

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

January 27, 2020

PLEDGE OF ALLEGIANCE

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

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

NOTICE

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

COMMUNICATIONS TO THE BOARD

1. A. Written:
- B. Oral:
2. ITEMS RECEIVED TOO LATE TO BE AGENDIZED

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

<u>CONSENT CALENDAR</u>	<u>Resolution No. 2020-5</u>	<u>Items 3-8</u>
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| <ol style="list-style-type: none">3. <u>RATIFY/APPROVE BOARD OF DIRECTORS' ATTENDANCE AT MEETINGS AND EVENTS</u>

 Recommendation: That the Board ratify/approve the meetings and events for Mary Aileen Matheis, Douglas Reinhart, Peer Swan, Steven LaMar and John Withers, as described.4. <u>MINUTES OF BOARD MEETINGS</u>

 Recommendation: That the minutes of the January 13, 2020 Regular Board meeting and the January 17, 2020 Adjourned Regular Board meeting be approved as presented. | |
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CONSENT CALENDAR – Continued

Items 3-8

5. DECEMBER 2019 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 2019 Summary of Payroll ACH payments in the total amount of \$2,112,770; and approve the December 2019 Accounts Payable Disbursement Summary of warrants 404225 through 405004, Workers' Compensation distributions, wire transfers, payroll withholding distributions and voided checks in the total amount of \$16,810,385.

6. IRWD STRATEGIC MEASURES

Recommendation: Receive and file.

7. DYER ROAD WELLFIELD SURGE TANKS CONTRACT CHANGE ORDER AND FINAL ACCEPTANCE

Recommendation: That the Board authorize the General Manager to execute Contract Change Order No. 17 in the amount of \$165,673.49 with Pascal & Ludwig Constructors, accept construction of the Dyer Road Wellfield Surge Tanks, Projects 05473 and 06165, authorize the General Manager to file a Notice of Completion, and authorize the payment of the retention 35 days after the date of recording the Notice of Completion.

8. 2020 INDEX TENDER NOTES REMARKETING

Recommendation: That the Board approve the 2020 Index Tender Notes Remarketing Statement and adopt a resolution by title approving the Remarketing Statement relating to Unscheduled Mandatory Tenders (Refunding Series 2011A-1 and Refunding Series 2011A-2.

Reso. No. 2020-

ACTION CALENDAR

9. SANTIAGO RESERVOIR PROJECT UPDATE AND INTERIM LAKE LEVEL OPERATIONS PLAN

Recommendation: That the Board provide input on the Santiago Reservoir Interim Lake Level Operations Plan.

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.

10. General Manager's Report
11. Directors' Comments
12. Receive oral update(s) from District liaison(s) regarding communities within IRWD's service area and provide information on relevant community events.
13. CLOSED SESSION CONFERENCE WITH LEGAL COUNSEL – ANTICIPATED LITIGATION – Pursuant to Government Code Section 54956.9 (d)(4): initiation of litigation. (*One (1) potential case*).
14. Open Session.
15. Adjourn.

Availability of agenda materials: Agenda exhibits and other writings that are disclosable public records distributed to all or a majority of the members of the Irvine Ranch Water District Board of Directors in connection with a matter subject to discussion or consideration at an open meeting of the Board of Directors are available for public inspection in the District's office, 15600 Sand Canyon Avenue, Irvine, California ("District Office"). If such writings are distributed to members of the Board less than 72 hours prior to the meeting, they will be available from the District Secretary of the District Office at the same time as they are distributed to Board Members, except that if such writings are distributed one hour prior to, or during, the meeting, they will be available at the entrance to the Board of Directors Room of the District Office. The Irvine Ranch Water District Board Room is wheelchair accessible. If you require any special disability-related accommodations (e.g., access to an amplified sound system, etc.), please contact the District Secretary at (949) 453-5300 during business hours at least seventy-two (72) hours prior to the scheduled meeting. This agenda can be obtained in alternative format upon written request to the District Secretary at least seventy-two (72) hours prior to the scheduled meeting.

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January 27, 2020
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.

Events/Meetings

Steven LaMar

February 12 MWDOC Water Policy Forum and Dinner, Costa Mesa

Mary Aileen Matheis

January 20 Monthly Discussion of District Activities with the General Manager
January 21 Orange County Forum’s State of the County, Irvine
January 24 Southern California Water Coalition Quarterly Meeting and Luncheon, Ontario
February 12 MWDOC Water Policy Forum and Dinner, Costa Mesa

Douglas Reinhart

January 24 Southern California Water Coalition Quarterly Meeting and Luncheon, Ontario
February 12 MWDOC Water Policy Forum and Dinner, Costa Mesa

Peer Swan

January 16 Public Policy Institute of California’s 2020 Speaker Series on California’s Future, Sacramento
February 12 MWDOC Water Policy Forum and Dinner, Costa Mesa
February 19-21 Urban Water Institute 2020 Spring Conference, Palm Springs

John Withers

January 15 Orange County Water Association Monthly Industry Insight Luncheon, Irvine
January 24 Southern California Water Coalition Quarterly Meeting and Luncheon, Ontario
February 6 Orange County Business Council Annual Dinner
February 12 MWDOC Water Policy Forum and Dinner, Costa Mesa

RECOMMENDATION:

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

LIST OF EXHIBITS:

None.

January 27, 2020
Prepared and
submitted by: L. Bonkowski
Approved by: Paul A. Cook



CONSENT CALENDAR

MINUTES OF BOARD MEETINGS

SUMMARY:

Provided are the minutes of the January 13, 2020 Regular Board meeting and the January 17, 2020 Adjourned Regular Board meeting for approval.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

Not applicable.

RECOMMENDATION:

THAT THE MINUTES OF THE JANUARY 13, 2020 REGULAR BOARD MEETING AND THE JANUARY 17, 2020 ADJOURNED REGULAR BOARD MEETING BE APPROVED AS PRESENTED.

LIST OF EXHIBITS:

Exhibit "A" – January 13, 2020 Minutes
Exhibit "B" – January 17, 2020 Minutes

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EXHIBIT “A”

MINUTES OF REGULAR MEETING – JANUARY 13, 2020

The regular meeting of the Board of Directors of the Irvine Ranch Water District (IRWD) was called to order at 5:00 p.m. by President Matheis on January 13, 2020 in the District office, 15600 Sand Canyon Avenue, Irvine, California.

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

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, Executive Director of Operations Chambers, General Counsel Collins, Public Affairs Director Beeman, Director of Maintenance Mykitta, Director of Water Quality and Regulatory Colston, Director of Water Resources Sanchez, Director of Treasury and Risk Management Jacobson, Director of Recycling Operations Zepeda, Director of Water Operations Roberts, Government Relations Officer/Deputy General Counsel Compton, Secretary Bonkowski, Assistant Secretary Swan, Mr. Bruce Newell, and members of staff and the public.

WRITTEN AND ORAL COMMUNICATIONS: None.

ITEMS TOO LATE TO BE AGENDIZED: None.

WORKSHOP

STUDY OF IRWD’S FUTURE POTENTIAL WATER EFFICIENCY

Ms. Amy McNulty reported that a study of IRWD’s Future Potential Water Efficiency was conducted to improve IRWD’s understanding of the current extent and impacts of water use efficiency programs and device saturation, as well as to evaluate opportunities for future water savings and potential efficacy of programs. She reported on the purpose of the study, the study period and data sources, how the 26 villages within the District’s service area were grouped, past program evaluation program analysis, and water savings methodology.

She summarized the key findings which include: 1) past water use efficiency programs have effectively targeted customers with the most potential for savings; 2) program participation rates are not consistent throughout the District and potential opportunities exist for more targeted outreach; 3) commercial, industrial and institutional (CII) customers remain a potentially untapped opportunity; 4) limited, cost-effective potential remains to further reduce indoor water use; 5) turf removal opportunities provide the most potential for additional outdoor potable water savings; 6) targeted marketing and education are more important than rebate amounts; 7) single-family residential (SFR) homes built after 2010 are the most efficient with indoor and outdoor water use. SFR homes built prior to 1993 have become increasingly more efficient than homes built from 1994 to 2009 because of targeted water use efficiency programs and natural replacement of indoor fixtures; 8) customer water use within IRWD’s service area has not fully rebounded to pre-drought levels because of permanent savings measures such as fixture and turf replacements. During future water shortages, the same levels of water savings may not be feasible due to this demand hardening; and 9) potential

District-wide potable water savings in a future shortage are estimated at approximately 5,000 acre-feet.

Ms. McNulty said that based on the findings from the study, potential new programs, program modifications and other recommendations include the following: 1) recognize that the future focus of IRWD's water use efficiency efforts will increasingly shift from device-based programs to programs that sustain the success of the District's budget-based rate structure and continue to educate and motivate customers to use water efficiently; 2) prioritize outreach for the Residential Turf Removal Program by turf area size; 3) target the Residential Turf Removal Program to customers who reduced outdoor use during the most recent drought; 4) continue to target the Non-Residential Turf Removal Program to customers not served by recycled water; 5) develop a pilot Pressure Reducing Valve Program targeted to non-residential customers in high pressure zones; and 6) review and update IRWD's Water Shortage Contingency Plan as necessary to reflect the study findings related to customer demand hardening and the potential potable water savings that could be achieved in a future shortage. Following discussion, Director Withers said that this item was reviewed by the Water Resources Policy and Communications Committee and said he was impressed by the study. On MOTION by Withers, seconded by Swan, and unanimously carried, THE STUDY UPDATE WAS RECEIVED AND FILED.

CONSENT CALENDAR

Director Swan asked that relative to item No. 8, MEMORANDUM OF OFFICERS OF THE BOARD COMMITTEE APPOINTMENTS AND OTHER ASSIGNMENTS, he proposed that Public Policy Institute of California be added with him being the lead representative, and Director Steve LaMar as alternate. Additionally, he asked that a seminar of the PPIC be included for January 16, 2020 under item No. 4, RATIFY / APPROVE BOARD OF DIRECTORS' ATTENDANCE AT MEETINGS AND EVENTS. On MOTION by Swan, seconded by LaMar, ITEMS 4 THROUGH 10 WERE APPROVED AS AMENDED.

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

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

5. MINUTES OF BOARD MEETING

Recommendation: That the minutes of the December 16, 2019 Regular Board meeting be approved as presented.

6. PELICAN HILL SEWER REHABILITATION CONSTRUCTION AWARD

Recommendation: That the Board authorize the General Manager to execute a construction contract with Sancon Technologies, Inc. in the amount of \$270,884.80 for the Pelican Hill Sewer Rehabilitation, Project 11121.

CONSENT CALENDAR (CONTINUED)

7. REHABILITATION OF DYER ROAD WELLFIELD WELLS 2 AND 17 AND LIMITED REDEVELOPMENT OF WELL 52 FINAL ACCEPTANCE

Recommendation: That the Board accept the Rehabilitation of Dyer Road Wellfield Wells 2 and 17 and limited redevelopment of Well 52, Projects 07090 and 10097, 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. MEMORANDUM ON OFFICERS OF THE BOARD, COMMITTEE APPOINTMENTS AND OTHER ASSIGNMENTS

Recommendation: That the Board receive and file the memorandum dated January 13, 2020, 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 2020 as delineated.

9. 2020 GENERAL COUNSEL CONTRACT

Recommendation: That the Board authorize the General Manager to execute a Professional Services Agreement with Hanson Bridgett LLP for general counsel legal services focused on municipal law, transactional and non-complex issues, and rate setting with a term from January 1, 2020, to December 31, 2020, and a not-to-exceed value of \$1,000,000.

10. VARIANCE TO IRWD'S LETTER OF ENGAGEMENT WITH ALSTON & BIRD

Recommendation: That the Board authorize the General Manager to execute a variance to IRWD's letter of engagement with Alston & Bird for legal services related to complex issues and litigation increasing the not-to-exceed value of the contract by \$3,600,000.

ACTION CALENDAR

2020 LEGISLATIVE AND REGULATORY UPDATE

Using a PowerPoint presentation, Government Relations Officer/Deputy General Counsel Compton reported that in April 2019, Governor Newsom issued Executive Order No. 10-19 calling for the development of a water resilience portfolio. Ms. Compton said that the portfolio outlines the Administration's water priorities with its draft portfolio released on January 3, 2020. She reviewed its recommendations and proposed initial action including: 1) enhancing weather forecasting and optimizing storage through integration; focusing on climate change-driven disasters and their environmental impacts; 3) improving water transfers and exchanges to capture more water in wet years; 4) evaluating and building California's water system resilience; 5) incentivizing the investment in and development of emergency water supplies; and 6) expanding water recycling. She compared IRWD's recommendations with the portfolio's actions, and said that staff will prepare comments on the portfolio and submit them by the comment deadline. She further said that staff would continue to advocate for the policy principles and initial actions included in IRWD's Water Resilience Policy Paper.

POLICY REVISIONS AND ADDITIONS RELATED TO DISTRICT APPROVALS,
AUTHORIZATION AND PROCEDURES

General Manager Cook reported that in September 2014, the Board approved revisions to IRWD's policies related to delegations of authority for purchasing and procurement, acquisitions of real property interests, dispositions of real and personal property and settlement of administrative claims. He said that Resolution 2014-42 requires that the policies be reviewed and updated at least every five years.

Using a PowerPoint presentation, Executive Director of Finance and Administration Clary reported that staff recommends revisions and additions intended to comply with changes in the law and improve operational efficiencies while still maintaining appropriate internal controls and governance by the Board.

Ms. Clary reviewed policies requiring changes for handling claims and lawsuits, legal counsel waivers and related agreements. She reviewed the current policy versus the proposed policy which adds settlement of lawsuits (in addition to claims), authorizes the General Manager to sign conflict waivers, joint defense and common interest agreements, and to approve up to \$50,000 for settling claims and lawsuits. Director Swan recommended said he would approve non-significant / routine lawsuits; however, he requested language to carve out significant lawsuits for Board approval, and made a motion for this carve-out. This motion did not pass due to a lack of a second.

Ms. Clary said that for the District's real property, the Policy authorizes the General Manager to negotiate proposed lease terms with prospective commercial property tenants. Consistent with the District's operating properties, the Policy provides for the General Manager to approve licenses, permits temporary rights of way and joint use lease agreements less than \$250,000, while lease agreements with gross annual revenue in excess of \$250,000 require Board approval. Additionally, the Policy adds language to be compliant with new legislation SB 1486 for surplus land related to disposal of real property; adds water rights and water associated with IRWD water banks for acquisition and disposition to require Board approval; adds clarifying language and reorganizes policy, and separates disposition of personal property into a separate policy. Director Swan asked that language be added under the Leases, Section 3.2, (i) and (ii), that prior to execution of a lease agreement, a consultation be held with a member of the Finance and Personnel Committee. On MOTION by Swan, seconded by LaMar, and unanimously carried, **UNDER SECTION 3.2 LEASES (i) and (ii), LANGUAGE WAS ADDED THAT THE GENERAL MANAGER MAY APPROVE SUCH A LEASE AGREEMENT UPON APPROVAL OF TERMS FROM A MEMBER OF THE FINANCE AND PERSONNEL COMMITTEE AND APPROVAL AS TO FORM BY LEGAL COUNSEL.**

Ms. Clary said that for personal property disposal, the proposed policy separates personal property from real property; there will be no change to Board approval level which requires approval over \$100,000.

Ms. Clary reviewed improvements to procurement efficiencies while maintaining appropriate level of Board oversight and alignment with industry procurement standards relative to authorization of expenditures, competitive bidding, procurement of professional services, and approval of change orders and variances. Following a review of the proposed expenditure

authorization limited, Director Swan made a motion, which was seconded by LaMar, to reduce the proposed limits for the General Manager from \$250,000 to \$200,000, and to leave the Executive Director and Department Director at their current levels as indicated on the chart. Prior to voting, Director Reinhart requested increasing the categories to a more effective level for the executive and department directors. Director Matheis said that this item was reviewed by the Finance and Personnel Committee on December 10, 2019, and they were in concurrence with the proposed levels. Director Reinhart made a substitute motion to Director Swan's previous motion for the General Manager's procurement authority to be up to \$200,000, Executive Director level to up to \$125,000, and the Department Director level to be up to \$75,000. Director Withers seconded the motion. Director Swan then made a motion, which was seconded by Withers to change "Manager" to "General Manager" throughout all of the proposed policies. Director Swan said relative to Exhibit D, policy for approval authorization of change orders and variances to existing contracts, he would like a monetary cap on very large contracts that would need to be submitted to the Board for review and approval or could be subject to a case by case basis. Director Swan made a motion to include language for larger projects, stating that the Board of Directors may at the time of award of a contract set a maximum value for change orders approved by the General Manager. It was the consensus of the Board to include this language into the policy. There being no further comments, on MOTION by Reinhart, seconded by LaMar, and carried (Reinhart, LaMar, Withers, and Matheis voting aye, and Swan voting no (4-1 vote), THE BOARD APPROVED THE OVERALL REVISIONS TO THE SEVEN POLICIES RELATED TO DISTRICT APPROVALS, AUTHORIZATIONS AND PROCEDURES AS AMENDED, AND ADOPTED THE FOLLOWING RESOLUTIONS BY TITLE:

RESOLUTION NO. 2020 -1

RESOLUTION OF THE BOARD OF DIRECTORS OF
IRVINE RANCH WATER DISTRICT
ADOPTING A REAL PROPERTY POLICY
AND RESCINDING RESOLUTION NO. 2014-40

RESOLUTION NO. 2020 -2

RESOLUTION OF THE BOARD OF DIRECTORS OF
IRVINE RANCH WATER DISTRICT
APPROVING A POLICY FOR HANDLING CLAIMS AND LAWSUITS,
CONFLICT WAIVERS AND RELATED AGREEMENTS,
AND RESCINDING RESOLUTION NO. 2014-41

RESOLUTION NO. 2020 -3

RESOLUTION OF THE BOARD OF DIRECTORS OF
IRVINE RANCH WATER DISTRICT
RESCINDING RESOLUTION NO. 2014-42, AND
ESTABLISHING REVISED POLICIES WITH RESPECT TO
PURCHASING AND AUTHORIZATION OF EXPENDITURES,
COMPETITIVE BIDDING AND AWARD OF CONTRACTS,
PROCUREMENT OF PROFESSIONAL SERVICES, AND
APPROVAL AND AUTHORIZATION OF CHANGE ORDERS

RESOLUTION NO. 2020 –4

RESOLUTION OF THE BOARD OF DIRECTORS OF
IRVINE RANCH WATER DISTRICT
ADOPTING A PERSONAL PROPERTY DISPOSAL POLICY
AND RESCINDING RESOLUTION NO. 2014-43

OTHER BUSINESS

GENERAL MANAGER’S REPORT

General Manager Cook reported that MWD has scheduled a shutdown for one week, and that South County agencies are getting nervous; however, the north county agencies will be fine. He said that today an executed term letter was received from East Orange County Water District where IRWD will assist this agency if necessary.

Mr. Cook said that he placed before each Director a letter from the Santa Ana Regional Water Quality Control Board to Poseidon Water relative to the proposed desalination plant in Huntington Beach.

DIRECTORS’ COMMENTS

Director LaMar reported on his attendance at a National Water Resources Association conference in Arizona, a WACO meeting, and a City of Lake Forest dedication ceremony and open house.

Director Withers reported that today he hosted a CORO meeting and that a “Women in Leadership” event is scheduled, and suggested that the District be a sponsor of this program. He further said that he attended a City of Lake Forest dedication event.

Director Swan said that he attended the fall ACWA conference in San Diego for four days, MWDOC Committee and Board meetings, a WACO meeting, a meeting at West Basin, Newport Chamber of Commerce meetings, and the City of Lake Forest dedication event. He said he would be attending a PPIC event this Thursday.

Director Reinhart said that he attended a MWDOC Board meeting, a SOCWA Board meeting, a Waco meeting, and a City of Lake Forest dedication event.

Director Matheis reported on her attendance at a City of Irvine Chamber of Commerce economic outlook meeting, and a City of Lake Forest dedication event. She further noted the passing of Mrs. Joan Irvine Smith on December 19, 2019 who faithfully attended IRWD Board meetings for over 20 years.

COMMUNITY UPDATES

As consultant Bruce Newell had to leave the Board meeting early, General Manager Cook provided his report noting that various issues, including a lighting issue at a District site, was recently discussed at a very positive Inter-Canyon meeting that Mr. Newell attended.

CLOSED SESSION

Legal Counsel Collins said that a Closed Session would be held this evening as follows:

CONFERENCE WITH LEGAL COUNSEL—ANTICIPATED LITIGATION -
Significant exposure to litigation pursuant to Government Code Section 54956.9(d)(2).
(Two (2) potential cases; claims on file with the District.)

OPEN SESSION

Following the Closed Session, the meeting was reconvened with Directors LaMar, Matheis, Withers, Swan, and Reinhart present. Legal Counsel Collins said that there was no action to be reported.

ADJOURNMENT

President Matheis adjourned the meeting to Friday, January 17, 2020, at 8:00 a.m., in the District Office, Multi-purpose Room, first floor, 15600 Sand Canyon Avenue, Irvine to hold a Strategic Planning Workshop.

ADJOURNMENT:

There being no further business, President Matheis adjourned the meeting.

APPROVED and SIGNED this 27th day of January, 2020.

President, IRVINE RANCH WATER DISTRICT

Secretary IRVINE RANCH WATER DISTRICT

APPROVED AS TO FORM:

Claire Hervey Collins, General Counsel
Hanson Bridgett LLP

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EXHIBIT “B”

MINUTES OF ADJOURNED REGULAR MEETING – JANUARY 17, 2020

The Adjourned Regular Meeting of the Board of Directors of the Irvine Ranch Water District (IRWD) was called to order at 8:00 a.m. by President Matheis on January 17, 2020 at the Irvine Ranch Water District’s Headquarters, 15600 Sand Canyon Avenue, Irvine, California.

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

Directors Absent: None.

Also Present: General Manager Cook, Executive Director of Finance and Administration Clary, Executive Director of Technical Services Burton, Executive Director of Water Policy Weghorst, Executive Director of Operations Chambers, Director of Public Affairs Beeman, Director of Human Resources Roney, General Counsel Collins, Director of Recycling Operations Zepeda, Director of Water Quality and Regulatory Compliance Colston, Director of Water Operations Roberts, Director of Treasury and Risk Management Jacobson, Director of Water Resources Sanchez, Director of Maintenance Mykitta, Secretary Bonkowski, Senior Engineer Jacob Moeder, Consultant Gregorio Estrada, and Principle Engineer Eric Akiyoshi.

COMMUNICATIONS TO THE BOARD

WRITTEN AND ORAL COMMUNICATIONS: None.

2020 IRWD GOALS AND TARGET ACTIVITIES LIST

General Manager Cook reported that staff is presenting for the Board’s review and comment the draft IRWD 2020 Goals and Target Activities. Mr. Cook said that this document proposes 18 goals for IRWD to accomplish within the next five years, and also summarizes the Target Activities on which IRWD will focus in 2020 in order to advance the completion of these goals.

Mr. Cook reviewed a graphical overview of IRWD’s Strategic Planning Process and said that exhibits included the District’s *Mission, Vision, and Values Statement* and the *IRWD Strategic Objectives*. No changes were recommended by the Board to these documents.

Mr. Cook said that the the IRWD Management Team met to develop some initial thoughts on changing conditions for the Board’s consideration. He reviewed the following list which he said are the most prominent changing conditions discussed: 1) emerging contaminants – specifically PFAS – and the impact on regulations, analytical testing needs, and customer expectations; 2) increases in legislation and regulation and IRWD’s expanding role in development and implementation; 3) increased integration of water supply solutions; 4) climate change and its impact on imported water supplies, local groundwater availability, and IRWD’s water banking activities; 5) response to service interruptions – water and/or energy supplies; 6) cyber security; 7) outcomes of current litigation; 8) dam regulations and community perception; 9) workforce logistics; 10) increased interaction with the homeless population; 11) tighter job market necessitating increasing training and education for new and existing employees; 12) leveraging data to enhance IRWD’s analytical and decision-making capabilities; 13) preserving and enhancing IRWD’s culture as the District grows; and 14) preparing IRWD for build-out (technically, operationally, and financially).

Mr. Cook reviewed the draft IRWD 2020 Goals and Target Activities attached as an exhibit. Following discussion on optimizing and protecting local groundwater utilization, staff was asked to update the District's policy on PFAS contamination from the groundwater and the basin in the near future. In response to Director Reinhart's inquiry, several target completion dates were discussed as he wanted to make sure they could be accomplished in the set time frame. In response to Director Swan's inquiry relative to securing agreements with multiple outlets for the biosolids project, Director of Recycling Operations Zepeda said that he will be working with brokers once he receives a date certain when the pellets will be produced, and will be submitting an item for the Board once the facility goes on-line. Director Swan made further comments relative to the Kern Fan activities, resolving issues with the Orange County Water District, the Huntington Beach desalination facility, supporting ACWA on various statewide policies, and taking an active role on base-loaded projects with a future IRWD policy paper on this issue. He further asked that an item be agendaized at a Committee meeting as well as a future Board Strategic Workshop to discuss developing strategic partnerships with various organizations.

SEWAGE TREATMENT MASTER PLAN UPDATE

General Manager Cook introduced Senior Engineer Moeder and Consultant Gregorio Estrada of HDR. Using a PowerPoint presentation, Mr. Moeder reviewed the purpose of the Sewage Treatment Master Plan, provided an overview of project phases, provided highlights from basis of planning, provided a summary of projected sewer flows and recycled water demands, and a baseline condition at buildout. Mr. Estrada provided system-wide alternatives including cost estimates, a cumulative OCSD capital and equity costs, and life cycle cost summaries. Mr. Moeder further reviewed non-economic criteria and weighting, provided an alternative evaluation results summary, reviewed an implementation plan and discussed future considerations, reviewed a strategy for moving forward, and highlighted next steps. Following comments by the Board, staff and the consultant were thanked for their efforts.

ADJOURNMENT

There being no further business, President Matheis adjourned the meeting at 11:26 a.m.

APPROVED and SIGNED this 27th day of January, 2020.

President, IRVINE RANCH WATER DISTRICT

Secretary IRVINE RANCH WATER DISTRICT

APPROVED AS TO FORM:

Claire Hervey Collins, General Counsel
Hanson Bridgett LLP

January 27, 2020

Prepared by: J. Davis / T. Fournier

Submitted by: R. Jacobson / C. Clary

Approved by: Paul A. Cook



CONSENT CALENDAR

DECEMBER 2019 TREASURY REPORT

SUMMARY:

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

- A. The December 2019 Investment Summary Report. This Investment Summary Report conforms with the 2019 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, 2019, as outlined in Exhibit "B";
- C. The Monthly Interest Rate Swap Summary as of December 31, 2019, as outlined in Exhibit "C";
- D. The December 31, 2019 Disbursement Summary of warrants 404225 through 405004, wire transfers, Workers' Compensation distributions, payroll withholding distributions, and voided checks in the total amount of \$16,810,385 as outlined in Exhibit "D";
- E. The Summary of Payroll ACH payments in the total amount of \$2,112,770 as outlined in Exhibit "E"; and
- F. The Disclosure Report of Reimbursements to Board Members and staff for December 2019, 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, 2019, the book value of the investment portfolio was \$368,443,272, with a 2.13% rate of return and a market value of \$369,950,357. Based on the IRWD's December 31, 2019 quarterly real estate investment rate of return of 8.67%, the weighted average return for the fixed income and real estate investments was 4.15%.

As of December 31, 2019, the outstanding principal amount of fixed and variable rate debt was \$659,425,000. The monthly weighted average all-in variable rate was 1.25%. Including the District'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 3.04%.

Payroll ACH payments totaled \$2,112,770, and wire transfers, all other ACH payments, and checks issued for debt service, accounts payable, payroll, and water purchases for December totaled \$16,810,385.

ENVIRONMENTAL COMPLIANCE:

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

COMMITTEE STATUS:

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

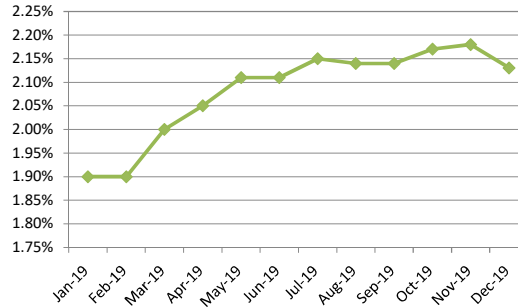
RECOMMENDATION: THAT THE BOARD RECEIVE AND FILE THE TREASURER'S INVESTMENT SUMMARY REPORT, THE SUMMARY OF FIXED AND VARIABLE RATE DEBT, AND DISCLOSURE REPORT OF REIMBURSEMENTS TO BOARD MEMBERS AND STAFF; APPROVE THE DECEMBER 2019 SUMMARY OF PAYROLL ACH PAYMENTS IN THE TOTAL AMOUNT OF \$2,112,770; AND APPROVE THE DECEMBER 2019 ACCOUNTS PAYABLE DISBURSEMENT SUMMARY OF WARRANTS 404225 THROUGH 405004, WORKERS' COMPENSATION DISTRIBUTIONS, WIRE TRANSFERS, PAYROLL WITHHOLDING DISTRIBUTIONS AND VOIDED CHECKS IN THE TOTAL AMOUNT OF \$16,810,385.

LIST OF EXHIBITS:

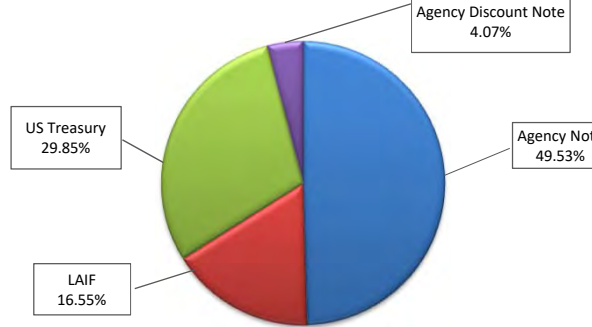
- Exhibit "A" – Investment Summary Report
- Exhibit "B" – Summary of Fixed and Variable Debt
- Exhibit "C" – Monthly Interest Rate Swap Summary
- Exhibit "D" – Monthly Summary of District Disbursements
- Exhibit "E" – Monthly Payroll ACH Summary
- Exhibit "F" – Disclosure of Reimbursements to Board Members and Staff

Exhibit "A"
**Irvine Ranch Water District
Investment Portfolio Summary
December 2019**

Monthly Fixed Income Yield



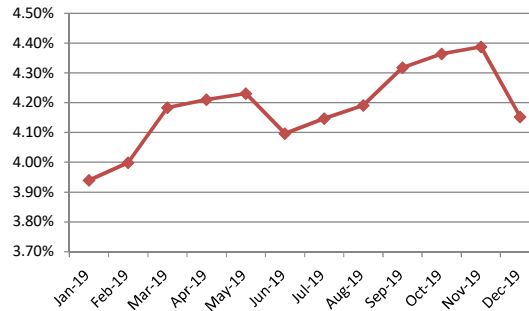
Portfolio Distribution



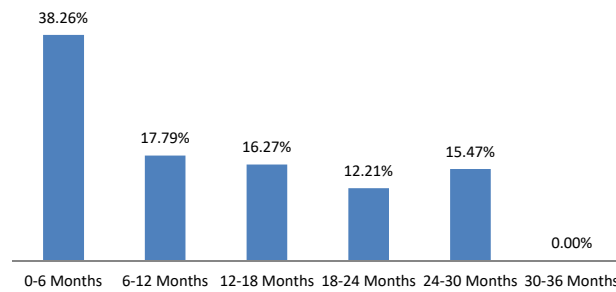
Investment Summary

Type	PAR	Book Value	Market Value
Agency Note	182,550,000	182,454,504	183,221,619
US Treasury	110,000,000	110,001,795	110,633,000
LAIF	61,000,000	61,000,000	61,107,988
Agency Discount Note	15,000,000	14,986,974	14,987,750
Grand Total	368,550,000	368,443,272	369,950,357

**Weighted Average Return
Including Real Estate Portfolio**



Maturity Distribution



Top Issuers

Issuer	PAR	% Portfolio
US Treasury	110,000,000	29.85%
Fed Farm Credit Bank	62,000,000	16.82%
State of California Tsy.	61,000,000	16.55%
Fed Home Loan Bank	55,000,000	14.92%
Fed Natl Mortgage Assoc	40,550,000	11.01%
Fed Home Loan Mortgage Corp	40,000,000	10.85%
Grand Total	368,550,000	100.00%

IRVINE RANCH WATER DISTRICT
INVESTMENT SUMMARY REPORT

12/31/19

SETTLMT	Call Schedule	Initial Call	Maturity Date	Rating	INVESTMENT TYPE	INSTITUTION / ISSUER	PAR Amount	COUPON DISCOUNT	YIELD	ORIGINAL COST	CARRY VALUE	MARKET VALUE ⁽¹⁾ 12/31/2019	UNREALIZED ⁽²⁾ GAIN/(LOSS)
08/23/17			01/01/20		LAIF	State of California Tsy.	\$61,000,000		2.020%	\$61,000,000.00	\$61,000,000.00	61,107,988.18	107,988.18
12/19/19	NA	NA	01/10/20	NR	FHLB - Discount Note	Fed Home Loan Bank	10,000,000	1.460%	1.482%	9,991,077.80	9,996,350.01	9,996,600.00	249.99
12/20/17	NA	NA	01/17/20	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	1.500%	1.932%	4,956,250.00	4,993,189.31	4,999,500.00	6,310.69
12/30/19	NA	NA	01/30/20	NR	Treasury - Bill	US Treasury	10,000,000	1.410%	1.431%	9,987,858.33	9,988,641.66	9,988,700.00	58.34
12/27/19	NA	NA	02/13/20	NR	FHLB - Discount Note	Fed Home Loan Bank	5,000,000	1.570%	1.595%	4,989,533.35	4,990,623.63	4,991,150.00	526.37
10/16/17	NA	NA	02/28/20	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.500%	1.612%	4,987,025.00	4,999,130.00	4,999,050.00	(80.00)
12/19/18	NA	NA	02/29/20	Aaa/NR/AAA	Treasury - Note	US Treasury	10,000,000	1.250%	2.672%	9,833,593.76	9,972,582.95	9,993,400.00	20,817.05
12/20/17	NA	NA	03/13/20	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	4.125%	1.940%	5,237,200.00	5,050,703.69	5,023,800.00	(26,903.69)
12/20/18	NA	NA	03/31/20	Aaa/NR/AAA	Treasury - Note	US Treasury	10,000,000	2.250%	2.665%	9,948,000.00	9,988,642.40	10,014,100.00	25,457.60
10/03/17	NA	NA	04/20/20	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	1.375%	1.630%	4,968,350.00	4,996,256.45	4,996,000.00	(256.45)
06/29/18	NA	NA	04/23/20	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	2.500%	2.544%	4,996,000.00	4,999,422.36	5,013,350.00	13,927.64
06/29/18	NA	NA	05/15/20	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	2.550%	2.566%	4,998,450.00	4,999,694.97	5,018,000.00	18,305.03
12/04/19	NA	NA	05/28/20	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	2.625%	1.582%	5,025,000.00	5,021,022.73	5,019,550.00	(1,472.73)
06/11/18	NA	NA	06/11/20	Aaa/NR/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	2.550%	2.570%	4,997,100.00	4,999,357.32	5,021,800.00	22,442.68
11/10/17	NA	NA	06/22/20	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.500%	1.750%	4,968,000.00	4,998,229.97	4,996,500.00	(1,729.97)
04/19/18	NA	NA	07/30/20	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.500%	2.535%	4,886,000.00	4,971,123.65	4,995,350.00	24,226.35
06/08/18	NA	NA	07/30/20	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.500%	2.559%	4,890,100.00	4,970,384.55	4,995,350.00	24,965.45
12/20/17	Quarterly	11/10/16	08/10/20	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	1.450%	2.052%	4,923,000.00	4,974,120.33	4,996,200.00	22,079.67
09/14/18	NA	NA	08/24/20	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	2.680%	2.789%	4,989,700.00	4,996,576.34	5,036,950.00	40,373.66
05/21/18	Continuous after	12/01/17	09/01/20	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	1.680%	2.735%	4,884,250.00	4,966,135.49	5,000,050.00	33,914.51
09/14/18	NA	NA	09/04/20	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	2.690%	2.794%	4,990,050.00	4,996,591.33	5,038,950.00	42,358.67
12/12/17	One Time	09/28/18	09/28/20	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	2.000%	2.000%	5,000,000.00	5,000,000.00	5,009,050.00	9,050.00
10/31/17	One Time	10/30/18	10/30/20	Aaa/NR/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,550,000	1.850%	1.850%	5,550,000.00	5,550,000.00	5,552,109.00	2,109.00
09/28/18	NA	NA	10/31/20	Aaa/NR/AAA	Treasury - Note	US Treasury	5,000,000	1.750%	2.847%	4,889,453.13	4,822,893.50	5,004,100.00	181,206.50
12/13/17	Continuous after	08/23/17	11/23/20	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	1.770%	2.060%	4,958,750.00	4,983,285.32	5,000,000.00	16,714.68
11/30/17	NA	NA	11/24/20	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	1.850%	1.964%	4,983,550.00	4,995,049.91	5,013,750.00	18,700.09
12/20/17	NA	NA	12/28/20	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.875%	2.023%	4,978,400.00	4,990,921.74	5,012,200.00	21,278.26
11/09/18	NA	NA	12/31/20	Aaa/NR/AAA	Treasury - Note	US Treasury	5,000,000	2.375%	2.958%	4,939,843.75	4,971,957.81	5,035,350.00	63,392.19
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	9,842,373.07	9,972,300.00	129,926.93
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	4,975,525.16	5,042,850.00	67,324.84
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	4,955,918.28	5,020,500.00	64,581.72
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	9,997,989.46	10,097,100.00	99,110.54
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	4,989,889.01	5,043,050.00	53,160.99
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	5,000,724.65	5,021,750.00	21,025.35
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	4,989,395.04	5,012,550.00	23,154.96
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	5,039,222.72	5,042,200.00	2,977.28
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	5,058,273.57	5,068,750.00	10,476.43

IRVINE RANCH WATER DISTRICT
INVESTMENT SUMMARY REPORT

12/31/19

SETTLMT	Call Schedule	Initial Call	Maturity Date	Rating	INVESTMENT TYPE	INSTITUTION / ISSUER	PAR Amount	COUPON DISCOUNT	YIELD	ORIGINAL COST	CARRY VALUE	MARKET VALUE ⁽¹⁾ 12/31/2019	UNREALIZED ⁽²⁾ GAIN/(LOSS)
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	5,032,770.73	5,043,850.00	11,079.27
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	4,996,098.07	5,024,350.00	28,251.93
12/12/19	One Time	05/27/20	08/21/21	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	1.750%	1.712%	5,003,200.00	5,003,096.44	5,002,700.00	(396.44)
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	4,943,823.92	4,961,550.00	17,726.08
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	5,116,954.19	5,112,100.00	(4,854.19)
10/15/19	Quarterly	01/15/19	10/15/21	Aaa/NA/NR	FHLMC - Note	Fed Home Loan Mortgage Corp	10,000,000	2.000%	2.000%	10,000,000.00	10,000,000.00	9,995,700.00	(4,300.00)
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	4,978,804.56	4,985,500.00	6,695.44
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	5,115,925.48	5,117,950.00	2,024.52
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	5,006,527.02	5,015,450.00	8,922.98
12/02/19	Continuous after	03/02/20	12/02/21	Aaa/AA+/NR	FFCB - Note	Fed Farm Credit Bank	7,000,000	1.700%	1.726%	6,996,500.00	6,996,643.64	6,999,160.00	2,516.36
11/25/19			12/31/21	Aaa/NR/AAA	Treasury - Note	US Treasury	5,000,000	2.000%	1.619%	5,039,062.50	5,037,178.13	5,040,050.00	2,871.87
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	5,073,585.58	5,077,100.00	3,514.42
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	5,003,902.51	5,090,450.00	86,547.49
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	5,023,811.98	5,029,300.00	5,488.02
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	4,966,784.19	5,044,600.00	77,815.81
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	5,087,979.25	5,094,900.00	6,920.75
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	5,002,001.82	5,093,850.00	91,848.18
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	5,025,186.64	5,031,850.00	6,663.36

TOTAL INVESTMENTS

\$368,550,000

\$367,785,979.22

\$368,443,272.49

\$369,950,357.18

\$1,507,084.69

Petty Cash
Ck Balance

Bank of America

3,400.00

2,696,753.62

\$370,486,132.84

⁽¹⁾ LAIF market value is as of the most recent quarter-end as reported by LAIF.
Security market values are determined using Bank of New York ("Trading Prices"), Bloomberg and/or broker dealer pricing.

