AGENDA
IRVINE RANCH WATER DISTRICT
FINANCE AND PERSONNEL COMMITTEE MEETING
TUESDAY, NOVEMBER 6, 2018

CALL TO ORDER 2:30 p.m., Committee Room, Second Floor, District Office
15600 Sand Canyon Avenue, Irvine, California

ATTENDANCE Committee Chair: Peer Swan ____ Member: Steve LaMar ____

ALSO PRESENT

Paul Cook	____	Cheryl Clary	____
Rob Jacobson	____	Christopher Smithson	____
Tanja Fournier	____	Eileen Lin	____
Kevin Burton	____	Jennifer Davis	____
Jenny Roney	____	Tony Mossbarger	____
Paul Weghorst	____	____________	____
Wendy Chambers	____	____________	____
Allen Shinbashi	____	____________	____

COMMUNICATIONS

1. Notes: Clary
2. Public Comments
3. Determine the need to discuss and/or take action on item(s) introduced, which came to the attention of the District subsequent to the agenda being posted.
4. Determine which items may be approved without discussion.

INFORMATION

5. EMPLOYEE POPULATION AND TURNOVER STATUS REPORT – SRADER / RONEY

   Recommendation: Receive and file.

6. PERFORMANCE RECOGNITION PROGRAM QUARTERLY UPDATE – HALL / RONEY

   Recommendation: Receive and file.

7. EXPENSES AND FEES OF BOARD MEMBERS AND GENERAL MANAGER PAID THROUGH THE FIRST QUARTER, FY 2018-19 – PULLES / CLARY

   Recommendation: Receive and file.

8. FIRST QUARTER FY 2018-19 LEGAL FEES ANALYSIS – TOBAR / CLARY

   Recommendation: Receive and file.

INFORMATION (Continued)

9. MONTHLY INVESTMENT AND DEBT REVIEW – DAVIS / FOURNIER / JACOBSON / CLARY

   Recommendation: Receive and file.

10. QUARTERLY DEFERRED COMPENSATION PLAN AND FUND REVIEW – DAVIS / FOURNIER / JACOBSON / CLARY

    Recommendation: Receive and file.

11. REAL ESTATE QUARTERLY PERFORMANCE – DAVIS / FOURNIER / JACOBSON / CLARY

    Recommendation: Receive and file.

12. QUARTERLY RISK MANAGEMENT REPORTING – SHINBASHI / JACOBSON

    Recommendation: Receive and file.

13. REPLACEMENT PLANNING MODEL – MARCACCI / AKIYOSHI / BURTON / SMITHSON / CLARY

    Recommendation: That the Committee provide feedback on the costs and assumptions used in the Replacement Planning and Replacement Fund Balance Models.

14. QUARTERLY OPERATING HIGHLIGHTS – PARDEE / SMITHSON / CLARY

    Recommendation: Receive and file.

ACTION

15. ANNUAL BOARD OF DIRECTORS' FEES – SWAN / COOK

    Recommendation: That the Board either accept or decline the five (5%) percent compensation increase for calendar year 2019.

16. FY 2017-18 COMPREHENSIVE ANNUAL FINANCIAL REPORT – LIN / CLARY

    Recommendation: Receive and file.

ACTION (Continued)

17. BUSINESS INTELLIGENCE CLOUD DISASTER RECOVERY IMPLEMENTATION AND REPORTING CONSULTANT SERVICES VARIANCE APPROVAL – MOSSBARGER / CLARY

Recommendation: That the Board authorize the General Manager to execute a variance to the agreement with Dilytics for Variance No. 4 in the amount of $426,000 for the BI Cloud DR Implementation and Reporting agreement and approve a budget increase in the amount of $246,000 each to project 10345 and 10347, for a total of $492,000.

18. ANNUAL MICROSOFT ENTERPRISE AGREEMENT SOFTWARE MAINTENANCE RENEWAL – MOSSBARGER / CLARY

Recommendation: That the Board approve the renewal of the Microsoft Enterprise Agreement beginning December 1, 2018 for a total commitment of $510,000.

19. REVISIONS TO PERSONNEL POLICY NO. 45 – CONFLICT OF INTEREST POLICY – COMPTON / COOK

Recommendation: That the Board adopt the following resolution by title:

RESOLUTION NO. 2018 -

RESOLUTION OF THE BOARD OF DIRECTORS OF IRVINE RANCH WATER DISTRICT RESCINDING RESOLUTION NO. 2015-30, AND ADOPT A REVISED CONFLICT OF INTEREST CODE FOR THE DISTRICT

OTHER BUSINESS

20. Directors' Comments

21. CLOSED SESSION

CONFERENCE WITH LEGAL COUNSEL — EXISTING LITIGATION - Pursuant to Government Code Section 54956.9(d)(1):

- *Farmers Insurance Exchange v. The Irvine Company, et al,* Case No.: 30-2018-01015483-CU-PO-CJC
- *Victoria Gleason v. County of Orange, et al,* Case No.: 30-2018-00977432

OTHER BUSINESS (Continued)

- *National Union Fire Ins. Co. of Pittsburgh, PA, et al, v. J-M Manufacturing Co., Inc. and Formosa Plastics Corp., USA,* Case No.: BC444309

CONFERENCE WITH LEGAL COUNSEL — ANTICIPATED LITIGATION - Pursuant to Government Code Section 54956.9(d)(2): significant exposure to litigation (*one potential case: BKK Working Group notification to IRWD of potential liability, claim and/or litigation on file with the District.*)

22. Adjournment

Availability of agenda materials: Agenda exhibits and other writings that are disclosable public records distributed to all or a majority of the members of the above-named Committee in connection with a matter subject to discussion or consideration at an open meeting of the Committee 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 Committee 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 Committee Members, except that if such writings are distributed one hour prior to, or during, the meeting, they will be available at the entrance of the meeting room at the District Office. The Irvine Ranch Water District Committee 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 an alternative format upon written request to the District Secretary at least seventy-two (72) hours prior to the scheduled meeting.

November 6, 2018
Prepared by: L. Srader
Submitted by: J. Roney
Approved by: Paul A. Cook P. Cook.

FINANCE AND PERSONNEL COMMITTEE

EMPLOYEE POPULATION AND TURNOVER STATUS REPORT

SUMMARY:

Staff has prepared various population and turnover reports for the Committee to review.

BACKGROUND:

The information attached as Exhibit "A" is a status report submitted monthly to the Committee for review.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

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

RECOMMENDATION:

Receive and file.

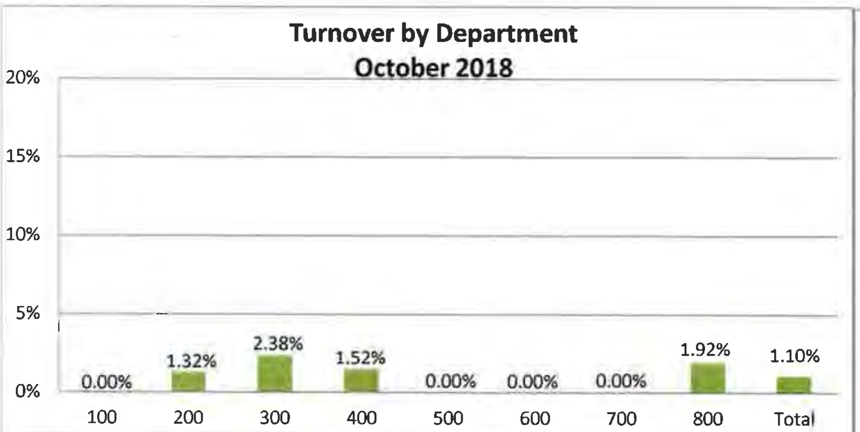
LISTS OF EXHIBITS:

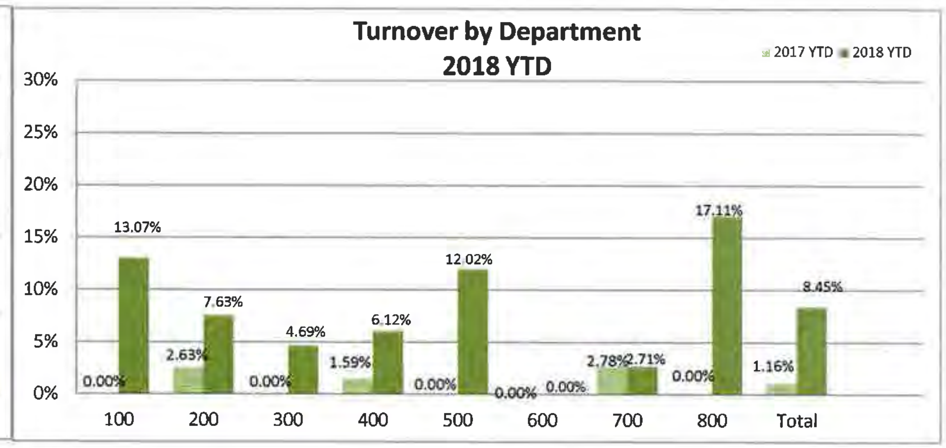
Exhibit "A" – Employee Population/Turnover Status Report

Exhibit "A"

IRVINE RANCH WATER DISTRICT
EMPLOYEE POPULATION STATUS REPORT
October 2018

	@10/01/18	Current Month Activity							@10/31/18		FY 18/19	Avg FYTD	Avg FYTD	Avg FYTD	Internal Turnover		External Turnover	
	Positions	New	Terms		Promo Trnsfr		Lateral Trnsfr		Positions	Positions	Budgeted	Filled Budget	Temp Emp	Total Filled	Current	2018	Current	2018
Dept	Filled	Hires	Vol	Invol	In	Out	In	Out	Filled	Unfilled	Positions*	Positions	FTE	Positions	Period	YTD	Period	YTD
100	16.0								16.0	0	16.0	15.5	0.0	15.5	0.00%	0.00%	0.00%	13.07%
200	76.0	4	1						79.0	8	84.0	77.3	15.8	93.1	0.00%	0.00%	1.32%	7.63%
300	42.0	1	1						42.0	2	44.0	42.5	4.6	47.1	0.00%	0.00%	2.38%	4.69%
400	66.0	2	1						67.0	4	70.0	66.5	8.8	75.3	0.00%	1.53%	1.52%	6.12%
500	52.0	1							53.0	4	56.0	49.5	4.9	54.4	0.00%	0.00%	0.00%	12.02%
600	20.0								20.0	0	20.0	20.0	2.3	22.3	0.00%	0.00%	0.00%	0.00%
700	41.0								41.0	2	43.0	38.8	6.7	45.4	0.00%	0.00%	0.00%	2.71%
800	52.0	3	1						54.0	8	60.0	52.5	0.9	53.4	0.00%	0.00%	1.92%	17.11%
Totals	365	11	4	0	0	0	0	0	372.0	28	393.0	362.5	44.0	406.5	0.00%	0.28%	1.10%	8.45%
10/17	344	8	2	0	5	5	0	0	350	27	377.00	338.40	24.50	362.9	1.45%	0.30%	0.58%	5.65%



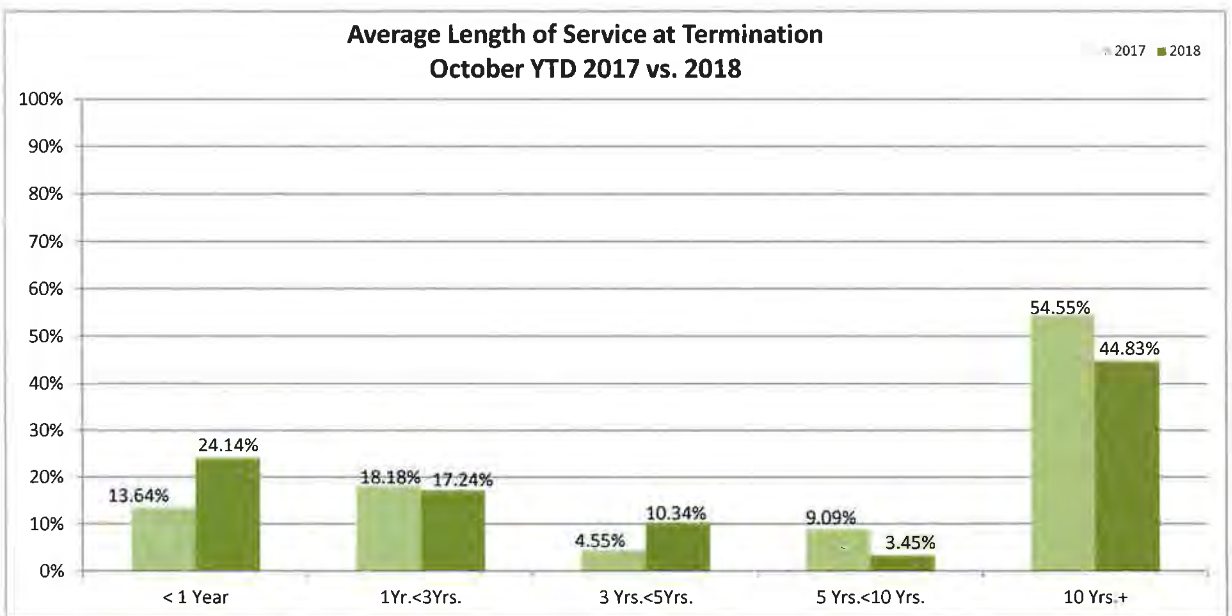


100-GM, HR, Safety; 200-Fin., Cust. Serv., IS, Purch.; 300-Eng.: 400-Water Ops; 500-Recycling; 600-Water Qualty; 700-Water Res., Pol., Conserv. and Public Affairs; 80-Adm. & Maintenance Ops
*Compares prior year with current year

