;
4. “THE WATER SYSTEM—Historic Water Deliveries” on page A-22;
5. “THE WATER SYSTEM—Water System Rates and Charges” on page A-24;
6. “THE SEWER SYSTEM—Historic Sewer and Recycled Water Connections” on page A-26;
7. “THE SEWER SYSTEM—Historic Sewer Daily Average Flow” on page A-27;
8. “THE SEWER SYSTEM—Sewer System Rates and Charges” on page A-30;
9. “WATER AND SEWER SYSTEM FINANCIAL INFORMATION—Historic Operating Results and Debt Service Coverage” on page A-33; and
10. An update of the following tables for each Improvement District:
 - (i) Assessed Valuations (Land Only); provided that only the total assessed values shall be updated;

- (ii) Assessed Valuation and Parcels by Land Use; and
- (iii) Largest Local Secured Taxpayers.

Any or all of the items listed above may be included by specific reference to other documents, including official statements of debt issues of the District or related public entities, which have been submitted to EMMA or the Securities and Exchange Commission; provided that if any document included by reference is a final official statement, it must be available from the Municipal Securities Rulemaking Board; and provided further that the District shall clearly identify each such document so included by reference.

5. Reporting of Significant Events.

(a) Pursuant to the provisions of this Section 5, the District shall give, or cause to be given, notice of the occurrence of any of the following events with respect to the Bonds in a timely manner not more than ten (10) Business Days after the event:

- 1. principal and interest payment delinquencies;
- 2. unscheduled draws on debt service reserves reflecting financial difficulties;
- 3. unscheduled draws on credit enhancements reflecting financial difficulties;
- 4. substitution of credit or liquidity providers, or their failure to perform;
- 5. adverse tax opinions or the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701-TEB) or other material notices or determinations with respect to the tax status of the Bonds;
- 6. defeasances;
- 7. tender offers;
- 8. ratings changes; and
- 9. bankruptcy, insolvency, receivership or similar proceedings.

Note: For the purposes of the event identified in subparagraph (9), the event is considered to occur when any of the following occur: the appointment of a receiver, fiscal agent or similar officer for an obligated person in a proceeding under the U.S. Bankruptcy Code or in any other proceeding under state or federal law in which a court or governmental authority has assumed jurisdiction over substantially all of the assets or business of the obligated person, or if such jurisdiction has been assumed by leaving the existing governmental body and officials or officers in possession but subject to the supervision and orders of a court or governmental authority, or the entry of an order confirming a plan of reorganization, arrangement or liquidation by a court or governmental authority having supervision or jurisdiction over substantially all of the assets or business of the obligated person.

(b) Pursuant to the provisions of this Section 5, the District shall give, or cause to be given, notice of the occurrence of any of the following events with respect to the Bonds, if material:

- 1. mergers, consolidations, acquisitions, the sale of all or substantially all of the assets of the obligated persons or their termination;
- 2. appointment of a successor or additional trustee or the change of the name of a trustee;

3. non-payment related defaults;
4. modifications to the rights of Bondholders;
5. notices of redemption; and
6. release, substitution or sale of property securing repayment of the Bonds.

(c) Whenever the District obtains knowledge of the occurrence of a Listed Event described in subsection (b), the District shall as soon as possible determine if such event would be material under applicable federal securities laws.

(d) If the District determines that knowledge of the occurrence of a Listed Event under Section 5(b) would be material under applicable federal securities laws, the District shall file a notice of such occurrence with EMMA in a timely manner not more than ten (10) Business Days after the event.

6. Cash and Investments. Upon request, the District shall provide on a quarterly basis to any person the most recently available Cash and Investment Summary as prepared for the Finance and Personnel Committee of the Board of Directors of the District.

7. Customarily Prepared and Public Information. Upon request, the District shall provide to any person financial information and operating data regarding the District which is customarily prepared by the District and is publicly available.

8. Termination of Obligation. The District's obligations under this Disclosure Certificate shall terminate upon the legal defeasance, prior redemption or payment in full of all of the Bonds. If such termination occurs prior to the final maturity of the Bonds, the District shall give notice of such termination in the same manner as for a Listed Event under Section 5(b).

9. Amendment; Waiver. Notwithstanding any other provision of this Disclosure Certificate, the District may amend this Disclosure Certificate, and any provision of this Disclosure Certificate may be waived, provided that, in the opinion of nationally recognized bond counsel, such amendment or waiver is permitted by the Rule.

10. Additional Information. Nothing in this Disclosure Certificate shall be deemed to prevent the District from disseminating any other information, using the means of dissemination set forth in this Disclosure Certificate or any other means of communication, or including any other information in any notice of occurrence of a Listed Event, in addition to that which is required by this Disclosure Certificate. If the District chooses to include any information in any notice of occurrence of a Listed Event in addition to that which is specifically required by this Disclosure Certificate, the District shall not thereby have any obligation under this Disclosure Certificate to update such information or include it in any future notice of occurrence of a Listed Event.

11. Default. In the event of a failure of the District to comply with any provision of this Disclosure Certificate, any Holders or Beneficial Owners of at least 50% aggregate principal amount of the Bonds may take such actions as may be necessary and appropriate, including seeking mandate or specific performance by court order, to cause the District to comply with its obligations under this Disclosure Certificate. A default under this Disclosure Certificate shall not be deemed an Event of Default under the Indentures of Trust, and the sole remedy under this Disclosure Certificate in the event of any failure of the District to comply with this Disclosure Certificate shall be an action to compel performance.

No Holder or Beneficial Owner of the Bonds may institute such action, suit or proceeding to compel performance unless they shall have first delivered to the District satisfactory written evidence of their status as such, and a written notice of and request to cure such failure, and the District shall have refused to comply therewith within a reasonable time.

12. Beneficiaries. This Disclosure Certificate shall inure solely to the benefit of the District, the Participating Underwriter and Holders and Beneficial Owners from time to time of the Bonds, and shall create no rights in any other person or entity.

Dated: April 15, 2011

IRVINE RANCH WATER DISTRICT

By: _____
Its: Treasurer

APPENDIX A
IRVINE RANCH WATER DISTRICT

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INTRODUCTION

The following sets forth certain information relating to the Irvine Ranch Water District (the “**District**”) and certain of its improvement districts.

The District’s projections in Tables 12, 15, 17, 19, 23, 25, 27, 30 and 32 of this Appendix A (the “**Projections**”) are derived from historic trends and experience and internal financial models. The internal models are used by the District to identify future infrastructure funding requirements, and to aid in setting water and sewer rates, charges and connection fees. Key inputs include assumptions based on historical experience and other factors regarding the District’s cost of borrowing, the rate of return on District investments, inflation, project costs, property tax receipts and the timing and amount of future bond sales, as well as the pace and scope of real estate development activity within the District’s service area. The District is in regular contact with major Orange County real estate development companies to assess and update this information.

The Projections constitute forward-looking statements. No assurance can be given that the future results reflected in the Projections and otherwise discussed herein will be achieved, and actual results may differ materially from the Projections. As noted above, the Projections rely heavily on certain assumptions regarding the pace and scope of real estate development activity within the District’s service area. Such activity may be affected by a variety of factors, such as tighter lending standards for real estate loans. Real estate development activity also may be affected by general economic conditions. The District has attempted to reflect such conditions in the Projections, but is unable to predict with certainty the level of future real estate development activity or the other factors affecting the Projections.

In addition to the specific limitations on remedies contained in the applicable documents themselves, the rights and obligations with respect to the Indentures are subject to bankruptcy, insolvency, reorganization, moratorium, fraudulent conveyance and other similar laws affecting creditors’ rights, to the application of equitable principles if equitable remedies are sought, and to the exercise of judicial discretion in appropriate cases and to limitations on legal remedies against public agencies in the State of California (the “**State**”). The various opinions of counsel that were delivered with respect to such documents, including the opinions of Co-Bond Counsel (the forms of which are attached to the Remarketing Statement as Appendix E), were similarly qualified.

Unless the context otherwise requires, all defined terms used herein shall have the same meanings set forth in the Remarketing Statement, except that the term “**Improvement Districts**” as used in this Appendix A refers to all eight water improvement districts and ten sewer improvement districts of the District.

THE IRVINE RANCH WATER DISTRICT

General

The District was established in 1961 as a California Water District under the provisions of Section 34000 *et seq.* of the California Water Code (the “**Act**”). As a special district, the District focuses on four primary services – providing potable water, collecting and treating wastewater, producing and distributing recycled and other non-potable water and implementing urban runoff treatment programs.

The District serves a 181-square-mile area, which includes all of the City of Irvine and portions of the cities of Tustin, Newport Beach, Costa Mesa, Orange and Lake Forest, as well as certain unincorporated areas of Orange County. Extending from the Pacific Coast to the foothills, the District’s region is semi-arid with a mild climate and an average annual rainfall of approximately 12 inches. The District serves a total estimated daytime population in excess of 500,000 through approximately 118,250 potable and non-potable water and approximately 113,200 sewer service and recycled water connections. The number of service connections has increased by approximately 21% over the last decade.

The District builds and maintains significant capital infrastructure in order to serve its customers and is organized into Improvement Districts in order to allocate funding responsibility for capital facilities to the area which will benefit from such capital facilities and to separate areas on the basis of projected timing of development. This allows capital facilities construction to be matched to the development approval decisions of the respective local agencies that make them. Some of the Improvement Districts share in the funding of the District's regional facilities which such Improvement Districts use or will use in common, such as major water importation facilities and water and wastewater treatment plants. In 2013, the District reviewed its capital funding plan, which resulted in a master consolidation and combination of several Improvement Districts. The District now has a total of eight water Improvement Districts and ten sewer Improvement Districts which cover specific areas within the District's boundaries, each of which is governed in accordance with the Act and all but one of which have the authority to issue general obligation indebtedness. See the Remarketing Statement under the caption "INTRODUCTION—Improvement Districts—Improvement District Nos. 125 and 225" for a discussion of the effect on the Series 2011A Bonds of the consolidation and combination of such Improvement Districts.

See Table 3 under the caption "—Outstanding Indebtedness—Improvement District Indebtedness" for information with respect to the amount of authorized and outstanding *ad valorem* assessment bonds for Improvement District Nos. 113, 125 and 213 and 225.

The principal office of the District is located at 15600 Sand Canyon Avenue, Irvine, California 92618.

Board of Directors and General Manager

The District's Board of Directors consists of five Directors who were elected by resident voters for staggered four-year terms. In 2019, the Board of Directors adopted a resolution changing the District's election procedures from at-large elections to by-division elections, which has resulted in the creation of five divisions of roughly equal population sizes within the District. By-division elections took place for two members of the Board of Directors in November 2020 and are scheduled to take place for the other three Board members in 2022. The policies of the Board of Directors are administered by the General Manager of the District.

Board of Directors. The present Directors are:

Douglas J. Reinhart. Mr. Reinhart was appointed to the District's Board of Directors in 2004 to fill a vacancy and has since been elected to subsequent terms. Mr. Reinhart currently serves as President and previously served as Vice President in 2016 and 2019. He served President in 2007, 2009 to 2010, 2013 and 2017 to 2018. He currently serves on the District's Supply Reliability Committee. Mr. Reinhart is a registered civil engineer with over 40 years of experience in the private sector directing projects in water, wastewater and other infrastructure. He was the president and an owner of ASL Consulting Engineers before its acquisition by Tetra Tech in 1999. Mr. Reinhart then served as the Divisional Executive Vice President for Tetra Tech for the western United States before starting a consulting business in 2004. He holds a bachelor's degree in civil engineering from the Missouri School of Mines and Metallurgy. Mr. Reinhart has served on the Board of Trustees of the Southern California Water Committee, the American Water Works Association Desalination Committee and the ACWA Groundwater Committee and is a past member of the Board of Directors of the National WaterReuse Association. In addition, Mr. Reinhart is a member of the American Society of Civil Engineers. Mr. Reinhart's current term ends in November 2022.

John B. Withers, Division 1. Mr. Withers was initially appointed to the District's Board of Directors in 1989 to fill a vacancy and has since been elected to subsequent terms. Mr. Withers currently serves as Vice President and previously served as Vice President in 2012 and President in 2004. He currently serves on the District's Engineering and Operations Committee. Mr. Withers is a partner with California Strategies, a strategic government relations firm in Irvine. In past positions, Mr. Withers has served as Vice President of Community Development for Lewis Operating Corporation and as Director of Water Resources for Psomas &

Associates, a civil engineering and planning firm based in Costa Mesa. He has served as Director of Governmental Affairs for the Orange County Region of the Building Industry Association of Southern California and as a legislative advocate for Crocker Bank and a major trade association in Sacramento. Mr. Withers served as Commissioner on the Orange County Local Agency Formation Commission from 1994 to 2019. He also served as a member, including a term as chairman, of the Santa Ana Regional Water Quality Control Board, having been appointed by the Governor in 1992. Mr. Withers was a board member of the National Water Research Institute for six years and is the District's current representative. A native Southern Californian, Mr. Withers received his bachelor's degree from UCLA in economics with a specialization in urban studies in 1979 and received a master's degree in urban studies from Occidental College in 1988. Mr. Withers' current term ends in November 2024.

Steven E. LaMar. Mr. LaMar was appointed to the District's Board of Directors in 2009 and has been elected to three subsequent terms. Mr. LaMar previously served as President in 2011, 2014 to 2015 and 2019. He served as Vice President in 2018. He is a water policy and planning expert with more than 25 years of experience on statewide business and industry committees and has directly participated in many major water policy forums. In 2019, Mr. LaMar was elected President of the Association of California Water Agencies ("ACWA"). He currently serves on the District's Finance and Personnel and Water Resources Policy and Communications Committees. Mr. LaMar has served on statewide task forces and advisory committees on drought planning, desalination, the California Bay-Delta, the California Water Plan and on landscape water conservation issues. Mr. LaMar is president and owner of LegiSight, LLC, located in Tustin, California. He has served as a water policy leader in the California Building Industry Association for over 20 years. He represents the District on the boards of the National Water Research Institute and the Nature Reserve of Orange County. Mr. LaMar holds a bachelor's degree in political science from Pittsburg State University (Kansas) and a certificate from the Environmental Management Institute, a U.S. Environmental Protection Agency environmental training program administered by the University of Southern California. Mr. LaMar's current term ends in November 2022.

Peer Swan. Mr. Swan was elected to the District's Board of Directors in 1979 and has since been elected to subsequent terms. Mr. Swan previously served as President from December 1981 until December 1995 and again in 2006, and as Vice President in 2014 and 2017. Mr. Swan is chairman of the Finance and Personnel Committee and serves on the Supply Reliability Programs Committee. Mr. Swan's community and professional involvement includes service as President of the Board of San Joaquin Wildlife Sanctuary and member of the Steering Committee of the Southern California Water Dialogue Committee. Mr. Swan is active in ACWA, where he served on the Board of Directors and on the Executive Committee. Mr. Swan has also been active in the California Association of Sanitation Agencies and the Newport Chamber of Commerce. Mr. Swan was the Treasurer of the Pacific Scientific Company prior to its acquisition in 1998 and a member of the Board of Directors of the Southern California Bank and its parent SC Bancorp until its acquisition in 1997. He has also served as a board member of the YMCA of Orange County and the Orange Coast College Foundation, where he was the founding Treasurer of the Board. He served as a Director of the Orange County Sanitation District for 15 years and was Vice Chairman for six years. Mr. Swan was also a Founding Director of the Board of the National Water Research Institute and was Chairman for four years. He is a longtime member of both the National Audubon Society and its local chapter (Sea & Sage). He was also the President of the Board of the Water Advisory Committee of Orange County in 2007 and 2008. Mr. Swan's current term ends in November 2022.

Karen McLaughlin, Division 4. Ms. McLaughlin was elected to the District's Board of Directors in 2020. She currently serves on the Engineering and Operations and Water Resources Policy and Communications Committees. She is a geological and environmental scientist with extensive experience in managing water research projects associated with the biogeochemical cycling of nutrients, eutrophication, atmospheric deposition, ocean acidification and other research topics associated with water quality in natural environments. Ms. McLaughlin holds a doctorate in geological and environmental sciences from Stanford University, a bachelor's degree in geosciences from Pennsylvania State University, and worked as a researcher at the University of California, Irvine. She currently serves as a senior scientist with the Southern California

Coastal Water Research Project, where she oversees research projects to improve water quality throughout Southern California.

General Manager. Paul A. Cook, the General Manager of the District, heads a staff of approximately 415 employees. Mr. Cook was appointed General Manager in October 2011. Mr. Cook previously served as Interim General Manager from July to October 2011 and held the position of Assistant General Manager from 2004 to July 2011. Mr. Cook is a registered civil engineer with over 22 years of experience with water and wastewater systems in the public and private sectors. Prior to joining the District, he served as the Manager of Engineering for Central and West Basin Municipal Water Districts in Carson, California. He also served as the District Engineer for Los Alisos Water District in Lake Forest. In the private sector, Mr. Cook held engineering and project management positions with BFI Constructors and Turner Construction Company. He was elected to the Orange County Water District Board of Directors in 2002 and served for three years, representing communities in Irvine, Tustin and Newport Beach. Mr. Cook received his bachelor of science degree in Civil Engineering from the University of the Pacific, his masters of science degree in Civil Engineering from California State University of Long Beach and his masters in business administration from the University of California, Irvine.

Employees

The District currently employs approximately 398 regular employees and 17 temporary workers and part-time interns. In January 2018, the International Brotherhood of Electrical Workers (“**IBEW**”) became the exclusive representative for the Irvine Ranch Water General Unit and for the Non-Exempt Supervisors Unit. The General Unit includes 242 employees, the Non-Exempt Supervisors Unit includes 27 employees, and 129 employees are unrepresented. The IBEW Memorandum of Understanding for the General Unit and the IBEW Memorandum of Understanding for the Non-Exempt Supervisors Unit govern relations between the District and the IBEW for a term running through June 30, 2021. The District has not experienced any strike or other labor actions.

Pension Benefits

General. The District participates in two plans to fund pension benefits for its employees, the California Public Employees Retirement System (“**CalPERS**”) Plan and the Pension Benefits Trust. The District makes a required annual contribution to the CalPERS Plan and has elected to fund additional amounts to a trust that has been established under Internal Revenue Code Section 115 (the “**Pension Benefits Trust**”). The Pension Benefits Trust is irrevocable and holds funding contributions for the District pending future remittance to the CalPERS Plan, which will pay all retiree benefit payments to employees. The District’s total pension assets include funds held by both CalPERS and the Pension Benefits Trust. As of June 30, 2020, the District reflected a net pension liability of approximately \$68.5 million. The net pension liability is the difference between total pension liability and the fair market value of CalPERS assets. Including the Pension Benefit Trust that is discussed below under the subcaption “—Pension Benefits Trust,” the District’s pension assets cover 103.4% of the total pension liability.

CalPERS Plan. The District contributes to CalPERS, an agent multiple-employer public employee defined benefit pension plan for all of the District’s full-time and certain of its temporary employees that have worked for the District for a total of over 1,000 hours. CalPERS provides retirement, disability and death benefits to plan members and beneficiaries. CalPERS acts as a common investment and administrative agent for participating public entities within the State, including the District.

CalPERS plan benefit provisions and all other requirements are established by State statute and the District’s Board of Directors. Participants in the District’s CalPERS plan contribute the full amount of the required employee contribution, which is up to 8% of their annual covered salary, depending on benefit level.

Employer contribution rates for all public employers are determined on an annual basis by the CalPERS actuary and are effective on July 1 following notice of a change in the rate. The total plan contributions are determined through the CalPERS annual actuarial valuation process. The actuarially determined rate is the estimated amount, expressed as a percentage of payroll, that is necessary to finance the costs of benefits that are earned by employees during the year (normal costs), with an additional required amount to finance any unfunded accrued liability. The District’s normal cost contribution for the District fiscal year ended June 30 (“**Fiscal Year**”), 2020 was \$3.2 million and the unfunded accrued liability contribution was \$5.2 million, for a total contribution of \$8.4 million. The District’s estimated total contributions, including normal and unfunded accrued liabilities, for Fiscal Years 2021 and 2022 are expected to be approximately \$9.2 million and \$10.5 million, respectively.

Pension Benefits Trust. The District recognizes that defined benefit plans and the related future pension obligations pose significant issues for many government agencies. The District has taken a proactive approach to address these issues by establishing a Pension Benefits Trust in Fiscal Year 2013 to assist in funding its CalPERS unfunded liability, providing the District with an alternative to CalPERS that allows for investment by a professional fund management team selected and monitored by the District. The Pension Benefits Trust holds the funding contributions from the District pending future remittance to CalPERS’ pension trust fund, which will pay all retiree benefit payments to employees associated with the District’s plan. Future contributions will be transferred to CalPERS at the District’s discretion. The funds held in the Pension Benefits Trust are legally protected from the claims of the general creditors of the District. Contributions to the Pension Benefits Trust and earnings on those contributions are irrevocable.

In Fiscal Year 2013, the District made an initial \$35.0 million contribution to the Pension Benefits Trust. From Fiscal Years 2014 through 2018, the District made total additional contributions of \$20.9 million to the Pension Benefits Trust. The District did not make any additional contributions to the Pension Benefits Trust in Fiscal Years 2019 or 2020. As of June 30, 2020, the fair market value of the assets in the Pension Benefits Trust was approximately \$83.1 million. Additional information on the Pension Benefits Trust’s investments can be found in Note 2 to the District’s audited financial statements for Fiscal Year 2020 attached to the Remarketing Statement as Appendix B.

A summary of principal assumptions and methods used to determine the total pension liability for Fiscal Year 2020 is shown below.

Actuarial Cost Method	Entry Age Normal in accordance with the requirements of GASB Statement No. 68 (“ GASB 68 ”)
Asset Valuation Method	Market Value of Assets
Actuarial Assumptions:	
Discount Rate	7.15%
Inflation	2.50%
Salary Increases	Varies by Entry age and service
Mortality Rate Table ⁽¹⁾	Derived using CalPERS’ membership data for all funds
Post-Retirement Benefit Increase	Contract COLA up to 2.50% until purchasing power protection allowance floor on purchasing power applies, and thereafter up to 2.50%

⁽¹⁾ The mortality table used was developed based on CalPERS-specific data. The table includes 15 years of mortality improvements using Society of Actuaries Scale 90% of scale MP 2016.
Source: The District.

The above information is primarily derived from information produced by CalPERS. The District has not independently verified the information provided and neither makes any representations nor expresses any opinion as to the accuracy of the information provided by CalPERS.

The comprehensive annual financial reports of CalPERS are available on its Internet website at www.calpers.ca.gov. The CalPERS website also contains CalPERS’ most recent actuarial valuation reports

and other information concerning benefits and other matters. The textual reference to such Internet website is provided for convenience only. None of the information on such Internet website is incorporated by reference herein. The District cannot guarantee the accuracy of such information. Actuarial assessments are “forward-looking” statements that reflect the judgment of the fiduciaries of the pension plans, and are based upon a variety of assumptions, one or more of which may not materialize or may be changed in the future.

Funding of CalPERS Plan. The Schedule of Funding Progress below shows District’s total pension liability, CalPERS assets, Pension Benefits Trust assets, and the relationship of the total pension liability (in thousands of dollars) to such assets.

IRVINE RANCH WATER DISTRICT
Schedule of Funding Progress
(In Thousands)

<i>Fiscal Year</i> ⁽¹⁾	<i>Total Pension Liability</i>	<i>CalPERS Assets</i>	<i>Net Pension Liability/(Asset)</i>	<i>Pension Benefit Trust Assets</i>	<i>CalPERS Assets as % of Total Pension Liability</i>	<i>Pension Benefit Trust Assets as % of Total Pension Liability</i>	<i>Total Pension Assets⁽²⁾ as % of Total Pension Liability</i>
06/30/16	\$227,796	\$180,577	\$47,219	\$45,297	79.3%	19.9%	99.2%
06/30/17	238,009	179,769	58,240	47,132	75.5	19.8	95.3
06/30/18	264,399	197,718	66,681	66,101	74.8	25.0	99.8
06/30/19	275,457	211,320	64,137	73,106	76.7	26.5	103.2
06/30/20	291,334	222,867	68,467	78,389	76.5	26.9	103.4

⁽¹⁾ Figures are as of the measurement dates of June 30, 2015, June 30, 2016, June 30, 2017, June 30, 2018 and June 30, 2019, which apply to the Fiscal Years ended June 30, 2016, June 30, 2017, June 30, 2018, June 30, 2019 and June 30, 2020, respectively.

⁽²⁾ Reflects total of moneys held in CalPERS plan and in Pension Benefits Trust.

Source: The District.

Changes in the Net Pension Liability. The changes in the net pension liability for the District’s CalPERS plan were as follows (in thousands):

TABLE 1
IRVINE RANCH WATER DISTRICT
Changes in Net Pension Liability
(In Thousands)

	<i>Increase (Decrease)</i>		
	<i>Total Pension Liability</i>	<i>Plan Fiduciary Net Position⁽¹⁾</i>	<i>Net Pension Liability / (Asset)</i>
Balance at June 30, 2019	\$ 275,457	\$ 211,320	\$ 64,137
Changes	<u>15,877</u>	<u>11,547</u>	<u>4,330</u>
Balance at June 30, 2020	\$ 291,334	\$ 222,867	\$ 68,467

⁽¹⁾ Excludes assets held in Pension Benefits Trust, in accordance with GASB Implementation Guide No. 2017-1. As of June 30, 2020, the Pension Benefits Trust had assets of \$83.1 million, which will be used to reduce the net pension liability.

Source: The District.

The June 30, 2019 balances are based on CalPERS actuarial valuation data of June 30, 2017, with assumptions and market values updated through June 30, 2018.

Sensitivity of the Net Pension Liability to Changes in the Discount Rate. The following table presents the net pension liability of the District’s CalPERS Plan (in thousands), calculated using the discount rate of 7.15%, as well as what the net pension liability would be if it were calculated using a discount rate that is 1 percentage point lower (6.15%) or 1 percentage point higher (8.15%) than the current rate:

TABLE 2
IRVINE RANCH WATER DISTRICT
Sensitivity of the Net Pension Liability to Changes in the Discount Rate⁽¹⁾
(In Thousands)

	<i>Discount Rate – 1%</i> <i>(6.15%)</i>	<i>Current Discount</i> <i>Rate (7.15%)</i>	<i>Discount Rate + 1%</i> <i>(8.15%)</i>
Plan’s Net Pension Liability/(Asset)	\$107,934	\$64,137	\$35,825

⁽¹⁾ Excludes assets held in Pension Benefits Trust, in accordance with GASB Implementation Guide No. 2017-1.
Source: The District.

Other Pension Benefits. The District enables all of its part-time and certain temporary employees to participate in a defined contribution plan. In a defined contribution plan, benefits depend solely on amounts contributed to the plan plus investment earnings. For Fiscal Year 2020, the District’s payroll for the related part-time and temporary employees who are covered by the plan was \$166,663 and the eligible employees contributed \$12,782. The District made no contributions to the defined contribution plan during such Fiscal Year.

All regular, full-time District employees are eligible to participate in the District’s deferred compensation program pursuant to Section 457 of the Internal Revenue Code whereby they can voluntarily contribute a portion of their earnings into a tax-deferred plan administered by the District and invested through a third party provider. Pursuant to the Economic Growth and Tax Relief Reconciliation Act of 2001, effective January 1, 2002, employees may contribute the lesser of 100% of includible compensation or the maximum dollar amount allowable under Internal Revenue Code Section 457 in effect for the year. The dollar amount currently in effect for calendar year 2020 is \$19,500. Since 2008, the limit has been indexed to inflation in \$500 increments.

Effective January 1, 2008, for employees with one year or more of service, the District provides: (i) 100% matching of employee Section 457 plan contributions up to an annual maximum of 3% of the employee’s base salary; and (ii) all full-time employees who have completed two years of regular, full-time service with the District, are eligible for an additional District contribution equal to 1% of such employees’ base salary. Such employer contribution amounts are deposited into a money purchase plan pursuant to Section 401(a) of the Internal Revenue Code. During Fiscal Year 2020, the District contributed \$1,272,674 to employee accounts under the 401(a) plan.

The assets in both plans are held in trust for the exclusive benefit of the participants and their beneficiaries, and are therefore not reported in the financial statements of the District.

For additional information relating to the District’s pension plans, see Note 13 to the District’s audited financial statements attached to the Remarketing Statement as Appendix B.

Other Post-Employment Benefits

The District currently has three programs for post-employment benefits other than pensions (“**OPEB**”): the California Public Employees Medical and Hospital Care Act (“**PEMHCA**”) premiums, a retiree health costs reimbursement plan and a retiree death benefit life insurance program. Under the first program, the District pays the required healthcare coverage under PEMHCA, commonly referred to as “PERS

Health.” To qualify, employees must retire from the District and begin drawing CalPERS retirement benefits. Participation in PEMHCA is financed in part by the District through a contribution of \$139.00 per employee per month (at current rates). The contribution rate is scheduled to be indexed with medical inflation in future years, although contributions could increase in greater amounts at the direction of CalPERS Board. In addition, the District pays 0.34% of the PEMHCA premium to cover administrative fees. In Fiscal Year 2020, the District contributed approximately \$175,000 on behalf of retirees participating in the PEMHCA program and had approximately \$295,000 for the estimated implied subsidy. The implied subsidy is the difference between average retiree claims and premiums charged by CalPERS.

As part of its retiree health costs reimbursement plan, the District provides retirees who have attained age 55 and have completed at least 3 years of service with the District with reimbursement of eligible healthcare costs of \$160 per month for retirees with at least 3 years of service up to a maximum of \$600 per month for retirees with at least 25 years of service. In Fiscal Year 2020, the District contributed approximately \$361,000 on behalf of retirees participating in the Retiree Health Costs Reimbursement Plan (“**RHCAP**”).

Finally, the retiree death benefit life insurance program provides retirees who were hired on or before December 31, 2008 with term life insurance benefits with a face amount equal to 100% of their annual salary in effect at the time of retirement. Insured group-term life benefits end for all participants at age 70. The District provides a self-insured \$10,000 death benefit for all participants already retired as of December 31, 2008 and for currently active Board members. To qualify, a retiree must have retired from the District, be at least 55 years old, have completed at least ten continuous years of service with the District, and must be drawing retirement benefits from CalPERS. In Fiscal Year 2020, the District did not make any contributions on behalf of retirees participating in this program.

The District had a total OPEB liability of approximately \$18.2 million as of June 30, 2020. The discount rate used to measure the total OPEB liability was 3.50%, which was based on the Bond Buyer 20-Bond General Obligation Index. The OPEB contributions for the District’s various OPEB plans are based on pay-as-you-go requirements. During Fiscal Year 2020, the District’s contributions totaled approximately \$0.83 million.

Changes in the OPEB Liability. The changes in the liability for the District’s OPEB plans were as follows (in thousands):

**IRVINE RANCH WATER DISTRICT
Changes in OPEB Liability
(In Thousands)**

	<i>PEMHCA</i>	<i>RHCAP</i>	<i>Retiree Death Benefit Only</i>	<i>Total</i>
Balance at June 30, 2019	\$ 11,981	\$ 3,206	\$ 1,485	\$ 16,672
Changes	<u>1,423</u>	<u>23</u>	<u>116</u>	<u>1,562</u>
Balance at June 30, 2020	\$ 13,404	\$ 3,229	\$ 1,601	\$ 18,234

⁽¹⁾ Excludes assets held in Pension Benefits Trust, in accordance with GASB Implementation Guide No. 2017-1. As of June 30, 2020, the Pension Benefits Trust had assets of \$83.1 million, which will be used to reduce the net pension liability. Source: The District.

Sensitivity of the OPEB Liability to Changes in the Discount Rate. The following table presents the net pension liability of the District’s CalPERS Plan (in thousands), calculated using the discount rate of 3.50%, as well as what the net pension liability would be if it were calculated using a discount rate that is 1 percentage point lower (2.50%) or 1 percentage point higher (4.50%) than the current rate:

IRVINE RANCH WATER DISTRICT
Sensitivity of the OPEB Liability to Changes in the Discount Rate⁽¹⁾
(In Thousands)

	<i>Discount Rate – 1%</i> <i>(2.50%)</i>	<i>Current Discount</i> <i>Rate (3.50%)</i>	<i>Discount Rate + 1%</i> <i>(4.50%)</i>
PEMHCA	\$15,722	\$13,404	\$11,570
RHCAP	3,424	3,229	3,045
Retiree Death Benefit Only	<u>1,720</u>	<u>1,601</u>	<u>1,494</u>
Total	\$20,866	\$18,234	\$16,109

⁽¹⁾ Excludes assets held in Pension Benefits Trust, in accordance with GASB Implementation Guide No. 2017-1.
Source: The District.

For additional information relating to the District’s OPEB obligations, see Note 14 to the District’s audited financial statements attached to the Remarketing Statement as Appendix B.

Budget Process

The District adopts a budget every other year for a two-year period. Following the adoption of the operating budget, the Board of Directors approves a schedule of water, sewer and recycled water rates for the first Fiscal Year within the budgeted period based on the budget approved by the Board of Directors, with rates for the following Fiscal Year during such budgeted period determined prior to the commencement of such Fiscal Year. See the caption “CONSTITUTIONAL LIMITS AND APPROPRIATIONS AND CHARGES—Proposition 218.”

The operating budget for Fiscal Years 2020 and 2021 was approved on April 22, 2019. After undertaking a mid-cycle budget review, the District deferred Water System and Sewer System rate increases that were scheduled to take effect on July 1, 2020 in consideration of the deleterious economic impact of the COVID-19 pandemic on its customers. See the caption “—COVID-19 Outbreak.” However, no other significant changes were made to the District’s Fiscal Year 2021 budget at the mid-point of its two-year budget cycle in light of the pandemic or otherwise. See the captions “THE WATER SYSTEM—Water System Rates and Charges” and “THE SEWER SYSTEM—Sewer System Rates and Charges” for a discussion of the effect of the deferral of the scheduled July 1, 2020 rate increases on District Revenues.

Water and Sewer System Insurance

The District is exposed to various risks of loss related to torts, theft of, damage to, and destruction of assets, errors and omissions and natural disasters. The District utilizes a combination of self-insurance and third-party liability insurance to minimize loss exposures from property, third-party liability claims and workers compensation claims. The District self-insures the first \$25,000 per occurrence for property losses, \$100,000 per occurrence for third-party liability claims and \$125,000 per occurrence for workers compensation claims. The District has implemented various controls to minimize loss including, but not limited to, routine employee safety meetings and training sessions, the use of uniform language in contracts designed to limit or prevent liability exposure, general risk assessments and the development of emergency plans, including a business continuity plan.

Property, boiler, machinery and cyber insurance is provided through participation in Public Risk Innovation, Solutions and Management (“PRISM”), formerly known as the California State Association of Counties Excess Insurance Authority. PRISM is a joint exercise of powers authority that was formed by a number of public agencies in the State to provide risk management services to its members. Property insurance includes flood insurance but does not include earthquake insurance except for the District’s real estate investment properties. See the caption “—Current Investments.” General and excess liability coverage

of \$35,000,000 and workers compensation insurance is provided through participation in PRISM. Pollution and legal liability coverage for the Irvine Desalter Project is provided by a policy with Ironshore Holdings, a Liberty Mutual company. Settlements have not exceeded coverage for each of the past three Fiscal Years.

In addition to maintaining cyber insurance through PRISM, the District engages an outside firm to evaluate the District's network security annually, and has also hired an outside firm to conduct a detailed information security assessment to identify critical data assets, potential system vulnerabilities and the District's ability to respond to cybersecurity threats.

Time and Manner of Payments for Service Charges

Most bills and charges for water and sewer, recycled water and natural treatment system service are billed monthly and due and payable upon presentation and become delinquent after 25 days. If payment is not received within 25 days after presentation, a late charge will be levied on any unpaid balance and after notice and proceedings as required by law (as described below), service may be discontinued. For late payment balances of \$10 or more, a one-time late charge of 10% of the unpaid balance plus 1.5% interest will be assessed for each month until the unpaid balance has been paid in full. A shutoff notice is mailed out in conjunction with an automated courtesy phone call when the unpaid balance exceeds \$150. Service is not restored until all charges, including a restoration charge, have been paid in full or the customer agrees to a payment arrangement. A small number of accounts located in Newport Beach for which the District provides sewer service only are billed on the County of Orange (the "**County**") tax rolls.

The District's shutoff policy complies with Senate Bill 998, which revised the requirements for residential shutoffs due to delinquent payments or non-payment effective February 1, 2020. Under the District's policy, the District may not discontinue residential water service for non-payment until payment by a customer has been delinquent for at least 60 days. The District will notify the customer named on the account and provide the customer with the District's policy no less than seven business days before discontinuing service. Residential service may be discontinued no sooner than five business days after the agency posts a final Notice of Intent to Disconnect Service in a conspicuous location at the property that is served. The District also may not discontinue residential water service if all of the following conditions are met:

- Discontinuing water service would pose a serious threat to the health and safety of a resident;
- The customer demonstrates that he/she is financially unable to pay for residential water service within the normal billing cycle (to qualify, the customer must participate in certain low income programs or certify that they are below 200% of the federal poverty level); and
- The customer agrees to a payment arrangement for past due amounts, generally not to exceed 12 months and must pay current charges.

If the customer's income is below 200% of the poverty line, then the reconnection fee is limited to \$50 during normal business hours or \$95 after normal business hours.

The District's shutoff policy is available in English and seven other languages spoken by 10% or more of the District's customers. The District will also be required to report the number of annual discontinuations of residential water service for inability to pay; reporting will be done by posting this information on the District's website and notifying the Board of Directors.

As described under the caption "—COVID-19 Outbreak," California's Governor has suspended utility service shutoffs for the duration of the state of emergency declared by the State, and the District will not seek to collect late fees or penalties. Although no service charges are being forgiven, the District's accounts receivable amount has increased slightly as a result of the foregoing policy.

Outstanding Indebtedness

Improvement District Indebtedness. As of December 31, 2020, the District had \$529,500,000 aggregate principal amount of outstanding *ad valorem* assessment bonds (the “**Ad Valorem Assessment Bonds**”) on behalf of the Improvement Districts. The Ad Valorem Assessment Bonds are secured by *ad valorem* assessments on land within the respective Improvement District, and are not by their terms payable from Revenues, except for the Series 2011A Bonds, the Bonds of the Irvine Ranch Water District, Series 2010B (the “**Series 2010B Bonds**”) and the Bonds of Irvine Ranch Water District, Series 2016 (the “**Series 2016 Bonds**”), each of which is described below under the caption “—Parity Obligations.” The District’s practice has been to apply Net Revenues remaining after the payment of debt service on Parity Obligations and subordinate obligations to the principal of and interest on the Ad Valorem Assessment Bonds. Pursuant to Section 35975 of the Act, the District also may levy certain rates and charges in lieu of *ad valorem* assessments to pay the Ad Valorem Assessment Bonds. The District does not currently levy in-lieu rates and charges. Any such in-lieu rates and charges levied by the District in the future would not constitute Revenues. The following table illustrates a breakdown of outstanding Ad Valorem Assessment Bonds by Improvement District as of December 31, 2020.

TABLE 3
IRVINE RANCH WATER DISTRICT
Outstanding Ad Valorem Assessment Bonds By Improvement District

<i>Improvement District</i>	<i>Amount Authorized</i>	<i>Amount Issued</i>	<i>Remaining Unissued Bonds Authorized</i>	<i>Amount Outstanding as of December 31, 2020</i>
Waterworks Bonds				
110	\$ 0	\$ 0	\$ 0	\$ 0
112	28,512,300	8,111,479	20,400,821	7,292,979
113⁽¹⁾	25,769,500	16,299,920	9,469,580	13,749,920
125⁽¹⁾⁽²⁾	735,246,000	429,728,732	305,517,268	175,153,624
153	237,300,000	7,601,244	229,698,756	7,601,244
154	4,839,000	0	4,839,000	0
185	13,500,000	1,492,889	12,007,111	1,492,889
188	8,174,000	4,589,618	3,584,382	1,578,618
Total Waterworks Bonds	<u>\$ 1,053,340,800</u>	<u>\$ 467,823,883</u>	<u>\$ 585,516,917</u>	<u>\$206,869,274</u>
Sewer Bonds				
1 ⁽³⁾	\$ 2,000,000	\$ 2,000,000	\$ 0	\$ 0
212	108,712,000	26,013,323	82,698,677	23,826,823
213⁽¹⁾	87,648,000	28,565,396	59,082,604	22,267,396
225⁽¹⁾⁽⁴⁾	856,643,000	493,304,113	363,338,887	246,469,903
240	117,273,000	49,722,056	67,550,944	16,027,474
252	0	0	0	0
253	122,283,000	11,877,248	110,405,752	11,877,248
256	0	0	0	0
285	21,300,000	1,808,776	19,491,224	1,808,776
288	8,977,000	443,106	8,533,894	353,106
Total Sewer Bonds	<u>\$ 1,324,836,000</u>	<u>\$ 613,734,018</u>	<u>\$ 711,101,983</u>	<u>\$322,630,726</u>
Total District	<u>\$ 2,378,176,800</u>	<u>\$1,081,557,900</u>	<u>\$ 1,296,618,900</u>	<u>\$529,500,000</u>

⁽¹⁾ The Series 2011A Bonds represent the consolidated, several general obligations of these Improvement Districts. See the Remarketing Statement under the caption “SECURITY FOR THE SERIES 2011A BONDS—General—Assessment Proceeds and Pledge of Revenues.”

⁽²⁾ Improvement District No. 125 was created on November 11, 2013 and reflects the consolidation of portions of former Improvement District Nos. 105, 106, 102, 121, 130, 135, 140, 161, 182, 184 and 186.

⁽³⁾ Also referred to as Improvement District No. 210.

⁽⁴⁾ Improvement District No. 225 was created on November 11, 2013 and reflects the consolidation of portions of former Improvement District Nos. 2(202), 206, 221, 230, 235, 250, 261, 282, 284 and 286.

Source: The District.

Parity Obligations. In addition to the Series 2011A Bonds, the District has the following Outstanding Parity Obligations:

- **Prior Reimbursement Agreements.** In connection with the District’s prior issuances of variable interest rate *ad valorem* assessment bonds, the District has entered into several reimbursement agreements (the “**Prior Reimbursement Agreements**”) with various letter of credit banks (the “**Prior Banks**”). Pursuant to the terms of the Prior Reimbursement Agreements, the District’s obligations to reimburse the Prior Banks will be payable from Net Revenues on parity with the Series 2011A Bonds and other Parity Obligations. There are currently no reimbursement obligations outstanding, although the District may incur reimbursement obligations under such Prior Reimbursement Agreements as provided therein. Variable interest rate bonds that are purchased by a Prior Bank bear interest at a significantly higher interest rate, and a Prior Bank that has purchased such bonds may elect to convert the term of such bonds into a term loan that is amortizable over a period of up to three years, depending upon the applicable Prior Reimbursement Agreement, resulting in significant increases in debt service. The following table summarizes the stated amount of each letter of credit associated with the Prior Reimbursement Agreements.

TABLE 4
IRVINE RANCH WATER DISTRICT
Summary of Prior Reimbursement Agreements
As of December 31, 2020

<i>General Obligation Bonds</i>	<i>Outstanding Principal</i>	<i>Letter of Credit Bank</i>	<i>Expiration Date</i>	<i>Letter of Credit Stated Amount</i>	<i>Reimbursement Obligations Outstanding</i>
Series 1993	\$ 26,600,000	U.S. Bank National Association	12/15/21	\$ 26,958,553	\$ 0
Series 2008A	45,000,000	Sumitomo Mitsui Banking Corp.	07/21/21	45,665,753	0
Series 2009A	52,500,000	U.S. Bank National Association	12/15/21	53,086,849	0
Series 2009B	<u>52,500,000</u>	Bank of America, N.A.	05/16/22	<u>53,086,849</u>	<u>0</u>
TOTAL	<u>\$ 176,600,000</u>			<u>\$178,798,005</u>	<u>\$ 0</u>

Source: The District.

- **Series 2010B Bonds.** In 2010, the District issued \$175,000,000 aggregate principal amount of Series 2010B Bonds. The Series 2010B Bonds were outstanding as of December 31, 2020 in the aggregate principal amount of \$175,000,000 and mature in 2040. In addition to *ad valorem* assessments on taxable land in certain Improvement Districts levied pursuant to the Act, water or sewer charges, as applicable, which in the discretion of the Board of Directors of the District are fixed and collected in such Improvement Districts in lieu of *ad valorem* assessments pursuant to the Act and proceeds from the sale of property in such Improvement Districts for the enforcement of delinquent assessments pursuant to the Act (collectively, “**Assessment Proceeds**”), the Series 2010B Bonds are payable from Net Revenues on a parity with the Series 2011A Bonds and other Parity Obligations. See the caption “WATER AND SEWER SYSTEM FINANCIAL INFORMATION—Reduction in BAB Credits” for a discussion of the effect of the federal sequester on the receipt of interest subsidy payments relating to the Series 2010B Bonds.

- **2016 Installment Sale Agreement.** In 2016, the District entered into an Installment Sale Agreement (the “**2016 Installment Sale Agreement**”) in connection with the execution and delivery of the District’s \$116,745,000 aggregate principal amount of Certificates of Participation Irvine Ranch Water District Series 2016. The 2016 Installment Sale Agreement was outstanding as of December 31, 2020 in the aggregate principal amount of \$116,745,000 and matures in 2046. The District’s obligation to make installment payments pursuant to the 2016 Installment Sale Agreement is payable from Net Revenues on a parity with the Series 2011A Bonds and other Parity Obligations.

- Series 2016 Bonds. In 2016, the District issued \$103,400,000 aggregate principal amount of Series 2016 Bonds. The Series 2016 Bonds were outstanding as of December 31, 2020 in the aggregate principal amount of \$103,400,000 and mature in 2046. In addition to Assessment Proceeds, the Series 2016 Bonds are payable from Net Revenues on a parity with the Series 2011A Bonds and other Parity Obligations.

Subordinate Debt.

- Interest Rate Swap Transactions. As of December 31, 2020, the District was also obligated under two interest rate swap transactions with a total notional amount of \$60 million and termination dates in March 2029, pursuant to which the District is entitled to receive variable rate payments based on a floating rate index in return for the District's obligation to make payments at a fixed interest rate of 5.687%, determined by reference to the outstanding notional amount (the "**Swaps**").