⁽²⁾ Gain (loss) calculated against carry value using the trading value provided by Bank of New York/or Brokers

⁽³⁾ Real estate rate of return is based on most recent quarter end return

Outstanding Variable Rate Debt	\$262,300,000
Net Outstanding Variable Rate Debt (Less \$60 million fixed-payer swaps)	\$202,300,000
Investment Balance:	\$370,486,133
Investment to Variable Rate Debt Ratio:	183%
Portfolio - Average Number of Days To Maturity	317

	Investment Portfolio	Real Estate ⁽³⁾ Portfolio	Weighted Avg. Return
December	2.13%	8.67%	4.15%
November	2.18%	9.15%	4.39%
Change	-0.05%		-0.24%

This Investment Summary Report is in conformity with the 2019 Investment Policy and provides sufficient liquidity to meet the next six months estimated expenditures.
*S - Step up

IRVINE RANCH WATER DISTRICT
SUMMARY OF MATURITIES

12/31/19

DATE	TOTAL	%	LAIF	Agency Notes	Agency Discount Notes	Collateral Deposit	US Treasury
12/19	\$61,000,000	16.55%	\$61,000,000				
01/20	25,000,000	6.78%		5,000,000	10,000,000		10,000,000
02/20	20,000,000	5.43%		5,000,000	5,000,000		10,000,000
03/20	15,000,000	4.07%		5,000,000			10,000,000
04/20	10,000,000	2.71%		10,000,000			
05/20	10,000,000	2.71%		10,000,000			
06/20	10,000,000	2.71%		10,000,000			
07/20	10,000,000	2.71%		10,000,000			
08/20	10,000,000	2.71%		10,000,000			
09/20	15,000,000	4.07%		15,000,000			
10/20	10,550,000	2.86%		5,550,000			5,000,000
11/20	10,000,000	2.71%		10,000,000			
SUB-TOTAL	\$206,550,000	56.04%	\$61,000,000	\$95,550,000	\$15,000,000		\$35,000,000
13 Months - 3 YEARS							
12/01/2020 - 1/31/2021	20,000,000	5.43%		5,000,000			15,000,000
2/01/2021 -04/30/2021	40,000,000	10.85%		30,000,000			10,000,000
05/01/2021 -7/31/2021	15,000,000	4.07%		10,000,000			5,000,000
08/01/2021 - 10/31/2021	30,000,000	8.14%		20,000,000			10,000,000
11/01/2021 - 1/31/2022	37,000,000	10.04%		12,000,000			25,000,000
2/01/2022 -4/30/2022	20,000,000	5.43%		10,000,000			10,000,000
	-						
	-						
	-						
TOTALS	\$368,550,000	100.00%	\$61,000,000	\$182,550,000	\$15,000,000		\$110,000,000

% OF PORTFOLIO

16.55%

49.53%

4.07%

29.85%

Irvine Ranch Water District
 Summary of Real Estate - Income Producing Investments
 12/31/2019

	ACQUISITION DATE	PROPERTY TYPE	OWNERSHIP INTEREST	ORIGINAL COST	MARKET VALUE 12/31/2019	ANNUALIZED RATE OF RETURN QUARTER ENDED 12/31/2019
Sycamore Canyon	Dec-92	Apartments	Fee Simple	\$ 43,550,810	\$ 148,625,000	18.28%
Wood Canyon Villas	Jun-91	Apartments	Limited Partner	\$ 6,000,000	\$ 28,710,327	8.53%
ITC (230 Commerce)	Jul-03	Office Building	Fee Simple	\$ 5,739,845	\$ 11,730,000	10.47%
Waterworks Business Pk.	Nov-08	Research & Dev.	Fee Simple	\$ 8,630,577	\$ 9,180,000	6.71%
Sand Canyon Professional Center	Jul-12	Medical Office	Fee Simple	\$ 8,648,594	\$ 11,220,000	8.73%
Total - Income Properties				\$ 72,569,826	\$ 209,465,327	14.34%
OTHER REAL ESTATE DESCRIPTION						
Serrano Summit - Promissory Note	Sep-17	NA	NA	\$ 88,128,000	\$ 88,128,000	4.00%
Total - Income Producing Real Estate Investments				\$ 160,697,826	\$ 297,593,327	8.67%

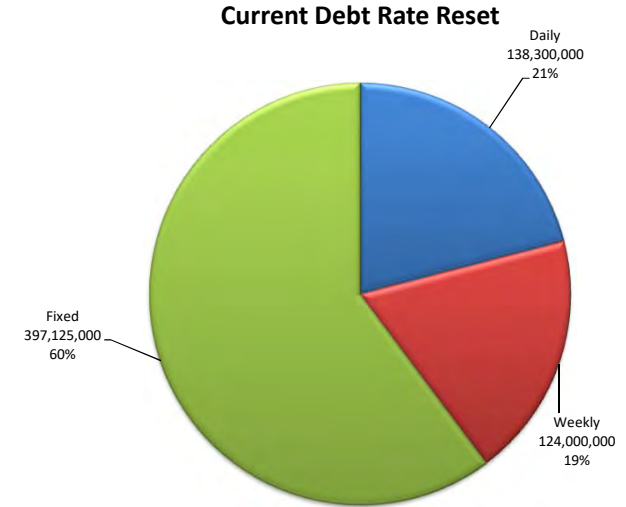
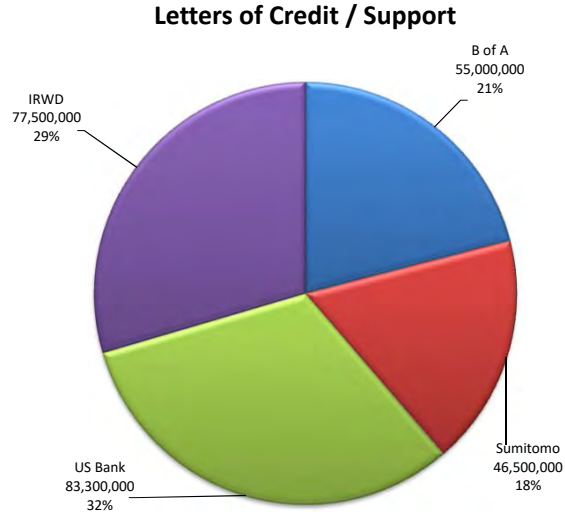
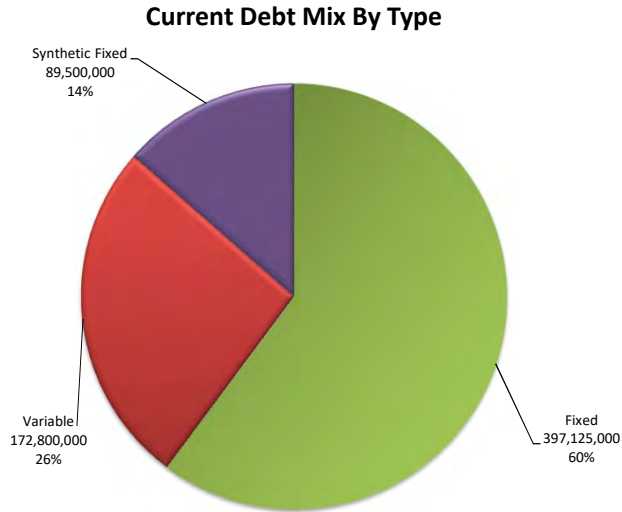
IRVINE RANCH WATER DISTRICT INVESTMENT SUMMARY REPORT
INVESTMENT ACTIVITY
Dec-19

MATURITIES/SALES/CALLS

PURCHASES

DATE	SECURITY TYPE	PAR	YIELD	Settlement Date	Maturity Date	SECURITY TYPE	PAR	YIELD TO MATURITY
12/2/2019	FNMA - Discount Note	\$6,000,000	1.45%	12/2/2019	12/2/2021	FFCB - Note	\$7,000,000	1.73%
12/4/2019	FNMA - Note	\$5,000,000	1.93%	12/4/2019	5/28/2020	FHLB - Note	\$5,000,000	1.58%
12/5/2019	FHLB - Discount Note	\$4,000,000	2.03%	12/5/2019	4/30/2021	Treasury - Note	\$5,000,000	1.65%
12/12/2019	FFCB - Note	\$5,000,000	1.44%	12/12/2019	8/27/2021	FHLB - Note	\$5,000,000	1.71%
12/19/2019	FFCB - Note	\$5,000,000	1.62%	12/19/2019	1/30/2019	FHLB - Discount Note	\$10,000,000	1.48%
12/27/2019	FHLC - Note	\$5,000,000	2.00%	12/19/2019	1/31/2022	Treasury - Note	\$5,000,000	1.64%
12/30/2019	FHLC - Note	\$10,000,000	2.00%	12/19/2019	2/15/2022	Treasury - Note	\$5,000,000	1.65%
				12/19/2019	3/31/2022	Treasury - Note	\$5,000,000	1.65%
				12/27/2019	2/13/2020	FHLB - Discount Note	\$5,000,000	1.60%
				12/30/2019	1/30/2019	Treasury - Bill	\$10,000,000	1.43%

Exhibit "B"
Irvine Ranch Water District
Summary of Fixed and Variable Rate Debt
December 2019



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	\$28,300,000	4.29%	US Bank	BAML	Variable	Daily
Series 2008-A Refunding	04/24/08	07/01/35	\$46,500,000	7.05%	Sumitomo	BAML	Variable	Weekly
Series 2011-A-1 Refunding	04/15/11	10/01/37	\$46,500,000	7.05%	IRWD	Goldman	Variable	Weekly
Series 2011-A-2 Refunding	04/15/11	10/01/37	\$31,000,000	4.70%	IRWD	Goldman	Variable	Weekly
Series 2009 - A	06/04/09	10/01/41	\$55,000,000	8.34%	US Bank	US Bank	Variable	Daily
Series 2009 - B	06/04/09	10/01/41	\$55,000,000	8.34%	B of A	Goldman	Variable	Daily
2010 Refunding COPS	02/23/10	03/01/20	\$1,980,000	0.30%	N/A	N/A	Fixed	Fixed
2016 COPS	09/01/16	03/01/46	\$116,745,000	17.70%	N/A	N/A	Fixed	Fixed
2010 Build America Taxable Bond	12/16/10	05/01/40	\$175,000,000	26.54%	N/A	N/A	Fixed	Fixed
Series 2016	10/12/16	02/01/46	\$103,400,000	15.68%	N/A	N/A	Fixed	Fixed
Total			\$659,425,000	100.00%				

IRVINE RANCH WATER DISTRICT
SUMMARY OF FIXED & VARIABLE RATE DEBT

December-19

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	\$28,300,000	US BANK	05/07/15	12/15/21	Aa3/VMIG1	AA-/A-1+	N/R	\$28,681,468	0.3300%	\$94,649	BAML	DAILY	0.10%	\$28,300	BANK OF NY											
SERIES 2008-A Refunding	04/24/08	07/01/35	Jul 1	5th Bus. Day	\$60,215,000	\$46,500,000	SUMITOMO	04/01/11	07/21/21	A1/P-1	A/A-1	A/F1	\$47,187,945	0.3150%	\$148,642	BAML	WED	0.07%	\$32,550	BANK OF NY											
SERIES 2011-A-1 Refunding	04/15/11	10/01/37	Oct 1	1st Bus. Day	\$60,545,000	\$46,500,000	N/A	N/A	N/A	Aa1/VMIG1	A-1+	AAA/F1+	N/A	N/A	N/A	Goldman	WED	0.13%	\$58,125	BANK OF NY											
SERIES 2011-A-2 Refunding	04/15/11	10/01/37	Oct 1	1st Bus. Day	\$40,370,000	\$31,000,000	N/A	N/A	N/A	Aa1/VMIG1	A-1+	AAA/F1+	N/A	N/A	N/A	Goldman	WED	0.13%	\$38,750	BANK OF NY											
SERIES 2009 - A	06/04/09	10/01/41	Oct 1	1st Bus. Day	\$75,000,000	\$55,000,000	US BANK	04/01/11	12/15/21	Aa2/VMIG 1	AA-/A-1+	AA/F1+	\$55,614,795	0.3300%	\$183,529	US Bank	DAILY	0.07%	\$38,500	US BANK											
SERIES 2009 - B	06/04/09	10/01/41	Oct 1	1st Bus. Day	\$75,000,000	\$55,000,000	B of A	04/01/11	05/16/22	Aa2/VMIG 1	A/A-1	A1/F1+	\$55,614,795	0.3000%	\$166,844	Goldman	DAILY	0.10%	\$55,000	US BANK											
\$349,430,000						\$262,300,000						SUB-TOTAL VARIABLE RATE DEBT					\$187,099,003					0.3173%					\$593,664				
															(Wt. Avg)					0.10%					\$251,225						
															(Wt. Avg)																
FIXED RATE ISSUES																															
2010 REFUNDING COPS	02/23/10	03/01/20	Mar 1	Mar/Sept	\$85,145,000	\$1,980,000	N/A	N/A	N/A	Aa1	AAA	AAA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	BANK OF NY											
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											
\$480,290,000						\$397,125,000						SUB-TOTAL FIXED RATE DEBT																			
\$829,720,000						\$659,425,000						TOTAL- FIXED & VARIABLE RATE DEBT																			

Remarketing Agents			GO VS COP's		
Goldman	132,500,000	51%	GO:	540,700,000	82%
BAML	74,800,000	29%	COPS:	118,725,000	18%
US Bank	55,000,000	21%	Total	<u>659,425,000</u>	
	<u>262,300,000</u>				

LOC Banks		Breakdown Between Variable & Fixed Rate Mode	
SUMITOMO	46,500,000	Daily Issues	138,300,000 21%
BANK OF AMERICA	55,000,000	Weekly Issues	46,500,000 7%
US BANK	83,300,000	ITN Issues	77,500,000 12%
	<u>184,800,000</u>	Sub-Total	<u>262,300,000</u>
		Fixed Rate Issues	\$397,125,000 60%
		Sub-Total - Fixed	<u>397,125,000</u>
		TOTAL DEBT	
		FIXED & VAR.	<u>659,425,000</u> 100%

IRVINE RANCH WATER DISTRICT
SUMMARY OF DEBT RATES
Dec-19

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	55,000,000	46,500,000	31,000,000	28,300,000	46,500,000	55,000,000
Bank	BOFA	(SIFMA -1)	(SIFMA -1)	US BANK	Sumitomo	US BANK
Reset		Wednesday	Wednesday		Wednesday	
12/1/2019	0.63%	1.09%	1.09%	0.65%	0.77%	0.63%
12/2/2019	0.50%	1.09%	1.09%	0.51%	0.77%	0.59%
12/3/2019	0.45%	1.09%	1.09%	0.53%	0.77%	0.48%
12/4/2019	0.44%	1.09%	1.09%	0.44%	0.77%	0.46%
12/5/2019	0.44%	1.05%	1.05%	0.46%	0.75%	0.46%
12/6/2019	0.44%	1.05%	1.05%	0.49%	0.75%	0.46%
12/7/2019	0.44%	1.05%	1.05%	0.49%	0.75%	0.46%
12/8/2019	0.44%	1.05%	1.05%	0.49%	0.75%	0.46%
12/9/2019	0.44%	1.05%	1.05%	0.58%	0.75%	0.46%
12/10/2019	0.44%	1.05%	1.05%	0.55%	0.75%	0.46%
12/11/2019	0.44%	1.05%	1.05%	0.52%	0.75%	0.49%
12/12/2019	0.50%	1.10%	1.10%	0.52%	0.73%	0.49%
12/13/2019	0.53%	1.10%	1.10%	0.62%	0.73%	0.53%
12/14/2019	0.53%	1.10%	1.10%	0.62%	0.73%	0.53%
12/15/2019	0.53%	1.10%	1.10%	0.62%	0.73%	0.53%
12/16/2019	0.58%	1.10%	1.10%	0.66%	0.73%	0.59%
12/17/2019	0.63%	1.10%	1.10%	0.68%	0.73%	0.64%
12/18/2019	0.72%	1.10%	1.10%	0.73%	0.73%	0.72%
12/19/2019	0.80%	1.26%	1.26%	0.83%	0.89%	0.78%
12/20/2019	0.88%	1.26%	1.26%	0.96%	0.89%	0.87%
12/21/2019	0.88%	1.26%	1.26%	0.96%	0.89%	0.87%
12/22/2019	0.88%	1.26%	1.26%	0.96%	0.89%	0.87%
12/23/2019	0.96%	1.26%	1.26%	1.09%	0.89%	0.95%
12/24/2019	1.25%	1.26%	1.26%	1.19%	0.89%	1.14%
12/25/2019	1.25%	1.26%	1.26%	1.19%	0.89%	1.14%
12/26/2019	1.22%	1.60%	1.60%	1.29%	1.24%	1.24%
12/27/2019	1.27%	1.60%	1.60%	1.45%	1.24%	1.29%
12/28/2019	1.27%	1.60%	1.60%	1.45%	1.24%	1.29%
12/29/2019	1.27%	1.60%	1.60%	1.45%	1.24%	1.29%
12/30/2019	1.35%	1.60%	1.60%	1.45%	1.24%	1.36%
12/31/2019	1.36%	1.60%	1.60%	1.43%	1.24%	1.37%
Avg Interest Rates	0.77%	1.22%	1.22%	0.83%	0.86%	0.77%
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	1.17%	1.35%	1.35%	1.26%	1.25%	1.17%
Par Amount	101,500,000		31,000,000	74,800,000		55,000,000

Interest Rate Mode	Percent of Total Variable Rate Debt	Par Outstanding	Weighted All-In Average Rate	Base Rate Average
Daily	52.73%	138,300,000	1.19%	0.78%
Weekly	47.27%	124,000,000	1.31%	1.09%
	100.00%	\$ 262,300,000	1.25%	0.93%
Fixed				
COPS 2010	0.50%	1,980,000	3.82%	
COPS 2016	29.40%	116,745,000	2.90%	
BABS 2010	44.07%	175,000,000	4.44%	(1)
SERIES 2016	26.04%	103,400,000	3.32%	
	100.00%	\$ 397,125,000	3.69%	
All-In Debt Rate Including \$60 Million Notional Amount of Swaps				3.04%

(1) Rate adjusted up from 4.35% as a result of sequestration reducing BAB's subsidy by 5.9%

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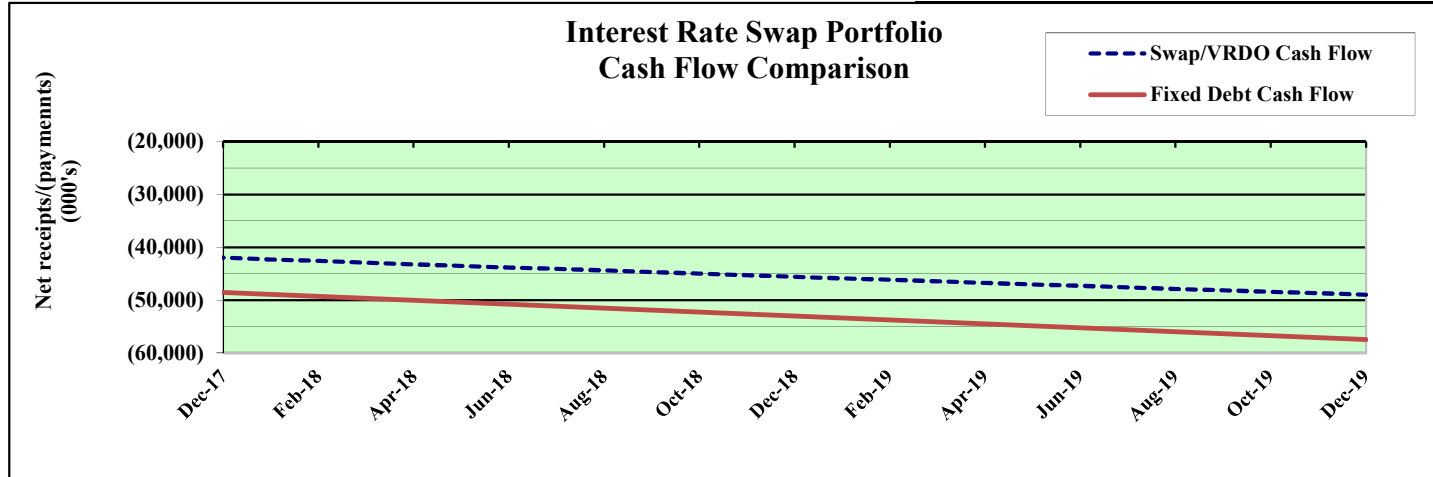
**IRVINE RANCH WATER DISTRICT
INTEREST RATE SWAP MONTHLY SUMMARY REPORT - DETAIL
December 31, 2019**

LIBOR Avg %	Prior Mo.	Current Mo.	12-Mo Avg
	1.74%	1.75%	2.24%

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	9.2	ML	30,000,000	FXP	LIBOR	5.687%	(88,705)	(105,524)	(522,333)	(17,368,060)	19,903,267	(10,096,733)	
3/10/2007	3/10/2029	9.2	CG	30,000,000	FXP	LIBOR	5.687%	(88,705)	(105,524)	(522,333)	(17,368,060)	19,902,947	(10,097,053)	
Totals/Weighted Avgs				9.2	\$ 60,000,000		5.687%	\$ (177,410)	\$ (211,048)	\$ (1,044,666)	\$ (34,736,119)	\$ 39,806,214	\$ (20,193,786)	
Total Current Year Active Swaps				\$ 60,000,000				\$ (177,410)	\$ (211,048)	\$ (1,044,666)	\$ (34,736,119)	\$ 39,806,214	\$ (20,193,786)	

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								\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

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								\$ (177,410)	\$ (211,048)	\$ (1,044,666)	\$ (34,736,119)	\$ 39,806,214	\$ (20,193,786)



Cash Flow Comparison Synthetic Fixed vs. Fixed Rate Debt	
Cash Flow to Date	
Synthetic Fixed =	\$48,976,991
Fixed Rate =	\$59,724,129
Assumptions:	
- Fixed rate debt issued at 4.93% in Mar-07 (estimated TE rate - Bloomberg)	
- 'Synthetic' includes swap cash flow + interest + fees to date	

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Exhibit "D"

IRVINE RANCH WATER DISTRICT AP DISBURSEMENTS AND VOIDS FOR DECEMBER 2019

CHECK OR ELECTRONIC #	SUPPLIERS	PAYMENT DATE	PAYMENT AMOUNT	PAYMENT METHOD	STATUS
404225	JCI JONES CHEMICALS INC	2-Dec-19	4,899.95	IRWD Check	Reconciled
404226	Borowski, Michael (Mike)	5-Dec-19	104.00	IRWD Check	Reconciled
404227	Colvin, Todd C (Todd)	5-Dec-19	192.00	IRWD Check	Reconciled
404228	Cortez, Malcolm A (Malcolm)	5-Dec-19	111.36	IRWD Check	Reconciled
404229	Drzymkowski, Michele A (Michele)	5-Dec-19	1,600.61	IRWD Check	Reconciled
404230	Frost, Garrick A (Garrick)	5-Dec-19	75.40	IRWD Check	Reconciled
404231	Grier, Corey	5-Dec-19	350.76	IRWD Check	Reconciled
404232	Hoffman, Michael S (Mike)	5-Dec-19	159.47	IRWD Check	Reconciled
404233	Hornung, Phillip	5-Dec-19	96.25	IRWD Check	Reconciled
404234	Hufana, Mr. Eugenio D II (Gino)	5-Dec-19	111.36	IRWD Check	Reconciled
404235	Lin, Eileen (Eileen)	5-Dec-19	261.10	IRWD Check	Reconciled
404236	Magana, Husai	5-Dec-19	80.00	IRWD Check	Reconciled
404237	Monroy, Jonnathan	5-Dec-19	260.84	IRWD Check	Reconciled
404238	Nash, Joel	5-Dec-19	40.60	IRWD Check	Reconciled
404239	Nicholson, Darin	5-Dec-19	436.36	IRWD Check	Reconciled
404240	Orozco, Gustavo A (Gus)	5-Dec-19	170.00	IRWD Check	Reconciled
404241	Paulson, David	5-Dec-19	60.09	IRWD Check	Reconciled
404242	Welch, Kelly A (Kellie)	5-Dec-19	25.52	IRWD Check	Reconciled
404243	JAMBOREE SMOG	5-Dec-19	644.50	IRWD Check	Reconciled
404244	A-1 ENTERPRISES, INC.	5-Dec-19	3,860.00	IRWD Check	Reconciled
404245	A.C. SPRAGGINS ENGINEERING & UNDERGROUND, INC.	5-Dec-19	1,902.66	IRWD Check	Reconciled
404246	ABC ICE, INC	5-Dec-19	156.98	IRWD Check	Reconciled
404247	ABM INDUSTRY GROUPS, LLC	5-Dec-19	1,349.79	IRWD Check	Reconciled
404248	ACCUSOURCE, INC.	5-Dec-19	75.35	IRWD Check	Reconciled
404249	ADAM'S FALCONRY SERVICE, LLC	5-Dec-19	1,300.00	IRWD Check	Reconciled
404250	ADORAMA	5-Dec-19	1,899.00	IRWD Check	Reconciled
404251	AECOM TECHNICAL SERVICES, INC.	5-Dec-19	83,731.73	IRWD Check	Reconciled
404252	AGILENT TECHNOLOGIES, INC.	5-Dec-19	1,084.36	IRWD Check	Reconciled
404253	AIRGAS, INC.	5-Dec-19	2,287.74	IRWD Check	Reconciled
404254	ALSTON & BIRD LLP	5-Dec-19	37,492.73	IRWD Check	Reconciled
404255	AMAZON CAPITAL SERVICES, INC.	5-Dec-19	216.69	IRWD Check	Reconciled
404256	ANTHONY N. LARSEN	5-Dec-19	450.00	IRWD Check	Reconciled
404257	APEX SYSTEMS, LLC	5-Dec-19	6,240.00	IRWD Check	Reconciled
404258	AQUA-METRIC SALES COMPANY	5-Dec-19	83,859.14	IRWD Check	Reconciled
404259	ARCHROCK SERVICES, L.P.	5-Dec-19	2,939.13	IRWD Check	Reconciled
404260	ASSEMBLED PRODUCTS CORPORATION	5-Dec-19	2,774.20	IRWD Check	Reconciled
404261	AT&T	5-Dec-19	313.21	IRWD Check	Reconciled
404262	AT&T	5-Dec-19	56.51	IRWD Check	Reconciled
404263	AT&T	5-Dec-19	756.76	IRWD Check	Reconciled
404264	ATHENS SERVICES	5-Dec-19	9,870.10	IRWD Check	Reconciled
404265	AUTOZONE PARTS, INC.	5-Dec-19	216.57	IRWD Check	Reconciled
404266	AXA EQUITABLE LIFE INSURANCE COMPANY	5-Dec-19	9,780.00	IRWD Check	Reconciled
404267	B & K ELECTRIC WHOLESALE	5-Dec-19	67.40	IRWD Check	Reconciled
404268	BAUTISTA, PAIGE	5-Dec-19	1,684.63	IRWD Check	Reconciled
404269	BAVCO BACKFLOW APPARATUS & VALVE COMPANY	5-Dec-19	3,235.56	IRWD Check	Reconciled
404270	BENNETT, SANFORD	5-Dec-19	3.15	IRWD Check	Negotiable
404271	BILL'S SWEEPING SERVICE INC	5-Dec-19	1,755.00	IRWD Check	Reconciled
404272	BIO-ACOUSTICAL CORP.	5-Dec-19	2,290.00	IRWD Check	Reconciled
404273	BLACK & VEATCH CORPORATION	5-Dec-19	24,368.00	IRWD Check	Reconciled
404274	BLOOMBERG FINANCE LP	5-Dec-19	13,305.00	IRWD Check	Reconciled
404275	BLOUIN, J.SCOTT	5-Dec-19	994.15	IRWD Check	Reconciled
404276	BRIAN HOMSY	5-Dec-19	395.80	IRWD Check	Negotiable
404277	BROWN AND CALDWELL	5-Dec-19	5,688.23	IRWD Check	Reconciled
404278	BUTLER BOX & STAKE INC	5-Dec-19	1,386.50	IRWD Check	Reconciled
404279	C WELLS PIPELINE MATERIALS INC	5-Dec-19	19,209.17	IRWD Check	Reconciled
404280	CALIFORNIA BARRICADE RENTAL, INC.	5-Dec-19	21,361.25	IRWD Check	Reconciled
404281	CANON SOLUTIONS AMERICA, INC.	5-Dec-19	9.20	IRWD Check	Reconciled
404282	CAROLLO ENGINEERS, INC	5-Dec-19	31,175.00	IRWD Check	Reconciled
404283	CARTER, DAMARLON	5-Dec-19	73.20	IRWD Check	Reconciled
404284	CHARLES WILLIAM ROBLE, JR.	5-Dec-19	1,912.50	IRWD Check	Reconciled
404285	CHEM SERVICE INC.	5-Dec-19	96.00	IRWD Check	Reconciled
404286	CHEM TECH INTERNATIONAL INC	5-Dec-19	9,029.34	IRWD Check	Reconciled
404287	CITY OF IRVINE	5-Dec-19	4,095.84	IRWD Check	Reconciled

**IRVINE RANCH WATER DISTRICT
AP DISBURSEMENTS AND VOIDS FOR DECEMBER 2019**

CHECK OR ELECTRONIC #	SUPPLIERS	PAYMENT DATE	PAYMENT AMOUNT	PAYMENT METHOD	STATUS
404288	CITY OF NEWPORT BEACH	5-Dec-19	894.00	IRWD Check	Reconciled
404289	CITY OF TUSTIN	5-Dec-19	12,790.00	IRWD Check	Reconciled
404290	CLA-VAL COMPANY	5-Dec-19	10,805.94	IRWD Check	Reconciled
404291	CLARIS STRATEGY INC.	5-Dec-19	13,365.00	IRWD Check	Reconciled
404292	CLIFFORD MORIYAMA	5-Dec-19	4,000.00	IRWD Check	Reconciled
404293	COMPUTER AIDED SOLUTIONS LLC	5-Dec-19	4,747.29	IRWD Check	Reconciled
404294	CONSTELLATION NEWENERGY, INC.	5-Dec-19	43,013.20	IRWD Check	Reconciled
404295	COX COMMUNICATIONS, INC.	5-Dec-19	3,659.71	IRWD Check	Reconciled
404296	CRESCENT CHEMICAL CO.	5-Dec-19	286.24	IRWD Check	Reconciled
404297	CUSTOM TRUCK ONE SOURCE, L.P.	5-Dec-19	4,890.00	IRWD Check	Reconciled
404298	D & H WATER SYSTEMS INC.	5-Dec-19	1,200.00	IRWD Check	Reconciled
404299	DAVIS FARR LLP	5-Dec-19	13,100.00	IRWD Check	Reconciled
404300	DEMARIA ELECTRIC MOTOR SERVICES, INC.	5-Dec-19	8,567.94	IRWD Check	Reconciled
404301	DENALI WATER SOLUTIONS LLC	5-Dec-19	6,828.32	IRWD Check	Reconciled
404302	DIAZ, ELISEO	5-Dec-19	42.71	IRWD Check	Negotiable
404303	DIRECTV INC	5-Dec-19	132.53	IRWD Check	Reconciled
404304	DISCOUNT COURIER SERVICE INC.	5-Dec-19	89.73	IRWD Check	Reconciled
404305	DISPATCH TRUCKING	5-Dec-19	534.63	IRWD Check	Reconciled
404306	DRIVELINES UNLIMITED	5-Dec-19	288.49	IRWD Check	Reconciled
404307	DUGALLY OBERFELD INC.	5-Dec-19	1,343.57	IRWD Check	Reconciled
404308	EHS INTERNATIONAL, INC	5-Dec-19	6,900.00	IRWD Check	Reconciled
404309	EISEL ENTERPRISES INC	5-Dec-19	1,570.50	IRWD Check	Reconciled
404310	EL CAPITAN ENVIROMENTAL SERVICES INC	5-Dec-19	1,638.22	IRWD Check	Reconciled
404311	EMD MILLIPORE CORPORATION	5-Dec-19	1,098.57	IRWD Check	Reconciled
404312	ENVIRONMENTAL SCIENCE ASSOCIATES	5-Dec-19	22,330.53	IRWD Check	Reconciled
404313	EUROFINS EATON ANALYTICAL, INC.	5-Dec-19	638.40	IRWD Check	Reconciled
404314	EXECUTIVE LIGHTING & ELECTRIC	5-Dec-19	238.54	IRWD Check	Reconciled
404315	FARRELL & ASSOCIATES	5-Dec-19	241.43	IRWD Check	Reconciled
404316	FEDEX	5-Dec-19	128.65	IRWD Check	Reconciled
404317	FERGUSON ENTERPRISES, LLC	5-Dec-19	7,781.83	IRWD Check	Reconciled
404318	FIRST CHOICE SERVICES	5-Dec-19	1,426.31	IRWD Check	Reconciled
404319	FISERV	5-Dec-19	21,815.28	IRWD Check	Reconciled
404320	FISHER SCIENTIFIC COMPANY LLC	5-Dec-19	4,867.47	IRWD Check	Reconciled
404321	FLEET SOLUTIONS LLC	5-Dec-19	5,269.23	IRWD Check	Reconciled
404322	FORESTRY SUPPLIERS INC	5-Dec-19	4,855.02	IRWD Check	Reconciled
404323	FOUGHT, CYNTHIA J.	5-Dec-19	3,370.29	IRWD Check	Reconciled
404324	FRONTIER CALIFORNIA INC.	5-Dec-19	397.79	IRWD Check	Reconciled
404325	FULLER TRUCK ACCESSORIES	5-Dec-19	269.02	IRWD Check	Reconciled
404326	GANAHL LUMBER CO.	5-Dec-19	48.25	IRWD Check	Reconciled
404327	GARDENWARE	5-Dec-19	1,597.62	IRWD Check	Reconciled
404328	GEI CONSULTANTS INC	5-Dec-19	10,411.00	IRWD Check	Reconciled
404329	GEOCON WEST, INC.	5-Dec-19	5,861.25	IRWD Check	Reconciled
404330	GEORGE YARDLEY CO., INC.	5-Dec-19	2,178.16	IRWD Check	Reconciled
404331	GRAINGER	5-Dec-19	10,022.20	IRWD Check	Reconciled
404332	GRAYBAR ELECTRIC COMPANY	5-Dec-19	4,185.01	IRWD Check	Reconciled
404333	GUITTARD, JAMES	5-Dec-19	117.84	IRWD Check	Reconciled
404334	HAAKER EQUIPMENT COMPANY	5-Dec-19	1,175.62	IRWD Check	Reconciled
404335	HAAKER EQUIPMENT COMPANY	5-Dec-19	340.67	IRWD Check	Reconciled
404336	HACH COMPANY	5-Dec-19	18,979.78	IRWD Check	Reconciled
404337	HARRINGTON INDUSTRIAL PLASTICS LLC	5-Dec-19	343.08	IRWD Check	Reconciled
404338	HARRIS & ASSOCIATES, INC.	5-Dec-19	180.00	IRWD Check	Reconciled
404339	HART BROTHERS CONSTRUCTION INC	5-Dec-19	1,143.77	IRWD Check	Reconciled
404340	HDR ENGINEERING INC	5-Dec-19	26,689.10	IRWD Check	Reconciled
404341	HELPMATES STAFFING SERVICES	5-Dec-19	26,347.29	IRWD Check	Reconciled
404342	HGCPM, INC	5-Dec-19	3,606.88	IRWD Check	Reconciled
404343	HILL BROTHERS CHEMICAL COMPANY	5-Dec-19	12,740.35	IRWD Check	Reconciled
404344	HINSILBLON LTD	5-Dec-19	6,050.00	IRWD Check	Reconciled
404345	HOME DEPOT USA INC	5-Dec-19	1,000.83	IRWD Check	Reconciled
404346	HOPKINS TECHNICAL PRODUCTS INC	5-Dec-19	6,367.51	IRWD Check	Reconciled
404347	HOWDEN USA COMPANY	5-Dec-19	4,451.15	IRWD Check	Reconciled
404348	HUMANA INSURANCE COMPANY	5-Dec-19	73.80	IRWD Check	Reconciled
404349	ICP DAS USA INC	5-Dec-19	6,466.90	IRWD Check	Reconciled
404350	INFOSYS LIMITED	5-Dec-19	26,880.00	IRWD Check	Reconciled