IRVINE RANCH WATER DISTRICT
TURNOVER LONGEVITY RATIO
October 2018

Dept.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD	YTD Turnover Longevity Ratio				
														< 1 Year	1Yr.<3Yrs.	3 Yrs.<5Yrs.	5 Yrs.<10 Yrs.	10 Yrs.+
100			1			1							2		1			1
200		1	1			1			2	1			6	2	1	1		2
300								1		1			2					2
400							1		2	1			4	2				3
500			1		2	2	1						6	2	1			3
600													0					
700								1					1			1		
800	1	1		1		1	1		2	1			8	1	2	1	1	2
2018 Total	**1**	**2**	**3**	**1**	**2**	**5**	**3**	**2**	**6**	**4**	**0**	**0**	**29**	**7**	**5**	**3**	**1**	**13**
2017 Data	**1**	**2**	**0**	**2**	**3**	**4**	**4**	**1**	**4**	**2**	**2**	**3**	**28**					
Percentage of Total Turnover														**24.14%**	**17.24%**	**10.34%**	**3.45%**	**44.83%**

2018 Average YTD Length of Service at Termination	**13.00 Years**
2017 Average YTD Length of Service at Termination	**14.35 Years**
2016 Average YTD Length of Service at Termination	**12.43 Years**
2015 Average YTD Length of Service at Termination	**12.27 Years**
2014 Average YTD Length of Service at Termination	**19.07 Years**



IRVINE RANCH WATER DISTRICT
EMPLOYEE POPULATION STATUS REPORT
October 2018

NEW HIRES

Hire	Dept	Employee Name	Position	Comments
10/22/18	210	Debra Pardee	Financial Analyst	
10/20/18	220	Alan Aguilar	Customer Service Field Technician	
10/16/18	240	Jimmy Rodriguez	Material Control Clerk I	
10/22/18	240	Adam Madrid	Material Control Clerk I	
10/08/18	300	Jason Pilgrim	Senior Construction Inspector	
10/20/18	430	Nicholas Korneff	Utility Worker	
10/20/18	430	Earl De Castro	Utility Worker	
10/01/18	550	Anthony Lockhart	Operator I	
10/22/18	840	Corey Grier	Senior Maintenance Mechanic	
10/22/18	870	Guy Perry	Vehicle and Equipment Maint. Mechanic	
10/30/18	870	Gregory Cronin	Vehicle and Equipment Maint. Mechanic	

TERMINATIONS

Termination Date	Dept	Employee Name	Position	Reason	Comments
10/19/18	250			Vol	
10/06/18	820			Vol	
10/12/18	420			Vol	

RETIREMENTS

Effective Date	Departing Dept	Employee Name	Position	Reason	Comments
10/06/18	300	Arseny Kalinsky	Engineer	Ret	

PROMOTIONS

Effective Date	Departing Dept	Employee Name	Departing Position	New Dept	New Position
10/06/18	220	Lina Santos	Customer Service Specialist I		Customer Service Specialist II

TRANSFERS

Effective Date	Departing Dept	Employee Name	Departing Position	New Dept	New Position

CROSS TRAINING

Effective Date	Departing Dept	Employee Name	Departing Position	New Dept	New Position
10/18/18	425	Douglas Rock	Metering Systems Technician	300	Construction Inspection

IRVINE RANCH WATER DISTRICT
EMPLOYEE POPULATION STATUS REPORT
October 2018

UNFILLED POSITIONS			
Dept	**Position**	**Salary Grade**	**Comments**
250	User Support Manager	U18.E	Recruiting
220	Customer Service Field Technician	14.N	Recruiting
220	Customer Service Specialist I	13.N	Recruiting
250	Sr. Applications Analyst	U18.E	Offer Pending
250	Network Administrator	U32.N	
300	Construction Inspector	28.N	
300	Engineer	U17.E	
425	Operator II	27.N	Recruiting
420	Operator III	29.N	
425	Water Maintenance Technician I	16.N	Recruiting
550	Operator II	27.N	Recruiting
550	Operator III	29.N	Recruiting
550	Process Specialist	32.N	
710	Cross Connection Control Supervisor	S31.N	
740	Regulatory Compliance Manager	U18.E	Recruiting through Alliance
805	Director of Maintenance	U27.E	
820	Instrumentation Technician	28.N	Recruiting
820	Instrumentation Technician	28.N	Recruiting
820	Electrical Technician	28.N	Recruiting
830	Asset Systems Analyst	10.E	Interviews scheduled
850	Facilities Services Technician	22.N	Recruiting

IRVINE RANCH WATER DISTRICT
EMPLOYEE POPULATION STATUS REPORT
October 2018

LEAVE OF ABSENCE					
Type of Leave	**Pay Status**	**Date Leave Began**	**Anticipated Return Date**	**Current Length**	**Comments**
FMLA/CFRA	SDI	7/23/2018	2/1/2019	3 months	
WC	WC	9/4/2018		2 months	
MLA/CFRA/PF	SDI	10/25/2018	1/2/2019	1 week	
FMLA/CFRA	SDI	10/15/2018	11/2/2018	3 weeks	
FMLA/CFRA	SDI	10/2/2018	11/12/2018	1 month	
MFLA/CFRA/PF	SDI	10/1/2018	11/12/2018	1 month	
MLA/CFRA/PF	SDI	10/1/2018	11/6/2018	1 month	
FMLA/CFRA	SDI	9/28/2018	10/24/2018	1 month	

Leave	Status	Began	Return Date	Length	Return Date	Comments
VC/FMLA/CFR	WC	10/30/2017	11/6/2017	1 Week	11/06/17	Returned
VC/FMLA/CFR	WC	10/30/2017	11/6/2017	1 Week	11/06/17	Returned
VC/FMLA/CFR	WC	10/30/2017	11/2/2017	1 Week	11/06/17	Returned
FMLA/CFRA	PFL	10/19/2017	11/27/2017	2 Weeks	11/27/17	Returned
FMLA/CFRA	PFL	11/11/2017	12/5/2017	3 Weeks	11/28/17	Returned
FMLA/CFRA	SDI	8/14/2017	12/6/2017	2 Month	12/06/17	Returned
FMLA/CFRA	SDI	12/5/2017	12/27/2017	3 Weeks	12/18/17	Returned
FMLA/CFRA	SDI	12/1/2017	12/17/2017	2 Weeks	12/18/17	Returned
FMLA/CFRA	PFL	12/16/2017	1/2/2018	2 Weeks	01/02/18	Returned
FMLA/CFRA	Sick	12/29/2017	1/8/2018	1 Week	01/08/18	Returned
FMLA/CFRA	SDI	12/28/2017	1/15/2018	3 Weeks	01/15/18	Returned
FMLA/CFRA	SDI	6/8/2017	1/10/2018	4 Months	02/01/18	Returned
FMLA/CFRA	SDI	12/25/2017	1/29/2018	5 Weeks	01/29/18	Returned
FMLA/CFRA	PFL	1/23/2018	2/9/2018	1 Week	02/08/18	Returned
FMLA/CFRA	PFL	2/6/2018	2/19/2018	2 Weeks	02/20/18	Returned
Leave	Sick/Vac	2/16/2018	3/1/2018	2 Weeks	03/02/18	Returned
VC/FMLA/CFR	WC	8/14/2017	1/19/2018	6 Months	03/05/18	Returned
FMLA/CFRA	PFL	1/23/2018	3/6/2018	1 Month	03/07/18	Returned
FMLA/CFRA	PFL	2/17/2018	3/19/2018	1 Week	03/12/18	Returned
FMLA/CFRA	PFL	2/27/2018	3/12/2018	2 Weeks	03/12/18	Returned
FMLA/CFRA	SDI	2/20/2018	4/1/2018	1.5 Weeks	03/13/18	Returned
FMLA/CFRA	PFL	2/2/2018	3/19/2018	1 Month	03/19/18	Returned
FMLA/CFRA	PFL	2/26/2018	3/15/2018	2 Weeks	03/19/18	Returned
VC/FMLA/CFR	WC	3/8/2018	3/19/2018	3 Weeks	03/20/18	Returned
VC/FMLA/CFR	WC	1/10/2018	6/10/2018	3 Months	04/10/18	Returned
Leave	Vac/PH	2/23/2018	3/23/2018	1 Month	04/02/18	Returned
FMLA/CFRA	PFL	4/8/2018	4/9/2018	1 Week	04/09/18	REturned
FMLA/CFRA	PFL	2/27/2018	4/11/2018	7 Weeks	04/11/18	Returned
FMLA/CFRA	SDI	3/23/2018	4/6/2018	1 Week	04/09/18	Returned
FMLA/CFRA	PFL	3/16/2018	5/7/2018	1.5 Months	05/07/18	Returned
FMA/CFRA	PFL	4/3/2018	5/16/2018	1 Month	05/16/18	Returned
FMA/CFRA	SDI	4/26/2018	5/7/2018	1 week	05/07/18	Returned
FMA/CFRA	PFL	4/17/2018	5/15/2018	1 month	05/15/18	Returned

IRVINE RANCH WATER DISTRICT
EMPLOYEE POPULATION STATUS REPORT
October 2018

LEAVE OF ABSENCE						
Type of Leave	**Pay Status**	**Date Leave Began**	**Anticipated Return Date**	**Current Length**	**Comments**	
FMLA/CFRA	PFL	5/11/2018	5/21/2018	2 weeks	05/21/18	Returned
FMLA/CFRA	PFL	5/14/2018	5/24/2018	10 days	05/24/18	Returned
FMLA/CFRA	SDI	4/10/2018	5/17/2018	2 Month	05/28/18	Returned
CFRA	PFL	5/29/2018	6/11/2018	8 days	06/11/18	Returned
FMLA/CFRA	PFL	5/25/2018	6/11/2018	1 Week	06/11/18	Returned
WC/FMLA/CFRA	WC	4/12/17	43279	13 months	06/28/18	Retired
FMLA/CFRA	SDI	2/12/2018	7/4/2018	4 months	07/03/18	Returned
FMLA/CFRA	PFL	6/5/2018	6/26/2017	4 weeks	06/19/18	Returned
FMLA/CFRA	PFL	6/4/2018	6/25/2018	5 weeks	06/25/18	Returned
FMLA/CFRA	PFL	5/17/2018	7/5/2018	7 weeks	07/05/18	Returned
FMLA/CFRA	SDI	5/15/2018	9/24/2018	10 weeks	08/24/18	Resigned
WC	WC	6/27/2018	7/30/2018	4 weeks	07/30/18	Returned

IRVINE RANCH WATER DISTRICT
EMPLOYEE POPULATION STATUS REPORT
October 2018

Month	Dept	Length of Employment	Termination		Comments
			Vol	Invol	
January	820	5 Years, 8 Months	X		Other employment
February	805	4 Years, 10 Months	X		Other employment
	220	1Year, 11 Months	X		Other employment
March	210	36 Years, 5 Months	X		Retired
	130	2 Years, 7 Months	X		Other employment
	590	24 Years, 1 Month	X		Retired
April	840	1 Month	X		Other employment
May	590	22 years, 1 month	X		Retired
	550	1 year, 3 months	X		Other employment
June	850	28 years, 5 months	X		Retired
	250	7 months		X	Probation Rejection
	590	23 years, 10 months	X		Retired
	140	23 years	X		Retired
	550	11 months	X		Other employment
July	550	11 months	X		Other employment
	820	1 year, 7 months	X		Other employment
	420	37 years, 6 months	X		Retired
August	300	20 years	X		Retired
	740	5 years, 7 months	X		Other employment
September	220	3 years, 2 months	X		Stay home
	425	2 months	X		Other employment
	420	11 months		X	Probation Rejection
	805	37 years, 10 months	X		Retired
	240	29 years	X		Retired
	870	25 years, 5 months	X		Retired
October	300	25 years, 3 months	X		Retired
	250	2 years, 3 months	X		Other employment
	820	1 month	X		Other employment
	420	12 years, 6 months	X		Out of State
November					
December					