The Swaps are evenly distributed, as to notional amount on a particular payment date, between two swap counterparties – Merrill Lynch Capital Services, Inc. ("**Merrill**") and Citibank, N.A. ("**Citibank**"). For additional information with respect to the payment terms and other information relating to the Swaps, see Note 3 to the District's audited financial statements attached to the Remarketing Statement as Appendix B. Regularly-scheduled and early termination payments with respect to the Swaps constitute unsecured general obligations of the District payable from legally available funds. The Swaps are payable from certain Revenues on a subordinate basis to the District's obligation to pay the Series 2011A Bonds and debt service on other Parity Obligations. In addition, any amounts received by the District pursuant to the Swaps constitute Revenues and, as such, are pledged to the payment of the Series 2011A Bonds and other Parity Obligations. As of December 31, 2020, the mark-to-market value of the Swaps did not exceed a collateral threshold amount of \$15,000,000 and, accordingly, no collateral has been posted.

The above-described interest rate swap transactions entail risk to the District. For example, the Swap counterparties may fail or be unable to perform, actual interest rates may vary from assumptions or the District could be required to make a net payment (on a subordinate basis to the Series 2011A Bonds) to a Swap counterparty in the event of an early termination of one or more Swaps. The early termination of a Swap may not affect the obligations of the counterparty with respect to the other Swap. The District cannot predict if any of the foregoing events will occur with respect to one or more of the Swaps. The District may also elect from time to time to enter into additional interest rate swap agreements with security and payment provisions determined by the District, and the risks described in this paragraph could also apply to such additional interest rate swap agreements. However, the District does not anticipate that any such event would have a material adverse effect on the District's ability to pay the principal of and interest on the Series 2011A Bonds.

The Swaps are fixed payer swaps, meaning that the District makes net payments in a fixed amount and receives payments from each Swap counterparty in a variable amount that is based on the one-month United States Dollar ("**USD**") London Interbank Offered Rate ("**LIBOR**"). LIBOR is currently administered by the Intercontinental Exchange Benchmark Administration (the "**IBA**"), an independent administrator authorized and regulated by the Financial Conduct Authority (the "**FCA**"), the regulatory authority in the United Kingdom that is responsible for the supervision of LIBOR.

On July 27, 2017, the FCA announced that it would no longer persuade or compel banks to submit rates for the calculation of LIBOR after 2021 (the "**FCA Announcement**"). In response to the FCA Announcement, on October 23, 2020, the International Swaps and Derivatives Association ("**ISDA**"), a trade organization for derivatives market participants, released amendments to certain definitions which took effect on January 25, 2021 and which apply to swap agreements (including the District's Swaps) that are governed by ISDA standards (the "**Amendments**") as well as a LIBOR Fallback Protocol (the "**Protocol**") that will be available after the discontinuation of LIBOR.

On November 30, 2020, the IBA, with the support of the Federal Reserve Board and the FCA, announced that it would commence a consultation on the timing of the cessation of publication of USD

LIBOR, including the potential cessation of only certain tenors of USD LIBOR on December 31, 2021, and the possible cessation of the most widely used tenors of USD LIBOR, including one-month USD LIBOR (which is used to set the floating rate to be paid to the District by its Swap counterparties), on June 23, 2023.

Because the District's Swaps do not mature until 2029, which is well after the expected discontinuation of LIBOR, the District's Board elected to adhere to the Protocol in January 2021 and has directed staff to take the steps necessary to do so.

The FCA is expected to announce (the "**Termination Announcement**") that one-month USD LIBOR will be discontinued (or will no longer be representative of market conditions) at a specified future date (the "**Index Cessation Effective Date**"). The date of the Termination Announcement will serve as an "Index Cessation Event" under the ISDA definitions. The five-year period ending on the date of the Termination Announcement will serve as the measurement period for the Spread that is described below.

One-month USD LIBOR will be replaced by an alternative rate (the "**Fallback Rate**") after the Index Cessation Effective Date. The Fallback Rate consists of: (i) the one-month Secured Overnight Financing Rate ("**SOFR**"), a measure of the cost of borrowing cash overnight which is secured by United States Treasury securities, plus a spread (the "**Spread**") equal to the median difference between one-month USD LIBOR and one-month SOFR over the five year period ending on the date of the Termination Announcement; and (ii) either (a) the existing basis point spread to LIBOR set forth in each swap agreement (not applicable to the District's Swaps); or (b) multiplied by the percentage of LIBOR from which the rate is derived in each swap agreement (also not applicable to the District's Swaps).

The transition to a SOFR-based rate could change the mark-to-market value of one or both of the District's Swaps, which could require the District to post collateral in favor of Merrill or Citibank, as applicable. In addition, because SOFR-based rates will differ from LIBOR-based rates, the economic value of the Swaps to the District could be affected.

The District is unable to determine at this time the outcome of the IBA's consultation as to the timing of the cessation of publication of USD LIBOR, or the ultimate effects of the discontinuation of LIBOR as a reference rate and transition to an alternate benchmark rate. The Fallback Rate is not expected to match the USD LIBOR rate that it replaces, so changes in the level of the floating rate amounts that will be due to the District and the resulting net amounts that will be payable by the District are likely to occur. The District is also unable to determine at this time whether it will be required to post collateral as a result of the cessation of LIBOR, or the effect of the cessation of LIBOR on the economic value of the Swaps. The District does not currently expect the cessation of LIBOR to have a material financial impact on the District.

- Santiago County Water District Consolidation. The District and Santiago County Water District ("**SCWD**") consolidated effective July 1, 2006. As successor to SCWD, the District is obligated to satisfy the following obligations: (i) a fiscal services agreement with the State of California Department of Water Resources, with a loan balance of approximately \$419,000 as of December 31, 2020 and final payment due in 2025; and (ii) a promissory note payable to Foothill/Eastern Transportation Corridor Agency with a remaining balance of approximately \$452,000 as of December 31, 2020 and a final payment date in 2045.

Variable Rate Debt Management

The Board of Directors of the District has adopted a policy to maintain a target amount of investment assets equal to 75% or more of the District's outstanding unhedged variable rate indebtedness. No assurance can be made that the Board of Directors of the District will not modify such policy in the future.

Current Investments

As of December 31, 2020, the District had investments (excluding the real estate investments that are described below) of approximately \$426.2 million as follows:

TABLE 5
IRVINE RANCH WATER DISTRICT
Summary of Investments⁽¹⁾

<i>Investment Type</i>	<i>Approximate Investment Amount in Millions</i>	<i>Percentage of Total Investments</i>
Federal Agency Securities	\$ 219.4	51.48%
Local Agency Investment Fund	75.3	17.67
United States Treasury Securities	<u>131.5</u>	<u>30.85</u>
Total	\$ 426.2	100.00%

⁽¹⁾ As of December 31, 2020. Rounded. Excludes real estate investments that are described below.
Source: The District.

In addition to the moneys invested as described in Table 5 above, the District has invested approximately \$98.6 million of its capital facilities replacement fund in real property. The District's current real property investments include a limited partnership interest in a 230-unit apartment complex (the "**Wood Canyon Villas Apartments**"), ownership of a 450-unit apartment complex (the "**Sycamore Canyon Apartments**") ownership of four commercial office buildings (the "**Irvine Market Place**," the "**Waterworks Business Park**," the "**Sand Canyon Professional Center**" and the "**Sand Canyon General Office**"). The Sand Canyon General Office building was completed in August 2020 and is currently being marketed for lease. Wood Canyon Villas Apartments, Sycamore Canyon Apartments, the Irvine Market Place, the Waterworks Business Park and the Sand Canyon Professional Center are all income-producing properties. The earnings and projected earnings for all properties are reflected in Tables 6 and 7, respectively, below.

Under current accounting rules, real estate investments are shown at fair market value. The total fair market value of the above-described assets as of June 30, 2020 was approximately \$244.3 million. On September 1, 2017, the District sold an undeveloped parcel known as Lake Forest Serrano Summit for \$136.0 million. Terms of the sale included a 40% down payment, with the balance of \$81.6 million secured by a note and deed of trust on the property and due in 24 months at a 4.0% interest rate. On July 24, 2019, the District executed an amendment to the note under which the District agreed to an extension of the original September 1, 2019 maturity. The loan amendment also increased the principal amount to include interest earned to September 1, 2019, for a total principal amount of \$88.1 million. The entire outstanding principal balance and all accrued unpaid interest was paid in a single lump sum in mid-2020. Any future changes in fair market value will be reflected in the District's annual Statement of Revenues, Expenses and Changes in Net Position.

Historic Net Real Estate Income

The following table shows the net real estate income after expenses of the District for the five most recent Fiscal Years.

TABLE 6
IRVINE RANCH WATER DISTRICT
Historic Net Real Estate Income
(in Thousands)

<i>Fiscal Year</i>	<i>Net Income</i>
2016	\$ 8,693
2017	9,076
2018 ⁽¹⁾	3,405
2019 ⁽¹⁾	8,372
2020 ⁽²⁾	12,549

⁽¹⁾ Fiscal Years 2018 and 2019 include expenses associated with development agreement obligations to the City of Lake Forest related to Lake Forest Serrano Summit property, which resulted in a reduction in net real estate income. See the caption “—Current Investments.”

⁽²⁾ Fiscal Year 2020 reflects extension granted on the Lake Forest Serrano Summit note. See the caption “—Current Investments.”

Source: The District.

Projected Net Real Estate Income

The following table projects the net real estate income after expenses of the District for the current and next four Fiscal Years.

TABLE 7
IRVINE RANCH WATER DISTRICT
Projected Net Real Estate Income
(in Thousands)

<i>Fiscal Year</i>	<i>Net Income</i> ⁽¹⁾
2021 ⁽²⁾⁽³⁾	\$11,560
2022	12,218
2023	13,540
2024	13,947
2025	14,365

⁽¹⁾ Based on existing and expected leases. See the caption “—Current Investments.”

⁽²⁾ Fiscal Year 2021 and future Fiscal Years include anticipated lease income from the Sand Canyon Professional Center Building. See the caption “—Current Investments.”

⁽³⁾ Fiscal Year 2021 includes payment on the note delivered in connection with the District’s sale of the Lake Forest Serrano Summit property. See the caption “—Current Investments.”

Source: The District.

1% Property Tax Revenues

Pursuant to the Act, the Board of Supervisors of the County is required to levy a “general assessment” on assessable property within the boundaries of the District that is sufficient to raise the amounts determined each year by the District’s Board of Directors to be necessary for the authorized purposes of the District. These provisions, however, have largely been superseded by the passage by the California electorate in June of

1978 of Article XIII A of the California Constitution (commonly known as “Proposition 13”), and by the legislation subsequently enacted by the California Legislature to implement Article XIII A. As a result of Article XIII A and its implementing legislation, the District receives as proceeds of the “general assessment” a share of the one percent *ad valorem* property tax collected by the County from assessable property within the boundaries of the District (the “**1% Property Tax Revenues**”).

From time to time legislation has been considered as part of the State budget to shift 1% Property Tax Revenues collected by each county from local agencies, including special districts such as the District, to school districts or other governmental entities. However, Proposition 1A (“**Proposition 1A**”), which was approved by the voters in November 2004, restricted State authority to reduce major local tax revenues. In addition, on November 2, 2010, California voters approved Proposition 22 (“**Proposition 22**”), the provisions of which superseded many of the provisions of Proposition 1A. Proposition 22: (i) prohibits the State of California from shifting or delaying the distribution of funds from special districts to schools and community colleges; (ii) eliminates the authority to shift property taxes temporarily during a severe financial hardship of the State; and (iii) restricts the State’s authority to use fuel tax revenues to pay debt service on transportation bonds, to borrow or change the distribution of fuel tax revenues or to use Vehicle License Fee revenues to reimburse local governments for state-mandated costs.

A portion of the District’s 1% Property Tax Revenues was previously subject to borrowing by the State under Proposition 1A. Despite the passage of Proposition 22, there can be no assurance that the 1% Property Tax Revenues that the District currently expects to receive will not be temporarily shifted from the District in future fiscal years or reduced pursuant to State legislation enacted in the future. If the property tax formula is permanently changed in the future, it could have a material adverse effect on the receipt of 1% Property Tax Revenues by the District. See the Remarketing Statement under the caption “SECURITY FOR THE SERIES 2011A BONDS—Pledge of Assessment Proceeds and Revenues” for a discussion of the extent to which 1% Property Tax Revenues are available to pay principal of and interest on the Series 2011A Bonds.

The table below sets forth the amount of 1% Property Tax Revenues received by the District for the five most recent Fiscal Years.

TABLE 8
IRVINE RANCH WATER DISTRICT
1% Property Tax Revenues
(in Thousands)

<i>Fiscal Year</i>	<i>1% Property Tax Revenues</i>
2016	\$34,871
2017	37,375
2018	40,483
2019	43,581
2020	45,604

Source: The District.

Alternative Method of Tax Apportionment – “Teeter Plan”

The Board of Supervisors of the County has approved the implementation of the Alternative Method of Distribution of Tax Levies and Collections and of Tax Sale Proceeds (the “**Teeter Plan**”), as provided for in Section 4701 *et seq.* of the California Revenue and Taxation Code. Under the Teeter Plan, the County apportions secured property assessments on an accrual basis when due (irrespective of actual collections) to its local political subdivisions, including the District, for which the County acts as the assessment-levying or assessment-collecting agency.

The Teeter Plan for the County is applicable to all assessment levies for which the County acts as the assessment-levying or assessment-collecting agency, or for which the treasury of the County is the legal depository of assessment collections.

The *ad valorem* property assessments to be levied by the District will be subject to the Teeter Plan. The District will receive 100% of the *ad valorem* property assessment levied on secured property to pay the Ad Valorem Assessment Bonds irrespective of actual delinquencies in the collection of the assessment by the County so long as the Teeter Plan remains in effect. The District's share of 1% Property Tax Revenues is also subject to the Teeter Plan.

The Teeter Plan is to remain in effect for the County unless the Board of Supervisors of the County orders its discontinuance or unless, prior to the commencement of any fiscal year of the County (which commences on July 1), the Board of Supervisors of the County receives a petition for its discontinuance joined in by a resolution adopted by at least two-thirds of the participating revenue districts in the County. In the event that the Board of Supervisors of the County discontinues the Teeter Plan for the County, only those secured property assessments that are actually collected would be allocated to political subdivisions (including the District) for which the County acts as the assessment-levying or assessment-collecting agency.

Governmental Regulations

The District's operations are subject to numerous environmental regulations enforced by multiple governmental entities. Programs are in place for compliance with drinking water regulations, water discharge regulations, underground and aboveground fuel storage tank regulations, hazardous materials management plans, hazardous waste regulations, air quality permitting requirements, wastewater discharge limitations, and employee safety issues relating to hazardous materials and other conditions. Also, the District aggressively pursues the investigation and, when appropriate, the implementation of alternative methods and technologies for meeting increasingly strict environmental regulations.

The District expects environmental regulation to increase, resulting in higher capital and operating costs in the future, which may have a material adverse effect on the finances of the District.

Although the District's Board of Directors establishes the schedules of water, sewer and recycled water rates for each Fiscal Year, such rates are subject to the requirements of Proposition 218, which are described further under the caption "CONSTITUTIONAL LIMITATIONS ON APPROPRIATIONS AND CHARGES—Proposition 218."

COVID-19 Outbreak

The spread of the novel strain of coronavirus called SARS-CoV-2, which causes the disease known as COVID-19 ("**COVID-19**"), and local, state and federal actions in response to COVID-19, have impacted the District's operations and finances. In response to the increasing number of cases of COVID-19 infections and fatalities, health officials and experts have recommended, and some governments have mandated, a variety of responses ranging from travel bans and social distancing practices to complete shutdowns of certain services and facilities. The World Health Organization has declared the COVID-19 outbreak to be a pandemic and on March 4, 2020, as part of the State's response to address the outbreak, the Governor declared a state of emergency. On March 13, 2020, the President declared a national emergency, freeing up funding for federal assistance to state and local governments. Many school districts across the State have temporarily closed some or all school campuses (including schools within the District's service area) in response to local and State directives or guidance.

On March 19, 2020, the Governor issued Executive Order N-33-20, a mandatory Statewide shelter-in-place order applicable to all non-essential services. Certain aspects of the shelter-in-place directives have been extended indefinitely until certain indicators have been met. The County has also declared a state of

emergency in response to the COVID-19 outbreak. On May 4, 2020, the Governor issued another executive order informing local health jurisdictions and industry sectors that they could gradually re-open under new modifications and guidance provided by the State. A phased re-opening of various sectors has been underway in accordance with a four-stage re-opening plan. Although pursuant to the re-opening plan some restrictions on activities have been eased, restrictions have also been re-imposed in various jurisdictions (including the County) as local conditions warrant, and such restrictions may be expanded as the pandemic continues.

On March 27, 2020, the President signed the \$2.2 trillion Coronavirus Aid, Relief, and Economic Stabilization Act (the “**CARES Act**”) which provides, among other measures, \$150 billion in financial assistance to states, tribal governments and local governments to provide emergency assistance to those most significantly impacted by COVID-19. Under the CARES Act, local governments are eligible for reimbursement of certain costs which are expended to address the impacts of the pandemic, although the District cannot predict what State and/or federal funding or other relief it will ultimately receive. Any funds received by the District under the CARES Act are not available for payment of the Series 2011A Bonds and cannot be used to backfill District revenue losses related to COVID-19.

On December 27, 2020, the President signed the \$900 billion Coronavirus Response and Relief Supplemental Appropriations Act. Although the act did not provide additional financial assistance to state and local governments, it did extend the deadline (to October 2021) for them to use unspent funds that were previously approved under the CARES Act.

While the effects of COVID-19 may be temporary, the outbreak and governmental actions in response to it are altering the behavior of businesses and people in a manner that is having significant negative impacts on global and local economies. In addition, financial markets in the United States and globally have experienced significant volatility attributed to COVID-19 concerns. CalPERS’ Fiscal Year 2020 earnings were below its investment targets, which could result in an increase in the District’s unfunded pension liability and future pension costs commencing in Fiscal Year 2023. See the caption “—Employees and Employee Benefits—Pension Obligations.” The outbreak has also resulted in increased pressure on State finances, as budgetary resources are directed toward containing the pandemic and tax revenues sharply decline. Identified cases of COVID-19 and deaths attributable to the COVID-19 outbreak are continuing to increase throughout the United States, including the County.

Potential impacts to the District associated with the COVID-19 outbreak include, but are not limited to, increasing costs and challenges to the public health system in and around the District’s service area, cancellations of public events and disruption of the regional and local economy with corresponding decreases in the District’s revenues, including as a result of reduced water use (particularly among commercial and hotel establishments), and potential declines in property values.

On-site District personnel are wearing masks, utilizing other personal protective equipment and practicing social distancing while working. The District does not expect its operations to be materially affected by such actions.

The COVID-19 outbreak is ongoing, and the duration and severity of the outbreak and the economic and other actions that may be taken by governmental authorities to contain the outbreak or to treat its effects are uncertain. The ultimate impact of COVID-19 on the operations and finances of the District is unknown at this time. However, based on unaudited actual results, Fiscal Year 2020 Revenues and Operation and Maintenance Costs were not affected by the COVID-19 outbreak or governmental actions in response thereto.

The Governor has suspended utility service shutoffs for the duration of the state of emergency declared by the State, and the District will not seek to collect late fees or penalties. Although no service charges are being forgiven, the District expects its accounts receivable amount to increase as a result of the foregoing policy.

The District considered the effect of the COVID-19 outbreak and an anticipated recession at its budget cycle mid-point in June 2020, but the District did not make significant changes to its Fiscal Year 2021 budget as a result of the COVID-19 outbreak and does not expect a material financial impact on the Water or Sewer System as a result of the outbreak or governmental actions in response thereto. Although the District deferred rate increases that were previously planned to take effect on July 1, 2020 in consideration of the deleterious economic impact of the pandemic on its customers, the expected reduction in Revenues (which the District estimates could have been as much as \$4.6 million) will be partially mitigated by a similar deferral of cost increases by third parties (such as OCWD and MWD) which would otherwise have been passed through to District customers. See the caption “WATER SUPPLY.”

Water use and wastewater service use by certain commercial customers of the District, in particular, hotels and restaurants, was reduced in Fiscal Year 2020 and may be reduced in the current and future Fiscal Years while the pandemic is ongoing. However, the District’s water and wastewater charges include fixed rates that are payable without regard to the amount of water used, which mitigates a portion of the impact of reduced water use by such customers. See the captions “THE WATER SYSTEM—Water System Rates and Charges” and “THE SEWER SYSTEM—Sewer System Rates and Charges.”

The District continues to actively monitor customer usage, revenues and delinquencies so that any further impacts can be anticipated. See the caption “WATER AND SEWER SYSTEM FINANCIAL INFORMATION—Projected Operating Results and Debt Service Coverage.” The District does not currently believe that the COVID-19 outbreak will materially adversely affect its ability to pay debt service on the Series 2011A Bonds.

WATER SUPPLY

The District was formed in 1961 for the purpose of obtaining a water supply for municipal and irrigation uses. For the twelve month period ended June 30, 2020, of the water supplied by the District, approximately 14% was imported water, approximately 59% was groundwater and native stream flows and approximately 27% was recycled water. Recycled water sales were not subject to the mandatory drought conservation measures that were previously imposed by the State, as discussed under the caption “—Water use Efficiency.” Accordingly, District recycled water supplies represented a lower percentage of total water supplies in the period ended June 30, 2020 than in years during the implementation of the drought conservation measures.

The District operates a number of wells and reservoirs that produce or store local water for both potable and non-potable uses. Surface storage includes Irvine Lake, a 25,000 acre feet reservoir that is jointly owned by the District and Serrano Water District. Irvine Lake receives native water from the Santiago Creek watershed and is also used to store imported untreated water. The District’s share of such water is used primarily for agricultural and other irrigation purposes, and supplements the recycled water system during peak demand periods. In addition, the District has approximately 5,250 acre feet of recycled water storage capacity in its Sand Canyon, Rattlesnake, San Joaquin and Syphon Reservoirs and is currently evaluating additional recycled water storage projects.

Imported Water

In Fiscal Year 2020, the District purchased approximately 17,400 acre feet of water imported from the Colorado River and northern California by The Metropolitan Water District of Southern California (“MWD”). MWD supplies water through its member agencies, including the member agency in which the District is situated, Municipal Water District of Orange County (“MWDOC”). The cost of treated imported water from MWDOC as of June 30, 2020 is \$1,078 per acre foot. In addition, the District currently pays a fixed charge to MWDOC in the form of readiness to serve, capacity reservation and service connection charges. The readiness to serve and capacity reservation charges are paid monthly and, as of June 30, 2020, total \$105,512 per month, while the service connection charge is paid annually and, for Fiscal Year 2020, was \$1,263,211.

MWD faces various challenges in the continued supply of imported water to MWDOC. A description of these challenges as well as a variety of other operating information with respect to MWD is included in certain disclosure documents prepared by MWD. MWD periodically prepares official statements and other disclosure documents in connection with its bonds and other obligations. MWD has also entered into certain continuing disclosure agreements pursuant to which MWD is contractually obligated for the benefit of owners of certain of its outstanding obligations to file certain annual reports, including audited financial statements and notice of certain events, pursuant to Rule 15c2-12 promulgated under the Securities Exchange Act of 1934, as amended (“**Rule 15c2-12**”). Such official statements, other disclosure documents, annual reports and notices (collectively, the “**MWD Information**”) are filed with the Municipal Securities Rulemaking Board’s Electronic Municipal Market Access system (“**EMMA**”) at <http://emma.msrb.org>. The MWD Information is not incorporated herein by reference thereto, and the District makes no representation as to the accuracy or completeness of such information. MWD HAS NOT ENTERED INTO ANY CONTRACTUAL COMMITMENT WITH THE DISTRICT, THE TRUSTEE OR THE OWNERS OF THE SERIES 2011A BONDS TO PROVIDE MWD INFORMATION TO THE DISTRICT OR THE OWNERS OF THE SERIES 2011A BONDS.

MWD HAS NOT REVIEWED THIS REMARKETING STATEMENT AND HAS NOT MADE REPRESENTATIONS OR WARRANTIES WITH RESPECT TO THE ACCURACY OR COMPLETENESS OF THE INFORMATION CONTAINED OR INCORPORATED HEREIN, INCLUDING INFORMATION WITH REGARD TO MWD. MWD IS NOT CONTRACTUALLY OBLIGATED, AND HAS NOT UNDERTAKEN, TO UPDATE SUCH INFORMATION FOR THE BENEFIT OF THE DISTRICT OR THE OWNERS OF THE SERIES 2011A BONDS UNDER RULE 15c2-12.

Groundwater

General. One of the goals of the District’s Water Resources Master Plan is to identify a reliable water supply mix, which includes developing sufficient groundwater production capacity to pump up to the District’s basin production percentage (the “**BPP**”) set by the Orange County Water District (“**OCWD**”), the agency responsible for managing the Orange County groundwater basin, to produce other local groundwater and to have sufficient capacity to meet demands during supply interruptions. District groundwater pumping is affected by policies of OCWD, including the setting of replenishment assessments, basin production percentages of total water demand by agencies pumping basin groundwater and basin equity assessments.

OCWD establishes and collects replenishment assessments as a means of purchasing water and funding projects for the purpose of replenishing the Orange County groundwater basin. The replenishment assessment is established annually by OCWD and applies to every acre foot of groundwater produced from the basin.

In addition, each year, OCWD sets the BPP for water to be extracted from the Orange County groundwater basin. The BPP is the amount of groundwater, as a percentage of the total water demands of a groundwater pumping agency such as the District, that can be pumped from the Orange County groundwater basin during the year by the groundwater pumping agency without incurring the additional assessment described in the following paragraph. The amount of groundwater that an agency can pump without incurring the additional assessment is calculated by multiplying the total water use of such agency by the BPP (the “**BPP formula**”). Between Fiscal Years 2012 and 2017, the BPP varied from 62% to 75%. In connection with the annexation of certain land by OCWD (as discussed in detail below), the District has agreed to a maximum BPP of 70% through 2023.

Currently, OCWD calculates total water use for the purpose of the BPP without considering recycled water sales to customers. This methodology reduces the amount of groundwater that recycled water sellers such as the District may pump from the Orange County groundwater basin without incurring additional

assessments. See the caption “—Complaint against OCWD” for a discussion of a lawsuit that the District filed against OCWD in June 2016 with respect to this issue.

The additional assessment incurred by an agency that pumps non-exempt groundwater above the limit established by the BPP formula is called the basin equity assessment (the “**BEA**”). The BEA is established annually by OCWD for every acre foot of groundwater produced from the Orange County groundwater basin above the BPP formula (with exemptions described further below for pumping that OCWD determines will provide water quality and other benefits) and is intended to increase the cost of producing groundwater in amounts above the BPP formula so that it equals the cost of importing water, thereby encouraging groundwater pumping agencies to supplement their groundwater production with imported water for the portion of their water use that exceeds the BPP. The BEA is a surcharge to discourage, yet still allow for, the production of groundwater in excess of the BPP formula. One of the District’s operating objectives is to produce the maximum amount of groundwater within the BPP formula and to avoid producing groundwater in excess of such maximum in order to avoid paying the BEA.

In Fiscal Year 2015, the amount of groundwater that the District pumped from the Orange County groundwater basin exceeded its BPP by approximately 300 acre feet under the methodology prescribed by OCWD. As further discussed under the caption “—Complaint against OCWD,” OCWD’s methodology prohibits the District from counting its use of recycled water as part of its total water demand, which the District believes inflates the amount of District pumping over the BPP. Based on the figure of 300 acre feet of pumping over the BPP, the District paid a BEA of approximately \$182,000 to OCWD in Fiscal Year 2015. Based on OCWD’s methodology, the District paid under protest a cash BEA of approximately \$1.7 million for Fiscal Year 2016, \$1.8 million for Fiscal Year 2017, \$2.25 million for Fiscal Year 2019 and \$2.61 million for Fiscal Year 2020. The District did not pay a BEA for Fiscal Year 2018.

The District has filed a court challenge to OCWD’s methodology and policies regarding BEA calculations that exclude the District’s use of recycled water. See the caption “—Complaint against OCWD.” Through this litigation, the District is seeking a refund of all or a portion of BEA payments for Fiscal Years 2016, 2017 and 2019 and 2020. In addition, the District seeks a judicial declaration in the litigation that, because of OCWD’s failure to consider recycled water a supplemental source of water, OCWD has miscalculated the amount of BEA credits remaining under various contracts with OCWD concerning groundwater quality projects being undertaken by the District.

OCWD has sought to enable groundwater producers to derive a larger percentage of their water supplies from local sources in times of Statewide drought so that such producers can reduce purchases of imported water at increased rates. For these reasons, OCWD has gradually increased the BPP in recent years. For Fiscal Years 2011, 2012 and 2013, the BPP was 62%, 65% and 68%, respectively. As a result of continued recharge of the Orange County groundwater basin, the BPP for Fiscal Year 2014 was raised to 70%, which allowed the District to pump approximately 54,000 acre feet from the Orange County groundwater basin without incurring any BEA. The District has agreed to a maximum BPP of 70% through 2023. In accordance with its 70% BPP, the District pumped approximately 47,809 acre feet of water from the Orange County groundwater basin in Fiscal Year 2020. The District currently pays OCWD a replenishment assessment of \$487 per acre foot for all groundwater pumped and a BEA equal to an additional \$540 per acre foot for groundwater pumped in excess of the BPP formula.

For certain portions of the District’s groundwater production, the application of OCWD’s BPP and BEA varies from the above general description. The District’s Dyer Road Well Field has a production amount established by contract with OCWD as described in the below paragraph. The District also has several projects through which groundwater is produced that are, by contract with OCWD, completely or partially exempt from the BEA. While this “BEA-exempt” groundwater typically requires treatment, the District’s cost to produce and treat this groundwater is effectively capped at the cost for imported water. Additionally, as portions of the District currently lie outside of OCWD’s jurisdictional boundary, water demands in those areas are not included by OCWD in the accounting of the BPP for the District. Currently, approximately 16% of the

District's water demand is from outside the OCWD jurisdictional boundary. In 2014, the Orange County Local Agency Formation Commission approved the annexation of approximately 6,482 acres of land within the District into OCWD. The majority of such land is open space and is not expected to be subject to additional water demand at this time.

The BPP formula for the District's Dyer Road Well Field is not adjusted annually by OCWD but is fixed by contract with OCWD at 28,000 acre feet per year of clear groundwater, subject to the requirement that the amount over 20,000 acre feet is matched by an equal amount of groundwater pumped from the District's Deep Aquifer Treatment System (the "**DATS**"), which treats water from a deep aquifer in order to remove organic color. Like OCWD's general BPP, the Dyer Road Well Field's contractually fixed BPP formula discourages, but does not prohibit, production over such amount through the application of the BEA to any excess amount.

As discussed above, effective October 2, 2013, the District entered into an agreement with OCWD pursuant to which approximately 6,482 acres of the District's territory was annexed to OCWD upon the Orange County Local Agency Formation Commission's approval in July 2014. Under the annexation agreement, the District agreed to a specified termination date for its BEA exemption on the DATS, represented that the DATS wells would be used to supply the groundwater used in the annexed territory and agreed that for a period of ten years from the effective date of the annexation agreement, the District will be deemed subject to a BPP equal to the lesser of OCWD's actual BPP or 70%.

The District also produces groundwater from its Irvine Desalter Project, which is described in greater detail under the caption "**Irvine Desalter Potable Water and El Toro Groundwater Remediation Projects.**" In Fiscal Year 2020, the Irvine Desalter Project provided a combined total potable and non-potable water production of approximately 6,770 acre feet per year that is exempt from the BPP. A combined additional approximately 1,710 acre feet per year of production is available from three other wells, the Orange Park Acres well, Well 2 in Lake Forest and Well 115 in Irvine. Water from Well 115 is pumped and treated at the Irvine Desalter Project. However, such water is not accounted for as Irvine Desalter Project water because it was not part of the original Irvine Desalter Project. Production from the Orange Park Acres well and Well 115 is subject to the BPP and the BEA, while production from Well 2 in the amount of approximately 170 acre feet per year is exempt from the BPP and the BEA.

In addition, in April 2013, the District completed construction of the Wells 21 and 22 project. The Wells 21 and 22 facility produced approximately 2,610 acre feet and 2,280 acre feet of groundwater in Fiscal Years 2019 and 2020, respectively. These wells are exempt from the BPP and the BEA. The District plans to expand its groundwater production facilities further, and is currently evaluating potential well sites. The District also has rights to native water impounded in Irvine Lake and at the Harding Canyon Dam in the Santiago Canyon area. Such native water does not produce firm annual yields.

Complaint against OCWD. As discussed under the caption "**General,**" OCWD annually establishes the BPP, which is the amount of groundwater, as a percentage of total water demands, that groundwater producers can pump from the Orange County groundwater basin without incurring additional assessments. Currently, OCWD calculates total water demands without considering recycled water sales. As discussed under the caption "**Recycled Water**" and "**THE SEWER SYSTEM—Historic Recycled Water Sales and Sewer Service Charge Revenues,**" the District sells significant quantities of recycled water to its customers. Because OCWD does not consider recycled water sales in calculating the District's total water demands, OCWD considers the District's total water demands to be lower than they would be if recycled water sales were counted. As a result, the amount of groundwater that the District can pump from the Orange County groundwater basin without incurring additional assessments is lower than it would be if recycled water sales were considered.

As discussed above, in June 2016, the District filed a complaint (the "**Complaint**") against OCWD in the Superior Court for the State of California, County of Orange, seeking an order determining that OCWD's

BPP calculation methodology is unlawful in that it improperly excludes the recycled water that the District produces. In August 2016, OCWD filed an answer to the Complaint denying all substantive allegations. In addition, the City of Anaheim, three local water agencies and one private water company (Golden State Water Company) that produce groundwater from the Orange County groundwater basin filed an answer to the original Complaint and joined the litigation as interested parties. In September 2016, the parties entered into a stipulation under which: (i) the District filed a First Amended Complaint to clarify certain allegations; and (ii) venue was moved to the Superior Court for the State of California, County of Los Angeles (the “**Trial Court**”). The District filed a Second Amended Complaint on June 13, 2017, a Third Amended Complaint on November 30, 2017, a Fourth Amended Complaint on October 24, 2018, a Fifth Amended Complaint on June 10, 2019, and a Sixth Amended Complaint on August 3, 2020. The Sixth Amended Complaint is currently the operative pleading in this matter, having superseded all prior complaints. In addition, the cities of Seal Beach and Buena Park were dismissed from the case on September 25, 2017.

The Sixth Amended Complaint also challenges OCWD’s practice of prohibiting the “unlawful exportation” of groundwater to the portions of the District’s service area that are outside of OCWD’s service area. In addition, the Sixth Amended Complaint seeks relief on two additional claims: (i) declaratory relief that OCWD’s policies relating to recycled water have improperly compelled The Irvine Company, a local land developer and property manager, to use its contractual credits to pay the BEA charged by the District; and (ii) declaratory relief as to The Irvine Company’s groundwater rights arising under a Judgment entered in 1933 in an action entitled *Campbell v. The Irvine Company* (the “**1933 Judgment**”). Additionally, the Sixth Amended Complaint challenges OCWD’s April 17, 2019 adoption of a resolution numbered “D,” which set a production limitation and surcharge on groundwater pumping from the Orange County Basin (the “**Production Limitation and Surcharge**”). The District is contesting the validity of the Production Limitation and Surcharge on various grounds, including that: (i) OCWD’s statutorily-required findings made for the Production Limitation and Surcharge are not supported by substantial evidence; (ii) the Production Limitation and Surcharge is being utilized as an improper method of restricting the unlawful exportation of water, which is not authorized under the OCWD Act; and (iii) OCWD’s proposed surcharge of \$2,000 per acre feet above the production limitation bears no reasonable relationship, and is therefore disproportionate, to either the benefit derived by the groundwater producer from OCWD’s action or the burden that the producer’s activities place on the Orange County groundwater basin. The Sixth Amended Complaint also alleges a claim for monetary damages in the amount of approximately \$1.6 million.

On June 15, 2018, the District filed a Petition for Writ of Mandate and Complaint for Reverse Validation and Declaratory Relief in the Superior Court for the State of California, County of Orange and filed a First Amended and Supplemental Petition for Writ of Mandate and Complaint for Reverse Validation and Declaratory Relief on July 12, 2018 in the same Court. This complaint alleges similar claims concerning OCWD’s BEA and BPP for Fiscal Year 2019. This action has been transferred to the Trial Court and consolidated with the original case.

On July 17, 2018, the Trial Court issued its ruling on the first phase of trial, which addressed the District’s validation and mandamus claims concerning OCWD’s actions disallowing recycled water as a supplemental source of water within the meaning of Section 31.5 of OCWD’s governing act. The Trial Court upheld OCWD’s position and denied relief to the District on the first four causes of action alleged in the Third Amended Complaint.

On September 30, 2019, the Trial Court issued its ruling on the second phase of the trial, which addressed the District’s claims concerning unlawful exportation (as discussed above). The Trial Court granted the District relief on the key contested issue – OCWD’s ability to restrict the exportation of groundwater. The Trial Court rejected OCWD’s position that it had broad discretion to take any action necessary to prevent unlawful exportation, and instead agreed with the District that OCWD’s power was limited to the conduct set forth in Section 2(9) of the OCWD Act (which is limited to filing a formal legal action).

In the third phase of trial (designated as Phase 2a), the District asserted claims challenging the validity of a Production Limitation and Surcharge (as discussed above) adopted by OCWD in April 2019. The District alleged that the Production Limitation improperly seeks to prohibit exports in violation of the OCWD Act and its limitation on OCWD's statutory power to prohibit exports through non-litigation means. On November 13, 2020, the Trial Court issued a ruling denying the District's claims asserted in Phase 2a. The Trial Court has scheduled a Trial Setting Conference for February 3, 2021 to address the trial procedures for the sole remaining claim in the case, which is for declaratory relief as to the District's alleged groundwater rights arising under the 1993 Judgment.

If the Trial Court rules in the District's favor on the remaining phases of the trial, the District may be able to pump additional amounts of groundwater without incurring additional assessments, thereby reducing the groundwater pumping charges that the District pays to OCWD. The projected water production expenses that are set forth under the caption "WATER AND SEWER SYSTEM FINANCIAL INFORMATION—Projected Operating Results" do not assume any reduction in payments to OCWD as a result of the Complaint.

If the Trial Court rules in OCWD's favor on the remaining phases of the trial, the Trial Court could order the District to pay all or a portion of OCWD's attorneys' fees in connection with the Complaint. The District does not believe that any such order would have a material impact on its ability to pay the 2011A Bonds.

Irvine Desalter Potable Water and El Toro Groundwater Remediation Projects. The Irvine Desalter Potable Water and El Toro Groundwater Remediation Projects are groundwater development projects that were constructed by the District in cooperation with OCWD, the United States Departments of the Navy and Justice, MWD and MWDOC. The two projects commenced operations in early 2007.

The Irvine Desalter Potable Water Project consists of a potable water wellfield, pipelines and a purification plant. This project treats local groundwater to remove salts and nitrates caused by the natural geology and past agricultural use. The water is treated to drinking water standards through reverse osmosis and disinfection. The Irvine Desalter Potable Water Project was originally anticipated to pump approximately 5,100 acre feet of groundwater per year. However actual pumping may vary each year based on operational conditions. In Fiscal Years 2019 and 2020, the Irvine Desalter Potable Water Project produced approximately 3,960 acre feet and 3,020 acre feet of groundwater, respectively. The reduction in Fiscal Year 2020 production was the result of the Irvine Desalter Potable Water Project being offline for several months during such Fiscal Year for periodic maintenance and repairs.

The El Toro Groundwater Remediation Project is treating a plume of contaminated groundwater from the main aquifer of the Irvine sub-basin of the Orange County groundwater basin. The plume originated from the now-closed El Toro Marine Corps Air Station (the "MCAS"). The El Toro Groundwater Remediation Project consists of a treatment system that removes volatile organic compounds in the groundwater from solvent degreasers previously used at the MCAS. The treatment plant removes contaminants from the groundwater using an air stripper and granular activated carbon absorption units. The treated water is used in the District's recycled water system and is designed to supply a minimum of 3,400 acre feet of recycled water per year. In Fiscal Years 2019 and 2020, the El Toro Groundwater Remediation Project produced approximately 3,483 acre feet and 3,750 acre feet, respectively, from non-potable wells. The United States Department of the Navy is compensating the District for this component of the project as part of the Settlement Agreement for Groundwater Remediation of the MCAS. The District expects that such compensation will cover the project costs until the plume of contaminated groundwater is cleaned up.

In addition to the two components described above, the Department of the Navy operates a number of wells on the former MCAS property. These wells pump contaminated groundwater from shallow basins located below the former base. Such water is treated by a treatment plant owned and operated by the District using an air stripper and granular activated carbon absorption units. These wells and the treatment plant, which are referred to as the Shallow Groundwater Unit, are designed to treat approximately 640 acre feet per

year of contaminated groundwater. The treated Shallow Groundwater Unit water is disposed of via an existing ocean outfall. In Fiscal Years 2019 and 2020, the Shallow Groundwater Unit treated approximately 630 acre feet and 600 acre feet, respectively, of water.

Historic Groundwater Supply. Set forth below is a summary of the District’s sources of groundwater supply in acre feet per year for the last five Fiscal Years.

TABLE 9
IRVINE RANCH WATER DISTRICT
Historic Groundwater Supply In Acre Feet Per Year

<i>Fiscal Year</i>	<i>Dyer Road Well Field</i>	<i>Deep Aquifer Treatment System</i>	<i>Irvine Desalter Project</i> ⁽¹⁾	<i>Irvine Sub-basin</i>	<i>Other</i> ⁽²⁾	<i>Total</i>
2016	27,419	7,365	8,284	1,601	1,326	45,995
2017	28,156	8,537	8,108	2,389	1,509	48,699
2018	16,112 ⁽³⁾	8,124	8,241	2,609	11,525 ⁽⁴⁾	46,611
2019	27,341	8,429	7,445	2,608	717	46,540
2020	23,217	8,489	6,772	2,279	6,064	46,821

⁽¹⁾ Excludes water pumped from the Shallow Groundwater Unit. Includes non-potable water (Wells ET-1, 2 and 78) used in the District’s recycled water system and from Well 115.

⁽²⁾ Includes Well 2 in Lake Forest, Wells 72 and 76 and In-Lieu water, which is imported water purchased at the request of OCWD. The In-Lieu program preserves and promotes groundwater basin levels, and the District generally responds affirmatively to In-Lieu program requests. Also includes the Orange Park Acres well. See the captions “—Groundwater—General” and “—Water Supply Reliability.” The District voluntarily took the Orange Park Acres well out of service in 2019 as a result of PFAS contamination. See the subcaption “—PFAS” below.

⁽³⁾ Decrease in pumping from these wells in Fiscal Year 2018 is due to purchases of In-Lieu water, which is priced at a rate that is equivalent to the cost of pumping groundwater. See Footnote (4) for a description of In-Lieu water.

⁽⁴⁾ Includes In-Lieu water, which is imported water purchased at the request of OCWD. The In-Lieu program preserves and promotes groundwater basin levels, and the District generally responds affirmatively to In-Lieu program requests.

Source: The District.

OCWD. OCWD faces various challenges in managing the Orange County groundwater basin. A description of these challenges, as well as a variety of other operating information with respect to OCWD, is included in certain disclosure documents prepared by OCWD. OCWD periodically prepares official statements and other disclosure documents in connection with its bonds and other obligations. OCWD has also entered into certain continuing disclosure agreements pursuant to which OCWD is contractually obligated for the benefit of owners of certain of its outstanding obligations to file certain annual reports, including audited financial statements and notice of certain events, pursuant to Rule 15c2-12. Such official statements, other disclosure documents, annual reports and notices (collectively, the “**OCWD Information**”) are filed with EMMA at <http://emma.msrb.org>. The OCWD Information is not incorporated herein by reference thereto, and the District makes no representation as to the accuracy or completeness of such information. **OCWD HAS NOT ENTERED INTO ANY CONTRACTUAL COMMITMENT WITH THE DISTRICT, THE TRUSTEE OR THE OWNERS OF THE SERIES 2011A BONDS TO PROVIDE OCWD INFORMATION TO THE DISTRICT OR THE OWNERS OF THE SERIES 2011A BONDS.**

OCWD HAS NOT REVIEWED THIS REMARKETING STATEMENT AND HAS NOT MADE REPRESENTATIONS OR WARRANTIES WITH RESPECT TO THE ACCURACY OR COMPLETENESS OF THE INFORMATION CONTAINED OR INCORPORATED HEREIN, INCLUDING INFORMATION WITH REGARD TO OCWD. OCWD IS NOT CONTRACTUALLY OBLIGATED, AND HAS NOT UNDERTAKEN, TO UPDATE SUCH INFORMATION FOR THE BENEFIT OF THE DISTRICT OR THE OWNERS OF THE SERIES 2011A BONDS UNDER RULE 15c2-12.

Sustainable Groundwater Management Act. On September 16, 2014, the California Governor signed Assembly Bill No. 1739 and Senate Bill Nos. 1168 and 1319 (collectively, the Sustainable Groundwater Management Act, or “**SGMA**”) into law. The SGMA constitutes a legislative effort to regulate groundwater on a Statewide basis. Pursuant to the SGMA, the California Department of Water Resources (“**DWR**”) has designated the Orange County groundwater basin as a medium priority basin for purposes of groundwater management. Compliance with the SGMA can be achieved in one of two ways:

(1) By January 31, 2017, local groundwater producers had to establish or designate an entity (referred to as a groundwater sustainability agency, or “**GSA**”), subject to DWR’s approval, to manage each high and medium priority groundwater basin. Each GSA was tasked with submitting a groundwater sustainability plan for DWR’s approval by January 31, 2020.

(2) Alternatively, an existing groundwater management agency can submit a groundwater management plan under Part 2.75 of the California Water Code (an “**Alternative Plan**”) or an analysis for DWR’s review demonstrating that a groundwater basin has operated within its sustainable yield for at least 10 years. Such Alternative Plans were required to be submitted by January 31, 2017 and must be updated every five years thereafter.