**IRVINE RANCH WATER DISTRICT
AP DISBURSEMENTS AND VOIDS FOR DECEMBER 2019**

CHECK OR ELECTRONIC #	SUPPLIERS	PAYMENT DATE	PAYMENT AMOUNT	PAYMENT METHOD	STATUS
404351	INSITUFORM TECHNOLOGIES. LLC	5-Dec-19	1,404.74	IRWD Check	Negotiable
404352	IRVINE PIPE & SUPPLY INC	5-Dec-19	3,849.66	IRWD Check	Reconciled
404353	IRVINE UNIFIED SCHOOL DISTRICT	5-Dec-19	1,247.11	IRWD Check	Reconciled
404354	IRWD-PETTY CASH CUSTODIAN	5-Dec-19	1,169.11	IRWD Check	Reconciled
404355	J M ELECTRICAL SERVICES	5-Dec-19	4,500.00	IRWD Check	Reconciled
404356	JAMBOREE SMOG	5-Dec-19	885.45	IRWD Check	Reconciled
404357	JCI JONES CHEMICALS INC	5-Dec-19	2,504.17	IRWD Check	Reconciled
404358	JOHN MICHAEL COVAS	5-Dec-19	173.20	IRWD Check	Reconciled
404359	KB HOMES	5-Dec-19	927.97	IRWD Check	Negotiable
404360	KERN COUNTY TREASURER TAX COLLECTOR	5-Dec-19	128.50	IRWD Check	Reconciled
404361	KERN COUNTY WATER AGENCY	5-Dec-19	7,500.00	IRWD Check	Reconciled
404362	KIMBALL MIDWEST	5-Dec-19	439.24	IRWD Check	Reconciled
404363	KOURY ENGINEERING & TESTING, INC.	5-Dec-19	23,680.50	IRWD Check	Reconciled
404364	KRONICK MOSKOVITZ TIEDEMANN & GIRARD	5-Dec-19	14,154.80	IRWD Check	Reconciled
404365	LA HABRA FENCE COMPANY INC	5-Dec-19	3,488.00	IRWD Check	Reconciled
404366	LABWORKS, LLC	5-Dec-19	880.00	IRWD Check	Negotiable
404367	LANDCARE HOLDINGS, INC.	5-Dec-19	80,577.67	IRWD Check	Reconciled
404368	LAYFIELD USA CORP	5-Dec-19	8,742.00	IRWD Check	Reconciled
404369	LEE & RO, INC.	5-Dec-19	76,586.58	IRWD Check	Reconciled
404370	LEE, JOSEPH	5-Dec-19	188.75	IRWD Check	Reconciled
404371	LEE, SOPHIA	5-Dec-19	160.77	IRWD Check	Reconciled
404372	LEWIS, RYAN	5-Dec-19	25.00	IRWD Check	Negotiable
404373	LSA ASSOCIATES INC	5-Dec-19	11,194.65	IRWD Check	Reconciled
404374	LU'S LIGHTHOUSE, INC.	5-Dec-19	2,282.11	IRWD Check	Reconciled
404375	LUBRICATION ENGINEERS, INC.	5-Dec-19	5,187.43	IRWD Check	Reconciled
404376	MAILFINANCE INC	5-Dec-19	3,265.46	IRWD Check	Reconciled
404377	MANHATTAN STITCHING COMPANY, INC	5-Dec-19	198.26	IRWD Check	Reconciled
404378	MARK KADESH	5-Dec-19	10,000.00	IRWD Check	Reconciled
404379	MBC AQUATIC SCIENCES, INC.	5-Dec-19	1,350.00	IRWD Check	Reconciled
404380	MBK ENGINEERS	5-Dec-19	2,082.00	IRWD Check	Reconciled
404381	MC FADDEN-DALE INDUSTRIAL	5-Dec-19	433.30	IRWD Check	Reconciled
404382	MC MASTER CARR SUPPLY CO	5-Dec-19	9.94	IRWD Check	Reconciled
404383	MERRIMAC PETROLEUM, INC.	5-Dec-19	26,134.09	IRWD Check	Reconciled
404384	MOBILE MODULAR MANAGEMENT CORPORATION	5-Dec-19	1,212.19	IRWD Check	Reconciled
404385	MPULSE MOBILE, INC	5-Dec-19	107.77	IRWD Check	Reconciled
404386	MRO ELECTRIC & SUPPLY CO.	5-Dec-19	5,385.00	IRWD Check	Reconciled
404387	MUTUAL PROPANE	5-Dec-19	172.39	IRWD Check	Reconciled
404388	NATIONAL READY MIXED CONCRETE SALES, LLC	5-Dec-19	1,786.33	IRWD Check	Reconciled
404389	NAVIGANT CONSULTING, INC	5-Dec-19	6,195.50	IRWD Check	Reconciled
404390	NCH CORPORATION	5-Dec-19	200.40	IRWD Check	Reconciled
404391	NEOFUNDS	5-Dec-19	4,000.00	IRWD Check	Reconciled
404392	NEWPORT WINDOW MAINTENANCE INC	5-Dec-19	2,385.00	IRWD Check	Negotiable
404393	NGUYEN, TAM	5-Dec-19	420.40	IRWD Check	Reconciled
404394	NICHOLS, ELLEN	5-Dec-19	22.76	IRWD Check	Negotiable
404395	NV5, INC.	5-Dec-19	31,465.00	IRWD Check	Reconciled
404396	O.C. SUPERIOR CUSTOM CLEANING	5-Dec-19	4,432.00	IRWD Check	Reconciled
404397	OCEAN BLUE ENVIRONMENTAL SERVICES INC	5-Dec-19	4,450.56	IRWD Check	Reconciled
404398	OLIN CORPORATION	5-Dec-19	69,608.68	IRWD Check	Reconciled
404399	ONESOURCE DISTRIBUTORS LLC	5-Dec-19	111,551.41	IRWD Check	Reconciled
404400	ONLINE CONSULTING INC	5-Dec-19	236.00	IRWD Check	Reconciled
404401	ORACLE AMERICA, INC.	5-Dec-19	1,248.75	IRWD Check	Reconciled
404402	ORANGE COUNTY AUTO PARTS CO	5-Dec-19	3,139.99	IRWD Check	Reconciled
404403	ORANGE COUNTY FIRE AUTHORITY	5-Dec-19	645.00	IRWD Check	Reconciled
404404	ORANGE COUNTY MOSQUITO AND VECTOR CONTROL DISTRICT	5-Dec-19	2,743.33	IRWD Check	Reconciled
404405	ORANGE COUNTY TREASURER	5-Dec-19	66.95	IRWD Check	Reconciled
404406	PACIFIC COAST BOLT CORP	5-Dec-19	950.36	IRWD Check	Reconciled
404407	PACIFIC HYDROTECH CORPORATION	5-Dec-19	1,064,148.67	IRWD Check	Reconciled
404408	PACIFIC HYDROTECH CORPORATION	5-Dec-19	40,839.13	IRWD Check	Reconciled
404409	PACIFIC HYDROTECH CORPORATION	5-Dec-19	15,168.70	IRWD Check	Reconciled
404410	PACIFIC SURVEYS, LLC	5-Dec-19	3,655.00	IRWD Check	Reconciled
404411	PAN, TIANAI	5-Dec-19	125.31	IRWD Check	Reconciled
404412	PARADA PAINTING INC	5-Dec-19	5,000.00	IRWD Check	Reconciled
404413	PARKHOUSE TIRE INC	5-Dec-19	3,032.54	IRWD Check	Reconciled

**IRVINE RANCH WATER DISTRICT
AP DISBURSEMENTS AND VOIDS FOR DECEMBER 2019**

CHECK OR ELECTRONIC #	SUPPLIERS	PAYMENT DATE	PAYMENT AMOUNT	PAYMENT METHOD	STATUS
404414	PARKWAY LAWNMOWER SHOP	5-Dec-19	84.80	IRWD Check	Reconciled
404415	PASCAL & LUDWIG CONSTRUCTORS	5-Dec-19	8,937.35	IRWD Check	Reconciled
404416	PASCAL & LUDWIG CONSTRUCTORS	5-Dec-19	2,741.23	IRWD Check	Reconciled
404417	PASCAL & LUDWIG CONSTRUCTORS	5-Dec-19	221,893.04	IRWD Check	Reconciled
404418	PAULUS ENGINEERING INC	5-Dec-19	127,378.97	IRWD Check	Reconciled
404419	PAULUS ENGINEERING, INC.	5-Dec-19	52,795.00	IRWD Check	Reconciled
404420	PAYNE & FEARS LLP	5-Dec-19	1,495.00	IRWD Check	Reconciled
404421	PELLETIER & ASSOCIATES, INC.	5-Dec-19	673.00	IRWD Check	Reconciled
404422	PETRUSSE-NORRIS PAINTING, INC.	5-Dec-19	9,782.36	IRWD Check	Reconciled
404423	PILAR ONATE	5-Dec-19	15,000.00	IRWD Check	Reconciled
404424	PLUMBERS DEPOT INC.	5-Dec-19	904.27	IRWD Check	Reconciled
404425	PRAXAIR DISTRIBUTION INC	5-Dec-19	2,632.05	IRWD Check	Reconciled
404426	PTI SAND & GRAVEL INC	5-Dec-19	2,582.17	IRWD Check	Reconciled
404427	PURE EFFECT INC	5-Dec-19	4,929.88	IRWD Check	Reconciled
404428	QUALITY ENVIRONMENTAL CONTAINERS	5-Dec-19	1,128.38	IRWD Check	Reconciled
404429	QUINTANA, WATTS & HARTMANN, LLC	5-Dec-19	5,000.00	IRWD Check	Reconciled
404430	R C FOSTER CORPORATION	5-Dec-19	77,299.51	IRWD Check	Reconciled
404431	R&B AUTOMATION, INC.	5-Dec-19	12,325.74	IRWD Check	Reconciled
404432	RAM AIR ENGINEERING INC	5-Dec-19	5,867.09	IRWD Check	Reconciled
404433	RASSOULI, SHARAIM	5-Dec-19	112.77	IRWD Check	Reconciled
404434	RED WING SHOE STORE	5-Dec-19	349.63	IRWD Check	Reconciled
404435	REFRIGERATION SUPPLIES DISTRIBUTOR	5-Dec-19	117.70	IRWD Check	Reconciled
404436	REGENTS OF THE UNIVERSITY OF CALIFORNIA AT IRVINE	5-Dec-19	76.00	IRWD Check	Reconciled
404437	RICHARD C. SLADE & ASSOCIATES LLC	5-Dec-19	27,554.30	IRWD Check	Negotiable
404438	RICHMOND AMERICAN HOMES OF MARYLAND, INC	5-Dec-19	112.67	IRWD Check	Reconciled
404439	RINCON TRUCK CENTER INC.	5-Dec-19	278.81	IRWD Check	Reconciled
404440	ROGER AND ROBERT HAGEMeyer	5-Dec-19	1.47	IRWD Check	Reconciled
404441	RYAN HERCO PRODUCTS CORP	5-Dec-19	1,716.63	IRWD Check	Reconciled
404442	SAFETY CENTER INCORPORATED	5-Dec-19	1,680.00	IRWD Check	Reconciled
404443	SAN DIEGO FLUID SYSTEM TECH	5-Dec-19	259.89	IRWD Check	Reconciled
404444	SAN MARCO APARTMENTS	5-Dec-19	158.79	IRWD Check	Reconciled
404445	SANTA ANA BLUE PRINT	5-Dec-19	600.89	IRWD Check	Reconciled
404446	SANTA MARGARITA FORD	5-Dec-19	1,756.07	IRWD Check	Reconciled
404447	SCHINDLER ELEVATOR CORPORATION	5-Dec-19	221.90	IRWD Check	Reconciled
404448	SHAMROCK SUPPLY CO INC	5-Dec-19	985.24	IRWD Check	Reconciled
404449	SHELTON, KIM	5-Dec-19	216.00	IRWD Check	Reconciled
404450	SHEN, ZIYIN	5-Dec-19	2.33	IRWD Check	Reconciled
404451	SHOETERIA	5-Dec-19	226.81	IRWD Check	Reconciled
404452	SITEONE LANDSCAPE SUPPLY, LLC	5-Dec-19	1,162.23	IRWD Check	Reconciled
404453	SITMATIC	5-Dec-19	3,044.28	IRWD Check	Reconciled
404454	SMISEK, TOM	5-Dec-19	237.34	IRWD Check	Reconciled
404455	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	5-Dec-19	2,935.32	IRWD Check	Reconciled
404456	SOUTH ORANGE COUNTY WASTEWATER AUTHORITY	5-Dec-19	42,307.00	IRWD Check	Reconciled
404457	SOUTHERN CALIFORNIA EDISON COMPANY	5-Dec-19	2,800.00	IRWD Check	Reconciled
404458	SOUTHERN CALIFORNIA EDISON COMPANY	5-Dec-19	459,832.71	IRWD Check	Reconciled
404459	SOUTHERN CALIFORNIA EDISON COMPANY	5-Dec-19	52.55	IRWD Check	Reconciled
404460	SOUTHERN CALIFORNIA GAS COMPANY	5-Dec-19	11.04	IRWD Check	Reconciled
404461	SOUTHERN COUNTIES LUBRICANTS LLC	5-Dec-19	245.12	IRWD Check	Reconciled
404462	STANTEC CONSULTING SERVICES INC.	5-Dec-19	24,898.92	IRWD Check	Reconciled
404463	STETSON ENGINEERS INC.	5-Dec-19	702.50	IRWD Check	Reconciled
404464	STRADLING YOCCA CARLSON & RAUTH	5-Dec-19	204.20	IRWD Check	Reconciled
404465	STREAKWAVE WIRELESS, INC.	5-Dec-19	619.56	IRWD Check	Reconciled
404466	SUEZ TREATMENT SOLUTIONS INC.	5-Dec-19	274.36	IRWD Check	Reconciled
404467	SUKUT CONSTRUCTION, LLC	5-Dec-19	3,000.00	IRWD Check	Reconciled
404468	SUMMIT CHEMICAL SPECIALTY PRODUCTS	5-Dec-19	11,880.96	IRWD Check	Reconciled
404469	SURF CITY OPTOMETRY	5-Dec-19	450.00	IRWD Check	Reconciled
404470	TEVORA BUSINESS SOLUTIONS, INC.	5-Dec-19	12,857.33	IRWD Check	Negotiable
404471	THE NEW HOME COMPANY SOUTHERN CALIFORNIA LLC	5-Dec-19	260.93	IRWD Check	Reconciled
404472	THYSSENKRUPP ELEVATOR CORPORATION	5-Dec-19	198.24	IRWD Check	Reconciled
404473	TIC-OFFICE PROPERTIES	5-Dec-19	1,429.89	IRWD Check	Reconciled
404474	TINSELTONS LLC	5-Dec-19	100.00	IRWD Check	Negotiable
404475	TOLL BROS., INC.	5-Dec-19	367.79	IRWD Check	Negotiable
404476	TOTAL RESOURCE MANAGEMENT, INC.	5-Dec-19	2,985.96	IRWD Check	Reconciled

**IRVINE RANCH WATER DISTRICT
AP DISBURSEMENTS AND VOIDS FOR DECEMBER 2019**

CHECK OR ELECTRONIC #	SUPPLIERS	PAYMENT DATE	PAYMENT AMOUNT	PAYMENT METHOD	STATUS
404477	TRAN, ANDREW MINH	5-Dec-19	421.56	IRWD Check	Negotiable
404478	TRAN, NHAN	5-Dec-19	417.49	IRWD Check	Reconciled
404479	TROPICAL PLAZA NURSERY INC	5-Dec-19	52,446.34	IRWD Check	Reconciled
404480	TRUCPARCO	5-Dec-19	694.69	IRWD Check	Reconciled
404481	TRUKSPECT, INC	5-Dec-19	798.96	IRWD Check	Reconciled
404482	TURTLE RIDGE APARTMENTS	5-Dec-19	1,037.48	IRWD Check	Reconciled
404483	UNITED HEALTHCARE INSURANCE COMPANY	5-Dec-19	284.07	IRWD Check	Reconciled
404484	UNIVAR SOLUTIONS USA INC.	5-Dec-19	4,572.00	IRWD Check	Reconciled
404485	VERIZON WIRELESS SERVICES LLC	5-Dec-19	15,655.49	IRWD Check	Reconciled
404486	VERTECH INDUSTRIAL SYSTEMS, LLC	5-Dec-19	14,843.81	IRWD Check	Reconciled
404487	VULCAN MATERIALS COMPANY	5-Dec-19	1,467.72	IRWD Check	Reconciled
404488	VWR INTERNATIONAL, LLC	5-Dec-19	5,721.65	IRWD Check	Reconciled
404489	WASTE MANAGEMENT OF ORANGE COUNTY	5-Dec-19	549.26	IRWD Check	Reconciled
404490	WAXIE'S ENTERPRISES, INC	5-Dec-19	2,093.82	IRWD Check	Reconciled
404491	WECK LABORATORIES INC	5-Dec-19	455.00	IRWD Check	Reconciled
404492	WEIR, SHANNON	5-Dec-19	66.51	IRWD Check	Reconciled
404493	WEST COAST SAND & GRAVEL INC.	5-Dec-19	423.27	IRWD Check	Reconciled
404494	WESTERN NATIONAL CONTRACTORS	5-Dec-19	3,300.20	IRWD Check	Reconciled
404495	WESTPARK CORTE BELLA HOA	5-Dec-19	4,445.54	IRWD Check	Reconciled
404496	WU, JADIA	5-Dec-19	12.39	IRWD Check	Reconciled
404497	XIE, YONG	5-Dec-19	1,302.88	IRWD Check	Negotiable
404499	YORKE ENGINEERING, LLC	5-Dec-19	3,669.00	IRWD Check	Reconciled
404500	YOUNGKER, CHUCK	5-Dec-19	38.21	IRWD Check	Negotiable
404501	YP LLC	5-Dec-19	91.01	IRWD Check	Reconciled
404502	YSI, INC	5-Dec-19	7,669.48	IRWD Check	Reconciled
404503	STATE OF CALIFORNIA, EDD	6-Dec-19	75.00	IRWD Check	Reconciled
404504	ORANGE COUNTY SHERIFF'S OFFICE	6-Dec-19	62.50	IRWD Check	Reconciled
404505	PERS LONG TERM CARE	6-Dec-19	538.89	IRWD Check	Reconciled
404506	INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS LOCAL 4	6-Dec-19	2,494.98	IRWD Check	Reconciled
404507	FRANCHISE TAX BOARD	6-Dec-19	430.00	IRWD Check	Reconciled
404508	JCI JONES CHEMICALS INC	6-Dec-19	5,255.25	IRWD Check	Reconciled
404509	Beltran, Benjamin Vega	11-Dec-19	281.00	IRWD Check	Reconciled
404510	Burton, Kevin L (Kevin)	11-Dec-19	31.77	IRWD Check	Reconciled
404511	Lassalette, James P (Jim)	11-Dec-19	192.00	IRWD Check	Reconciled
404512	Matheis, Mary Aileen	11-Dec-19	477.13	IRWD Check	Negotiable
404513	Moeder, Jacob J (Jacob)	11-Dec-19	300.00	IRWD Check	Reconciled
404514	Noguera, Ricardo II	11-Dec-19	520.00	IRWD Check	Reconciled
404515	Reynoso, Pio (Pio)	11-Dec-19	150.00	IRWD Check	Negotiable
404516	Swan, Peer	11-Dec-19	181.59	IRWD Check	Negotiable
404517	CONSTELLATION NEWENERGY, INC.	11-Dec-19	1,942.47	IRWD Check	Reconciled
404518	ABM INDUSTRY GROUPS, LLC	11-Dec-19	17,565.22	IRWD Check	Reconciled
404519	ADS LLC	11-Dec-19	2,250.00	IRWD Check	Reconciled
404520	AEGIS ENGINEERING MANAGEMENT, INC.	11-Dec-19	840.00	IRWD Check	Reconciled
404521	AIR RESOURCES BOARD	11-Dec-19	1,470.00	IRWD Check	Reconciled
404522	AIRGAS, INC.	11-Dec-19	156.29	IRWD Check	Reconciled
404523	ALEXANDER'S CONTRACT SERVICES, INC.	11-Dec-19	121,436.25	IRWD Check	Reconciled
404524	AMAZON CAPITAL SERVICES, INC.	11-Dec-19	571.60	IRWD Check	Reconciled
404525	ARMORCAST PRODUCTS COMPANY	11-Dec-19	17,110.29	IRWD Check	Reconciled
404526	ASSOCIATION OF CALIFORNIA WATER AGENCIES/JPIA	11-Dec-19	258.39	IRWD Check	Negotiable
404527	AT&T	11-Dec-19	1,666.07	IRWD Check	Reconciled
404528	AT&T	11-Dec-19	5,037.80	IRWD Check	Reconciled
404529	AUTOZONE PARTS, INC.	11-Dec-19	38.78	IRWD Check	Reconciled
404530	B & K ELECTRIC WHOLESALE	11-Dec-19	3,096.60	IRWD Check	Reconciled
404531	BATEMAN, AMY	11-Dec-19	42.67	IRWD Check	Reconciled
404532	BATTERY SPECIALTIES	11-Dec-19	935.24	IRWD Check	Reconciled
404533	BAVCO BACKFLOW APPARATUS & VALVE COMPANY	11-Dec-19	838.29	IRWD Check	Reconciled
404534	BOROVINSKY, ALBERTO	11-Dec-19	11.67	IRWD Check	Negotiable
404535	BOYD & ASSOCIATES	11-Dec-19	3,753.00	IRWD Check	Reconciled
404536	BRIGHTVIEW LANDSCAPE DEVELOPMENT	11-Dec-19	399.98	IRWD Check	Reconciled
404537	BROWN AND CALDWELL	11-Dec-19	74,030.34	IRWD Check	Reconciled
404538	BUCCOLA LANDSCAPE SERVICES, INC.	11-Dec-19	414.00	IRWD Check	Reconciled
404539	C WELLS PIPELINE MATERIALS INC	11-Dec-19	4,644.04	IRWD Check	Negotiable
404540	CALIFORNIA BARRICADE RENTAL, INC.	11-Dec-19	9,787.88	IRWD Check	Negotiable

**IRVINE RANCH WATER DISTRICT
AP DISBURSEMENTS AND VOIDS FOR DECEMBER 2019**

CHECK OR ELECTRONIC #	SUPPLIERS	PAYMENT DATE	PAYMENT AMOUNT	PAYMENT METHOD	STATUS
404541	CANON SOLUTIONS AMERICA, INC.	11-Dec-19	35.21	IRWD Check	Reconciled
404542	CAROLLO ENGINEERS, INC	11-Dec-19	17,616.00	IRWD Check	Reconciled
404543	CDW GOVERNMENT LLC	11-Dec-19	2,073.20	IRWD Check	Reconciled
404544	CHAIREL CUSTOM HAY, INC.	11-Dec-19	5,692.00	IRWD Check	Reconciled
404545	CHANG, DAHAI	11-Dec-19	33.95	IRWD Check	Reconciled
404546	CHANG, EMERY K	11-Dec-19	179.41	IRWD Check	Negotiable
404547	CHEN, CHITA	11-Dec-19	47.00	IRWD Check	Negotiable
404548	CHO DESIGN ASSOCIATES, INC	11-Dec-19	2,016.18	IRWD Check	Reconciled
404549	CITY OF IRVINE	11-Dec-19	595.46	IRWD Check	Negotiable
404550	CITY OF SANTA ANA	11-Dec-19	192.67	IRWD Check	Reconciled
404551	CITY OF TUSTIN	11-Dec-19	261.78	IRWD Check	Reconciled
404552	CLEAN ENERGY	11-Dec-19	3,635.13	IRWD Check	Reconciled
404553	CONSTELLATION NEWENERGY, INC.	11-Dec-19	25,976.27	IRWD Check	Reconciled
404554	CORELOGIC INC	11-Dec-19	61.47	IRWD Check	Reconciled
404555	COSTCO WHOLESALE CORPORATION	11-Dec-19	49.68	IRWD Check	Reconciled
404556	DAVIS FARR LLP	11-Dec-19	5,100.00	IRWD Check	Reconciled
404557	DEALERS SERVICE, INC	11-Dec-19	1,114.77	IRWD Check	Reconciled
404558	DISCOVERY SCIENCE CENTER OF ORANGE COUNTY	11-Dec-19	4,634.84	IRWD Check	Reconciled
404559	EAGLE PRINT DYNAMICS	11-Dec-19	4,546.90	IRWD Check	Reconciled
404560	EAST ORANGE COUNTY WATER DISTRICT	11-Dec-19	70,024.96	IRWD Check	Reconciled
404561	ENVIRONMENTAL RESOURCE ASSOCIATES	11-Dec-19	907.36	IRWD Check	Reconciled
404562	EUGENIO H. NEARNS	11-Dec-19	9,764.25	IRWD Check	Reconciled
404563	EUROFINS EATON ANALYTICAL, INC.	11-Dec-19	3,500.00	IRWD Check	Reconciled
404564	EVANS-HYDRO INC	11-Dec-19	64,396.81	IRWD Check	Negotiable
404565	FEDEX	11-Dec-19	450.18	IRWD Check	Reconciled
404566	FERGUSON ENTERPRISES, LLC	11-Dec-19	717.62	IRWD Check	Reconciled
404567	FIRE EXTINGUISHING SAFETY & SERVICE	11-Dec-19	1,176.98	IRWD Check	Reconciled
404568	FISERV	11-Dec-19	10.45	IRWD Check	Reconciled
404569	FOSTER, CHERYL	11-Dec-19	29.90	IRWD Check	Reconciled
404570	FRONTIER CALIFORNIA INC.	11-Dec-19	57.90	IRWD Check	Reconciled
404571	FUSCOE ENGINEERING, INC.	11-Dec-19	3,715.68	IRWD Check	Reconciled
404572	GALLADE CHEMICAL INC	11-Dec-19	868.47	IRWD Check	Reconciled
404573	GARZA INDUSTRIES, INC	11-Dec-19	1,448.16	IRWD Check	Reconciled
404574	GRAINGER	11-Dec-19	13,056.55	IRWD Check	Reconciled
404575	GRAYBAR ELECTRIC COMPANY	11-Dec-19	29.70	IRWD Check	Reconciled
404576	GRILLAS, STEPHANE	11-Dec-19	35.88	IRWD Check	Negotiable
404577	HACH COMPANY	11-Dec-19	2,552.61	IRWD Check	Reconciled
404578	HALL GRIFFIN LLP	11-Dec-19	3,687.90	IRWD Check	Reconciled
404579	HANNA, YOUSSEF	11-Dec-19	52.57	IRWD Check	Negotiable
404580	HARMSWORTH ASSOCIATES	11-Dec-19	5,703.00	IRWD Check	Reconciled
404581	HARRINGTON INDUSTRIAL PLASTICS LLC	11-Dec-19	6,505.66	IRWD Check	Reconciled
404582	HDR ENGINEERING INC	11-Dec-19	40,460.29	IRWD Check	Reconciled
404583	HELPMATES STAFFING SERVICES	11-Dec-19	11,939.53	IRWD Check	Reconciled
404584	HENDRICKS, KEVIN	11-Dec-19	11.16	IRWD Check	Negotiable
404585	HILL BROTHERS CHEMICAL COMPANY	11-Dec-19	5,363.76	IRWD Check	Reconciled
404586	INDUSTRIAL METAL SUPPLY CO	11-Dec-19	425.57	IRWD Check	Reconciled
404587	IRVINE AUTO RETAIL I INC	11-Dec-19	13,595.47	IRWD Check	Reconciled
404588	IRVINE PIPE & SUPPLY INC	11-Dec-19	60.15	IRWD Check	Reconciled
404589	IRWD-PETTY CASH CUSTODIAN	11-Dec-19	1,003.54	IRWD Check	Reconciled
404590	JAMBOREE SMOG	11-Dec-19	526.75	IRWD Check	Reconciled
404591	KAYUGA SOLUTION INC	11-Dec-19	3,600.00	IRWD Check	Reconciled
404592	KEENE, JOHN H	11-Dec-19	14.69	IRWD Check	Reconciled
404593	KIMBALL MIDWEST	11-Dec-19	341.32	IRWD Check	Reconciled
404594	KONECRANES INC	11-Dec-19	4,537.50	IRWD Check	Reconciled
404595	LABELLE-MARVIN INC	11-Dec-19	2,275.00	IRWD Check	Negotiable
404596	LANDCARE HOLDINGS, INC.	11-Dec-19	11,853.78	IRWD Check	Reconciled
404597	LILLESTRAND LEADERSHIP CONSULTING, INC.	11-Dec-19	521.29	IRWD Check	Reconciled
404598	LSA ASSOCIATES INC	11-Dec-19	2,155.57	IRWD Check	Reconciled
404599	LU'S LIGHTHOUSE, INC.	11-Dec-19	771.75	IRWD Check	Reconciled
404600	LUBRICATION ENGINEERS, INC.	11-Dec-19	3,278.84	IRWD Check	Reconciled
404601	MANHATTAN STITCHING COMPANY, INC	11-Dec-19	129.30	IRWD Check	Reconciled
404602	MAP COMMUNICATIONS, INC.	11-Dec-19	880.39	IRWD Check	Reconciled
404603	MC FADDEN-DALE INDUSTRIAL	11-Dec-19	45.01	IRWD Check	Reconciled

**IRVINE RANCH WATER DISTRICT
AP DISBURSEMENTS AND VOIDS FOR DECEMBER 2019**

CHECK OR ELECTRONIC #	SUPPLIERS	PAYMENT DATE	PAYMENT AMOUNT	PAYMENT METHOD	STATUS
404604	MC MASTER CARR SUPPLY CO	11-Dec-19	1,489.63	IRWD Check	Reconciled
404605	MCR TECHNOLOGIES INC	11-Dec-19	10,014.54	IRWD Check	Reconciled
404606	MR CRANE INC	11-Dec-19	1,298.50	IRWD Check	Reconciled
404607	MUNCE, WILLIAM	11-Dec-19	24.23	IRWD Check	Negotiable
404608	NEWPORT REAL ESTATE SERVICES	11-Dec-19	13,100.00	IRWD Check	Reconciled
404609	NINYO & MOORE	11-Dec-19	3,524.25	IRWD Check	Negotiable
404610	NMG GEOTECHNICAL INC	11-Dec-19	11,179.20	IRWD Check	Reconciled
404611	NORTHWOOD PARK APTS	11-Dec-19	39.39	IRWD Check	Negotiable
404612	NSI LAB SOLUTIONS, INC.	11-Dec-19	336.00	IRWD Check	Reconciled
404613	OLIN CORPORATION	11-Dec-19	3,663.06	IRWD Check	Reconciled
404614	OMAR DANDASHI	11-Dec-19	180.00	IRWD Check	Negotiable
404615	ONESOURCE DISTRIBUTORS LLC	11-Dec-19	2,525.10	IRWD Check	Reconciled
404616	ORANGE COUNTY AUTO PARTS CO	11-Dec-19	1,606.74	IRWD Check	Reconciled
404617	ORANGE COUNTY FIRE AUTHORITY	11-Dec-19	3,552.00	IRWD Check	Reconciled
404618	PAPER DEPOT DOCUMENT DESTRUCTION LLC	11-Dec-19	360.00	IRWD Check	Reconciled
404619	PENN ARCHIVE SERVICES	11-Dec-19	47.50	IRWD Check	Reconciled
404620	PRAXAIR DISTRIBUTION INC	11-Dec-19	252.59	IRWD Check	Reconciled
404621	PREMIER PAVING INC.	11-Dec-19	3,303.07	IRWD Check	Reconciled
404622	PSOMAS	11-Dec-19	12,839.70	IRWD Check	Negotiable
404623	PYRO-COMM SYSTEMS INC	11-Dec-19	1,760.00	IRWD Check	Reconciled
404624	QUICKEL PAVING INC	11-Dec-19	11,293.00	IRWD Check	Negotiable
404625	R&B AUTOMATION, INC.	11-Dec-19	11,766.30	IRWD Check	Reconciled
404626	RANCHO MARIPOSA APTS	11-Dec-19	34.22	IRWD Check	Negotiable
404627	RCE CONSULTANTS, INC.	11-Dec-19	12,488.47	IRWD Check	Reconciled
404628	REAL WATER CONSULTANTS INC.	11-Dec-19	2,370.00	IRWD Check	Reconciled
404629	RED WING SHOE STORE	11-Dec-19	185.71	IRWD Check	Reconciled
404630	REFRIGERATION SUPPLIES DISTRIBUTOR	11-Dec-19	380.82	IRWD Check	Reconciled
404631	RINCON TRUCK CENTER INC.	11-Dec-19	163.97	IRWD Check	Reconciled
404632	RLG ENTERPRISES, INC	11-Dec-19	749.21	IRWD Check	Reconciled
404633	SAFETY-KLEEN SYSTEMS, INC	11-Dec-19	466.75	IRWD Check	Reconciled
404634	SAN DIEGO FLUID SYSTEM TECH	11-Dec-19	88.17	IRWD Check	Reconciled
404635	SANTA ANA BLUE PRINT	11-Dec-19	262.91	IRWD Check	Reconciled
404636	SCHWEITZER ENGINEERING LABORATORIES, INC.	11-Dec-19	3,873.61	IRWD Check	Reconciled
404637	SECURITAS SECURITY SERVICES USA, INC.	11-Dec-19	57,608.47	IRWD Check	Reconciled
404638	SEPARATION PROCESSES, INC.	11-Dec-19	266.00	IRWD Check	Negotiable
404639	SHAMROCK SUPPLY CO INC	11-Dec-19	654.94	IRWD Check	Reconciled
404640	SIRIUS COMPUTER SOLUTIONS INC	11-Dec-19	22,710.50	IRWD Check	Reconciled
404641	SOFTWAREONE INC	11-Dec-19	168,539.85	IRWD Check	Reconciled
404642	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	11-Dec-19	3,316.61	IRWD Check	Reconciled
404643	SOUTH COAST WATER CO.	11-Dec-19	90.00	IRWD Check	Reconciled
404644	SOUTHERN CALIFORNIA EDISON COMPANY	11-Dec-19	7,053.44	IRWD Check	Reconciled
404645	SOUTHERN CALIFORNIA SECURITY CENTERS, INC.	11-Dec-19	528.03	IRWD Check	Reconciled
404646	SPARKLETTS	11-Dec-19	203.36	IRWD Check	Reconciled
404647	STANTEC CONSULTING SERVICES INC.	11-Dec-19	20,840.00	IRWD Check	Reconciled
404648	STARBUCKS	11-Dec-19	430.31	IRWD Check	Negotiable
404649	STREAKWAVE WIRELESS, INC.	11-Dec-19	232.72	IRWD Check	Reconciled
404650	SUKLE ADVERTISING INC.	11-Dec-19	17,102.40	IRWD Check	Reconciled
404651	SUSAN A. SIROTA	11-Dec-19	4,525.00	IRWD Check	Reconciled
404652	TASSIN SCIENTIFIC SERVICES, LLC.	11-Dec-19	1,158.75	IRWD Check	Negotiable
404653	THOMAS HARDER & CO	11-Dec-19	3,467.50	IRWD Check	Reconciled
404654	THOMPSON INDUSTRIAL SUPPLY	11-Dec-19	791.38	IRWD Check	Reconciled
404655	TROPICAL PLAZA NURSERY INC	11-Dec-19	810.00	IRWD Check	Reconciled
404656	UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA	11-Dec-19	1,975.73	IRWD Check	Reconciled
404657	UNITED PARCEL SERVICE INC	11-Dec-19	180.81	IRWD Check	Reconciled
404658	US BANK NAT'L ASSOCIATION NORTH DAKOTA	11-Dec-19	112,206.58	IRWD Check	Reconciled
404659	V&A CONSULTING ENGINEERS	11-Dec-19	5,949.50	IRWD Check	Negotiable
404660	VERCHOK, IOURI	11-Dec-19	26.66	IRWD Check	Negotiable
404661	WARE MALCOMB	11-Dec-19	1,526.76	IRWD Check	Reconciled
404662	WASTE MANAGEMENT OF ORANGE COUNTY	11-Dec-19	5,374.90	IRWD Check	Reconciled
404663	WATERSMART SOFTWARE, INC	11-Dec-19	13,597.50	IRWD Check	Reconciled
404664	WAXIE'S ENTERPRISES, INC	11-Dec-19	94.51	IRWD Check	Reconciled
404665	WCT PRODUCTS, INC.	11-Dec-19	8,028.01	IRWD Check	Reconciled
404666	WECK LABORATORIES INC	11-Dec-19	2,355.00	IRWD Check	Reconciled