IRVINE RANCH WATER DISTRICT
SUMMARY
AGENCY & DISTRICT TEMPORARY EMPLOYEES
September 2018*
ACTIVE

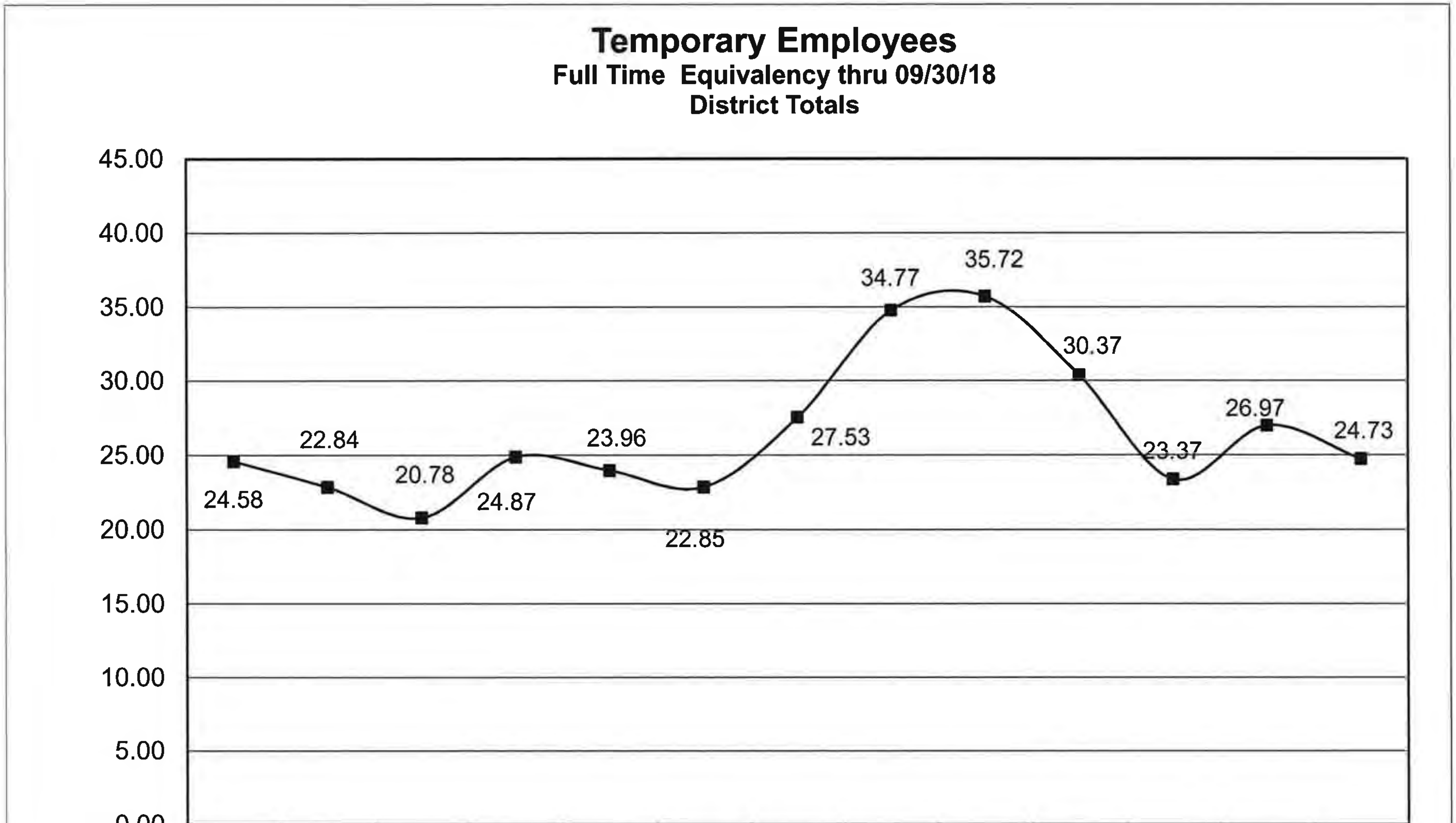
Current Month FTE	FYTD Ave Hours Worked FTE	PERS Enroll-ment	Agency	Dept	Hire Date	Term Date	Job Assignment	Hourly Rate	Est Hours per Month	Est Cost Per Month	Expected Duration (Months)	Actual Worked (Months)	Projected Cost FY' YTD	Actual Cost FY 'YTD
0.00	**0.00**			**100**										
0.84	1.00	Yes		210	6/5/2017		Temp. Accountant	30.00	168	5,040.00	6	3	15,120.00	15,903.60
1.00	1.00	Yes		220	7/17/2017		Temp. CS Field Tech	35.22	168	5,916.96	12	3	17,750.88	21,334.52
1.00	1.00	No	X	220	1/22/2018		Temp. CS Field Tech	31.00	168	5,208.00	12	3	15,624.00	16,864.00
0.89	0.98	Yes		220	10/2/2017		Temp. CS Field Tech	22.11	168	3,714.48	12	3	11,143.44	11,469.56
0.80	0.92	Yes	X	220	2/5/2018		Temp. CS Specialist I	25.97	168	4,362.96	12	3	13,088.88	12,452.62
0.78	0.61	YES		240	6/5/2017		Temp. Help	26.01	168	4,369.68	3	3	13,109.04	8,193.15
1.00	0.79	No	X	240	3/12/2018		Temp. Material Control	26.01	168	4,369.68	3	3	13,109.04	11,515.93
0.00	0.00	Yes		250	9/17/2018		Retired Annuitant	56.55	84	4,750.20	9	2	9,500.40	0.00
0.88	0.51	EXC		220	8/6/2018		CS Specialist	25.97	168	4,362.96	11	2	8,725.92	6,963.21
7.19	**6.81**			**200**										
0.82	0.98	Yes		300	6/20/2015	10/27/2018	Temp. GIS Tech	24.23	168	4,070.64	12	3	12,211.92	12,381.53
0.63	0.85	Yes		300	6/20/2016		Temp. Asst. Engineer	15.00	84	1,260.00	12	3	3,780.00	6,633.75
0.76	0.81	No	X	300	3/8/2018		Temp. Development Ser	38.44	168	6,457.92	12	3	19,373.76	16,215.15
0.78	0.94	No	X	300	3/19/2018		Temp. Sr. Office Specia	35.31	168	5,932.08	12	3	17,796.24	17,213.63
0.72	0.91	EXC		300	6/16/2018		Student Intern	17.00	84	1,428.00	12	4	5,712.00	8,007.00
0.62	0.87	EXC		300	6/16/2018		Student Intern	17.00	84	1,428.00	12	4	5,712.00	7,650.00
0.92	0.77	EXC		300	6/16/2018		Student Intern	17.00	84	1,428.00	12	4	5,712.00	6,800.00
0.75	0.92	EXC		300	6/16/2018		Student Intern	17.00	84	1,428.00	12	4	5,712.00	8,109.00
0.87	0.44	No	X	300	8/13/2018		GIS Tech I	33.98	168	5,708.64	11	3	17,125.92	7,849.38
0.57	0.74	Yes		300	7/10/2018		Asst. Engineer	34.78	168	5,843.04	12	3	17,529.12	13,320.74
3.00	**3.58**			**300**			Student Intern							
0.87	0.83	No	X	425	11/28/2017		Temp. WM Tech I	23.12	168	3,884.16	12	3	11,652.48	10,178.58
1.00	1.00	No	X	425	3/8/2018		Temp. Water Maintenan	31.18	168	5,238.24	12	3	15,714.72	17,616.70
0.94	0.99	No	X	425	3/20/2018		Temp. Water Maintenan	31.18	168	5,238.24	12	3	15,714.72	16,018.73
1.00	1.00	Yes		430	8/1/2017	10/19/2018	Temp. Utility Worker	23.00	168	3,864.00	12	3	11,592.00	12,992.13
0.98	0.40	No	X	425	8/20/2018		Metering Sys. Tech	31.18	168	5,238.24	10	2	10,476.48	6,688.11
0.92	0.38	No	X	425	8/20/2018		Metering Sys. Tech	31.18	168	5,238.24	10	2	10,476.48	6,391.90
0.00	0.00	No		425	10/23/2018		Temp Utility Wkr	31.17	168	5,236.56	8		0.00	0.00
0.00	0.00	No		425	9/11/2018		Temp WMT I	31.15	168	5,233.20	12	1	5,233.20	3,738.00
1.00	1.00	Yes		430	5/2/2017	10/11/2018	Temp. Utility Worker	26.65	168	4,477.20	12	3	13,431.60	16,782.84
6.70	**5.61**			**400**										
0.78	0.72	EXC		515	7/24/2017		Student Intern	18.00	84	1,512.00	6	3	4,536.00	6,750.00
0.92	1.00	EXC		515	7/24/2017		Student Intern	27.02	84	2,269.68	12	3	6,809.04	14,698.88
0.88	0.65	EXC		515	7/23/2018		Student Intern	18.00	84	1,512.00	12	3	4,536.00	6,048.00
0.92	0.82	EXC		515	7/11/2018		Student Intern	16.00	84	1,344.00	12	3	4,032.00	6,784.00
1.70	**1.72**			**500**										
0.35	0.70	EXC		600	6/19/2017		Student Intern	17.00	84	1,428.00	6	3	4,284.00	6,145.50
0.71	0.71	EXC		600	7/8/2017		Student Intern	17.00	84	1,428.00	11	2	2,856.00	6,273.00
0.96	0.94	No	X	600	11/27/2017		Temp. Scientist	31.50	168	5,292.00	11	2	10,584.00	15,868.13
0.87	0.80	EXC		600	7/9/2018		Student Intern	15.00	84	1,260.00	12	3	3,780.00	6,247.50
0.88	0.66	EXC		600	7/24/2018		Student Intern	15.00	84	1,260.00	12	2	2,520.00	5,160.00
2.02	**2.35**			**600**										
0.77	0.97	Yes		750	5/7/2018		Temp Water Eff Spec	27.02	168	4,539.36	12	3	13,618.08	13,604.57
0.61	0.72	Yes		730	8/13/2015	10/13/2018	Temp. Filling Station At	19.80	84	1,663.20	5	3	4,989.60	7,415.10
0.63	0.76	Yes		730	8/13/2015	10/15/2018	Temp. Filling Station At	19.00	84	1,596.00	5	3	4,788.00	7,552.50
0.63	0.65	No	X	730	4/30/2018		Temp. Filling Station At	19.99	84	1,679.16	5	3	5,037.48	6,806.60
0.57	0.87	EXC		750	7/10/2017		Student Intern	16.00	84	1,344.00	12	3	4,032.00	7,240.00
0.81	1.00	Yes		750	7/18/2017		Temp. Water Eff. Spec.	27.02	168	4,539.36	12	3	13,618.08	14,692.13
0.00	0.00	No		740	9/10/2018		Temp Scientist	44.63	168	7,497.84	10	2	14,995.68	5,355.60
0.78	1.00	No	X	740	2/5/2018		Temp Scientist	29.75	168	4,998.00	12	3	14,994.00	15,916.25
3.26	**4.00**			**700**										
0.85	0.86	No	X	850	2/28/2018	11/9/2018	Temp. Facilities Service	36.48	168	6,128.64	3	3	18,385.92	16,343.04
0.85	**0.86**			**800**										
24.73	**24.93**													

IRVINE RANCH WATER DISTRICT
SUMMARY
AGENCY & DISTRICT TEMPORARY EMPLOYEES
September 2018*
TERMINATED

Current Month FTE	Avg FYTD Temp Emp FTE	Active PERS Y/N *	Agency	Dept	Hire Date	Term Date	Classification	Hourly Rate	Est Hours per Month	Est Cost Per Month	Expected Duration (Months)	Actual Worked (Months)	Projected Cost FYTD	Actual Cost FYTD
0.00	**0.00**			**100**										
0.00	**0.00**			**200**										
0.00	**0.00**			**300**										
0.00	**0.00**			**400**										
0.54	0.21	EXC		515	7/9/2018	8/23/2018	Student Intern	15.00	84	1,260.00	12	2	2,520.00	1,635.00
0.00	**0.00**			**500**										
#REF!	**#REF!**			**600**										
#REF!	**#REF!**			**700**										
0.00	**0.00**			**800**										
	#REF!												466,222.24	469,819.51

EXC = Exclude from PERS enrollment

Yes= Temporary employee enrolled in PERS Membership
No=Temporary Agency employee
*Data reported 30 days in arrears



	9/17	10/17	11/17	12/17	01/18	02/18	03/18	04/18	5/18	6/18	7/18	8/18	9/18
District	24.58	22.84	20.78	24.87	23.96	22.85	27.53	34.77	35.72	30.37	23.37	26.97	24.73

November 6, 2018
Prepared by: A. Hall
Submitted by: J. Roney
Approved by: Paul A. Cook

FINANCE AND PERSONNEL COMMITTEE

PERFORMANCE RECOGNITION PROGRAM QUARTERLY UPDATE

SUMMARY:

Irvine Ranch Water District's Performance Recognition Program recognizes employees who exhibit outstanding performance which depicts initiative, creativity and/or enthusiasm above and beyond the performance requirements of their positions. This memo provides an update of activities within this program through the first quarter of FY 2018-19.