If local groundwater producers do not create or nominate an entity to serve as a GSA, the SGMA authorizes DWR to assume management of a groundwater basin until such time as a GSA can perform such functions.

GSA’s must consider the interests of all groundwater users in the basin and may require registration of groundwater users, the installation of flow meters to measure groundwater extractions and annual reporting of extractions. In addition, GSA’s are authorized to impose spacing requirements on new wells, monitor, regulate and limit or condition groundwater production and establish production allocations among groundwater producers, among other powers. GSA’s are authorized to impose fees to fund such activities and to fine or issue cease and desist orders against producers that violate the GSA’s regulations. A local agency that manages groundwater pursuant to its principal act (such as OCWD) may not exercise such authority in a manner that is inconsistent with any prohibitions or limitations in its principal act unless the governing board of such local agency makes a finding that such local agency is unable to sustainably manage the groundwater basin without the prohibited authority. Groundwater sustainability plans must include sustainability goals and a plan to implement such goals within 20 years.

The SGMA specifically allows OCWD, which manages the Orange County groundwater basin, to develop an Alternative Plan under Part 2.75 of the California Water Code to manage those portions of the basin that are within OCWD’s boundaries. See the caption “—Groundwater—General.” In order for OCWD to submit an Alternative Plan, the entire groundwater basin (as mapped by DWR) must be included. OCWD’s service area includes about 89% of the Orange County groundwater basin and is described in the Alternative Plan as the OCWD Management Area (“**MA**”). The remaining fringe areas, which include portions of multiple agencies, were aggregated into the La Habra/Brea MA, the Santa Ana River Canyon MA and the South East Basin MA.

On May 4, 2016, OCWD sent letters to thirteen agencies located in the La Habra/Brea, Santa Ana River Canyon and South East Basin MAs requesting that such agencies participate in the development of an Alternative Plan. On December 22, 2016, an Alternative Plan was jointly submitted to DWR, with the OCWD MA and Santa Ana River Canyon MA portions prepared by OCWD, the South East Basin MA portion prepared by the District and the La Habra/Brea MA portion prepared by the City of La Habra. Other agencies within the groundwater basin either participated in preparing and/or reviewed the Alternative Plan that was submitted. The sustainability goal for the OCWD MA is to continue to manage the groundwater basin to prevent conditions that would lead to significant and unreasonable: (1) lowering of groundwater levels; (2) reductions in storage; (3) water quality degradation; (4) seawater intrusion; and (5) inelastic land subsidence. The sustainability goal for the South East Basin MA and Santa Ana Canyon MA is to recognize that these

MAs are a small part of the larger groundwater basin managed by OCWD, the groundwater levels and water quality in which will be monitored to achieve the same goals as the OCWD MA. The City of La Habra has decided to form a separate GSA to manage the La Habra/Brea MA, which requires the development of a groundwater sustainability plan and the execution of a coordination agreement with OCWD. No additional groundwater management or monitoring by OCWD or the District is required by the Alternative Plan.

The District's wells within OCWD's jurisdictional boundaries are presently metered and operated within the management guidelines established by OCWD. The District's wells in the South East Basin MA are presently metered and operated by the District.

The District does not currently expect its groundwater extraction rights or costs in the Orange County groundwater basin to change significantly as a result of the enactment of the SGMA, nor does the District currently expect the enactment of the SGMA to have a material adverse effect on the District's ability to pay principal of and interest on the Series 2011A Bonds from Net Revenues. The District notes that *ad valorem* property assessments constitute an additional source of moneys available to pay the interest on and principal of the Series 2011A Bonds. See the Remarketing Statement under the caption "SECURITY FOR THE SERIES 2011A BONDS."

PFAS. In 2019, the State of California Water Resources Control Board's Division of Drinking Water (the "**Division**") lowered the Notification Levels (the "**NLs**") for Perfluorooctanoic acid ("**PFOA**") and Perfluorooctanesulfonic acid ("**PFOS**") to 5.1 and 6.5 parts per trillion ("**PPT**"), respectively. NLs are non-regulatory, precautionary health-based measures for concentrations of chemicals in drinking water that warrant notification and further monitoring and assessment. In 2020, the Division lowered the Response Level (the "**RL**") for PFOA and PFOS from 70 PPT, combined, to 10 and 40 PPT, respectively. RLs are non-regulatory, precautionary health-based measures that are set at higher levels than NLs and represent thresholds at which the Division recommends that water utilities remove a water source from use or treat it.

PFOA and PFOS are fluorinated organic chemicals which are part of a family of synthetic compounds that are known as per- and polyfluoroalkyl substances ("**PFAS**"). PFAS are water and lipid resistant substances that are useful for a variety of manufacturing processes and industrial applications. They are often present in water supplies which are impacted by wastewater treatment plant effluent or active or former military installations.

The District believes that PFAS have been in the Orange County groundwater basin in very low concentrations for many years. Recent technological advances enable water agencies to detect PFAS compounds at such low concentrations, and PFAS has been detected in the District's Orange Park Acres ("**OPA-1**") well in concentrations above the NLs for PFOA and PFOS and above the RL for PFOA.

OCWD is undertaking a program to install wellhead treatment facilities at all drinking water wells under its jurisdiction for which PFAS levels exceed RLs. OCWD's adopted policy is to pay for the PFAS wellhead treatment systems in full and to pay for up to 50% of the annual operation and maintenance costs of such facilities. The District has entered into a contract with OCWD for the installation of a wellhead treatment facility for PFAS at the OPA-1 well. The project is currently in the design phase. The District has not served water from the OPA-1 well since September 2018 and the District does not intend to serve water from the OPA-1 well until the PFAS treatment facility is installed.

The District, together with OCWD and 10 other groundwater producers in the Orange County groundwater basin, initiated litigation against PFAS manufacturers and users in December 2020 to recover the costs arising from PFAS in the groundwater. There can be no assurance as to the outcome of such litigation, or the timing thereof.

The District's goal is to ensure that all drinking water served to customers does not contain PFAS in amounts which are above the NLS, which are lower than the RLs. The District has significant water supplies which are not impacted by the presence of PFAS.

The District does not anticipate that implementation of the lower RLs will have a material adverse effect on the operation of the Water System or on the operating costs thereof. The projected operating results which are set forth under the caption "WATER AND SEWER SYSTEM FINANCIAL INFORMATION—Projected Operating Results" do not assume significant increases in water treatment or Water System operating costs to meet State regulations relating to PFAS.

Water Use Efficiency

State Orders. Precipitation in the Santa Ana River Watershed and the State as a whole was below average for several years, leading to a severe drought from 2013 to 2017. On January 17, 2014, the California Governor declared a state of emergency due to a Statewide drought by proclamation (the "**Proclamation**") with immediate effect. The Proclamation included several orders which were designed to reduce water use Statewide.

In May 2016, the California Governor issued Executive Order B-37-16, which directed the SWRCB to build on the actions taken during the then-pending drought and to "Make Conservation a Way of Life in California." In addition, legislation requiring Statewide long-term water use efficiency was adopted in 2018. The State is expected to establish new long-term water use efficiency objectives by June 2022.

The District has a long history of implementing cost-effective water efficiency programs and believes that it is well prepared to meet future water efficiency objectives. The District's customers have one of the lowest residential per capita (gallons per capita per day) water usage rates in the State. For these reasons, the District does not believe that the May 2016 Executive Order (or compliance with the water efficiency objectives which may arise therefrom, which have not been finalized) will have a significant effect on the District's ability to pay principal of and interest on the Series 2011A Bonds from Net Revenues. The District notes that the Series 2011A Bonds are also secured by a pledge of Assessment Proceeds. See the Remarketing Statement under the caption "SECURITY FOR THE SERIES 2011A BONDS."

District Response to Shortage. Under the District's water shortage contingency plan (the "**WSCP**"), the District responds to a water shortage in stages based upon six levels of supply cutbacks: Level One (supply reductions of up to 10%), Level Two (supply reductions of up to 20%), Level Three (supply reductions of up to 30%), Level Four (supply reductions of up to 40%), Level Five (supply reductions of up to 50%) and Level Six (supply reductions exceeding 50%). Each shortage level triggers a District response that is intended to reduce demand to the amount of available supply. Responses include public outreach, education and awareness of water waste and water leaks, the implementation of an updated allocation-based tiered rate structure as discussed in the following paragraph and mandatory restrictions on water use (beginning with irrigation and other outdoor uses), together with enforcement actions.

During a water shortage, one of the strategies that may be employed by the District is an adjustment to its existing allocation-based tiered rate structure to encourage greater water conservation. Under the District's allocation-based tiered rate structure, customers are assigned a water allocation based on either two or four tiers. The water allocation for each customer is designed to allow a reasonable amount of water use for the customer's needs and provides an economic incentive not to exceed such allocation. Customers that exceed the water allocation within their tier are subject to progressively higher water rates. See the caption "THE WATER SYSTEM—Water System Rates and Charges." As part of the implementation of the WSCP, the District may elect to reduce the allocation for outdoor potable water use and reduce tier percentages, which causes customers to ascend through the tiers more rapidly, increasing customers' water costs.

While future implementation of the WSCP may result in slightly lower water sales revenues, it is also likely to result in lower operating costs, in particular water purchase costs and energy costs for water deliveries. As discussed under the caption “THE WATER SYSTEM—Water System Rates and Charges,” the District’s rate structure consists of variable and fixed rate components. Decreased water consumption is largely offset by a decrease in related variable costs, while fixed water charges largely cover the District’s fixed operating and maintenance costs. The projected operating results set forth under the caption “WATER AND SEWER SYSTEM FINANCIAL INFORMATION—Projected Operating Results” do not reflect the implementation of the WSCP in the current or next four years.

If a Statewide water shortage should recur, legal issues exist as to whether different California Water Code provisions should be invoked to require reasonable regulations for the allocation of water in time of shortage. Any curtailment pursuant to State orders that is accompanied by an increase in MWD water charges to its member agencies could necessitate an increase in the District’s water rates to District customers. See the caption “CONSTITUTIONAL LIMITATIONS ON APPROPRIATIONS AND CHARGES—Proposition 218” for a discussion of certain restrictions on the District’s ability to raise water rates.

Water Supply Reliability

Water Banking. In addition to developing its local groundwater and recycled water systems, the District has further diversified its water supply reliability by developing water banking facilities in Kern County, California. These projects are known as the Strand Ranch Integrated Banking Project and the Stockdale Integrated Banking Project (collectively, the “**Water Bank**”). The District’s Water Bank is situated on groundwater recharge lands that overlie the regional Kern County groundwater basin. The purpose of the Water Bank is to improve the District’s water supply reliability by capturing and storing low cost water available during wet hydrologic periods for use during dry periods, with the target of providing enough water to meet approximately 15% of customers’ needs for three years. The Water Bank will enhance the District’s ability to respond to drought conditions and potential water supply interruptions and enable it to reduce the cost of water delivered under such conditions.

The District has entered into agreements for a 30-year water banking partnership with the Rosedale-Rio Bravo Water Storage District (“**Rosedale**”) in Kern County. These agreements provide for Rosedale to operate the Water Bank on behalf of the District and permit the District: (i) to store up to 126,000 acre feet of water in the aquifer; (ii) to recharge a minimum of 44,600 acre feet of water per year in the aquifer; and (iii) to recover a minimum of 28,750 acre feet of water per year from the aquifer.

The District has constructed 740 acres of recharge ponds and other facilities at the Water Bank that are necessary to divert water from an adjacent canal and into the ponds. Seven groundwater wells that provide the ability to recover water have been constructed on the Strand Ranch property and three additional recovery wells have been constructed and equipped on the Stockdale West property. The District, in partnership with Rosedale and other agencies, has also constructed six additional wells that will increase the ability to recover water from the Water Bank during peak summer demand periods. These wells were equipped and completed in 2018.

The District has secured water from a number of sources for recharge at the Water Bank. These sources are available as described below.

- Pursuant to the District’s agreement with Rosedale, Rosedale has first priority rights to use District facilities to divert and recharge a portion of its entitlement to floodwater flows on the Kern River to District-owned storage ponds for recovery in dry years. The District is entitled, at no cost, to 20% and 50% of all Kern River floodwaters recharged on the Strand Ranch and Stockdale West recharge ponds, respectively.

- The District has also secured access to State Water Project water which can be stored in the Water Bank. Such water is available as a result of the District’s acquisition of approximately 883 acres located within the Dudley Ridge Water District (“**Dudley Ridge**”), including the rights to use up to 1,749 acre feet per year of Table A State Water Project water allocated to Dudley Ridge. Under an existing agreement, the District can store its Table A water in the Water Bank, with half of the water being available for future use in the District’s service area. The acquisition also included certain participation rights in the Kern Water Bank that allow the District to store approximately 9,495 acre feet of water.
- In 2011, the District entered into a long-term exchange program (the “**Exchange Program**”) with Buena Vista Water Storage District (“**BVWSD**”) that allows BVWSD to store water in the Water Bank in exchange for allocating 50% of the stored water to the District. BVWSD is responsible for all costs of delivering water to the Water Bank and the District is responsible for all costs of returning BVWSD its share of the water. The District is entitled to keep an additional 10% of the stored water each calendar year after the fourth calendar year that BVWSD does not call on the return of its share of the water. The District is entitled to 100% of the water if BVWSD does not call for the return of its share of the water by the end of the ninth year.
- In recent years, the District also entered into separate Pilot Exchange Agreements with the Central Coast Water Authority and the Antelope Valley-East Kern Water Agency that provided for such agencies to store portions of their 2012 allocation of State Water Project water at the Water Bank. In 2017 and 2019, the District executed short-term agreements with the Central Coast Water Authority which provided for the delivery and storage of 1,272 acre feet on an unbalanced exchange basis under which the District is allocated 50% of such stored water. In 2019, the District and Antelope Valley-East Kern Water Agency entered into a long-term water exchange program for the delivery and storage of 20,000 acre feet on an unbalanced exchange basis under which the District is allocated 50% of such stored water. The District is seeking other long-term partnerships with other agencies to facilitate similar transactions in the future.

The District has entered into a Coordinated Operating, Water Storage, Exchange and Delivery Agreement with MWD which allows the District to have State Water Project water which has been recovered from the Water Bank delivered to the District’s service area. In 2014, the District entered into an additional agreement with MWD that allowed MWD to receive 4,000 acre feet of the District’s non-State Water Project water recovered from the Water Bank in exchange for a future return to the District’s service area. Under the additional agreement with MWD, the District recovered and delivered approximately 1,000 acre feet from the Water Bank for use in the District’s service area in 2015.

Since 2010, the District has delivered a total of approximately 79,290 acre feet of water to the Water Bank through the water supply partnerships that are described above. The District has returned its partners’ share of the water and currently holds approximately 35,815 acre feet of water in storage (after applicable losses) for its future use during droughts and major supply interruptions.

A summary of water held in storage pursuant to the District’s water banking program as of December 31, 2020 (after water losses) is set forth below.

TABLE 10
IRVINE RANCH WATER DISTRICT
Summary of Water Banking Programs' Storage After Losses
As of December 31, 2020 (Acre Feet)

<i>Facility</i>	<i>Total Capacity</i>	<i>Total Water in Storage</i>	<i>District Share of Total Water in Storage</i>
Strand Ranch Integrated Banking ⁽¹⁾	50,000	35,789	31,514
Stockdale West ⁽¹⁾	26,000	2,995	1,459
Kern Water Bank ⁽²⁾	<u>9,495</u>	<u>4,320</u>	<u>4,320</u>
Total	85,495	43,104	37,293

⁽¹⁾ The District has executed exchanges with MWD that have diversified the ability to call on the District's share of the banked water from the Water Bank and MWD supplies. The above numbers take into consideration Water Bank losses as well as small purchases of water made by the District when land was taken out of agricultural production. Extractions from Strand Ranch are currently limited to approximately 17,500 acre feet per year. The completion of the Stockdale West property recovery facilities enables the District to recover approximately 11,250 acre feet per year of additional water from the Water Bank.

⁽²⁾ The District's share of total water stored in the Kern Water Bank is to be used on the District's Dudley Ridge property.
Source: The District.

Other Water Supply Reliability Programs.

Palo Verde Irrigation District Land Purchases. As of December 31, 2020, the District has purchased a total of approximately 3,100 acres of irrigated agricultural land (the "**PVID Properties**") in Riverside County, California. The PVID Properties are located within the water service area of Palo Verde Irrigation District ("**PVID**"), which has first priority rights on the Colorado River. Of the total acres purchased, approximately 970 acres of the land are subject to and enrolled in an MWD/PVID fallowing program under which MWD makes payments to landowners in exchange for letting land lie fallow. Water that is conserved through fallowing is available for use within MWD's service area (which includes the District's service area). The non-fallowed land is currently being farmed either through leases with tenant farmers or through agricultural management agreements with contract farmers. The District plans to work with MWD and MWDOC in the future to develop mutually beneficial arrangements through which the District would receive increased water supply reliability during periods of drought or supply interruptions in consideration for the water conserved on the PVID Properties.

Due to the preliminary nature of its discussions with MWD and MWDOC, the District can make no assurance as to the amount of water, if any, it would receive from MWD through conservation of water on the PVID Properties. Should the expected water supply reliability benefits of the land not be realized, the District's investment in the PVID Properties could be recovered in whole or in part through the sale of the land.

Kern Fan Project. The Kern Fan Groundwater Storage Project (the "**Kern Fan Project**") will develop a regional water bank in the Kern Fan area of Kern County to capture, recharge and store Article 21 water from the State Water Project and other water supplies during wet hydrologic periods. The project is a joint venture between the District and Rosedale. In April 2020, Rosedale and the District executed a joint exercise of powers agreement (the "**Agreement**") creating the Groundwater Banking Joint Powers Authority (the "**Authority**") to develop and administer the Kern Fan Project. The Agreement took effect July 1, 2020. The stored water would be extracted when needed to provide ecosystem, emergency supply and water supply benefits. The District's share of the Kern Fan Project would be used in conjunction with the Water Bank (as discussed under the subcaption "**Water Banking**" above) to meet the District's contingency storage needs at build-out. The District's goal for contingency storage is to secure supplies that are adequate to backfill the loss of imported supplies for three consecutive years. The District believes that, upon completion, the Kern Fan Project, together with the Water Bank, will allow the District to meet this goal.

In August 2017, the District and Rosedale jointly submitted a grant application to the California Water Commission (the “CWC”) for the proposed Kern Fan Project. The application sought Proposition 1 funds available from the CWC through the Water Storage Investment Program. In July 2018, the CWC conditionally awarded \$67.5 million to the Kern Fan Project. The District is currently pursuing additional funding opportunities. See the caption “FUTURE CAPITAL IMPROVEMENTS—Water Supply Reliability.”

Recycled Water

During Fiscal Year 2020, the District produced 24,627 acre feet of recycled water and supplied an additional 6,492 acre feet of non-potable water to District customers via the recycled water system. The District processes and treats secondary effluent from its customers to produce recycled water for sale to customers for non-potable utilization. Recycled water is currently sold to approximately 5,900 customers within the District. As of December 31, 2020, the District had approximately 570 miles of recycled water mains and recycled water storage capacity of approximately 5,250 acre feet. Revenues from the sale of recycled water are accounted for as part of the District’s sewer system.

Historic and Projected Water Supply

Set forth below is a summary of the District’s sources of total water supply in acre feet per year for the last five Fiscal Years.

TABLE 11
IRVINE RANCH WATER DISTRICT
Historic Water Supply In Acre Feet Per Year⁽¹⁾

<i>Fiscal Year</i>	<i>Groundwater⁽²⁾</i>	<i>Runoff Capture (Irvine Lake)</i>	<i>Imported Water</i>	<i>Recycled Water</i>	<i>Total</i>
2016	46,901	25	11,853	23,206	81,985
2017	49,208	1,937	19,397	22,006	92,549
2018	48,109	6,109	15,436	25,255	94,909
2019	47,258	4,151	13,937	22,381	87,727
2020	47,810	6,524	13,002	24,627	91,963

⁽¹⁾ Differences between the amounts that are shown in the table and the water sales figures that are set forth under the caption “THE WATER SYSTEM—Historic Water Deliveries/Sales” reflect water losses and the timing of billing.

⁽²⁾ Excludes water pumped from the Shallow Groundwater Unit, which is disposed of via an existing ocean outfall following treatment.

Source: The District.

Set forth below is a summary of the District’s projection of total water production to meet expected water demand (as discussed under the caption “THE WATER SYSTEM—Projected Water Deliveries”) for the current and next four Fiscal Years. The below table reflects projected water production from groundwater extractions, water purchases and recycled water production and does *not* reflect all available water supplies of the District.

TABLE 12
IRVINE RANCH WATER DISTRICT
Projected Water Supply In Acre Feet Per Year

<i>Fiscal Year</i>	<i>Groundwater⁽¹⁾</i>	<i>Runoff Capture (Irvine Lake)</i>	<i>Imported Water</i>	<i>Recycled Water⁽²⁾</i>	<i>Total</i>	<i>Percentage Change</i>
2021	48,766	3,800	14,562	24,134	91,263	(0.76)%
2022	49,254	3,500	14,853	24,375	91,983	0.79
2023	49,746	3,500	15,002	24,619	92,868	0.96
2024	50,244	3,500	15,152	24,865	93,761	0.96
2025	50,746	3,500	15,304	25,114	94,664	0.96

⁽¹⁾ Excludes water pumped from the Shallow Groundwater Unit, which is disposed of via an existing ocean outfall following treatment.

⁽²⁾ Recycled water production projected to increase approximately 1% per annum beginning in Fiscal Year 2021.

Source: The District.

Set forth below is a comparison of the District's sources of supply for Fiscal Year 2020 as compared to other neighboring agencies supplying water for Fiscal Year 2019.

TABLE 13
IRVINE RANCH WATER DISTRICT
Water Supply Comparison by Source

	<i>Imported Water</i>	<i>Groundwater</i>	<i>Runoff Capture (Irvine Lake)</i>	<i>Recycled Water</i>
Irvine Ranch Water District⁽¹⁾	14%	52%	7%	27%
City of Anaheim	24	76	0	0
South Coast Water District ⁽²⁾	80	0	0	20
Moulton Niguel Water District ⁽²⁾	100	0	0	0
Mesa Water District	0	100	0	0

⁽¹⁾ Approximately 20% of the District's water demand is from areas outside of OCWD's jurisdictional boundaries.

⁽²⁾ This agency is not located within OCWD's jurisdictional boundaries.

Source: The District.

THE WATER SYSTEM

General

Through the issuance of general obligation bonds and other indebtedness, the District has constructed, purchased or acquired capacity in, or connections to, various transmission, pumping, storage and distribution facilities to convey water into the District, including several major facilities built in cooperation with other water districts and cities.

The development of water supplies and the construction and acquisition of facilities are being carried out under a master plan formulated by the District in 1972 and most recently updated in 2009. Existing uses and planned development within the District will necessitate a projected combined total annual water supply of approximately 124,800 acre feet by 2035.

The District anticipates meeting all of its water supply needs using the above-mentioned water importation and storage facilities, groundwater production facilities and recycled water facilities. The combination of the District's facilities and sources of supply is expected to provide the District with a reliable

water supply sufficient to permit the ultimate development as presently planned. Reliability of water supply is further enhanced by the District's local storage facilities, which currently provide more than a seven-day supply.

As of June 30, 2020, the District had approximately 2,525 miles of water mains in its potable and recycled water systems and storage capacity of approximately 24,000 acre feet, including the District's share of Irvine Lake, a 25,000 acre feet untreated water reservoir, and the District's Sand Canyon, Rattlesnake, Syphon and San Joaquin Reservoirs, which are recycled water reservoirs with capacities of 800 acre feet, 1,100 acre feet, 450 acre feet and 2,900 acre feet respectively. See the caption "WATER SUPPLY."

In 2013, the District completed a study of the feasibility of increasing storage capacity in Syphon Reservoir from 450 acre feet up to approximately 5,000 acre feet. Additional storage capacity, if constructed, would allow the District to recycle 100% of the sewage flows tributary to the District's Michelson Water Reclamation Plant (the "MWRP") and reduce the District's need to supplement the recycled water system with imported water in dry years. The District is currently performing geotechnical evaluations of the site and evaluating funding alternatives for the Syphon Reservoir expansion. See the caption "FUTURE CAPITAL IMPROVEMENTS—Water Supply Reliability."

See the caption "WATER SUPPLY—Water Supply Reliability—Water Banking" for information with respect to the District's water banking programs, which constitute additional sources of water that are not reflected in the discussion of the District's storage facilities above.

Currently, the District purchases treated water from MWD for delivery to residential and commercial customers, as well as small amounts of untreated water for delivery to non-domestic customers. Groundwater that is produced from District wells is generally of high quality and is subject to minimal treatment to meet drinking water standards.

The Baker Water Treatment Plant (the "Baker WTP"), a water treatment plant which commenced operations in January 2017, treats to drinking water standards approximately 28 million gallons per day ("mgd") of untreated imported water purchased from MWD. During emergencies and planned imported water outages, water from Irvine Lake is expected to be supplied to the Baker WTP for treatment to drinking water standards. The Baker WTP utilizes microfiltration and ultraviolet disinfection as the primary treatment processes. Although the plant is owned and operated by the District, approximately 76% of capacity in the Baker WTP is held by other participating water agencies located in southern Orange County. The facility provides an operational source of supply to the District and participating agencies and, in the event of a short-term water shortage emergency, provides regional water reliability to other neighboring water agencies. The project cost was approximately \$106 million, which was funded by the District and the other participating water agencies in proportion to their participation in the project. The District financed a portion of its 24% share of the costs from the proceeds of the Series 2016 Bonds that are described under the caption "THE IRVINE RANCH WATER DISTRICT—Outstanding Indebtedness."

The District expects that it will reduce treated water purchases and increase raw water purchases from MWD going forward. Raw water, which will be treated at the Baker WTP, is available at a lower rate than treated water. Accordingly, the District expects its water purchase costs to be reduced in future years as a result of the construction of the Baker WTP.

Historic Water Connections

The following table shows the number of water connections in the District for the five most recent Fiscal Years.

TABLE 14
IRVINE RANCH WATER DISTRICT
Historic Water Connections⁽¹⁾

<i>Fiscal Year</i>	<i>Connections</i>	<i>Percentage Change</i>
2016	107,402	N/A%
2017	110,520	2.90
2018	114,164	3.30
2019	116,539	2.08
2020	118,263	1.48

⁽¹⁾ Excludes recycled water connections.
Source: The District.

Projected Water Connections

The following table shows the number of water connections projected by the District for the current and next four Fiscal Years.

TABLE 15
IRVINE RANCH WATER DISTRICT
Projected Water Connections⁽¹⁾

<i>Fiscal Year</i>	<i>Connections</i>	<i>Percentage Change</i>
2021	120,527	1.91%
2022	122,835	1.92
2023	125,190	1.92
2024	127,592	1.92
2025	130,042	1.92

⁽¹⁾ Excludes recycled water connections. Increases in connections reflect District estimates of increased development activity.
Source: The District.

Connection Fees

The District collects a water connection fee for each new connection to finance District facilities. Connection fees vary by Improvement District and range from \$1,308 to \$4,027 for each residential unit and \$6,411 to \$34,033 for each acre of commercial or industrial property. The connection fee is designed to recover the cost of each additional connection and allocate among all Improvement Districts the costs of master planned facilities such as water sources and production facilities, transmission mains, pumping stations, reservoirs and appurtenances and capacity necessary for each Improvement District.

Historic Water Deliveries/Sales

The following table presents a summary of historic water deliveries by the District in acre feet per year for the five most recent Fiscal Years. Historic water deliveries vary from historic water supply as a result of losses in the water system and the timing of billing. Revenues from the sale of recycled water are accounted for as part of the District’s sewer system.

TABLE 16
IRVINE RANCH WATER DISTRICT
Historic Water Deliveries/Sales in Acre Feet Per Year⁽¹⁾

<i>Fiscal Year</i>	<i>Potable and Non-Potable System</i>	<i>Recycled System⁽²⁾</i>	<i>Total</i>	<i>Percentage Change</i>
2016	51,098	26,879	77,977	N/A%
2017	51,299	27,860	79,159	1.52
2018	55,138	31,642	86,780	9.63
2019 ⁽³⁾	51,651	27,689	79,340	(8.57)
2020	51,761	31,119	82,880	4.46

⁽¹⁾ Differences between the amounts that are shown in the table and the water production figures that are set forth under the caption “WATER SUPPLY—Historic and Projected Water Supply” reflect water losses and the timing of billing.

⁽²⁾ Recycled water sales in excess of the historic recycled water production amounts set forth in Table 11 under the caption “WATER SUPPLY—Historic and Projected Water Supply” reflect supplemental water supplied in excess of recycled water produced by the District.

⁽³⁾ Reduced deliveries reflect wet hydrological year.

Source: The District.

Projected Water Deliveries/Sales

The District estimates that water system deliveries for the current and next four Fiscal Years will be as set forth in the following table. The District currently projects that water deliveries will increase at a slower pace than the increase in connections after the current Fiscal Year, as set forth in the table under the caption “—Projected Water Connections,” as a result of increased conservation efforts and a return to long-term historical average hydrological conditions in the State. The District notes that recycled water use is not subject to the mandatory conservation orders imposed by the State in connection with the recent Statewide drought. See the caption “WATER SUPPLY—Water Use Efficiency.” Revenues from the sale of recycled water are accounted for as part of the District’s sewer system.

TABLE 17
IRVINE RANCH WATER DISTRICT
Projected Water Deliveries/Sales in Acre Feet Per Year

<i>Fiscal Year</i>	<i>Potable and Non-Potable System</i>	<i>Recycled System⁽¹⁾</i>	<i>Total</i>	<i>Percentage Change</i>
2021	51,789	31,741	83,531	0.78%
2022	52,199	32,059	84,258	0.87
2023	52,701	32,379	85,081	0.98
2024	53,209	32,703	85,912	0.98
2025	53,722	33,030	86,752	0.98

⁽¹⁾ Projected recycled water sales in excess of the projected recycled water production amounts set forth in Table 12 under the caption “WATER SUPPLY—Historic and Projected Water Supply” reflect supplemental water projected to be supplied in excess of recycled water produced by the District.

Source: The District.

Historic Water Sales and Service Charge Revenues

The following table shows annual water sales and service charge revenues for the five most recent Fiscal Years. The following table does not include revenues from the sale of recycled water, which is accounted for as part of the District’s sewer system.

TABLE 18
IRVINE RANCH WATER DISTRICT
Historic Water Sales and Service Charge Revenues
(In Thousands)

<i>Fiscal Year</i>	<i>Sales and Service Charge Revenues⁽¹⁾</i>	<i>Percentage Change</i>
2016	\$76,692	N/A%
2017	77,252	0.73
2018	84,575	9.48
2019 ⁽²⁾	94,107	11.27
2020 ⁽³⁾	90,213	(4.14)

⁽¹⁾ Includes late payment charges and other penalty revenues.

⁽²⁾ Increase in Fiscal Year 2019 reflects customer growth, a Board-approved commodity rate increase and a cumulative adjustment in water banking storage revenue of \$5.4 million, reflecting a valuation assigned to water stored over multiple years.

⁽³⁾ Decrease in Fiscal Year 2020 reflects one-time cumulative adjustment in water banking storage revenue in Fiscal Year 2019. See Footnote 2.

Source: The District.

Projected Water Sales and Service Charge Revenues

The following table projects annual water sales and service charge revenues for the current and next four Fiscal Years.

TABLE 19
IRVINE RANCH WATER DISTRICT
Projected Water Sales and Service Charge Revenues
(In Thousands)

<i>Fiscal Year</i>	<i>Sales and Service Charge Revenues⁽¹⁾</i>	<i>Percentage Change</i>
2021	\$ 92,919	3.00%
2022	98,495	6.00 ⁽²⁾
2023	101,449	3.00
2024	104,493	3.00
2025	107,628	3.00

⁽¹⁾ Reflects projected increases in water connections and deliveries described under the captions “—Projected Water Connections” and “—Projected Water Deliveries,” respectively, as well as projected increases in rates described under the caption “—Water System Rates and Charges.” Such rate increases are subject to the notice, hearing and protest provisions of Proposition 218 and there can be no assurance that the Board of Directors will adopt such rate increases as currently projected. See the caption “CONSTITUTIONAL LIMITATIONS ON APPROPRIATIONS AND CHARGES—Proposition 218.”

⁽²⁾ Reflects anticipated implementation of a water rate increase on July 1, 2021 which consists of: (i) an increase that was originally scheduled to take effect on July 1, 2020 but deferred in light of the COVID-19 outbreak; and (ii) a separate water rate increase that is planned for July 1, 2021. See the caption “—Water System Rates and Charges.”

Source: The District.

Largest Water Customers

The following table sets forth the ten largest water customers of the District for Fiscal Year 2020, as determined by annual payments.

TABLE 20
IRVINE RANCH WATER DISTRICT
Ten Largest Water Customers
Fiscal Year 2020

<i>Customer</i>	<i>Fiscal Year 2020 Payment</i>	<i>Percentage of Total Water Sales Revenues</i>
1. The Irvine Company/Irvine Apartment Communities	\$ 7,863,799	8.72%
2. Jazz Semiconductor	1,222,084	1.35
3. B Braun Medical Inc.	1,122,799	1.24
4. University of California, Irvine	1,070,434	1.19
5. Woodbridge Village Association	524,264	0.58
6. City of Lake Forest	397,366	0.44
7. City of Irvine	300,980	0.33
8. ERP Operating LP	299,796	0.33
9. Maruchan Inc.	261,729	0.29
10. Allergan Sales, LLC	<u>260,519</u>	<u>0.29</u>
TOTAL	\$13,323,770	14.76%

Source: The District.

These ten largest customers accounted for approximately 14.76% of water sales revenues in Fiscal Year 2020.

Water System Rates and Charges

Water system rates and charges (other than connection fees) are generally uniform throughout the District. Pumping surcharges apply in higher elevations. Effective July 1, 2019, the average monthly service charge for residential water meters is \$10.35. The monthly service charges for commercial and industrial water meters range from \$10.35 to \$2,949 based on meter size. Quantity charges are set according to a water conservation oriented allocation-based ascending block rate structure with rates ranging from \$1.47 to \$13.63 per 100 cubic feet (“ccf”), as shown in the below table.

As discussed under the caption “THE IRVINE RANCH WATER DISTRICT—COVID-19 Outbreak,” the District deferred rate increases that were previously planned to take effect on July 1, 2020 in consideration of the deleterious economic impact of the COVID-19 pandemic on its customers. However, the expected reduction in Revenues (which the District estimates could have been as much as \$4.6 million) will be partially mitigated by a similar deferral of cost increases by third party water suppliers to the District which would otherwise have been passed through to District customers. With the exception of the current Fiscal Year, for the past ten Fiscal Years, the District has increased its water system rates and charges by an average of approximately 5% each year for an average residential customer using approximately 12 ccf of water per month.

**IRVINE RANCH WATER DISTRICT
Residential Water Rates⁽¹⁾**

<i>Tier</i>	<i>Allocation</i>	<i>Rate per ccf</i>
Low Volume	0-40%	\$1.47
Base ⁽¹⁾	41-100	2.00
Inefficient	101-140	4.86
Wasteful	141+	13.63

⁽¹⁾ Rates are effective as of July 1, 2019. A rate increase that was previously planned to take effect on July 1, 2020 was deferred as described above.
⁽²⁾ The “base” rate reflects an average cost of water from all sources that are used by the District.
 Source: The District.

See the caption “CONSTITUTIONAL LIMITATIONS ON APPROPRIATIONS AND CHARGES—Proposition 218—Article XIID” for a discussion of a 2015 California Court of Appeal decision with respect to allocation-based rates similar to those of the District. Rates are based on a cost of service study.

The projected water system revenues set forth under the captions “—Projected Water Sales and Service Charge Revenues” and “WATER AND SEWER SYSTEM FINANCIAL INFORMATION—Projected Operating Results and Debt Service Coverage” reflect the projected water deliveries that are described under the caption “—Projected Water Deliveries/Sales” as well as projected water rate increases of 3% per annum in Fiscal Years 2022 through 2025, with the deferred rate increase that was scheduled to take effect on July 1, 2020 projected to take effect on July 1, 2021, thereby resulting in a total projected rate increase of 6% in Fiscal Year 2022. Future water rate increases are subject to the notice, hearing and protest provisions of Proposition 218 described under the caption “CONSTITUTIONAL LIMITATIONS ON APPROPRIATIONS AND CHARGES—Proposition 218.” There can be no assurance that the Board of Directors will adopt such rate increases as currently projected.

Set forth below is a comparison of the District’s water bill for a typical residential customer as compared to neighboring communities.

**TABLE 21
IRVINE RANCH WATER DISTRICT
Typical Residential Customer Water Bills**

<i>Water Service Provider</i>	<i>Charge</i> ⁽¹⁾
City of Costa Mesa	\$77.66
City of Newport Beach	68.06
City of Santa Ana	63.38
City of Huntington Beach	65.65
City of Tustin	61.73
City of Anaheim	54.98
City of Orange	53.00
Irvine Ranch Water District ⁽²⁾	37.17

⁽¹⁾ Based on average gallons per capita per day for each water service provider in ccf. For the District, the first 5 ccf is billed at the low volume rate of \$1.47 and next 9 ccf is billed at \$2.00.

⁽²⁾ Information is as of July 1, 2020. Excludes *ad valorem* assessments levied by the District.

Source: The District.

THE SEWER SYSTEM

General

The District, following voter approval in 1965, is authorized by law to acquire, construct, operate and furnish facilities and services for the collection, treatment, reclamation and disposal of wastewater, and the District may contract with others for such purposes. The District has an extensive network of gravity sewers, force mains, lift stations and siphons that convey wastewater to two District-owned treatment plants. As of June 30, 2020, the District had approximately 1,143 miles of sewer mains and treatment plant capacity of approximately 35.5 mgd at the MWRP and the Los Alisos Water Recycling Plant (“**LAWRP**”). More than 10.3 billion gallons of wastewater were treated by the District (including wastewater flows sent to Orange County Sanitation District (“**OCSD**”)) during Fiscal Year 2020.

In 1986, the District cooperated with OCSD to form Sanitation District 14 (functionally replaced by “Revenue Area 14” of OCSD, upon the consolidation of the several sanitation districts comprising OCSD’s predecessor, the County Sanitation Districts of Orange County, in 1998), which overlays a substantial portion of the District’s territory. Under an agreement entered into between the District and OCSD in connection with such formation, the District paid approximately \$34 million for an approximate 6% interest in OCSD’s sewage processing facilities (such percentage of interest will vary over time pursuant to a formula set forth in the agreement between OCSD and the District). This agreement currently provides treatment capacity (in addition to the capacity at District-owned facilities (the MWRP and the LAWRP)) of up to 15 mgd. The agreement also provides for the purchase by the District of certain additional capacity in OCSD sewage processing facilities determined from annual flows. In Fiscal Years 2019 and 2020, the District utilized approximately 2.3 billion gallons and 1.6 billion gallons, respectively, of capacity each year pursuant to its agreement with OCSD. In Fiscal Year 2020, approximately 84% of the District’s wastewater was treated by the MWRP and LAWRP operated by the District, and approximately 16% was treated by OCSD.

The District treats and recycles wastewater in amounts sufficient to meet recycled water customer demand and fill available capacity in seasonal storage reservoirs for later delivery to recycled water customers. Any excess wastewater collected by the District is diverted to OCSD for treatment and ultimate disposal into the Pacific Ocean through OCSD’s two ocean outfall pipelines or recharged into the Orange County groundwater basin through OCWD’s Groundwater Replenishment System.

Ultimately, the District plans to expand capacity for its treatment facilities to approximately 40.5 mgd in order to: (i) increase recycled water production and utilization; (ii) decrease exposure to external treatment costs and operational constraints; and (iii) decrease dependence on imported water supplies. See the caption “FUTURE CAPITAL IMPROVEMENTS.”

The District has evaluated alternative approaches to handling its biosolids. In May 2013, the District began construction of a facility for handling MWRP solids, which are currently conveyed to OCSD, as well as solids from the District’s LAWRP and other potential participating agencies. New capital facilities constructed at the MWRP to dewater and beneficially reuse biosolids from this facility are estimated to cost \$240 million. Construction of the facilities is substantially complete and startup was initiated in June 2020. The startup process is scheduled to be substantially completed by mid-2021. See the caption “FUTURE CAPITAL IMPROVEMENTS—Solids Handling.”

OCSD faces various challenges in the continued treatment of sewage. A description of these challenges, as well as a variety of other operating information with respect to OCSD, is included in certain disclosure documents prepared by OCSD. OCSD periodically prepares official statements and other disclosure documents in connection with its bonds and other obligations. OCSD has also entered into certain continuing disclosure agreements pursuant to which OCSD is contractually obligated for the benefit of owners of certain of its outstanding obligations to file certain annual reports, including audited financial statements and notice of certain events, pursuant to Rule 15c2-12. Such official statements, other disclosure documents, annual reports and notices (collectively, the “OCSD Information”) are filed with EMMA at <http://emma.msrb.org>. The OCSD Information is not incorporated herein by reference thereto, and the District makes no representation as to the accuracy or completeness of such information. OCSD HAS NOT ENTERED INTO ANY CONTRACTUAL COMMITMENT WITH THE DISTRICT, THE TRUSTEE OR THE OWNERS OF THE SERIES 2011A BONDS TO PROVIDE OCSD INFORMATION TO THE DISTRICT OR THE OWNERS OF THE SERIES 2011A BONDS.

OCSD HAS NOT REVIEWED THIS REMARKETING STATEMENT AND HAS NOT MADE REPRESENTATIONS OR WARRANTIES WITH RESPECT TO THE ACCURACY OR COMPLETENESS OF THE INFORMATION CONTAINED OR INCORPORATED HEREIN, INCLUDING INFORMATION WITH REGARD TO OCSD. OCSD IS NOT CONTRACTUALLY OBLIGATED, AND HAS NOT UNDERTAKEN, TO UPDATE SUCH INFORMATION FOR THE BENEFIT OF THE DISTRICT OR THE OWNERS OF THE SERIES 2011A BONDS UNDER RULE 15c2-12.

Historic Sewer System and Recycled Water Connections

The following table shows the number of sewer and recycled water connections in the District for the five most recent Fiscal Years.

**TABLE 22
IRVINE RANCH WATER DISTRICT
Historic Sewer and Recycled Water Connections**

<i>Fiscal Year</i>	<i>Connections</i>	<i>Percentage Change</i>
2016	101,865	N/A%
2017	105,053	3.13
2018	108,754	3.52
2019	111,210	2.26
2020	113,176	1.77

Source: The District.

Projected Sewer and Recycled Water Connections

The following table shows the projected number of sewer and recycled water connections for the current and next four Fiscal Years.

**TABLE 23
IRVINE RANCH WATER DISTRICT
Projected Sewer and Recycled Water Connections⁽¹⁾**

<i>Fiscal Year</i>	<i>Connections</i>	<i>Percentage Change</i>
2021	115,440	2.00%
2022	117,748	2.00
2023	120,103	2.00
2024	122,505	2.00
2025	124,955	2.00

⁽¹⁾ Increases in connections reflect District estimates of increased development activity.
Source: The District.

Connection Fees

The District collects a sewer connection fee for each new connection to finance District sewer facilities. Connection fees vary by Improvement District and range from \$1,520 to \$7,150 for each residential unit and \$6,422 to \$69,916 for each acre of commercial or industrial property. The connection fee is designed to recover the cost of each additional connection and allocate among all Improvement Districts the costs of master planned facilities such as transmission mains, pumping stations, treatment facilities and appurtenances and capacity necessary to serve each Improvement District.

Historic Sewer Daily Average Flow

The following table shows the daily average sewer flow in millions of gallons per day for the five most recent Fiscal Years.

**TABLE 24
IRVINE RANCH WATER DISTRICT
Historic Sewer Daily Average Flow**

<i>Fiscal Year</i>	<i>Daily Average Flow (mgd)⁽¹⁾</i>	<i>Percentage Change</i>
2016	27.0	N/A%
2017	28.0	3.70
2018	27.8	(0.71)
2019	28.2	1.44
2020	28.3	0.35

⁽¹⁾ Includes District flow treated by OCSD.
Source: The District.

Projected Sewer Daily Average Flow

The following table shows the projected daily average sewer flow in millions of gallons per day for the current and next four Fiscal Years.

**TABLE 25
IRVINE RANCH WATER DISTRICT
Projected Sewer Daily Average Flow**

<i>Fiscal Year</i>	<i>Daily Average Flow (mgd)⁽¹⁾</i>	<i>Percentage Change</i>
2021	28.6	1.06%
2022	28.8	1.00
2023	29.1	1.00
2024	29.4	1.00
2025	29.7	1.00

⁽¹⁾ Includes flow treated by OCSD.
Source: The District.

Historic Recycled Water Sales and Sewer Service Charge Revenues

The following table shows the recycled water sales and sewer service charge revenues for the five most recent Fiscal Years. Increases reflect increases in connections as well as rate increases adopted by the Board of Directors.

**TABLE 26
IRVINE RANCH WATER DISTRICT
Historic Recycled Water Sales and Sewer Service Charge Revenues
(In Thousands)**

<i>Fiscal Year</i>	<i>Recycled Water Sales and Sewer Service Charge Revenues</i>	<i>Percentage Change</i>
2016	\$67,682	N/A%
2017	72,054	6.46
2018	76,789	6.57
2019	76,841	0.07
2020	77,187	0.45

Source: The District.

Projected Recycled Water Sales and Sewer Service Charge Revenues

The following table shows the projected recycled water sales and sewer service charge revenues for the current and next four Fiscal Years.

TABLE 27
IRVINE RANCH WATER DISTRICT
Projected Recycled Water Sales and Sewer Service Charge Revenues
(In Thousands)

<i>Fiscal Year</i>	<i>Recycled Water Sales and Sewer Service Charge Revenues⁽¹⁾</i>	<i>Percentage Change</i>
2021	\$79,503	3.00%
2022	84,273	6.00 ⁽²⁾
2023	86,801	3.00
2024	89,405	3.00
2025	92,087	3.00

⁽¹⁾ Reflects increases in projected sewer connections and daily average sewer flow described under the captions “—Projected Sewer and Recycled Water Connections” and “—Projected Sewer Daily Average Flow,” respectively, as well as adopted and projected increases in recycled water and sewer rates described under the captions “THE WATER SYSTEM—Water System Rates and Charges” and “THE SEWER SYSTEM—Sewer System Rates and Charges.” Such rate increases are subject to the notice, hearing and protest provisions of Proposition 218 and there can be no assurance that the Board of Directors will adopt such rate increases as currently projected. See the caption “CONSTITUTIONAL LIMITATIONS ON APPROPRIATIONS AND CHARGES—Proposition 218.”