**IRVINE RANCH WATER DISTRICT
AP DISBURSEMENTS AND VOIDS FOR DECEMBER 2019**

CHECK OR ELECTRONIC #	SUPPLIERS	PAYMENT DATE	PAYMENT AMOUNT	PAYMENT METHOD	STATUS
404667	WEST YOST ASSOCIATES, INC	11-Dec-19	3,130.00	IRWD Check	Reconciled
404668	WHITMAN REQUARDT AND ASSOCIATES LLP	11-Dec-19	3,250.06	IRWD Check	Reconciled
404669	YOON, CHARLES	11-Dec-19	58.58	IRWD Check	Reconciled
404670	ZALLE, PAUL M	11-Dec-19	38.20	IRWD Check	Reconciled
404671	ZHANG, LINGZHI	11-Dec-19	25.00	IRWD Check	Reconciled
404672	ZHAO, LINGHUA	11-Dec-19	20.53	IRWD Check	Negotiable
404673	JCI JONES CHEMICALS INC	16-Dec-19	3,381.00	IRWD Check	Reconciled
404674	IRWD-PETTY CASH CUSTODIAN	18-Dec-19	1,273.55	IRWD Check	Reconciled
404675	Akiyoshi, Eric S (Eric)	19-Dec-19	209.85	IRWD Check	Reconciled
404676	Cho, Harry K (Harry)	19-Dec-19	286.00	IRWD Check	Negotiable
404677	Clary, Cheryl L	19-Dec-19	25.54	IRWD Check	Negotiable
404678	Fabris, John	19-Dec-19	12.76	IRWD Check	Reconciled
404679	Fournier, Tanja L (Tanja)	19-Dec-19	384.56	IRWD Check	Reconciled
404680	Haney, Lisa	19-Dec-19	549.36	IRWD Check	Reconciled
404681	Ho, Connie	19-Dec-19	13.28	IRWD Check	Reconciled
404682	Jackson, Bradley E (Brad)	19-Dec-19	113.11	IRWD Check	Reconciled
404683	Mares, Michael	19-Dec-19	75.00	IRWD Check	Reconciled
404684	Nash, Joel	19-Dec-19	71.92	IRWD Check	Reconciled
404685	Oldewage, Lars D (Lars)	19-Dec-19	543.46	IRWD Check	Reconciled
404686	Real, Omar	19-Dec-19	130.00	IRWD Check	Reconciled
404687	Seesangrit, Melody M	19-Dec-19	315.13	IRWD Check	Reconciled
404688	Shinbashi, Allen	19-Dec-19	454.53	IRWD Check	Reconciled
404689	Wang, Peter (Peter)	19-Dec-19	196.09	IRWD Check	Reconciled
404690	Zaragoza, Anthony	19-Dec-19	235.00	IRWD Check	Reconciled
404691	Bill, Cody (Cody)	19-Dec-19	175.00	IRWD Check	Negotiable
404692	Burk, Rachael	19-Dec-19	25.00	IRWD Check	Negotiable
404693	Crowe, David M (David)	19-Dec-19	105.00	IRWD Check	Reconciled
404694	Nguyen, Viet Quoc (Quoc)	19-Dec-19	44.66	IRWD Check	Reconciled
404695	ABSOLUTE STANDARDS, INC.	19-Dec-19	227.50	IRWD Check	Negotiable
404696	ADAM'S FALCONRY SERVICE, LLC	19-Dec-19	1,560.00	IRWD Check	Reconciled
404697	AECOM TECHNICAL SERVICES, INC.	19-Dec-19	141,837.97	IRWD Check	Negotiable
404698	AEGIS ENGINEERING MANAGEMENT, INC.	19-Dec-19	16,590.00	IRWD Check	Reconciled
404699	AGILENT TECHNOLOGIES, INC.	19-Dec-19	53.82	IRWD Check	Reconciled
404700	AIRGAS, INC.	19-Dec-19	244.91	IRWD Check	Reconciled
404701	ALL STAR GLASS	19-Dec-19	879.37	IRWD Check	Reconciled
404702	ALSTON & BIRD LLP	19-Dec-19	518,657.40	IRWD Check	Reconciled
404703	AMAZON CAPITAL SERVICES, INC.	19-Dec-19	124.99	IRWD Check	Reconciled
404704	AMERICAN WATER CHEMICALS, INC.	19-Dec-19	5,112.74	IRWD Check	Reconciled
404705	AMR AND ALINA BAKR	19-Dec-19	770.25	IRWD Check	Reconciled
404706	APEX SYSTEMS, LLC	19-Dec-19	10,556.00	IRWD Check	Reconciled
404707	ARCHROCK SERVICES, L.P.	19-Dec-19	1,299.30	IRWD Check	Reconciled
404708	ASSEMBLED PRODUCTS CORPORATION	19-Dec-19	919.11	IRWD Check	Reconciled
404709	ASSOCIATION OF CALIFORNIA WATER AGENCIES/JPIA	19-Dec-19	36,244.43	IRWD Check	Negotiable
404710	AT&T	19-Dec-19	5,919.77	IRWD Check	Reconciled
404711	AT&T	19-Dec-19	173.55	IRWD Check	Reconciled
404712	ATHENS SERVICES	19-Dec-19	2,005.12	IRWD Check	Reconciled
404713	AUTOZONE PARTS, INC.	19-Dec-19	71.10	IRWD Check	Reconciled
404714	B & K ELECTRIC WHOLESALE	19-Dec-19	402.00	IRWD Check	Reconciled
404715	BADGER METER INC	19-Dec-19	59,348.70	IRWD Check	Reconciled
404716	BASULTO, ERNIE	19-Dec-19	72.50	IRWD Check	Negotiable
404717	BAVCO BACKFLOW APPARATUS & VALVE COMPANY	19-Dec-19	120.00	IRWD Check	Reconciled
404718	BDC SPECIAL WASTE	19-Dec-19	450.00	IRWD Check	Reconciled
404719	BELL TOWER FLORIST & GIFTS	19-Dec-19	231.64	IRWD Check	Negotiable
404720	BRENNTAG PACIFIC INC	19-Dec-19	5,675.20	IRWD Check	Reconciled
404721	BRIGHTVIEW LANDSCAPE DEVELOPMENT	19-Dec-19	3,626.56	IRWD Check	Reconciled
404722	BRUCE HADLEY NEWELL	19-Dec-19	2,500.00	IRWD Check	Negotiable
404723	BYEON, MARY	19-Dec-19	43.76	IRWD Check	Negotiable
404724	C WELLS PIPELINE MATERIALS INC	19-Dec-19	11,669.33	IRWD Check	Negotiable
404725	CALIFORNIA DEPARTMENT OF TAX AND FEE ADMINISTRATION	19-Dec-19	2,390.00	IRWD Check	Negotiable
404726	CALIFORNIA NEWSPAPER PARTNERSHIP	19-Dec-19	9,158.64	IRWD Check	Reconciled
404727	CALIFORNIA STATE UNIVERSITY, FULLERTON	19-Dec-19	6,720.00	IRWD Check	Negotiable
404728	CANON FINANCIAL SERVICES, INC	19-Dec-19	8,398.83	IRWD Check	Reconciled
404729	CANON SOLUTIONS AMERICA, INC.	19-Dec-19	13,333.61	IRWD Check	Reconciled

**IRVINE RANCH WATER DISTRICT
AP DISBURSEMENTS AND VOIDS FOR DECEMBER 2019**

CHECK OR ELECTRONIC #	SUPPLIERS	PAYMENT DATE	PAYMENT AMOUNT	PAYMENT METHOD	STATUS
404730	CAPTIVE AUDIENCE MARKETING INC.	19-Dec-19	79.00	IRWD Check	Reconciled
404731	CAROLLO ENGINEERS, INC	19-Dec-19	16,470.00	IRWD Check	Negotiable
404732	CASH, CHRISTIE	19-Dec-19	60.54	IRWD Check	Negotiable
404733	CHARLES WILLIAM ROBLE, JR.	19-Dec-19	697.50	IRWD Check	Reconciled
404734	CHEM TECH INTERNATIONAL INC	19-Dec-19	43,711.63	IRWD Check	Negotiable
404735	CITY OF IRVINE	19-Dec-19	32.50	IRWD Check	Reconciled
404736	CIVIL SOURCE	19-Dec-19	244.70	IRWD Check	Negotiable
404737	CLA-VAL COMPANY	19-Dec-19	7,732.74	IRWD Check	Negotiable
404738	CLARIS STRATEGY INC.	19-Dec-19	25,715.00	IRWD Check	Negotiable
404739	COLONIAL LIFE & ACCIDENT INSURANCE CO.	19-Dec-19	2,352.06	IRWD Check	Negotiable
404740	COLONIAL LIFE & ACCIDENT INSURANCE CO.	19-Dec-19	1,248.80	IRWD Check	Negotiable
404741	COLUMBIA COURT APTS	19-Dec-19	100.86	IRWD Check	Negotiable
404742	CONSTELLATION NEWENERGY, INC.	19-Dec-19	20,672.90	IRWD Check	Reconciled
404743	CORNELL COURT APTS	19-Dec-19	38.18	IRWD Check	Negotiable
404744	CORRPRO COMPANIES, INC.	19-Dec-19	54,345.01	IRWD Check	Negotiable
404745	COTTONS POINT DESIGN, INC.	19-Dec-19	6,964.44	IRWD Check	Reconciled
404746	CR & R INCORPORATED	19-Dec-19	236.67	IRWD Check	Reconciled
404747	CRC FACILITY CONSULTING, INC.	19-Dec-19	3,725.00	IRWD Check	Reconciled
404748	CREATE TUSTIN LLC	19-Dec-19	256.39	IRWD Check	Negotiable
404749	CULLIGAN OF SANTA ANA	19-Dec-19	20,000.00	IRWD Check	Reconciled
404750	D & H WATER SYSTEMS INC.	19-Dec-19	3,367.59	IRWD Check	Reconciled
404751	DAN'S MACHINE TOOL, INC.	19-Dec-19	1,064.00	IRWD Check	Reconciled
404752	DATA CLEAN CORPORATION	19-Dec-19	554.00	IRWD Check	Negotiable
404753	DATASITE INC	19-Dec-19	4,173.00	IRWD Check	Negotiable
404754	DDB ENGINEERING, INC.	19-Dec-19	2,460.00	IRWD Check	Reconciled
404755	DELL MARKETING LP	19-Dec-19	13,492.08	IRWD Check	Reconciled
404756	DILYTICS INC	19-Dec-19	3,605.00	IRWD Check	Reconciled
404757	DISCOUNT COURIER SERVICE INC.	19-Dec-19	89.73	IRWD Check	Reconciled
404758	DIVERSIFIED COMMUNICATIONS SERVICES, INC.	19-Dec-19	9,979.85	IRWD Check	Reconciled
404759	ECO SERVICES LLC	19-Dec-19	5,180.36	IRWD Check	Reconciled
404760	ENDRESS AND HAUSER INC	19-Dec-19	3,241.62	IRWD Check	Reconciled
404761	ENVIRONMENTAL ENGINEERING AND CONTRACTING, INC.	19-Dec-19	22,652.50	IRWD Check	Reconciled
404762	ENVIRONMENTAL SCIENCE ASSOCIATES	19-Dec-19	113,963.82	IRWD Check	Reconciled
404763	ENVIROSUPPLY & SERVICE INC.	19-Dec-19	3,636.40	IRWD Check	Reconciled
404764	ESRI	19-Dec-19	30,640.54	IRWD Check	Reconciled
404765	EUROFINS EATON ANALYTICAL, INC.	19-Dec-19	192.15	IRWD Check	Reconciled
404766	EVANTEC CORPORATION	19-Dec-19	896.70	IRWD Check	Reconciled
404767	FARRELL & ASSOCIATES	19-Dec-19	782.79	IRWD Check	Reconciled
404768	FEDEX	19-Dec-19	100.98	IRWD Check	Reconciled
404769	FIDELITY SECURITY LIFE INSURANCE COMPANY	19-Dec-19	14,889.07	IRWD Check	Negotiable
404770	FIONA HUTTON & ASSOCIATES, INC.	19-Dec-19	19,426.11	IRWD Check	Negotiable
404771	FIRE EXTINGUISHING SAFETY & SERVICE	19-Dec-19	697.70	IRWD Check	Reconciled
404772	FISERV	19-Dec-19	23,189.20	IRWD Check	Reconciled
404773	FISHER SCIENTIFIC COMPANY LLC	19-Dec-19	25,062.35	IRWD Check	Reconciled
404774	FRONTIER CALIFORNIA INC.	19-Dec-19	293.70	IRWD Check	Negotiable
404775	GEIGER BROS	19-Dec-19	2,327.53	IRWD Check	Reconciled
404776	GORDANA JURIC-SEKHAR AND LALIGAM SEKHAR	19-Dec-19	91.46	IRWD Check	Reconciled
404777	GRAINGER	19-Dec-19	2,861.50	IRWD Check	Reconciled
404778	GRAYBAR ELECTRIC COMPANY	19-Dec-19	76.56	IRWD Check	Reconciled
404779	HABITAT RESTORATION SCIENCES, INC.	19-Dec-19	1,183.00	IRWD Check	Negotiable
404780	HACH COMPANY	19-Dec-19	2,068.80	IRWD Check	Reconciled
404781	HAIGH BUILDERS INC	19-Dec-19	328.82	IRWD Check	Reconciled
404782	HANSEN, KYLE	19-Dec-19	14.68	IRWD Check	Negotiable
404783	HARTFORD LIFE AND ACCIDENT INSURANCE COMPANY	19-Dec-19	289.20	IRWD Check	Negotiable
404784	HAZEN AND SAWYER	19-Dec-19	3,640.00	IRWD Check	Reconciled
404785	HDR ENGINEERING INC	19-Dec-19	31,231.78	IRWD Check	Reconciled
404786	HELP/SYSTEMS, LLC	19-Dec-19	2,200.00	IRWD Check	Reconciled
404787	HELPMATES STAFFING SERVICES	19-Dec-19	15,189.44	IRWD Check	Reconciled
404788	HERITAGE FIELDS EL TORO, LLC	19-Dec-19	138.72	IRWD Check	Negotiable
404789	HI-LINE INC	19-Dec-19	1,022.67	IRWD Check	Reconciled
404790	HILL BROTHERS CHEMICAL COMPANY	19-Dec-19	14,729.59	IRWD Check	Reconciled
404791	HILTS CONSULTING GROUP, INC.	19-Dec-19	5,970.00	IRWD Check	Reconciled
404792	HOME DEPOT USA INC	19-Dec-19	774.50	IRWD Check	Reconciled

**IRVINE RANCH WATER DISTRICT
AP DISBURSEMENTS AND VOIDS FOR DECEMBER 2019**

CHECK OR ELECTRONIC #	SUPPLIERS	PAYMENT DATE	PAYMENT AMOUNT	PAYMENT METHOD	STATUS
404793	ICP DAS USA INC	19-Dec-19	1,273.00	IRWD Check	Reconciled
404794	IDEXX DISTRIBUTION, INC	19-Dec-19	8,815.18	IRWD Check	Reconciled
404795	INDUSTRIAL METAL SUPPLY CO	19-Dec-19	56.10	IRWD Check	Reconciled
404796	INFOSEND, INC.	19-Dec-19	37,452.51	IRWD Check	Reconciled
404797	IRON MOUNTAIN INFORMATION MANAGEMENT INC	19-Dec-19	1,740.84	IRWD Check	Reconciled
404798	IRVINE PIPE & SUPPLY INC	19-Dec-19	1,659.88	IRWD Check	Reconciled
404799	JAMBOREE SMOG	19-Dec-19	542.00	IRWD Check	Reconciled
404800	JCI JONES CHEMICALS INC	19-Dec-19	2,482.77	IRWD Check	Reconciled
404801	JOEY SOTO	19-Dec-19	20,038.50	IRWD Check	Reconciled
404802	JOHNSON PLASTICS	19-Dec-19	1,190.07	IRWD Check	Reconciled
404803	JOHNSON, KAREN E	19-Dec-19	3,800.00	IRWD Check	Reconciled
404804	JUST ENERGY SOLUTIONS INC.	19-Dec-19	372.19	IRWD Check	Reconciled
404805	K HOVNIANIAN HOMES	19-Dec-19	199.61	IRWD Check	Reconciled
404806	KASCH, MATTHEW	19-Dec-19	89.85	IRWD Check	Negotiable
404807	KAY, DAWN	19-Dec-19	17.07	IRWD Check	Negotiable
404808	KB HOMES	19-Dec-19	274.48	IRWD Check	Negotiable
404809	KELLY, EMILY	19-Dec-19	296.28	IRWD Check	Reconciled
404810	KLEINFELDER, INC.	19-Dec-19	3,780.00	IRWD Check	Reconciled
404811	KONECRANES INC	19-Dec-19	2,787.50	IRWD Check	Reconciled
404812	KPRS CONSTRUCTION SERVICES, INC.	19-Dec-19	1,566,292.89	IRWD Check	Reconciled
404813	LAGUNA BEACH COUNTY WATER DISTRICT	19-Dec-19	5,446.70	IRWD Check	Negotiable
404814	LANDCARE HOLDINGS, INC.	19-Dec-19	7,471.60	IRWD Check	Reconciled
404815	LCS TECHNOLOGIES, INC.	19-Dec-19	7,425.00	IRWD Check	Reconciled
404816	LEE & RO, INC.	19-Dec-19	59,981.87	IRWD Check	Reconciled
404817	LENNAR HOMES	19-Dec-19	403.37	IRWD Check	Reconciled
404818	LEWIS BRISBOIS BISGAARD AND SMITH, LLP	19-Dec-19	59,767.64	IRWD Check	Reconciled
404819	LG SONIC US, LLC	19-Dec-19	18,500.00	IRWD Check	Reconciled
404820	LI, YILIN	19-Dec-19	77.46	IRWD Check	Negotiable
404821	LILLESTRAND LEADERSHIP CONSULTING, INC.	19-Dec-19	590.04	IRWD Check	Reconciled
404822	LSA ASSOCIATES INC	19-Dec-19	11,423.46	IRWD Check	Reconciled
404823	MANIS, JULIA	19-Dec-19	35.51	IRWD Check	Reconciled
404824	MARINA LANDSCAPE, INC.	19-Dec-19	223,758.07	IRWD Check	Reconciled
404825	MARK ENTERPRISES, INC.	19-Dec-19	5,937.80	IRWD Check	Reconciled
404826	MARK IV CAPITAL INC	19-Dec-19	613.59	IRWD Check	Reconciled
404827	MC FADDEN-DALE INDUSTRIAL	19-Dec-19	170.76	IRWD Check	Reconciled
404828	MC MASTER CARR SUPPLY CO	19-Dec-19	31.13	IRWD Check	Reconciled
404829	MCR TECHNOLOGIES INC	19-Dec-19	7,537.73	IRWD Check	Reconciled
404830	MERRIMAC PETROLEUM, INC.	19-Dec-19	17,058.81	IRWD Check	Reconciled
404831	MICHELE CHAVIS-LOVING	19-Dec-19	1,284.90	IRWD Check	Reconciled
404832	MICROSOFT CORPORATION	19-Dec-19	470.53	IRWD Check	Reconciled
404833	MILLER, MARIE	19-Dec-19	82.63	IRWD Check	Negotiable
404834	MISSION COMMUNICATIONS, LLC	19-Dec-19	14,851.20	IRWD Check	Reconciled
404835	MORIARTY, RICHARD A	19-Dec-19	138.70	IRWD Check	Reconciled
404836	MRO ELECTRIC & SUPPLY CO.	19-Dec-19	7,722.00	IRWD Check	Reconciled
404838	MUTUAL PROPANE	19-Dec-19	27.00	IRWD Check	Reconciled
404839	NATIONAL READY MIXED CONCRETE SALES, LLC	19-Dec-19	1,838.31	IRWD Check	Reconciled
404840	NMG GEOTECHNICAL INC	19-Dec-19	4,040.20	IRWD Check	Reconciled
404841	NOVACOAST INC	19-Dec-19	69,237.50	IRWD Check	Reconciled
404842	OLIN CORPORATION	19-Dec-19	18,699.26	IRWD Check	Reconciled
404843	ONESOURCE DISTRIBUTORS LLC	19-Dec-19	10,728.06	IRWD Check	Reconciled
404844	ORACLE AMERICA, INC.	19-Dec-19	20,749.19	IRWD Check	Reconciled
404845	ORANGE COAST PETROLEUM EQUIPMENT INC.	19-Dec-19	2,262.69	IRWD Check	Reconciled
404846	ORANGE COUNTY AUTO PARTS CO	19-Dec-19	2,277.87	IRWD Check	Reconciled
404847	ORANGE COUNTY SANITATION DISTRICT	19-Dec-19	2,510.00	IRWD Check	Reconciled
404848	ORANGE LINE OIL COMPANY	19-Dec-19	493.78	IRWD Check	Reconciled
404849	OUTSOURCE TECHNICAL LLC	19-Dec-19	4,400.00	IRWD Check	Reconciled
404850	PACIFIC COAST BOLT CORP	19-Dec-19	5,780.53	IRWD Check	Reconciled
404851	PACIFIC PARTS & CONTROLS INC	19-Dec-19	2,768.10	IRWD Check	Reconciled
404852	PACIFIC STAR CHEMICAL, LLC	19-Dec-19	1,211.80	IRWD Check	Reconciled
404853	PARKHOUSE TIRE INC	19-Dec-19	1,609.70	IRWD Check	Reconciled
404854	PASCAL & LUDWIG CONSTRUCTORS	19-Dec-19	1,296.78	IRWD Check	Reconciled
404855	PAULUS ENGINEERING, INC.	19-Dec-19	38,720.00	IRWD Check	Reconciled
404856	PLUMBERS DEPOT INC.	19-Dec-19	4,536.09	IRWD Check	Reconciled

**IRVINE RANCH WATER DISTRICT
AP DISBURSEMENTS AND VOIDS FOR DECEMBER 2019**

CHECK OR ELECTRONIC #	SUPPLIERS	PAYMENT DATE	PAYMENT AMOUNT	PAYMENT METHOD	STATUS
404857	PMC ENGINEERING LLC.	19-Dec-19	1,097.03	IRWD Check	Negotiable
404858	PRAXAIR DISTRIBUTION INC	19-Dec-19	1,320.73	IRWD Check	Reconciled
404859	PRE-PAID LEGAL SERVICES INC	19-Dec-19	4,704.60	IRWD Check	Negotiable
404860	PROCARE WORK INJURY CENTER	19-Dec-19	410.00	IRWD Check	Reconciled
404861	PRUDENTIAL OVERALL SUPPLY	19-Dec-19	15,161.97	IRWD Check	Reconciled
404862	PTI SAND & GRAVEL INC	19-Dec-19	654.21	IRWD Check	Reconciled
404863	PURE EFFECT INC	19-Dec-19	7,553.50	IRWD Check	Reconciled
404864	QUINN COMPANY	19-Dec-19	84.56	IRWD Check	Reconciled
404865	R&B AUTOMATION, INC.	19-Dec-19	2,005.00	IRWD Check	Reconciled
404866	RAM AIR ENGINEERING INC	19-Dec-19	13,053.08	IRWD Check	Reconciled
404867	REAL WATER CONSULTANTS INC.	19-Dec-19	36,558.75	IRWD Check	Negotiable
404868	REFRIGERATION SUPPLIES DISTRIBUTOR	19-Dec-19	971.65	IRWD Check	Reconciled
404869	REGENTS OF THE UNIVERSITY OF CALIFORNIA AT IRVINE	19-Dec-19	2,038.00	IRWD Check	Negotiable
404870	RENTOKIL NORTH AMERICA, INC	19-Dec-19	13,549.00	IRWD Check	Reconciled
404871	RINCON TRUCK CENTER INC.	19-Dec-19	214.51	IRWD Check	Reconciled
404872	ROSEDALE - RIO BRAVO WATER STORAGE DISTRICT	19-Dec-19	5,965.02	IRWD Check	Reconciled
404873	ROSENBLUM, TRACY	19-Dec-19	37.92	IRWD Check	Reconciled
404874	S&S SEEDS INC	19-Dec-19	1,425.09	IRWD Check	Reconciled
404875	S3 HOSPITALITY LLC	19-Dec-19	3,889.63	IRWD Check	Reconciled
404876	SAN CARLO APARTMENTS	19-Dec-19	32.89	IRWD Check	Negotiable
404877	SANTA ANA BLUE PRINT	19-Dec-19	415.60	IRWD Check	Negotiable
404878	SEK, THOMAS	19-Dec-19	35.24	IRWD Check	Negotiable
404879	SHAMROCK SUPPLY CO INC	19-Dec-19	22.27	IRWD Check	Reconciled
404880	SHAOQIANG PENG AND LIJUAN YU	19-Dec-19	1,175.78	IRWD Check	Reconciled
404881	SILVIA VELASQUEZ AND ADELIA CAL	19-Dec-19	36.48	IRWD Check	Reconciled
404882	SIMI VALLEY LANDFILL AND RECYCLING CENTER	19-Dec-19	448.56	IRWD Check	Reconciled
404883	SIRIUS COMPUTER SOLUTIONS INC	19-Dec-19	3,900.00	IRWD Check	Reconciled
404884	SKORUZ TECHNOLOGIES	19-Dec-19	16,610.00	IRWD Check	Reconciled
404885	SNAP-ON INCORPORATED	19-Dec-19	394.45	IRWD Check	Reconciled
404886	SOUTH COAST WATER DISTRICT	19-Dec-19	970.71	IRWD Check	Reconciled
404887	SOUTHERN CALIFORNIA EDISON COMPANY	19-Dec-19	473,004.54	IRWD Check	Reconciled
404888	SOUTHERN CALIFORNIA GAS COMPANY	19-Dec-19	13,649.95	IRWD Check	Reconciled
404889	SOUTHERN COUNTIES LUBRICANTS LLC	19-Dec-19	2,117.79	IRWD Check	Reconciled
404890	SOUTHLAND WATER TECHNOLOGIES LLC	19-Dec-19	186.09	IRWD Check	Reconciled
404891	SOUTHWEST VALVE & EQUIPMENT	19-Dec-19	3,649.32	IRWD Check	Negotiable
404892	SPARKLETTES	19-Dec-19	71.85	IRWD Check	Reconciled
404893	SPARLING INSTRUMENTS LLC	19-Dec-19	763.71	IRWD Check	Reconciled
404894	SPATIAL WAVE, INC.	19-Dec-19	68,700.00	IRWD Check	Negotiable
404895	STANFORD COURT APARTMENTS	19-Dec-19	61.20	IRWD Check	Negotiable
404896	STANTEC CONSULTING SERVICES INC.	19-Dec-19	19,059.50	IRWD Check	Reconciled
404897	STICE COMPANY, INC.	19-Dec-19	347.27	IRWD Check	Reconciled
404898	STREAKWAVE WIRELESS, INC.	19-Dec-19	361.77	IRWD Check	Reconciled
404899	SULZER ELECTRO-MECHANICAL SERVICES (US) INC.	19-Dec-19	5,782.40	IRWD Check	Reconciled
404900	SUNSHINE SUPPLY COMPANY, INC.	19-Dec-19	4,102.05	IRWD Check	Reconciled
404901	TALLEY INC	19-Dec-19	419.45	IRWD Check	Reconciled
404902	TAYLOR MORRISON OF CALIFORNIA, LLC	19-Dec-19	32.54	IRWD Check	Negotiable
404903	TEAM INDUSTRIAL SERVICES, INC.	19-Dec-19	17,257.00	IRWD Check	Reconciled
404904	TERRY AND GLORIA TUCHMAN	19-Dec-19	38.18	IRWD Check	Reconciled
404905	THE NEW HOME COMPANY SOUTHERN CALIFORNIA LLC	19-Dec-19	109.18	IRWD Check	Negotiable
404906	THOMPSON INDUSTRIAL SUPPLY	19-Dec-19	1,486.95	IRWD Check	Reconciled
404907	THORNTON, KELLY	19-Dec-19	10.39	IRWD Check	Negotiable
404908	TIC-IPG-COMMON	19-Dec-19	317.75	IRWD Check	Negotiable
404909	TIC-OFFICE PROPERTIES	19-Dec-19	1,521.45	IRWD Check	Negotiable
404910	TIC-RETAIL PROPERTIES	19-Dec-19	425.40	IRWD Check	Negotiable
404911	TOLL BROS., INC.	19-Dec-19	341.48	IRWD Check	Negotiable
404912	TORRES, BEATRIZ	19-Dec-19	51.15	IRWD Check	Reconciled
404913	TROPICAL PLAZA NURSERY INC	19-Dec-19	15,084.00	IRWD Check	Reconciled
404914	TRUKSPECT, INC	19-Dec-19	798.96	IRWD Check	Reconciled
404915	TSIPERFAL, ILYA	19-Dec-19	400.95	IRWD Check	Reconciled
404916	TYCO FIRE & SECURITY (US) MANAGEMENT INC	19-Dec-19	4,821.61	IRWD Check	Negotiable
404917	UNION ENGINEERING CO INC	19-Dec-19	1,496.95	IRWD Check	Negotiable
404918	UNIVAR SOLUTIONS USA INC.	19-Dec-19	4,520.00	IRWD Check	Reconciled
404919	URBAN WATER INSTITUTE INC	19-Dec-19	1,500.00	IRWD Check	Negotiable

**IRVINE RANCH WATER DISTRICT
AP DISBURSEMENTS AND VOIDS FOR DECEMBER 2019**

CHECK OR ELECTRONIC #	SUPPLIERS	PAYMENT DATE	PAYMENT AMOUNT	PAYMENT METHOD	STATUS
404920	USA BLUEBOOK	19-Dec-19	552.36	IRWD Check	Reconciled
404921	VWR INTERNATIONAL, LLC	19-Dec-19	10,014.25	IRWD Check	Reconciled
404922	WANG, DONGYU	19-Dec-19	22.48	IRWD Check	Negotiable
404923	WANYU HE AND JIANHONG HUANG	19-Dec-19	1,732.68	IRWD Check	Reconciled
404924	WATEREUSE ASSOCIATION	19-Dec-19	5,500.00	IRWD Check	Negotiable
404925	WAXIE'S ENTERPRISES, INC	19-Dec-19	651.86	IRWD Check	Reconciled
404926	WCT PRODUCTS, INC.	19-Dec-19	1,079.66	IRWD Check	Reconciled
404927	WECK LABORATORIES INC	19-Dec-19	2,600.00	IRWD Check	Reconciled
404928	WEST COAST SAFETY SUPPLY INC	19-Dec-19	8,811.84	IRWD Check	Negotiable
404929	WEST COAST SAND & GRAVEL INC.	19-Dec-19	1,786.46	IRWD Check	Reconciled
404930	WESTAMERICA COMMUNICATIONS, INC.	19-Dec-19	9,078.20	IRWD Check	Reconciled
404931	WESTERN WEATHER GROUP INC	19-Dec-19	3,098.00	IRWD Check	Reconciled
404932	WIN-911 SOFTWARE	19-Dec-19	3,685.00	IRWD Check	Reconciled
404933	WINDWOOD GLEN	19-Dec-19	42.61	IRWD Check	Negotiable
404934	WOODARD & CURRAN INC	19-Dec-19	15,365.54	IRWD Check	Reconciled
404935	YSI, INC	19-Dec-19	28,430.59	IRWD Check	Reconciled
404936	ZHANG, STEPHEN	19-Dec-19	64.50	IRWD Check	Negotiable
404937	Compton, Christine A	20-Dec-19	49.36	IRWD Check	Reconciled
404938	Llewellyn, Shana W (Shana)	20-Dec-19	324.45	IRWD Check	Reconciled
404939	Van Deusen, Scott A (Scott)	20-Dec-19	286.00	IRWD Check	Negotiable
404940	AMETEK BROOKFIELD	20-Dec-19	883.05	IRWD Check	Reconciled
404941	APEX SYSTEMS, LLC	20-Dec-19	2,080.00	IRWD Check	Reconciled
404942	APPLIED ENGINEERING CONCEPTS	20-Dec-19	3,860.00	IRWD Check	Reconciled
404943	AT&T	20-Dec-19	66.18	IRWD Check	Reconciled
404944	AT&T	20-Dec-19	5,643.73	IRWD Check	Reconciled
404945	BUSH & ASSOCIATES INC	20-Dec-19	3,912.00	IRWD Check	Negotiable
404946	CALIFORNIA MUNICIPAL STATISTICS INC	20-Dec-19	50.00	IRWD Check	Negotiable
404947	CHAN, GREG	20-Dec-19	1,874.53	IRWD Check	Reconciled
404948	CLARIS STRATEGY INC.	20-Dec-19	6,675.00	IRWD Check	Negotiable
404949	CONSTELLATION NEWENERGY, INC.	20-Dec-19	24,399.59	IRWD Check	Negotiable
404950	COX COMMUNICATIONS, INC.	20-Dec-19	3,260.38	IRWD Check	Reconciled
404951	CULLIGAN OF SANTA ANA	20-Dec-19	1,000.00	IRWD Check	Reconciled
404952	CVS PHARMACY, INC.	20-Dec-19	2,720.00	IRWD Check	Reconciled
404953	DIRECTV INC	20-Dec-19	131.98	IRWD Check	Negotiable
404954	ENVIRONMENTAL SCIENCE ASSOCIATES	20-Dec-19	2,307.00	IRWD Check	Reconciled
404955	EVERETT DOREY LLP	20-Dec-19	11,563.09	IRWD Check	Reconciled
404956	FRANCHISE TAX BOARD	20-Dec-19	887.35	IRWD Check	Negotiable
404957	FUSCOE ENGINEERING, INC.	20-Dec-19	311.11	IRWD Check	Reconciled
404958	GEI CONSULTANTS INC	20-Dec-19	12,697.75	IRWD Check	Reconciled
404959	GRAINGER	20-Dec-19	2,540.38	IRWD Check	Reconciled
404960	HI-LINE INC	20-Dec-19	227.36	IRWD Check	Reconciled
404961	HOME DEPOT USA INC	20-Dec-19	2,315.29	IRWD Check	Reconciled
404962	INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS LOCAL 4	20-Dec-19	2,494.98	IRWD Check	Reconciled
404963	IRVINE PIPE & SUPPLY INC	20-Dec-19	303.39	IRWD Check	Reconciled
404964	JAMBOREE SMOG	20-Dec-19	308.75	IRWD Check	Reconciled
404965	MC FADDEN-DALE INDUSTRIAL	20-Dec-19	58.89	IRWD Check	Reconciled
404966	MCCLAINS FURNITURE	20-Dec-19	4,185.00	IRWD Check	Reconciled
404967	NATIONAL WATER RESEARCH INSTITUTE	20-Dec-19	2,500.00	IRWD Check	Reconciled
404968	NMG GEOTECHNICAL INC	20-Dec-19	10,602.40	IRWD Check	Reconciled
404969	OLIN CORPORATION	20-Dec-19	7,339.66	IRWD Check	Reconciled
404970	ORANGE COUNTY AUTO PARTS CO	20-Dec-19	34.06	IRWD Check	Reconciled
404971	ORANGE COUNTY SHERIFF'S OFFICE	20-Dec-19	174.50	IRWD Check	Negotiable
404972	ORANGE COUNTY WATER DISTRICT	20-Dec-19	1,602,376.00	IRWD Check	Reconciled
404973	PERS LONG TERM CARE	20-Dec-19	538.89	IRWD Check	Reconciled
404974	PINNACLE TOWERS LLC	20-Dec-19	779.18	IRWD Check	Reconciled
404975	PMC ENGINEERING LLC.	20-Dec-19	4,464.54	IRWD Check	Reconciled
404976	PRAXAIR DISTRIBUTION INC	20-Dec-19	243.24	IRWD Check	Reconciled
404977	QMC CRANES, LLC	20-Dec-19	30.70	IRWD Check	Negotiable
404978	REGENTS OF THE UNIVERSITY OF CALIFORNIA AT IRVINE	20-Dec-19	1,250.00	IRWD Check	Negotiable
404979	RELIANCE STANDARD LIFE INSURANCE COMPANY	20-Dec-19	60,960.29	IRWD Check	Negotiable
404980	ROSEDALE - RIO BRAVO WATER STORAGE DISTRICT	20-Dec-19	21,143.60	IRWD Check	Negotiable
404981	ROYAL WHOLESALE ELECTRIC	20-Dec-19	20,380.48	IRWD Check	Reconciled
404982	SMITH SYSTEM DRIVER IMPROVEMENT INSTITUTE, INC.	20-Dec-19	1,521.68	IRWD Check	Reconciled