BACKGROUND:

During the first quarter of the FY 2018-19, there were 22 Performance Recognition Awards totaling $3,389.00 and involving 64 IRWD employees. As described in Exhibit "A", the awards include employees in Engineering, Water Resources and Policy, Maintenance Operations, Administration, Water Operations, and Finance and Administration.

As of September 30, 2018, the Fiscal Year overall Performance Recognition Awards totaled $3,389.00.

Exhibit "A" summarizes the Performance Recognition Awards for the first quarter of FY 2018-19.

FISCAL IMPACTS:

The District's annual budget for FY 2018-19 is $157,000 for this program of which $3,389.00 has been distributed for awards to date.

RECOMMENDATION:

Receive and file.

LISTS OF EXHIBITS:

Exhibit "A" – Quarterly Update for First Quarter of FY 2018-19

			PERFORMANCE RECOGNITION PROGRAM			
			QUARTERLY UPDATE			
			Fiscal Year 2018-2019			
			Q1 July - September 2018			
QTR.	**DATE**	**EMPLOYEE**	**PERFORMANCE RECOGNIZED**	**AWARD**	**GROSS AMOUNT**	**NET AMOUNT**
1st Qtr.	7/2/2018	Stephen Donnelly	Recognized for his excellent service to a customer by flushing a water	2 Tickets 2 Certs	$27.00	$27.00
			mainline in front of his home to clear excess buildup of Calcium Corbonate.			
	7/10/2018	Deniene Rivenburg	Recognized for her efforts assisting with a presentation on Organizational	2 Tickets 2 Certs	$27.00	$27.00
			Values for the Association of Women in Water, Engineering & Environment.			
	7/16/2018	Ken Pfister	Recognized for their innovative approach and the added efficiences gained	Payroll Check	$250.00	$102.88
		Kevin Reideler	at the BWTP.	Payroll Check	$250.00	$226.37
		Andrew Willis		Payroll Check	$250.00	$223.88
		Mark Nelson		Payroll Check	$250.00	$223.88
	7/26/2018	Sharon DeLeon	Recognized for their efforts to build a terrain model for the Portable,	2 Tickets 2 Certs	$27.00	$27.00
		Mark Marcacci	Recylced and Sewer system Hydraulic model to present at the Annual	2 Tickets 2 Certs	$27.00	$27.00
			ESRI User Conference.			
	7/31/2018	Quynh Nguyen	Recognized for her great assistance to Human Resources during our	2 Tickets 2 Certs	$27.00	$27.00
			transition period.			
	8/14/2018	Eric Flotho	Recognized for his efforts in assisting with password changes and AV			
			equipment setup in a kind and patient manner.	2 Tickets 2 Certs	$27.00	$27.00
	8/14/2018	Toni Lynch	Recognized for her efforts preparing for and conducting an excellent pre-bid	2 Tickets 2 Certs	$27.00	$27.00
			meeting for the Reach "A" Sewer Improvements projects.			
	8/15/2018	Jacob Broderick	Recognized for his efforts starting a recycling program for the single-use	2 Tickets 2 Certs	$27.00	$27.00
			plastic sampling containers.			
	8/16/2018	Jeffrey Schreck	Recognized for their efforts going "above and beyond" in their job duties	2 Tickets 2 Certs	$27.00	$27.00
		Timothy Koenig	cross training, volunteering for challenging assignments, picking up extra	2 Tickets 2 Certs	$27.00	$27.00
		Jason Ludwig	workload and showing overall geniune enthusiasm for their job.	2 Tickets 2 Certs	$27.00	$27.00
	8/16/2018	John Fabris	Recognized for their efforts in putting together a highly creative and effective	2 Tickets	$17.00	$17.00
		Julie Bendzick-Sin	graphic comparison of the IRWD/MWDOC Water Supply Reliability Pilot	2 Tickets	$17.00	$17.00
			Program against other opportunities available in the county.			

			PERFORMANCE RECOGNITION PROGRAM			
			QUARTERLY UPDATE			
			Fiscal Year 2018-2019			
			Q1 July - September 2018			
QTR.	**DATE**	**EMPLOYEE**	**PERFORMANCE RECOGNIZED**	**AWARD**	**GROSS AMOUNT**	**NET AMOUNT**
1st Qtr.	8/16/2018	Joesph Baquerizo	Recognized for their efforts on the Tap Water 101 Community Workshop.	Payroll Check	$100.00	$68.95
		Ken Pfister	This event was an outstanding collboration of hard work, creativity and	Payroll Check	$100.00	$68.95
		John Fabris	leadership.	Payroll Check	$100.00	$68.95
		Lars Oldewage		Payroll Check	$100.00	$68.95
		Connie Ho		Payroll Check	$100.00	$68.95
		Dawn Jordan		Payroll Check	$100.00	$68.95
		Deniene Rivenburg		Payroll Check	$100.00	$68.95
		Bob Denhaan		2 Tickets 2 Certs	$27.00	$27.00
		Julie Bendzick-Sin		2 Tickets 2 Certs	$27.00	$27.00
		Amy McNulty		2 Tickets 2 Certs	$27.00	$27.00
		Denise Chauz		2 Tickets 2 Certs	$27.00	$27.00
		Jason La		2 Tickets 2 Certs	$27.00	$27.00
		Luis Genis		2 Tickets 2 Certs	$27.00	$27.00
		Mindy Bergen		2 Tickets 2 Certs	$27.00	$27.00
		Alex Munoz		2 Tickets 2 Certs	$27.00	$27.00
		Damien McBride		2 Tickets 2 Certs	$27.00	$27.00
		Jay Eggers		2 Tickets 2 Certs	$27.00	$27.00
		Jesse Hesch		2 Tickets 2 Certs	$27.00	$27.00
		Mark Stone		2 Tickets 2 Certs	$27.00	$27.00
		Richard Brown		2 Tickets 2 Certs	$27.00	$27.00
	8/21/2018	Diane Squyres	Recognized for her above and beyond assistance to a visitor Carl Seckel,	2 Tickets 2 Certs	$27.00	$27.00
			Assistant GM of MWDOC .			
	8/23/2018	Lars Oldewage	Recognized for their efforts assisting with educational tours for the new	2 Tickets	$17.00	$17.00
		Mindy Bergen	Engineering Department interns.	2 Tickets	$17.00	$17.00
		Jason La		2 Tickets	$17.00	$17.00
		Joe Costantino		2 Tickets	$17.00	$17.00
		Scott Toland		2 Tickets 2 Certs	$27.00	$27.00
		Jacob Moeder		2 Tickets 2 Certs	$27.00	$27.00
	8/23/2018	Ray Bennett	Recognized for his efforts working with other department's staff on the	2 Tickets 2 Certs	$27.00	$27.00
			Baker Solar Project to ensure the project was thoroughly evaluated and all			
			issues and risks resolved properly.			
	8/28/2018	Bernardo Ordonez	Recognized for his efforts on the recently assigned TKN/TP analysis	2 Tickets 2 Certs	$27.00	$27.00
			assignment.			

			PERFORMANCE RECOGNITION PROGRAM			
			QUARTERLY UPDATE			
			Fiscal Year 2018-2019			
			Q1 July - September 2018			
QTR.	**DATE**	**EMPLOYEE**	**PERFORMANCE RECOGNIZED**	**AWARD**	**GROSS AMOUNT**	**NET AMOUNT**
1st Qtr.	8/31/2018	Henry Solis	Recognized for their efforts on 8/31/18 assisting Costa Mesa Sanitary	2 Tickets 2 Certs	$27.00	$27.00
		Jose Silva	District with the sewer force main/airgap and wastewater spill that occurred	2 Tickets 2 Certs	$27.00	$27.00
		Benjamin Vega	at the underpass of the 55 freeway at the Baker off ramp.	2 Tickets 2 Certs	$27.00	$27.00
		Brandon Gronlund		2 Tickets 2 Certs	$27.00	$27.00
	8/31/2018	David Crowe	Recognized for his efforts on the district and support of Water Loss	Payroll Check	$100.00	$68.95
			Prevention.			
	8/31/2018	Eric Akiyoshi	Recognized for their extra efforts analyzing several complex water operation	Payroll Check	$250.00	$174.87
		Mitchell Robinson	scenarios in regards to ongoing litigation with OCWD.	Payroll Check	$100.00	$68.95
	9/5/2018	Michael Arana	Recognized for his efforts assisting with questions and payroll procedures.	2 Tickets 2 Certs	$27.00	$27.00
		Benjamin Reed	Recognized for his efforts and enthusiastic initiative assisting with utility	2 Tickets 2 Certs	$27.00	$27.00
			billing and accounting duties in the absence of other staff.			
	9/6/2018	Jenny Pan	Recognized for their outstanding performance for closing the general ledger	2 Tickets 2 Certs	$27.00	$27.00
		Javier Tobar	for the discal year end June 30, 2018 and preparing for the year-end audit.	2 Tickets 2 Certs	$27.00	$27.00
		Sophia Phuong		2 Tickets 2 Certs	$27.00	$27.00
	9/20/2018	Dilcia Colina	Recognized for their efforts assisting with expedited project requests.	2 Tickets	$17.00	$17.00
		Shana Llewellyn				
		Bradley Jackson	Recognized for their efforts on their days off (Friday & Saturday) retreiving	4 Certs	$20.00	$20.00
		Jason Ludwig	keys and relocating District vehciles so that tree trimming could commence	4 Certs	$20.00	$20.00
			without damage to any vehicles.			
	9/25/2018	Diane Squyres	Recognized for their efforts, enthusiasm, helpful attitude and constant	2 Tickets 2 Certs	$27.00	$27.00
		Natalie Casteneda	display of the district values in their day to day work.	2 Tickets 2 Certs	$27.00	$27.00
			First Quarter Total		$3,389.00	$2,811.43
			FISCAL YEAR TO DATE TOTAL		$3,389.00	$2,811.43

November 6, 2018
Prepared by: M. Pulles
Submitted by: C. Clary
Approved by: Paul A. Cook

FINANCE AND PERSONNEL COMMITTEE

EXPENSES AND FEES OF BOARD MEMBERS AND GENERAL MANAGER PAID THROUGH THE FIRST QUARTER, FY 2018-19

SUMMARY:

Pursuant to the Policy Regarding Business Expense Reimbursement, Travel, Meeting Compensation and Representation, staff has assembled for Committee review an Expense Summary, as shown in Exhibits "A" and "B" for the District's Board Members and the General Manager through the first quarter of Fiscal Year (FY) 2018-19. Provided below is a summary of expenses paid to date.

	Name	Conference, Travel, and Other District-Related Expenses	Meeting Fees	Total
Board Members:	LaMar	$ 2,971	$ 8,190	$ 11,161
	Matheis	777	7,644	8,421
	Reinhart	1,011	8,190	9,201
	Swan	5,480	8,190	13,670
	Withers	205	6,825	7,030
	Sub-Total:	**$ 10,444**	**$ 39,039**	**$ 49,483**
General Manager:	Cook	$ 3,382	N/A	$ 3,382
	Sub-Total:	**$ 3,382**	**N/A**	**$ 3,382**
	TOTAL:	**$ 13,826**	**$ 39,039**	**$ 52,865**
	YTD Budget:	**$ 19,000**	**$ 42,000**	**$ 61,000**
	Variance:	**$ 5,174**	**$ 2,961**	**$ 8,135**

FISCAL IMPACTS:

Meeting fees total $39,039 versus a budget of $42,000 resulting in a positive variance of $2,961 year-to-date. Conference and meeting-related travel expenses total $13,826 versus a budget of $19,000, resulting in a positive variance of $5,174.

The total cost for Board and General Manager conference, travel, and other District-related expenses, including meeting fees, through the first quarter, FY 2018-19, is $52,865, resulting in a positive variance of $8,135 to budget.

ENVIRONMENTAL COMPLIANCE:

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

RECOMMENDATION:

Receive and file.