⁽²⁾ Reflects anticipated implementation of a water rate increase on July 1, 2021 which consists of: (i) an increase that was originally scheduled to take effect on July 1, 2020 but deferred in light of the COVID-19 outbreak; and (ii) a separate water rate increase that is planned for July 1, 2021. See the caption “—Sewer System Rates and Charges.”

Source: The District.

Largest Sewer and Recycled Water Service Customers

The following table sets forth the ten largest sewer service customers of the District for Fiscal Year 2020, as determined by annual payments.

TABLE 28
IRVINE RANCH WATER DISTRICT
Ten Largest Sewer and Recycled Water Service Customers
Fiscal Year 2020

<i>Customer</i>	<i>Fiscal Year 2020 Payment</i>	<i>Percentage of Total Sewer and Recycled Service Revenues</i>
1. The Irvine Company/Irvine Apartment Communities	\$12,393,661	16.06%
2. City of Irvine	2,370,182	3.07
3. University of California, Irvine	1,843,344	2.39
4. B Braun Medical Inc.	880,504	1.14
5. Irvine Unified School District	600,536	0.78
6. ERP Operating LP	353,432	0.46
7. Maruchan Inc.	341,303	0.44
8. Allergan Sales, LLC	310,835	0.40
9. Crystal Cove Community Association	304,276	0.39
10. City of Tustin	<u>288,119</u>	<u>0.37</u>
TOTAL	\$19,686,192	25.50%

Source: The District.

These ten largest customers accounted for approximately 25.50% of total sewer and recycled water service revenues in Fiscal Year 2020.

Sewer System Rates and Charges

Effective July 1, 2019, residential users pay a fixed monthly service charge which ranges from \$19.55 to \$26.10. Commercial and industrial users pay \$26.10 for the first ten ccf of water use and from \$2.78 to \$2.916 per ccf thereafter.

The Board of Directors did not implement a sewer rate increase for Fiscal Year 2020, as the projected revenues based on the rates that were in place for Fiscal Year 2019 were expected to cover projected expenses. In addition, as discussed under the caption “THE IRVINE RANCH WATER DISTRICT—COVID-19 Outbreak,” the District deferred rate increases that were previously planned to take effect on July 1, 2020 in consideration of the deleterious economic impact of the COVID-19 pandemic on its customers. With the exception of the past two Fiscal Years, over the past ten Fiscal Years, the District has increased its fixed monthly service charge by an average of approximately 6% each year.

The projected sewer system and recycled water sales revenues set forth under the captions “—Projected Recycled Water Sales and Sewer Service Charge Revenues” and “WATER AND SEWER SYSTEM FINANCIAL INFORMATION—Projected Operating Results and Debt Service Coverage” reflect projected sewer and recycled water rate increases of 3% per annum in Fiscal Years 2022 through 2025, with the deferred rate increase that was scheduled to take effect on July 1, 2020 projected to take effect on July 1, 2021 thereby resulting in a total projected rate increase of 6% in Fiscal Year 2022. Such rate increases are subject to the notice, hearing and protest provisions of Proposition 218 described under the caption “CONSTITUTIONAL LIMITATIONS ON APPROPRIATIONS AND CHARGES—Proposition 218.” There can be no assurance that the Board of Directors will adopt such rate increases as currently projected.

Set forth below is a comparison of the District’s sewer bills for a typical residential customer as compared to other neighboring communities.

TABLE 29
IRVINE RANCH WATER DISTRICT
Typical Residential Customer Sewer Bill

<i>Sewer Service Provider</i>	<i>Charge</i> ⁽¹⁾
City of Orange	\$43.63
City of Huntington Beach	38.60
City of Tustin	37.25
City of Newport Beach	36.95
City of Costa Mesa	35.95
City of Santa Ana	34.13
City of Anaheim	33.42
Irvine Ranch Water District	19.55 – 26.10

⁽¹⁾ Information is as of prior year for providers other than the District and as of July 1, 2020 for the District. Excludes *ad valorem* assessments levied by District.

Source: The District.

FUTURE CAPITAL IMPROVEMENTS

The District anticipates spending approximately \$550,200,000 on future water, recycled water and sewer system improvements during the current and the next four Fiscal Years. The District anticipates financing such improvements through a combination of District revenues, fund balances, bonds and certificates of participation and, for a portion of the Kern Fan Project (which is described under the caption “—Water Supply Reliability” below), grant proceeds of approximately \$34 million. The District anticipates issuing additional bonds in the estimated principal amount of \$50-\$100 million in Fiscal Year 2025. The following table sets forth the District’s projected capital improvement projects for the current and next four Fiscal Years:

TABLE 30
IRVINE RANCH WATER DISTRICT
Projected Water, Recycled Water and Sewer Systems Capital Improvements
For Fiscal Years 2021 through 2025

<i>Project</i>	<i>2021</i>	<i>2022</i>	<i>2023</i>	<i>2024</i>	<i>2025</i>	<i>Total</i>
Solids Handling	\$ 6,160,591	\$ 2,323,611	\$ 1,297,692	\$ 2,197,276	\$ 7,202,178	\$ 19,181,348
OCSD CORF/Equity ⁽¹⁾	10,002,750	(19,030,250)	13,461,750	12,160,750	12,443,750	29,038,750
Water Supply Reliability	15,101,353	16,430,978	31,875,316	29,129,597	18,515,468	111,052,712
Development-Related Expansion	19,263,476	15,820,226	46,660,373	52,167,548	4,767,281	138,678,904
Replacement and Refurbishment	41,158,367	66,446,071	49,288,892	28,137,937	29,566,926	214,598,193
Operational Improvements	<u>15,786,163</u>	<u>14,294,603</u>	<u>6,271,080</u>	<u>644,300</u>	<u>654,000</u>	<u>37,650,146</u>
Total	\$107,472,700	\$96,285,239	\$148,855,103	\$124,437,408	\$73,149,603	\$550,200,053

⁽¹⁾ The District pays for its portion of OCSD capital costs based on a 3-year rolling average of sewer flows. Assuming normal weather patterns return, the District’s average sewer flow is expected to decrease in the future, resulting in an expected credit in OCSD capital costs in Fiscal Year 2022. See the caption “THE SEWER SYSTEM—General.”

Source: The District.

Solids Handling

The solids handling capital projects include the design and construction of facilities for thickening, acid-phase anaerobic digestion, dewatering, drying and pelletization, energy generation, and use of pellets as a fertilizer or e-fuel. They also include a solids receiving station to allow processing of dewatered sludge from

the LAWRP for drying and pelletization. In addition, facilities for the receipt and transfer of fats, oil and grease to the digesters are being designed and will be constructed to increase methane and energy production capabilities. Construction of the facilities is substantially complete and startup was initiated in June 2020. The startup process is scheduled to be substantially completed by mid-2021. See the caption “THE SEWER SYSTEM—General.” A portion of the costs of these projects was financed from proceeds of the 2016 Installment Sale Agreement and the Series 2016 Bonds. See the caption “THE IRVINE RANCH WATER DISTRICT—Outstanding Indebtedness.”

OCSO CORF/Equity

OCSO’s Capital Outlay Revolving Fund (“CORF”) funds OCSO projects such as plant upgrades for secondary treatment and the Groundwater Replenishment System. The District funds its share of the CORF based on the District’s percentage share of OCSO’s total wastewater flow. Wastewater flows from the District presently comprise approximately 2% – 3% of OCSO flows. In addition, the District purchases and sells equity in the OCSO Joint Works Treatment Facilities based on the District’s percentage of OCSO flows. See the caption “THE SEWER SYSTEM—General—OCSO” above. During the rainy season in early 2017, the District temporarily diverted additional sewage to OCSO, resulting in a temporary increase in the OCSO CORF and equity capital expenditures.

Water Supply Reliability

Water supply reliability projects include the acquisition and construction of water banking facilities in Kern County and the Kern Fan Project, which will develop a regional water bank in the Kern Fan area to capture, recharge and store unallocated Article 21 water from the State Water Project during wet hydrologic periods through a joint venture between the District and Rosedale. The stored water would be extracted when needed to provide ecosystem, emergency supply and water supply benefits. The District’s share of the Kern Fan Project would be used in conjunction with the Strand Ranch and Stockdale Integrated Banking Projects to meet the District’s contingency storage needs at build-out. Other water supply reliability projects include booster pump stations and interagency pipeline construction. See the captions “WATER SUPPLY—Water Supply Reliability—Other Water Supply Reliability Programs” and “THE WATER SYSTEM—General.”

Development-Related Expansion

Development-related expansion improvements include construction of new water, recycled water and sewer improvements to serve new developments and the expansion of the Siphon Recycled Water Reservoir, which is intended to increase storage capacity in the reservoir from 450 acre feet to 5,000 acre feet. Additional storage capacity could allow the District to utilize more of the recycled water it produces.

Replacement and Refurbishment

Replacement and refurbishment improvements consist of repairs and restoration to existing water, recycled water and sewer system facilities.

Operational Improvements

Operational improvements consist of optimizing District facilities and include improvements to the District’s water and wastewater Operations Center, adding water quality mixing systems to existing reservoirs, expanding the reliability of the Supervisory Control and Data Acquisition system, and relocating District facilities as required by interagency projects.

WATER AND SEWER SYSTEM FINANCIAL INFORMATION

Financial Statements

A copy of the most recent financial statements of the District audited by Davis Farr LLP, Certified Public Accountants (the “**Auditor**”), are included as Appendix B (the “**Financial Statements**”) and should be read in their entirety. The Auditor’s letter is set forth at the beginning of the Financial Section of the Financial Statements. The Auditor has not reviewed the contents of this Remarketing Statement, and the District has not sought the Auditor’s consent to the inclusion of the Auditor’s report in the Financial Statements in this Remarketing Statement.

Reduction in BAB Credits

On March 1, 2013, the federal government announced the implementation of certain automatic budget cuts known as the sequester, including reductions in Build America Bond (“**BAB**”) interest subsidy payments (“**BAB Credits**”). The originally scheduled BAB Credit was reduced by amounts ranging from 5.7% to 8.7% in federal fiscal years 2013 through 2021. Under a federal budget bill enacted in 2019, the reduction of BAB Credits will continue through September 30, 2029.

On November 14, 2017, the Congressional Budget Office sent a letter (the “**CBO Letter**”) to Representative Steny Hoyer (D-Maryland) responding to his request for information about the effects of the Tax Cuts and Jobs Act of 2017, which was signed into law by the President on December 22, 2017, and which would raise deficits by an estimated \$1.5 trillion over the 2018-2027 period, specifically with respect to a sequestration in accordance with the Statutory Pay-As-You-Go Act of 2010 (the “**PAYGO Law**”). The CBO Letter indicated that, without enacting subsequent legislation either to offset the expected deficit increase or to waive, mitigate or eliminate the requirements of the PAYGO Law, the Office of Management and Budget would be required to issue a sequestration order in a potentially significant amount. If not changed by Congress, the indirect effect of the legislation may be to reduce significantly or eliminate direct interest subsidy payments that are eligible to be received by issuers of specified tax credit bonds, including BABs. It is not possible to predict how much the reduction in BAB Credits would be at this time.

The District’s Series 2010B Bonds are BABs and the historic and projected operating results shown under the captions “—Historic Operating Results and Debt Service Coverage” and “—Projected Operating Results and Debt Service Coverage” reflect the announced reduction in BAB Credits but do not reflect additional reductions in BAB Credits that may be required in future federal fiscal years under the PAYGO Law. While the District continues to monitor the effects of the reduction in BAB Credits on District finances, the District does not currently expect announced reductions, or any future reductions, to have a material adverse effect on the ability of the District to pay the principal of and interest on the Series 2010B Bonds or the Parity Obligations from Net Revenues.

Historic Operating Results and Debt Service Coverage

The following summary of operating results of the District for the last five Fiscal Years is derived from the Financial Statements and audited financial statements of the District for prior Fiscal Years and excludes certain non-cash items and includes certain other adjustments. Such summary operating results are qualified in their entirety by reference to such statements, including the notes thereto.

TABLE 31
IRVINE RANCH WATER DISTRICT
Historic Operating Results and Debt Service Coverage
Fiscal Years 2015 through 2019
(In Thousands)

	2016	2017	2018	2019	2020
REVENUES					
Water sales and service charges	\$ 76,692 ⁽¹²⁾	\$ 77,252	\$ 84,575	\$ 94,107 ⁽¹⁴⁾	\$ 90,213 ⁽¹⁴⁾
Recycled water sales and sewer service charges	67,682	72,054	76,789	76,841	77,187
Connection fees	32,109	25,563	32,674	18,205	10,943
Net real estate income	8,693	9,076	3,405 ⁽¹³⁾	8,372	12,549
Interest income	1,585	3,210	4,133	6,199	7,790
Available 1% Property Tax Revenues ⁽¹⁾	31,645	34,247	29,649	42,389	44,463
Other ⁽²⁾	<u>7,836</u>	<u>7,117</u>	<u>7,504</u>	<u>8,876</u>	<u>6,606</u>
Total Revenues	\$ 226,242	\$ 228,519	\$ 238,729	\$ 254,989	\$ 249,751
OPERATION AND MAINTENANCE EXPENSES					
Water services	\$ 57,499	\$ 55,296	\$ 63,671	\$ 64,004	\$ 67,792
Sewer services	40,413	42,752	38,115	43,734	49,497
Administrative and general	19,909	22,664 ⁽¹²⁾	22,390	25,610	24,303
Pension expense ⁽³⁾	2,831	5,146	5,333	4,700	9,629
Other ⁽⁴⁾	<u>2,800</u>	<u>1,997</u>	<u>174</u>	<u>2,615</u>	<u>5,240</u>
Total Operation & Maintenance Expenses	\$ 123,452	\$ 127,855	\$ 129,683	\$ 140,663	\$ 156,461
NET REVENUES	\$ 102,790	\$ 100,664	\$ 109,046	\$ 114,326	\$ 93,290
ASSESSMENT PROCEEDS⁽⁵⁾	\$ 6,036	\$ 8,605	\$ 10,499	\$ 12,554	\$ 13,548
TOTAL NET REVENUES AND ASSESSMENT PROCEEDS	<u>\$ 108,826</u>	<u>\$ 109,269</u>	<u>\$ 119,545</u>	<u>\$ 126,880</u>	<u>\$ 106,838</u>
PARITY OBLIGATION DEBT SERVICE					
Series 2016 Bonds	\$ -	\$ 1,605	\$ 5,301	\$ 5,301	\$ 5,301
2016 Installment Sale Agreement	-	2,919	5,837	5,837	5,837
Series 2011A Bonds	2,927	2,967	3,675	4,045	3,887
Series 2010B Bonds ⁽⁶⁾	7,823	7,813	7,807	7,792	7,778
2010 Installment Sale Agreement ⁽⁷⁾	9,487	8,756	1,885	1,984	2,079
1997 State Loan #3	227	194	194	194	194
Prior Reimbursement Agreements	-	-	-	-	-
Total Parity Obligation Debt Service	\$ 20,464	\$ 24,254	\$ 24,699	\$ 25,153	\$ 25,076
PARITY OBLIGATION COVERAGE⁽⁸⁾	5.3x	4.5x	4.8x	4.0x	4.3x
Revenues Available For Subordinate Debt Service	\$ 88,362	\$ 85,015	\$ 94,846	\$ 101,727	\$ 81,762
SUBORDINATE OBLIGATION DEBT SERVICE					
Swap Payments ⁽⁹⁾	\$ 7,712	\$ 6,798	\$ 5,739	\$ 4,513	\$ 2,496
State Loans and SCWD Debt ⁽¹⁰⁾	<u>308</u>	<u>133</u>	<u>122</u>	<u>122</u>	<u>100</u>
Total Subordinate Obligation Debt Service	\$ 8,020	\$ 6,931	\$ 5,861	\$ 4,635	\$ 2,596
Sources of Payment for Ad Valorem					
Assessment Bonds:					
Remaining Revenues	\$ 80,342	\$ 78,084	\$ 88,985	\$ 97,092	\$ 79,166
1% Pledged Property Tax Revenues ⁽¹¹⁾	3,226	3,128	10,834	1,192	1,141
Ad valorem Assessments	<u>5,396</u>	<u>5,341</u>	<u>6,265</u>	<u>6,922</u>	<u>7,223</u>
Total Funds Available for Ad Valorem	\$ 88,964	\$ 86,553	\$ 106,084	\$ 105,206	\$ 87,530
Assessment Bonds	-	-	-	-	-
Ad Valorem Assessment Bond Debt Service	<u>(11,173)</u>	<u>(12,385)</u>	<u>(20,843)</u>	<u>(11,436)</u>	<u>(10,781)</u>
NET REVENUES AVAILABLE FOR	<u>\$ 77,791</u>	<u>\$ 74,168</u>	<u>\$ 85,241</u>	<u>\$ 93,770</u>	<u>\$ 76,749</u>

OTHER PURPOSES

(FOOTNOTES ON FOLLOWING PAGE)

- (1) Represents 1% Property Tax Revenues available to pay debt service on Parity Obligations after payment of debt service on bonds of the District secured by a pledge of the District's share of the County 1% general *ad valorem* property tax pursuant to Resolution 2002-10, adopted by the Board of Directors of the District on April 8, 2002 (the "**Secured Bonds**").
- (2) Other Revenues includes golf course lease, cell site leases, conservation revenue, penalty revenue, grants and Allen-McColloch pipeline income.
- (3) Pension expense is based on GASB 68 requirements. See the caption "THE IRVINE RANCH WATER DISTRICT—Pension Benefits." These expenses were included in the "Administrative and general" line item in the audited financial statements of the District for the Fiscal Years shown. They have been separated in the above table for presentation purposes. Beginning in Fiscal Year 2018, the net amount is presented, including income from and the fair market value of the Pension Benefits Trust.
- (4) Reflects reduction of approximately \$7.0 million in other expenses, including capital assets and project write-offs.
- (5) Pro rata share of *ad valorem* assessments based on outstanding par amount of all Ad Valorem Assessment Bonds. Assessment Proceeds are only available to pay debt service on Series 2010B Bonds, Series 2011A Bonds and Series 2016 Bonds and are not available to pay debt service on other Parity Obligations which are not general obligation bonds secured by *ad valorem* assessments.
- (6) Debt Service net of BAB Credit on Series 2010B Bonds. Reflects announced reductions in BAB Credits. See the caption "—Reduction in BAB Credits."
- (7) Entered into in February 2010 in connection with the prepayment of the 2008 Certificates of Participation and the 1986 Certificates of Participation.
- (8) Total Net Revenues and Assessment Proceeds divided by Total Parity Obligation Debt Service.
- (9) Net swap payments made.
- (10) Santiago County Water District was consolidated into the District as of July 1, 2006.
- (11) Represents District's share of 1% Property Tax Revenues which, together with the *ad valorem* assessments, is sufficient to pay debt service on the Secured Bonds. Variations reflect fluctuations in debt service on the Secured Bonds and redemptions thereof.
- (12) Increase from Fiscal Year 2016 reflects increases in labor, benefits and professional services costs and supplies for water treatment, sewage treatment and recycled water system maintenance.
- (13) Decrease from Fiscal Year 2017 reflects expenses associated with development agreement for the City of Lake Forest related to Lake Forest Serrano Summit property. See the caption "THE IRVINE RANCH WATER DISTRICT—Current Investments."
- (14) Decrease in Fiscal Year 2020 reflects one-time cumulative adjustment in water banking storage revenue in Fiscal Year 2019. See Footnote 2.

Source: The District.

Projected Operating Results and Debt Service Coverage

The District's estimated projected operating results for the current and next four Fiscal Years are set forth below, reflecting certain significant assumptions concerning future events and circumstances. The financial forecast represents the District's estimate of projected financial results based on the District's assumptions, including the assumptions in the footnotes to the chart set forth below. Such assumptions are material in the development of the District's financial projections, and variations in the assumptions may produce substantially different financial results. Actual operating results achieved during the projection period may vary from those presented in the forecast and such variations may be material.

TABLE 32
IRVINE RANCH WATER DISTRICT
Five-Year Debt Service Coverage Forecast
Fiscal Years 2020 through 2024
(In Thousands)

	2021 ⁽¹⁾	2022	2023	2024	2025
REVENUES					
Water sales and service charges ⁽²⁾	\$ 92,919	\$ 98,495	\$ 101,449	\$ 104,493	\$ 107,628
Recycled water sales and sewer service charges ⁽³⁾	79,503	84,273	86,801	89,405	92,087
Connection fees ⁽⁴⁾	15,000	15,000	20,000	20,000	20,000
Net real estate income ⁽⁵⁾	11,560	12,218	13,540	13,947	14,365
Interest income ⁽⁶⁾	4,696	2,860	2,943	2,722	3,117
Available 1% Property Tax Revenues ⁽⁷⁾	46,971	48,236	49,582	50,975	52,229
Other ⁽⁸⁾	8,000	8,000	8,000	8,000	8,000
Total Revenues	<u>\$ 258,649</u>	<u>\$ 269,081</u>	<u>\$ 282,316</u>	<u>\$ 289,541</u>	<u>\$ 297,426</u>
OPERATION AND MAINTENANCE EXPENSES					
Water services ⁽⁹⁾	\$ 69,826	\$ 74,015	\$ 76,236	\$ 78,523	\$ 80,879
Sewer services ⁽⁹⁾	50,982	54,041	55,662	57,332	59,052
Administrative and general ⁽¹⁰⁾	26,415	26,679	27,213	28,029	28,870
Pension expense ⁽¹¹⁾	9,918	10,216	10,522	10,838	11,163
Other ⁽¹²⁾	2,000	2,000	2,000	2,000	2,000
Total Operation & Maintenance Expenses	<u>\$ 159,141</u>	<u>\$ 166,951</u>	<u>\$ 171,633</u>	<u>\$ 176,721</u>	<u>\$ 181,963</u>
NET REVENUES	\$ 99,508	\$ 102,130	\$ 110,683	\$ 112,820	\$ 115,463
ASSESSMENT PROCEEDS⁽¹³⁾	\$ 12,083	\$ 12,238	\$ 11,286	\$ 11,396	\$ 11,513
TOTAL NET REVENUES AND ASSESSMENT PROCEEDS	<u>\$ 111,591</u>	<u>\$ 114,368</u>	<u>\$ 121,969</u>	<u>\$ 124,215</u>	<u>\$ 126,975</u>
PARITY OBLIGATION DEBT SERVICE⁽¹⁴⁾					
Series 2016 Bonds	\$ 5,301	\$ 7,456	\$ 7,458	\$ 7,455	\$ 7,455
2016 Installment Sale Agreement ⁽¹⁵⁾	9,257	9,341	9,423	9,506	9,630
Series 2011A Bonds ⁽¹⁶⁾	3,206	3,398	3,627	3,941	4,355
Series 2010B Bonds ⁽¹⁷⁾	7,764	7,764	7,764	7,764	10,884
Prior Reimbursement Agreements	-	-	-	-	-
Total Parity Obligation Debt Service	<u>\$ 25,528</u>	<u>\$ 27,959</u>	<u>\$ 28,271</u>	<u>\$ 28,665</u>	<u>\$ 32,323</u>
PARITY OBLIGATION COVERAGE⁽¹⁸⁾	4.4x	4.1x	4.3x	4.3x	3.9x
Revenues Available For Subordinate Debt Service	\$ 86,063	\$ 86,410	\$ 93,697	\$ 95,550	\$ 94,653
SUBORDINATE OBLIGATION DEBT SERVICE⁽¹⁴⁾					
Swap Payments ⁽¹⁹⁾	\$ 3,264	\$ 3,264	\$ 3,264	\$ 2,964	\$ 2,754
State Loans and SCWD Debt ⁽¹⁵⁾	100	100	100	100	100
Total Subordinate Obligation Debt Service	<u>\$ 3,364</u>	<u>\$ 3,364</u>	<u>\$ 3,364</u>	<u>\$ 3,064</u>	<u>\$ 2,854</u>
Sources of Payment for Ad Valorem					
Assessment Bonds:					
Remaining Revenues	\$ 82,699	\$ 83,046	\$ 90,333	\$ 92,486	\$ 91,799
1% Pledged Property Tax Revenues ⁽²⁰⁾	929	1,064	1,218	1,325	1,671
<i>Ad valorem</i> Assessments ⁽²¹⁾	6,217	6,062	7,014	6,904	6,787
Total Funds Available for Ad Valorem	\$ 89,844	\$ 90,171	\$ 98,565	\$ 100,716	\$ 100,257
Assessment Bonds	\$ 89,844	\$ 90,171	\$ 98,565	\$ 100,716	\$ 100,257
Ad Valorem Assessment Bond Debt Service ⁽²²⁾	(9,280)	(9,733)	(10,005)	(10,671)	(11,555)
NET REVENUES AVAILABLE FOR OTHER PURPOSES	<u>\$ 80,564</u>	<u>\$ 80,439</u>	<u>\$ 88,560</u>	<u>\$ 90,046</u>	<u>\$ 88,702</u>

(FOOTNOTES ON FOLLOWING PAGE)

- (1) Based on Fiscal Year 2021 budgeted amounts with certain adjustments.
- (2) Projected to increase approximately 6% in Fiscal Year 2022 and 3% per annum thereafter. See the caption “THE WATER SYSTEM—Projected Water Sales and Service Charge Revenues.”
- (3) Projected to increase approximately 6% in Fiscal Year 2022 and 3% per annum thereafter. See the caption “THE SEWER SYSTEM—Projected Recycled Water Sales and Sewer Service Charge Revenues.”
- (4) Based on District projections of development.
- (5) Based on existing and expected leases. See the captions “THE IRVINE RANCH WATER DISTRICT—Current Investments” and “THE IRVINE RANCH WATER DISTRICT—Projected Net Real Estate Income.”
- (6) Assumes interest rates ranging from 1.15% in Fiscal Year 2021 and 0.75% in Fiscal Year 2022, increasing to 1.40% in Fiscal Year 2025.
- (7) Represents 1% Property Tax Revenues available to pay Debt Service on Parity Obligations after payment of debt service on Secured Bonds from 1% Property Tax Revenues and applicable *ad valorem* assessments. Projected fluctuation in 1% Property Tax Revenues is a result of uneven debt service on Secured Bonds. See the caption “THE IRVINE RANCH WATER DISTRICT—1% Property Tax Revenues.”
- (8) Includes, golf course lease, cell site leases, overallocation revenue, penalty revenue and grants. Projected to remain at Fiscal Year 2021 budgeted amount.
- (9) Projected to increase approximately 3% in Fiscal Year 2021, 6% in Fiscal Year 2022 and 3% per annum thereafter. Water services expenses do not reflect any reduction in payments to OCWD as a result of the Complaint that is discussed under the caption “WATER SUPPLY—Groundwater—General.”
- (10) Projected to increase approximately 1% in Fiscal Year 2022, 2% in Fiscal Year 2023 and 3% per annum thereafter.
- (11) Calculated according to GASB 68 requirements. Projected to increase approximately 3% per annum from Fiscal Year 2021 budgeted amount. See the caption “THE IRVINE RANCH WATER DISTRICT—Pension Benefits.”
- (12) Projected to remain at Fiscal Year 2021 budgeted amount.
- (13) Pro rata share of *ad valorem* assessments based on outstanding par amount of all Ad Valorem Assessment Bonds. Assessment Proceeds are only available to pay debt service on Series 2010B Bonds, Series 2011A Bonds and Series 2016 Bonds and are not available to pay other Parity Obligations which are not general obligation bonds secured by *ad valorem* assessments.
- (14) Does not reflect the issuance of additional debt to finance future capital improvements. See the caption “FUTURE CAPITAL IMPROVEMENTS.”
- (15) Reflects scheduled debt service.
- (16) Projected at SIFMA rates increasing from 0.15% in Fiscal Year 2021 to 1.25% in Fiscal Year 2025. Assumes that the purchase price of Series 2011A Bonds is paid from remarketing proceeds.
- (17) Debt Service net of BAB Credit on Series 2010B Bonds. Reflects announced reductions in BAB Credits only. See the caption “—Reduction in BAB Credits.”
- (18) Total Net Revenues and Assessment Proceeds divided by Total Parity Obligation Debt Service.
- (19) Net swap payments. Assumes LIBOR or successor rate with respect to swaps increasing from 0.25% in Fiscal Year 2021 to 1.10% in Fiscal Year 2025. See the caption “THE IRVINE RANCH WATER DISTRICT—Outstanding Indebtedness—Subordinate Debt—Interest Rate Swap Transactions.”
- (20) Represents District’s share of 1% Property Tax Revenues which, together with the applicable *ad valorem* assessments, is sufficient to pay debt service on the Secured Bonds.
- (21) Pro rata share of *ad valorem* assessments based on outstanding par amount of all *ad valorem* assessment bonds and Series 2010B Bonds, Series 2011A Bonds and Series 2016 Bonds.
- (22) Ad Valorem Assessment Bonds debt projection assumes annual sinking fund payments, SIFMA rates ranging from increasing from 0.15% in Fiscal Year 2021 to 1.25% in Fiscal Year 2025 and letter of credit fees equal to 0.32% of principal. Does not include Series 2010B Bonds, Series 2011A Bonds or Series 2016 Bonds, which are Parity Obligations. Assumes the issuance of \$50 million of new variable rate *ad valorem* assessment bonds issued in Fiscal Year 2025.

Source: The District.

THE IMPROVEMENT DISTRICTS

General

The District contains eight water Improvement Districts and ten sewer Improvement Districts covering specific areas within the District’s boundaries, some of them overlapping and each of which is governed by the Act. The District formed the Improvement Districts in order to allocate funding responsibility for capital facilities to the areas that will benefit from such capital facilities and to separate areas on the basis of projected timing of development so that capital facilities construction can be matched to the development approval decisions of the respective local agency that makes them. Some of the Improvement Districts share in the funding of the District’s regional facilities which the Improvement Districts will use in common, such as major water importation facilities or sewer treatment plants.

Each Improvement District has a respective plan of works and a certain amount of authorized general obligation bonded indebtedness. See Table 3 under the caption “THE IRVINE RANCH WATER

DISTRICT—Outstanding Indebtedness—Improvement District Indebtedness.” The *Ad Valorem* Assessment Bonds issued pursuant to such authorization are sold in each instance by the District on the respective Improvement District’s behalf. The obligation to repay bonds issued on behalf of an Improvement District is secured in each instance by the power of the District to levy and collect within such Improvement District *ad valorem* assessments without limitation as to rate or amount on land only (enforceable by customary rights to foreclose and sell property for delinquent assessments) or, in lieu of assessments, in the District’s discretion, charges for water or sewer service, as applicable, all within the subject Improvement District. These powers and functions are exercised for each Improvement District by the Board of Directors of the District. Although the respective funding obligations of each Improvement District are separate and independent, the Improvement Districts are not operated as separate or independent governmental entities, nor do they have governing boards or any staff. The Improvement Districts are geographical subdivisions of the District through which the District funds capital improvements.

As a result of the District’s discretionary election to use other sources of payment for debt service on *ad valorem* assessment bonds, the annual tax rates set by the District vary from year to year and generally do not result in revenues that correspond with debt service requirements on the *Ad Valorem* Assessment Bonds. The annual tax rates set by the District may vary from year to year for other reasons as well. The District has covenanted under the Indentures that, to the extent necessary to pay debt service on the Series 2011A Bonds, it will impose and collect *ad valorem* assessments on taxable land and In Lieu Charges (as such term is defined in Appendix C) within Improvement District Nos. 113, 125, 213 and 225. See the caption “SECURITY FOR THE SERIES 2011A BONDS—General—Covenant to Collect Assessment Proceeds” in the forepart of this Remarketing Statement.

The California Water Code allows the Board of Directors, in a noticed hearing process, to reorganize its improvement district boundaries and to consolidate coterminous improvement districts. As development progresses to completion in improvement districts and the need for having separate improvement districts to match capital facilities construction timing for different geographic areas diminishes, consolidation of various improvement districts can produce efficiencies for the District. Under the California Water Code provisions, certain improvement districts of the District are the consolidated successors to previously separate water improvement districts or previously separate sewer improvement districts, respectively. In 2013, following studies carried out by the District to identify further opportunities to implement such consolidations and reorganizations of its improvement districts, the District implemented improvement district consolidations that reduced the number of its improvement districts from 33 to 17. The statutory provisions for the consolidation of improvement districts specify that a consolidated improvement district may levy and collect the assessments and charges necessary to satisfy the obligations of its predecessor improvement districts, and that the authorized and unissued bonds of the predecessor improvement districts may be issued and sold as the bonds of the consolidated improvement district. The District believes that its actions to reorganize and/or consolidate improvement districts will not impair the District’s obligation to pay debt service on the outstanding bonds of such improvement districts or the security therefor. See the Remarketing Statement under the caption “INTRODUCTION—Improvement Districts—Improvement District Nos. 125 and 225” for a discussion of the consolidation of Improvement District Nos. 105 and 250 into Improvement District Nos. 125 and 225, respectively.

The following is a general description of each of the Improvement Districts as to which the Series 2011A Bonds constitute consolidated, several general obligations:

Improvement District Nos. 125 and 225

General. At the time of their initial issuance on April 15, 2011, the Series 2011A Bonds constituted the consolidated, several general obligations of Improvement District Nos. 105, 113, 213 and 250. Improvement District Nos. 125 and 225 are the legal successors to Improvement District Nos. 105 and 250, respectively. See the Remarketing Statement under the caption “INTRODUCTION—Improvement

Districts—Improvement District Nos. 125 and 225” for a discussion of the consolidation of Improvement District Nos. 105 and 250 into Improvement District Nos. 125 and 225, respectively.

Improvement District No. 125 (water) covers approximately 35,438 acres of the District, including several contiguous and non-contiguous areas in the central and coastal parts of the District. Improvement District No. 225 (sewer) covers approximately 32,862 acres of the District, including several contiguous and non-contiguous areas in the central part of the District. Currently, the majority of the land within Improvement District Nos. 125 and 225 consists of developed residential and commercial properties. The District expects certain areas within Improvement District Nos. 125 and 225 to be subject to infill development and redevelopment in the future. The District expects such additional development in Improvement District Nos. 125 and 225 to continue through at least 2024.

The *ad valorem* assessments levied by the District in Improvement District Nos. 125 and 225 to pay such Improvement Districts’ respective Included Amounts of debt service on the Series 2011A Bonds will be levied on land only. See Table 3 under the caption “THE IRVINE RANCH WATER DISTRICT—Outstanding Indebtedness—Improvement District Indebtedness” for a description of the authorized, issued, authorized and unissued, and the amount of outstanding Improvement District Nos. 125 and 225 Ad Valorem Assessment Bonds.

The following table presents the assessed valuations of land in Improvement District No. 125 for the current and previous four Fiscal Years.

TABLE 33
IRVINE RANCH WATER DISTRICT
Improvement District No. 125
Assessed Valuations (Land Only)

<i>Fiscal Year</i>	<i>Local Secured</i>	<i>Utility</i>	<i>Unsecured⁽¹⁾</i>	<i>Total</i>
2017	\$35,463,520,016	\$360,065	\$42,511,969	\$35,506,392,050
2018	38,772,258,515	360,065	30,254,798	38,802,873,378
2019	42,940,618,115	553,973	42,559,521	42,983,731,609
2020	45,880,505,430	553,973	43,180,694	45,924,240,097
2021	48,251,707,120	553,973	38,575,168	48,290,836,261

⁽¹⁾ Assessed value of unsecured land only, reflecting possessory interests in tax exempt utility property and gas and oil leases.
Source: California Municipal Statistics, Inc.

The following table presents the assessed valuations of land in Improvement District No. 225 for the current and last four Fiscal Years.

TABLE 34
IRVINE RANCH WATER DISTRICT
Improvement District No. 225
Assessed Valuations (Land Only)

<i>Fiscal Year</i>	<i>Local Secured</i>	<i>Utility</i>	<i>Unsecured⁽¹⁾</i>	<i>Total</i>
2017	\$29,909,778,039	\$360,065	\$34,996,275	\$29,945,134,379
2018	32,815,019,005	360,065	23,543,532	32,838,922,602
2019	36,506,618,586	553,973	42,365,472	36,549,538,031
2020	39,191,007,846	553,973	42,628,832	39,234,190,651
2021	41,344,701,998	553,973	38,581,368	41,383,837,339

⁽¹⁾ Assessed value of unsecured land only, reflecting possessory interests in tax exempt utility property and gas and oil leases.
Source: California Municipal Statistics, Inc.

The following table sets forth information with respect to land only local secured assessed valuation in Improvement District No. 125 (excluding tax exempt utility property and gas and oil leases) by land use for the Fiscal Year ending June 30, 2021:

TABLE 35
IRVINE RANCH WATER DISTRICT
Improvement District No. 125
Assessed Valuation and Parcels by Land Use

	<i>Fiscal Year 2021</i>		<i>No. of</i>	
	<i>Assessed Valuation⁽¹⁾</i>	<i>% of Total</i>	<i>Parcels</i>	<i>% of Total</i>
Non-Residential:				
Rural/Undeveloped	\$ 86,531,421	0.18%	109	0.10%
Commercial/Office	4,279,101,863	8.87	1,522	1.39
Industrial	2,013,443,056	4.17	1,129	1.03
Government/Social/Institutional	8,402,112	0.02	233	0.21
Miscellaneous	<u>17,454,170</u>	<u>0.04</u>	<u>10</u>	<u>0.01</u>
Subtotal Non-Residential	\$ 6,404,932,622	13.27%	3,003	2.74%
Residential:				
Single Family Residence	\$28,400,454,824	58.86%	39,857	36.42%
Condominium	12,644,624,000	26.21	33,125	30.27
2+ Residential Units/Apartments	716,978,896	1.49	243	0.22
Timeshare Interests	<u>84,716,778</u>	<u>0.18</u>	<u>33,205</u>	<u>30.34</u>
Subtotal Residential	\$41,846,774,498	86.73%	106,430	97.26%
Total	<u>\$48,251,707,120</u>	<u>100.00%</u>	<u>109,433</u>	<u>100.00%</u>

⁽¹⁾ Land Only Local Secured Assessed Valuation; excludes assessed value of unsecured land (possessory interests in tax exempt utility property and gas and oil leases).
Source: California Municipal Statistics, Inc.

The following table sets forth information with respect to land only local secured assessed valuation in Improvement District No. 225 (excluding tax exempt utility property and gas and oil leases) by land use for the Fiscal Year ending June 30, 2021:

TABLE 36
IRVINE RANCH WATER DISTRICT
Improvement District No. 225
Assessed Valuation and Parcels by Land Use

	<i>Fiscal Year 2021</i> <i>Assessed Valuation</i> ⁽¹⁾	<i>% of Total</i>	<i>No. of</i> <i>Parcels</i>	<i>% of Total</i>
Non-Residential:				
Rural/Undeveloped	\$ 63,331,821	0.15%	97	0.13%
Commercial/Office	4,239,608,822	10.25	1,469	1.95
Industrial	1,972,599,146	4.77	1,101	1.46
Government/Social/Institutional	5,442,473	0.01	203	0.27
Miscellaneous	<u>17,029,191</u>	<u>0.04</u>	<u>9</u>	<u>0.01</u>
Subtotal Non-Residential	\$ 6,298,011,453	15.23%	2,879	3.83%
Residential:				
Single Family Residence	\$ 21,968,611,285	53.14%	39,124	52.00%
Condominium	12,366,708,817	29.91	32,997	43.86
2+ Residential Units/Apartments	<u>711,370,443</u>	<u>1.72</u>	<u>241</u>	<u>0.32</u>
Subtotal Residential	\$ 35,046,690,545	84.77%	72,362	96.17%
Total	<u>\$ 41,344,701,998</u>	<u>100.00%</u>	<u>75,241</u>	<u>100.00%</u>

⁽¹⁾ Land Only Local Secured Assessed Valuation; excludes assessed value of unsecured land (possessory interests in tax exempt utility property and gas and oil leases).

Source: California Municipal Statistics, Inc.

Principal Taxpayers. The following table lists the major taxpayers in Improvement District No. 125 based on land only local secured assessed valuations for the Fiscal Year ending June 30, 2021:

TABLE 37
IRVINE RANCH WATER DISTRICT
Improvement District No. 125
Largest Local Secured Taxpayers

	<i>Property Owner</i>	<i>Primary Land Use</i>	<i>Fiscal Year 2021</i> <i>Assessed Valuation</i>	<i>% of</i> <i>Total</i> ⁽¹⁾
1.	The Irvine Company	Commercial	\$ 476,206,683	0.99%
2.	Centerpoint Properties Trust	Commercial	227,715,000	0.47
3.	Five Point Office Venture	Commercial	227,262,565	0.47
4.	Lennar Homes of California Inc.	Residential Development	141,443,971	0.29
5.	Sand Canyon Business Center LLC	Commercial	88,570,436	0.18
6.	Olen Properties Corp.	Commercial	87,454,370	0.18
7.	Heritage Fields El Toro LLC	Commercial	83,131,383	0.17
8.	Irvine Spectrum Center LLC	Commercial	54,497,723	0.11
9.	PH Finance LLC	Commercial	53,256,629	0.11
10.	LBA RVI-Company XIX LLC	Commercial	<u>51,000,000</u>	<u>0.11</u>
	TOTAL		<u>\$ 1,490,538,760</u>	3.09%

⁽¹⁾ Fiscal Year 2021 Local Secured Assessed Valuation (Land Only): \$48,251,707,120.

Source: California Municipal Statistics, Inc.

The following table lists the major taxpayers in Improvement District No. 225 based on land only local secured assessed valuations for the Fiscal Year ending June 30, 2021:

TABLE 38
IRVINE RANCH WATER DISTRICT
Improvement District No. 225
Largest Local Secured Taxpayers

	<i>Property Owner</i>	<i>Primary Land Use</i>	<i>Fiscal Year 2021 Assessed Valuation</i>	<i>% of Total⁽¹⁾</i>
1.	The Irvine Company	Commercial	\$ 503,397,339	1.22%
2.	Centerpoint Properties Trust	Commercial	227,715,000	0.55
3.	Five Point Office Venture	Commercial	227,262,565	0.55
4.	Lennar Homes of California Inc.	Residential Development	141,443,971	0.34
5.	Sand Canyon Business Center LLC	Commercial	88,570,436	0.21
6.	Olen Properties Corp.	Commercial	87,454,370	0.21
7.	Heritage Fields El Toro LLC	Commercial	83,131,383	0.20
8.	Irvine Spectrum Center LLC	Commercial	54,497,723	0.13
9.	LBA RVI-Company XIX LLC	Commercial	51,000,000	0.12
10.	CHC Bayview Owner LLC	Commercial	<u>38,270,400</u>	<u>0.09</u>
	TOTAL		<u>\$ 1,502,743,187</u>	3.63%

⁽¹⁾ Fiscal Year 2021 Local Secured Assessed Valuation (Land Only): \$41,344,701,998.
Source: California Municipal Statistics, Inc.

Statement of Direct and Overlapping Debt. Set forth in the table below is a direct and overlapping debt report (the “**Debt Reports–I.D. 125/225**”) for Improvement District Nos. 125 and 225, respectively, prepared by California Municipal Statistics, Inc. and effective December 31, 2020. The Debt Reports–I.D. 125/225 were prepared by California Municipal Statistics, Inc., and the District expresses no opinion on the completeness or accuracy of such reports and makes no representation in connection therewith.

California Municipal Statistics, Inc. reports that the Debt Reports–I.D. 125/225 generally include long-term obligations sold in the public credit markets by public agencies whose boundaries overlap the boundaries of Improvement District No. 125 and No. 225 in whole or in part. Such long-term obligations generally are not payable from revenues of the District or Improvement District No. 125 and No. 225 (except as indicated) nor are they necessarily obligations secured by land within Improvement District No. 125 and No. 225. In many cases long-term obligations issued by a public agency are payable only from the general fund or other revenues of such public agency.

TABLE 39
IRVINE RANCH WATER DISTRICT
Improvement District No. 125
Direct and Overlapping Debt Statement

Fiscal Year 2021 Land Only Assessed Valuation: \$48,290,836,261

<u>DIRECT AND OVERLAPPING TAX AND ASSESSMENT DEBT:</u>	<u>% Applicable⁽¹⁾</u>	<u>Debt 12/31/20</u>
Metropolitan Water District	2.701%	\$ 870,532
Coast Community College District	5.254	46,565,667
Rancho Santiago Community College District	0.962	2,076,728
Irvine Unified School District School Facilities Improvement District No. 1	47.137	55,760,714
Laguna Beach Unified School District	14.895	2,371,284
Newport Mesa Unified School District	13.871	33,384,118
Orange Unified School District	2.073	3,687,141
Saddleback Valley Unified School District	35.813	35,764,652
Tustin Unified School District School Facilities Improvement District No. 2002-1	3.516	1,401,094
Tustin Unified School District School Facilities Improvement District No. 2008-1	3.619	2,886,695
Tustin Unified School District School Facilities Improvement District No. 2012-1	31.881	11,811,911
Irvine Ranch Water District Improvement District No. 125	100.000	175,153,624⁽²⁾
Irvine Ranch Water District Improvement District Nos. 153/253	99.987	19,475,960
Irvine Ranch Water District Improvement District Nos. 185/285	100.000	3,301,665
Irvine Ranch Water District Improvement District No. 225	96.419	237,643,816
Irvine Ranch Water District Improvement District No. 240	99.544	15,954,389
Community Facilities Districts	0.737-100.000	904,755,674
County 1915 Act Bonds	100.000	23,545,000
City 1915 Act Bonds	Various	<u>785,513,566</u>
TOTAL DIRECT AND OVERLAPPING TAX AND ASSESSMENT DEBT		\$2,361,924,230
 <u>OVERLAPPING GENERAL FUND DEBT:</u>		
Orange County General Fund Obligations	13.447%	\$ 52,005,600
Orange County Pension Obligation Bonds	13.447	31,259,596
Orange County Board of Education Certificates of Participation	13.447	1,738,697
Coast Community College District General Fund Obligations	5.254	127,410
Orange Unified School District Certificates of Participation and Benefit Obligations	2.073	1,793,642
City of Newport Beach Certificates of Participation	22.569	23,808,038
City of Orange General Fund Obligations	3.423	<u>1,024,504</u>
TOTAL OVERLAPPING GENERAL FUND DEBT		\$ 111,757,487
 OVERLAPPING TAX INCREMENT DEBT (Successor Agencies)		\$ 3,675,887
 COMBINED TOTAL DEBT		\$2,477,357,604⁽³⁾

Ratios to Fiscal Year 2021 Land Only Assessed Valuation:

Direct Debt (\$175,153,624)0.36%
Total Direct and Overlapping Tax and Assessment Debt.....4.89%

Ratios to Adjusted All Property Assessed Valuation:

Combined Total Debt.....2.81%

Ratios to Redevelopment Incremental Valuation (\$749,675,338):

Total Overlapping Tax Increment Debt.....0.49%

⁽¹⁾ Based on all property assessed valuation of \$88,147,286,078.