**IRVINE RANCH WATER DISTRICT
AP DISBURSEMENTS AND VOIDS FOR DECEMBER 2019**

CHECK OR ELECTRONIC #	SUPPLIERS	PAYMENT DATE	PAYMENT AMOUNT	PAYMENT METHOD	STATUS
404983	SOUTHERN CALIFORNIA EDISON COMPANY	20-Dec-19	49.42	IRWD Check	Reconciled
404984	SOUTHERN CALIFORNIA GAS COMPANY	20-Dec-19	24.90	IRWD Check	Reconciled
404985	STATE OF CALIFORNIA, EDD	20-Dec-19	75.00	IRWD Check	Reconciled
404986	STATE WATER RESOURCES CONTROL BOARD	20-Dec-19	223,043.11	IRWD Check	Reconciled
404987	STETSON ENGINEERS INC.	20-Dec-19	1,296.00	IRWD Check	Reconciled
404988	TEVORA BUSINESS SOLUTIONS, INC.	20-Dec-19	23.33	IRWD Check	Negotiable
404989	TUCCINARDI, KIRSTIN	20-Dec-19	1,336.74	IRWD Check	Reconciled
404990	US BANK NAT'L ASSOC N.DAKOTA	20-Dec-19	1,430.00	IRWD Check	Reconciled
404991	USA BLUEBOOK	20-Dec-19	719.44	IRWD Check	Reconciled
404992	WECK LABORATORIES INC	20-Dec-19	830.00	IRWD Check	Reconciled
404993	MISSION SAN JUAN CAPISTRANO	20-Dec-19	100.00	IRWD Check	Reconciled
404994	MUNICIPAL WATER DISTRICT OF ORANGE COUNTY	23-Dec-19	2,445.07	IRWD Check	Reconciled
404995	Bertsch, Frederick J (Jeff)	23-Dec-19	259.46	IRWD Check	Negotiable
404996	Pascual, Allan	23-Dec-19	154.57	IRWD Check	Negotiable
404997	Saini, Mohit	23-Dec-19	78.88	IRWD Check	Reconciled
404998	Saini, Mohit	23-Dec-19	218.62	IRWD Check	Reconciled
404999	BEST DRILLING AND PUMP, INC.	23-Dec-19	299,345.00	IRWD Check	Reconciled
405000	PCL CONSTRUCTION, INC.	23-Dec-19	117,750.70	IRWD Check	Negotiable
405001	MERRIMAC PETROLEUM, INC.	23-Dec-19	19,125.17	IRWD Check	Reconciled
405002	US BANK NAT'L ASSOCIATION NORTH DAKOTA	30-Dec-19	53,780.99	IRWD Check	Negotiable
405003	IRWD-PETTY CASH CUSTODIAN	30-Dec-19	1,343.72	IRWD Check	Reconciled
405004	MUNICIPAL WATER DISTRICT OF ORANGE COUNTY	30-Dec-19	83,855.00	IRWD Check	Negotiable
SUB-TOTAL CHECK DISBURSEMENTS			12,265,453.35		
13505	CHARD SNYDER & ASSOCIATES, INC.	4-Dec-19	2,196.34	IRWD Wire	Negotiable
13506	CHARD SNYDER & ASSOCIATES, INC.	4-Dec-19	17,292.39	IRWD Wire	Negotiable
13507	YORK INSURANCE SERVICES GROUP INC - CA	4-Dec-19	5,674.05	IRWD Wire	Negotiable
13508	BANK OF NEW YORK MELLON TRUST COMPANY NA	5-Dec-19	2,187.50	IRWD Wire	Negotiable
13509	BANK OF NEW YORK MELLON TRUST COMPANY NA	9-Dec-19	10,817.31	IRWD Wire	Negotiable
13510	CHARD SNYDER & ASSOCIATES, INC.	9-Dec-19	1,440.30	IRWD Wire	Negotiable
13511	CHARD SNYDER & ASSOCIATES, INC.	9-Dec-19	2,575.89	IRWD Wire	Negotiable
13512	CHARD SNYDER & ASSOCIATES, INC.	9-Dec-19	10,701.44	IRWD Wire	Negotiable
13513	YORK INSURANCE SERVICES GROUP INC - CA	11-Dec-19	4,535.44	IRWD Wire	Negotiable
13514	WELLS FARGO BANK, N.A.	16-Dec-19	22.73	IRWD Wire	Negotiable
13515	U.S. BANK NATIONAL ASSOCIATION	16-Dec-19	6,814.06	IRWD Wire	Negotiable
13516	ORANGE COUNTY SANITATION DISTRICT	16-Dec-19	1,125,735.77	IRWD Wire	Negotiable
13517	CALPERS	17-Dec-19	2,892.23	IRWD Wire	Negotiable
13518	CALPERS	17-Dec-19	509,463.18	IRWD Wire	Negotiable
13519	INTERNAL REVENUE SERVICE	17-Dec-19	222,534.38	IRWD Wire	Negotiable
13520	FRANCHISE TAX BOARD	17-Dec-19	69,405.36	IRWD Wire	Negotiable
13521	EMPLOYMENT DEVELOPMENT DEPARTMENT	17-Dec-19	10,111.47	IRWD Wire	Negotiable
13522	CALIFORNIA DEPARTMENT OF CHILD SUPPORT SERVICES	17-Dec-19	3,026.42	IRWD Wire	Negotiable
13523	GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY	17-Dec-19	148,473.15	IRWD Wire	Negotiable
13524	CALPERS	17-Dec-19	228,455.97	IRWD Wire	Negotiable
13525	CALPERS	17-Dec-19	616.73	IRWD Wire	Negotiable
13526	CHARD SNYDER & ASSOCIATES, INC.	17-Dec-19	4,640.30	IRWD Wire	Negotiable
13527	CHARD SNYDER & ASSOCIATES, INC.	17-Dec-19	5,215.19	IRWD Wire	Negotiable
13528	YORK INSURANCE SERVICES GROUP INC - CA	17-Dec-19	10,806.79	IRWD Wire	Negotiable
13529	SUMITOMO MITSUI BANKING CORPORATION	18-Dec-19	31,084.94	IRWD Wire	Negotiable
13530	U.S. BANK NATIONAL ASSOCIATION	18-Dec-19	16,328.72	IRWD Wire	Negotiable
13531	BANK OF NEW YORK MELLON TRUST COMPANY NA	18-Dec-19	71,703.43	IRWD Wire	Negotiable
13532	U.S. BANK NATIONAL ASSOCIATION	18-Dec-19	30,845.23	IRWD Wire	Negotiable
13533	BANK OF AMERICA	18-Dec-19	29,790.44	IRWD Wire	Negotiable
13534	BANK OF NEW YORK MELLON TRUST COMPANY NA	18-Dec-19	3,645.83	IRWD Wire	Negotiable
13535	MUNICIPAL WATER DISTRICT OF ORANGE COUNTY	18-Dec-19	854,524.54	IRWD Wire	Negotiable
13536	FILANC-BALFOUR BEATTY JV	23-Dec-19	197,258.64	IRWD Wire	Negotiable
13537	FILANC-BALFOUR BEATTY JV	23-Dec-19	3,837.87	IRWD Wire	Negotiable
13538	CHARD SNYDER & ASSOCIATES, INC.	23-Dec-19	2,198.82	IRWD Wire	Negotiable
13539	CHARD SNYDER & ASSOCIATES, INC.	23-Dec-19	3,011.37	IRWD Wire	Negotiable
13540	INTERNAL REVENUE SERVICE	23-Dec-19	231,148.27	IRWD Wire	Negotiable
13541	FRANCHISE TAX BOARD	23-Dec-19	72,362.76	IRWD Wire	Negotiable
13542	EMPLOYMENT DEVELOPMENT DEPARTMENT	23-Dec-19	9,705.63	IRWD Wire	Negotiable
13543	CALIFORNIA DEPARTMENT OF CHILD SUPPORT SERVICES	23-Dec-19	3,026.42	IRWD Wire	Negotiable

**IRVINE RANCH WATER DISTRICT
AP DISBURSEMENTS AND VOIDS FOR DECEMBER 2019**

CHECK OR ELECTRONIC #	SUPPLIERS	PAYMENT DATE	PAYMENT AMOUNT	PAYMENT METHOD	STATUS
13544	GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY	23-Dec-19	143,318.51	IRWD Wire	Negotiable
13545	BANK OF AMERICA MERRILL LYNCH	23-Dec-19	14,040.11	IRWD Wire	Negotiable
13546	BANK OF AMERICA MERRILL LYNCH	23-Dec-19	78,626.62	IRWD Wire	Negotiable
13547	CHARD SNYDER & ASSOCIATES, INC.	30-Dec-19	7,652.12	IRWD Wire	Negotiable
13548	CHARD SNYDER & ASSOCIATES, INC.	30-Dec-19	1,762.68	IRWD Wire	Negotiable
13549	YORK INSURANCE SERVICES GROUP INC - CA	30-Dec-19	3,390.59	IRWD Wire	Negotiable
13550	BANK OF NEW YORK MELLON TRUST COMPANY NA	30-Dec-19	35,920.52	IRWD Wire	Negotiable
13551	BANK OF NEW YORK MELLON TRUST COMPANY NA	30-Dec-19	42,798.91	IRWD Wire	Negotiable
13552	BANK OF NEW YORK MELLON TRUST COMPANY NA	30-Dec-19	20,491.80	IRWD Wire	Negotiable
13553	CALPERS	30-Dec-19	225,454.50	IRWD Wire	Negotiable
13554	WATILO, CORY	30-Dec-19	33.28	IRWD Wire	Negotiable
13555	YANG, BIYI	30-Dec-19	38.02	IRWD Wire	Negotiable
13556	YORK INSURANCE SERVICES GROUP INC - CA	31-Dec-19	4,483.00	IRWD Wire	Negotiable
SUB-TOTAL ELECTRONIC DISBURSEMENTS			4,544,117.96		
SUB-TOTAL AP CHECK AND ELECTRONIC DISBURSEMENTS			16,809,571.31		
404498	XUEJIAN LIU AND YULING SUN	5-Dec-19	348.39	IRWD Check	Voided
404837	MUNICIPAL WATER DISTRICT OF ORANGE COUNTY	19-Dec-19	465.07	IRWD Check	Voided
SUB-TOTAL CHECK ISSUED AND VOIDED IN DECEMBER 2019			813.46		
TOTAL AP DISBURSEMENTS AND VOIDS FOR DECEMBER 2019			16,810,384.77		

Exhibit "E"

MONTHLY SUMMARY OF PAYROLL ACH PAYMENTS

**December
2019**

	AMOUNT	VENDOR	PURPOSE
12/6/2019	1,045,801.17	BANK OF AMERICA	ACH Payments for Payroll
12/20/2019	1,066,968.61	BANK OF AMERICA	ACH Payments for Payroll
	<u><u>\$2,112,769.78</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-19 to 31-DEC-19

NAME	CHECK NO.	CHECK DATE	AMOUNT	ITEM DESCRIPTION	EXPENSE JUSTIFICATION
Beltran, Benjamin Vega	404509	11-Dec-19	192.00	Membership Renewal	CWEA membership
Bertsch, Jeff	404995	23-Dec-19	129.68	Other(Misc)	I.S. staff meeting lunch
Bill, Cody	404691	19-Dec-19	175.00	Certification Renewal	CWEA Collections Grade I
Borowski, Michael	404226	5-Dec-19	104.00	Certification Renewal	CWEA E-I Grade IV
Cho, Harry	404676	19-Dec-19	286.00	Membership Renewal	AWWA membership
Colvin, Todd	404227	5-Dec-19	192.00	Membership Renewal	CWEA membership
Crowe, David	404693	19-Dec-19	105.00	Certification Renewal	SWRCB Grade D5
Drzymkowski, Michele	404229	5-Dec-19	673.00	Airfare	US EPA Region 4 2019 Water Laboratory Alliance Security Summit, Atlanta, GA - Nov. 13-14, 2019
Drzymkowski, Michele	404229	5-Dec-19	439.34	Lodging	US EPA Region 4 2019 Water Laboratory Alliance Security Summit, Atlanta, GA - Nov. 13, 2019
Drzymkowski, Michele	404229	5-Dec-19	352.25	Lodging	US EPA Region 4 2019 Water Laboratory Alliance Security Summit, Atlanta, GA - Nov. 14, 2019
Fournier, Tanja	404679	19-Dec-19	199.00	Membership Renewal	Morningstar membership
Haney, Lisa	404680	19-Dec-19	501.96	Airfare	CASA Regulatory Workgroup Meeting, Oakland, CA - Dec. 13, 2019
Hoffman, Michael	404232	5-Dec-19	159.47	Other(Misc)	Safety shoe allowance
Lassalette, James	404511	11-Dec-19	192.00	Membership Renewal	CWEA membership
Lin, Eileen	404235	5-Dec-19	120.00	Certification Renewal	CPA license renewal
Lin, Eileen	404235	5-Dec-19	135.72	Other(Misc)	Meeting supplies
Matheis, Mary Aileen	404512	11-Dec-19	141.99	Lodging	WEF 2019 Colorado River Symposium, Santa Fe, NM - Sept. 18, 2019
Matheis, Mary Aileen	404512	11-Dec-19	141.99	Lodging	WEF 2019 Colorado River Symposium, Santa Fe, NM - Sept. 19, 2019
Matheis, Mary Aileen	404512	11-Dec-19	141.99	Lodging	WEF 2019 Colorado River Symposium, Santa Fe, NM - Sept. 20, 2019
Moeder, Jacob	404513	11-Dec-19	300.00	Membership Renewal	ASCE membership
Monroy, Jonnathan	404237	5-Dec-19	100.00	Other(Misc)	Fuel for IRWD service truck - Strand Ranch, Bakersfield - Nov. 11-14, 2019
Nicholson, Darin	404239	5-Dec-19	100.00	Other(Misc)	Fuel for IRWD service truck - Strand Ranch, Bakersfield - Nov. 11-14, 2019
Nicholson, Darin	404239	5-Dec-19	192.00	Membership Renewal	CWEA membership
Noguera, Ricardo II	404514	11-Dec-19	295.00	Certification Renewal	SWRCB Wastewater Grade III exam fee
Noguera, Ricardo II	404514	11-Dec-19	225.00	Certification Renewal	SWRCB Wastewater Grade III
Oldewage, Lars	404685	19-Dec-19	125.00	Other(Misc)	Safety shoe allowance
Oldewage, Lars	404685	19-Dec-19	376.00	Certification Renewal	CWEA Lab Analyst IV, Environmental Compliance Inspector II
Orozco, Gustavo	404240	5-Dec-19	170.00	Certification Renewal	CWEA Collections Systems Maintenance Grade I
Real, Omar	404686	19-Dec-19	130.00	Certification Renewal	SWRCB Water Distribution Operator Grade II
Reynoso, Pio	404515	11-Dec-19	150.00	Certification Renewal	SWRCB Wastewater Treatment Grade V
Saini, Mohit	404998	23-Dec-19	218.62	Other(Misc)	Apps Team staff meeting lunch
Seesangrit, Melody	404687	19-Dec-19	215.05	Lodging	Behavior Energy & Climate Change 2019 Conference, Sacramento, CA - Nov. 19, 2019
Shinbashi, Allen	404688	19-Dec-19	454.53	Other(Misc)	2010 Main Street - 10" pipe break - provided lunch for crew
Van Deusen, Scott	404939	20-Dec-19	192.00	Membership Renewal	CWEA membership
Wang, Peter	404689	19-Dec-19	196.09	Other(Misc)	Safety shoe allowance
Zaragoza, Anthony	404690	19-Dec-19	130.00	Membership Renewal	SWRCB - Water Distribution Grade IV exam fee
Zaragoza, Anthony	404690	19-Dec-19	105.00	Certification Renewal	SWRCB Water Distribution Grade IV
Total Amount:			\$8,056.68		

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January 27, 2020

Prepared by: D. Pardee / C. Smithson

Submitted by: C. Clary

Approved by: Paul A. Cook



CONSENT CALENDAR

IRVINE RANCH WATER DISTRICT 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” – December 2019 Strategic Measures

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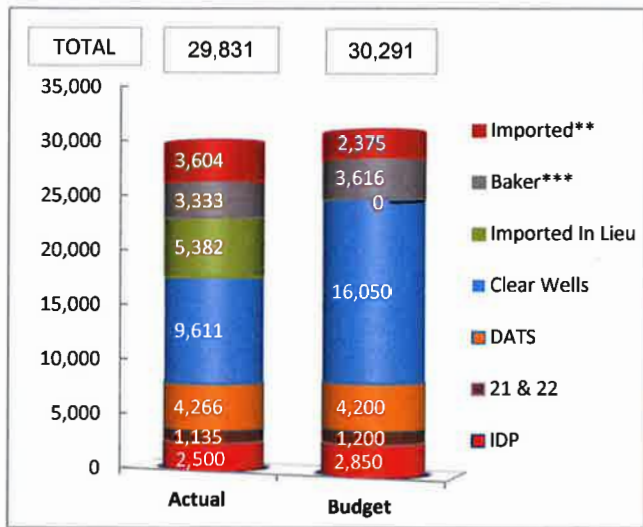
IRVINE RANCH WATER DISTRICT

EXHIBIT "A"

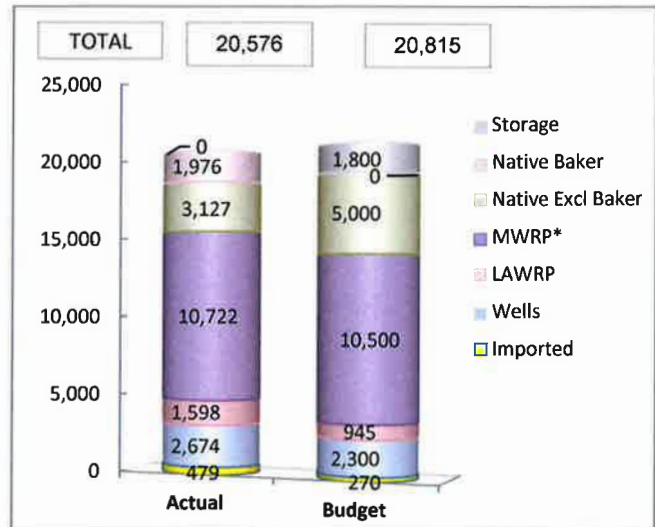
Operational Performance Measures

Data as of December 31, 2019

Potable Water Production FYTD
(AF)



Non-Potable Water Production FYTD
(AF)



* Excess production moved to recycled reservoirs.

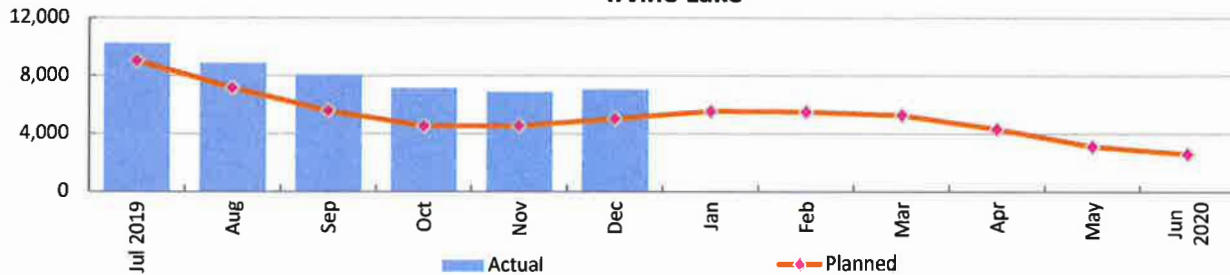
**Total Demand was lower than expected, resulting in an unanticipated reduction In Lieu water allocated to the District.

***Baker used 1,976 AF of native water (Non-Potable graph) and the District's allocation is 507 AF (Potable graph).

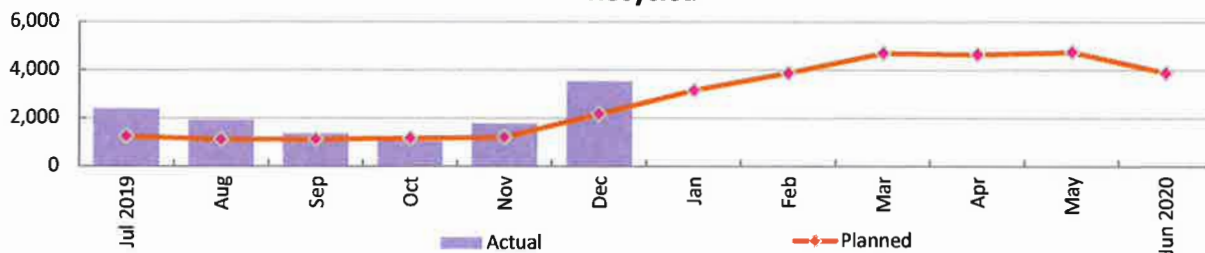
Non-Potable Reservoir Storage

(AF)

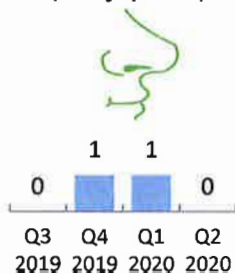
Irvine Lake



Recycled



Odor Complaints

(FY by quarter)


OSHA Recordables

Incidents


Regulatory Compliance

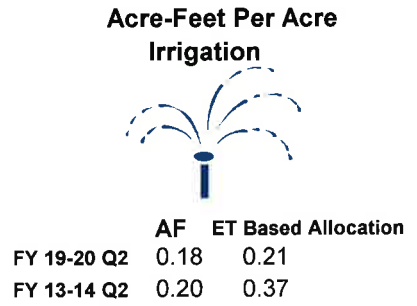
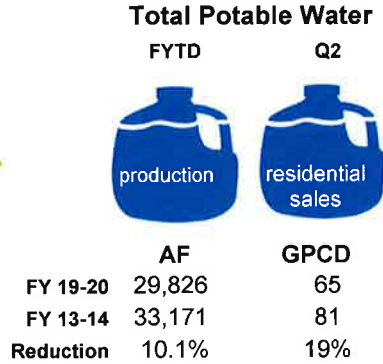
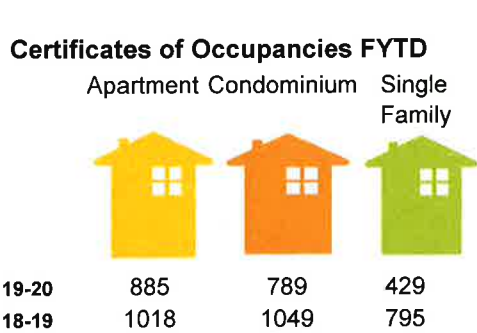
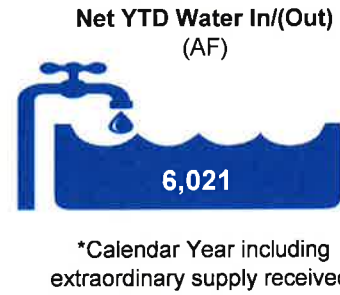
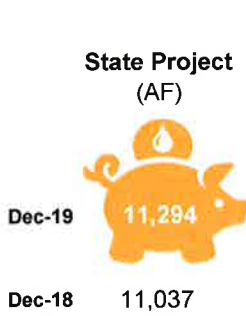
Incidents

Category	Q3 2019	Q4 2019	Q1 2020	Q2 2020
AQMD	0	0	0	1
Plants	0	0	0	1
Sewer Spills	1	0	0	2

IRVINE RANCH WATER DISTRICT

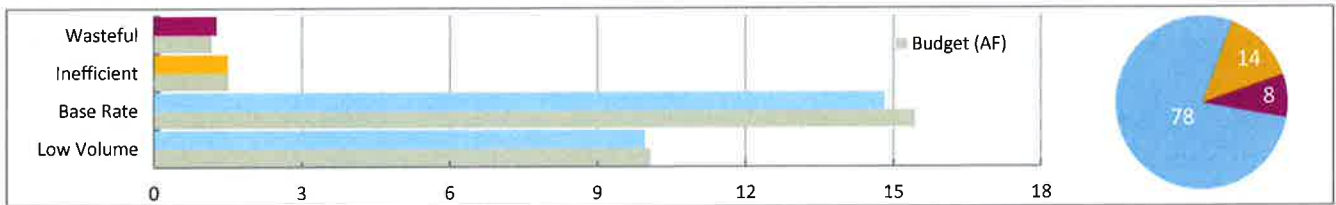
Other Statistical Information

Data as of December 31, 2019



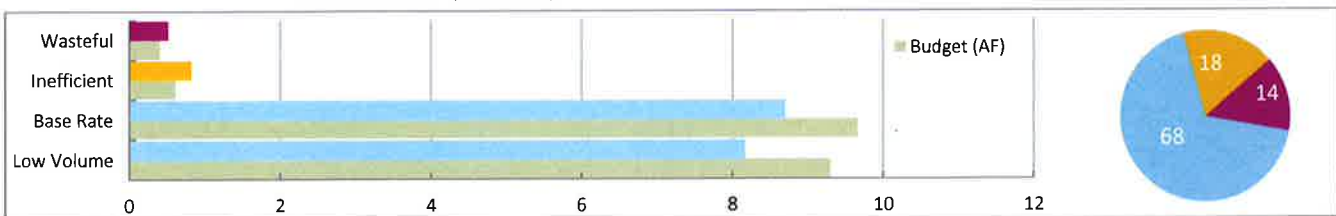
Potable Sales by Tier FYTD
(in thousands)

% of Customers by Tier

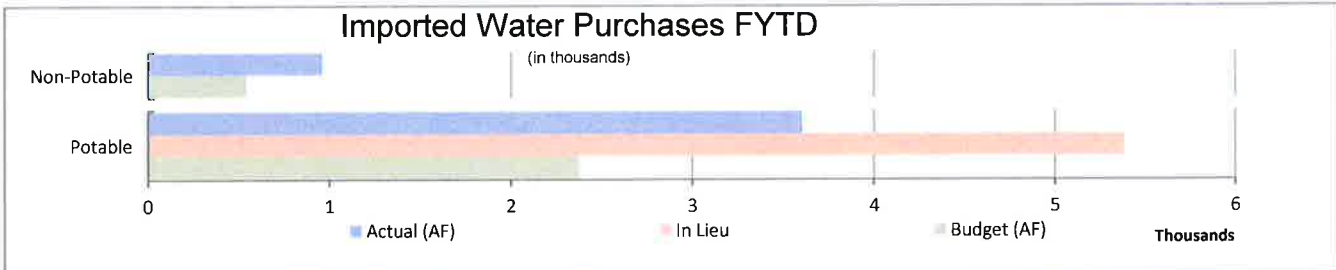


Non-Potable Sales by Tier FYTD
(in thousands)

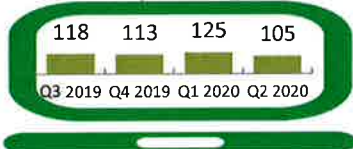
% of Customers by Tier



Imported Water Purchases FYTD
(in thousands)



Website Hits
(in thousands)



Customer Satisfaction Index**



January 27, 2020

Prepared by: H. Cho / M. Cortez

Submitted by: K. Burton

Approved by: Paul A. Cook

CONSENT CALENDAR

DYER ROAD WELLFIELD SURGE TANKS CONTRACT CHANGE ORDER AND FINAL ACCEPTANCE

SUMMARY:

The Dyer Road Wellfield Surge Tanks project is complete. IRWD's contractor, Pascal & Ludwig, has completed the required work and all punch list items. The project has received final inspection and acceptance of construction is recommended. Staff recommends that the Board:

- Authorize the General Manager to execute Contract Change Order No. 17 in the amount of \$165,673.49 with Pascal & Ludwig Constructors;
- Accept construction of the Dyer Road Wellfield Surge Tanks;
- Authorize the General Manager to file a Notice of Completion; and
- Authorize the payment of the retention 35 days after the date of recording the Notice of Completion.

BACKGROUND:

This project installed new surge tanks at Wells 5 and 7 and replaced the existing corroding surge tanks at Wells 11 and 15. Since the tanks' corrosion resulted from being directly buried in soil with high groundwater, the new tanks were installed aboveground at Wells 5 and 7, in a partially recessed and canopied concrete vault at Well 11, and in an underground concrete vault at Well 15.

Tetra Tech completed the design in March 2017, and Pascal & Ludwig Constructors was awarded the construction contract on April 24, 2017. Pascal & Ludwig Constructors mobilized in July 2017 and completed construction of all improvements on September 27, 2019. Final acceptance was delayed due to the review and processing of contract change order requests.

The construction period was lengthened due to many challenges encountered during construction. One major challenge occurred when setting the shoring around the existing surge tank at Well 15 for excavation and tank demolition. The contractor encountered the unknown condition of pea gravel, which was used extensively as backfill around the existing surge tank. Since pea gravel lacks cohesion, the shoring plan was changed to piles set in casing tubes and to steel sheets rather than wood lagging. The loose gravel also undermined a concrete masonry block wall along the property line with the adjacent residence; the block wall was replaced in its entirety. The other major challenge occurred when Southern California Edison (SCE) replaced the electric power feed wire to Well 11 when the transformer was moved from one side of the well site to the other to create the space required for the new surge tank. The conduit carrying the wire in the street in front of the well was discovered to be damaged during SCE's work, and the conduit needed to be repaired. The City of Santa Ana required 30 weeks to issue the encroachment permit to repair the conduit delaying the project.

Contract Change Order No. 17:

Contract Change Order No. 17 includes the following three items:

- At Well 7, a temporary construction easement was obtained from the adjacent Segerstrom & Sons property, and the contractor stored materials there during construction. Due to the extended length of the project, the contractor was required to vacate their storage yard and move stored materials to other project well sites, and then to move the material back to Well 7 when needed for installation. The additional cost was \$4,573.00.
- At Wells 5 and 11, the intrusion alarm override switches inside the two well buildings were replaced at staff's request due to their poor condition. The additional cost was \$1,100.49.
- Due to the many challenges that occurred during construction, the contractor claimed additional project management administration costs and materials costs due to the lengthened schedule, and these costs were greater than the 15% change order markup allowed in the General Provisions in the construction contract. After negotiations, staff and the contractor agreed to an extended administrative cost of \$160,000 for the lengthened duration of the project.

Contract Change Order No. 17 in the amount of \$165,673.49 is attached as Exhibit "A". The Contract Change Order Summary is attached as Exhibit "B".

Final Acceptance:

Project Title:	Dyer Road Wellfield Surge Tanks
Project Nos.:	05473 and 06165
Design Engineer:	Tetra Tech
Construction Management by:	IRWD Staff
Contractor:	Pascal & Ludwig Constructors
Original Contract Cost:	\$3,693,000.00
Final Contract Cost:	\$4,966,214.51
Original Contract Days:	420
Final Contract Days:	857
Final Change Order Approved On:	January 27, 2020

FISCAL IMPACTS:

Projects 05473 and 06165 are included in the FY 2019-20 Capital Budget. The existing budget is sufficient to fund the final payment for the project.

ENVIRONMENTAL COMPLIANCE:

This activity is categorically exempt from the California Environmental Quality Act (CEQA) as authorized under the California Code of Regulations, Title 14, Chapter 3, Section 15301 (b) which provides exclusion for minor alteration of public facilities; Section 15302 which provides for replacement or reconstruction of existing structures and facilities where the new structure will be located on the same site as the structure replaced and will have substantially the same purpose; and Section 15303 which consists of exclusion for minor alteration of public facilities such as water and other utility extensions. A Notice of Exemption was filed with the Orange County Clerk-Recorder on May 25, 2016.

COMMITTEE STATUS:

This item was not reviewed by a Committee.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXECUTE CONTRACT CHANGE ORDER NO. 17 IN THE AMOUNT OF \$165,673.49 WITH PASCAL & LUDWIG CONSTRUCTORS, ACCEPT CONSTRUCTION OF THE DYER ROAD WELLFIELD SURGE TANKS, PROJECTS 05473 AND 06165, AUTHORIZE THE GENERAL MANAGER TO FILE A NOTICE OF COMPLETION, AND AUTHORIZE THE PAYMENT OF THE RETENTION 35 DAYS AFTER THE DATE OF RECORDING THE NOTICE OF COMPLETION.