LIST OF EXHIBITS:

Exhibit "A" – Expense Summary, All Members
Exhibit "B" – Expense Summary, By Individual

Exhibit "A"

Irvine Ranch Water District
Conference/Seminar and Monthly Expense Summary
For the First Quarter, FY 2018-19

All Board Members/General Manager

Name	Registration Fees	Airfare	Lodging	Meals	Taxi/Shuttle/ Auto Rental	Parking Fees	Other	Mileage Reimb # Miles	Mileage Reimb Amount	Reimb. By ACWA	Total
Board Members:											
Steven LaMar	$ 1,170	$ 2,764	$ 844	$ 151	$ -	$ 40	$ -	175	$ 96	(2,093)	$ 2,971
Mary Aileen Matheis	165	524	-	-	63	20	-	9	5	-	777
Doug Reinhart	445	-	462	-	-	20	-	154	84	-	1,011
Peer Swan	1,451	1,088	1,468	101	119	195	164	1,640	894	-	5,480
John Withers	205	-	-	-	-	-	-	-	-	-	205
											-
											-
											-
											-
											-
											-
General Manager:											-
Paul Cook	1,174	1,174	146	443	-	25	420	-	-	-	3,382
											-
											-
Total	**$ 4,610**	**$ 5,550**	**$ 2,920**	**$ 695**	**$ 182**	**$ 300**	**$ 584**	**1,978**	**$ 1,078**	**$ (2,093)**	**$ 13,826**

Exhibit "B"

Irvine Ranch Water District
Conference/Seminar and Monthly Expense Summary
For the First Quarter, FY 2018-19

IRWD

Steven LaMar

Date Paid	Date Incurred	Description/Location	Registration Fees	Airfare	Lodging	Meals	Taxi/Shuttle/ Auto Rental	Parking Fees	Other	Mileage Reimb # Miles	Mileage Reimb Amount	Reimb. By ACWA	Total
Monthly Expense Reports													
Paid	July 2018	*Various business meetings	$ 35.00	$ 648.92								$ (648.92)	$ 35.00
Paid	August 2018	*Various business meetings	85.00	376.96								(376.96)	85.00
Paid	September 2018	*Various business meetings		1,173.85									1,173.85
	October 2018	Monthly Expense Report (no activity this period)											-
	November 2018	Monthly Expense Report (no activity this period)											-
	December 2018	Monthly Expense Report (no activity this period)											-
	January 2019	Monthly Expense Report (no activity this period)											-
	February 2019	Monthly Expense Report (no activity this period)											-
	March 2019	Monthly Expense Report (no activity this period)											-
	April 2019	Monthly Expense Report (no activity this period)											-
	May 2019	Monthly Expense Report (no activity this period)											-
	June 2019	Monthly Expense Report (no activity this period)											-
													-
													-
Conferences/Seminars and Other Non-local Travel													-
													-
Paid	08/01/2018	NWRA 2018 Western Water Seminar, Park City, UT	625.00		381.70	112.69						(1,067.55)	51.84
Paid	08/22/2018	Urban Water Institute Conference, San Diego, CA	425.00		462.07	27.50		20.00		159	86.76		1,021.33
Paid	08/28/2018	Water and Science Austin Ewell Meeting, Sacramento, CA		563.96		11.57		20.00		16	8.94		604.47
													-
													-
													-
													-
													-
													-
													-
													-
													-
													-
													-
Total			$ 1,170.00	$ 2,763.69	$ 843.77	$ 151.76	$ -	$ 40.00	$ -	175	$ 95.70	$ (2,093.43)	$ 2,971.49

*Detail of Description/Location provided on Expense Report

IRWD

Irvine Ranch Water District
Conference/Seminar and Monthly Expense Summary
For the First Quarter, FY 2018-19

Mary Aileen Matheis

Date Paid	Date Incurred	Description/Location	Registration Fees	Airfare	Lodging	Meals	Taxi/Shuttle/ Auto Rental	Parking Fees	Other	Mileage Reimb # Miles	Mileage Reimb Amount	Reimb. By ACWA	Total
Monthly Expense Reports													
Paid	July 2018	*Various business meetings	80.00										$ 80.00
Paid	August 2018	OC Forum 2019 Housing Outlook, Newport Beach	85.00										85.00
	September 2018	Monthly Expense Report (no activity this period)											-
	October 2018	Monthly Expense Report (no activity this period)											-
	November 2018	Monthly Expense Report (no activity this period)											-
	December 2018	Monthly Expense Report (no activity this period)											-
	January 2019	Monthly Expense Report (no activity this period)											-
	February 2019	Monthly Expense Report (no activity this period)											-
	March 2019	Monthly Expense Report (no activity this period)											-
	April 2019	Monthly Expense Report (no activity this period)											-
	May 2019	Monthly Expense Report (no activity this period)											-
	June 2019	Monthly Expense Report (no activity this period)											-
													-
Conferences/Seminars and Other Non-local Travel													-
													-
Paid	09/20/2018	WEF 35th Annual Conference, Sacramento, CA		523.96			62.70	20.00		9	4.91		611.57
													-
													-
													-
													-
													-
													-
													-
													-
													-
													-
													-
													-
													-
													-
Total			**$ 165.00**	**$ 523.96**	**$ -**	**$ -**	**$ 62.70**	**$ 20.00**	**$ -**	**9**	**$ 4.91**	**$ -**	**$ 776.57**

*Detail of Description/Location provided on Expense Report

IRWD

Irvine Ranch Water District
Conference/Seminar and Monthly Expense Summary
For the First Quarter, FY 2018-19

Doug Reinhart

Date Paid	Date Incurred	Description/Location	Registration Fees	Airfare	Lodging	Meals	Taxi/Shuttle/ Auto Rental	Parking Fees	Other	Mileage Reimb # Miles	Mileage Reimb Amount	Reimb. By ACWA	Total
Monthly Expense Reports													
	July 2018	Monthly Expense Report (no activity this period)											$ -
	August 2018	Monthly Expense Report (no activity this period)											-
	September 2018	Monthly Expense Report (no activity this period)											-
	October 2018	Monthly Expense Report (no activity this period)											-
	November 2018	Monthly Expense Report (no activity this period)											-
	December 2018	Monthly Expense Report (no activity this period)											-
	January 2019	Monthly Expense Report (no activity this period)											-
	February 2019	Monthly Expense Report (no activity this period)											-
	March 2019	Monthly Expense Report (no activity this period)											-
	April 2019	Monthly Expense Report (no activity this period)											-
	May 2019	Monthly Expense Report (no activity this period)											-
	June 2019	Monthly Expense Report (no activity this period)											-
													-
													-
Conferences/Seminars and Other Non-local Travel													-
													-
Paid	08/22/2018	Urban Water Institute (UWI) Conf., San Diego, CA	425.00		462.06			20.00		154	83.93		990.99
Paid	08/30/2018	Sustain OC Conf., UCI Applied Innovation, Irvine, CA	20.00										20.00
													-
													-
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													-
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													-
													-
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													-
Total			**$ 445.00**	**$ -**	**$ 462.06**	**$ -**	**$ -**	**$ 20.00**	**$ -**	**154**	**$ 83.93**	**$ -**	**$ 1,010.99**

*Detail of Description/Location provided on Expense Report

IRWD

Peer Swan

Irvine Ranch Water District
Conference/Seminar and Monthly Expense Summary
For the First Quarter, FY 2018-19

Date Paid	Date Incurred	Description/Location	Registration Fees	Airfare	Lodging	Meals	Taxi/Shuttle/ Auto Rental	Parking Fees	Other	Mileage Reimb # Miles	Mileage Reimb Amount	Reimb. By ACWA	Total
Monthly Expense Reports *													
Paid	July 2018	*Various business meetings	$ 65.00						$ 52.29	306	$ 166.71		$ 284.00
Paid	August 2018	*Various business meetings	20.00						36.45	183	99.99		156.44
Paid	September 2018	*Various business meetings	65.39						49.42	233	126.75		241.56
	October 2018	Monthly Expense Report (no activity this period)											-
	November 2018	Monthly Expense Report (no activity this period)											-
	December 2018	Monthly Expense Report (no activity this period)											-
	January 2019	Monthly Expense Report (no activity this period)											-
	February 2019	Monthly Expense Report (no activity this period)											-
	March 2019	Monthly Expense Report (no activity this period)											-
	April 2019	Monthly Expense Report (no activity this period)											-
	May 2019	Monthly Expense Report (no activity this period)											-
	June 2019	Monthly Expense Report (no activity this period)											-
													-
Conferences/Seminars and Other Non-local Travel													-
													-
Paid	08/07/2018	CASA Conference, Monterey, CA	575.00		1,005.92	15.99		75.00	4.86	736	401.12		2,077.89
Paid	08/22/2018	Urban Water Institute Conference, San Diego, CA	425.00		462.06	80.00		80.00	10.98	154	83.93		1,141.97
Paid	08/28/2018	ACWA Energy Committee Meeting, Folsom, CA		563.96		5.66	61.82	20.00	4.86	14	7.63		663.93
Paid	09/20/2018	WEF 35th Annual Water Summit, Sacramento, CA	300.44	523.96			57.38	20.00	4.86	14	7.63		914.27
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													-
Total			**$ 1,450.83**	**$ 1,087.92**	**$ 1,467.98**	**$ 101.65**	**$ 119.20**	**$ 195.00**	**$ 163.72**	**1,640**	**$ 893.76**	**$ -**	**$ 5,480.06**

*Detail of Description/Location provided on Expense Report

IRWD

Irvine Ranch Water District
Conference/Seminar and Monthly Expense Summary
For the First Quarter, FY 2018-19

John Withers

Date Paid	Date Incurred	Description/Location	Registration Fees	Airfare	Lodging	Meals	Taxi/Shuttle/ Auto Rental	Parking Fees	Other	Mileage Reimb # Miles	Mileage Reimb Amount	Reimb. By ACWA	Total
Monthly Expense Reports													
Paid	July 2018	ACCOC Summer Event, Newport Beach Civic Center	35.00										$ 35.00
Paid	August 2018	*Various business meetings	105.00										105.00
Paid	September 2018	Irvine Historical Society's "An Evening on the Ranch"	65.39										65.39
	October 2018	Monthly Expense Report (no activity this period)											-
	November 2018	Monthly Expense Report (no activity this period)											-
	December 2018	Monthly Expense Report (no activity this period)											-
	January 2019	Monthly Expense Report (no activity this period)											-
	February 2019	Monthly Expense Report (no activity this period)											-
	March 2019	Monthly Expense Report (no activity this period)											-
	April 2019	Monthly Expense Report (no activity this period)											-
	May 2019	Monthly Expense Report (no activity this period)											-
	June 2019	Monthly Expense Report (no activity this period)											-
													-
Conferences/Seminars and Other Non-local Travel													-
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Total			$ 205.39	$ -	$ -	$ -	$ -	$ -	$ -	-	$ -	$ -	$ 205.39

*Detail of Description/Location provided on Expense Report

Irvine Ranch Water District
Conference/Seminar and Monthly Expense Summary
For the First Quarter, FY 2018-19

Paul Cook

Date Paid	Date Incurred	Description/Location	Registration Fees	Airfare	Lodging	Meals	Taxi/Shuttle/ Auto Rental	Parking Fees	Other	Mileage Reimb # Miles	Mileage Reimb Amount	Reimb. By ACWA	Total
Monthly Expense Reports													
Paid	July 2018	Monthly Expense Report #696666 / # 696668				$ 63.79		$ 25.00	$ 420.00				$ 508.79
Paid	August 2018	Monthly Expense Report #701694	699.00			228.75							927.75
Paid	September 2018	Monthly Expense Report # 704672 / 705667	475.00	1,173.92	146.26	150.18							1,945.36
	October 2018	Monthly Expense Report (no activity this period)											-
	November 2018	Monthly Expense Report (no activity this period)											-
	December 2018	Monthly Expense Report (no activity this period)											-
	January 2019	Monthly Expense Report (no activity this period)											-
	February 2019	Monthly Expense Report (no activity this period)											-
	March 2019	Monthly Expense Report (no activity this period)											-
	April 2019	Monthly Expense Report (no activity this period)											-
	May 2019	Monthly Expense Report (no activity this period)											-
	June 2019	Monthly Expense Report (no activity this period)											-
													-
													-
Conferences/Seminars and Other Non-local Travel													-
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Total			**$ 1,174.00**	**$ 1,173.92**	**$ 146.26**	**$ 442.72**	**$ -**	**$ 25.00**	**$ 420.00**	**-**	**$ -**	**$ -**	**$ 3,381.90**

*Detail of Description/Location provided on Expense Report

November 6, 2018
Prepared: by: J. Tobar
Submitted by: C. Clary
Approved by: Paul A. Cook

FINANCE AND PERSONNEL COMMITTEE

FIRST QUARTER 2018-19 LEGAL FEES ANALYSIS

SUMMARY:

This analysis provides a summary of legal fees incurred by the Irvine Ranch Water District for the first quarter of FY 2018-19.