⁽²⁾ Improvement District No. 125 was formed by consolidating former Improvement District Nos. 105, 106, 102, 121, 130, 135, 140, 161, 182, 184 and 186.

⁽³⁾ Excludes tax and revenue anticipation notes, enterprise revenue, mortgage revenue and tax allocation bonds and non-bonded capital lease obligations.

Source: California Municipal Statistics, Inc.

TABLE 40
IRVINE RANCH WATER DISTRICT
Improvement District No. 225
Direct and Overlapping Debt Statement

Fiscal Year 2021 Land Only Assessed Valuation: \$41,383,837,339

<u>DIRECT AND OVERLAPPING TAX AND ASSESSMENT DEBT:</u>	<u>% Applicable⁽¹⁾</u>	<u>Debt 12/31/20</u>
Metropolitan Water District	2.372%	\$ 764,496
Coast Community College District	0.284	2,517,063
Rancho Santiago Community College District	0.018	38,858
Irvine Unified School District School Facilities Improvement District No. 1	52.947	62,633,654
Newport Mesa Unified School District	2.822	6,791,867
Orange Unified School District	0.038	67,589
Saddleback Valley Unified School District	35.813	35,764,652
Tustin Unified School District School Facilities Improvement District No. 2002-1	5.352	2,132,723
Tustin Unified School District School Facilities Improvement District No. 2008-1	5.509	4,394,254
Tustin Unified School District School Facilities Improvement District No. 2012-1	33.208	12,303,564
Irvine Ranch Water District Improvement District No. 125	84.654	148,274,549
Irvine Ranch Water District Improvement District No. 153/253	99.987	19,475,960
Irvine Ranch Water District Improvement District No. 185/285	100.000	3,301,665
Irvine Ranch Water District Improvement District No. 225	100.000	246,469,903⁽²⁾
Community Facilities Districts	0.737-100.000	891,919,897
City 1915 Act Bonds	Various	<u>660,802,244</u>
TOTAL DIRECT AND OVERLAPPING TAX AND ASSESSMENT DEBT		\$2,097,652,938

<u>OVERLAPPING GENERAL FUND DEBT:</u>		
Orange County General Fund Obligations	11.806%	\$ 45,659,115
Orange County Pension Obligation Bonds	11.806	27,444,842
Orange County Board of Education Certificates of Participation	11.806	1,526,516
Coast Community College District General Fund Obligations	0.284	6,887
Orange Unified School District Certificates of Participation and Benefit Obligations	0.038	32,879
City of Newport Beach Certificates of Participation	3.494	3,685,821
City of Orange General Fund Obligations	0.031	<u>9,278</u>
TOTAL OVERLAPPING GENERAL FUND DEBT		\$ 78,365,338

OVERLAPPING TAX INCREMENT DEBT (Successor Agencies) \$ 3,675,887

COMBINED TOTAL DEBT \$2,179,694,163⁽³⁾

Ratios to Fiscal Year 2021 Land Only Assessed Valuation:

Direct Debt (\$246,469,903)0.60%
 Total Direct and Overlapping Tax and Assessment Debt.....5.07%

Ratios to Adjusted All Property Assessed Valuation:

Combined Total Debt.....2.82%

Ratios to Redevelopment Incremental Valuation (\$710,462,441):

Total Overlapping Tax Increment Debt.....0.52%

⁽¹⁾ Based on all property assessed valuation of \$77,391,984,345

⁽²⁾ Improvement District No. 225 was formed by consolidating former Improvement District Nos. 2(202), 206, 221, 230, 235, 250, 261, 282, 284 and 286.

⁽³⁾ Excludes tax and revenue anticipation notes, enterprise revenue, mortgage revenue and tax allocation bonds and non-bonded capital lease obligations.

Source: California Municipal Statistics, Inc.

Improvement District Nos. 113 and 213

General. Improvement District No. 113 (water) and Improvement District No. 213 (sewer) are coterminous and are located in portions of the Cities of Tustin and Irvine, California. Improvement District No. 113 and Improvement District No. 213 are comprised of approximately 1,629 acres of the land formerly known as Marine Corps Air Station Tustin. The boundaries of Improvement District No. 113 and Improvement District No. 213 are Harvard Avenue on the southeast, Barranca Parkway on the southwest, Red Hill Avenue on the northwest and Edinger Avenue on the northeast. The former helicopter base, now known as Tustin Legacy, is currently being redeveloped with residential, commercial, institutional and recreational uses. The District expects development in Improvement District No. 113 and Improvement District No. 213 to continue through 2024. The District expects that the development will consist of approximately 7,200 dwelling units and approximately 9,700,000 square feet of commercial, institutional and recreational uses when completed.

The *ad valorem* assessments levied by the District in Improvement District Nos. 113 and 213 to pay such Improvement Districts’ respective Included Amounts of debt service on the Series 2011A Bonds will be levied on land only. See Table 3 under the caption “THE IRVINE RANCH WATER DISTRICT—Outstanding Indebtedness—Improvement District Indebtedness” for a description of the authorized, issued, authorized and unissued, and the amount of outstanding Improvement District Nos. 113 and 213 Ad Valorem Assessment Bonds.

The following table presents the assessed valuations of land in Improvement District No. 113 and Improvement District No. 213 for the current and previous four Fiscal Years.

TABLE 41
IRVINE RANCH WATER DISTRICT
Improvement District Nos. 113 and 213
Assessed Valuations (Land Only)

<i>Fiscal Year</i>	<i>Local Secured</i>	<i>Unsecured⁽¹⁾</i>	<i>Total</i>
2017	\$ 884,813,999	\$ 577,549	\$ 885,391,548
2018	1,031,146,805	674,218	1,031,821,023
2019	1,143,798,184	0	1,143,798,184
2020	1,186,307,161	145,009	1,186,452,170
2021	1,265,220,518	17,890,475	1,283,110,993

⁽¹⁾ Assessed value of unsecured land only, reflecting possessory interests in tax exempt utility property and gas and oil leases.
Source: California Municipal Statistics, Inc.

The following table sets forth information with respect to land only local secured assessed valuation in Improvement District No. 113 and Improvement District No. 213 (excluding tax exempt utility property and gas and oil leases) by land use for the Fiscal Year ending June 30, 2021:

TABLE 42
IRVINE RANCH WATER DISTRICT
Improvement District Nos. 113 and 213
Assessed Valuation and Parcels by Land Use

	<i>Fiscal Year 2021 Assessed Valuation⁽¹⁾</i>	<i>% of Total</i>	<i>No. of Parcels</i>	<i>% of Total</i>
Non-Residential:				
Commercial	\$ 167,894,509	13.27%	45	1.33%
Government/Social/Institutional	<u>0</u>	<u>0.00</u>	<u>160</u>	<u>4.72</u>
Subtotal Non-Residential	\$ 167,894,509	13.27%	205	6.04%
Residential:				
Single Family Residence	\$ 601,475,426	47.54%	1,411	41.59%
Condominium/Townhouse	424,702,717	33.57	1,465	43.18
Apartments	35,161,742	2.78	3	0.09
Vacant Residential	<u>35,986,124</u>	<u>2.84</u>	<u>309</u>	<u>9.11</u>
Subtotal Residential	\$ 1,097,326,009	86.73%	3,188	93.96%
Total	<u>\$ 1,265,220,518</u>	<u>100.00%</u>	<u>3,393</u>	<u>100.00%</u>

⁽¹⁾ Land Only Local Secured Assessed Valuation; excludes assessed value of unsecured land (possessory interests in tax exempt utility property and gas and oil leases).

Source: California Municipal Statistics, Inc.

The following table lists the major taxpayers in Improvement District No. 113 and Improvement District No. 213 based on land only local secured assessed valuations for the Fiscal Year ending June 30, 2021:

TABLE 43
IRVINE RANCH WATER DISTRICT
Improvement District Nos. 113 and 213
Largest Local Secured Taxpayers

	<i>Property Owner</i>	<i>Primary Land Use</i>	<i>Fiscal Year 2021 Assessed Valuation</i>	<i>% of Total⁽¹⁾</i>
1.	Vestar/Kimco Tustin LP	Commercial	\$ 85,139,712	6.73%
2.	Legacy Villas LLC	Apartments	35,161,742	2.78
3.	Flight Phase I Owner LLC	Office Development	31,853,451	2.52
4.	Lennar Homes of California Inc.	Residential Development	29,460,751	2.33
5.	Costco Wholesale Corporation	Commercial	16,271,497	1.29
6.	1C Tustin Legacy LLC	Commercial	16,149,425	1.28
7.	Lowes HIW Inc.	Commercial	12,070,767	0.95
8.	Hoag Memorial Hospital Presbyterian	Commercial	9,082,394	0.72
9.	Healthsouth Corporation	Commercial	5,730,523	0.45
10.	2C Tustin Legacy LLC	Commercial	<u>2,856,225</u>	<u>0.23</u>
	TOTAL		<u>\$ 243,776,487</u>	<u>19.27%</u>

⁽¹⁾ Fiscal Year 2021 Local Secured Assessed Valuation (Land Only): \$1,265,220,518.

Source: California Municipal Statistics, Inc.

Statement of Direct and Overlapping Debt. Set forth in the table below is a direct and overlapping debt report (the “**Debt Report–I.D. 113/213**”) for Improvement District No. 113 and Improvement District No. 213 prepared by California Municipal Statistics, Inc. and effective December 31, 2019. The Debt Report–I.D. 113/213 was prepared by California Municipal Statistics, Inc., and the District expresses no opinion on the completeness or accuracy of such reports and makes no representation in connection therewith.

California Municipal Statistics, Inc. reports that the Debt Report–I.D. 113/213 generally includes long-term obligations sold in the public credit markets by public agencies whose boundaries overlap the boundaries of Improvement District No. 113 and Improvement District No. 213 in whole or in part. Such long-term obligations generally are not payable from revenues of the District or Improvement District No. 113 and Improvement District No. 213 (except as indicated) nor are they necessarily obligations secured by land within Improvement District No. 113 and Improvement District No. 213. In many cases long-term obligations issued by a public agency are payable only from the general fund or other revenues of such public agency.

TABLE 44
IRVINE RANCH WATER DISTRICT
Improvement District Nos. 113 and 213
Direct and Overlapping Debt Statement

Fiscal Year 2021 Land Only Assessed Valuation: \$1,283,110,993

<u>DIRECT AND OVERLAPPING TAX AND ASSESSMENT DEBT:</u>	<u>% Applicable⁽¹⁾</u>	<u>Debt 12/31/20</u>
Metropolitan Water District	0.083%	\$ 26,751
Rancho Santiago Community College District	0.134	289,274
Rancho Santiago Community College District School Facilities Improvement District No. 1	0.251	401,525
Irvine Unified School District School Facilities Improvement District	3.002	3,551,216
Santa Ana Unified School District	0.310	841,898
Tustin Unified School District School Facilities Improvement District No. 2002-1	8.031	3,200,281
Tustin Unified School District School Facilities Improvement District No. 2008-1	5.398	4,305,715
Tustin Unified School District School Facilities Improvement District No. 2012-1	3.789	1,403,825
Tustin Unified School District Community Facilities District No. 06-1	100.000	13,755,000
City of Irvine Community Facilities District No. 2005-2	99.263	12,869,448
Irvine Ranch Water District Improvement District No. 113	100.000	13,749,920
Irvine Ranch Water District Improvement District No. 213	100.000	22,267,396
City of Tustin Community Facilities District Nos. 04-1, 06-1 and 07-1	60.457-100.000	91,044,087
TOTAL DIRECT AND OVERLAPPING TAX AND ASSESSMENT DEBT		\$167,706,336

<u>OVERLAPPING GENERAL FUND DEBT:</u>		
Orange County General Fund Obligations	0.413%	\$ 1,597,257
Orange County Pension Obligation Bonds	0.413	960,081
Orange County Board of Education Certificates of Participation	0.413	53,401
Santa Ana Unified School District Certificates of Participation	0.310	185,457
TOTAL OVERLAPPING GENERAL FUND DEBT		\$ 2,796,196

<u>OVERLAPPING TAX INCREMENT DEBT</u>		
Successor Agency to Tustin Redevelopment Agency	55.582%	\$ 26,804,420
TOTAL OVERLAPPING TAX INCREMENT DEBT		\$ 26,804,420

COMBINED TOTAL DEBT \$197,306,952⁽²⁾

Ratios to Fiscal Year 2020 Land Only Assessed Valuation:

Direct Debt (\$36,017,316)	2.81%
Total Direct and Overlapping Tax and Assessment Debt.....	13.07%

Ratios to Adjusted All Property Assessed Valuation:

Combined Total Debt	7.29%
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Ratios to Redevelopment Incremental Valuation (\$968,707,186):

Overlapping Tax Increment Debt	2.77%
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⁽¹⁾ Based on all property assessed valuation of \$2,704,939,690.

⁽²⁾ Excludes tax and revenue anticipation notes, enterprise revenue, mortgage revenue and tax allocation bonds and non-bonded capital lease obligations.

Source: California Municipal Statistics, Inc.

CONSTITUTIONAL LIMITATIONS ON APPROPRIATIONS AND CHARGES

Proposition 218

General. An initiative measure entitled the “Right to Vote on Taxes Act” (the “**Initiative**”) was approved by the voters of the State of California at the November 5, 1996 general election. The Initiative added Article XIII C and Article XIII D to the California Constitution. According to the “Title and Summary” of the Initiative prepared by the California Attorney General, the Initiative limits “the authority of local governments to impose taxes and property-related assessments, fees and charges.”

Article XIII D. Article XIII D defines the terms “fee” and “charge” to mean “any levy other than an *ad valorem* tax, a special tax or an assessment, imposed by an agency upon a parcel or upon a person as an incident of property ownership, including a user fee or charge for a property related service.” A “property-related service” is defined as “a public service having a direct relationship to property ownership.” Article XIII D further provides that reliance by an agency on any parcel map (including an assessor’s parcel map) may be considered a significant factor in determining whether a fee or charge is imposed as an incident of property ownership.

Article XIII D requires that any agency imposing or increasing any property-related fee or charge must provide written notice thereof to the record owner of each identified parcel upon which such fee or charge is to be imposed and must conduct a public hearing with respect thereto. The proposed fee or charge may not be imposed or increased if a majority of owners of the identified parcels file written protests against it.

In July 2006, the California Supreme Court held, in *Bighorn-Desert View Water Agency v. Verjil*, 39 Cal. 4th 205 (2006) (“**Bighorn**”), that the initiative power described in Article XIII C applies to any local taxes, assessments, fees and charges as defined in Articles XIII C and XIII D. Article XIII D defines “fee” or “charge” to mean a levy (other than *ad valorem* or special taxes or assessments) imposed by a local government “upon a parcel or upon a person as an incident of property ownership,” including a user fee for a “property related service.” The Court also found that charges for water delivery are charges for a property-related service and, therefore, constitute “fees” or “charges” within the meaning of both Article XIII D and section 3 of Article XIII C. In accordance with Article XIII D and the decision in *Bighorn*, the District has conducted notice and hearing proceedings to comply with requirements of Article XIII D with respect to proposed increases of rates and charges since Fiscal Year 2007. See the captions “THE WATER SYSTEM—Water System Rates and Charges” and “THE SEWER SYSTEM—Sewer System Rates and Charges.”

On April 20, 2015, the California Court of Appeal, Fourth District, issued an opinion in *Capistrano Taxpayers Association, Inc. v. City of San Juan Capistrano*, 235 Cal. App. 4th 1493 (2015) (“**SJC**”) upholding tiered water rates under Proposition 218 provided that the rates correspond to the actual cost of furnishing service at a given level of usage. The opinion included a finding that the City of San Juan Capistrano did not attempt to calculate the actual costs of providing water at various tier levels. The District’s tiered water rates are described under the caption “THE WATER SYSTEM—Water System Rates and Charges.” The District does not currently expect the *SJC* ruling to affect its water rate structure or have a material adverse effect on its financial condition.

Article XIII C. Article XIII C provides that the initiative power shall not be prohibited or otherwise limited in matters of reducing or repealing any local tax, assessment, fee or charge and that the power of initiative to affect local taxes, assessments, fees and charges shall be applicable to all local governments. Article XIII C does not define the terms “local tax,” “assessment,” “fee” or “charge.” In light of *Bighorn* and as discussed above under the caption “—Article XIII D,” the terms “fee” and “charge” as used in Article XIII C include, at a minimum, all of the fees and charges within the “property related” qualification set forth in Article XIII D. Moreover, the provisions of Article XIII C are not expressly limited to local taxes, assessments, fees and charges imposed after November 6, 1996. Therefore, in the absence of other limitations, provisions of Article XIII C could be applicable to the water and sewer rates charged by the District.

On August 3, 2020, the State Supreme Court issued an opinion in *Wilde v. City of Dunsmuir* (Cal. S. Ct. S252915) holding that the taxation exemption from the State Constitution’s referendum process applies to measures setting water rates, and that the Initiative does not subject water rates to challenge by referendum. The District and its general counsel do not believe that current applicable case law interpreting Article XIII C grants to the voters within the District the power to repeal or reduce rates and charges in a manner which would be inconsistent with the contractual obligations of the District. However, there can be no assurance of the availability of particular remedies adequate to protect the beneficial owners of the Series 2011A Bonds. Remedies available to beneficial owners of the Series 2011A Bonds in the event of a default by the District are dependent upon judicial actions which are often subject to discretion and delay and could prove both expensive and time-consuming to obtain.

Proposition 26

On November 2, 2010, voters in the State approved Proposition 26. Proposition 26 amends Article XIII C of the State Constitution to expand the definition of “tax” to include “any levy, charge, or exaction of any kind imposed by a local government” except the following: (1) a charge imposed for a specific benefit conferred or privilege granted directly to the payor that is not provided to those not charged, and which does not exceed the reasonable costs to the local government of conferring the benefit or granting the privilege; (2) a charge imposed for a specific government service or product provided directly to the payor that is not provided to those not charged, and which does not exceed the reasonable costs to the local government of providing the service or product; (3) a charge imposed for the reasonable regulatory costs to a local government for issuing licenses and permits, performing investigations, inspections, and audits, enforcing agricultural marketing orders, and the administrative enforcement and adjudication thereof; (4) a charge imposed for entrance to or use of local government property, or the purchase, rental, or lease of local government property; (5) a fine, penalty, or other monetary charge imposed by the judicial branch of government or a local government, as a result of a violation of law; (6) a charge imposed as a condition of property development; and (7) assessments and property-related fees imposed in accordance with the provisions of Article XIII D. Proposition 26 provides that the local government bears the burden of proving by a preponderance of the evidence that a levy, charge, or other exaction is not a tax, that the amount is no more than necessary to cover the reasonable costs of the governmental activity, and that the manner in which those costs are allocated to a payor bear a fair or reasonable relationship to the payor’s burdens on, or benefits received from, the governmental activity. The District does not believe that the enactment of Proposition 26 has affected its ability to levy rates and charges for water, recycled water or sewer service.

Article XIII A

General. On June 6, 1978, California voters approved Proposition 13, which added Article XIII A to the California Constitution (“**Article XIII A**”). Article XIII A limits the amount of any *ad valorem* tax on real property to one percent of the full cash value thereof, except that additional *ad valorem* taxes may be levied to pay debt service on indebtedness approved by the voters prior to July 1, 1978 and (as a result of an amendment to Article XIII A approved by California voters on June 3, 1986) on bonded indebtedness for the acquisition or improvement of real property that has been approved on or after July 1, 1978 by the voters voting on such indebtedness. Article XIII A defines full cash value to mean “the county assessor’s valuation of real property as shown on the 1975/76 tax bill under ‘full cash value’ or, thereafter, the appraised value of real property when purchased, newly constructed, or a change in ownership has occurred after the 1975 assessment.” This full cash value may be increased at a rate not to exceed two percent per year to account for inflation.

Article XIII A has subsequently been amended to permit reduction of the “full cash value” base in the event of declining property values caused by damage, destruction or other factors to provide that there would be no increase in the “full cash value” base in the event of reconstruction of property damaged or destroyed in a disaster and in other minor or technical ways.

Legislation Implementing Article XIII A. Legislation has been enacted and amended a number of times since 1978 to implement Article XIII A. Under current law, local agencies are no longer permitted to levy directly any property tax (except to pay voter-approved indebtedness). The 1% property tax is automatically levied by each California county and distributed according to a formula among taxing agencies. The formula apportions the tax roughly in proportion to the relative shares of taxes levied prior to 1979.

Increases of assessed valuation resulting from reappraisals of property due to new construction, change in ownership or from the 2% annual adjustment are allocated among the various jurisdictions in the “taxing area” based upon the location of reappraised property and the value of property within each taxing agency. Any such allocation made to a local agency continues as part of its allocation in future years.

Article XIII B

An initiative to amend the California Constitution entitled “Limitation of Government Appropriations” was approved on November 6, 1979 thereby adding Article XIII B to the California Constitution (“**Article XIII B**”). Under Article XIII B state and local governmental entities have an annual “appropriations limit” and are not permitted to spend certain moneys that are called “appropriations subject to limitation” (consisting of tax revenues, state subventions and certain other funds) in an amount higher than the “appropriations limit.” Article XIII B does not affect the appropriations of moneys that are excluded from the definition of “appropriations subject to limitation,” including debt service on indebtedness existing or authorized as of January 1, 1979, or bonded indebtedness subsequently approved by the voters. In general terms, the “appropriations limit” is to be based on certain 1978-79 expenditures and is to be adjusted annually to reflect changes in consumer prices, populations, and services provided by these entities. Among other provisions of Article XIII B, if these entities’ revenues in any year exceed the amounts permitted to be spent, the excess would have to be returned by revising tax rates or fee schedules over the subsequent two years.

The District is of the opinion that its rates and charges for water, sewer and recycled water services do not exceed the costs it reasonably bears in providing such services and therefore are not subject to the limits of Article XIII B, and that tax revenues and other revenues received by the District which may constitute the “proceeds of taxes” are appropriated for debt service or qualified capital outlay projects and are not subject to

Future Initiatives

Article XIII A, Article XIII B, Proposition 218 and Proposition 26 were each adopted as measures that qualified for the ballot pursuant to California’s initiative process. From time to time other initiative measures could be adopted, further affecting ability of the District to collect or expend Revenues.

EXHIBIT "B"

RESOLUTION NO. 2021-3

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

The Irvine Ranch Water District ("IRWD") previously issued the "Bonds of Irvine Ranch Water District, Refunding Series 2011A-1" (the "Series A-1 Bonds") and "Bonds of Irvine Ranch Water District, Refunding Series 2011A-2" (the "Series A-2 Bonds" and, together with the Series A-1 Bonds, the "Bonds").

In Resolution No. 2011-10, adopted by IRWD authorizing and providing for the issuance of the Bonds, the Treasurer of IRWD was authorized, when the Bonds of either or both series shall be in an index tender mode, for all tender periods, to do or cause to be done any and all of the following, if and to the extent required or permitted by the applicable Indenture: to require an unscheduled mandatory tender and establish the date thereof, to rescind an unscheduled mandatory tender, to determine the scheduled mandatory tender date and call protection date for each ensuing tender period, and on behalf of IRWD in connection with all of the foregoing to give, exercise, make and deliver any notices, directions, elections and requests required or permitted in the applicable Indenture or remarketing agreement to be given, exercised, made or delivered by IRWD.

Pursuant to such authority, the Treasurer has determined that an unscheduled mandatory tender shall be effected for each series of the Bonds on or about February 4, 2021 or such other date as may be determined by the Treasurer (the "Unscheduled Mandatory Tenders").

This Board of Directors desires to approve the form of the remarketing statement (the "Remarketing Statement") to be used in connection with the remarketing of the respective series of the Bonds upon the purchase thereof pursuant to the Unscheduled Mandatory Tenders.

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

Section 1. The Remarketing Statement relating to the Unscheduled Mandatory Tenders of the respective series of the Bonds, to be dated the date determined by the Treasurer and in substantially the form presented to the Board of Directors at this meeting, is hereby approved with such changes thereto as the Treasurer with the concurrence of the President shall approve (such approval and concurrence to be conclusively evidenced by execution and delivery thereof). The Board of Directors hereby approves the use of the Remarketing Statement by the remarketing agent for the respective series, including delivery of the Remarketing Statement in electronic form, in connection with the remarketing of the Bonds pursuant to the Unscheduled Mandatory Tenders, and the Board of Directors hereby further approves the use by the

remarketing agent of any supplements or amendments to the Remarketing Statement, including delivery of any such supplements or amendments in electronic form, which the Treasurer shall determine are necessary so that such Remarketing Statement does not include any untrue statement of a material fact and does not omit to state a material fact necessary to make the statement therein not misleading. The Treasurer of IRWD is hereby authorized and directed to execute the Remarketing Statement and any amendments or supplements thereto, in the name and on behalf of IRWD and thereupon to cause the Remarketing Statement and any such amendments or supplements to be delivered to the respective remarketing agent.

Section 2. The distribution of the Remarketing Statement, inclusive of the above-authorized changes, is hereby authorized in connection with the remarketing of the Bonds pursuant to the Unscheduled Mandatory Tenders.

Section 3. The President, the Treasurer, the Secretary and each other officer of IRWD, acting singly, be and each of them hereby is authorized and directed to execute and deliver any and all documents and instruments, and to do and cause to be done any and all acts and things necessary or proper for carrying out the transactions contemplated by this resolution.

Section 4. This resolution shall take effect immediately upon its adoption.

ADOPTED, SIGNED AND APPROVED this 25th day of January, 2021.

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:
Hanson Bridgett LLP

By: _____
Legal Counsel

January 25, 2021
Prepared and
submitted by: C. Compton
Approved by: Paul A. Cook



CONSENT CALENDAR

2021 LEGISLATIVE AND REGULATORY UPDATE

SUMMARY:

This report provides an update on the 2021-2022 legislative session, regulatory issues, and IRWD priorities. As legislation and regulations develop, staff will provide updates and recommendations to the Water Resources Policy and Communications Committee (Committee) and the Board, as appropriate. Staff recommends the Board consider the following actions/positions:

- *AB 59 (Gabriel) – Mitigation Fee Act: “OPPOSE”;*
- *SB 55 (Stern) – Very High Fire Hazard Severity Zone: Development Prohibition: “SEEK AMENDMENTS”;* and
- *COVID-19 Financial Relief for Water Agencies – “SUPPORT IN CONCEPT”.*

BACKGROUND:

The 2021-2022 state legislative session convened on December 7, 2020. New members of the Legislature were sworn into office that day. The Legislature then recessed until January 4, 2021, when the first year of the 2021-2022 legislative session was to be convened. Due to the current surge in COVID-19 cases, the Senate President pro Tempore and the Assembly Speaker moved the reconvening date back to January 11, 2021. At least one day prior to the Legislature’s return to session, Governor Gavin Newsom will submit his proposed Fiscal Year 2021-2022 budget to the Legislature.

January 22 is the last day for bills to be submitted to the Office of the Legislative Counsel. The bill introduction deadline this year is February 19, although resolutions and constitutional amendments can be introduced after that date. The first policy committee deadlines are in late April and early May.

A copy of the 2021 Legislative Matrix is provided as Exhibit “A”. Links to the bills discussed below are included within each discussion, unless a separate exhibit is noted.

2021 State Legislative Update:

AB 59 (Gabriel, D-Woodland Hills) – Mitigation Fee Act:

Under Government Code Section 66022, a lawsuit seeking to invalidate water and sewer connection fees or capacity charges must be filed within 120 days of the effective date of the ordinance, resolution or motion adopting the fee or charge. This creates a 120-day statute of limitations for challenging water and sewer connection fees, and capacity charges. AB 59 proposes to delete this provision of the Government Code and, instead, treat connection fees and

capacity charges in the same manner as development impact fees (DIF). Existing law allows a DIF to be paid under protest and then challenged within 180-days of the fee being paid to the local agency. Additionally, AB 59 makes other changes to the notice and evidence a board can consider when adopting connection and capacity fees or charges.

Staff recommends the Board adopt an “oppose” position on AB 59 as it fails to distinguish between DIFs and connection fees, would impact IRWD’s ability to adopt cost-based connection fees, and would repeal Government Code Section 66022.

SB 55 (Stern, D-Calabasas) – Very High Fire Hazard Severity Zone: Development Prohibition:

SB 55 was introduced on December 7, 2020. The bill, which is a reintroduction of SB 474 (Stern) from last year, proposes to prohibit new residential, commercial, retail and industrial development within a very high fire severity zone or state responsibility area. As currently drafted, the language of the bill does not clearly exclude utility infrastructure from the bill’s development prohibition and, therefore, creates uncertainty as to whether infrastructure development is permitted. The author’s office has indicated that they do not intend for the bill to prohibit the development of facilities and infrastructure related to water service.

Staff recommends the Board adopt a “seek amendments” position on SB 55. The amendments sought would be clarification that the bill does not apply to water and wastewater utility infrastructure and facilities.

COVID-19 Financial Relief for Water Agencies

The San Diego County Water Authority has been working to develop legislation directing that a portion of the federal COVID-19 relief received by the State of California be allocated to water suppliers to pay for some of the outstanding debt customers have accumulated as a result of the COVID-19 shutoffs moratorium. On January 12, 2021, staff provided an update on the status of this proposal to the Committee and recommends the Board adopt a “support in concept” position on allocating a portion of the federal COVID-19 relief equitably to water districts across the state to assist customers with their outstanding debt.

2021 State Regulatory Update:

State Water Resources Control Board’s Survey on COVID-19 Impacts:

The State Water Resources Control Board was expected to receive a report from its staff at its January 5, 2021, Board meeting on the survey results from the November 2020 COVID-19 financial impacts survey that was sent to water agencies. As yet, the report has not placed on the State Board’s agenda.

2021 State Regulatory Update:

The following is a list of some of the State regulations and agency reports staff is monitoring, tracking or planning to engage in over the next three to 12 months. As the next drafts of the regulations or report are released for public review and comment, staff will engage, as appropriate.

The pending regulations and reports actively being tracked include the:

- Board of Forestry and Fire Protection’s propose “[Fire Safe Regulations](#)”;
- California Air Resources Board’s [proposed “Advanced Clean Trucks Regulation;](#)”
- California Air Resources Board’s Heavy-Duty Vehicle Inspection and Maintenance Program;
- California Plumbing Code Update;
- California Water Commission Workshops on Water Conveyance;
- Department of Water Resources (DWR) and the State Board’s implementation of the “[Making Water Conservation a California Way of Life](#)” legislation;
- Implementation of Executive Order [EO-N-82-2020](#) requiring 30 percent of the state’s land and coastal waters to be conserved by 2030;
- Implementation of the Governor’s Water Resiliency Portfolio;
- State Board’s adopted “[Definition of Microplastics in Drinking Water;](#)”
- State Board’s development of a “[Cross Connection Policy Handbook;](#)”
- State Board’s Electronic Annual Report;
- State Board’s [Safe and Affordable Funding for Equity and Resilience \(SAFER\) Drinking Water Program;](#) and
- State Board’s [Water Loss Performance Standards Regulations.](#)

2021 Federal Legislative Update:

IRWD’s federal advocacy efforts in 2021 continue to largely focus on seeking federal funding for the Kern Fan Groundwater Storage Project and advocating for an increased funding authorization for the federal Water Storage Program. As the nation’s attention has shifted to COVID-19, staff and the District’s advocates have been tracking the federal legislation dealing with the coronavirus. Staff also continues to track federal legislation related to infrastructure funding. Staff updated the Committee on these efforts and on the ongoing efforts related to positioning the Kern Fan Groundwater Storage Project for federal funding this year, and other federal proposals of interest to the District.

FISCAL IMPACTS:

Not applicable.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

This item was reviewed by the Water Resources Policy and Communications Committee on January 12, 2021.

RECOMMENDATION:

THAT THE BOARD ADOPT AN “OPPOSE” POSITION ON AB 59 (GABRIEL), A “SEEK AMENDMENTS” POSITION ON SB 55 (STERN), AND A “SUPPORT IN CONCEPT” POSITION ON THE LEGISLATIVE CONCEPT TO ALLOCATING A PORTION OF CALIFORNIA’S FEDERAL COVID-19 RELIEF FUNDING EQUITABLY TO WATER DISTRICTS ACROSS THE STATE TO ASSIST CUSTOMERS WITH THEIR OUTSTANDING DEBT.

LIST OF EXHIBITS:

Exhibit “A” – IRWD Legislative Matrix

EXHIBIT “A”
IRWD 2021 LEGISLATIVE MATRIX
Updated 01/04/2021

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
<u>AB 1</u> Garcia (D)	Hazardous Waste		Creates the Board of Environmental Safety in the California Environmental Protection Agency. Provides requirements for the membership of the board and requires the board to conduct no less than 6 public meetings per year. Provides for the duties of the board, which would include, among others, reviewing specified policies, processes, and programs within the hazardous waste control laws.	12/07/2020 - INTRODUCED.
<u>AB 2</u> Fong (R)	Regulations: Legislative Review: Regulatory Reform		Requires the Office of Administrative Law to submit to each house of the Legislature for review a copy of each major regulation that it submits to the Secretary of State. Requires each state agency to review that agency's regulations, identify any regulations that are duplicative, overlapping, inconsistent, or out of date, to revise those identified regulations, and report to the Legislature and Governor.	12/07/2020 - INTRODUCED.
<u>AB 5</u> Fong (R)	Greenhouse Gas Reduction Fund: High Speed Rail		Suspends the appropriation to the High-Speed Rail Authority for the 2021-22 and 2022-23 fiscal years and requires the transfer of those amounts from moneys collected by the State Air Resources Board to the General Fund. Specifies that the transferred amounts shall be available to support K-12 education and to offset any funding reduction for K-12 education.	12/07/2020 - INTRODUCED.
<u>AB 9</u> Wood (D)	Wildfires		States the intent of the Legislature to enact subsequent legislation that would increase California's capacity to prevent and reduce the impact of wildfires.	12/07/2020 - INTRODUCED.
<u>AB 11</u> Ward (D)	Climate Change: Regional Coordinating Groups		Requires the Strategic Growth Council to establish up to 12 regional climate change coordinating groups to develop and work on climate adaptation for their communities. Authorizes the regional climate change coordinating groups to engage in certain activities to address climate change.	12/07/2020 - INTRODUCED.

IRWD 2021 LEGISLATIVE MATRIX
Updated 01/04/2021

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
<u>AB 15</u> Chiu (D)	COVID-19 Relief: Tenancy Stabilization Act of 2021		Extends the definition of "COVID-19 rental debt" as unpaid rent or any other unpaid financial obligation of a tenant that came due between March 1, 2020, and December 31, 2021. Extends the repeal date of the COVID-19 Tenant Relief Act of 2020 to January 1, 2026. Prohibits a landlord from taking certain actions with respect to a tenant's COVID-19 rental debt, including, among others, charging or attempting to collect late fees, or withholding a service or amenity.	12/07/2020 - INTRODUCED.
<u>AB 16</u> Chiu (D)	Tenancies: Tenant, Small Landlord, and Housing Act		States the intent of the Legislature to enact the Tenant, Small Landlord, and Affordable Housing Provider Stabilization Act of 2021 to address the long-term financial impacts of the COVID-19 pandemic on renters, small landlords, and affordable housing providers, ensure ongoing housing stability for tenants at risk of eviction, and stabilize rental properties at risk of foreclosure.	12/07/2020 - INTRODUCED.
<u>AB 20</u> Lee (D)	Political Reform Act of 1974: Clean Money Act of 2021		Enacts the Clean Money Act of 2021, would prohibit a candidate for elective office from receiving a contribution from a business entity, and a business entity from making a contribution to a candidate for elective office, and would make related findings and declarations.	12/07/2020 - INTRODUCED.
<u>AB 25</u> Kiley (R)	Worker Classification: Employees and Contractors		Generally repeals provisions relating to the "ABC" test to determine if workers are employees or independent contractors. The bill would instead require the determination of whether a person is an employee or an independent contractor to be based on the specific multifactor test set forth in the Borello decision, including whether the person to whom service is rendered has the right to control the manner and means of accomplishing the result desired.	12/07/2020 - INTRODUCED.
<u>AB 29</u> Cooper (D)	State Bodies: Meetings		Requires that the notice of a meeting of a state body include all writings or materials provided for the noticed meeting to a member of the state body by the staff of a state agency, board, or commission, or another member of the state body that are in	12/07/2020 - INTRODUCED.

IRWD 2021 LEGISLATIVE MATRIX
Updated 01/04/2021

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
			connection with a matter subject of discussion or consideration at the meeting.	
<u>AB 33</u> Ting (D)	Natural Gas		Prohibits the Department of General Services from approving or providing funding from the construction on new school buildings that have natural gas connections. Prohibits new public buildings for which construction begins on or after January 1, 2022, to have natural gas connections.	12/07/2020 - INTRODUCED.
<u>AB 49</u> Petrie-Norris (D)	California Debt Limit Allocation Committee		States the intent of the Legislature to enact future legislation that would eliminate the California Debt Limit Allocation Committee and that would transfer the duties and authority of that committee to the California Tax Credit Allocation Committee.	12/07/2020 - INTRODUCED.
<u>AB 50</u> Boerner Horvath (D)	Climate Adaptation Center and Regional Support Network		Establishes the Climate Adaptation Center and Regional Support Network in the Ocean Protection Council to provide local governments facing sea level rise challenges with information and scientific expertise necessary to proceed with sea level rise mitigation.	12/07/2020 - INTRODUCED.
<u>AB 51</u> Quirk (D)	Regional Climate Adaptation Planning Groups		Requires the Strategic Growth Council, by July 1, 2022, to establish guidelines for the formation of regional climate adaptation planning groups. Requires the council, by July 1, 2023, and in consultation with certain state entities, to develop criteria for the development of regional climate adaptation plans.	12/07/2020 - INTRODUCED.
<u>AB 52</u> Frazier (D)	California Global Warming Solutions Act of 2006		Requires the State Air Resources Board, in each scoping plan update prepared by the state board after January 1, 2022, to include, consistent with the Global Warming Solutions Act of 2006, recommendations for achieving the maximum technologically feasible and cost-effective reductions of emissions of greenhouse gases and black carbon from wildfires. Expresses the intent of the Legislature to appropriate an amount from the Greenhouse Gas Reduction Fund for wildfire mitigation and prevention.	12/07/2020 - INTRODUCED.

IRWD 2021 LEGISLATIVE MATRIX
Updated 01/04/2021

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
<u>AB 53</u> Low (D)	Election Day Holiday		Adds the day on which a statewide general election is held, which is the first Tuesday after the first Monday in November of any even-numbered year, to the list of holidays. Requires community colleges and public schools to close on any day on which a statewide general election is held. Requires that state employees, with specified exceptions, be given time off with pay for days on which a statewide general election is held.	12/07/2020 - INTRODUCED.
<u>AB 55</u> Boerner Horvath (D)	Employment: Telecommuting		Declares the intent of the Legislature to enact future legislation to ensure certain rights and benefits for telecommuting employees.	12/07/2020 - INTRODUCED.
<u>AB 59</u> Gabriel (D)	Mitigation Fee Act: Fees: Notice and Timeliness		Relates to the Mitigation Fee Act. Increases, for fees and service charges and for fees for specified public facilities, the time for mailing the notice of the time and place of the meeting to at least 45 days before the meeting. Requires the local agency to make that information available to the public at least 30 days before the meeting.	12/07/2020 - INTRODUCED.
<u>AB 63</u> Petrie-Norris (D)	Marine Resources: Marine Managed Areas Improvement Act		Relates to the Marine Managed Areas Improvement Act, restoration activities. Authorizes the designating entity or managing agency to also permit restoration activities.	12/07/2020 - INTRODUCED.
<u>AB 64</u> Quirk (D)	Electricity: Renewable Energy and Zero-Carbon		Requires the PUC, Energy Commission, and State Air Resources Board, in consultation with all balancing authorities, to additionally develop a strategy, by an unspecified date, on how to achieve a specified state policy in a cost-effective and environmentally beneficial manner.	12/07/2020 - INTRODUCED.
<u>AB 67</u> Petrie-Norris (D)	Sea Level Rise: Working Group: Economic Analysis		Requires a state agency to take into account the current and future impacts of sea level rise when planning, designing, building, operating, maintaining, and investing in infrastructure located in the coastal zone or otherwise vulnerable to flooding from sea level rise	12/07/2020 - INTRODUCED.

IRWD 2021 LEGISLATIVE MATRIX
Updated 01/04/2021

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
			or storm surges, or when otherwise approving the allocation of state funds for those purposes.	
<u>AB 68</u> Salas (D)	Affordable Housing: California State Auditor's Report		States the intent of the Legislature to enact legislation that would implement recommendations made in the California State Auditor's Report 2020-108, issued on November 17, 2020, relating to affordable housing.	12/07/2020 - INTRODUCED.
<u>AB 69</u> Kiley (R)	State of Emergency: Termination After 60 Days		Requires a state of emergency to terminate 60 days after the Governor's proclamation of the state of emergency unless the Legislature extends it by a concurrent resolution. Prohibits a concurrent resolution from extending a state of emergency by more than 60 days.	12/07/2020 - INTRODUCED.
<u>AB 72</u> Petrie-Norris (D)	Environmental Protection: Coastal Adaptation Projects		Enacts the Coastal Adaptation Permitting Act of 2021. Requires the Natural Resources Agency to explore, and authorize it to implement, options within the agency's jurisdiction to establish a more coordinated and efficient regulatory review and permitting process for coastal adaptation projects.	12/07/2020 - INTRODUCED.
<u>AB 93</u> Garcia E (D)	Pandemics: Priority for Medical Treatment: Food Supply		States the intent of the Legislature to enact legislation to prioritize workers in the food supply industry, including, but not limited to, field workers and grocery workers, for rapid testing and vaccination programs in response to pandemics, including COVID-19.	12/07/2020 - INTRODUCED.
<u>AB 95</u> Low (D)	Employees: Bereavement Leave		Enacts the Bereavement Leave Act of 2021. Requires an employer with 25 or more employees to grant an employee up to 10 business days of unpaid bereavement leave upon the death of a spouse, child, parent, sibling, grandparent, grandchild, or domestic partner, in accordance with certain procedures, and subject to certain exclusions. Requires an employer with fewer than 25 employees to grant up to 3 business days of leave.	12/07/2020 - INTRODUCED.

IRWD 2021 LEGISLATIVE MATRIX
Updated 01/04/2021

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
<u>AB 96</u> O'Donnell (D)	Clean Truck, Bus, and Off-Road Vehicle and Technology		Extends the requirement that 20% of funding be made available to support early commercial deployment of existing zero- and near-zero-emission heavy-duty truck technology until December 31, 2026. The bill would further require at least 20% of that funding support early commercial deployment of existing near-zero-emission heavy-duty truck technology.	12/07/2020 - INTRODUCED.
<u>AB 100</u> Holden (D)	Drinking Water: Pipes and Fittings: Lead Content		Defines "lead free" under the California Safe Drinking Water Act, with respect to end point devices, to mean that the devices do not leach more than one microgram of lead under certain tests and meeting a specified certification.	12/11/2020 - INTRODUCED.
<u>AB 108</u> Cunningham (R)	Governor's Emergency Orders and Regulations: Approval		Permits an order or regulation, or an amendment or rescission thereof, issued pursuant to specified California Emergency Services Act (CESA) provisions 60 or more days after the proclamation, to take effect only if approved by a concurrent resolution of the Legislature.	12/16/2020 - INTRODUCED.
<u>AB 115</u> Bloom (D)	Planning and Zoning: Housing Development		Requires that a housing development be an authorized use on a site designated in any local agency's zoning code or maps for commercial uses if certain conditions apply. Provides that among these conditions, the bill would require that the housing development be subject to a recorded deed restriction requiring that at least 20% of the units have an affordable housing cost or affordable rent for lower income households, as those terms are defined, and located on a site that satisfies specified criteria.	12/18/2020 - INTRODUCED.
<u>AB 119</u> Salas (D)	County Assessors: Direct Levies		Requires county assessors to make publicly available on their internet websites information about direct levies applicable to each tax rate area within the county.	12/18/2020 - INTRODUCED.
<u>AB 123</u> Gonzalez (D)	Paid Family Leave: Weekly Benefit Amount		Revises the formula for determining benefits available pursuant to the family temporary disability insurance program, for periods of disability commencing after January 1, 2022, by redefining the	12/18/2020 - INTRODUCED.