LIST OF EXHIBITS:

Exhibit "A" – Contract Change Order No. 17
Exhibit "B" – Contract Change Order Summary

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EXHIBIT "A" CONTRACT CHANGE ORDER



Irvine Ranch Water District

15600 Sand Canyon Avenue
P.O. Box 57000
Irvine, CA 92619-7000
(949) 453-5300

C.O. No. 17
 Final

Project No. 05473/06165

Dyer Road Well Field Surge Tanks

Project Title

Date: December 31, 2019

THE FOLLOWING CHANGE TO CONTRACT, DRAWINGS AND SPECIFICATIONS IS PROPOSED.	\$ ADDITIONS	\$ DELETIONS	DAYS ±
1. Additional mobilization off temporary construction easement next to Well 7.	\$4,573.00	\$-0-	0
2. Intrusion alarm replacement at Well 5 and Well 11	\$1,100.49	\$-0-	0
3. Extended project management costs and materials	\$160,000.00	\$-0-	214
The project completion date is revised from January 30, 2019 to August 30, 2019..			
TOTAL	\$165,673.49	\$-0-	214

DAYS ±

1. NET AMOUNT THIS CHANGE ORDER	=	\$165,673.49	214
2. ORIGINAL CONTRACT AMOUNT	=	\$3,693,000.00	420
3. TOTAL PREVIOUS CHANGE ORDER(S)	=	\$1,107,541.02	223
4. TOTAL BEFORE THIS CHANGE ORDER (2+ 3)	=	\$4,800,541.02	643
5. PROPOSED REVISED CONTRACT AMOUNT TO DATE (1+4)	=	\$4,966,214.51	857

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

One Hundred Sixty Five Thousand Six Hundred Seventy Three and 49/100 ----- Dollars

12/31/19

Date

Pascal & Ludwig Constructors

Contractor

Alan T Ludwig

By

SIGNATURE	DATE	APPROVAL LEVEL REQUIRED
<u>H. Cuo</u> IRWD Engineer or Consulting Engineer	<u>1/23/2020</u> Date	Department Director Approval Required <input type="checkbox"/>
<u>Malcolm A. Cortez</u> Engineering Manager	<u>1/23/20</u> Date	Executive Director Approval Required <input type="checkbox"/>
_____ Executive Director of Technical Services	_____ Date	General Manager Approval Required <input type="checkbox"/>
_____ General Manager	_____ Date	Board Approval Required <input checked="" type="checkbox"/>
		Purchase Order No. _____

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

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

CSG-02

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EXHIBIT "B"

DRWF Surge Tanks
Project 05473 & 06165
Construction Change Order Summary

Contractor: Pascal & Ludwig
Design Engineer: Tetra Tech

											Contract Days				Original Completion Date:	
Original Contract Amount:											\$3,693,000.00				Original Days: 420	6/21/2018
Change Order	Description	Change Order Amount	Well 15 Shoring Related CO Amount	Previous Change Orders	Cumulative Total of Change Orders	Cumulative Total of Well 15 Shoring CO	Cumulative Total of All Other CO Items	% of Original Contract Amount	% of Original Contract Amount of Non-Well 15 Shoring CO Items	Revised Contract Amount	Change Order Days	Previous Change Orders	Cum. Total C.O. days	Revised Total Contract Days	Revised Completion Date	
1	Approved by Exe. Director of Engineering and Water Quality Approved on December 4, 2017 Electrical conduit change per SCE, Well 11 crane for column off-load, Class 250 valves, 16"x12" reducer for Well 15 , flange insulation kits	\$72,008.00	\$0.00	\$0.00	\$72,008.00	\$0.00	\$72,008.00	1.95%	1.95%	\$3,765,008.00	60	0	60	480	8/20/2018	
2	Approved by Exe. Director of Engineering and Water Quality Approved on April 13, 2018 Well 11 SCE conduit investigation, buried 12-inch insulating flange, crane to off surge tanks for Well 11 and 15, additional shoring column installation costs for Well 15	\$74,271.76	\$30,213.00	\$72,008.00	\$146,279.76	\$30,213.00	\$116,066.76	3.96%	3.14%	\$3,839,279.76	7	60	67	487	8/27/2018	
3	Approved by Exe. Director of Engineering and Water Quality Approved on May 2, 2018 Well 11 exploratory trench, Maples systems HML, new Orbit radios, grounding grid for 4 well sites	\$11,517.35	\$0.00	\$146,279.76	\$157,797.11	\$30,213.00	\$127,584.11	4.27%	3.45%	\$3,850,797.11	1	67	68	488	8/28/2018	
4	Approved by Board of Directors Approved on May 29, 2018 Additional shoring solumn installation costs, material costs for steel plates, credit for original bid amount for column installaiton at Well 15	\$317,977.00	\$317,977.00	\$157,797.11	\$475,774.11	\$348,190.00	\$127,584.11	12.88%	3.45%	\$4,168,774.11	42	68	110	530	10/9/2018	
5	Approved by Executive Director of Engineering and Water Quality Approved on July 5, 2018 Credit for trucking and soil disposal for Well 15 from original bid, Well 15 vault wall height increase, surge tank piping re-route due to conflict at Well 7	\$5,272.00	-\$10,679.00	\$475,774.11	\$481,046.11	\$337,511.00	\$143,535.11	13.03%	3.89%	\$4,174,046.11	3	110	113	533	10/12/2018	
6	Approved by Executive Director of Engineering and Water Quality Approved on July 25, 2018 Standby charges and additional shoring installation costs at Well 15, and early installation for the butterfly valve to the surge tank at Well 11	\$44,898.00	\$35,926.00	\$481,046.11	\$525,944.11	\$373,437.00	\$152,507.11	14.24%	4.13%	\$4,218,944.11	42	113	155	575	11/23/2018	
7	Approved by Executive Director of Engineering and Water Quality Approved on July 25, 2018 Modified demo process at Well 11, temporary power at Well 11, standby charge for temporary power, and additional CCTV video of neighbors' homes	\$41,920.38	\$0.00	\$525,944.11	\$567,864.49	\$373,437.00	\$194,427.49	15.38%	5.16%	\$4,260,864.49	5	155	160	580	11/28/2018	
8	Approved by Executive Director of Engineering and Water Quality Approved on October 1, 2018 Concrete encountered at early valve replacement at Well 11, temporary power at Well 11, and vibration monitoring at Well 11	\$38,148.68	\$0.00	\$567,864.49	\$606,013.17	\$373,437.00	\$232,576.17	16.41%	6.06%	\$4,299,013.17	5	160	165	585	12/3/2018	
9	Approved by Executive Director of Engineering and Water Quality Approved on November 8, 2018 Reciprocating compressors at Wells 5 and 7 rather than screw type compressors and wood lagging credit at Well 15	\$35,478.81	-\$9,132.92	\$606,013.17	\$641,491.98	\$364,304.08	\$277,187.90	17.37%	7.20%	\$4,334,491.98	15	165	180	600	12/18/2018	
10	Approved by General Manager Approved on January 4, 2019 Replace block wall that settled at Well 15, grout voids underneath Well 15 building, storm drain inlet at Well 11, and temporary power at Well 11	\$98,945.48	\$72,369.35	\$641,491.98	\$740,437.46	\$436,673.43	\$303,764.03	20.05%	7.29%	\$4,433,437.46	21	180	201	621	1/8/2019	
11	Approved by Board of Directors Approved on January 28, 2019 Remove concrete slurry from bottom of old surge tank at Well 11 and SCE primary conduit repair in street median at Well 11	\$145,259.55	\$0.00	\$740,437.46	\$885,697.01	\$436,673.43	\$449,023.58	23.98%	10.76%	\$4,578,697.01	22	201	223	643	1/30/2019	
12	Approved by Executive Director of Engineering and Water Quality	\$57,046.40	\$2,198.00	\$885,697.01	\$942,743.41	\$438,871.43	\$503,871.98	25.53%	11.94%	\$4,635,743.41	0	223	223	643	1/30/2019	

Original Contract Amount: \$3,693,000.00											Original Days: 420			6/21/2018	
Change Order	Description	Change Order Amount	Well 15 Shoring Related CO Amount	Previous Change Orders	Cumulative Total of Change Orders	Cumulative Total of Well 15 Shoring CO	Cumulative Total of All Other CO Items	% of Original Contract Amount	% of Original Contract Amount of Non-Well 15 Shoring CO Items	Revised Contract Amount	Change Order Days	Previous Change Orders	Cum. Total C.O. days	Revised Total Contract Days	Revised Completion Date
	Approved on March 13, 2019 Soft soil at Well 11 surge tank excavation and pipe, Well 15 control panel relocation, Well 11 SCE pull box size increase, relabel PLC I/O points														
13	Approved by Executive Director of Engineering and Water Quality Approved on May 13, 2019 Additional paving, HMI screens, Well 11 canopy trim, curb and gutter replacement, NPDES permit extension	\$48,588.16	\$0.00	\$942,743.41	\$991,331.57	\$438,871.43	\$552,460.14	26.84%	12.97%	\$4,684,331.57	0	223	223	643	1/30/2019
14	Approved by Executive Director of Engineering and Water Quality Approved on June 7, 2019 Change to vertical compressors at Well 11 and Well 15, deduction for not painting compressor enclosure at Well 5 and Well 7, move pipe bollard at Well 5 due to SCE conduit conflict	\$31,428.64	\$0.00	\$991,331.57	\$1,022,760.21	\$438,871.43	\$583,888.78	27.69%	13.58%	\$4,715,760.21	0	223	223	643	1/30/2019
15	Approved by Executive Director of Engineering and Water Quality Approved on Aug. 16, 2019 Remove air vacuum valves from surge tanks, additional PLC/MCC wiring at Well 11 and Well 15, and air compressor size increase and control panel location change at Well 5 and Well 7	\$43,871.05	\$0.00	\$1,022,760.21	\$1,066,631.26	\$438,871.43	\$627,759.83	28.88%	14.48%	\$4,759,631.26	0	223	223	643	1/30/2019
16	Approved by Executive Director of Engineering and Water Quality Approved on Nov. 15, 2019 Price increase for steel and rock and backfill materials and additional cost required to install new HMI screens on the new PLC cabinets	\$40,909.76	\$0.00	\$1,066,631.26	\$1,107,541.02	\$438,871.43	\$668,669.59	29.99%	15.08%	\$4,800,541.02	0	223	223	643	1/30/2019

January 27, 2020
Prepared by: J. Davis / T. Fournier
Submitted by: R. Jacobson / C. Clary
Approved by: Paul A. Cook

P. A. Cook

CONSENT CALENDAR

2020 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 IRWD legal counsel, have prepared the required Remarketing Statement. Staff recommends the Board adopt a resolution approving the 2020 ITN Remarketing Statement.

BACKGROUND:

IRWD currently has \$77.5 million of ITNs, the 2011 A-1 issue of \$46.5 million and 2011 A-2 issue of \$31.0 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 2019 at the SIFMA weekly index with a spread of minus one basis point, resulting in an all-in rate for 2019 of 1.58%. 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 4, 2020.

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 \$77.5 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 4, 2020.

COMMITTEE STATUS:

This item was not reviewed by a Committee due to the cancellation of the Finance and Personnel Committee meeting in January. The Remarketing Statement was provided to Finance and Personnel Committee members on January 14, 2020.

RECOMMENDATION:

THAT THE BOARD APPROVE THE 2020 INDEX TENDER NOTES REMARKETING STATEMENT, AND ADOPT THE FOLLOWING RESOLUTION BY TITLE:

RESOLUTION NO. 2020-5

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 1/14/20

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]

\$46,500,000
BONDS OF IRVINE RANCH WATER DISTRICT
REFUNDING SERIES 2011A-1
CUSIP†: 4636324Q9

\$31,000,000
BONDS OF IRVINE RANCH WATER DISTRICT
REFUNDING SERIES 2011A-2
CUSIP†: 4636324R7

Date of Initial Delivery: April 15, 2011 Scheduled Mandatory Tender Date: March 3, 2021 Due: October 1, 2037
Price: 100% Call Protection Date: September 4, 2020

This Remarketing Statement replaces the Remarketing Statement dated January 30, 2019, as supplemented on February 5, 2019, 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 6, 2020.

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 6, 2020 with the Scheduled Mandatory Tender Date on March 3, 2021; 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 6, 2020, 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 6, 2020 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© 2020 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 3, 2021. 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 6, 2020 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 6, 2020 following their mandatory tender.

Goldman Sachs & Co. LLC
Remarketing Agent

Dated: January 28, 2020

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

Mary Aileen Matheis, *President*
Douglas J. Reinhart, *Vice President*
Steven E. LaMar
Peer A. Swan
John B. Withers

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]

TABLE OF CONTENTS

	Page
INTRODUCTION	1
Purpose.....	1
The District	2
The Series 2011A Bonds.....	2
Improvement Districts.....	3
Security for the Series 2011A Bonds	4
Professionals Involved in the Remarketing.....	6
Summaries Not Definitive	6
Additional Information	7
THE SERIES 2011A BONDS	7
General.....	7
Payment of Interest	8
Determination of Index Tender Rates and Index Rate Accrual Periods for Series 2011A Bonds in Index Mode	8
Mandatory Tender for Purchase.....	9
Purchase of Series 2011A Bonds	10
Remarketing and Purchase of Series 2011A Bonds in Connection with Scheduled Mandatory Tender	11
Remarketing and Purchase of Series 2011A Bonds in Connection with Unscheduled Mandatory Tender	13
Changes in Mode	15
Mandatory Purchase of Series 2011A Bonds.....	16
Undelivered Bonds.....	16
Refinancing and Related Risks	16
Redemption of Series 2011A Bonds	17
Selection of Series 2011A Bonds for Redemption.....	18
Notice of Redemption	18
Allocation of Credits for Purchased or Redeemed Series 2011A Bonds	19
Book-Entry Only System	20
SECURITY FOR THE SERIES 2011A BONDS	20
General.....	20
Pledge of Assessment Proceeds and Revenues	22
Allocation of Monies Under the Indentures.....	23
Existing Parity Obligations	25
Limitations on Parity and Superior Obligations.....	25
Investment of Monies in Funds and Accounts Under the Indentures	27
THE IRVINE RANCH WATER DISTRICT	27
CONTINUING DISCLOSURE.....	27
LITIGATION	28
General.....	28
Biosolids Litigation.....	28
RATINGS	29
TAX MATTERS.....	30
Original Opinions.....	30
No Updated Co-Bond Counsel Opinions.....	30
General Considerations.....	30

REMARKETING AGENT	31
APPROVAL OF LEGAL MATTERS.....	32
INDEPENDENT ACCOUNTANTS	32
MISCELLANEOUS	1
APPENDIX A IRVINE RANCH WATER DISTRICT	A-1
APPENDIX B AUDITED FINANCIAL STATEMENTS.....	B-1
APPENDIX C SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURES.....	C-1
APPENDIX D CO-BOND COUNSEL OPINIONS.....	D-1
APPENDIX E BOOK-ENTRY SYSTEM	E-1
APPENDIX F FORM OF CONTINUING DISCLOSURE CERTIFICATE	F-1

REMARKETING STATEMENT

\$46,500,000	\$31,000,000
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 30, 2019, as supplemented on February 5, 2019, 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, together with the Original 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 6, 2020. 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 6, 2020 with the Scheduled Mandatory Tender Date of March 3, 2021; 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 6, 2020, 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 6, 2020 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 \$46,500,000 aggregate principal amount of the Series 2011A-1 Bonds and \$31,000,000 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 6, 2020. 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 6, 2020. 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 seven 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 6, 2020 with the Scheduled Mandatory Tender Date of March 3, 2021 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 3, 2021. 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, 2019: (i) Improvement District No. 125 had \$305,517,268 aggregate principal amount of authorized but unissued *ad valorem* assessment bonds and \$179,344,506 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 \$251,267,128 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 2020 assessed value of the land in Improvement District No. 125 is \$45,924,240,097, 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 2020 assessed value of the land in Improvement District No. 225 is \$39,234,190,651, 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 2020 assessed value of the land in coterminous Improvement District Nos. 113 and 213 is \$1,186,452,170.

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	\$ 2,325,000	5.00%
125	21,715,500	46.70
213	2,929,500	6.30
225	<u>19,530,000</u>	<u>42.00</u>
Total	<u>\$ 46,500,000</u>	<u>100.00%</u>

SERIES 2011A-2 BONDS

<i>Improvement District No.</i>	<i>Included Amount</i>	<i>Included Percentage</i>
113	\$ 1,550,000	5.00%
125	14,477,000	46.70
213	1,953,000	6.30
225	<u>13,020,000</u>	<u>42.00</u>
Total	<u>\$ 31,000,000</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.

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 6, 2020 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 6, 2020 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 6, 2020 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 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).

Index Spread; Adjustment of Index Spread. Promptly after the Remarketing Agent determines the Index Spread for the Tender Period commencing on February 6, 2020, the District will publish it by supplementing this Remarketing Statement and posting the supplement with EMMA. With respect to

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

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 6, 2020 and will have a Scheduled Mandatory Tender Date of March 3, 2021. 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 6, 2020, the Scheduled Mandatory Tender Date is March 3, 2021 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 September 4, 2020 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 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 6, 2020 is September 4, 2020.

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 teletype 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 6, 2020 is September 4, 2020.

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 3, 2021 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 6, 2020 is September 4, 2020.

Mandatory Redemption. The Series 2011A-1 Bonds are subject to mandatory redemption in part on October 1, 2020 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>
2020	\$1,800,000
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, 2020 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>
2020	\$1,200,000
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.

Notwithstanding the foregoing, so long as the Installment Sale Agreement, dated as of February 1, 2010 (the “**2010 Installment Sale Agreement**”), by and between the District and the Irvine Ranch Water District Water Service Corporation remains in effect, the District will need to comply with the requirements set therein regarding the rate covenant, which are identical to those set forth in the prior paragraph except that the Assessment Proceeds (and any assessment proceeds related to other Parity Obligations) which are applied as a credit to Debt Service above are included as revenues for purposes of such calculation and the definition of Aggregate Debt Service in the 2010 Installment Sale Agreement does not provide an offset for debt service paid from Assessment Proceeds (and any assessment proceeds related to other Parity Obligations) associated with Revenue Enhancement Agreements. The 2010 Installment Sale Agreement is scheduled to mature in 2020.

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 2010 Installment Sale Agreement, securing the District's Certificates of Participation, Irvine Ranch Water District Refunding Series 2010 (the "**2010 Certificates**") currently outstanding in the aggregate principal amount of \$1,980,000;
- (vi) the District's Series 2010B Bonds currently outstanding in the aggregate principal amount of \$175,000,000;
- (vii) 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
- (viii) 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

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).

Notwithstanding the foregoing, so long as the 2010 Installment Sale Agreement remains outstanding, the District will need to comply with the requirements set therein for the issuance of Parity Obligations, which are identical to those set forth in clauses (a), (b) and (c) above except that the Assessment Proceeds (and any assessment proceeds related to other Parity Obligations) which are applied as a credit to Debt Service in clauses (a) and (b) above are included as revenues for purposes of such calculation and the definition of Aggregate Debt Service in the 2010 Installment Sale Agreement does not provide an offset for debt service paid from Assessment Proceeds (and any assessment proceeds related to other Parity Obligations) associated

with Revenue Enhancement Agreements. The 2010 Installment Sale Agreement is scheduled to mature in 2020.

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 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.

[TO BE UPDATED] 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: (i) 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; and (ii) the Annual Reports for Fiscal Year 2013 and 2014, when originally filed, were not linked by CUSIP to the EMMA page for the 2010 Certificates despite the District’s effort to link such Annual Reports to the CUSIPs for all District obligations. 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.

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.

The court has scheduled an October 2020 trial date with respect to FBB's complaint and the District's cross-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 7, 2018.

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 6, 2020. 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. 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. 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, 2019, 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

TABLE OF CONTENTS

INTRODUCTION 1

THE IRVINE RANCH WATER DISTRICT 1

General..... 1

Board of Directors and General Manager..... 2

Employees..... 4

Pension Benefits 4

Other Post-Employment Benefits 8

Budget Process..... 9

Water and Sewer System Insurance..... 10

Time and Manner of Payments for Service Charges 10

Outstanding Indebtedness 11

Variable Rate Debt Management..... 15

Current Investments 15

Historic Net Real Estate Income..... 16

Projected Net Real Estate Income..... 17

1% Property Tax Revenues..... 17

Alternative Method of Tax Apportionment – “Teeter Plan”..... 18

Governmental Regulations..... 18

WATER SUPPLY 19

Imported Water 19

Groundwater 20

Water Use Efficiency..... 27

Water Supply Reliability 29

Recycled Water..... 31

Historic and Projected Water Supply..... 32

THE WATER SYSTEM..... 33

General..... 33

Historic Water Connections..... 34

Projected Water Connections..... 35

Connection Fees..... 35

Historic Water Deliveries/Sales..... 36

Projected Water Deliveries/Sales..... 36

Historic Water Sales and Service Charge Revenues..... 37

Projected Water Sales and Service Charge Revenues..... 37

Largest Water Customers..... 38

Water System Rates and Charges 38

THE SEWER SYSTEM 40

General..... 40

Historic Sewer System and Recycled Water Connections..... 41

Projected Sewer and Recycled Water Connections 41

Connection Fees..... 42

Historic Sewer Daily Average Flow 42

Projected Sewer Daily Average Flow 42

Historic Recycled Water Sales and Sewer Service Charge Revenues 43

Projected Recycled Water Sales and Sewer Service Charge Revenues..... 43

Largest Sewer and Recycled Water Service Customers 44

Sewer System Rates and Charges 44

FUTURE CAPITAL IMPROVEMENTS..... 45

Solids Handling..... 45

OCSD CORF/Equity..... 46

Water Supply Reliability	46
Development-Related Expansion.....	46
Replacement and Refurbishment	46
Operational Improvements.....	46
WATER AND SEWER SYSTEM FINANCIAL INFORMATION	46
Financial Statements	46
Reduction in BAB Credits	47
Historic Operating Results and Debt Service Coverage	47
Projected Operating Results and Debt Service Coverage	49
THE IMPROVEMENT DISTRICTS	51
General.....	51
Improvement District Nos. 125 and 225	52
Improvement District Nos. 113 and 213	59
CONSTITUTIONAL LIMITATIONS ON APPROPRIATIONS AND CHARGES.....	63
Proposition 218.....	63
Proposition 26.....	64
Article XIII A.....	64
Article XIII B.....	65
Future Initiatives	65

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 an internal financial model known as the “**District Enterprise Model**.” The District Enterprise Model is a capital planning and budgeting tool 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 utilized in the District Enterprise Model 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 for use in the District Enterprise Model.

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 seven 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 116,500 potable and non-potable water and

approximately 111,000 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 seven 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. 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, and who currently sit, at large 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 will take place for two members of the Board of Directors in November 2020 and 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:

Mary Aileen Matheis. Ms. Matheis was initially appointed to the District's Board of Directors in 1988 to fill a vacancy and has since been elected to subsequent terms. Ms. Matheis currently serves as President and previously served as Vice President in 2005, 2011 and 2019. She previously served as President in 2001, 2012 and 2016. She currently serves on the Water Resources Policy and Communications Committee. Ms. Matheis is a practicing lawyer and member of the California Bar and is also admitted to practice in the Supreme Court of the United States and the United States Tax Court. Ms. Matheis holds a bachelor's degree and master's degree in Communications and she received her Juris Doctorate from Western State University School of Law and was admitted to the California Bar in 1982. Ms. Matheis' activities in other water areas include service on the Legal Affairs Committee of ACWA and as a member of Independent Special Districts of Orange County Executive Committee. Ms. Matheis is a member of the Colorado River Water Users Association and the Colorado River Foundation. Ms. Matheis is also the District representative to the Independent Special Districts of Orange County and a board member of the Water Education Foundation. Ms. Matheis is active in the Orange County Bar Association, a member of the Real Estate Section Executive Committee and the Probate and Estate Planning Section. Ms. Matheis is also on the Orange County Assessment Appeals Panel for Property Tax Appeals. Ms. Matheis' current term ends in November 2020.

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 Vice President and

previously served as Vice President in 2016. He served President in 2007, 2009 to 2010, 2013 and 2017 to 2018. He currently serves on the District's Supply Reliability Committee and is chair of the Engineering and Operations 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. Mr. Reinhart 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. Mr. Reinhart 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 Water Reuse Association. In addition, Mr. Reinhart is a member of the American Society of Civil Engineers. Mr. Reinhart's current term ends in November 2022.

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 Committee. 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 Supply Reliability and Finance and Personnel Committees. 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.

John B. Withers. 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 previously served as Vice President in 2012 and President in 2004. He currently serves on the District's Water Resources Policy and Communications 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. Mr. Withers 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. Mr. Withers 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 2020.

General Manager. Paul A. Cook, the General Manager of the District, heads a staff of approximately 412 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 383 regular employees and 29 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 233 employees, the Non-Exempt Supervisors Unit includes 28 employees, and 122 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

In 2012, the Governmental Accounting Standards Board (“**GASB**”) adopted standards (GASB Statement No. 68, or “**GASB 68**”) with respect to accounting and financial reporting by state and local government employers for defined benefit pension plans. The reporting requirements took effect in the fiscal year ended June 30 (“**Fiscal Year**”), 2015. GASB 68 is a change in accounting reporting and disclosure requirements, but it does not change the District's pension plan funding obligations. The standards revised the accounting treatment of defined benefit pension plans, changing the way expenses and liabilities are calculated and how state and local government employers report those expenses and liabilities in their financial statements. Major changes included the following: (i) unfunded pension liabilities are shown on the government's balance sheet (previously, such unfunded liabilities were typically included as notes to the government's financial statements); (ii) pension expense incorporates more rapid recognition of actuarial experience and investment returns and is no longer based on the employer's actual contribution amounts; (iii) lower actuarial discount rates are required to be used for underfunded plans in certain cases for purposes of the financial statements; (iv) closed amortization periods for unfunded liabilities are required to be used for certain purposes of the financial statements; and (v) the difference between expected and actual investment returns will be recognized over a five-year smoothing period. Based on the adoption of the accounting standards, the annual required contribution (the “**ARC**”) and the annual pension expense are different. For additional

information relating to the District's plan, see Note 13 to the District's audited financial statements for Fiscal Year 2019 attached to the Remarketing Statement as Appendix B.

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 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.

In Fiscal Year 2018, the District implemented GASB Implementation Guide No. 2017-1 relating to accounting and reporting of net pension liability and the Pension Benefits Trust. Under the issued guidance, balances and activities of the Pension Benefits Trust are not considered part of the pension plan and cannot be used to offset the net pension liability for financial statement reporting, and are instead reflected as assets of the District. As of June 30, 2019, the District reflected a net pension liability of approximately \$64.1 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, the pension assets cover 103.2% 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 the 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 Fiscal Year 2019 was \$2.7 million and the unfunded accrued liability was \$4.5 million, for a total contribution of \$7.2 million. The District's estimated total contributions, including normal and unfunded accrued liabilities, for Fiscal Years 2020 and 2021 are expected to be approximately \$7.9 million and \$8.3 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 the issue 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. As of June 30, 2019, the fair market value of the assets in the Pension Benefits Trust was approximately \$78.4 million. The District did not make any additional contributions to the Pension

Benefits Trust in Fiscal Year 2019 and as of December 31, 2019, the District has not made any additional contributions to the Pension Benefits Trust for Fiscal Year 2020. 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 2019 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 2019 is shown below.

Actuarial Cost Method	Entry Age Normal in accordance with the requirements of 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
Investment Rate of Return	7.50% net of pension plan investment and administrative expenses; includes projected inflation rate of 2.50%
Mortality Rate Table ⁽¹⁾	Derived using CalPERS’ membership data for all funds
Post-Retirement Benefit Increase	Contract COLA up to 2.00% 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

(1) Figures are as of the measurement dates of June 30, 2015, June 30, 2016, June 30, 2017 and June 30, 2018, which apply to the Fiscal Years ended June 30, 2016, June 30, 2017, June 30, 2018 and June 30, 2019, 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, 2018	\$ 264,399	\$ 197,718	\$ 66,681
Changes	<u>11,058</u>	<u>13,602</u>	<u>(2,544)</u>
Balance at June 30, 2019	\$ 275,457	\$ 211,320	\$ 64,137

(1) Excludes assets held in Pension Benefits Trust, in accordance with GASB Implementation Guide No. 2017-1 (described above). As of June 30, 2019, the Pension Benefits Trust had assets of \$73.1 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)	\$101,766	\$64,137	\$32,971

⁽¹⁾ Excludes assets held in Pension Benefits Trust, in accordance with GASB Implementation Guide No. 2017-1 (described above).

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 2019, the District’s payroll for the related part-time and temporary employees who are covered by the plan was \$162,706. The eligible employees contributed \$11,675. 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 2019 is \$19,000. 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 2019, the District contributed \$1,090,432 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.

Other Post-Employment Benefits

In 2015, GASB adopted standards (GASB Statement No. 75, or “**GASB 75**”) with respect to accounting and financial reporting by state and local government employers for postemployment benefits other than pensions (“**OPEB**”). The reporting requirements took effect in Fiscal Year 2018. Based on the adoption of the accounting standards, beginning with the Fiscal Year 2018 actuarial valuation, the annual required contribution and the annual OPEB expense are different. GASB 75 is a change in accounting reporting and disclosure requirements, but it does not change the District’s OPEB plan funding obligations. The standards affected the accounting treatment of OPEB plans, changing the way expenses and liabilities are calculated and how state and local government employers report those expenses and liabilities in their financial statements. Major changes include the following: (i) unfunded OPEB liabilities are shown on the government’s balance sheet (previously, such unfunded liabilities were typically included as notes to the government’s financial statements); (ii) OPEB expense incorporates more rapid recognition of actuarial experience and investment

returns and is no longer based on the employer's actual contribution amounts; (iii) lower actuarial discount rates are required to be used for underfunded plans in certain cases for purposes of the financial statements; and (iv) closed amortization periods for unfunded liabilities are required to be used for certain purposes of the financial statements.

The District currently has three OPEB programs: 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 \$136.00 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 2019, the District contributed approximately \$163,000 on behalf of retirees participating in the PEMHCA program and had approximately \$216,000 for the estimated implied subsidy.

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 each case for up to five years. In Fiscal Year 2019, the District contributed approximately \$332,000 on behalf of retirees participating in the Retiree Health Costs Reimbursement Plan.

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 2019, the District contributed approximately \$10,000 on behalf of retirees participating in this program.

Under GASB 75, the District had a total OPEB liability of approximately \$16.7 million as of June 30, 2019. The OPEB contributions for the District's various OPEB plans are based on pay-as-you-go requirements. During Fiscal Year 2019, the District's contributions totaled \$0.7 million.

For additional information relating to the District's OPEB obligations, see Note 14 to the District's audited financial statements for Fiscal Year 2019 attached to the Remarketing Statement as Appendix B.

Budget Process

Prior to July 1 of each second year, the General Manager prepares an operating budget for the period commencing on July 1 and ending on the second succeeding June 30. 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.

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 the California State Association of Counties Excess Insurance Authority (“CSAC-EIA”). 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 CSAC-EIA. Pollution and legal liability coverage for the Irvine Desalter Project is provided by a policy with Chubb Insurance Company. Settlements have not exceeded coverage for each of the past three Fiscal Years.

In addition to maintaining cyber insurance through CSAC-EIA, 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.

In September 2018, Senate Bill 998 (Dodd) (“SB 998”) was signed by the State Governor. The bill included revised requirements for residential shutoffs due to delinquent payments or non-payment, requires compliance by February 1, 2020 and applies to any water agency with more than 200 service connections. The bill requires agencies to adopt a written shutoff policy and to provide the policy to customers if their water service is subject to being discontinued due to nonpayment.

The District’s Board of Directors adopted an SB 998-compliant policy on December 16, 2019. 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.

Outstanding Indebtedness

Improvement District Indebtedness. As of December 31, 2019, the District had \$540,700,000 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, 2019.

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, 2019</i>
Waterworks Bonds				
112	\$ 28,512,300	\$ 8,111,479	\$ 20,400,821	\$ 7,384,479
113⁽¹⁾	25,769,500	16,299,920	9,469,580	14,037,420
125⁽¹⁾⁽²⁾	735,246,000	429,728,732	305,517,268	179,344,506
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	1,584,618
Total Waterworks Bonds	<u>\$ 1,053,340.800</u>	<u>\$ 467,823.883</u>	<u>\$ 585,516.917</u>	<u>\$211,445,156</u>
Sewer Bonds				
1 ⁽³⁾	\$ 2,000,000	\$ 2,000,000	\$ 0	\$ 0
212	108,712,000	26,013,323	82,698,677	24,070,323
213⁽¹⁾	87,648,000	28,565,396	59,082,604	22,947,396
225⁽¹⁾⁽⁴⁾	856,643,000	493,304,113	363,338,887	251,267,128
240	117,273,000	49,722,056	67,550,944	16,920,867
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	363,106
Total Sewer Bonds	<u>\$ 1,324,836.000</u>	<u>\$ 613,734.018</u>	<u>\$ 711,101.983</u>	<u>\$329,254,844</u>
Total District	<u>\$ 2,378,176.800</u>	<u>\$1,081,557.900</u>	<u>\$ 1,296,618.900</u>	<u>\$540,700,000</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, 2019

<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	\$ 28,300,000	U.S. Bank National Association	12/15/21	\$ 28,681,468	\$ 0
Series 2008A	46,500,000	Sumitomo Mitsui Banking Corp.	07/21/21	47,187,945	0
Series 2009A	55,000,000	U.S. Bank National Association	12/15/21	55,614,795	0
Series 2009B	<u>55,000,000</u>	Bank of America, N.A.	05/16/22	<u>55,614,795</u>	<u>0</u>
TOTAL	<u>\$ 184,800,000</u>			<u>\$ 187,099,003</u>	<u>\$ 0</u>

Source: The District.

- 2010 Installment Sale Agreement. In 2010, the District entered into an Installment Sale Agreement (the “**2010 Installment Sale Agreement**”) in connection with the execution and delivery of the District’s \$85,145,000 aggregate principal amount of Certificates of Participation Irvine Ranch Water District Refunding Series 2010. The 2010 Installment Sale Agreement was outstanding as of December 31, 2019 in the aggregate principal amount of \$1,980,000 and matures in 2020. The District’s obligation to make installment payments pursuant to the 2010 Installment Sale Agreement is payable from Net Revenues on a parity with the Series 2011A Bonds and other Parity Obligations.

- 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, 2019 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, 2019 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, 2019 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, 2019, 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 (the "**Swaps**").

The Swaps are evenly distributed, as to notional amount on a particular transaction 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 financial statements attached as Appendix B to the Remarketing Statement. 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, but are subordinate to the District's obligation to pay the Series 2011A Bonds and debt service on other Parity Obligations. Any amounts received by the District pursuant to the Swaps also constitute Revenues and, as such, are pledged for the payment of the Series 2011A Bonds and other Parity Obligations. As of December 31, 2019, the mark-to-market value of the total interest rate swaps with Citibank and Merrill did not exceed the 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, interest rates may vary from assumptions, the District may be required to post collateral in certain circumstances, or the District may be required to make significant payments 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 counterparties with respect to the other Swaps. The District cannot predict if any such event will occur with respect to one or more of the District's existing or future 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 payments in a fixed amount and receives payments from each Swap counterparty in a variable amount that is based on the one-month London Interbank Offered Rate ("**LIBOR**"), a rate determined by certain London banks. In September 2012, the government of the United Kingdom published the results of its review of LIBOR (commonly referred to as the "**Wheatley Review**"). The Wheatley Review made a number of recommendations for changes with respect to LIBOR, including the introduction of statutory regulation of LIBOR, the transfer of responsibility for LIBOR from the British Bankers' Association to an independent administrator, changes to the method of compilation of lending rates and new regulatory oversight and enforcement mechanisms for rate setting. Based on the Wheatley Review, final rules for the regulation and supervision of LIBOR by the Financial Conduct Authority (the "**FCA**"), a regulatory authority in the United Kingdom, were published and came into effect on April 2, 2013 (the "**FCA Rules**").

The FCA Rules include requirements that: (1) an independent LIBOR administrator monitor and survey LIBOR submissions to identify breaches of practice standards and/or potentially manipulative behavior; and (2) firms submitting data to LIBOR establish and maintain a clear conflicts of interest policy and appropriate systems and controls. In addition, in response to the Wheatley Review recommendations, ICE Benchmark Administration Limited (the "**ICE Administration**") was appointed as the independent LIBOR administrator, effective February 1, 2014.

On July 27, 2017, the FCA announced that it will no longer persuade or compel banks to submit rates for the calculation of the LIBOR rates after 2021 (the "**FCA Announcement**"). The District's Swaps do not mature until 2029, which is well after the expected termination of LIBOR. It is not possible to predict the effect of the FCA Rules, the FCA Announcement, any changes in the methods pursuant to which the LIBOR rates are determined and any other reforms to LIBOR that will be enacted in the United Kingdom or elsewhere, which may adversely affect the trading market for LIBOR-based securities or result in the phase-out of LIBOR

as a reference rate for securities. In addition, any changes announced by the FCA, including the FCA Announcement, by the ICE Administration or by any other successor governance or oversight body, or future changes adopted by such body, in the method pursuant to which the LIBOR rates are determined may result in a sudden or prolonged increase or decrease in the reported LIBOR rates. If a change in LIBOR rates were to occur, and to the extent that the value of LIBOR-based securities is affected by reported LIBOR rates, the level of interest payments and the value of the securities may be affected. Further, uncertainty as to the extent and manner in which the Wheatley Review recommendations will continue to be adopted and the timing of such changes may adversely affect the current trading market for and value of LIBOR-based securities such as the District's Swaps. The District continues to monitor and evaluate alternatives in anticipation of the expected termination of LIBOR in 2021.

- 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 additional obligations: (i) a fiscal services agreement with the State of California Department of Water Resources, with a loan balance of approximately \$454,664 as of December 31, 2019 and final payment due in 2025; and (ii) a promissory note payable to Foothill/Eastern Transportation Corridor Agency with a remaining balance of approximately \$471,000 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, 2019, the District had investments (excluding the real estate investments that are described below) of approximately \$369.9 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	\$ 198.2	53.58%
Local Agency Investment Fund	61.1	16.52
United States Treasury Securities	<u>110.6</u>	<u>29.90</u>
Total	\$ 369.9	100.00%

⁽¹⁾ As of December 31, 2019. 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 \$72.6 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 three commercial office buildings (the "**Irvine Market Place**," the "**Waterworks Business Park**" and the "**Sand Canyon Professional Center**"), with market values well in excess of the original investments, and a parcel of land known as the "**Sand Canyon General Office**." In 2018, the District began construction of a 70,000 square foot for-lease two-story office building on the Sand Canyon General Office parcel. The building is expected to be available for lease in 2020. 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 from which are reflected in Tables 6 and 7 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, 2019 was approximately \$229.6 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 eight-month 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 will be due in a single lump sum on or before April 30, 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>
2015	\$8,191
2016	8,693
2017	9,076
2018 ⁽¹⁾	3,405
2019	8,372

⁽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.”

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⁾
2020 ⁽²⁾	\$10,267
2021 ⁽³⁾	10,900
2022	11,118
2023	11,340
2024	11,567

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

⁽²⁾ Projected income includes payments on the note delivered in connection with the District’s sale of the Lake Forest Serrano Summit property. The note matures in Fiscal Year 2020. See the caption “—Current Investments.” Also includes expenses associated with development agreement obligations to the City of Lake Forest related to Lake Forest Serrano Summit property.

⁽³⁾ Fiscal Year 2021 and future Fiscal Years include anticipated lease income from the Sand Canyon Professional Center Building. 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>
2015	\$33,128
2016	34,871
2017	37,375
2018	40,483
2019	43,581

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."