BACKGROUND:

Legal fees for the first quarter of FY 2018-19 supporting the general operations of the District totaled $249,183 compared to a budget of $481,250 resulting in a positive variance of $232,067 or 48.2%. The variance is primarily a timing difference and it is anticipated that legal fees for the remainder of the year will align with the budget.

Of the total legal fees attributable to operations, personnel issues were over budget by $23,542 due primarily to work associated with employee matters and personnel policy review and revisions. There were positive variances in other areas including general services, litigation, special projects, and insurance litigation. Operating legal expenses for work performed by Kronick, Moskovitz, Tiedemann & Girard were negative due to a reversal of an accrual from the prior year, while legal fees for the current year associated with the Kern Fan Project were capitalized. Actual legal fees accounted for 0.62% of actual operating expenses and 0.82% of total expenditures.

Capitalized legal fees associated with major capital projects for the first quarter of FY 2018-19 totaled $215,235. The MWRP Biosolids and Energy Recovery Facility, the Water and Energy Planning Studies Domestic Water, and the Water Supply Reliability Agreements projects comprised 94.3% of the total legal fees associated with capital spending for the first quarter of FY 2018-19.

There were no non-operating legal fees in the first quarter of FY 2018-19.

Exhibit "A" provides a detailed comparison of actual to budgeted legal fees for the first quarter of FY 2018-19. Exhibit "B" provides a three-year comparison of fees incurred by the firms providing services in FY 2016-17 through FY 2018-19, their hourly rates, and a general description of the services provided.

FISCAL IMPACTS:

Fiscal impacts are included in the above narrative.

ENVIRONMENTAL COMPLIANCE:

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

RECOMMENDATION:

Receive and file.

LIST OF EXHIBITS:

Exhibit "A" – Legal Fees, Fiscal Year 2018 - 2019
Exhibit "B" – Analysis of Legal Fees, Expensed and Capitalized for FY 2016-17 through FY 2018-19

Exhibit "A"

Legal Fees
Fiscal Year 2018 - 2019

Firm	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	YTD Actual Operating Legal Fees	YTD Budget Operating Legal Fees	YTD % Actual vs Budget
Operating Legal Fees:							
General Services:							
Alston & Bird LLP	$ 12,288	$ -	$ -	$ -	$ 12,288		
Alexander Bowie a Law Corp	$ -	$ -	$ -		$ -		
Kronick Moskovitz Tiedemann & Girard	$ (52,822)	$ -	$ -	$ -	$ (52,822)		
Lewis Brisbois Bisgaard & Smith LLP	$ 142,539	$ -	$ -	$ -	$ 142,539		
Olson, Hagel & Fishburn, LLP	$ 128	$ -	$ -	$ -	$ 128		
Sub-total	$ 102,133	$ -	$ -	$ -	$ 102,133	$ 200,000	51.1%
Litigation:							
Alston & Bird LLP	$ 42,478	$ -	$ -	$ -	$ 42,478		
Everett Dorey LLP	$ 31,262	$ -	$ -	$ -	$ 31,262		
Sub-total	$ 73,740	$ -	$ -	$ -	$ 73,740	$ 180,000	41.0%
Special Projects:							
Alexander Bowie a Law Corp	$ -	$ -	$ -	$ -	$ -		
Atkinson, Andelson, Loya, Ruud and Romo	$ 6,540	$ -	$ -	$ -	$ 6,540		
Sub-total	$ 6,540	$ -	$ -	$ -	$ 6,540	$ 50,000	13.1%
Personnel Issues:							
Alexander Bowie a Law Corp	$ -	$ -	$ -	$ -	$ -		
Burke, Williams & Sorensen, LLP	$ 14,170	$ -	$ -	$ -	$ 14,170		
EXTTI, Incorporated	$ -	$ -	$ -		$ -		
Law Office of Atoosa Vakili	$ 763	$ -	$ -		$ 763		
Payne & Fears LLP	$ 23,565	$ -	$ -	$ -	$ 23,565		
Pillsbury Winthrop Shaw Pittman LLP	$ 21,294	$ -	$ -	$ -	$ 21,294		
Sub-total	$ 59,792	$ -	$ -	$ -	$ 59,792	$ 36,250	164.9%
Legal Fees Total	$ 242,205	$ -	$ -	$ -	$ 242,205	$ 466,250	52.0%
Insurance Litigation:							
Daley & Heft LLP [1]	$ -	$ -	$ -	$ -	$ -		
Koeller Nebeker Carlson & Haluck LLP [1]	$ 2,364	$ -	$ -	$ -	$ 2,364		
Lewis Brisbois Bisgaard & Smith LLP [1]	$ 3,340	$ -	$ -	$ -	$ 3,340		
Woodruff, Spradlin & Smart	$ 1,274	$ -	$ -	$ -	$ 1,274		
Insurance Litigation Total	$ 6,978	$ -	$ -	$ -	$ 6,978	$ 15,000	46.5%
Total Operating Legal Fees	$ 249,183	$ -	$ -	$ -	$ 249,183	$ 481,250	51.8%
Major Capital Projects Legal Fees:							
Asset Optimization - Sand Canyon Profess.	$ 882	$ -	$ -	$ -	$ 882		
MWRP Biosolids and Energy Recovery	$ 137,140	$ -	$ -	$ -	$ 137,140		
Syphon Reservoir Improvements	$ 6,815	$ -	$ -	$ -	$ 6,815		
Water and Energy Planning Studies DW	$ 46,046	$ -	$ -	$ -	$ 46,046		
Water Supply Reliability Agreements	$ 19,802	$ -	$ -	$ -	$ 19,802		
Water Supply Reliability Planning	$ 4,550	$ -	$ -	$ -	$ 4,550		
Capital Projects Total	$ 215,235	$ -	$ -	$ -	$ 215,235		
[1] Net of insurance reimbursement							
Total Operating and Capital Legal Fees	$ 464,418	$ -	$ -	$ -	$ 464,418		

	YTD Actual	YTD Budget
Operating Expense	$ 40,436,728	$ 41,809,963
Operating Legal Fees	$ 249,183	$ 481,250
% of Legal to Operating	0.62%	1.15%
Capital Projects	$ 16,148,577	$ 23,705,615
Capital Legal Fees	$ 215,235	
% of Legal to Capital	1.33%	
Total Operating and Capital Expenditures	$ 56,585,305	$ 65,515,578
Total Operating and Capital Legal Fees	$ 464,418	
% of Legal Fees to Total Operating and Capital Expenditures	0.82%	

Non-operating Legal Fees:	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total
Bond Counsel:					
Total	$ -	$ -	$ -	$ -	$ -

Exhibit "B"

Analysis of Legal Fees
First Quarter Ended September 30, 2016 - 2018

Firm	YTD Actual 2016-2017	YTD Actual 2017-2018	YTD Actual 2018-2019	Hourly Rate	Area of Expertise	Service Provided
Operating Legal Fees:						
Alston & Bird LLP	$ 97,378	$ 72,678	$ 54,766	$ 265 to $ 535	Litigation	Orange County Water District litigation
Alexander Bowie a Law Corp	$ -	$ 6,221	$ -	$ 185 to $ 220	IRWD legal counsel	District general counsel/legislative/litigation/special project
Atkinson, Andelson, Loya, Ruud and Rom	$ -	$ -	$ 6,540	$ 220	IRWD legal counsel	District general counsel/legislative/litigation/special project
Bowie, Arneson, Wiles & Giannone	$ 48,098	$ -	$ -	$ 185 to $ 220	IRWD legal counsel	District general counsel/legislative/litigation/special project
Burke, Williams & Sorensen, LLP	$ 18,647	$ 16,442	$ 14,170	$ 325	Employee relations	Personnel policy review and revision
CSU Fullerton Auxiliary Services Corp	$ -	$ -	$ -	n/a	Demographic research	IRWD 2018 districting existing conditions analysis
Everett Dorey LLP	$ -	$ -	$ 31,262	235 to $ 260	Litigation	County of Orange Litigation
EXTTI, Incorporated	$ 22,601	$ -	$ -	$ 200 to $ 275	Employee relations	Personnel matters
Kronick Moskovitz Tiedemann & Girard	$ -	$ -	$ (52,822)	$ 100 to $ 350	IRWD legal counsel	Counsel services related to water resources and policy matters
Law Office of Atoosa Vakili	$ -	$ -	$ 763	$ 75 to $ 250	Employee relations	General personnel and human resources
Lewis Brisbois Bisgaard & Smith LLP	$ -	$ -	$ 142,539	$ 335	IRWD legal counsel	District general counsel/legislative/litigation/special project
Nossaman LLP	$ 7,537	$ 391,753	$ -	$ 225 to $ 595	IRWD legal counsel	District general counsel/legislative/litigation/special project
Olson, Hagel & Fishburn, LLP	$ -	$ -	$ 128	$ 255	IRWD legal counsel	District general counsel/legislative/litigation/special project
Payne & Fears, LLP	$ 40,192	$ 17,332	$ 23,565	$ 235 to $ 550	Employee relations	General personnel and human resources
Pillsbury Winthrop Shaw Pittman LLP	$ -	$ 10,541	$ 21,294	$ 370 to $ 490	Employee relations	Employee benefits
Legal Fees Total	$ 234,453	$ 514,967	$ 242,205			
Insurance Litigation:						
Daley & Heft LLP [(1)]	$ -	$ -	$ -	$ 175	Legal Counsel	Legal counsel related to insurance claim issues
Koeller Nebeker Carlson & Haluck LLP [(1)]	$ 5,410	$ 2,120	$ 2,364	$ 195	Legal Counsel	Legal counsel related to insurance claim issues
Lewis Brisbois Bisgaard & Smith LLP [(1)]	$ -	$ 1,040	$ 3,340	$ 200	Legal Counsel	Legal counsel related to insurance claim issues
Woodruff, Spradlin & Smart	$ 37,014	$ -	$ 1,274	$ 105 to $ 255	Legal Counsel	Legal counsel related to insurance claim issues
Insurance Litigation Total	$ 42,424	$ 3,160	$ 6,978			
Total Operating Legal Fees	$ 276,877	$ 518,127	$ 249,183			

[(1)] Net of insurance reimbursement

Firm	YTD Actual 2016-2017	YTD Actual 2017-2018	YTD Actual 2018-2019	Hourly Rate	Area of Expertise	Service Provided
Capitalized Legal Fees:						
Alexander Bowie a Law Corp	$ 3,956	$ 2,688	$ -	$ 185 to $ 220	IRWD legal counsel	District general counsel/legislative/litigation/special project
Alston & Bird LLP	$ -	$ -	$ 137,139	$ 265 to $ 535	IRWD legal counsel	Counsel services in connection with the Biosolids project
Burke, Williams & Sorensen, LLP	$ -	$ -	$ 4,550	$ 325	Employee relations	
Jackson Tidus, a Law Corporation	$ -	$ 12,432	$ 882	$ 225 to $ 595	IRWD legal counsel	Counsel services in connection with Serrano Summit property sale
Kronick Moskovitz Tiedemann & Girard	$ -	$ -	$ 72,664	$ 100 to $ 350	IRWD legal counsel	Counsel services in connection with water resources and policy matters
Nossaman LLP	$ -	$ -	$ -	$ 420	IRWD legal counsel	Counsel services in connection with Serrano Summit property sale
Capitalized Legal Fees Total	$ 3,956	$ 15,120	$ 215,235			
Total Operating and Capital Legal Fees	$ 280,833	$ 533,247	$ 464,418			
Non-operating Legal Fees:						
Bond Counsel:						
Non-operating Legal Fees Total	$ -	$ -	$ -			

November 6, 2018 SD
Prepared by: J. Davis / T. Fournier
Submitted by: R. Jacobson / C. Clary
Approved by: Paul A. Cook

FINANCE AND PERSONNEL COMMITTEE

MONTHLY INVESTMENT AND DEBT REVIEW

SUMMARY:

The following items are submitted for the Committee's review and consideration:

- The Investment Portfolio Summary Report as of October 26, 2018, as outlined in Exhibit "A";
- The U.S. Treasury Yield Curve as of October 26, 2018, as outlined in Exhibit "B";
- The Summary of Fixed and Variable Debt as of October 26, 2018, as outlined in Exhibit "C"; and,
- The Summary of Variable Rate Debt Rates as of October 26, 2018, as outlined in Exhibit "D".