IRWD 2021 LEGISLATIVE MATRIX
Updated 01/04/2021

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
			weekly benefit amount to be equal to 90% of the wages paid to an individual for employment by employers during the quarter of the individual's disability base period in which these wages were highest, divided by 13, but not exceeding the maximum workers' compensation disability indemnity weekly benefit amount.	
<u>AB 125</u> Rivas R (D)	Food and Agriculture: Climate Crisis: COVID-19 Recovery		States the intent of the Legislature to enact subsequent legislation to issue a bond to support solutions to the climate crisis and recovery from the COVID-19 pandemic that would create a more equitable and resilient food and farming system.	12/18/2020 - INTRODUCED.
<u>ACA 1</u> Aguiar-Curry (D)	Local Government Financing: Affordable Housing		Creates an additional exception to the 1% ad valorem tax rate limit on real property that would authorize a city, county, or special district to levy an ad valorem tax to service bonded indebtedness incurred to fund the construction, reconstruction, rehabilitation, or replacement of public infrastructure, affordable housing, or permanent supportive housing, if the proposition proposing the tax is approved by 55% of the voters of the city or county, and the proposition includes accountability requirements.	12/07/2020 - INTRODUCED.
<u>SB 1</u> Atkins (D)	Coastal Resources: Sea Level Rise		Includes, as part of the procedures the California Coastal Commission is required to adopt for local coastal programs, recommendations and guidelines for the identification, assessment, minimization, and mitigation of sea level rise within each local coastal program.	12/07/2020 - INTRODUCED.
<u>SB 3</u> Caballero (D)	Tenancy: COVID-19		Extends the covered time period and transition time period for purposes of the COVID-19 Tenant Relief Act of 2020 to a specified date.	12/07/2020 - INTRODUCED.
<u>SB 8</u> Skinner (D)	Density Bonus Law		Makes a nonsubstantive change to the definition of development standard for purposes of the Density Bonus Law.	12/07/2020 - INTRODUCED.

IRWD 2021 LEGISLATIVE MATRIX
Updated 01/04/2021

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
<u>SB 9</u> Atkins (D)	Housing Development: Approvals		Requires a proposed housing development containing two residential units within a single-family residential zone to be considered ministerially, without discretionary review or hearing, if the proposed housing development meets certain requirements that the proposed housing development would not require demolition or alteration of housing that is subject to a recorded covenant, ordinance, or law that restricts rents to levels affordable to persons and families of moderate or low income.	12/07/2020 - INTRODUCED.
<u>SB 10</u> Wiener (D)	Planning and Zoning: Housing Development: Density		Authorizes a local government to pass an ordinance to zone any parcel for up to 10 units of residential density per parcel, at a height specified in the ordinance, if the parcel is located in a transit-rich area, a jobs-rich area, or an urban infill site, as those terms are defined. Requires the Department of Housing and Community Development to determine jobs-rich areas and publish a map of those areas on a certain frequency.	12/07/2020 - INTRODUCED.
<u>SB 12</u> McGuire (D)	Local Government Planning and Zoning: Wildfires		Requires the safety element, upon the next revision of the housing element or the hazard mitigation plan, on or after a certain date, whichever occurs first, to be reviewed and updated as necessary to include a comprehensive retrofit strategy to reduce the risk of property loss and damage during wildfires, and would require the planning agency to submit the adopted strategy to the Office of Planning and Research for inclusion into the clearinghouse for climate adaptation.	12/07/2020 - INTRODUCED.
<u>SB 13</u> Dodd (D)	Local Agency Services: Contracts: Napa, San Bernardino		Imposes a deadline for the Napa and San Bernardino commissions to report to the Legislature on the pilot program, authorize a city or district to provide new or extended services outside its jurisdictional boundary, and would require the contents of that report to include how many requests for extension of services were received under these provisions.	12/07/2020 - INTRODUCED.

IRWD 2021 LEGISLATIVE MATRIX
Updated 01/04/2021

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
<u>SB 27</u> Skinner (D)	Carbon Sequestration: State Goals: Natural Working Land		Requires the Natural Resources Agency, no later than July 1, 2022, in coordination with the California Environmental Protection Agency, the State Air Resources Board, and the Department of Food and Agriculture, to establish carbon sequestration goals for natural and working lands. Requires the state board, as part of its scoping plan, to establish specified carbon dioxide removal targets for 2030 and beyond.	12/07/2020 - INTRODUCED.
<u>SB 29</u> Umberg (D)	Elections: Vote by Mail Ballots		Extends requirements to vote by mail ballots to all elections conducted prior to January 1, 2022.	12/07/2020 - INTRODUCED.
<u>SB 33</u> Cortese (D)	California Environmental Quality Act: Lead Agency		Makes nonsubstantive changes to the California Environmental Quality Act.	12/07/2020 - INTRODUCED.
<u>SB 36</u> Skinner (D)	Energy Efficiency		Makes nonsubstantive changes to existing law which authorizes the State Energy Resources Conservation and Development Commission to prescribe, by regulation, energy efficiency standards, including appliance efficiency standards.	12/07/2020 - INTRODUCED.
<u>SB 37</u> Cortese (D)	Contaminated Sites Dominic Cortese Act of 2021		Updates and revitalizes the Hazardous Waste and Substances Sites List, or the Cortese List. Requires the Department of Toxic Substances Control to also list hazardous waste facilities where the department issued an order for corrective action after determining that there is or has been a release of hazardous waste or constituents into the environment from a facility.	12/07/2020 - INTRODUCED.
<u>SB 45</u> Portantino (D)	Wildfire Prevention, Safe Drinking Water Bond Act		Enacts the Wildfire Prevention, Safe Drinking Water, Drought Preparation, and Flood Protection Bond Act of 2022, which, if approved by the voters, would authorize the issuance of bonds in a specified amount pursuant to the State General Obligation Bond Law to finance projects for a wildfire prevention, safe drinking water, drought preparation, and flood protection program.	12/07/2020 - INTRODUCED.

IRWD 2021 LEGISLATIVE MATRIX
Updated 01/04/2021

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
<u>SB 46</u> Stern (D)	Employment: Contact Tracing: COVID-19		States the intent of the Legislature to enact legislation that would require an employer to develop and implement contact tracing and safety policies for its employees, including requiring notice to the employer when an employee receives a positive Coronavirus disease 2019 test.	12/07/2020 - INTRODUCED.
<u>SB 49</u> Umberg (D)	Business Fees: Reimbursement: Waiver: COVID-19		Expresses the intent of the Legislature to enact future legislation that would reimburse or waive state or locally mandated operating fees for businesses that are unable to operate due to statewide or local actions or ordinances instituted as a result of the Coronavirus 19 pandemic.	12/07/2020 - INTRODUCED.
<u>SB 51</u> Durazo (D)	Surplus Residential Property: Sale: Los Angeles		Requires, with respect to surplus residential property that is located in the City of Los Angeles, that if the surplus residential property is not sold to a former owner or present occupant, the property be offered at fair market value to purchasers who are present tenants who have occupied the property for 5 years or more and who are in good standing with all rent obligations current and paid in full, with first right of occupancy to the present occupants.	12/07/2020 - INTRODUCED.
<u>SB 52</u> Dodd (D)	State of Emergency: Power Outages		Expands the definition of sudden and severe energy shortage to include a deenergization event, defined as a planned power outage, as specified, and would make a deenergization event one of those conditions constituting a state of emergency and a local emergency.	12/07/2020 - INTRODUCED.
<u>SB 55</u> Stern (D)	Very High Fire Hazard Severity Zone: Development		Prohibits the creation or approval of a new development, as defined, in a very high fire hazard severity zone or a state responsibility area.	12/07/2020 - INTRODUCED.
<u>SB 63</u> Stern (D)	Fire Prevention: Vegetation Management: Education		Requires the Director of Forestry and Fire Protection to identify areas of the state as moderate and high fire hazard severity zones and requires a local agency to make this information available for public review and comment. Requires the director to establish a statewide program to allow qualified entities to support and	12/07/2020 - INTRODUCED.

IRWD 2021 LEGISLATIVE MATRIX
Updated 01/04/2021

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
			augment the department in its defensible space and home hardening assessment and education efforts.	
<u>SB 67</u> Becker (D)	Clean Energy		States intent of the Legislature to enact subsequent legislation to accelerate the state's progress toward having all electricity provided by renewable or other zero-carbon sources on a permanent basis.	12/07/2020 - INTRODUCED.
<u>SB 68</u> Becker (D)	Building Decarbonization		States the intent of the Legislature to enact subsequent legislation that will help the state achieve its climate and air pollution reduction goals in the building sector through actions such as reducing barriers to upgrading electrical service panels or accommodating additional electrical appliances within existing service panels.	12/07/2020 - INTRODUCED.
<u>SB 72</u> Rubio (D)	Residential Property Insurance: Wildfire Risk		Requires the Insurance Commissioner to transmit to the Secretary of the Natural Resources Agency a report that makes geographic recommendations for vegetation management projects based on the commissioner's analysis of specified information, including nonrenewal data on policies of residential property insurance, and to post that report on the Department of Insurance's internet website.	12/10/2020 - INTRODUCED.
<u>SB 77</u> Nielsen (R)	Elections: Ballots		Makes a technical, nonsubstantive change to provisions of existing law providing that, on election day, a voter who does not vote the ballot the voter has received shall, before leaving the polling place, return it to the precinct board member having charge of the ballots, who shall immediately cancel it.	12/15/2020 - INTRODUCED.
<u>SB 79</u> Nielsen (R)	Fair Political Practices Commission		Makes technical, nonsubstantive changes to provisions of the Fair Political Practices Commission prohibiting members of the commission from holding certain offices and from participating in certain activities. Makes technical, nonsubstantive changes to prescribing criteria for the removal of members of the Fair Political Practices Commission.	12/15/2020 - INTRODUCED.


IRWD 2021 LEGISLATIVE MATRIX
Updated 01/04/2021

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
<u>SB 83</u> Allen (D)	California Infrastructure and Economic Development Bank		Creates the Sea Level Rise Revolving Loan Program within the I-Bank to provide low-interest loans to local jurisdictions for the purchase of coastal properties in their jurisdictions identified as vulnerable coastal property. Requires the California Coastal Commission in consultation with the State Lands Commission, and any other applicable state, federal, and local entities, as specified to determine criteria and guidelines for the identification of eligible vulnerable coastal properties.	12/15/2020 - INTRODUCED.
<u>SB 98</u> McGuire (D)	Public Peace: Media Access		Requires that specified media be allowed to enter specified closed areas and prohibits a peace officer or other law enforcement officer from intentionally assaulting, interfering with, or obstructing a duly authorized representative who is gathering, receiving, or processing information for communication to the public. Prohibits a duly authorized representative who is in a closed area from being cited for the failure to disperse, a violation of a curfew, or a violation of other specified laws.	12/22/2020 - INTRODUCED.
<u>SB 99</u> Dodd (D)	Community Energy Resilience Act of 2021		Requires the State Energy Resources Conservation and Development Commission to develop and implement a grant program for local governments to develop community energy resilience plans. Sets forth guiding principles for plan development, including equitable access to reliable energy and integration with other existing local planning documents.	12/28/2020 - INTRODUCED.
<u>SCA 1</u> Hertzberg (D)	Elections: Referenda		Requires that the ballot for a referendum measure provide that a Yes vote is in favor of the referendum and rejects the statute or part of the statute subject to the referendum, and a No vote is against the referendum and approves the statute or part of the statute subject to the referendum, thus requiring a majority vote in favor of the referendum to reject the statute or part of the statute subject to the referendum.	12/07/2020 - INTRODUCED.

IRWD 2021 LEGISLATIVE MATRIX
Updated 01/04/2021

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
<u>SCR 5</u> Melendez (R)	State of emergency: COVID-19: Termination		Declares that the state of emergency proclaimed by the Governor on a specified date, is at an end, thereby terminating the emergency powers granted to the Governor as a result of that proclamation.	12/22/2020 - INTRODUCED.;12/22/2020 - To SENATE Committee on RULES.

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January 25, 2021
Prepared by: J. Dayer
Submitted by: R. Mykitta / W. Chambers
Approved by: Paul A. Cook 

CONSENT CALENDAR

HEATING, VENTILATION AND AIR CONDITIONING MAINTENANCE THREE-YEAR CONTRACT AWARD

SUMMARY:

To ensure effective operation and timely repair of the commercial heating, ventilation, and air conditioning systems (HVAC) at Michelson Water Recycling Plant (MWRP), the Sand Canyon Headquarters Building, and the Baker Water Treatment Plant, staff recommends that the Board authorize the General Manager to execute a three-year contract with Ram Air Engineering, Inc. for commercial HVAC services for a total amount of \$685,620.

BACKGROUND:

In November 2020, staff solicited bids from six qualified HVAC service contractors for maintenance and repair of IRWD's commercial HVAC systems at MWRP, the Sand Canyon Headquarters Building, and the Baker Plant. Ram Air Engineering, F.M. Thomas Air Conditioning, and Los Angeles Air Conditioning submitted proposals which included quotes for both scheduled maintenance and hourly rates for unscheduled maintenance and repairs.

Ram Air submitted the lowest bid for scheduled maintenance and the lowest melded labor rate for unscheduled maintenance and repairs as provided in Exhibit "A". The proposal for three years of scheduled maintenance is \$205,620 and for unscheduled maintenance and repairs is \$480,000 based on the melded contractor hourly labor rate and historical expenditures on unscheduled repairs for these systems (on a time and materials). Ram Air has provided service for IRWD for many years and staff finds its performance to be satisfactory.

FISCAL IMPACTS:

Sufficient funding for the first five months of the contract are included in the Fiscal Year 2020-21 Operating Budget with the remaining term to be processed through the District's Operating budget process.

ENVIRONMENTAL COMPLIANCE:

This activity is not subject to the California Environmental Quality Act (CEQA) as authorized under the California Code of Regulations, Title 14, Chapter 3, Section 15060 (c)(1) Preliminary Review. An activity is not subject to CEQA if the activity will not result in a direct reasonably foreseeable indirect physical change to the environment.

COMMITTEE STATUS:

Award of maintenance contracts are not submitted to Committee.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXECUTE A THREE-YEAR CONTRACT WITH RAM AIR ENGINEERING, INC. FOR COMMERCIAL HVAC SERVICES FOR A TOTAL AMOUNT OF \$685,620.

LIST OF EXHIBITS:

Exhibit "A" – HVAC Maintenance and Repair Three-year Contract Bid Summary

EXHIBIT "A"

HVAC Maintenance and Repair 3-Year Contract

Contractor	Sand Canyon			
	Year 1	Year 2	Year 3	Total
Ram Air Engineering, Inc.	\$11,540	\$11,540	\$11,540	\$34,620
F.M. Thomas Air Conditioning, Inc.	\$25,671	\$26,954	\$28,302	\$80,927
Los Angeles Air Conditioning, Inc.	\$34,400	\$34,400	\$34,400	\$103,200

Contractor	Operations Center			
	Year 1	Year 2	Year 3	Total
Ram Air Engineering, Inc.	\$21,000	\$21,000	\$21,000	\$63,000
F.M. Thomas Air Conditioning, Inc.	\$47,448	\$49,820	\$52,311	\$149,579
Los Angeles Air Conditioning, Inc.	\$55,750	\$55,750	\$55,750	\$167,250

Contractor	Baker Water Treatment Plant			
	Year 1	Year 2	Year 3	Total
Ram Air Engineering, Inc.	\$36,000	\$36,000	\$36,000	\$108,000
F.M. Thomas Air Conditioning, Inc.	\$64,662	\$67,895	\$71,289	\$203,846
Los Angeles Air Conditioning, Inc.	\$64,050	\$64,050	\$64,050	\$192,150

Contractor	Grand Total			
	Year 1	Year 2	Year 3	Three Year Total
Ram Air Engineering, Inc.	\$68,540	\$68,540	\$68,540	\$205,620
F.M. Thomas Air Conditioning, Inc.	\$137,781	\$144,669	\$151,902	\$434,352
Los Angeles Air Conditioning, Inc.	\$154,200	\$154,200	\$154,200	\$462,600


Contractor	Extra Work Labor Rates (Per Hour)			
	Standard Labor Rate	Overtime Labor Rate	Holiday Labor Rate	SCADA Labor Rate
Ram Air Engineering, Inc.	\$120	\$180	\$240	\$160
F.M. Thomas Air Conditioning, Inc.	\$130	\$195	\$260	\$175
Los Angeles Air Conditioning, Inc.	\$120	\$162	\$216	\$180

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January 25, 2021

Prepared by: J. Moeder / R. Mori

Submitted by: K. Burton

Approved by: Paul A. Cook 

ACTION CALENDAR

SEWAGE TREATMENT MASTER PLAN UPDATE, BUDGET ADDITION, AND BUDGET INCREASE

SUMMARY:

IRWD prepared a Wastewater Treatment Master Plan in 2003 to identify conveyance and treatment facility improvements to meet capacity and regulatory requirements through 2025. IRWD's sewage and recycled water systems and demands have changed significantly since then, and the District's service area is approaching buildout. IRWD contracted with HDR Engineering to prepare a new Sewage Treatment Master Plan (STMP). At the Strategic Planning Workshop held in January 2020, staff provided a project overview and an update on the status of the work. Since then, HDR and staff have advanced the work, and the STMP is complete. At the Board meeting, staff will provide an overview of the completed STMP and additional information supporting the following recommendations. Staff recommends the Board:

- Authorize the addition of the MWRP Tributary Gravity Diversion, Project 11832, in the amount of \$2,942,000 to the FY 2020-21 Capital Budget, and
- Authorize a budget increase in the amount of \$193,130,250, from \$20,975,000 to \$214,105,250, for the LAWRP Treatment Modernization, Project 01477.

BACKGROUND:

In 2003, IRWD prepared a Wastewater Treatment Master Plan that defined a logical, cost effective program to upgrade and expand IRWD's recycling treatment plants to handle projected sewage flows, meet effluent quality requirements, and satisfy recycled water demands through 2025. IRWD has implemented many of the recommendations in the 2003 Master Plan including the Michelson Water Recycling Plant (MWRP) Phase 1 and Phase 2 Expansions, the Los Alisos Water Recycling Plant (LAWRP) 2005 Upgrades, and the Harvard Avenue Trunk Sewer Diversion to MWRP.

IRWD's service area, water recycling plants, and the wastewater industry in general have experienced a number of changes since completion of the 2003 Master Plan. This prompted staff to prepare a new master plan that evaluates the sewer system through District buildout. The 2020 STMP is now complete, and it provides a framework for handling future ultimate sewage flows. The framework is structured in a manner that identifies an overall strategy, which is organized into near-term and long-term recommendations. The STMP is also structured such that various near-term improvements can be implemented now without committing IRWD to completion of the identified long-term recommendations. This approach provides IRWD with the flexibility of proceeding with initial projects while continuing to monitor changing conditions that will then be considered in future evaluations and decisions regarding implementation of the long-term recommendations.

Near-term improvements include: 1) replacing the lagoon treatment system at LAWRP with a modernized treatment process, 2) expanding the capacity of the membrane bioreactors (MBR) and implementing improvements to the existing conventional activated sludge (CAS) treatment processes at MWRP to accommodate projected increases in sewer loading concentrations, and 3) constructing a new gravity sewer diversion from the MWRP tributary sewershed to the LAWRP tributary sewershed to deliver additional sewer flows to LAWRP for treatment.

At the Board meeting, staff will provide an overview of the completed STMP and will discuss the following topics:

- Project overview;
- Summary of the January 2020 Strategic Planning Workshop;
- Results of the treatment plant alternatives evaluation;
- Implementation plan overview; and
- Recommendations for near-term improvements.

The Sewage Treatment Master Plan Overview presentation is provided as Exhibit “A”. Also included as Exhibit “B” is a summary of the abbreviations used throughout the presentation.

FISCAL IMPACTS:

Project 01477 for LAWRP Treatment Modernization is included in the FY 2020-2021 Capital Budget and funded 100% through Sewer Replacement. Staff requests a budget increase in the amount of \$193,130,250. Project 11832 for MWRP Tributary Gravity Diversion is not included in the FY 2020-2021 Capital Budget. Staff requests adding this project to the FY 2020-21 Capital Budget in the amount of \$2,942,000, which will be funded by the Regional Sewer Improvement District Split.

Projects 01659 and 01797 for MWRP Phase 3 MBR Expansion are not currently Board-approved but are included in the IRWD Long-Term Capital Program. Both projects are funded 100% through Regional Recycled Water and Sewer Improvement District Splits. The Long-Term Capital Program budgets for these projects will be increased as shown in the table below. Project 11833 for MWRP Expansion Phase 3 (CAS) will be added to the IRWD Long-Term Capital Program in the amount of \$17,867,000 and will be funded by the Regional Sewer Improvement District Split.

A summary of the proposed budget additions, budget increases, and modifications to the IRWD Long-Term Capital Program is provided in the table below.

Project No.	Current Budget	Addition <Reduction>	Total Budget
01477	\$20,975,000	\$193,130,250	\$214,105,250
11832	\$0	\$2,942,000	\$2,942,000
01659	\$11,896,500	\$9,361,500	\$21,258,000
01797	\$19,131,000	\$24,549,000	\$43,680,000
11833	\$0	\$17,867,000	\$17,867,000
Total	\$52,002,500	\$247,849,750	\$299,852,250

ENVIRONMENTAL COMPLIANCE:

California Environmental Quality Act (CEQA) as authorized under the California Code of Regulations, Title 14, Chapter 3, Section 15262 provides exemption for planning studies.

COMMITTEE STATUS:

This item was reviewed by the Engineering and Operations Committee on January 19, 2021.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE ADDITION OF THE MWRP TRIBUTARY GRAVITY DIVERSION, PROJECT 11832, IN THE AMOUNT OF \$2,942,000 TO THE FY 2020-21 CAPITAL BUDGET AND AUTHORIZE A BUDGET INCREASE IN THE AMOUNT OF \$193,130,250, FROM \$20,975,000 TO \$214,105,250, FOR THE LAWRP TREATMENT MODERNIZATION, PROJECT 01477.

LIST OF EXHIBITS:

Exhibit "A" – Sewage Treatment Master Plan Overview Presentation

Exhibit "B" – Summary of Abbreviations

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Sewage Treatment Master Plan Project Update

Master Plan Completion Update

Board Meeting
January 25, 2021



1

Purpose of Sewage Treatment Master Plan

Develop a long-term plan for optimizing
sewage conveyance and treatment of
ultimate sewer flows

Irvine Ranch Water District

2

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Agenda

- Project Overview
- Updates since January 2020 Strategic Planning Workshop
- Implementation Plan
- Future Considerations and Next Steps
- Capital Budget Impacts

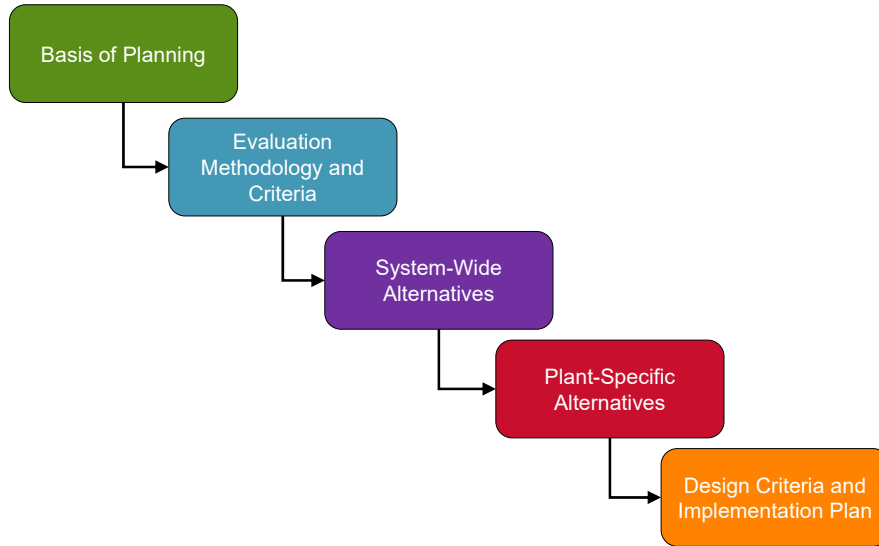
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Overview of STMP Phases



5

Overview of STMP Phases

6



Progress Since January 2020 Strategic Planning Workshop

- Considered treatment technology alternatives
- Shortlist and evaluated treatment alternatives for Michelson Water Recycling Plant (MWRP) and Los Alisos Water Recycling Plant (LAWRP)
- Develop and refine design criteria for system-wide and facility-specific improvements
- Develop implementation plan

Basis of Planning

Evaluation Methodology and Criteria

System-Wide Alternatives

Plant-Specific Alternatives

Design Criteria and Implementation Plan

Irvine Ranch Water District

Basis

Methodology

System-Wide

Plant-Specific

Implementation

7

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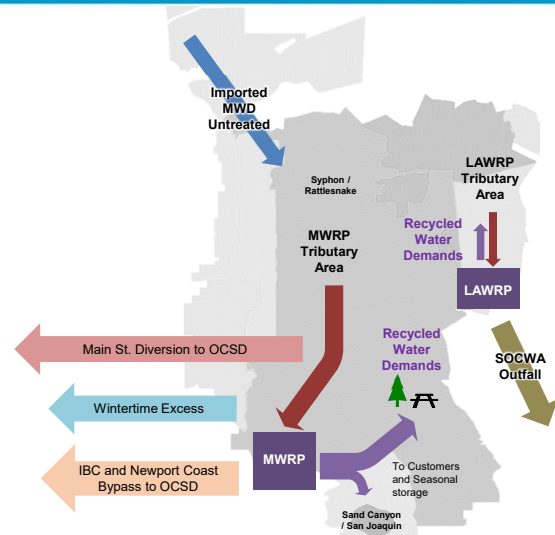
Sewage and Recycled Water System Overview

System Description

- Two tributary areas
- Two treatment plants

System-Wide Alternatives

- Six alternatives were shortlisted and evaluated



Irvine Ranch Water District

Basis

Methodology

System-Wide

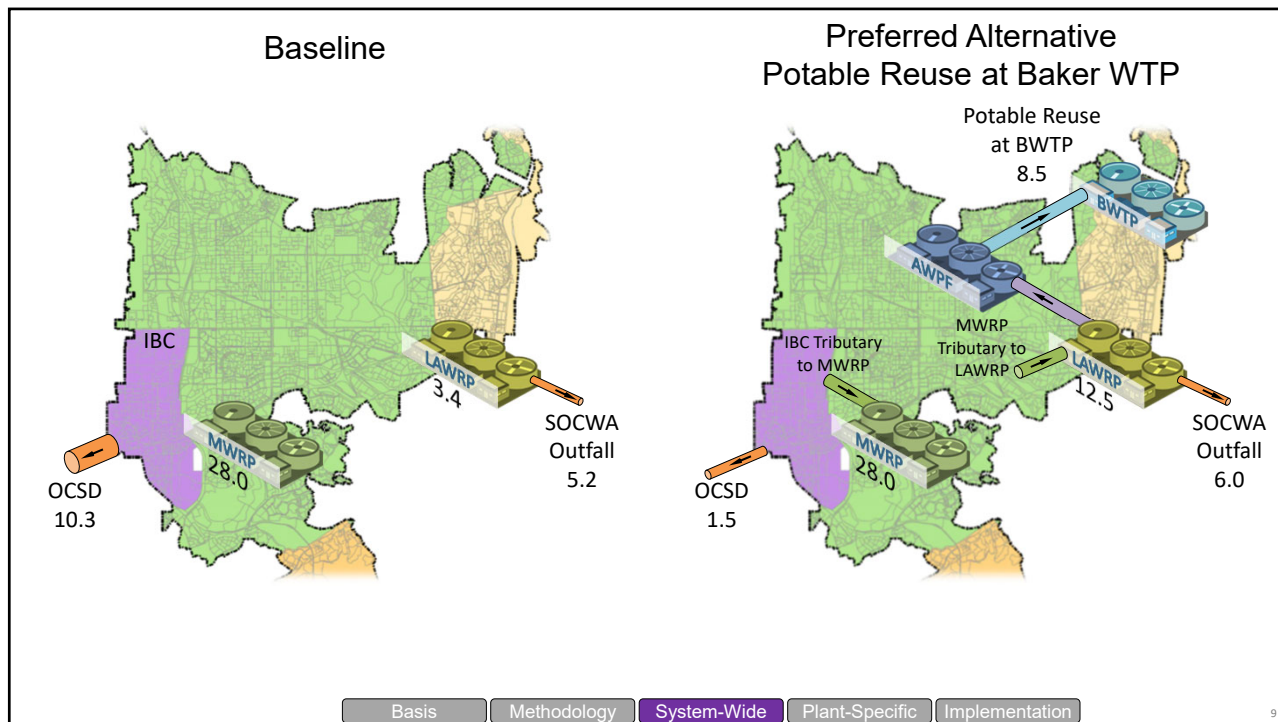
Plant-Specific

Implementation

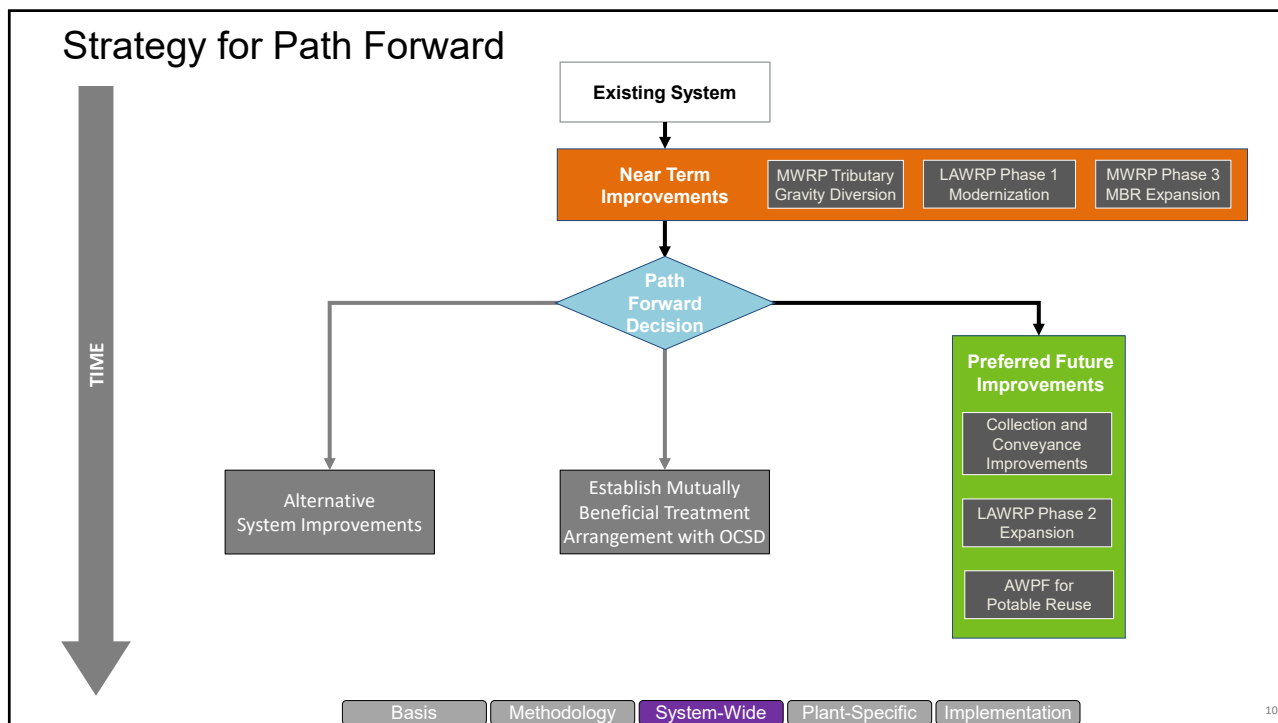
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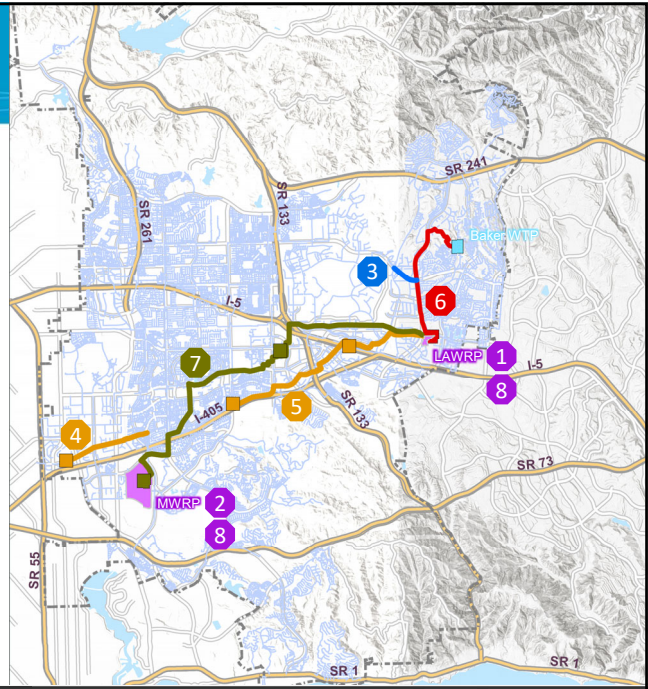


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Preferred System-Wide Alternative

- 1 LAWRP Phase 1 Modernization
- 2 MWRP Phase 3 MBR Expansion
- 3 MWRP Tributary Gravity Diversion
- 4 New IBC Lift Station & Forcemain
- 5 Pumped diversion from MWRP sewershed to LAWRP
- 6 New Pump Station & Pipeline from LAWRP to Baker WTP
- 7 New Pump Station & Brine Line from MWRP to SOCWA Outfall
- 8 LAWRP Phase 2 Expansion and AWPf & MWRP RO Facility



Irvine Ranch Water District

Basis

Methodology

System-Wide

Plant-Specific

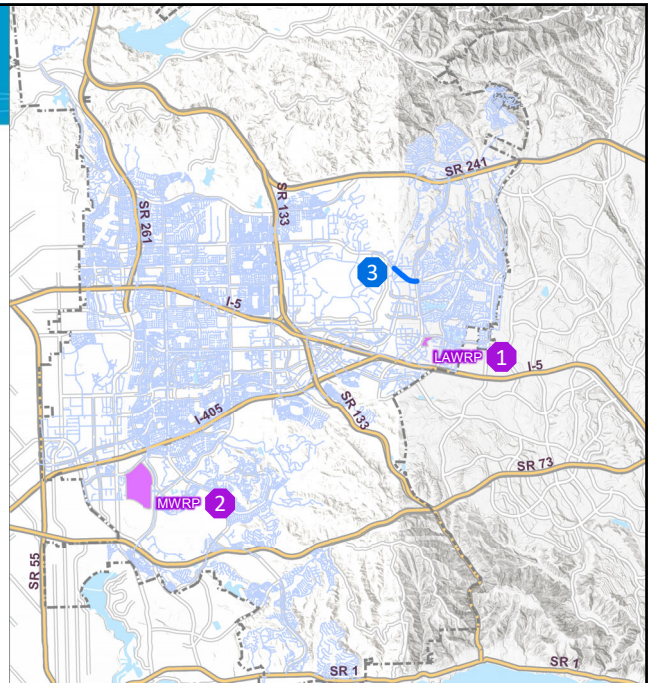
Implementation

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Recommended Near Term Projects

- 1 LAWRP Phase 1 Modernization (6.25 mgd)
- 2 MWRP Phase 3 MBR Expansion (28 mgd)
- 3 MWRP Tributary Gravity Diversion (1.9 mgd)



Irvine Ranch Water District

Basis

Methodology

System-Wide

Plant-Specific

Implementation

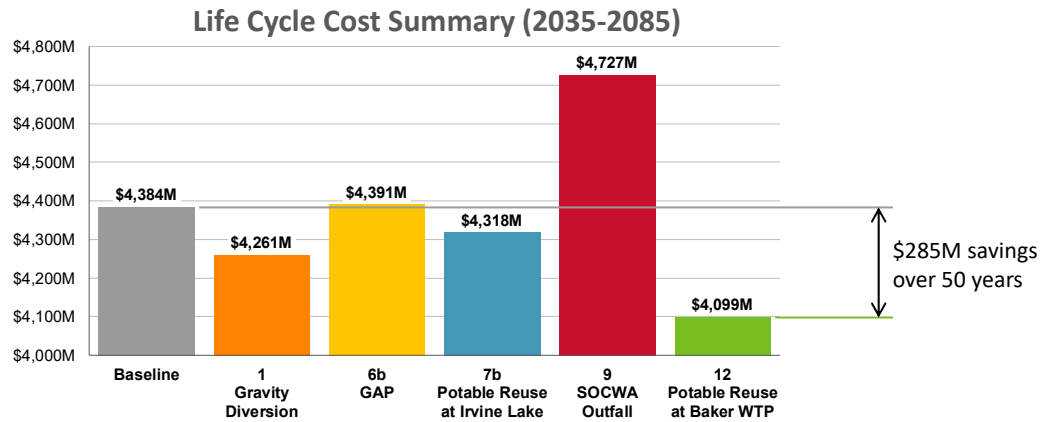
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Summary of System-Wide Evaluation

- Some adjustments were made to system-wide evaluation to capture changes to CORF calculation.
- Estimated life-cycle costs changed, but alternative ranking did not.
- Potable Reuse at Baker WTP has highest non-economic benefits.



Irvine Ranch Water District

Basis

Methodology

System-Wide

Plant-Specific

Implementation

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Michelson Water Recycling Plant Treatment Overview

Biosolids Facility

Flow Equalization

Conventional Activated Sludge

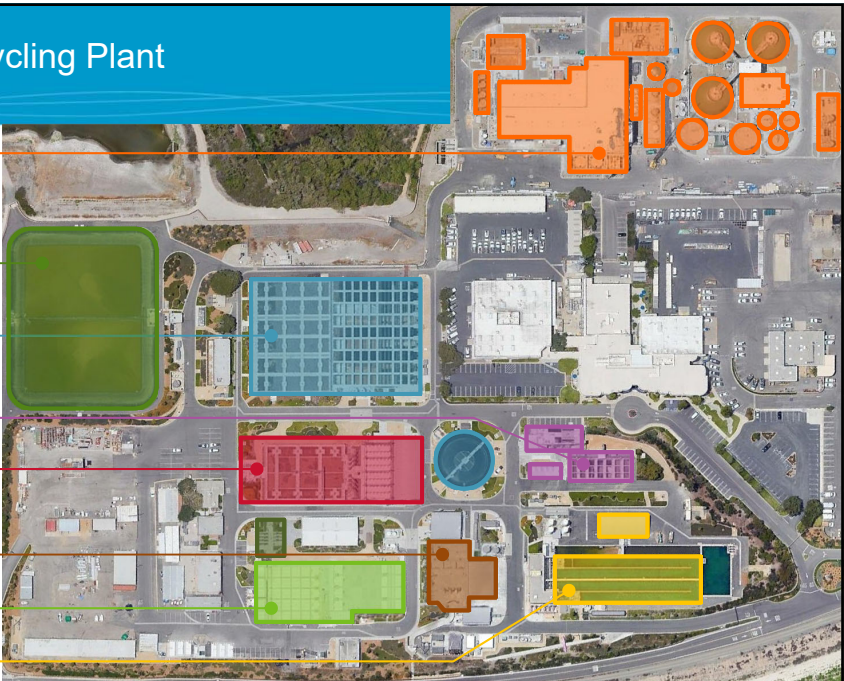
Tertiary Filtration

Membrane Bioreactor

Headworks

Primary Sedimentation

Disinfection



Irvine Ranch Water District

Basis

Methodology

System-Wide

Plant-Specific

Implementation

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Considerations for MWRP Treatment Evaluation

- Increasing influent concentrations means both hydraulic capacity and loading capacity need to be considered
- Higher projected influent concentrations at ultimate flows result in loading capacity constraint, driven primarily by influent Ammonia concentrations
- Phase 3 MBR Expansion would address loading capacity constraint
- Future improvements address planned routing of IBC flows to MWRP that results in higher TDS



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Recycling Facility Treatment Evaluation MWRP Capacity Based on Projected Concentrations

Conventional Activated Sludge (CAS)

- Hydraulic Capacity: 18.0 mgd
- Loading Capacity: 17.2 mgd at Projected Ammonia Concentration of 44 mg/L

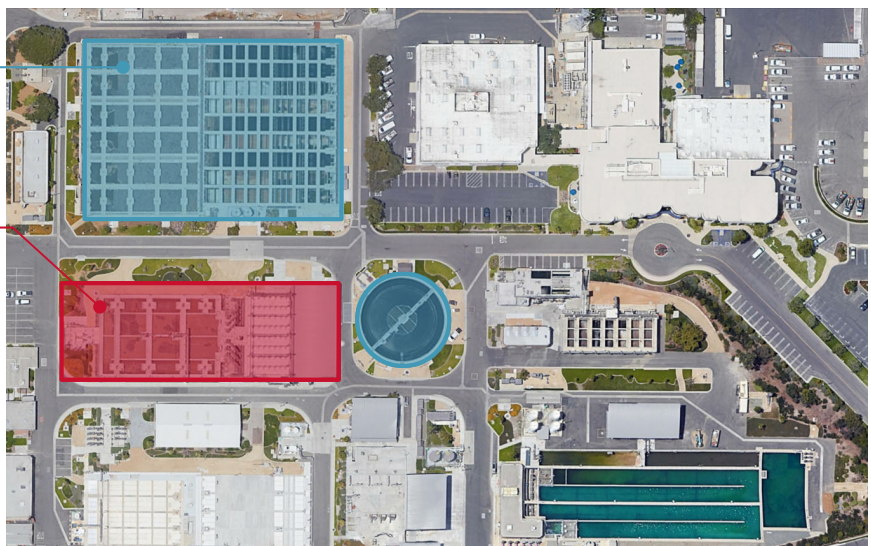
Membrane Bioreactor (MBR)

- Hydraulic Capacity: 10.5 mgd
- Loading Capacity: 9.9 mgd at Projected Ammonia Concentration of 44 mg/L

MWRP Total Plant Capacity

Existing Ammonia Loading Capacity = 9,960 lbs/day

Projected Ultimate Influent Ammonia Loading = 10,280 lbs/day



Irvine Ranch Water District

Basis Methodology System-Wide **Plant-Specific** Implementation

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Recycling Facility Treatment Evaluation MWRP Alternatives

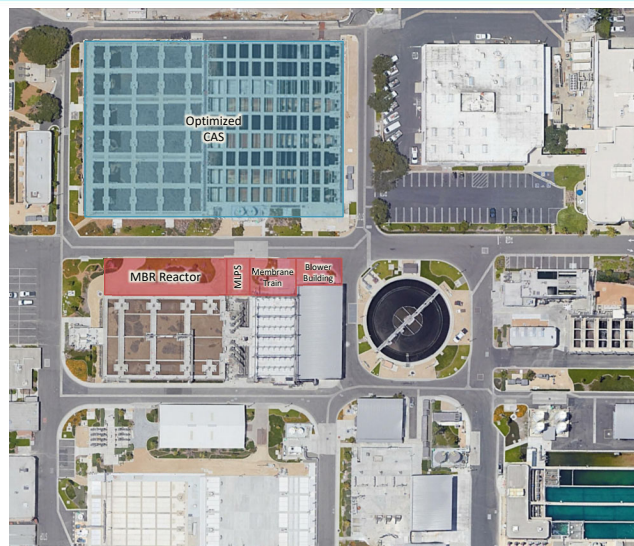
Alternative	Impact to MBR	Impact to CAS
M1	Add third train Expand from 10 mgd to 15 mgd	Address operational constraints Optimize for 13 mgd
M2	Add third train Expand from 10 mgd to 15 mgd	Remove and replace with MBR at 13 mgd
M3	Add third train Expand from 10 mgd to 15 mgd	Remove and replace with Aerobic Granular Sludge (AGS) at 13 mgd

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MWRP Alternative M1 Expand MBR to 15 mgd and Optimize CAS to 13 mgd

- Total Plant Loading Capacity: 28 mgd
- Expand MBR by adding 5 mgd train
- Reduce flow to CAS and improve biological treatment performance
- Optimize CAS configuration and address operational issues

■ New facilities
■ Modifications to existing facilities



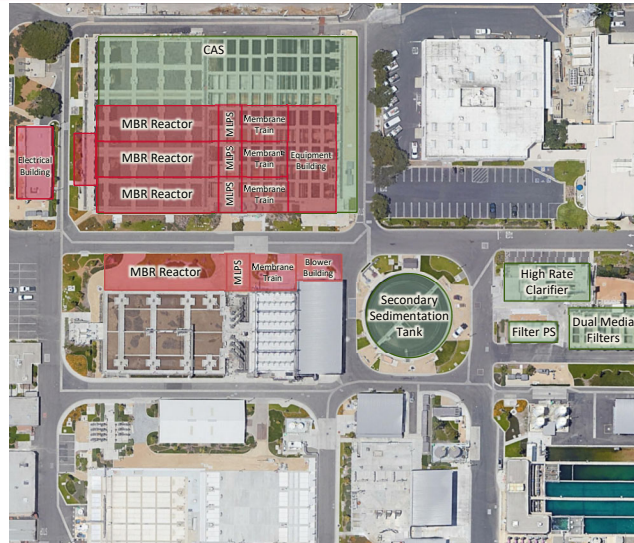
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MWRP Alternative M2 Expand MBR to 15 mgd and Replace CAS with 13 mgd MBR

- Total Plant Loading Capacity: 28 mgd
- Expand MBR by adding 5 mgd train
- Remove:
 - Conventional Activated Sludge
 - Filter Influent Pump Station
 - High Rate Clarifier
 - Dual Media Filters
- Construct new 13 mgd MBR

■ New facilities
■ Demolition of existing facilities



Irvine Ranch Water District

Basis

Methodology

System-Wide

Plant-Specific

Implementation

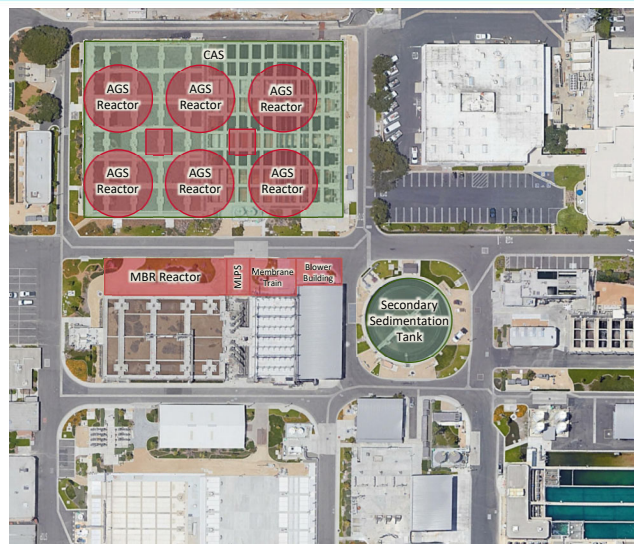
19

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MWRP Alternative M3 Expand MBR to 15 mgd and Replace CAS with 13 mgd AGS

- Total Plant Loading Capacity: 28 mgd
- Expand MBR by adding 5 mgd train
- Remove CAS
- Construct new 13 mgd AGS

■ New facilities
■ Demolition of existing facilities



Irvine Ranch Water District

Basis

Methodology

System-Wide

Plant-Specific

Implementation

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Recycling Facility Treatment Evaluation MWRP Alternatives

Alternative	Impact to MBR	Impact to CAS	Construction Cost (2035 Dollars)
M1	Add third train Expand from 10 mgd to 15 mgd	Address operational constraints Optimize for 13 mgd	\$74M
M2	Add third train Expand from 10 mgd to 15 mgd	Remove and replace with MBR at 13 mgd	\$239M
M3	Add third train Expand from 10 mgd to 15 mgd	Remove and replace with Aerobic Granular Sludge (AGS) at 13 mgd	\$91M

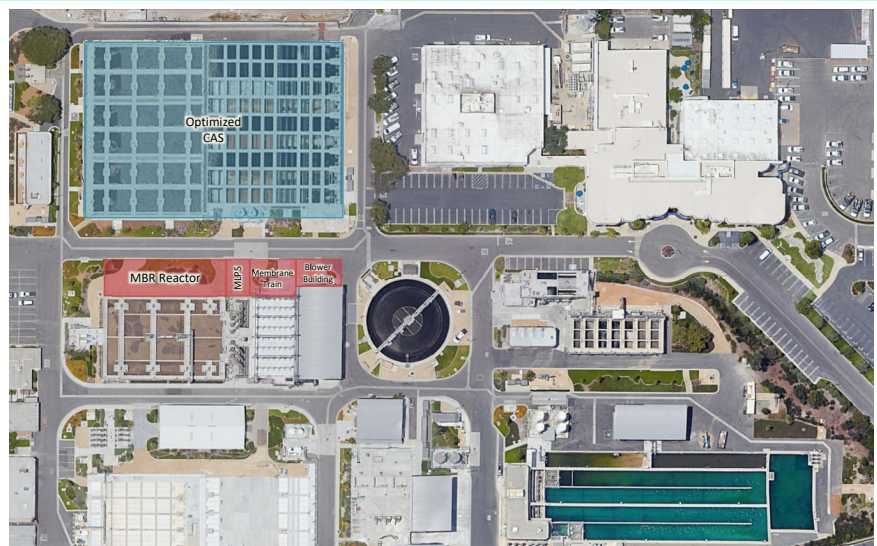
* Note construction costs do not include future improvements to address high TDS from IBC flows routed to MWRP.