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, 2019, of the water supplied by the District, approximately 16% was imported water, approximately 59% was groundwater and native stream flows and approximately 25% 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, 2019 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 2019, the District purchased approximately 13,940 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, 2019 is \$1,050 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, 2019, total \$105,512 per month, while the service connection charge is paid annually and, for Fiscal Year 2019, 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 BEA of approximately \$1.7 million for Fiscal Year 2016, \$1.8 million for Fiscal Year 2017 and \$2.25 million for Fiscal Year 2019. 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.” As a result of this litigation, the District expects that all or a portion of BEA payments for Fiscal Years 2016, 2017 and 2019 could be refunded to the District in the event that the litigation is resolved favorably to the District. 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 46,630 acre feet of water from the Orange County groundwater basin in Fiscal Year 2019. The District currently pays OCWD a replenishment assessment of \$487 per acre foot for all groundwater pumped and a BEA equal to an additional \$547 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 2019, the Irvine Desalter Project provided a combined total potable and non-potable water production of approximately 6,060 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 of groundwater in each of Fiscal Years 2018 and 2019. 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 and a Fifth Amended Complaint on June 12, 2019. The Fifth 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 Fifth 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 Fifth 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 Fifth 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 Fifth 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).

The third phase of trial (designated as Phase 2a), which will address the District's claims concerning the Production Limitation and Surcharge (as discussed above), is scheduled to occur on March 27, 2020. A trial date has not yet been scheduled with respect to the dispute relating to the 1933 Judgment. The District is not entitled to file an appeal as of right on the Trial Court's ruling until a final judgment is entered on all phases of trial.

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 2018 and 2019, the Irvine Desalter Potable Water Project produced approximately 4,620 acre feet and 3,960 acre feet of groundwater, respectively. The reduction in Fiscal Year 2019 was the result of the Irvine Desalter Potable Water Project being offline for several months during such Fiscal Year.

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 2018 and 2019, the El Toro Groundwater Remediation Project produced approximately 3,620 acre feet and 3,483 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 2018 and 2019, the Shallow Groundwater Unit treated approximately 610 acre feet and 630 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⁽¹⁾</i>	<i>Irvine Sub-basin</i>	<i>Other⁽²⁾</i>	<i>Total</i>
2015	28,305	8,600	8,661	3,552	1,114	50,232
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

- ⁽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, which was out of service in Fiscal Year 2015, and Kern County Water Bank. 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 must 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 is 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. The State Water Resources Control Board (the "SWRCB") Division of Drinking Water (the "Division") has lowered the Notification Levels for Perfluorooctanoic acid ("PFOA") and Perfluorooctanesulfonic acid ("PFOS") to 5.1 and 6.5 parts per trillion ("PPT"), respectively. PFOA and PFOS are fluorinated organic chemicals which are part of a family of compounds referred to as per- and polyfluoroalkyl substances ("PFAS"). PFAS are synthetic compounds that are water and lipid resistant and are useful for a variety of manufacturing processes and industrial applications.

The District believes that PFAS have been in the Orange County groundwater basin in very low concentrations for many years. Recent technological advances enabled water agencies to detect PFAS compounds at such low concentrations, and PFAS has been detected in at least one of the District's groundwater wells (the Orange Park Acres well) in concentrations above the Notification Levels. The District has voluntarily stopped pumping groundwater from this well and, together with OCWD, has initiated a study of potential groundwater treatment options. See footnote 2 in Table 9 under the subcaption "—Historic Groundwater Supply" above.

The District understands that the Division may lower the Response Levels for PFOA and PFOS from 70 PPT, combined, to about 10 to 12 PPT, each. The District's goal is to ensure that all potable groundwater served to customers does not contain PFAS in amounts which are above the Notification Levels, which are lower than the Response Levels. The District has significant water supplies which are not impacted by the presence of PFAS.

The District does not anticipate that implementation of the proposed lower Response Levels would have a material adverse effect on the operation of the Water System or the operating costs thereof, although the District may be required to undertake additional treatment procedures in order to ensure that groundwater which is served to customers meets the proposed lower Response Levels. 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 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%) and 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 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 76,000 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, the District executed a short-term agreement with the Central Coast Water Authority which provided for the delivery and storage of 578 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 to be 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 78,177 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 35,731 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, 2019 (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, 2019 (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	42,334	29,952
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	49,649	35,731

⁽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. As of December 31, 2019, 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.

Recycled Water

During Fiscal Year 2019, the District produced 22,382 acre feet of recycled water and supplied an additional 5,297 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, 2019, the District had approximately 555 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>Local Water⁽²⁾</i>	<i>Imported Water</i>	<i>Recycled Water</i>	<i>Total</i>
2015	54,057	18,628	22,866	95,551
2016 ⁽³⁾	46,926	11,853	23,206	81,985
2017	49,252	16,418	22,006	87,676
2018	52,386	17,409	24,913	94,708
2019	51,844	13,937	22,382	88,163

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

⁽³⁾ Reduced water production reflects effects of Statewide drought and State orders with respect thereto. See the caption “—Water Use Efficiency.”

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>Local Water⁽¹⁾</i>	<i>Imported Water</i>	<i>Recycled Water⁽²⁾</i>	<i>Total</i>	<i>Percentage Change</i>
2020	54,900	12,626	22,890	90,416	2.56%
2021	50,610	18,617	22,890	92,117	1.88
2022	51,116	18,989	23,119	93,224	1.20
2023	51,627	19,369	23,350	94,346	1.20
2024	52,144	19,757	23,584	95,484	1.21

⁽¹⁾ Includes groundwater and native water. 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 2019 as compared to other neighboring agencies supplying water for Fiscal Year 2018.

TABLE 13
IRVINE RANCH WATER DISTRICT
Water Supply Comparison by Source

	<i>Imported Water</i>	<i>Groundwater</i>	<i>Surface Water</i>	<i>Recycled Water</i>
Irvine Ranch Water District⁽¹⁾	16%	54%	5%	25%
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, 2019, the District had approximately 2,484 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>
2015	104,678	1.55%
2016	107,402	2.60
2017	110,520	2.90
2018	114,164	3.30
2019	116,539	2.08

⁽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>
2020	117,739	1.03%
2021	119,993	1.91
2022	122,292	1.92
2023	124,636	1.92
2024	127,028	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 \$1,386 to \$4,027 for each residential unit and \$6,392 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>
2015	58,319	32,139	90,458	0.59%
2016 ⁽³⁾	51,098	26,879	77,977	(13.80)
2017	51,299	27,860	79,159	1.52
2018	55,137	31,750	86,887	9.76
2019 ⁽⁴⁾	51,364	27,679	79,043	(9.03)

⁽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 effects of Statewide drought and State orders with respect thereto. See the caption “WATER SUPPLY—Water Use Efficiency.”

⁽⁴⁾ 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>
2020	52,624	32,493	85,117	7.68%
2021	53,939	32,495	86,434	1.55
2022	54,565	32,820	87,385	1.10
2023	55,199	33,148	88,347	1.10
2024	55,841	33,480	89,321	1.10

(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>
2015	\$70,110	5.71%
2016 ⁽²⁾	76,692	9.39
2017	77,252	0.73
2018	84,575	9.48
2019 ⁽³⁾	94,107	11.27

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

(2) The District’s rate structure (separation of commodity and fixed service charges) provided for revenue stability throughout the recent Statewide drought. See the caption “WATER SUPPLY—Water Use Efficiency.”

(3) 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.

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>
2020 ⁽²⁾	\$ 94,040	(0.07)%
2021	99,709	6.03
2022	102,701	3.00
2023	105,782	3.00
2024	108,955	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) Decrease from Fiscal Year 2019 reflects one-time cumulative adjustment in water banking storage revenue in Fiscal Year 2019. See Footnote 3 to Table 18 under the caption “—Historic Water Sales and Service Charge Revenues.”

Source: The District.

Largest Water Customers

The following table sets forth the ten largest water customers of the District for Fiscal Year 2019, as determined by annual payments.

TABLE 20
IRVINE RANCH WATER DISTRICT
Ten Largest Water Customers
Fiscal Year 2019

<i>Customer</i>	<i>Fiscal Year 2019 Payment</i>	<i>Percentage of Total Water Sales Revenues</i>
1. The Irvine Company/Irvine Apartment Communities	\$ 7,451,673	8.38%
2. University of California, Irvine	1,385,199	1.56
3. Jazz Semiconductor	1,210,411	1.36
4. B Braun Medical Inc.	1,045,000	1.18
5. Woodbridge Village Association	590,810	0.66
6. City of Irvine	391,077	0.44
7. City of Lake Forest	342,143	0.38
8. Allergan Sales, LLC	281,375	0.32
9. Irvine Unified School District	264,337	0.30
10. Maruchan Inc.	<u>259,686</u>	<u>0.29</u>
TOTAL	\$13,221,712	14.87%

Source: The District.

These ten largest customers accounted for approximately 14.87% of water sales revenues in Fiscal Year 2019.

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.

**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.

⁽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.

Set forth below is a comparison of the District’s water bill for a typical residential customer as compared to neighboring communities. For the past ten Fiscal Years, including in the current Fiscal Year, 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.

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 between 2% and 4% in Fiscal Years 2020 through 2024, including a rate increase of 4% beginning July 1, 2019. 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.

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

<i>Water Service Provider</i>	<i>Charge⁽¹⁾</i>
City of Costa Mesa	\$73.87
City of Newport Beach	63.47
City of Santa Ana	49.40
City of Orange	49.30
City of Anaheim	54.08
City of Tustin	39.23
City of Huntington Beach	46.18
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 7 ccf is billed at \$2.00.

⁽²⁾ Information is as of July 1, 2019. 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, 2019, the District had approximately 1,134 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 10.5 billion gallons of wastewater were treated by the District (including wastewater flows sent to Orange County Sanitation District (“**OCSD**”)) during Fiscal Year 2019.

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 2018 and 2019, the District utilized approximately 1.9 billion gallons and 2.3 billion gallons, respectively, of capacity each year pursuant to its agreement with OCSD. In Fiscal Year 2019, approximately 77% of the District’s wastewater was treated by the MWRP and LAWRP operated by the District, and approximately 23% 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. The remainder of the 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 \$210 million. Construction of the solids handling facility at the MWRP is anticipated to be completed by mid-2020. 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>
2015	99,397	1.96%
2016	103,328	3.95
2017	105,752	2.35
2018	108,754	2.84
2019	111,210	2.26

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>
2020	112,686	1.33%
2021	114,940	2.00
2022	117,239	2.00
2023	119,583	2.00
2024	121,975	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 \$1,727 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>
2015	28.6	(3.05)% ⁽²⁾
2016	27.8	(2.80) ⁽²⁾
2017	28.5	2.52
2018	28.9	1.40
2019	28.2	(2.42) ⁽²⁾

⁽¹⁾ Includes District flow treated by OCSD.

⁽²⁾ Reduction in flows reflects reduced water use, including conservation efforts.

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>
2020	28.9	0.70%
2021	29.4	1.73
2022	29.9	1.70
2023	30.4	1.67
2024	30.9	1.64

⁽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>
2015	\$62,808	8.09%
2016	67,682	7.76
2017	72,054	6.46
2018	76,789	6.57
2019	76,841	0.07

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>
2020	\$83,520	8.69%
2021	85,690	2.60
2022	88,260	3.00
2023	90,908	3.00
2024	93,635	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.”

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 2019, as determined by annual payments.

**TABLE 28
IRVINE RANCH WATER DISTRICT
Ten Largest Sewer and Recycled Water Service Customers
Fiscal Year 2019**

<i>Customer</i>	<i>Fiscal Year 2019 Payment</i>	<i>Percentage of Total Sewer and Recycled Service Revenues</i>
1. The Irvine Company/Irvine Apartment Communities	\$11,932,092	15.53%
2. University of California, Irvine	2,256,337	2.94
3. City of Irvine	2,202,981	2.87
4. B Braun Medical Inc.	858,955	1.12
5. Irvine Unified School District	657,418	0.86
6. ERP Operating LP	351,201	0.46
7. Crystal Cove Community Association	349,178	0.45
8. Allergan Sales, LLC	344,890	0.45
9. Maruchan Inc.	338,045	0.44
10. Woodbridge Village Association	<u>318,598</u>	<u>0.41</u>
TOTAL	\$19,609,695	25.53%

Source: The District.

These ten largest customers accounted for approximately 25.53% of total sewer and recycled water service revenues in Fiscal Year 2019.

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. Set forth below is a comparison of the District’s sewer bills for a typical residential customer as compared to other neighboring communities. The Board of Directors did not implement a sewer rate increase for the current Fiscal Year. The projected revenues based on the rates that are now in place are expected to cover projected expenses. 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 rate increases of between 2% to 3% in Fiscal Years 2021 through 2024 and projected recycled water rate increases of between 2% and 3% in Fiscal Years 2021 through 2024. 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.

TABLE 29
IRVINE RANCH WATER DISTRICT
Typical Residential Customer Sewer Bill

<i>Sewer Service Provider</i>	<i>Charge⁽¹⁾</i>
City of Santa Ana	\$36.22
City of Huntington Beach	39.60
City of Costa Mesa	35.95
City of Tustin	37.36
City of Anaheim	33.42
City of Newport Beach	40.00
City of Orange	39.41
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, 2019 for the District. Excludes *ad valorem* assessments levied by District.

Source: The District.

FUTURE CAPITAL IMPROVEMENTS

The District anticipates spending approximately \$476,700,000 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 bonds, certificates of participation, District revenues and fund balances in Fiscal Years 2020 through 2024, including additional bonds in the estimated principal amount of \$50-\$75 million that are expected to be issued in Fiscal Year 2024, and that the remaining cost of such improvements will be financed from funds on hand and District revenues. 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 2020 through 2024

<i>Project</i>	<i>2020</i>	<i>2021</i>	<i>2022</i>	<i>2023</i>	<i>2024</i>	<i>Total</i>
Solids Handling	\$ 9,840,428	\$ 6,160,591	\$ 2,323,611	\$ 1,297,692	\$ 2,197,276	\$ 21,819,598
OCS D CORF/Equity	(8,705,250)	10,002,750	(19,030,250)	13,461,750	12,160,750	7,889,750
Water Supply Reliability	12,540,192	5,631,369	24,415,420	32,933,540	31,022,261	106,542,782
Development-Related Expansion	19,795,246	18,187,410	12,504,140	46,426,173	52,167,548	149,080,517
Replacement and Refurbishment	26,381,871	29,771,010	24,741,428	19,474,781	14,607,782	114,976,872
Operational Improvements	<u>14,687,473</u>	<u>11,224,957</u>	<u>16,824,222</u>	<u>16,824,222</u>	<u>16,824,222</u>	<u>76,385,096</u>
Total	\$74,539,960	\$80,978,087	\$61,778,571	\$130,418,158	\$128,979,839	\$476,694,615

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, with the startup process anticipated to be completed by mid-2020. 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.”

OCSD CORF/Equity

OCSD's Capital Outlay Revolving Fund ("CORF") funds OCSD 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 OCSD's total wastewater flow. Wastewater flows from the District presently comprise approximately 2% – 3% of OCSD flows. In addition, the District purchases and sells equity in the OCSD Joint Works Treatment Facilities based on the District's percentage of OCSD flows. See the caption "THE SEWER SYSTEM—General—OCSD" above. During the rainy season in early 2017, the District temporarily diverted additional sewage to OCSD, resulting in a temporary increase in the OCSD 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 Ground Water Storage Project (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" 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 Syphon 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 5.9% to 8.7% in federal fiscal years 2013 through 2020. 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)

	2015	2016	2017	2018	2019
REVENUES					
Water sales and service charges	\$ 70,110	\$ 76,692 ⁽¹⁴⁾	\$ 77,252	\$ 84,575	\$ 94,107
Recycled water sales and sewer service charges	62,808	67,682	72,054	76,789	76,841
Connection fees	29,183	32,109	25,563	32,674	18,205
Net real estate income	8,191	8,693	9,076	3,405 ⁽¹⁵⁾	8,372
Interest income	1,515	1,585	3,210	4,133	6,199
Available 1% Property Tax Revenues ⁽¹⁾	29,770	31,645	34,247	29,649	42,389
Other ⁽²⁾	<u>7,899</u>	<u>7,836</u>	<u>7,117</u>	<u>7,504</u>	<u>8,876</u>
Total Revenues	\$ 209,476	\$ 226,242	\$ 228,519	\$ 238,729	\$ 254,989
OPERATION AND MAINTENANCE EXPENSES					
Water services	\$ 57,978	\$ 57,499	\$ 55,296	\$ 63,671	\$ 64,004
Sewer services	54,575	40,413 ⁽¹²⁾	42,752	38,115	43,734
Administrative and general	16,012	19,909 ⁽¹³⁾	22,664 ⁽¹⁴⁾	22,390	25,610
Pension expense ⁽³⁾	2,237	2,831	5,146	10,496	10,036
Other ⁽⁴⁾	<u>9,752</u>	<u>2,800</u>	<u>1,997</u>	<u>174</u>	<u>2,615</u>
Total Operation & Maintenance Expenses	\$ 140,554	\$ 123,452	\$ 127,855	\$ 134,846	\$ 145,999
NET REVENUES	\$ 68,922	\$ 102,790	\$ 100,664	\$ 103,883	\$ 108,990
ASSESSMENT PROCEEDS⁽⁵⁾	\$ 4,839	\$ 6,036	\$ 8,605	\$ 10,499	\$ 12,554
TOTAL NET REVENUES AND ASSESSMENT PROCEEDS	\$ 73,761	\$ 108,826	\$ 109,269	\$ 114,382	\$ 121,544
PARITY OBLIGATION DEBT SERVICE					
Series 2016 Bonds	\$ -	\$ -	\$ 1,605	\$ 5,301	\$ 5,301
2016 Installment Sale Agreement	-	-	2,919	5,837	5,837
Series 2011A Bonds	2,455	2,927	2,967	3,675	4,045
Series 2010B Bonds ⁽⁶⁾	7,829	7,823	7,813	7,807	7,792
2010 Installment Sale Agreement ⁽⁷⁾	9,098	9,487	8,756	1,885	1,984
1997 State Loan #3	227	227	194	194	194
Prior Reimbursement Agreements	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Total Parity Obligation Debt Service	\$ 19,609	\$ 20,464	\$ 24,254	\$ 24,699	\$ 25,153
PARITY OBLIGATION COVERAGE⁽⁸⁾	3.8x	5.3x	4.5x	4.6x	4.8x
Revenues Available For Subordinate Debt Service	\$ 54,152	\$ 88,362	\$ 85,015	\$ 89,683	\$ 96,391
SUBORDINATE OBLIGATION DEBT SERVICE					
Swap Payments ⁽⁹⁾	\$ 7,734	\$ 7,712	\$ 6,798	\$ 5,739	\$ 4,513
State Loans and SCWD Debt ⁽¹⁰⁾	<u>308</u>	<u>308</u>	<u>133</u>	<u>122</u>	<u>122</u>
Total Subordinate Obligation Debt Service	\$ 8,042	\$ 8,020	\$ 6,931	\$ 5,861	\$ 4,635
Sources of Payment for Ad Valorem					
Assessment Bonds:					
Remaining Revenues	\$ 46,110	\$ 80,342	\$ 78,084	\$ 83,822	\$ 91,756
1% Pledged Property Tax Revenues ⁽¹¹⁾	3,358	3,226	3,128	10,834	1,192
Ad valorem Assessments	<u>4,463</u>	<u>5,396</u>	<u>5,341</u>	<u>6,265</u>	<u>6,922</u>
Total Funds Available for Ad Valorem Assessment Bonds	\$ 53,931	\$ 88,964	\$ 86,553	\$ 100,921	\$ 99,870
Ad Valorem Assessment Bond Debt Service	<u>(12,840)</u>	<u>(11,173)</u>	<u>(12,385)</u>	<u>(20,843)</u>	<u>(11,436)</u>
NET REVENUES AVAILABLE FOR OTHER PURPOSES	\$ 41,091	\$ 77,791	\$ 74,168	\$ 80,078	\$ 88,434

(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**") from 1% Property Tax Revenues and *ad valorem* assessments.
- (2) Other Revenues includes golf course lease, cell site leases, conservation revenue, penalty revenue, grants and Allen-McColloch pipeline income.
- (3) Prior to Fiscal Year 2015, pension expense was equal to the Annual Required Contribution. Beginning in Fiscal Year 2015 and in subsequent years, 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.
- (4) Decrease from Fiscal Year 2015 amount beginning in Fiscal Year 2016 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) Decrease from Fiscal Year 2015 reflects decrease of approximately \$11.0 million in the cost of handling, treatment, and disposal of sewage solids residuals sent to OCSD and a decrease in sewer system projects associated with the District's capital program.
- (13) Increase from Fiscal Year 2015 reflects increased payroll costs for water and sewer operations and increased District overhead.
- (14) 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.
- (15) 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."

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)

	2020 ⁽¹⁾	2021 ⁽¹⁾	2022	2023	2024
REVENUES					
Water sales and service charges ⁽²⁾	\$ 94,040	\$ 99,709	\$ 102,701	\$ 105,782	\$ 108,955
Recycled water sales and sewer service charges ⁽³⁾	83,520	85,690	88,260	90,908	93,635
Connection fees ⁽⁴⁾	19,000	18,000	20,000	20,000	20,000
Net real estate income ⁽⁵⁾	10,267	10,900	11,118	11,340	11,567
Interest income ⁽⁶⁾	7,839	8,828	7,940	7,899	7,322
Available 1% Property Tax Revenues ⁽⁷⁾	44,819	46,713	48,121	49,545	50,848
Other ⁽⁸⁾	<u>8,000</u>	<u>8,000</u>	<u>8,080</u>	<u>8,161</u>	<u>8,242</u>
Total Revenues	\$ 267,485	\$ 277,840	\$ 286,220	\$ 293,635	\$ 300,570
OPERATION AND MAINTENANCE EXPENSES					
Water services ⁽⁹⁾	\$ 68,867	\$ 73,137	\$ 75,331	\$ 77,591	\$ 79,919
Sewer services ⁽⁹⁾	45,419	45,271	46,629	48,028	49,469
Administrative and general ⁽¹⁰⁾	27,129	28,512	28,797	29,085	29,376
Pension expense ⁽¹¹⁾	10,337	10,647	10,966	11,295	11,634
Other ⁽¹²⁾	<u>2,000</u>	<u>2,040</u>	<u>2,081</u>	<u>2,122</u>	<u>2,165</u>
Total Operation & Maintenance Expenses	\$ 153,752	\$ 159,607	\$ 163,804	\$ 168,121	\$ 172,561
NET REVENUES	\$ 113,733	\$ 118,233	\$ 122,415	\$ 125,515	\$ 128,008
ASSESSMENT PROCEEDS⁽¹³⁾	\$ 13,045	\$ 13,734	\$ 14,311	\$ 13,629	\$ 14,136
TOTAL NET REVENUES AND ASSESSMENT PROCEEDS	<u>\$ 126,778</u>	<u>\$ 131,967</u>	<u>\$ 136,727</u>	<u>\$ 139,144</u>	<u>\$ 142,143</u>
PARITY OBLIGATION DEBT SERVICE⁽¹⁴⁾					
Series 2016 Bonds	\$ 5,301	\$ 5,301	\$ 7,456	\$ 7,458	\$ 7,458
2016 Installment Sale Agreement ⁽¹⁵⁾	5,837	9,257	9,341	9,423	9,506
Series 2011A Bonds ⁽¹⁶⁾	4,077	3,944	4,105	4,164	4,222
Series 2010B Bonds ⁽¹⁷⁾	7,772	7,772	7,772	7,772	7,772
2010 Installment Sale Agreement ⁽¹⁵⁾⁽¹⁸⁾	2,079	-	-	-	-
1997 State Loan #3 ⁽¹⁵⁾⁽¹⁹⁾	194	-	-	-	-
Prior Reimbursement Agreements	-	-	-	-	-
Total Parity Obligation Debt Service	\$ 25,260	\$ 26,274	\$ 28,674	\$ 28,816	\$ 28,957
PARITY OBLIGATION COVERAGE⁽²⁰⁾	5.0x	5.0x	4.8x	4.8x	4.9x
Revenues Available For Subordinate Debt Service	\$ 101,518	\$ 105,694	\$ 108,053	\$ 110,328	\$ 113,187
SUBORDINATE OBLIGATION DEBT SERVICE⁽¹⁴⁾					
Swap Payments ⁽²¹⁾	\$ 2,304	\$ 2,364	\$ 2,364	\$ 2,364	\$ 2,364
State Loans and SCWD Debt ⁽¹⁵⁾	<u>122</u>	<u>122</u>	<u>122</u>	<u>122</u>	<u>122</u>
Total Subordinate Obligation Debt Service	<u>\$ 2,426</u>	<u>\$ 2,486</u>	<u>\$ 2,486</u>	<u>\$ 2,486</u>	<u>\$ 2,486</u>
Sources of Payment for Ad Valorem Assessment Bonds:					
Remaining Revenues	\$ 99,092	\$ 103,208	\$ 105,567	\$ 107,842	\$ 110,701
1% Pledged Property Tax Revenues ⁽²²⁾	1,181	1,187	1,179	1,255	1,452
<i>Ad valorem</i> Assessments ⁽²²⁾	<u>6,955</u>	<u>7,066</u>	<u>7,089</u>	<u>8,471</u>	<u>8,564</u>
Total Funds Available for Ad Valorem Assessment Bonds	\$ 107,228	\$ 111,460	\$ 113,835	\$ 117,567	\$ 120,717
Ad Valorem Assessment Bond Debt Service ⁽²⁴⁾	<u>(11,590)</u>	<u>(11,096)</u>	<u>(11,459)</u>	<u>(11,321)</u>	<u>(11,670)</u>
NET REVENUES AVAILABLE FOR OTHER PURPOSES	<u>\$ 95,638</u>	<u>\$ 100,365</u>	<u>\$ 102,376</u>	<u>\$ 106,246</u>	<u>\$ 109,047</u>

(FOOTNOTES ON FOLLOWING PAGE)

- (1) Based on Fiscal Year 2020 and 2021 budgeted amounts with certain adjustments.
- (2) Decrease from Fiscal Year 2019 reflects one-time cumulative adjustment in water banking storage revenue in Fiscal Year 2019. See Footnote 2 to Table 18 under the caption “THE WATER SYSTEM—Historic Water Sales and Service Charge Revenues.” Projected to increase approximately 3% per annum from Fiscal Year 2021 budgeted amount. See the caption “THE WATER SYSTEM—Projected Water Sales and Service Charge Revenues.”
- (3) Projected to increase approximately 3% per annum from Fiscal Year 2021 budgeted amount. 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 decreasing from 2.10% in Fiscal Year 2020 to 1.75% in Fiscal Year 2024.
- (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 increase approximately 1% per annum from Fiscal Year 2021 budgeted amount.
- (9) Projected to increase approximately 3% per annum from Fiscal Year 2021 budgeted amount. 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% per annum from Fiscal Year 2021 budgeted amount.
- (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 increase approximately 2% per annum from Fiscal Year 2020 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 decreasing from 1.50% in Fiscal Year 2020 to 1.25% in Fiscal Year 2024. 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) Matures in Fiscal Year 2020.
- (19) Matures in Fiscal Year 2020.
- (20) Total Net Revenues and Assessment Proceeds divided by Total Parity Obligation Debt Service.
- (21) Net swap payments. Assumes LIBOR rate with respect to swaps decreasing from 1.85% in Fiscal Year 2020 to 1.75% in Fiscal Year 2024. See the caption “THE IRVINE RANCH WATER DISTRICT—Outstanding Indebtedness—Subordinate Debt—Interest Rate Swap Transactions.”
- (22) 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.
- (23) 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.
- (24) Ad Valorem Assessment Bonds debt projection assumes annual sinking fund payments, SIFMA rates ranging from 1.50% in Fiscal Year 2019 to 1.25% in Fiscal Year 2024 and letter of credit fees equal to 0.37% 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 2024.

Source: The District.

THE IMPROVEMENT DISTRICTS

General

The District contains seven 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>
2016	\$32,702,471,690	\$ 0	\$49,943,067	\$32,752,414,757
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

⁽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>
2016	\$27,510,931,539	\$ 0	\$46,675,263	\$27,557,606,802
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

⁽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, 2020:

TABLE 35
IRVINE RANCH WATER DISTRICT
Improvement District No. 125
Assessed Valuation and Parcels by Land Use

	<i>Fiscal Year 2020</i> <i>Assessed Valuation⁽¹⁾</i>	<i>% of Total</i>	<i>No. of</i> <i>Parcels</i>	<i>% of Total</i>
Non-Residential:				
Rural/Undeveloped	\$ 84,485,603	0.18%	110	0.10%
Commercial/Office	4,019,747,739	8.76	1,511	1.39
Industrial	1,950,074,602	4.25	1,123	1.04
Government/Social/Institutional	8,198,687	0.02	233	0.21
Miscellaneous	<u>16,808,052</u>	<u>0.04</u>	<u>10</u>	<u>0.01</u>
Subtotal Non-Residential	\$ 6,079,314,683	13.25%	2,987	2.75%
Residential:				
Single Family Residence	\$26,956,764,623	58.75%	39,124	36.08%
Condominium	12,098,358,899	26.37	32,894	30.33
2+ Residential Units/Apartments	662,940,005	1.44	241	0.22
Timeshare Interests	<u>83,127,220</u>	<u>0.18</u>	<u>33,205</u>	<u>30.62</u>
Subtotal Residential	\$39,801,190,747	86.75%	105,464	97.25%
Total	<u>\$45,880,505,430</u>	<u>100.00%</u>	<u>108,451</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, 2020:

TABLE 36
IRVINE RANCH WATER DISTRICT
Improvement District No. 225
Assessed Valuation and Parcels by Land Use

	<i>Fiscal Year 2020 Assessed Valuation⁽¹⁾</i>	<i>% of Total</i>	<i>No. of Parcels</i>	<i>% of Total</i>
Non-Residential:				
Rural/Undeveloped	\$ 61,954,905	0.16%	99	0.13%
Commercial/Office	3,980,068,552	10.16	1,460	1.97
Industrial	1,911,164,570	4.88	1,099	1.48
Government/Social/Institutional	5,307,358	0.01	203	0.27
Miscellaneous	<u>16,383,498</u>	<u>0.04</u>	<u>9</u>	<u>0.01</u>
Subtotal Non-Residential	\$ 5,974,878,883	15.25%	2,870	3.86%
Residential:				
Single Family Residence	\$ 20,713,301,195	52.85%	38,308	51.58%
Condominium	11,843,859,167	30.22	32,854	44.23
2+ Residential Units/Apartments	<u>658,968,601</u>	<u>1.68</u>	<u>240</u>	<u>0.32</u>
Subtotal Residential	\$ 33,216,128,963	84.75%	71,402	96.14%
Total	<u>\$ 39,191,007,846</u>	<u>100.00%</u>	<u>74,272</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, 2020:

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 2020 Assessed Valuation</i>	<i>% of Total⁽¹⁾</i>
1.	The Irvine Company	Commercial	\$ 522,459,837	1.14%
2.	Lennar Homes of California Inc.	Residential Development	138,670,632	0.30
3.	Toll CA XX LP	Residential Development	90,292,671	0.20
4.	Sand Canyon Business Center LLC	Commercial	86,833,760	0.19
5.	Olen Properties Corp.	Commercial	84,593,158	0.18
6.	Heritage Fields El Toro LLC	Commercial	81,501,357	0.18
7.	Albertsons Stores Sub LLC	Commercial	56,648,963	0.12
8.	Shea Homes LP	Residential Development	55,647,757	0.12
9.	Irvine Spectrum Center LLC	Commercial	53,429,142	0.12
10.	PH Finance LLC	Commercial	<u>52,212,381</u>	<u>0.11</u>
	TOTAL		<u>\$ 1,222,289,658</u>	<u>2.66%</u>

⁽¹⁾ Fiscal Year 2020 Local Secured Assessed Valuation (Land Only): \$45,880,505,430.

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, 2020:

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 2020 Assessed Valuation</i>	<i>% of Total⁽¹⁾</i>
1.	The Irvine Company	Commercial	\$ 508,440,149	1.30%
2.	Toll CA XX LP	Residential Development	90,292,671	0.23
3.	Sand Canyon Business Center LLC	Commercial	86,833,760	0.22
4.	Olen Properties Corp.	Commercial	84,593,158	0.22
5.	Heritage Fields El Toro LLC	Commercial	81,501,357	0.21
6.	Albertsons Stores Sub LLC	Commercial	56,648,963	0.14
7.	Shea Homes LP	Residential Development	55,647,757	0.14
8.	Irvine Spectrum Center LLC	Commercial	53,429,142	0.14
9.	LBA RVI-Company XIX LLC	Commercial	50,000,000	0.13
10.	Applied Medical Resources Corporation	Industrial	<u>39,142,191</u>	<u>0.10</u>
	TOTAL		<u>\$ 1,106,529,148</u>	2.82%

⁽¹⁾ Fiscal Year 2019 Local Secured Assessed Valuation (Land Only): \$39,191,007,846.
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, 2019. 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 2020 Land Only Assessed Valuation: \$45,924,240,097

<u>DIRECT AND OVERLAPPING TAX AND ASSESSMENT DEBT:</u>	<u>% Applicable⁽¹⁾</u>	<u>Debt 12/31/19</u>
Metropolitan Water District	2.736%	\$ 1,314,648
Coast Community College District	5.301	48,135,771
Rancho Santiago Community College District	0.972	2,139,994
Irvine Unified School District School Facilities Improvement District No. 1	47.511	58,628,574
Laguna Beach Unified School District	15.047	3,010,152
Newport Mesa Unified School District	14.003	35,079,371
Orange Unified School District	2.083	3,757,420
Saddleback Valley Unified School District	36.048	38,767,822
Tustin Unified School District School Facilities Improvement District No. 2002-1	3.680	1,560,954
Tustin Unified School District School Facilities Improvement District No. 2008-1	3.791	3,153,164
Tustin Unified School District School Facilities Improvement District No. 2012-1	32.563	12,991,009
Irvine Ranch Water District Improvement District No. 125	100.000	179,344,506⁽²⁾
Irvine Ranch Water District Improvement District Nos. 153/253	99.979	19,474,402
Irvine Ranch Water District Improvement District Nos. 185/285	82.924	2,737,873
Irvine Ranch Water District Improvement District No. 225	96.401	242,224,024
Irvine Ranch Water District Improvement District No. 240	99.533	16,841,847
Community Facilities Districts	0.737-100.000	938,609,153
County 1915 Act Bonds	100.000	24,855,000
City 1915 Act Bonds	Various	<u>685,071,582</u>
TOTAL DIRECT AND OVERLAPPING TAX AND ASSESSMENT DEBT		\$2,317,697,266
 <u>OVERLAPPING GENERAL FUND DEBT:</u>		
Orange County General Fund Obligations	13.520%	\$ 52,554,944
Orange County Pension Obligation Bonds	13.520	27,588,744
Orange County Board of Education Certificates of Participation	13.520	1,823,848
Coast Community College District General Fund Obligations	5.301	147,368
Orange Unified School District Certificates of Participation and Benefit Obligations	2.083	2,627,440
City of Newport Beach Certificates of Participation	22.772	<u>22,930,265</u>
TOTAL OVERLAPPING GENERAL FUND DEBT		\$ 107,672,609
 <u>OVERLAPPING TAX INCREMENT DEBT (Successor Agencies)</u>		 \$ 4,274,667
 <u>COMBINED TOTAL DEBT</u>		 \$2,429,644,542⁽³⁾

Ratios to Fiscal Year 2020 Land Only Assessed Valuation:

Direct Debt (\$179,344,506)0.39%
Total Direct and Overlapping Tax and Assessment Debt.....5.05%

Ratios to Adjusted All Property Assessed Valuation:

Combined Total Debt.....2.87%

Ratios to Redevelopment Incremental Valuation (\$655,612,273):

Total Overlapping Tax Increment Debt.....0.65%

⁽¹⁾ Based on all property assessed valuation of \$84,607,230,953.