BACKGROUND:

Investment Portfolio:

Due to the timing of the Committee meeting, the rate of return for October 2018 is not complete at this time. Preliminary calculations indicate a rate of return for the fixed income investment portfolio of 1.67%, which is a 0.14% increase from September's rate of 1.53%. Including real estate investments, the weighted average rate of return for the District's investment portfolio for October 2018 is estimated to be 3.90%, which is a 0.11% increase from September's rate of 3.79%. The increase is due to a full month of higher interest rates on the reinvestment of $15 million in September and an increase in the LAIF interest rate from 1.76% to 2.00%.

Debt Portfolio:

As of October 26, 2018, the District's weighted average all-in variable rate was 1.69%, which was unchanged from September's rate. Including the District's weighted average fixed rate bond issues of 3.70% 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 3.54%, which was a 0.05% decrease from September's rate of 3.59%. The decrease is primarily due to the change in the negative cash accrual from $412,382 to $367,117 for the District's fixed payer swaps.

FISCAL IMPACTS:

Fiscal impacts are outlined above and included in the attached exhibits.

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.

RECOMMENDATION:

Receive and file.

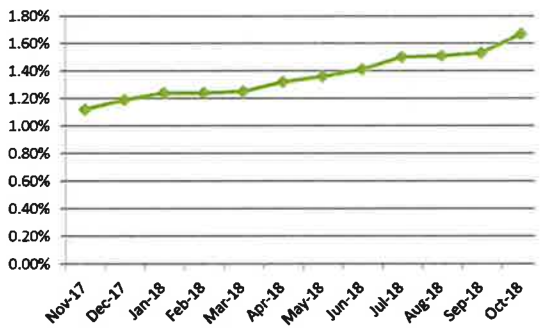
LIST OF EXHIBITS:

Exhibit "A" – Investment Portfolio Summary as of October 26, 2018
Exhibit "B" – Yield Curve as of October 26, 2018
Exhibit "C" – Summary of Fixed and Variable Debt as of October 26, 2018
Exhibit "D" – Summary of Variable Rate Debt Rates as of October 26, 2018

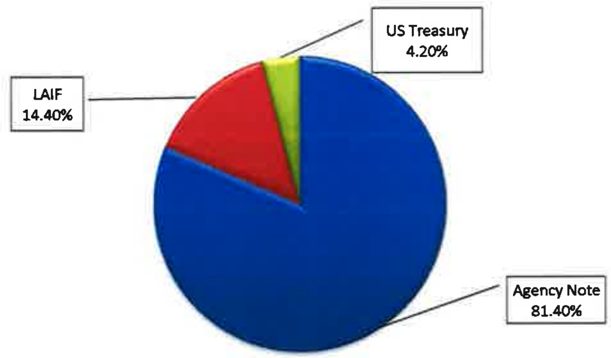
Exhibit "A"

Irvine Ranch Water District
Investment Portfolio Summary
October 2018

Monthly Fixed Income Yield



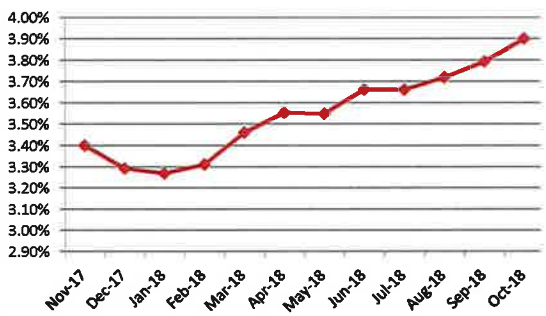
Portfolio Distribution



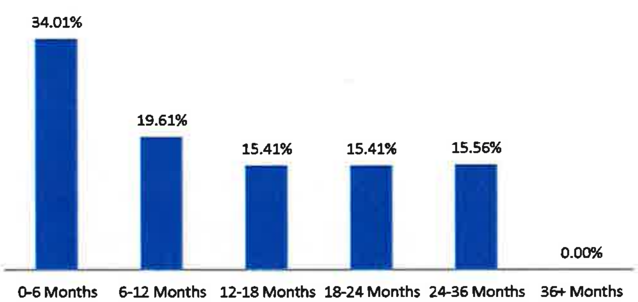
Investment Summary

Type	PAR	Book Value	Market Value
Agency Note	290,550,000	290,223,313	287,458,270
LAIF	51,400,000	51,400,000	51,288,586
US Treasury	15,000,000	14,557,338	14,555,294
Grand Total	356,950,000	356,180,651	353,302,149

Weighted Average Return Including Real Estate Portfolio



Maturity Distribution



Top Issuers

Issuer	PAR	% Portfolio
Fed Natl Mortgage Assoc	80,550,000	22.57%
Fed Home Loan Bank	80,000,000	22.41%
Fed Farm Credit Bank	65,000,000	18.21%
Fed Home Loan Mortgage Corp	65,000,000	18.21%
State of California Treasury - LAIF	51,400,000	14.40%
US Treasury	15,000,000	4.20%
Grand Total	356,950,000	100.00%

F:\INVEST\INVESTMENTS\Avg. Inv. Bal. & ROR - 1987 to Current.xlsx

IRVINE RANCH WATER DISTRICT
INVESTMENT SUMMARY REPORT

10/26/18

SETTLMT	Call Schedule	Initial Call	Maturity Date	Rating	INVESTMENT TYPE	INSTITUTION / ISSUER	PAR Amount	COUPON DISCOUNT	YIELD	ORIGINAL COST	CARRY VALUE	MARKET VALUE[1] 10/26/2018	UNREALIZED[2] GAIN/(LOSS)
08/23/17			10/27/18		LAIF	State of California Tsy.	$51,400,000		2.000%	$51,400,000.00	$51,400,000.00	51,288,585.57	(111,414.43)
10/12/16	N/A	N/A	11/27/18	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	10,000,000	1.625%	0.956%	10,140,360.00	10,008,320.31	9,990,600.00	(17,720.31)
12/21/16	N/A	N/A	12/05/18	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	1.100%	1.319%	4,978,900.00	5,004,707.31	4,988,850.00	(15,857.31)
09/01/16	NA	NA	12/14/18	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	1.750%	0.941%	5,091,300.00	5,002,491.01	4,995,150.00	(7,341.01)
12/27/16	NA	NA	12/14/18	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	1.750%	1.320%	5,041,536.20	4,998,995.24	4,995,150.00	(3,845.24)
09/01/16	One Time	07/30/18	01/30/19	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	0.950%	1.009%	4,993,000.00	4,999,284.90	4,977,050.00	(22,234.90)
10/26/16	One Time	07/30/18	01/30/19	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	0.950%	1.035%	4,990,500.00	4,998,895.88	4,977,050.00	(21,845.88)
10/26/16	One Time	07/30/18	01/30/19	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	0.950%	1.040%	4,990,000.00	4,998,837.77	4,977,050.00	(21,787.77)
10/12/16	Continuous after	02/12/18	02/12/19	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	10,000,000	1.050%	1.093%	9,990,000.00	9,998,558.03	9,954,400.00	(44,158.03)
09/01/16	NA	NA	03/08/19	Aaa/AA+/AAA	FHLB - Note	Fed Home Loan Bank	5,000,000	1.500%	0.964%	5,066,500.00	5,009,199.89	4,981,550.00	(27,649.89)
03/21/18	NA	NA	03/21/19	Aaa/NA/NR	FHLB - Note	Fed Home Loan Bank	10,000,000	2.125%	2.125%	10,000,000.00	10,000,000.00	9,988,300.00	(11,700.00)
10/12/16	N/A	N/A	03/29/19	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	1.050%	1.050%	4,999,950.00	4,999,990.65	4,966,050.00	(33,940.65)
10/12/16	N/A	N/A	04/15/19	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	10,000,000	1.125%	0.992%	10,032,800.00	10,006,631.69	9,929,300.00	(77,331.69)
10/31/16	N/A	N/A	04/26/19	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	1.050%	1.060%	4,998,750.00	4,999,756.06	4,959,300.00	(40,456.06)
09/01/16	N/A	N/A	05/28/19	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	1.030%	1.048%	4,997,550.00	4,999,489.89	4,952,050.00	(47,439.89)
04/19/18	N/A	N/A	05/30/19	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	1.750%	2.252%	4,972,500.00	4,985,775.86	4,975,050.00	(10,725.86)
09/01/16	NA	NA	06/14/19	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	1.625%	0.987%	5,087,400.00	5,019,355.31	4,968,500.00	(50,855.31)
10/12/16	NA	NA	06/14/19	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	1.625%	1.103%	5,068,515.88	5,017,216.81	4,968,500.00	(48,716.81)
10/12/16	NA	NA	07/19/19	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	0.875%	1.098%	4,969,652.90	4,991,586.94	4,934,200.00	(57,386.94)
09/01/16	NA	NA	07/26/19	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.150%	1.180%	4,995,700.00	4,998,914.84	4,940,950.00	(57,964.84)
09/01/16	N/A	N/A	08/28/19	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.150%	1.160%	4,998,500.00	4,999,587.53	4,934,550.00	(65,037.53)
09/01/16	NA	NA	08/28/19	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.125%	1.132%	4,999,000.00	4,999,725.02	4,933,450.00	(66,275.02)
09/28/16	Quarterly	03/09/17	09/09/19	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.125%	1.142%	4,997,500.00	4,999,270.16	4,932,450.00	(66,820.16)
04/10/18	NA	NA	09/13/19	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	2.375%	2.288%	5,006,000.00	5,003,639.16	4,985,550.00	(18,089.16)
09/28/16	Continuous after	12/27/16	09/27/19	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	1.250%	1.189%	5,001,500.00	5,000,452.47	4,931,250.00	(69,202.47)
10/12/16	Continuous after	10/03/17	10/03/19	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	10,000,000	1.125%	1.160%	9,989,780.00	9,996,649.80	9,847,100.00	(149,549.80)
10/12/16	Continuous after	10/11/17	10/11/19	Aaa/AA+/NR	FFCB - Note	Fed Farm Credit Bank	10,000,000	1.120%	1.205%	9,975,000.00	9,991,681.90	9,848,500.00	(143,181.90)
11/08/16	Quarterly	05/08/17	11/08/19	Aaa/AA+/NR	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.250%	1.245%	5,000,750.00	5,000,254.79	4,922,650.00	(77,604.79)
11/28/16	NA	NA	11/15/19	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	1.375%	1.440%	4,990,550.00	4,996,689.88	4,928,250.00	(68,439.88)
11/28/16	Quarterly	05/25/17	11/25/19	Aaa/AA+/NR	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.400%	1.503%	4,985,000.00	4,994,656.59	4,928,850.00	(65,806.59)
12/12/16	NA	NA	12/12/19	Aaa/AA+/NR	FFCB - Note	Fed Farm Credit Bank	5,000,000	1.450%	1.440%	5,001,450.00	5,000,536.79	4,927,900.00	(72,636.79)
12/21/16	NA	NA	12/19/19	Aaa/AA+/NR	FFCB - Note	Fed Farm Credit Bank	5,000,000	1.500%	1.621%	4,982,350.00	4,993,330.79	4,929,300.00	(64,030.79)
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	4,968,601.58	4,922,000.00	(46,601.58)
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	4,992,740.00	4,914,500.00	(78,240.00)
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	5,174,840.29	5,093,800.00	(81,040.29)
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	4,981,758.71	4,893,350.00	(88,408.71)
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	4,996,776.40	4,976,800.00	(19,976.40)

IRVINE RANCH WATER DISTRICT
INVESTMENT SUMMARY REPORT

10/26/18

SETTLMT	Call Schedule	Initial Call	Maturity Date	Rating	INVESTMENT TYPE	INSTITUTION / ISSUER	PAR Amount	COUPON DISCOUNT	YIELD	ORIGINAL COST	CARRY VALUE	MARKET VALUE(1) 10/26/2018	UNREALIZED(2) GAIN/(LOSS)
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	4,998,732.43	4,979,900.00	(18,832.43)
11/21/17	Continuous after	02/20/18	05/20/20	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	1.830%	1.930%	4,987,500.00	4,979,560.21	4,922,350.00	(57,210.21)
06/11/18	NA	NA	06/11/20	Aaa/NR/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	2.500%	2.570%	4,997,100.00	4,997,667.31	4,978,400.00	(19,267.31)
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	4,992,384.74	4,893,250.00	(99,134.74)
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	4,912,823.53	4,886,200.00	(26,623.53)
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	4,910,592.21	4,886,200.00	(24,392.21)
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	4,940,093.36	4,875,450.00	(64,643.36)
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	4,990,396.34	4,986,050.00	(4,346.34)
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	4,907,011.39	4,892,950.00	(14,061.39)
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	4,990,712.41	4,983,800.00	(6,912.41)
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	4,911,300.00	(88,700.00)
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	5,424,570.00	(125,430.00)
09/28/18	NA	NA	10/31/20		Treasury - Note	US Treasury	5,000,000	1.750%	2.847%	4,889,453.13	4,884,533.50	4,890,450.00	5,916.50
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	4,966,954.00	4,887,600.00	(79,354.00)
12/13/17	Quarterly	05/24/18	11/24/20	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.900%	2.023%	4,982,500.00	4,985,977.25	4,891,600.00	(94,377.25)
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	4,988,620.83	4,895,750.00	(92,870.83)
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	4,982,586.96	4,893,600.00	(88,986.96)
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	9,672,804.72	9,664,843.75	(7,960.97)
TOTAL INVESTMENTS							$356,950,000			$356,398,766.87	$356,180,651.47	$353,302,149.32	