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Recycling Facility Treatment Evaluation MWRP Preferred Alternative – Site Plan

- Lowest capital and life-cycle cost
- Lowest site disruption

■ New facilities
■ Modifications to existing facilities



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Los Alisos Water Recycling Plant Treatment Overview

Ponds 1 and 2: High-Rate Aerated
Ponds for BOD Removal Only

Headworks

Pond 5: Final Clarification and
Equalization

Pond 3: Solids Stabilization and
Storage

Pond 4: Solids Stabilization and Storage

SOCWA Pump Station

Disinfection

Tertiary Filtration



Irvine Ranch Water District

Basis

Methodology

System-Wide

Plant-Specific

Implementation

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Considerations for LAW RP Treatment Evaluation

- In the US, 90% of municipal aerated lagoon treatment plants are less than 1.0 mgd
- Largest aerated lagoon system in US (20 mgd) was in Modesto, CA; converted to BNR + Tertiary Membrane in 2018
- Unifying the recycled water system requires nutrient removal and TDS reduction
- Phased implementation
- Phase 1 (Modernization)
 - Remove all process areas except disinfection
 - Retain access and use of SOCWA outfall
 - Construct new facility with 6.25 mgd capacity
- Phase 2 (Expansion)
 - Expand sewage treatment to 12.5 mgd
 - Add digestion facilities
 - Construct new AWPf for raw water augmentation at Baker WTP



Irvine Ranch Water District

Basis

Methodology

System-Wide

Plant-Specific

Implementation

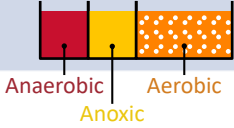
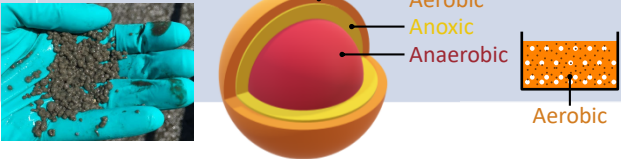
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Recycling Facility Treatment Evaluation LAWRP Alternatives

- Developed and evaluated six shortlisted treatment alternatives
- Selected two preferred alternatives:

L2 Membrane Bioreactor (MBR)	L3A Aerated Granular Sludge (AGS)
<ul style="list-style-type: none"> • Second lowest capital and operating costs • Established treatment process • Staff familiarity • Robust treatment • Greater consistency in sludge produced • Consolidated secondary and tertiary treatment 	<ul style="list-style-type: none"> • Lowest capital and operating costs • Eliminates primary sedimentation • Ability to produce secondary effluent for disposal • Biological phosphorus removal – improves reservoir water quality • Granular sludge process is relatively new to US
	

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Recycling Facility Treatment Evaluation LAWRP Site Plan (at Ultimate Flows)



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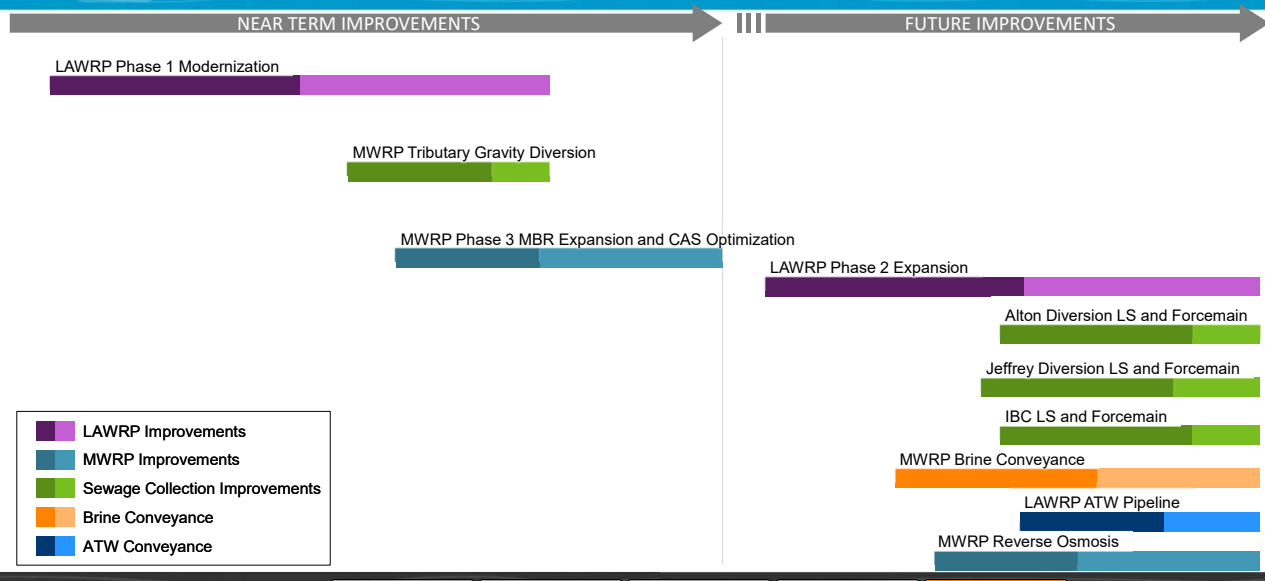
Recycling Facility Treatment Evaluation LAWRP Alternatives

Alternative	Description	Construction Cost (2035 Dollars)	Life Cycle Cost
L2 MBR		\$495M	\$2,867M
L3A AGS		\$480M	\$2,700M

* Note construction and life cycle costs include Phase 1 and Phase 2 improvements, including the AWPF

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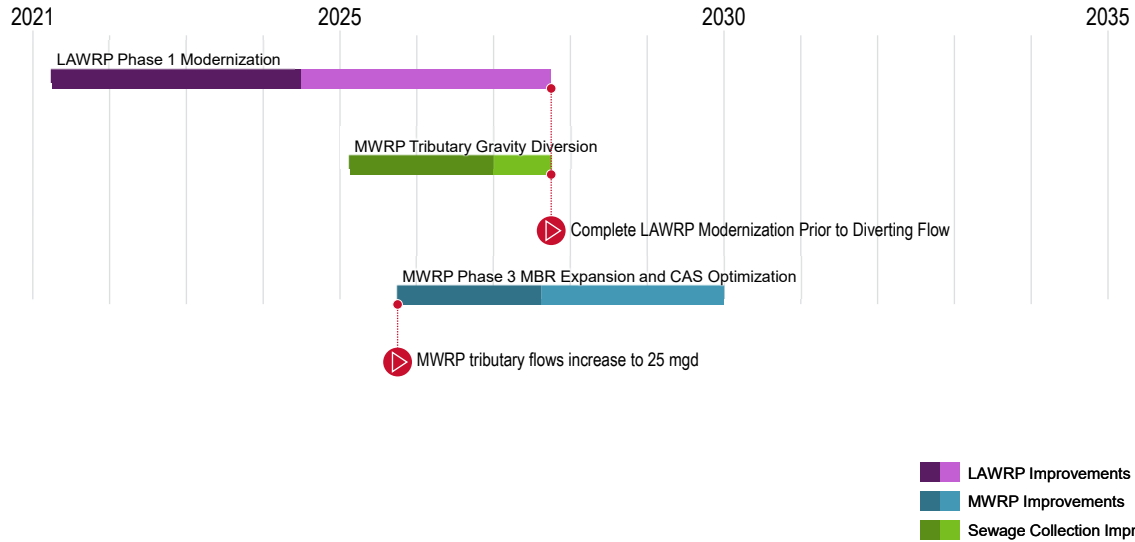
Overall Implementation Plan



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Implementation Plan Near Term Improvements



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Implementation Plan and Future Considerations

- Impacts to Potable Water Supplies
- Potable Reuse Regulations
- Modification to Local Limits Program
- LAFCO considerations
- Interagency Agreements
 - Baker WTP Partners
 - OCSD
 - OCWD
 - SMWD

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Next Steps

- Proceed with recommended near term projects
 - LAWRP Phase 1 Modernization
 - MWRP Tributary Gravity Diversion
 - MWRP Phase 3 MBR Expansion & CAS Optimization
- Provide completed Master Plan Report to OCSD and SMWD and discuss improvement plans



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Near Term Improvements Capital Budget Impacts

Project	Estimated Total Capital Cost	Current Capital Budget Amount	Capital Budget Increase	Recommended Improvement District Split
FY 2020-2021 Capital Budget Impacts				
MWRP Tributary Gravity Diversion	\$3 M	\$0	\$3 M	Sewer Regional Split
LAWRP Treatment Modernization	\$214 M ¹	\$21 M	\$193 M	Sewer Replacement ²
Long-Term Capital Program Impacts				
MWRP Expansion Phase 3				
MBR	\$64 M	\$31 M	\$33 M	RW and Sewer Regional Split
CAS	\$18 M	\$0	\$18 M	Sewer Regional Split
TOTAL	\$299 M	\$52 M	\$247 M	

1. Capital costs assume that thickened sludge would be trucked to MWRP for digestion.
2. The estimated increase to the Financial Replacement Model is \$256 M over the next 50 years.

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Recommendations

- Authorize the addition of the MWRP Tributary Gravity Diversion project, in the amount of \$2,942,000 to the FY 2020-21 Capital Budget; and
- Authorize a budget increase in the amount of \$193,130,250, from \$20,975,000 to \$214,105,250 for the LAWRP Treatment Modernization project.

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Questions/Discussion



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EXHIBIT "B"

Terms Sheet

Abbreviation	Definition
AER	Aerobic
AGS	Aerobic Granular Sludge
ATW	Advanced Treated Water
AWPF	Advanced Water Purification Facility
BOD	Biological Oxygen Demand
BWTP	Baker Water Treatment Plant
CAS	Conventional Activated Sludge
CORF	Capital Outlay Revolving Fund
ETWD	El Toro Water District
GAP	Green Acres Project
IBC	Irvine Business Complex
LAFCO	Local Agency Formation Commission
LAWRP	Los Alisos Water Recycling Plant
MBR	Membrane Bioreactor
MLPS	Mixed Liquor Pump Station
MWD	Metropolitan Water District
MWRP	Michelson Water Recycling Plant

Abbreviation	Definition
MT	Membrane Treatment
OCSD	Orange County Sanitation District
OCWD	Orange County Water District
RO	Reverse Osmosis
RW	Recycled Water
RWA	Raw Water Augmentation (Potable Reuse)
SMWD	Santa Margarita Water District
SOCWA	South Orange County Wastewater Authority
STMP	Sewage Treatment Master Plan
SWA	Surface Water Augmentation (Potable Reuse)
TDS	Total Dissolved Solids
TMF	Tertiary Membrane Filters
TSS	Total Suspended Solids

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January 25, 2021

Prepared by: R. Burk / M. Cortez

Submitted by: K. Burton

Approved by: Paul A. Cook



ACTION CALENDAR

OPERATIONS CENTER COMPRESSED NATURAL GAS, DIESEL, AND GASOLINE FUELING FACILITY BUDGET INCREASE AND CONSULTANT SELECTION

SUMMARY:

The Operations Center Compressed Natural Gas (CNG), Diesel, and Gasoline Fueling Facility project will install a CNG Fueling Facility, replace the existing diesel and gasoline fueling systems, and install an additional diesel storage tank to increase the storage capacity to account for three days of emergency diesel fuel use. Staff recommends the Board:

- Authorize a budget increase in the amount of \$1,882,000, from \$748,000 to \$2,630,000, for Operations Center CNG, Diesel, and Gasoline Fueling Facility – DW, Project 07881;
- Authorize a budget increase in the amount of \$4,509,000, from \$748,000 to \$5,257,000, for Operations Center CNG, Diesel, and Gasoline Fueling Facility – SS, Project 07882; and
- Authorize the General Manager to execute a Professional Services Agreement with AECOM in the amount of \$701,560 for engineering design services for the Operations Center CNG, Diesel, and Gasoline Fueling Facility.

BACKGROUND:

IRWD's Fleet Services Facility located at the Michelson Operations Center maintains a fleet of approximately 300 vehicles fueled by either diesel, gasoline, or CNG. A fuel island located in the parking lot adjacent to the Fleet Services Facility is used for fueling vehicles with either diesel or gasoline. Currently, IRWD's CNG vehicles are fueled at the City of Irvine's facility or the City of Santa Ana's facility. This project will install a new CNG Fueling Facility to fuel the District's 11 sewer jetter trucks, vector trucks, hydraulic excavators, tractor, and boom crane. The CNG Fueling Facility is proposed to be located on the northeast side of the Operations Center access road. A site plan is shown in Exhibit "A".

The existing diesel and gasoline fleet fueling systems are approaching the end of useful life and require replacement. The systems consist of a 15,000-gallon underground gasoline storage tank, a 12,000-gallon underground diesel storage tank, fuel dispensers, transition sumps, and piping. This project will replace the existing storage tanks with above ground storage tanks located on the hillside area northeast of the Operations Center Access Road (see Exhibit "A") as well as replace the existing fuel dispensers and associated piping and equipment at the fuel island.

The District is in the process of increasing emergency fuel storage capacity throughout IRWD's service area to account for three days of emergency fuel use for generators. The Michelson Operations Center has nine stationary generators and 11 portable generators. The last component of this project is the installation of an additional above ground diesel storage tank to supply the three days of emergency diesel fuel.

Consultant Selection:

Last year, IRWD retained Fuel Solutions to evaluate CNG fueling alternatives for the Michelson Operations Center as well as diesel storage requirements to allow for three days of emergency diesel fuel use. Based on Fuel Solutions' recommendations, staff developed the scope of the design. Staff issued a request for proposal for the design to three consultants: AECOM, HDR, and Stantec. HDR declined to submit a proposal citing staff availability. AECOM and Stantec submitted proposals on December 21, 2020.

Staff evaluated the proposals based on the consultants' project approach, project team and relevant experience and recommends the selection of AECOM. AECOM and Stantec provided proposals that reflected a good understanding of the scope of work and the work effort and commensurate fees required to complete the design. AECOM's design fee is \$701,560, and Stantec's design fee is \$583,887. Both firms included tasks to design a new CNG fueling facility, replace the existing diesel and gasoline fueling system, and install additional diesel storage capacity to account for three days of emergency diesel fuel use. AECOM included tasks to coordinate with regulatory agencies and prepare design plans for the removal of the existing underground storage tanks for diesel and gasoline.

Staff recommends the selection of AECOM based on the design concepts and project approach presented in its proposal, the strength of its project team, and its recent successfully completed design experience on District projects. The consultant evaluation matrix is provided as Exhibit "B", and a copy of AECOM's proposal is provided as Exhibit "C".

FISCAL IMPACTS:

Staff requests budget increases to Projects 07881 and 07882 as shown in the table below. These projects consist of building new facilities, replacing aging infrastructure, and supporting all District functions. The replacement components of the project will be funded equally by the Potable and Sewer Replacement Funds. The new facilities will be funded in equal parts by the Regional Potable, Sewer, and Recycled Water Improvement District Splits.

Project No.	Current Budget	Addition <Reduction>	Total Budget
07881	\$748,000	\$1,882,000	\$2,630,000
07882	\$748,000	\$4,509,000	\$5,257,000
Total	\$1,496,000	\$6,391,000	\$7,887,000

ENVIRONMENTAL COMPLIANCE:

This project is subject to the California Environmental Quality Act (CEQA). In conformance with the California Code of Regulations Title 14, Chapter 3, Section 15004, the appropriate environmental document will be prepared when "meaningful information" becomes available.

COMMITTEE STATUS:

This item was reviewed by the Engineering and Operations Committee on January 19, 2021.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE A BUDGET INCREASE IN THE AMOUNT OF \$1,882,000, FROM \$748,000 TO \$2,630,000, FOR PROJECT 07881 AND IN THE AMOUNT OF \$4,509,000, FROM \$748,000 TO \$5,257,000, FOR PROJECT 07882, AND AUTHORIZE THE GENERAL MANAGER TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT WITH AECOM IN THE AMOUNT OF \$701,560 FOR ENGINEERING DESIGN SERVICES FOR THE OPERATIONS CENTER COMPRESSED NATURAL GAS, DIESEL, AND GASOLINE FUELING FACILITY, PROJECTS 07881 AND 07882.

LIST OF EXHIBITS:

- Exhibit "A" – Site Plan
- Exhibit "B" – Consultant Selection Evaluation Matrix
- Exhibit "C" – AECOM's Proposal

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EXHIBIT "A"

PROJECT SITE PLAN OPERATIONS CENTER COMPRESSED NATURAL GAS (CNG), DIESEL, AND GASOLINE FUELING FACILITY



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EXHIBIT "B"

Operations Center Compressed Natural Gas (CNG), Diesel, and Gasoline Fueling Facility Consultant Selection Matrix
5-Jan-20

	Weights	AECOM	Stantec
TECHNICAL APPROACH	60%		
*Project Approach	50%	1	2
*Scope of Work	50%	1	2
Weighted Score (Technical Approach)		1.00	2.00
EXPERIENCE	40%		
*Firm/Team	30%	1	2
*Project Manager	40%	2	1
*Project Engineer	30%	1	2
Weighted Score (Experience)		1.40	1.60
Principal-in-Charge/Technical Advisor Project Manager QA/QC Manager Project Controls Mechanical Fuel System Engineering Civil Improvements Fueling Systems CNG Instrumentation & Controls CAD Civil/Structural Structural Electrical Permit Coordination		Heidi Goebel Sean Goldsmith Bryan Paine Melanie Kirk Sean Goldsmith Bill Black Matt Hyatt James Young Tim Gutkowski Allen Randall	Jason Carr Joe Long Reb Guthrie - Fuel Solutions Tama Snow, Cole Warrick, Richard Robinson Faye Farahmand - Fuel Solutions Jeff Wilson Craig Wilcox Marty Armenta Reb Guthrie - Fuel Solutions
COMBINED WEIGHTED SCORE		1.16	1.84
		Man-hours	Man-hours
Task 1 Project Management		529	250
Task 2 Preliminary Design		434	632
Task 3 Final Design		2,870	1,316
TOTAL HOURS		3,833	2,198
Number of Construction Drawings		72	60

Operations Center Compressed Natural Gas (CNG), Diesel, and Gasoline Fueling Facility Consultant Selection Matrix
5-Jan-20

	Weights	AECOM	Stantec
FEE			
Task 1 Project Management		\$100,995	\$72,207
Task 2 Preliminary Design		\$80,650	\$122,646
Task 3 Final Design		\$519,915	\$389,034
Total		\$701,560	\$583,887
Average \$/manhrs		183	266
Professional Liability Insurance		YES	YES
General Liability Insurance		YES	YES
FORCED RANKINGS:		1	2
1 - First			
2 - Second			



Michelson Water Recycling Plant Compressed Natural Gas Fueling Facility

Engineering and Design Services

Irvine Ranch Water District

Proposal reference: 1090978 - Rev 1

January 8, 2021

January 8, 2021

Our Reference
1090978 – Rev 1

Ms. Rachael L. Burk, PE
Project Manager
3512 Michelson Drive
Irvine, California 92612

via hard copy and email -
burk@irwd.com

MWRP CNG Fueling Facility and Upgrades to Diesel and Gasoline Fleet Fueling Systems

Dear Ms. Burk:

Irvine Ranch Water District (IRWD) has determined that the existing gasoline and diesel systems at its Michelson Water Recycling Plant (MWRP) need to be replaced. This will be done with new above-ground storage tanks (AST), dispensers, and fuel management system, along with a new CNG system will be constructed to facilitate CNG fueling. AECOM is pleased to offer this revised proposal to perform engineering services for the MWRP CNG Fueling Facility and Upgrades to Diesel and Gasoline Fleet Fueling Systems Project in Irvine, California. This proposal is based on items requested in the RFP received November 11, 2020 via email, site walk on November 30, 2020, and discussion held on January 6, 2021. We are excited to have the opportunity to present this information that outlines our understanding of the project, our anticipated deliverables, revised project team, preliminary schedule, and our cost and commercial terms to execute the project within your desired timeline.

When making contractor selections please consider the following:



Technical Expertise – Our multi-discipline staff are poised to provide IRWD with the most innovative, cost-effective, design solution. Our key personnel resumes highlight experience demonstrative of our ability to deliver fuel storage and compressed natural gas (CNG) projects. Our team will be led by **Sean Goldsmith, PE** who will serve as the project manager and mechanical lead. Sean brings more than 14 years of experience in project/mechanical engineering and technical oversight on projects for major oil and gas companies. Sean will be supported by **Bryan Paine, PE**, as QA/QC manager. Bryan brings 22 years of experience in the planning, design, construction, and operations of public infrastructure including managing multiple IRWD capital improvement projects. Of value on this project is the involvement of our CNG subject matter expert, **Bill Black, PE**, who has been designing fueling stations for more than 25 years. His expertise includes planning and design of fueling facilities (CNG, LNG, gasoline, propane, and diesel), municipal engineering, site design work, highway design, water, sewer and storm drainage studies, minor structural design, and contract administration. He is certified by the Natural Gas Vehicle Institute for the design of CNG stations and has personally designed and/or evaluated more than 50 fueling stations in North America. Bryan, Sean, and Bill will be supported by a team of engineers and designers.

Benefit – Our demonstrated experience and access to in-house subject matter experts provides IRWD the expertise and solutions that the best available technology and approaches are being employed for the MWRP CNG Fueling Facility and Upgrades to Diesel and Gasoline Fleet Fueling Systems Project.

✓ **Relevant Experience** – Our submittal includes a listing of relevant project experience that shows the diversity we have in designing CNG and storage tanks projects as well as projects for IRWD. This listing includes multiple CNG projects in California as well as storage experience for several oil & gas companies.

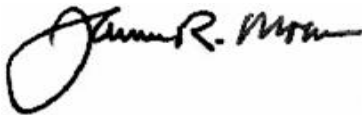
Benefit – This diversity in expertise has helped identify a multitude of approaches and techniques that can be used to define the most effective design and construction approach for your project.

✓ **Local Presence** – We plan to involve local Orange-based resources to execute the project.

Benefit – This allows us to cost effectively support all your desired meetings, while minimizing the associated travel expenses.

AECOM is proud to provide engineering and design services with a commitment to delivering the highest standards of business conduct and ethics. We are proud to be contributing to IRWD's business success, sharing its values, safety, and quality standards. We appreciate the opportunity to provide this proposal and look forward to working with the IRWD team towards a successful project. Should you have any questions or require additional information, please contact Sean Goldsmith at the information provided below.

Yours sincerely,



James R. Moon
Vice President, Industrial Engineering
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AECOM
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E: sean.goldsmith@aecom.com

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1. Scope of Work

1.1 Project Understanding and Approach

1.1.1 Project Background

Irvine Ranch Water District (IRWD) operates the Michelson Water Recycling Plant (MWRP) in Irvine, California. MWRP maintains approximately 300 fleet vehicles ranging from passenger vehicles to heavy machinery. Most of the vehicles use gasoline and diesel fuel, while 11 vehicles use compressed natural gas (CNG). IRWD anticipates expanding the CNG vehicle fleet by five (5) heavy vehicles in the future.



Michelson Water Recycling Plant

MWRP currently has the capability to fuel gasoline and diesel vehicles on-site, while CNG vehicles must fuel offsite at the city of Irvine’s CNG fueling facility or the Santa Ana CNG fueling facility. IRWD wishes to provide on-site CNG fueling at MWRP to alleviate the need for staff to travel offsite and wait in cue with other non-MWRP vehicles.

IRWD evaluated their on-site fuel storage capacities and determined the need to maintain a three-day supply of gasoline, diesel, and CNG. The existing diesel storage capacity does not meet the three-day capacity requirement. Additional storage for diesel will be required.

MWRP’s current fleet fueling consists of a 15,000-gallon gasoline underground storage tank (UST), 12,000-gallon diesel UST, gasoline dispenser, diesel dispenser, and associated fuel management system. IRWD has determined that this equipment is near the end of its useful life and will require replacement.



Fuel Dispensing Station

1.1.2 Project Overview

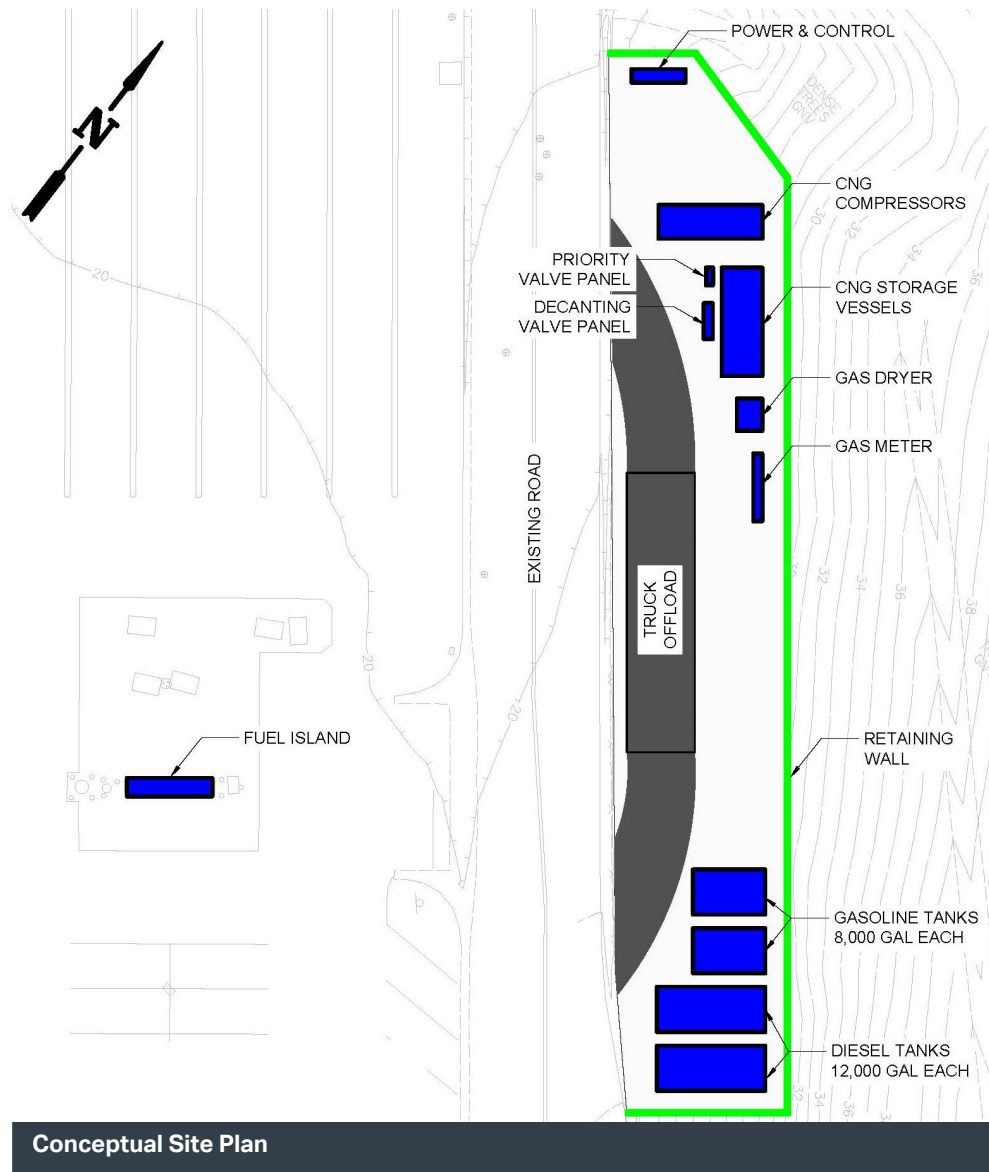
A detailed preliminary design report was completed to evaluate site requirements, existing equipment, fuel capacities, and fuel throughput. The existing gasoline and diesel systems will be replaced with new above-ground storage tanks (AST), dispensers, and fuel management system. A new CNG system will be constructed to facilitate CNG fueling.

1.1.2.1 Site Layout

Plot space at the MWRP site is in short supply, as most of the site is used for vehicle parking or allocated for future projects. A location near the north end of the facility has been identified for the new fueling equipment. The proposed location is currently a hillside and will require significant grading and a new retaining wall. During preliminary design, AECOM proposes to optimize the equipment layout to minimize the required plot space. A truck offloading lane will be established as to not restrict traffic on the road adjacent to the proposed site location.

The existing dispensing island is currently slated to be demolished and rebuilt to accommodate gasoline, diesel, and CNG fueling. AECOM proposes to evaluate alternate dispensing locations during preliminary design to potentially alleviate the downtime required to demolish and rebuild the dispensing island. Alternate locations may include dispensing near the storage tanks or using an area that is currently used for vehicle parking.

AECOM developed the conceptual site plan (presented below) for IRWD's consideration. The truck offload lane has been included as well as revised equipment arrangements discussed in Sections 1.1.2.2 and 1.1.2.3 that follow.



Conceptual Site Plan

1.1.2.2 Compressed Natural Gas System

The preliminary design report evaluated both slow-fill and fast-fill options for CNG fueling. AECOM understands that IRWD has ruled out slow-fill, and fast-fill is preferred per Configuration D of the preliminary design report.

A 6-inch natural gas line owned by SoCal Gas runs through MWRP. Coordination with SoCal Gas will be required for SoCal Gas to tap the line and install a new gas meter to feed the CNG fueling system.

The CNG fueling system will consist of compressors, a manual regeneration desiccant dryer, filtration, storage, priority valve panel, decanting valve panel, and dispensing. The preliminary design report (PDR) made recommendations for compressor size, storage volumes, and three-day storage philosophy. AECOM concurs with the recommended 205 SCFM compressors instead of the smaller 75 SCFM compressors based on efficiency and reliability. AECOM would also like to build on the PDR by presenting a more efficient solution in terms of compressors for consideration. Such a recommendation would necessitate preparing a Form 5 and submitting it to SoCal Gas. The last fuel pressure analysis by SoCal Gas was two years ago. According to SoCal Gas, there may be an opportunity to take advantage of higher available pressure, and with the same 125 horsepower driver requirement, more efficiency could be achieved which translates to less energy and longer maintenance intervals.

Understanding there are power limitations, AECOM proposes to reevaluate the compressor size and power limitations during primary design to confirm optimum system performance. AECOM also proposes to evaluate the three-day storage philosophy such that it complements the compressor selection and fast-fill requirements during gas supply disruption.

The PDR identified spheres for gas storage. AECOM suggests considering gas cylinders to optimize plot required for gas storage. Gas cylinders will require less area per unit stored as well as a reduction in tubing needed for connection to the compressors, the priority and decanting valve panels.

Safety will always be considered of primary importance in the design of your CNG station. An example of this is "block and bleed" with the imperative that no one should ever put a wrench on a pressurized pipe. Pressure safety relief valves must be calibrated on a given schedule dictated by code. When they are removed, there needs to be a way to remove them safely. In many cases it has been observed that the operator had to "crack a thread" to relieve pressure so that pressure safety valves could be changed out. That will NOT happen on this station. Block and bleed will be addressed in our design.



1.1.2.3 Gasoline and Diesel Systems

The existing USTs are slated to be abandoned or removed. This will require coordination with the city of Irvine, Orange County Fire Authority, and Orange County Health Care Agency. AECOM's recent experience is that authorities having jurisdiction (AHJ) require USTs to be removed unless it can be shown that removal is not possible. Based on site observations, AECOM anticipates the AHJs will require removal. AECOM will coordinate with the appropriate AHJ to determine removal requirements (such as abandonment plan, soil sampling, and tank cleaning) during preliminary design and include those requirements in the final design drawings.

Three new aboveground storage tanks (AST) were identified in the PDR, two 12,000-gallon diesel tanks, and one 15,000-gallon gasoline tank. After review, AECOM proposes to reevaluate the storage capacities and arrangement during preliminary engineering. AECOM believes California Fire Code (CFC) may restrict the size of above ground motor fuel dispensing tanks to 12,000-gallons if they are not located in vaults.

1.1.2.4 Control System & Fuel Management

A new PLC will be provided for control of the CNG system as well as receive permissive signals due to utility power failure scenario identified in the preliminary design report. System status and alarms will be available in the control room on an operator consol. The present fuel management system will be replaced with a modern system. The system will include vehicle identification and user authentication at the dispensing island. The fuel management system will communicate via radio to the control room where the fuel management servers will be located. Each compressor will be supplied with a dedicated engine/compressor controller. Operational data can be polled from the controller and provided to the site control system for trending, archival, historical data capture, and alarm management. The control system will include shutdown or ESD functionality and will rely on interface signals and shutdown commands to be hardwired between the various systems. It should be noted that any ESD activation will shut down all fueling (gasoline, diesel, and CNG). Additional controls for CNG storage control will be integrated into the overall control system. Each dispenser is supplied with a standalone dispenser controller that monitors/manages the vehicle fueling and provides for data communications and hardwired signal interfaces.

1.2 Scope of Services

The scope of work for the design and implementation of the MWRP fueling upgrade project includes project management, preliminary design, and final design activities.

1.2.1 Project Management

AECOM will provide effective project management that adheres to the scope, schedule, and budget outlined in this proposal. We will provide efficient and frequent communication with IRWD and other project stakeholders throughout the project duration to confirm expectations are achieved. We will also implement our Quality Management System (QMS) in order to provide effective quality assurance/quality control for all deliverables and design activities. The scope of services for project management includes the following:

1.2.1.1 Project Status Reports

AECOM will prepare weekly and monthly project status reports for IRWD's management team. The weekly status reports will consist of a brief (one to two paragraphs) email summarizing work activities completed the previous week along with activities planned for the upcoming week. The monthly status reports will provide more detail as to project activities and will summarize work for the previous and upcoming month. The monthly reports will include an updated project schedule using Microsoft Project and a summary of budget status by task.

1.2.1.2 Meetings

AECOM will schedule and lead meetings with IRWD's team to verify that all design, operational, and maintenance issues are addressed appropriately. AECOM will provide agendas of upcoming project coordination meetings five working days in advance of the meeting and prepare meeting minutes and action items within five working days after the meetings. These efforts are intended to make sure that all technical issues are being addressed and that the project remains on schedule. For the purposes of budgeting, the following meetings are anticipated for the project:

- Kickoff meeting and site visit (2 hours)
- Draft Technical Memorandum Submittal Meeting – Basis of Design (2 hours)

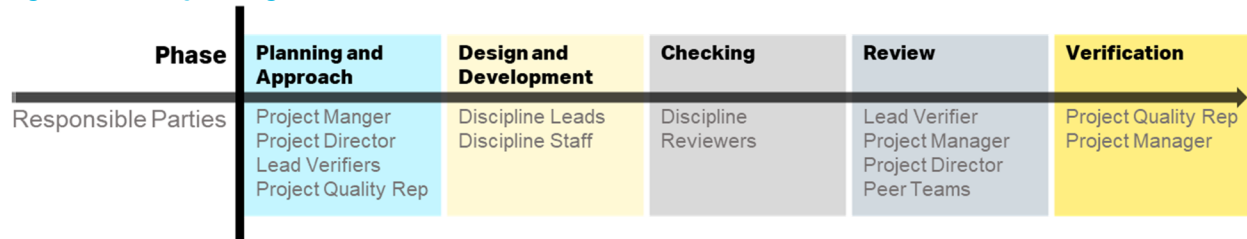
- Present the 60% design and record IRWD's comments (2 hours)
- Present the 90% design, discuss IRWD's comments (2 hours)
- Present the 100% design, discuss IRWD's comments (2 hours)
- Final design plan signing (1 hour)

The budget has been allocated for two, two-hour, on-site meetings for key technical staff in addition to the meetings listed above.

1.2.1.3 Quality

AECOM will implement its QMS throughout the project to confirm consistent quality control for all project phases. The QMS system is based on the ISO 9001 standard and is required on all AECOM projects. The AECOM QMS system requires that each project deliverable undergo a detailed checking review, independent technical review, and construction documents will undergo a constructability review. The independent technical review will be provided by a technical expert in the related field, who has not been involved in preparation of the deliverable. The detailed checking review focuses on a review of grammar, spelling, notes, construction callouts, construction coordinates, plans and specification coordination, and discipline coordination. AECOM will provide IRWD with review comment disposition forms, redlines, redline back-checks, and QMS forms upon request.

Figure 1. Quality Management Process



1.2.2 Preliminary Design

A preliminary design report has been completed (by others) for this project. AECOM will complete a basis of design technical memorandum with supporting drawings and exhibits. The assumptions stated in the preliminary design report will be validated and modifications (as needed) will be proposed. The following items will be addressed during preliminary design:

1.2.2.1 Basis of Design

The basis of design technical memorandum will include the following:

- CNG system criteria including requirements for utility gas supply, compressors, storage vessels, gas dryer, gas filters, fast-fill dispensers, priority valve panel, decanting valve panel, control system, valves, piping, etc.
- Gasoline and diesel system criteria including requirements for truck offloading, storage tanks, pumps, dispensers, control system, leak detection system, valves, piping, etc.
- Demolition requirements for the two existing USTs including soil sampling, tank cleaning, and backfilling.
- Identification of all permitting requirements for the project will be provided. Anticipated permitting agencies include, but are not limited to city of Irvine, Orange County Fire Authority, Orange County Health Care Agency Environmental Health Division, and South Coast Air Quality Management.

1.2.2.2 Piping and Instrumentation Diagrams (P&IDs)

Preliminary P&IDs will be developed during preliminary engineering in conjunction with the basis of design to convey the process operation for CNG, gasoline, and diesel systems.

1.2.2.3 Site Plan

A preliminary site plan will be developed to determine plot space requirements and equipment configuration to support the basis of design. The site plan will also identify locations for the truck offloading location. It will also verify separation criteria and aisle spacing required by the AHJs.

1.2.2.4 Electrical Load Study

The preliminary design report evaluated the CNG power requirements in conjunction with the site electrical limitations. AECOM will confirm the existing 480VAC/300A electrical service intended for the CNG facility will provide adequate capacity for the new loads. We assume IRWD maintains a coordination and arc flash model that depicts the current electrical system configuration and that the coordination and arc flash report will be updated by others.

1.2.3 Final Design

The final design will be completed in accordance with IRWD’s Design Process Manual. AECOM will address the following items in the final design:

1.2.3.1 Utility Review

AECOM will perform a tabletop site utility investigation by reviewing IRWD record drawings and recent project as-built. Appropriate third-party utility companies will be contacted to determine the location of third-party utilities. All third-party utilities will be shown on the project construction drawings.

1.2.3.2 Potholing

Once utilities are identified during the utility review, AECOM will prepare a pothole plan to confirm utility locations. We will subcontract with a potholing contractor to perform up to 10 potholes.

1.2.3.3 SoCal Gas Coordination

A new natural gas meter will be required to supply natural gas to the CNG system. IRWD will lead the coordination with SoCal Gas. AECOM will prepare two exhibits identifying the CNG facility location and necessary details to aid in IRWD coordination with SoCal Gas.

1.2.3.4 Permitting

AECOM will prepare a permit matrix that will identify all project required permits and their agencies. All permit prerequisites and requirements will be identified on the permit matrix. AECOM will submit permit applications on behalf of IRWD and work through the plan check process until plan check is complete and the permit is approved. After review of the project scope, AECOM believes the following permits will be required:

Table 1. Permits Required.

Agency	Permit	Notes
City of Irvine	Grading	
City of Irvine	Building	
City of Irvine	Electrical	
Orange County Fire Authority	Fire	
Orange County Health Care Agency, Environmental Health	Storage Tanks Installation/Removal	
South Coast Air Quality Management District	Permit to Operate	Modify existing air permit per project

After discussion with IRWD during the job walk, AECOM assumes that environmental permitting will not be required.

1.2.3.5 Geotechnical Support

AECOM has performed a preliminary review of the geotechnical report provided by IRWD and concluded that additional geotechnical investigation will likely be required. During final design, AECOM will develop a scope of work and boring plan for the additional geotechnical scope. It is assumed that IRWD will contract with NMG Geotechnical, Inc. directly for the additional services.

AECOM can self-perform any additional geotechnical engineering services required for the project. An optional task for two additional borings up to 35 feet deep, along with lab analysis, and a technical report have been included in the fee schedule. AECOM assumes the boring location will be suitable for the boring equipment required.

1.2.3.6 Survey

AECOM has performed a preliminary review of the survey data provided by IRWD and concluded that additional survey data will likely not be required. This assumes the project selects the proposed site location as defined in the preliminary design report.

1.2.3.7 CNG Facility Power Supply

AECOM understands that a dedicated 480VAC/300A feeder has been installed for CNG facility power and proposes to evaluate the feeder suitability during preliminary engineering to align compressor selection with site power limitations. This will allow any major issues to be identified early in the project cycle. During final design, all the loads will be accounted for and the electrical construction drawings will be developed.

1.2.3.8 Electrical and Instrumentation

AECOM will prepare P&IDs, single line diagrams, load lists, panel schedules, instrument & IO list, cause & effect matrix, control panel layout drawings, control loop drawings, control description, and communication block diagrams for the CNG and gasoline/diesel systems. We will schedule a workshop with IRWD to confirm alignment with IRWD control system preferences, standard operations, programming, and tagging requirements.

1.2.3.9 Project Manual

AECOM will prepare the project manual in standard IRWD format and complete IRWD templates for the bidding and contract requirements section of the manual. We will use the latest version of IRWD's project manual for bidding, agreements, general provisions, and special provisions. The special provisions will be tailored for the project. The project manual will reference the applicable sections of IRWD's general technical specifications. AECOM will modify these sections and provide new technical sections as needed for the project.

An original set of bid documents in 8.5-inch x 11-inch format will be provided. Electronic native files of the project manual will be submitted to IRWD in the latest version of Microsoft Word on CD-1 and as a single PDF file on CD-2. We will use sample IRWD project manuals as reference.

1.2.3.10 Construction Plans

AECOM will prepare detailed construction drawings in the latest version of AutoCAD using NCS V4.0 layering standards. Construction drawings will be prepared on 22-inch x 34-inch sheet with an IRWD standard border template. Construction drawings will include general notes, construction notes, sheet index, location map, legends, plans, and associated sections & details. The horizontal and vertical control will be established with NAD83 and NAVD88 survey standards, respectively. Anticipated construction drawings are listed in the table below:

Table 2. Anticipated Construction Drawings.