⁽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 2020 Land Only Assessed Valuation: \$36,234,190,651

<u>DIRECT AND OVERLAPPING TAX AND ASSESSMENT DEBT:</u>	<u>% Applicable⁽¹⁾</u>	<u>Debt 12/31/19</u>
Metropolitan Water District	2.399%	\$ 1,152,720
Coast Community College District	0.265	2,406,335
Rancho Santiago Community College District	0.018	39,630
Irvine Unified School District School Facilities Improvement District No. 1	53.299	65,770,966
Newport Mesa Unified School District	2.808	7,034,412
Orange Unified School District	0.038	68,546
Saddleback Valley Unified School District	36.048	38,767,822
Tustin Unified School District School Facilities Improvement District No. 2002-1	5.537	2,348,642
Tustin Unified School District School Facilities Improvement District No. 2008-1	5.704	4,744,302
Tustin Unified School District School Facilities Improvement District No. 2012-1	33.895	13,522,410
Irvine Ranch Water District Improvement District No. 125	84.519	151,580,183
Irvine Ranch Water District Improvement District No. 153/253	99.979	19,474,402
Irvine Ranch Water District Improvement District No. 185/285	82.924	2,737,873
Irvine Ranch Water District Improvement District No. 225	100.000	251,267,128⁽²⁾
Community Facilities Districts	0.737-100.000	924,263,858
City 1915 Act Bonds	Various	685,071,582
TOTAL DIRECT AND OVERLAPPING TAX AND ASSESSMENT DEBT		\$2,170,250,811
 <u>OVERLAPPING GENERAL FUND DEBT:</u>		
Orange County General Fund Obligations	11.854%	\$ 46,078,869
Orange County Pension Obligation Bonds	11.854	24,189,125
Orange County Board of Education Certificates of Participation	11.854	1,599,105
Coast Community College District General Fund Obligations	0.265	7,367
Orange Unified School District Certificates of Participation and Benefit Obligations	0.038	47,932
City of Newport Beach Certificates of Participation	3.477	3,501,165
TOTAL OVERLAPPING GENERAL FUND DEBT		\$ 75,423,563
 OVERLAPPING TAX INCREMENT DEBT (Successor Agencies)		 \$ 4,274,667
 COMBINED TOTAL DEBT		 \$2,249,939,041 ⁽³⁾

Ratios to Fiscal Year 2020 Land Only Assessed Valuation:

Direct Debt (\$251,267,128)0.64%
Total Direct and Overlapping Tax and Assessment Debt.....5.53%

Ratios to Adjusted All Property Assessed Valuation:

Combined Total Debt.....3.03%

Ratios to Redevelopment Incremental Valuation (\$655,612,273):

Total Overlapping Tax Increment Debt.....0.65%

(1) Based on all property assessed valuation of \$74,178,282,916.

(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</i> ⁽¹⁾	<i>Total</i>
2016	\$ 826,913,605	\$610,480	\$ 827,524,085
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

⁽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, 2020:

TABLE 42
IRVINE RANCH WATER DISTRICT
Improvement District Nos. 113 and 213
Assessed Valuation and Parcels by Land Use

	<i>Fiscal Year 2020 Assessed Valuation⁽¹⁾</i>	<i>% of Total</i>	<i>No. of Parcels</i>	<i>% of Total</i>
Non-Residential:				
Commercial	\$ 147,246,368	12.41%	40	1.22%
Government/Social/Institutional	<u>0</u>	<u>0.00</u>	<u>160</u>	<u>4.89</u>
Subtotal Non-Residential	\$ 147,246,368	12.41%	200	6.12%
Residential:				
Single Family Residence	\$ 567,663,788	47.85%	1,389	42.48%
Condominium/Townhouse	382,798,778	32.27	1,357	41.50
Apartments	34,472,296	2.91	3	0.09
Vacant Residential	<u>54,125,931</u>	<u>4.56</u>	<u>321</u>	<u>9.82</u>
Subtotal Residential	\$ 1,039,060,793	87.59%	3,070	93.988%
Total	<u>\$ 1,186,307,161</u>	<u>100.00%</u>	<u>3,270</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, 2020:

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 2020 Assessed Valuation</i>	<i>% of Total⁽¹⁾</i>
1.	Vestar/Kimco Tustin LP	Commercial	\$ 83,470,305	7.04%
2.	Legacy Villas LLC	Apartments	34,472,296	2.91
3.	Flight Phase I Owner LLC	Office Development	31,228,878	2.63
4.	Costco Wholesale Corporation	Commercial	15,952,448	1.34
5.	IC Tustin Legacy LLC	Commercial	15,832,774	1.33
6.	Lowes HIW Inc.	Commercial	11,834,085	1.00
7.	Hoag Memorial Hospital Presbyterian	Commercial	8,904,308	0.75
8.	Healthsouth Corporation	Commercial	5,618,160	0.47
9.	2C Tustin Legacy LLC	Commercial	2,800,221	0.24
10.	Roger Rong-Tai & Lisa Ling-Ying Yang	Residential	<u>2,018,955</u>	<u>0.17</u>
	TOTAL		<u>\$ 212,132,430</u>	<u>17.88%</u>

⁽¹⁾ Fiscal Year 2019 Local Secured Assessed Valuation (Land Only): \$1,186,307,161.

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 2020 Land Only Assessed Valuation: \$1,186,452,170

<u>DIRECT AND OVERLAPPING TAX AND ASSESSMENT DEBT:</u>	<u>% Applicable⁽¹⁾</u>	<u>Debt 12/31/19</u>
Metropolitan Water District	0.081%	\$ 38,921
Rancho Santiago Community College District	0.095	209,156
Rancho Santiago Community College District School Facilities Improvement District No. 1	0.178	295,516
Irvine Unified School District School Facilities Improvement District	3.039	3,750,126
Santa Ana Unified School District	0.220	628,501
Tustin Unified School District School Facilities Improvement District No. 2002-1	7.712	3,271,217
Tustin Unified School District School Facilities Improvement District No. 2008-1	4.997	4,156,255
Tustin Unified School District School Facilities Improvement District No. 2012-1	3.478	1,387,548
Tustin Unified School District Community Facilities District No. 06-1	100.000	14,090,000
City of Irvine Community Facilities District No. 2005-2	99.263	13,440,210
Irvine Ranch Water District Improvement District No. 113	100.000	14,037,420
Irvine Ranch Water District Improvement District No. 213	100.000	22,947,396
City of Tustin Community Facilities District Nos. 04-1, 06-1 and 07-1	60.457-100.000	92,871,024
TOTAL DIRECT AND OVERLAPPING TAX AND ASSESSMENT DEBT		\$171,123,290

<u>OVERLAPPING GENERAL FUND DEBT:</u>		
Orange County General Fund Obligations	0.400%	\$ 1,554,880
Orange County Pension Obligation Bonds	0.400	816,235
Orange County Board of Education Certificates of Participation	0.400	53,960
Santa Ana Unified School District Certificates of Participation	0.220	139,828
TOTAL OVERLAPPING GENERAL FUND DEBT		\$ 2,564,903

<u>OVERLAPPING TAX INCREMENT DEBT</u>		
Successor Agency to Tustin Redevelopment Agency	54.170%	\$ 27,187,923
TOTAL OVERLAPPING TAX INCREMENT DEBT		\$ 27,187,923

COMBINED TOTAL DEBT \$200,876,116⁽²⁾

Ratios to Fiscal Year 2020 Land Only Assessed Valuation:

Direct Debt (\$36,984,816)	3.12%
Total Direct and Overlapping Tax and Assessment Debt.....	14.42%

Ratios to Adjusted All Property Assessed Valuation:

Combined Total Debt	8.67%
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Ratios to Redevelopment Incremental Valuation (\$847,169,656):

Overlapping Tax Increment Debt	1.35%
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⁽¹⁾ Based on all property assessed valuation of \$2,501,324,944.

⁽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 was specific to the facts of the case, including 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 November 15, 2018, the California Court of Appeal, Third District (the “**Third District**”), issued an opinion in *Wilde v. City of Dunsmuir* (2018) 29 Cal.App.5th 158 (the “**Wilde Case**”) holding that taxpayers have the right to place a referendum on the ballot and vote on whether to repeal a city’s water rates. The Third District also in 2019 issued an opinion in *Howard Jarvis Taxpayers Association v. Amador Water Agency* (2019) 36 Cal.App.5th 279 holding that ratepayers cannot place a referendum on the ballot to vote on repeal of the agency’s water rates. This split in opinion has been appealed to the State Supreme Court, where it is awaiting review.

The District and its general counsel do not believe that current applicable case law interpreting Article XIIIIC 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 XIIIIC 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 XIID. 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.

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RESOLUTION NO. 2020-5

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 6, 2020 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 27th day of January, 2020.

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 Bridget LLP

By: _____
Legal Counsel

January 27, 2020

Prepared by: J. Moeder / R. Mori

Submitted by: K. Burton

Approved by: Paul A. Cook



ACTION CALENDAR

SANTIAGO RESERVOIR PROJECT UPDATE AND INTERIM LAKE LEVEL OPERATIONS PLAN

SUMMARY:

Staff will provide an update on the outlet tower replacement and spillway assessment at the Santiago Reservoir (also known as Irvine Lake). The spillway assessment, which is now complete, identified that the existing spillway is nearing the end of its useful life and that the spillway be replaced within the next 10 years. During the planning and design efforts associated with the spillway replacement, staff recommends implementing an interim lake level operations plan to reduce the probability of flow over the spillway. Staff will present the Santiago Reservoir Interim Lake Level Operations for the Board's discussion and input.

BACKGROUND:

Santiago Reservoir Outlet Tower Replacement:

AECOM was retained to perform a seismic stability analysis of the existing Irvine Lake outlet tower. The analysis, which was completed in July 2017, concluded that the outlet tower would fail in a "Maximum Credible Earthquake" event and that debris and/or silt could obstruct the outlet and prevent a controlled drawdown of the lake. Based on collaboration with the Division of Safety of Dams (DSOD), the recommendation for a new sloped outlet was selected, and staff continued to work with AECOM to complete the preliminary design for the proposed sloped outlet.

In February 2019, AECOM completed the Santiago Creek Dam Outlet Tower Replacement Preliminary Design Report (PDR), which includes abandoning the existing outlet tower, utilizing the existing outlet pipeline under the embankment dam, and construction of a new inclined outlet conduit. Staff transmitted the Final PDR to the DSOD in March 2019 for review, and DSOD completed its review in October 2019. The DSOD confirmed that the proposed design concept for the outlet works is acceptable, and also provided several technical comments that will be addressed during final design.

Santiago Creek Dam Spillway Assessment:

In June 2017, DSOD requested a comprehensive condition assessment of the nearly 90-year old Santiago Creek Dam spillway. IRWD retained GEI Consultants in August 2017 to perform the assessment. The first phase of the assessment, which included evaluation of available information on the spillway design and construction, review of the geologic setting, and surface observation of the concrete spillway was completed in February 2018. Based on the findings, GEI recommended that a second phase of the assessment be conducted to better define and understand the condition of the spillway.

The second phase of the assessment included non-destructive evaluation to determine the thickness of the concrete spillway, borescope exploration to confirm the presence or absence of voids beneath the spillway, concrete core sampling and strength testing, video survey of the spillway underdrain system, and additional geologic mapping in the area immediately downstream of the spillway.

GEI completed the second phase of the assessment, which concludes that the condition of the concrete spillway structure is nearing the end of its useful life. The assessment further recommends that the planning phase for the replacement begin now, and that the spillway replacement is completed within the next 10 years.

At staff's request, GEI prepared a statistical hydrologic analysis to estimate potential spillway flow rates given various lake levels and various rain events. Based on the hydrologic analysis, IRWD and Serrano Water District staff jointly developed an Interim Lake Level Operations Plan, included as Exhibit "A", that is proposed to remain in effect from now until the spillway replacement is complete.

At the Board meeting, staff will provide more detailed information associated with the outlet tower replacement, spillway assessment, and proposed interim lake level operations plan. A draft of the presentation is included as Exhibit "B".

FISCAL IMPACTS:

For the projects described, the cost split will be 75% for IRWD and 25% for Serrano Water District in accordance with the Irvine Lake ownership agreements.

ENVIRONMENTAL COMPLIANCE:

The projects are subject to the California Environmental Quality Act. In conformance with the California Code of Regulations Title 14, Chapter 3, Section 15044, appropriate environmental documents will be prepared when "meaningful information" becomes available.

COMMITTEE STATUS:

This item was not reviewed by a Committee.

RECOMMENDATION:

THAT THE BOARD PROVIDE INPUT ON THE SANTIAGO RESERVOIR INTERIM LAKE LEVEL OPERATIONS PLAN.

LIST OF EXHIBITS:

Exhibit "A" – Draft Interim Lake Level Operations Plan

Exhibit "B" – Draft Presentation for Santiago Reservoir Tower Replacement and Spillway Assessment Project Update and Interim Operations Plan

EXHIBIT "A"

Santiago Reservoir Improvements
Project No. 01813
Interim Lake Level Operations Plan

In June 2017, the California Division of Safety of Dams (DSOD) requested that Irvine Ranch Water District (IRWD) and Serrano Water District (SWD) perform a comprehensive condition assessment of the Santiago Creek Dam spillway. GEI Consultants (GEI) was retained in August 2017 to perform the assessment. The spillway assessment is complete and identifies that the spillway structure is reaching the end of its useful life.

The purpose of the interim lake level operations plan is to prescribe seasonal lake levels that will reduce the probability of discharging flow over the spillway until the existing spillway is replaced. The proposed operating parameters for the lake are summarized below.

Summer Season (April 2 – October 30):

- Lake will operate without restrictions. Maximum water surface elevation will remain at El. 790 or El. 794 with the flashboards installed.

Winter Season (October 31 – April 1):

- On October 31, the water level in the lake will be below El. 762.5.
- At anytime during the winter season, if the water level in the lake reaches El. 762.5, IRWD & SWD will implement measures to reduce the water level to below El. 762.5. Measures may include sending water to IRWD's Baker Water Treatment Plant, SWD's Howler Plant, or to Santiago Creek.
- Starting March 14 of each year, IRWD and SWD will monitor the water level in the lake and the weather forecast to determine if the water level could be increased above 762.5. If the water levels in the lake and the weather forecast permit, the water level in the lake may be increased to a maximum elevation of El. 772.5. This shall only be contemplated at the end of the winter season between March 14 and April 1.

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Santiago Reservoir Tower Replacement and Spillway Assessment Project Update and Interim Operation Plan

IRWD Board Update
January 27, 2020



Presentation Agenda

1. Purpose
2. Tower Replacement Preliminary Design Report
3. Spillway Assessment
4. Lake Level Evaluation and Interim Operation Plan
5. Next Steps

Purpose of Presentation

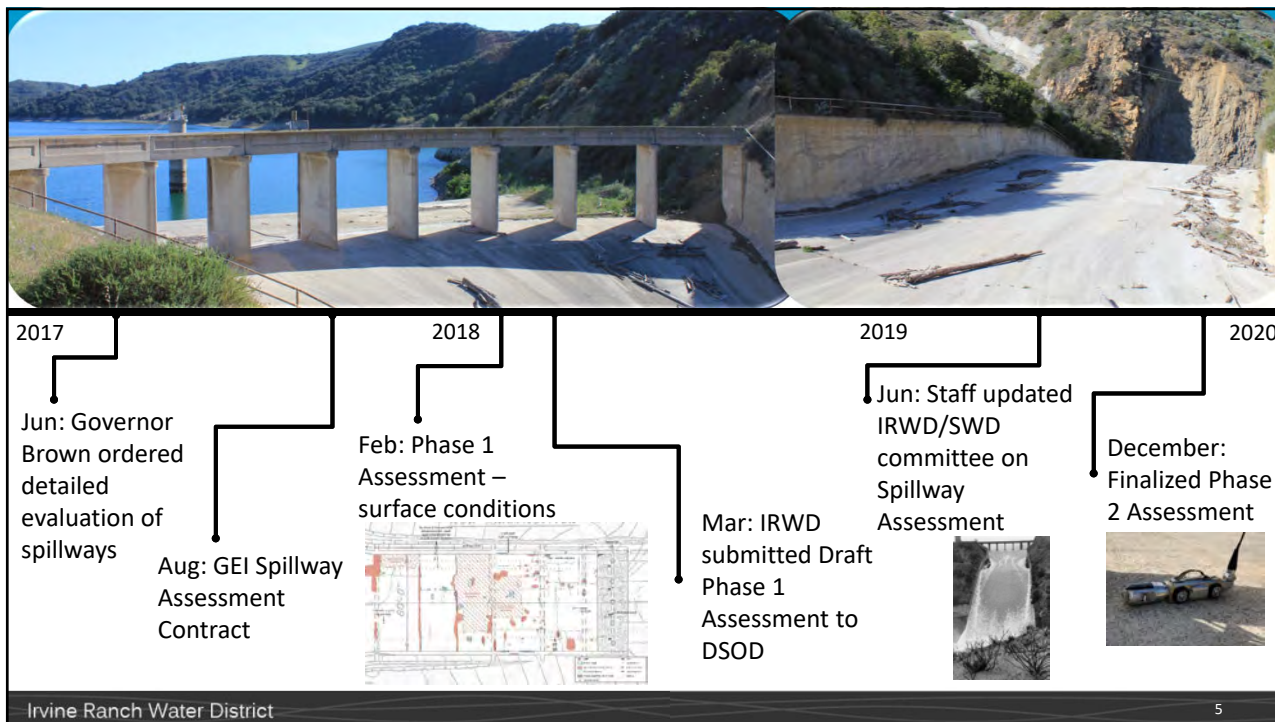
Finalize an Interim Operation Plan for Irvine Lake that targets maximum water surface elevations to reduce the potential use of Irvine Lake's spillway until major spillway and outlet tower improvements are complete.

Tower Replacement Preliminary Design Report

- AECOM completed the Preliminary Design Report in February 2019
- DSOD reviewed and provided comments on the PDR in November 2019
- Staff anticipates responding to DSOD comments in February 2020

AECOM Imagine It. Deliver It.






Spillway Assessment & Findings

Assessment:


- Existing spillway construction
- Surface observations
- Drain line inspection
- Non-destructive testing
- Geologic mapping

Findings:


Spillway is reaching the end of its useful life and needs to be replaced within the next 10-years




Exposed rebar



Failing crack repairs



Concrete Delamination



Concrete Delamination

Irvine Ranch Water District
6

Spillway Capacity

- 1931: Spillway designed for 1-in-1,000 year event which was estimated to be 23,830 cfs.
- 1981: DSOD estimated Probable Maximum Flood (PMF) outflow to be 37,360 cfs for the 6-hr local storm.
- 1981: DSOD report indicates that the spillway chute walls were sized to handle 30,000 cfs with 10-ft of freeboard.

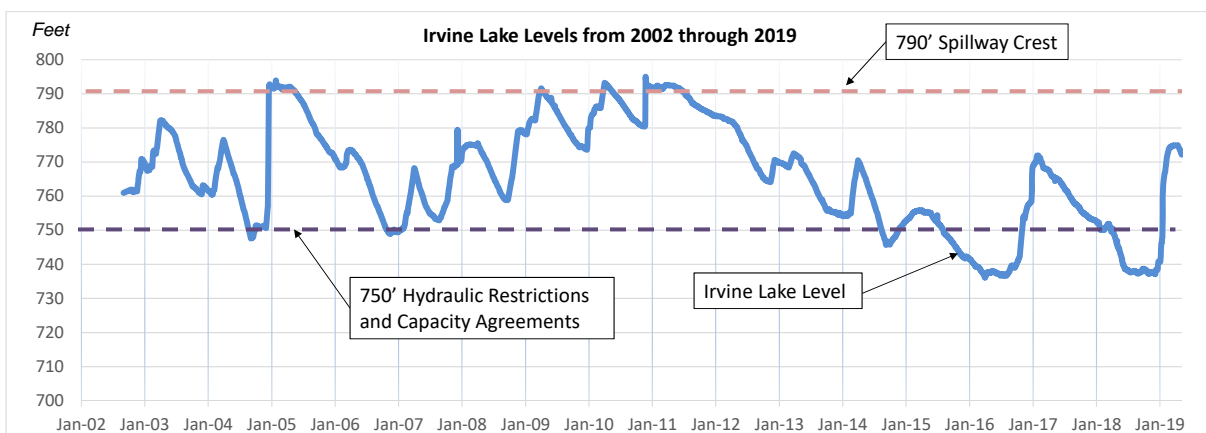
Staff recommends IRWD and Serrano proactively present to DSOD an Interim Operations Plan.



Historic Spillway Usage

1937 to 2019: 19 years with spill events (approximately 4.3 years) – *extended history*

2002 to 2019: 2 years with spill events (approximately 9.0 years) – *optimistic time period*



Historic Spillway Flow Rates

Peak Spillway Flow Rates from Recent Rain Events

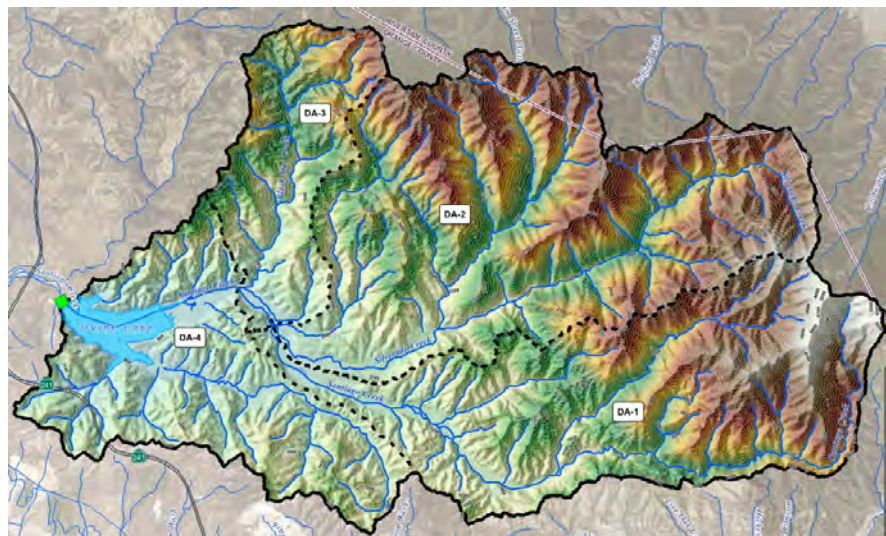
Date	Spillway Flow Rate (cfs)	One-Day Change in Elevation/Volume (ft/AF)	1-Day Rainfall / 3-Day Rainfall (inches)
1/10/2005	4,010	13.7 / 5,972	4.87 / 7.38
12/21/2010	5,830	8.1 / 4,250	3.05 / 8.2

Average Spillway Flow Rate = 4,920 cfs
 75% of Average Spillway Flow Rate = 3,690 cfs




Santiago Reservoir Watershed

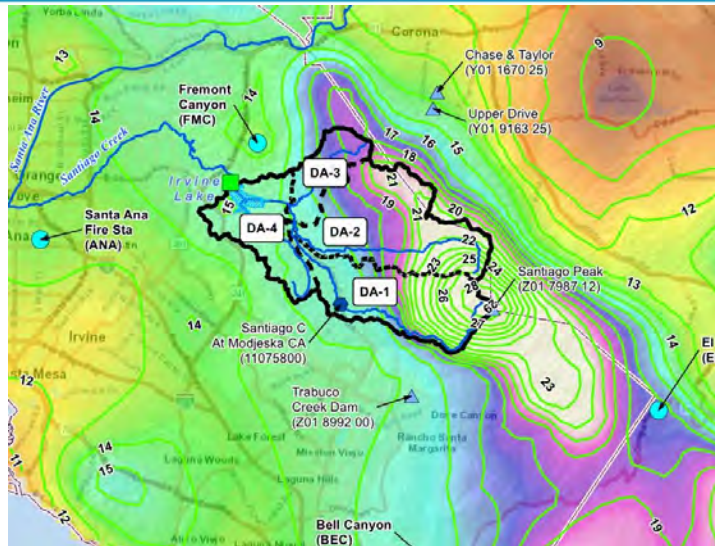
- 63 square mile watershed
- Multiple creeks
- Elevation range: 780 feet to 5,600 feet



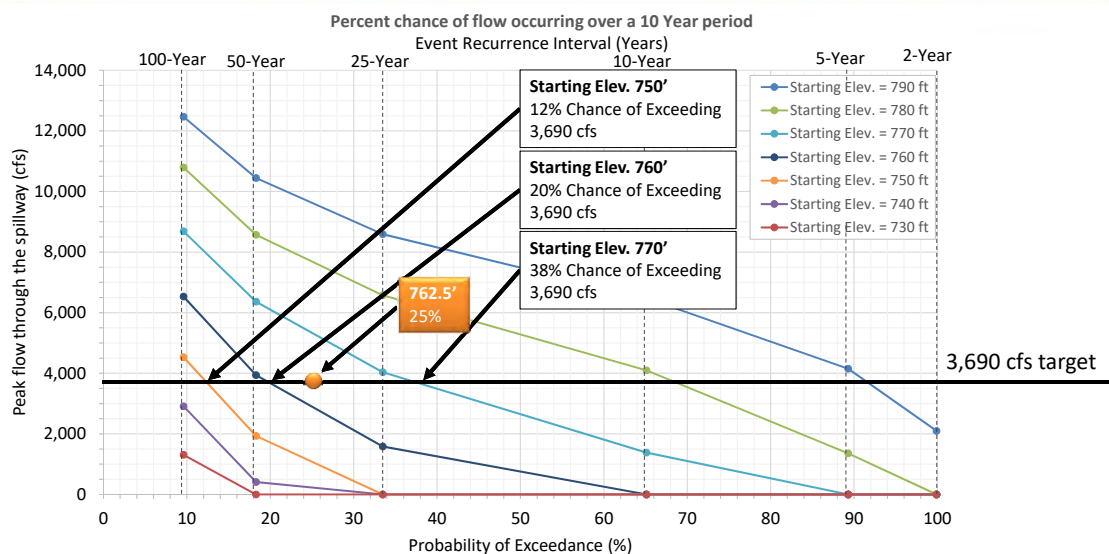
Santiago Reservoir Watershed – 30-yr Normal Precipitation

- NOAA precipitation data checked with several rain gages in the area of Santiago Reservoir Watershed
- More precipitation at higher elevations

Precipitation (inches):
 High : 29.0133
 Low : 8.36886



Probability Analysis of Spillway Flows Based on Recurrence Interval



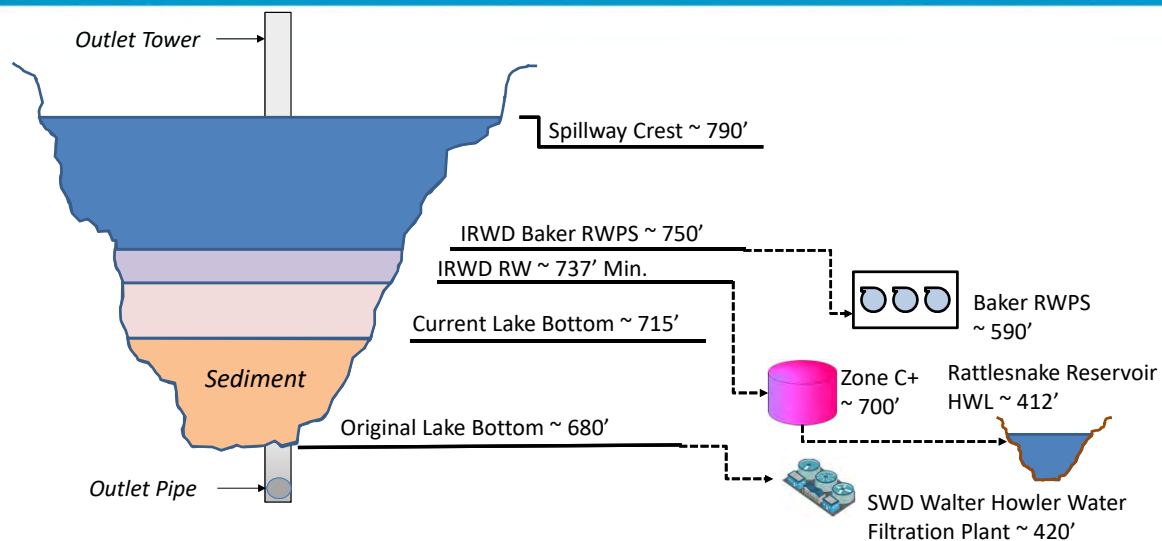
Options for Lowering Irvine Lake Level

Reservoir Drawdown Options and Capacities

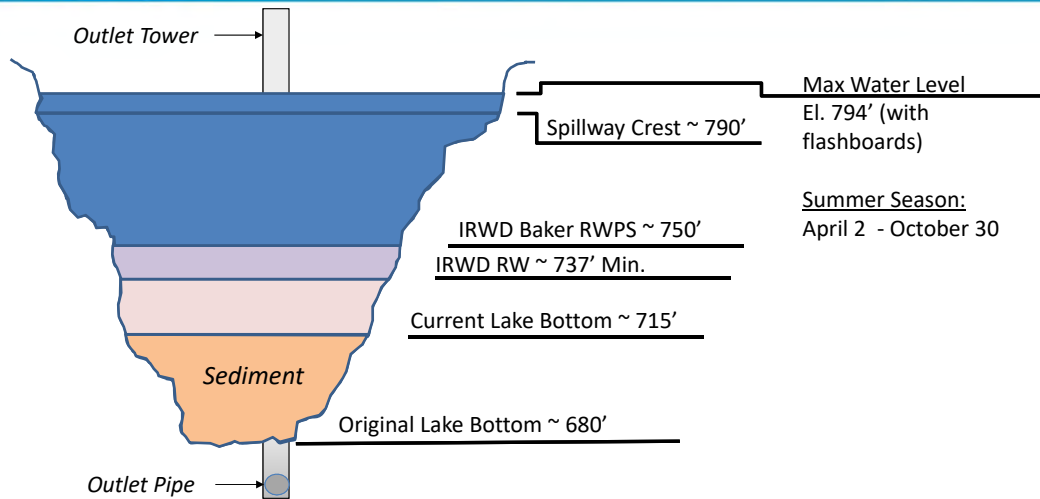
Description	Flow Rate (AF/Day) ¹	3-day Change in Storage (AF)
Feed Source to SWD Walter Howler Plant	~6	~18
Feed Source to IRWD Baker WTP	106	318
Supplement IRWD Recycled Water System	65-116	195-348
Release Water to Santiago Creek	397-446	1,191-1,338

1) Based on lake level range of El. 750 – El. 762.5

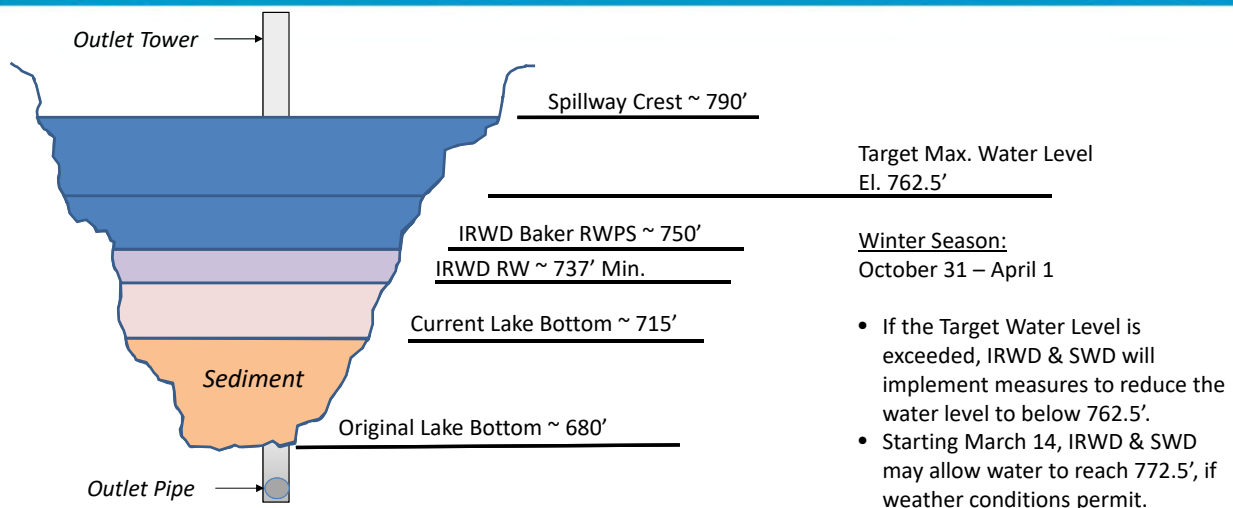
Irvine Lake Usable Storage Constraints



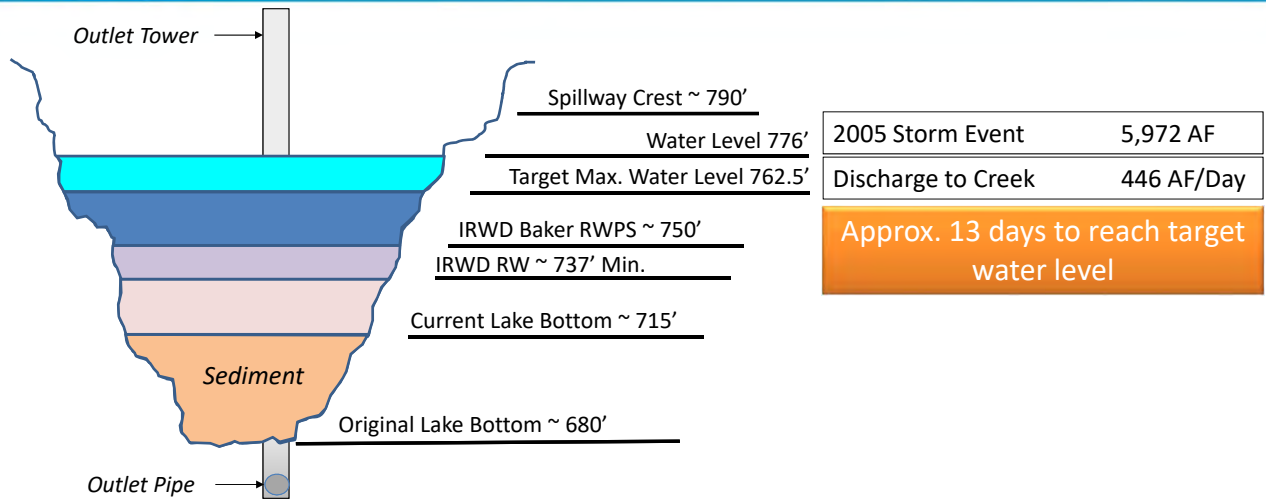
Santiago Reservoir Interim Operation Plan – Summer Season



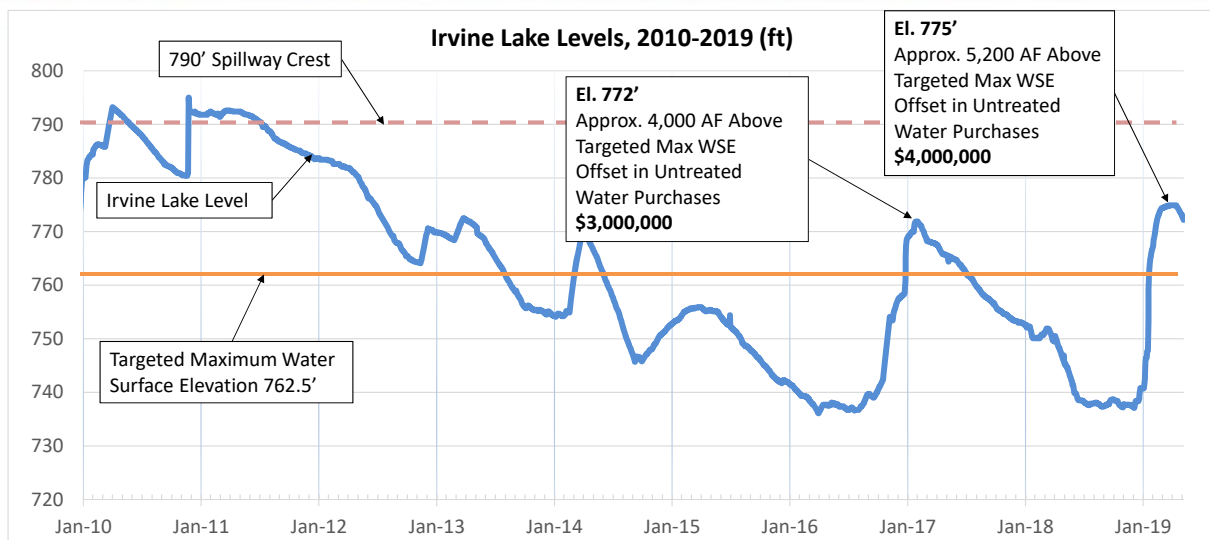
Santiago Reservoir Interim Operation Plan – Winter Season



Potential Lake Lowering Response Time



Potential Cost Impacts



Next Steps

Schedule

Submit / implement Lake Level Interim Operation Plan and submit plan to DSOD

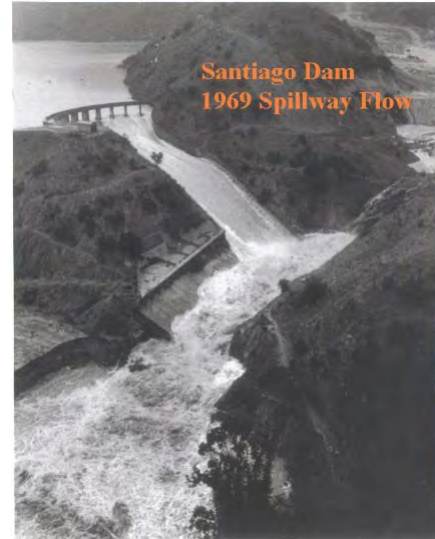
March 2020

Complete Spillway Replacement Alternatives Study and identify preferred alternative

April 2020

IRWD and SWD Boards: Merge AECOM and GEI consultant contracts and start CEQA process

April 2020



Questions