Sheet Number	Drawing Number	Sheet Title
General		
1	G-1	Title Sheet
2	G-2	Location Map/Drawing Index
3	G-3	General Notes
Civil		
4	C-1	Civil Notes/Index
5	C-2	Site Plan
6	C-3	Location Control Plan
7	C-4	Grading Plan
8	C-5	Facilities Layout & Paving Plan
9	C-6	Demolition Plan – UST
10	C-7	Paving Plan - UST

Sheet Number	Drawing Number	Sheet Title
11	C-8	Civil Details
12	C-9	Civil Details
Structural		
13	S-1	Structural Notes/Index
14	S-2	Structural Site Plan
15	S-3	Retaining Wall Plan
16	S-4	Retaining Wall Section & Details
17	S-5	Retaining Wall Section & Details
18	S-6	CNG Foundation Plan
19	S-7	CNG Foundation Section & Details
20	S-8	Tank Foundation Plan
21	S-9	Tank Foundation Section & Details
22	S-10	Fuel Island Foundation Plan
23	S-11	Fuel Island Foundation Section & Details
24	S-12	Structural Details
25	S-13	Structural Details
Mechanical		
26	M-1	Mechanical Notes/Index/Legend/Symbols
27	M-2	Mechanical Plot Plan
28	M-3	CNG Piping Plan
29	M-4	CNG Piping Sections & Details
30	M-5	CNG Compressor Plan and Section
31	M-6	CNG Storage Plan and Sections
32	M-7	CNG Priority and Decanting Panel Plans & Sections
33	M-8	Tank Piping Plan
34	M-9	Tank Piping Section & Details
35	M-10	Dispensing Piping Plan
36	M-11	Dispensing Piping & Details
37	M-12	Piping Details
38	M-13	Piping Details
39	M-14	Signage Details
40	M-15	Signage Plan
Electrical		
41	E-1	Electrical Notes/Index/Legend/Symbols
42	E-2	Electrical Site Plan
43	E-3	Electrical Single Line Diagram

Sheet Number	Drawing Number	Sheet Title
44	E-4	Equipment Elevations
45	E-5	CNG Power & Control Plan
46	E-6	CNG Lighting & Grounding Plan
47	E-7	CNG Area Classification Plan
48	E-8	Tank Power & Control Plan
49	E-9	Tank Lighting & Grounding Plan
50	E-10	Tank Area Classification Plan
51	E-11	Fuel Island Power & Control Plan
52	E-12	Fuel Island Lighting & Grounding Plan
53	E-13	Fuel Island Area Classification Plan
54	E-14	Control Schematics
55	E-15	Control Schematics
56	E-16	Conduit and Cable Schedule
57	E-17	Electrical Details
58	E-18	Electrical Details
Instrumentation and Controls		
59	I-1	Instrumentation Notes/Index/Legend/Symbols
60	I-2	CNG P&ID
61	I-3	Gasoline and Diesel P&ID
62	I-4	Communication Block Diagram
63	I-5	CNG Control Panel Layout
64	I-6	CNG Control Panel Power Schematic
65	I-7	CNG Control Panel I/O Schematics
66	I-8	CNG Control Panel I/O Schematics
67	I-9	Gasoline/Diesel Control Panel Layout
68	I-10	Gasoline/Diesel Panel Power Schematics
69	I-11	Gasoline/Diesel I/O Schematics
70	I-12	Gasoline/Diesel I/O Schematics
71	I-13	Instrumentation Details
72	I-14	Instrumentation Details

1.2.3.11 Project Schedule

A detailed project schedule that identifies all critical factors including design activities, permitting, coordination events, submittal milestones, IRWD reviews, critical path items, shop drawing reviews, and construction activities will be developed and maintained. AECOM will submit monthly project schedule updates with each monthly status report. We will also submit monthly schedule updates with each design submittal. The schedule will be prepared in Microsoft Project format. A preliminary project schedule is attached in **Section 4**.

1.2.3.12 Liquidated Damage Calculation

AECOM will assist in calculating liquidated damages for the project which would take effect if the contractor exceeds the contract time. IRWD's standard liquidated damage calculation form will be used. AECOM has completed this form for IRWD on numerous projects.

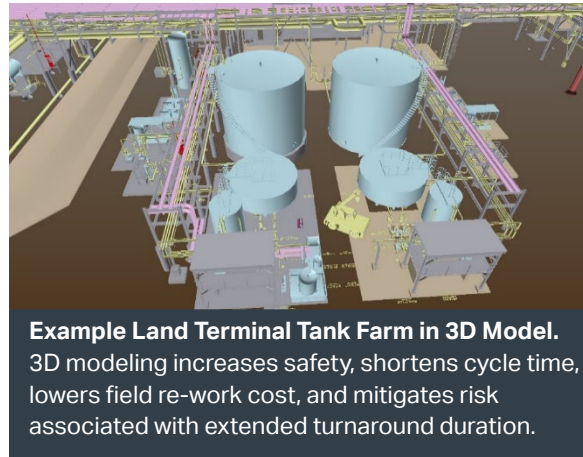
1.2.3.13 Opinion of Probably Construction Costs

AECOM will provide IRWD with an engineer's estimate of probable construction costs for the 60%, 90%, and 100% design submittals. IRWD's comments related to the cost estimate will be incorporated and addressed. Construction costs will be determined from a variety of resources, including vendor quotes, RS Means Costworks software, recent IRWD construction bids, and bids from other local projects that AECOM has recently completed.

1.2.3.14 Design Deliverables

The final design deliverables pursuant to IRWD's design process manual will be provided. Hard copies of construction plans will be reproduced in either full-size (22-inch x 34-inch) format or tabloid (11-inch x 17-inch) format, per IRWD preference. The project manual will be reproduced in double-sided, letter-size format with color paper per IRWD standards. The submittals will be provided as described below.

A 3D model of the project showing all major components for each design submittal will also be developed. AECOM recommends a review meeting with IRWD technical staff where AECOM will present the 3D model in conjunction with the design drawings as an alternate method to convey the project design. We find that a 3D model review helps to identify operational, maintenance, and constructability issues that may be overlooked during a 2D drawing review. The 3D model will be provided in Navisworks format.



60% Submittal

AECOM will submit six (6) 11-inch x 17-inch and two (2) 22-inch x 34-inch bound hard copies and one (1) electronic file in PDF format of the 60% submittal drawings. Drawings will include civil/site layout, demolition, mechanical equipment and piping layout, structural layout, and electrical plans. The 60% submittal will include a table of contents for the project manual. A 3D model will also be provided.

90% Submittal

AECOM will submit six (6) 11-inch x 17-inch and two (2) 22-inch x 34-inch bound hard copies and one (1) electronic file in PDF of the 90% submittal. The 90% submittal will include all required project drawings and show all design components such as civil, structural, demolition, mechanical, electrical, and instrumentation. The 90% submittal will incorporate IRWD's 60% design submittal comments. AECOM will provide five (5) color coded copies of the 90% project manual including all sections, contract documents, general provisions, special provisions, general requirements, technical specifications, and appendices. AECOM will update the engineer's estimate of probable construction cost and provide a 3D model file.

100% Submittal

AECOM will submit six (6) 11-inch x 17-inch and two (2) 22-inch x 34-inch bound hard copies, one (1) CD with AutoCAD files for the entire drawing set, and one (1) CD with a single full-scale PDF file of the drawing set for the 100% submittal. The 100% submittals will have incorporated IRWD's 90% design submittal comments. AECOM will provide five (5) color coded copies of the 100% project manual and a binder with design calculations including civil, structural, mechanical, electrical, pipe thickness, and restraint calculations. One (1) CD will be provided containing all MS Word files used to prepare the project manual. AECOM will update the engineer's estimate of probable construction cost and provide a 3D model file.

Final Design

AECOM will submit one (1) full size stamped and signed reproducible plans (mylars) of the final construction drawings and original signed project manual for IRWD signatures. We will attend IRWD's meeting for signatures to explain the project and answer questions. A final engineer's estimate of probable construction cost will be submitted with the final plans and project manual.

1.2.3.15 Addenda Preparation and Pre-bid Meeting

During the bidding period, AECOM will provide support for information and clarification to the contract documents and construction drawings. We plan to consult with IRWD to address concerns or answer questions in support of administering the bid process. Up to three (3) addenda to the construction drawings and project manual have been budgeted for. For budgeting purposes, AECOM has included the following for addenda preparation:

- 16 hours for drawing revisions.
- 16 hours for specification revision.
- 24 hours to address bidder questions.

AECOM will prepare for and conduct one (1) two-hour pre-bid meeting along with a site visit with potential bidders, if required. AECOM will prepare the meeting agenda, exhibits, sign-in sheet, and minutes for the pre-bid meeting.

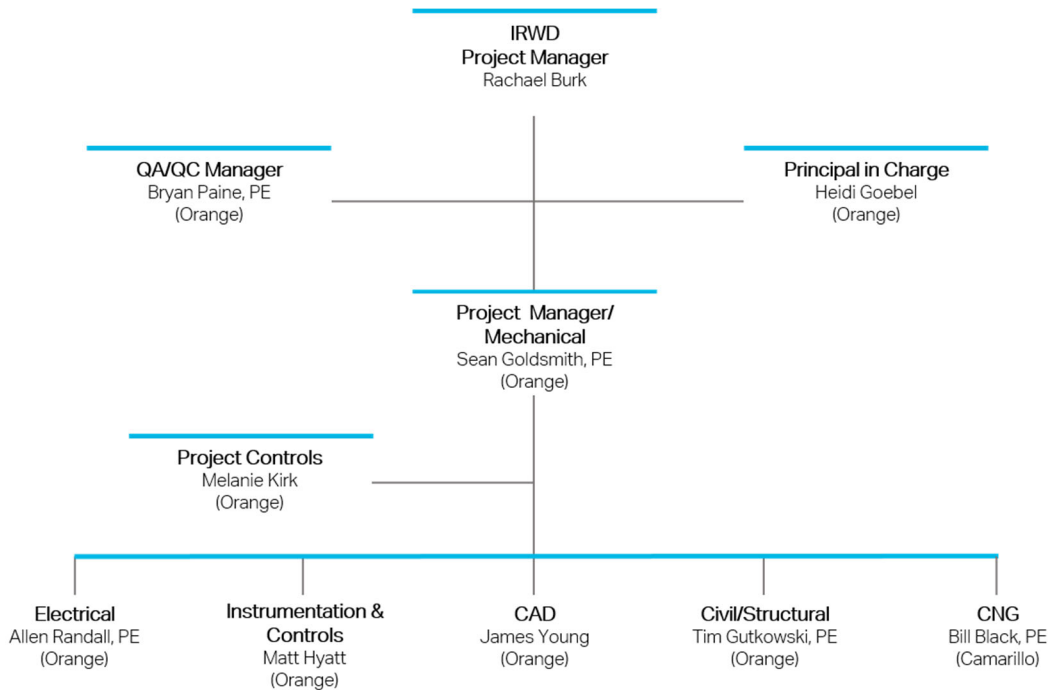
2. Team

2.1.1 Organization Chart

The key to the successful execution of the Michelson Recycling Plant Compressed Natural Gas Fueling Facility and Upgrades to Diesel and Gasoline Fleet Fueling Systems Project is an integrated, experienced team with a record of success of permitting and designing fuel and CNG facility projects. AECOM offers IRWD comprehensive environmental and engineering resources through a core team based in our Orange, California office. Our proposed key personnel have been selected based on their experience working on underground storage, CNG, and facility projects as well as similar scopes of work.

The project will be managed by **Sean Goldsmith, PE**. Sean brings more than 14 years of experience in project/mechanical engineering and technical oversight on projects for major oil and gas companies. He has managed and designed fueling projects for Kinder Morgan, Vopak, and PetroPort. Sean will be supported by a team of engineers and designers. **Bryan Paine, PE** will serve as the QA/QC manager and will support Sean. Bryan brings more than 22 years of experience and is familiar with IRWD’s standards and requirements. He has worked on over a dozen IRWD capital improvement projects over the past two decades including pump stations, lift stations, disinfection facilities, pipelines, tanks, dams, and various updates at MWRP. He has also provided site civil design and permitting support for several diesel and CNG fueling facilities within Southern California. **Bill Black, PE** has been designing fueling stations for more than 25 years and will serve as the CNG expert. His expertise includes planning and design of fueling facilities (CNG, LNG, gasoline, propane, and diesel), municipal engineering, site design work, highway design, water, sewer and storm drainage studies, minor structural design, and contract administration. He is certified by the Natural Gas Vehicle Institute for the design of CNG stations and has personally designed and/or evaluated more than 50 fueling stations in North America (Calgary, Alberta Canada, California, Alabama, Michigan, Virginia, Florida, and Wisconsin). He is currently working on the CNG fueling station of an RNG facility in Bridgeville, Delaware. The proposed organization chart is provided in **Figure 2** below.

Figure 2. Proposed Project Organization Chart



If additional specialty resources are required, AECOM will draw on engineering resources from other offices throughout the United States. Our specialized resources, combined with our national network of technical experts across the United States, enables us to provide the most appropriate expertise to meet your needs, and ultimately, to provide the best value for your project.

AECOM pledges that the key personnel on this team will be available to the extent proposed for the duration of the project, and that no person designated as “key” to the project shall be removed or replaced without the prior written concurrence of IRWD.

We have included an overview of key team members in **Table 3**. Resumes are included in **Appendix A** at the end of this proposal. **Table 4** provides our key team members’ availability.

Table 3. Overview of Team

Name Role	Location	Years of Experience	CNG	Liquid/ Conven- tional Fuels	IRWD	Under- ground Storage Demolition	Specialties and Capabilities
Sean Goldsmith, PE Project Manager/ Mechanical	Orange, CA	14		●		●	<ul style="list-style-type: none"> - UL142 Tanks - Piping Engineering - Equipment Specification - Stress Analysis
Bryan Paine, PE QA/QC Manager	Orange, CA	22	●	●	●	●	<ul style="list-style-type: none"> - Civil Site Improvements - Permitting - CNG and Diesel - Stormwater - Project Management
Heidi Goebel Principal in Charge	Orange, CA	35	●	●		●	<ul style="list-style-type: none"> - Fuel Quality - Fueling Systems - California Requirements - Permitting
Bill Black, PE CNG SME	Camarillo, CA	42	●	●		●	<ul style="list-style-type: none"> - CNG - Conventional Fuels - California Requirements - CNG Compression
Allen Randall, PE Electrical	Orange, CA	45	●	●	●		<ul style="list-style-type: none"> - Electrical Design of Water Systems - CNG
Matt Hyatt Instrumentation & Controls	Orange, CA	35	●	●	●		<ul style="list-style-type: none"> - Fuel Management Systems - CNG Compression - CNG & Fueling Measurement
James Young CAD	Orange, CA	10		●	●	●	<ul style="list-style-type: none"> - 3D Design - Piping, Electrical, & Instrumentation Design
Tim Gutkowski, PE Civil/Structural	Orange, CA	30		●		●	<ul style="list-style-type: none"> - California Requirements - Seismic - Tanks & Foundations
Melanie Kirk Project Controls	Orange, CA	30					<ul style="list-style-type: none"> - Cost - Scheduling

Table 4. Contributing to Project

Name	Role	Contributing to Project (% of Work Hours)
Sean Goldsmith, PE	Project Manager/Mechanical Lead	12%
Bryan Paine, PE	QA/QC Manager	6%
Heidi Goebel	Principal in Charge	2%
Bill Black, PE	CNG SME	7%
Allen Randall, PE	Electrical Lead	3%
Matt Hyatt	Instrumentation & Controls Lead	11%
James Young	CAD Lead	6%
Tim Gutkowski, PE	Civil/Structural Lead	6%
Melanie Kirk	Project Controls Lead	5%
Other Staff (8)	Supporting Roles	42%

2.2 Subcontractors

C Below – Underground Investigations/Potholing

C Below offers professional utility locating and mapping services throughout Southern California. Their highly experienced technicians use the most advanced non-destructive equipment in the industry to gather information. C Below specializes exclusively in subsurface imaging and has performed utility investigations at over 60 Southern California schools.

3. Experience

3.1 IRWD Experience

AECOM has been performing work for IRWD over the past 40 years. From this tenure, we have excellent knowledge of your expectations, requirements, and preferences, and believe we are very well positioned to provide a very efficient and successful project. A summary of IRWD recent projects follows.

Irvine Ranch Water District Orange Park Acres Well No. 1

IRWD contracted AECOM to design a wellhead, booster pump, and disinfection facility to provide a groundwater supply source to serve the Orange Park Acres (OPA) service area. The proposed well will have an initial maximum production rate of 2,000 gpm (capped to a maximum of 900 AFY) to meet the current domestic water demands of the Orange Park Acres (OPA) service area. The project also incorporates planned future expansions of the OPA Well No. 1 site, which includes an additional well and booster pump to increase the total production to 4,000 gpm to meet future demands posed by future developments.

The proposed well facility includes a contiguous building housing the new production well with constant-speed drive, wet-well/clearwell, vertical turbine booster pump with variable frequency drive, and an air-conditioned electrical control room. A wet-well was incorporated into the overall design to provide the booster pumps with a stable suction water level regardless of varying water well production rates caused by the variable water column within the production well. Since the production water will be directly incorporated into the domestic water distribution system, chloramine disinfection will be provided to meet CDPH requirements. Disinfection chemical storage and dosing facilities will be housed in a separate building onsite. The site will also include a surge tank for the booster pumps, a pump-to-waste system for the well, landscaping for the front yard of the site, security cameras, radio telemetry, drainage facilities, an asphalt-concrete parking area, fire suppression system for the chemical room, and a new electrical service and transformer.

The project site is located within a residential area and has sensitive receptors along all property lines; therefore, the city of Orange requires compliance with its noise ordinance, which limits nighttime noise levels to 50dB. Because the proposed buildings will be constructed of grout-filled concrete masonry blocks, sound-proofing measures for the building walls will not be required. The biggest challenge was to develop sound suppression for the building roof, door, hatches, and ventilation system while allowing for proper ventilation and air conditioning of the pumping and electrical equipment. AECOM prepared a noise study to aid in the design of noise suppression equipment for the proposed facilities as well as a hydraulic computer model network analysis of IRWD's Zone 5 OPA domestic water system. The hydraulic analysis was used to confirm the proposed pump hydraulic characteristics and ability of the proposed pumps to meet the design flow objectives while also meeting system demands within the OPA service area.



Orange Park Acres Well No. 1 Rendering



Orange Park Acres Well No. 1 Construction

Contract Value: \$5.3 million

Completed: 2015

Reference: Richard Mori, PE, Principal Engineer; 949.453.5570 (Irvine, California) or Jacob Moeder, PE, Project Manager; 949.453.5554 (Irvine, California)

Irvine Ranch Water District Syphon Reservoir Interim Facilities

AECOM designed an interim facility to integrate the Syphon Reservoir into the District's Zone A recycled water (RW) system. The scope of services included: preparation of a draft and final preliminary design report; utility potholing; utility research; topographic survey; construction drawings; project manual; construction cost estimate; project schedule; team meetings; assistance with CEQA documentation; permitting; equipment procurement; bid period assistance; and construction support services.

The filtration facilities included two 14-inch Hellan automatic strainers that each strains 5-cfs of reservoir water prior to gravity flow deliver to the Zone A RW system. Flow through the strainers is controlled by a mag-meter and motor-operated butterfly valve. AECOM designed a 200-gpm frame-mounted end-suction pump to supply backwash supply water to the strainers and a pre-packaged backwash lift station that discharges backwash back into the reservoir. The disinfection facilities include two 1,000-gallon sodium hypochlorite bulk storage poly-tanks, metering pumps, injection piping, controls, and a sun shade enclosure with concrete containment slab. AECOM provided electrical and instrumentation design for a new SCE service and transformer and pump and strainer control and telemetry system. Potable water was provided for eyewash/shower and site wash-down. We also assisted with the bidding process and provided construction support services.



Strainer

Contract Value: \$1.1 million

Completed: 2013

Reference: Harry Cho, PE, Project Manager; 949.453.5675 (Irvine, California) and Malcolm Cortez, PE, Principal Engineer; 949.453.5854 (Irvine, California)

Irvine Ranch Water District Eastwood Recycled Water Pump Stations



Recycled Water Pump Stations

This project consisted of four different pump stations housed in a single building on a small, restricted site. Site constraints included a small, restricted site with only one entry point, townhomes on two side, and a busy intersection on the other two sides. Construction challenges included strict work hours, dust control, and conformance to the city of Irvine noise ordinance. AECOM confirmed that the site and building design met the demanding aesthetic needs of the community.

Additional effort was provided in phasing the pump stations as two were initially constructed and two equipped later, with all underground and electrical work requiring to be designed now to simplify the future work. Various pumping schemes needed to be evaluated for this project that also including pressure reducing stations. AECOM conducted transient analysis and recommended three surge tanks and other surge mitigation measures to protect the recycled water system and pump station from pressure surges that could occur during power outages, pump failures, or valve closures.

AECOM provided six alternative conceptual designs with architectural renderings followed by preliminary and final design services. The renderings included various site and building configurations, different roof types, and building exterior treatments, and landscaping arrangement. After the preferred site and building layout was selected, AECOM proceeded with site development, mechanical piping and equipment design,

building architecture, structural design, hydraulic and surge analyses, HVAC system design (ventilation and air conditioning), and electrical and instrumentation engineering including a SCADA system with radio telemetry. Acoustical panels, louvers, and other sound attenuation measures (50 dB at property line limit) were also included.

The 6,800-square-foot, fully automated facility contains 14 vertical turbine canned pumps serving the four different pressure zones, as well as the future expansion of Syphon Reservoir. The ultimate capacity is 70-mgd with all pumps running. While working on the development of the building and equipment layout, the AECOM design team realized that some variations in the layout could potentially represent significant cost savings. The selected layout maximized the small project site by housing all pumping and metering equipment inside a single room, which also included three pressure reducing stations and an ADA-compliant restroom. The electrical room houses constant speed and variable speed drives and is climate controlled with an air conditioning system. A separate mechanical room houses air compressors and controls for the surge suppression systems. Connections to existing utilities in the city streets where up to 15 feet in depth. AECOM recommended jack and bore tunneling to connect to these utilities, which greatly reduced cost compared to traditional cut and cover methods and reduced traffic shutdowns along the adjacent intersection.



Architectural Rendering

With the pump stations being located within a residential area and having sensitive receptors along all property lines, noise suppression was a critical factor to the success of this project. AECOM developed a noise transmission model and designed sound suppression systems to address noise issues, specifically industrial and mechanical room applications. AECOM finalized the noise model using the Cadna/A® 3D acoustical noise model. Cadna/A® takes transmission loss, ground absorption, reflection, diffraction around building edges, topography, and noise attenuation due to spherical wave divergence all into account in order to generate accurate results. AECOM designed noise suppression measures including acoustic panels on all interior building walls, acoustic blankets on the underside of the roofing, insulated doors and roof hatches, double chevron acoustic louvers, and wrapped surge tanks.

Contract Value: \$1.0 million (design); \$12.2 million (construction)

Completed: 2020

Reference: Joe McGehee, PE, Senior Engineer and Project Manager; 949.453.5542 (Irvine, California)

3.2 CNG Experience

AECOM has significant experience in a multitude of projects involving natural gas, including recent work associated with the commercialization and dispensing of CNG in lieu of traditional fossil fuel. In the past 25 years, we have seen several both public and private sector companies transition to the use of natural gas for fueling both mass transit and long-haul vehicles with a focus on improved fuel efficiency and lower emissions.

For these projects, we provide full-service capabilities associated with environmental assessment and permitting, design, engineering, procurement, and construction management. These activities for these types of facilities can include:

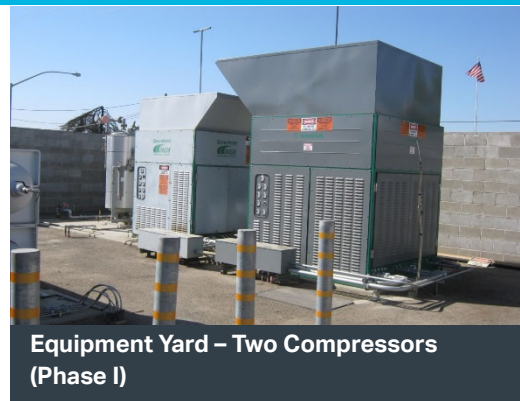
- Feasibility studies
- Economic analysis
- Lifecycle assessment (sustainability)
- Environmental assessment/site preparation
- Environmental permitting
- Program management
- Conceptual and detailed engineering
- Procurement
- Construction management

City of Dinuba, California CNG Station Initial Project and Phase I & II Expansion Improvements

AECOM completed both phases of a two-phase project to upgrade their CNG station originally designed by Bill Black in 2005. At the time the original station was designed, there was no viable fuel load, so the station had been designed to fuel a minimum number of vehicles. The two-phase improvement strategy was to serve the new load and provide for the future. The goal of the first station expansion was to add a second compressor and additional storage due to a limited budget.

The second phase of the project was considerably larger than the first and included many improvements:

- A second new-generation and larger compressor by Atlas Copco. This new compressor along with the one provided in Phase I tripled the capacity of the original station.
- A new higher capacity gas dryer with on-board regeneration capabilities.
- Upgraded compressor control panel to provide state of the art PLC control of both compressors so that they operate smoothly in an efficient manner.
- Replacement of the card reader. This replacement allowed Dinuba to bill credit cards in addition to fleet cards.
- Addition of new 10-bus covered time fill fueling area complete with fire sprinklers, fire alarm, and lights.
- Site improvements including storm drainage retention basin, drainage piping, and pavement.



Equipment Yard – Two Compressors
(Phase I)



10-Bus Fueling Area (Phase II)

Contract Value: \$16,000 (Phase I) and \$103,500 (Phase II)

Completed: September 2011 (Phase I) and May 2017 (Phase II)

Reference: Blanca Beltran, Director of Public Works; 559.591.5924 (Dinuba, California)

Kern County Superintendent of Schools CNG Station



Overview of CNG Fueling Facility

This multi-phase project began with an initial \$3.5 million in construction and involved design of a facility that could fuel a fleet of 90 school busses (**Phase 1**). The initial design was for two fast-fill fueling islands (four hoses) with provisions to expand to four; 16 time-fill hoses with provisions to expand to 96; and a de-fueling facility to facilitate on-site maintenance of the vehicles. In addition to design of the fueling station, the project also included street and parking lot design, over two acres of landscaping, extensive storm drainage work, security cameras, block walls, automatic opening gates and canopies. This phase was designed by Mr. Black with a prior firm. Phase 1 was completed in 2006.

The District engaged AECOM for design of its first major expansion, **Phase 2**. The expansion consisted of doubling the compression capability at the station, adding four additional fast-fill hoses, adding 46 more time-fill hoses and construction of canopies over each fast-fill island. Phase 2, which was the first phase by AECOM, concluded in the summer of 2015. It was delivered on time and provided for the equipment and construction improvements within the estimated budget.



**Matrix Valve Panel
and Priority Valve
Panel**

For **Phase 3**, the District reengaged AECOM to design the second expansion to add more compression, one transit fill nozzle, one tube trailer dispenser and nozzle, and four additional more time-fill nozzles. The station serves the fleet of busses for the superintendent of schools, the Kern High School District, Golden Empire Transit (GET), UPS, long-haul truckers, other agencies including the city of Arvin and the public in general. Vehicles that are fueled include 70 buses ranging in length from 32-40 feet as well as off-site, vehicles ranging from the size of Honda Civics to tractor trailer rigs with 53-foot trailers. The total cost of the station and expansions was \$7 million. The second expansion design occurred at a favorable time in terms of budget, as construction costs allowed for completion of all alternates. The second expansion was completed in Winter 2018. The District has accrued so much profit from serving outside customers that the station has paid for itself more than twice since its initial construction.

The project involves a single 26-acre site that houses a bus maintenance facility, administration offices, a bus wash, gasoline and diesel fueling, and a storm water management pond. At completion of

the third phase, the facility now stands at eight NGV-1 hoses on four islands, one transit fill hose, a tube trailer dispenser and hose, a defueling panel, and 66 time-fill hoses. The District maintains and operates the station but may call on a third-party maintenance contractor.

The load for the station prior to conversion was 526,000 therms per year or about 380,000 diesel gallons equivalent. This number has nearly doubled since the first expansion.



Priority Valve Panel

Contract Value: \$400,000 (Phase 1-3)

Completed: Winter 2018

Reference: George Carson, Construction Manager; 661.636.4895 (Kern County, California) or Scott Fieber, Energy Conservation Supervisor; 661.852.5863 (Kern County, California)

Lemoore Union High School District CNG Station



Lemoore Union High School CNG Fueling Station

AECOM has designed all phases of this project. The original project (**Phase 1**) was designed by Mr. Black in 2011 and constructed in 2012. It included two compressors, a dryer, three storage vessels, 20 time-fill dispensers, and a fast fill dispenser on an island.

Phase 2 added more storage and increase fill capacity to the time-fill dispensers. The design and construction were completed in 2016. The most recent phase, **Phase 3**, included the following elements:

- One additional compressor (205 scfm)
- No new dryer needed since the initial dryer was designed to accommodate this expansion
- An upgraded priority and time fill panel to accommodate transit fills
- Upgrade of the fast fill fueling island to include a transit high-volume fill dispenser
- Addition of a canopy to shelter the fast-fill island
- Site improvements to accommodate transit and long-haul trucking clients

Phase 3 construction was completed in August 2019. The final expansion (**Phase 4**) will be designed by AECOM when funds become available.

The project has been challenging due to the constraints of the parcel of land on which the station was constructed. The initial station was never intended for long-haul truckers, but with the second phase, the station accommodates them handily. With additional compression and the new high-flow nozzle, more long-haul and transit customers will use the station. The client will benefit from the additional revenue.

Contract Value: \$710,000 (Phase 1); \$350,000 (Phase 2); \$1,000,000 (Phase 3)

Completed: 2011 (Phase 1); 2016 (Phase 2); 2019 (Phase 3)

Reference: Mark Howard, Director of Business Services; 559.924.6610 x 206 (Lemoore, California)

3.3 Storage Experience

AECOM has provided services to a wide number of terminal facilities for storage and handling of liquids, gas, and solids, both onshore and at shore. From this work, we have created a staff of specialists including multi-discipline design teams, marine and geotechnical engineers, GIS/CADD staff, etc. We offer clients knowledgeable specialists with years of hands-on experience and active involvement in industry associations. Select projects follow.

Chevron El Segundo Biodiesel Blending

AECOM performed design, permitting, and construction support services for the installation of a biodiesel truck offload facility, 40,000-gallon UL142 biodiesel storage tank, and biodiesel/diesel blending at the truck loading rack. AECOM coordinated with the city of El Segundo building department and fire department to secure the required permits. The project also required the removal of two underground storage tanks.

Contract Value: \$300,000

Completed: 2020

Reference: Sandy Cook, Terminal Engineer; 714.457.1336 (Fullerton, California)

Kinder Morgan MaxBass NGL Injection Facility

AECOM performed design, permitting, and construction support services for a natural gas liquids (NGL) facility. The NGL facility included the installation of a two lane NGL truck offload rack, a 20,000 BBL pressurized storage tank, flare, propane blanketing system, and pipeline pumps. The project overcame many obstacles including tight schedule and construction during the winter in North Dakota. The project ultimately met the commercial timeframe for start of operations.

Contract Value: \$400,000

Completed: 2018

Reference: Rich Hulbert, Project Manager; 714.986.6148 (Irvine, California)

Enterprise Products Company Jones Creek Tank Farm Expansion

AECOM performed detailed design for the installation of pumps, piping, and other systems to provide an additional 600,000 barrels of crude oil storage at Enterprise's Seaway Pipeline Company's Jones Creek Terminal in Brazoria County, Texas.

In the role of owner's engineer, AECOM supported the tank design development. We provided engineering design and procurement assistance services for the systems external to the tank in order to support the installation and operations and maintenance of these new facilities at the Jones Creek Terminal, including the following equipment items:

- major piping systems
- pumps foundations and platforms
- electrical PCR building
- vacuum combustion unit (VCU) foundations

AECOM's scope of work initiated at the tank nozzle connections and includes but was not limited to: terminal piping design to connect the new storage tank to new piping systems; equipment and electrical and instrumentation design to connect tank-mounted and in-line instrumentation; motor operated valves; and other instruments for a new facility control system located in a new electrical and controls building.

In addition to the design scope above, AECOM reviewed the existing firewater protection system to access the ability to provide firewater protection for the new tank installation. AECOM completed the design for a foam system for the new tank with new bladder tank, fire monitors, and fire hydrants around new tank.



Contract Value: \$40 million TIC

Completed: 2018

ExxonMobil Chalmette Tank and Loading Modifications

AECOM provided various engineering services to ExxonMobil's Project Implementation Department. This work was performed by a multi-discipline task force that included process/chemical, mechanical, electrical, instrumentation, controls, civil/structural, and environmental engineering resources. Projects were developed and executed in compliance with the ExxonMobil Gated work process. Typically, our services begin with pre-Gate 2 studies and continued through Gate 2, Gate 4, and engineering procurement of the respective project. Select projects include:

- **Low Sulfur Diesel (LSD) Header** – Installed a new suction piping from the LSD tank and converted the 89 gasoline pumps and piping to the dock to the new LSD service.
- **Mid-East Truck Loading Vapor Recovery Unit** – Project increased the loading capacity of the Mid-East rack by using lower RVP gasoline from tank 6344 in lieu of the 87 gasoline from tank 6309. Gasoline circulation increased. Work included a new suction and return lines as well as replacement of both gasoline circulation pumps on the VRU skid.
- **LPG Loading Rack Modifications** – Modifications include tankless operation and enhanced safety.

Contract Value: Varied

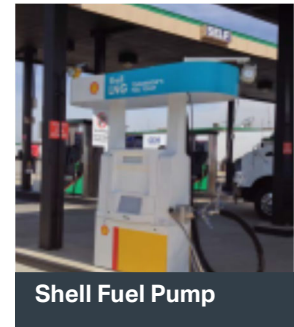
Completed: 2007

3.4 Fueling Experience

Shell US

Truck LNG Fueling (20 locations throughout the US)

AECOM provided engineering, procurement, and construction management (EPCM) for the construction of a network of 80 liquefied natural gas (LNG) fueling stations at TA Travel Centers America truck stops across the US interstate highway system. Project tasks included permit acquisition, design modification, equipment procurement, and construction contracting, construction management, and commissioning. Twenty locations were designed and permitted in Texas, Louisiana, Oklahoma, Arkansas, California, Oregon, Washington, and Pennsylvania.



Shell Fuel Pump

Contract Value: \$100K per location

Completed: 2015

Mass Transportation Authority

Davison Service Center



Fuel Pump Station

The Davison Area Service Center is a new facility to service the transportation needs of residents in the surrounding service area. The facility accommodates storage of 21 propane vehicles (12,500 sq. ft.), wash and inspection bay, fueling dispensing area, driver's lounge, office space and customer's waiting area (2,400 sq. ft.). Key elements included:

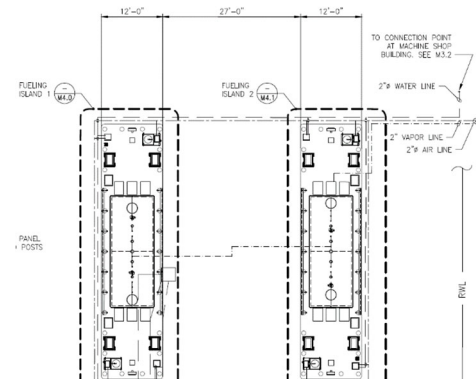
- Bus Storage Area for Propane Vehicles
- Concrete and Asphalt Pavement Entrances and Parking Areas
- Bus Wash Bay
- Offices and Dispatch Room
- Driver's Lounge & Restrooms
- HVAC Systems
- Gasoline and Propane Fueling Systems including canopy.
- Fuel Management System
- Radio Tower
- Gas Detection Systems
- Security and Video Surveillance Systems
- Lighting (LED) – Interior and Exterior Lighting
- IT Server Room
- Lightning Protection System

Contract Value: \$4.4 million

Completed: 2017

SF PUC CDD Fueling Station

AECOM designed an eight dual-hose dispenser for gasoline and diesel fueling on two large double-sided islands with dual-cell above ground storage tanks. The propane fueling station was also relocated.



Drawing of CDD Fueling Station

Contract Value: \$304,000

Completed: 2018

4. Schedule

AECOM confirms that all work can be completed according to the preliminary project schedule included on the following page.

5. Budget

The budget proposal, including fee schedules and breakdown of the fee by task, is being submitted in a sealed envelope separate from this technical proposal.

6. Joint Venture

AECOM is not proposing a joint venture for this project.

AECOM does plan to engage C Below for underground investigations and potholing. Details regarding this subcontractor can be found in Section 2.2 Subcontractors.

7. Conflict of Interest

AECOM is not aware of any personal or organizational conflicts of interest that would preclude us from providing the services proposed in this submittal.

8. Contract

Based on our review of the sample contract and our previous work with IRWD, we are confident that AECOM and IRWD can successfully agree on terms, if we are awarded this assignment.

Our team is fully capable in all areas outlined under the scope of work in the RFP. We can begin work immediately upon award and agreement of terms, and we are able to maintain the required level of effort to meet the proposed schedule.

9. Insurance

The insurance certificate included on the following page confirms that AECOM's liability coverage is compliant with the requirements for this project.

aecom.com

December 21, 2020

Our Reference
1090978

Ms. Rachael L. Burk, PE
Project Manager
3512 Michelson Drive
Irvine, California 92612

via hard copy

Budget Proposal - MWRP CNG Fueling Facility and Upgrades to Diesel and Gasoline Fleet Fueling Systems

Dear Ms. Burk:

Irvine Ranch Water District (IRWD) has determined that the existing gasoline and diesel systems at its Michelson Water Recycling Plant (MWRP) need to be replaced with new above-ground storage tanks (AST), dispensers, and fuel management system, along with a new CNG system to facilitate CNG fueling. AECOM is pleased to offer our fee estimate to perform engineering services for the MWRP CNG Fueling Facility and Upgrades to Diesel and Gasoline Fleet Fueling Systems Project in Irvine, California. This estimate is based on items requested in the RFP received November 11, 2020 via email and bid walk held on November 30, 2020.

Our technical proposal, including our qualifications and scope of work, is being submitted under separate cover.

The detailed budget proposal is included in **Appendix A**. This includes an analysis of the estimated hours that each member of the project team will contribute for the individual tasks depicted in the scope of work. We have also included the identity and estimated hours and costs of subcontractors, reproduction costs, and other direct costs.

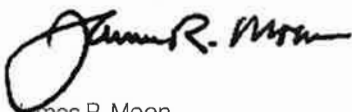
The estimated amount for each phase of the work is as follows:

Task	Amount
Project Management	\$100,995
Preliminary Design	\$ 80,650
Final Design	\$519,915

As shown, our total not to exceed price for performance of all services is **\$701,560**. Our billing rate schedule is included in **Appendix B**.

AECOM is proud to be contributing to IRWD's business success, sharing its values, safety, and quality standards. We appreciate the opportunity to provide this proposal and look forward to working with the IRWD team towards a successful project. Should you have any questions or require additional information, please contact Bryan Paine.

Yours sincerely,



James R. Moon
Vice President, Industrial Engineering
AECOM
M: 504.343.7940
E: jim.moon@aecom.com



Mr. Bryan Paine, PE, QSD
AVP, Senior Project Manager
AECOM
M: 714.483.1354
E: bryan.paine@aecom.com

Appendix A Detailed Budget Proposal

AECOM's detailed budget proposal broken down by task and team member for the MWRP CNG Fueling Facility and Upgrades to Diesel and Gasoline Fleet Fueling Systems Project can be found on the following page.

Task No.	Task Description	Labor Category with Billing Rate													TOTAL HOURS	TOTAL LABOR	Subcontractor		Direct Costs / Materials ¹	TOTAL		
		Principal-in-Charge	Principal Engineer	Senior Engineer	Senior Engineer	Project Manager	Project Engineer-Architect	Estimator	Estimator	Senior Designer	Senior Drafter	Drafter	Senior Project Admin	Project Admin			Geotech Boring Services TBD	Utility Potholing Services C Below				
		\$270	\$250	\$230	\$175	\$230	\$150	\$170	\$150	\$150	\$110	\$100	\$140	\$120								
TASK 1: Project Management																						
A.	Project Status Reports					40								32	32		104		\$17,520			\$17,520
B.	Meetings/Workshops																					
	Kickoff Meeting and Site Visit (1 meeting of 2 hours)	2	4	2	2	2								1	1	14		\$3,070		\$40	\$3,110	
	Basis of Design Review Meeting (1 meeting of 2 hours)	2	4	2	2	2								1	1	14		\$3,070		\$40	\$3,110	
	60% Design Workshop (1 meeting for 2 hours)	2	4	2	2	2				2				1	1	16		\$3,290		\$40	\$3,330	
	90% Design Workshop (1 meeting for 2 hours)	2	4	2	2	2				2				1	1	16		\$3,290		\$40	\$3,330	
	100% design Workshop (1 meeting for 2 hours)	2	4	2	2	2				2				1	1	16		\$3,290		\$40	\$3,330	
	Final design plan signing (1 meeting for 1 hour)	2	4	2	2	1								1	1	13		\$2,840		\$40	\$2,880	
	Additional On-site visits (2 visits at 4 hours each)	8	4	8	8	16										44		\$10,080		\$40	\$10,120	
C.	Quality Assurance/Quality Control	2	100		25	25	60			20	60					292		\$54,265			\$54,265	
	SUBTOTAL TASK 1	22	128	20	45	92	60			20	66			38	38	529		\$100,715		\$280	\$100,995	
TASK 2: Basis of Design / Preliminary Design																						
A.	Review PDR Memorandum		8	4	4	4	4									24		\$5,140				\$5,140
B.	Hydraulic Model and Analysis						20									20		\$3,000				\$3,000
C.	Equipment Sizing		20		10	20	20									50		\$9,750				\$9,750
D.	Site Plan	2	4		4	2	4			10	20					46		\$7,000				\$7,000
E.	Permits & Coordination	2	4	12	10	12	12									40		\$7,850				\$7,850
F.	Schedule in Microsoft Project		20		10	4	12									46		\$9,470				\$9,470
G.	USTs Removal - Initial Investigation				6		12									18		\$2,850				\$2,850
H.	Preliminary PIDs			32	12	20	20			8	16					108		\$20,020				\$20,020
I.	Preliminary Single Line/ Load Summary		4				20			2	6					32		\$4,960				\$4,960
J.	Development of Basis of Design Document	4	12	12	6	4	12									50		\$10,610				\$10,610
	SUBTOTAL TASK 2	8	72	60	62	34	136			20	42					434		\$80,650			\$80,650	
TASK 3: Final Design																						
A.	Utility Review					4	24				12					40		\$5,840				\$5,840
B.	Potholing Underground Utilities				4	4	4				12					20		\$2,620		\$15,000		\$17,620
C.	Exhibits for Coordination with SCGC				4	4	4				16					24		\$3,060				\$3,060
D.	Permitting Assistance	4	4		4	20	40				40					112		\$17,780		\$10,000		\$27,780
E.	Recently Completed Geotechnical Investigation				3		20									23		\$3,525				\$3,525
F.	Recently Completed Site Survey				4											4		\$700				\$700
G.	CNG Fueling Facility Power Supply		4		4		4									12		\$2,300				\$2,300
H.	Electrical/Instrumentation			80						8	16					104		\$21,360				\$21,360
I.	Project Manual	8	55	50	10	70	80							16	16	305		\$61,420				\$61,420
J.	Construction Plans																					
	60% Design Plans	10	150	100	15	100	110			40	340	80	5	5		955		\$158,025				\$158,025
	90% Design Plans	10	100	50	15	60	80			20	180	60	10	10		595		\$99,025				\$99,025
	100% Design Plans	10	80	50	15	60	60			20	100					395		\$73,625				\$73,625
K.	Project Schedule				6	4	6							24	24	64		\$9,110				\$9,110
L.	Liquidated Damages Calculations				1		2									3		\$475				\$475
M.	Opinion of Probable Construction Cost at each Design Milestone				10					80	40					130		\$21,350				\$21,350
N.	Design Deliverables Printed										24					24		\$2,640		\$1,500		\$4,140
O.	Addenda Preparation and Pre-Bid Meeting																					
	Plan Revisions (16 hours)				6	2	2				4		1	1		16		\$2,510				\$2,510
	Specification Revisions (16 hours)			3	3	4	4						1	1		16		\$2,995				\$2,995
	Bidder Questions (24 hours)			5	5	4	4				4		1	1		24		\$4,245				\$4,245
	Pre-Bid Meeting (1 Meeting of 2 hours)				2	2										4		\$810				\$810
	SUBTOTAL TASK 3	42	393	338	111	330	444	80	40	88	748	140	58	58		2,870		\$493,415		\$15,000	\$11,500	\$519,915
	TOTAL (TASKS 1 THRU 3)	72	593	418	218	456	640	80	40	128	856	140	96	96		3,833		674,780		15,000	11,780	701,560
Optional Items																						
A.	Additional Geotech		6	25	25		30			5	15					106		\$18,525		\$35,000		\$53,525
	SUBTOTAL "Optional Items"		6	25	25		30			5	15				106		\$18,525		\$35,000		\$53,525	

Notes & Assumptions:

1.) Direct costs/materials include costs such as mileage to meetings/site, courier fees, document reproduction, permit fee allowances, and soil lab costs.

Appendix B Billing Rate Schedule

A copy of AECOM's billing rate schedule can be found on the following page.

AECOM Schedule of Fees and Charges (Rate Table)

This Schedule of Fees and Charges shown in the labor classification table below are subject to a 3% annual escalation.

PERSONNEL CHARGES*

The charge for all time required in the performance of the Scope of Service, including office, field and travel time, will be at the Unit Price Hourly rates set forth below for the labor classifications:

LABOR CLASSIFICATION	
Professional Staff	Hourly Rate
Staff Engineer/Scientist/Geologist	\$100
Senior Staff Engineer/Scientist/Geologist	\$120
Project Engineer/Scientist/Geologist.....	\$150
Senior Engineer/Scientist/Geologist.....	\$175
Project Manager/Senior Engineer	\$230
Principal Engineer/Architect.....	\$250
Principal-in-Charge	\$270
Technical Staff	Hourly Rate
Drafter/GIS/Graphics.....	\$100
Senior Drafter/GIS/Graphics.....	\$110
Design/GIS/Estimator/Scheduler.....	\$120
Senior Design/Estimator/Scheduler	\$150
Lead Design/Estimator/Scheduler	\$170
Project Support Staff	Hourly Rate
Office/Clerical	\$80
Project Assistant	\$90
Administrator/Contracts.....	\$100
Project Admin/Contracts	\$120
Sr Project Admin/Contracts	\$140
Principal Project Admin/Contract	\$160

Overtime (hours worked in excess of eight (8) hours per day) by exempt personnel will be charged at the above straight time rate. Overtime by non-exempt personnel will be charged at 1.5 times the above hourly rates.

OTHER PROJECT CHARGES

Subcontractors and Equipment Rental

The cost of services subcontracted by AECOM to others and other costs incurred by AECOM will be charged at cost with no mark-up.

Document Reproduction

In-house reproduction will be charged as follows:

8 1/2x11 Black & White = \$0.09

11x17 Black & White = \$0.17

8 1/2x11 Color = \$0.14

11x17 Color = \$0.26

Black & White plot/ square foot = \$0.20

Color plot/square foot = \$0.26

Vehicles and Mileage

Leased field vehicles (pick-ups, vans, trucks, etc.) used on project assignments will be charged at \$85 per day. The mileage charge for personal autos will be the current mileage rate established by the Internal Revenue Service.

This fee schedule contains confidential business information and is not to be copied or distributed for any purpose other than the use intended in this contract or proposal.

When AECOM/GEI staff, appear as expert witnesses at court trials, mediation, arbitration hearings and depositions, their time will be charged at 2.0 times the standard rate. All time spent preparing for such trials, hearings and depositions will be charged at the standard labor rate.

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