Petty Cash		3,400.00
Ck Balance	Bank of America	1,849,167.99
		$358,251,334.86

(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	$273,300,000
Net Outstanding Variable Rate Debt (Less $130 million fixed-payer swaps)	$143,300,000
Investment Balance:	$358,251,335
Investment to Variable Rate Debt Ratio:	250%
Portfolio - Average Number of Days To Maturity(4)	337

	Investment Portfolio	Real Estate(3) Portfolio	Weighted Avg. Return
October	**1.67%**	**9.05%**	**3.90%**
September	**1.53%**	**9.05%**	**3.79%**
Change	**0.14%**		**0.11%**

This Investment Summary Report is in conformity with the 2018 Investment Policy and provides sufficient liquidity to meet the next six months estimated expenditures.
*S - Step up

IRVINE RANCH WATER DISTRICT
SUMMARY OF MATURITIES

10/26/18

DATE	TOTAL	%	LAIF	Agency Notes	Agency Discount Notes	Collateral Deposit	US Treasury
10/18	$51,400,000	14.40%	$51,400,000				
11/18	10,000,000	2.80%		10,000,000			
12/18	15,000,000	4.20%		15,000,000			
01/19	15,000,000	4.20%		15,000,000		-	
02/19	10,000,000	2.80%		10,000,000			
03/19	20,000,000	5.60%		20,000,000			
04/19	15,000,000	4.20%		15,000,000			
05/19	10,000,000	2.80%		10,000,000			
06/19	10,000,000	2.80%		10,000,000			
07/19	10,000,000	2.80%		10,000,000			
08/19	10,000,000	2.80%		10,000,000			
09/19	15,000,000	4.20%		15,000,000			
SUB-TOTAL	$191,400,000	53.62%	$51,400,000	$140,000,000			
13 Months - 3 YEARS							
10/01/2019 - 11/30/19	35,000,000	9.81%		35,000,000			
12/01/19 - 2/28/2020	20,000,000	5.60%		20,000,000			
3/01/2020 - 5/31/2020	30,000,000	8.40%		30,000,000			
6/01/2020 - 8/31/2020	25,000,000	7.00%		25,000,000			
9/01/2020 -12/31/2020	45,550,000	12.76%		40,550,000			5,000,000
1/01/2021 -2/28/2021	10,000,000	2.80%					10,000,000
	-						
	-						
	-						
TOTALS	$356,950,000	100.00%	$51,400,000	$290,550,000			$15,000,000
% OF PORTFOLIO			14.40%	81.40%			4.20%

IRVINE RANCH WATER DISTRICT INVESTMENT SUMMARY REPORT
INVESTMENT ACTIVITY
Oct-18

MATURITIES/SALES/CALLS

DATE	SECURITY TYPE	PAR	YIELD
10/1/2018	FFCB - NOTE	$5,000,000	0.93%
10/12/2018	FFCB - NOTE	$10,000,000	1.04%

PURCHASES

Settlement Date	Maturity Date	SECURITY TYPE	PAR	YIELD TO MATURITY
10/12/2018	1/31/2021	Treasury - Note	$10,000,000	2.89%

Irvine Ranch Water District
Summary of Real Estate - Income Producing Investments
9/30/2018

	ACQUISITION DATE	PROPERTY TYPE	OWNERSHIP INTEREST	ORIGINAL COST	MARKET VALUE 9/30/2018	ANNUALIZED RATE OF RETURN QUARTER ENDED 9/30/2018
Sycamore Canyon	Dec-92	Apartments	Fee Simple	$ 43,550,810	$ 145,000,000	19.02%
Wood Canyon Villas	Jun-91	Apartments	Limited Partner	$ 6,000,000	$ 30,670,120	8.55%
ITC (230 Commerce)	Jul-03	Office Building	Fee Simple	$ 5,739,845	$ 11,500,000	10.85%
Waterworks Business Pk.	Nov-08	Research & Dev.	Fee Simple	$ 8,630,577	$ 9,000,000	5.82%
Sand Canyon Professional Center	Jul-12	Medical Office	Fee Simple	$ 8,648,594	$ 11,000,000	8.88%
Total - Income Properties				$ 72,569,826	$ 207,170,120	14.73%
OTHER REAL ESTATE DESCRIPTION						
Serrano Summit - Promissory Note	Sep-17	NA	NA	$ 81,600,000	$ 81,600,000	4.00%
Total - Income Producing Real Estate Investments				$ 154,169,826	$ 288,770,120	9.05%

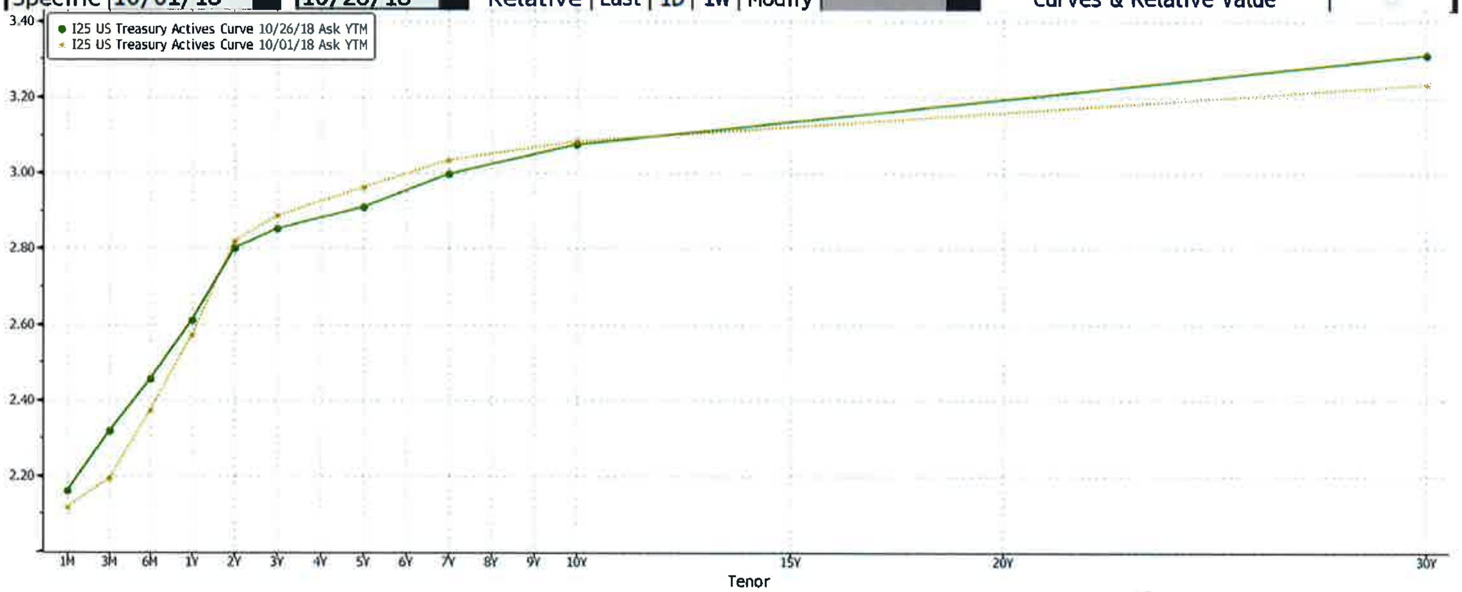
Exhibit “B”

Running as C15. Run GC for more features.

US Treasury Actives Curve | Actions | 98) Table | Export | Settings | Graph Curves

X-Axis Tenor Y-Axis Ask YTM Currency None PCS Lower Chart History Table

Specific 10/01/18 10/26/18 Relative Last 1D 1W Modify Curves & Relative Value



All Tenors Key Tenors

Curve Id	3M	1Y	2Y	3Y	5Y	10Y	30Y
11) I25 10/26/18	2.319	2.613	2.802	2.853	2.909	3.076	3.312
12) I25 10/01/18	2.194	2.573	2.819	2.886	2.961	3.084	3.234
13) I25 (10/26/18-10/0...	12.6	4.0	-1.7	-3.3	-5.3	-0.8	7.7

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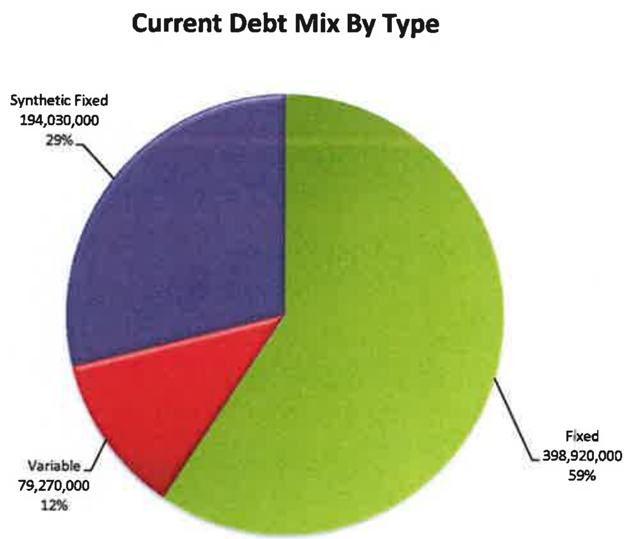
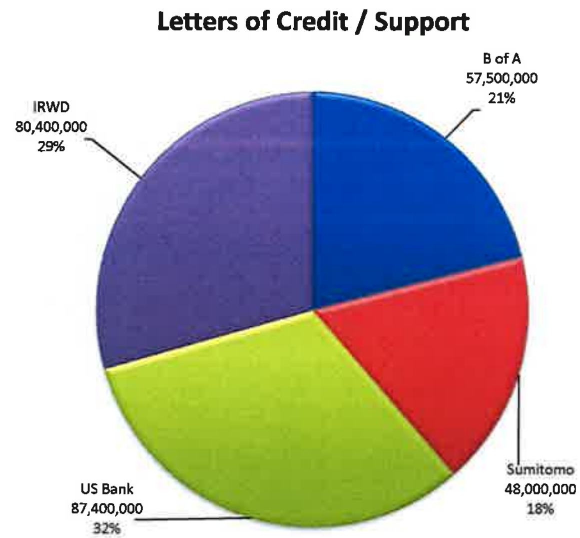
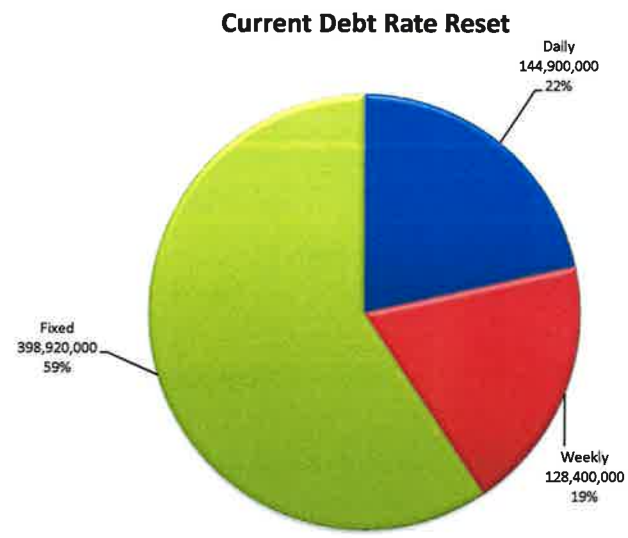
Exhibit "C"

Irvine Ranch Water District
Summary of Fixed and Variable Rate Debt
October 2018







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	$29,900,000	4.45%	US Bank	BAML	Variable	Daily
Series 2008-A Refunding	04/24/08	07/01/35	$48,000,000	7.14%	Sumitomo	BAML	Variable	Weekly
Series 2011-A-1 Refunding	04/15/11	10/01/37	$48,240,000	7.18%	IRWD	Goldman	Variable	Weekly
Series 2011-A-2 Refunding	04/15/11	10/01/37	$32,160,000	4.78%	IRWD	Morgan	Variable	Weekly
Series 2009 - A	06/04/09	10/01/41	$57,500,000	8.55%	US Bank	US Bank	Variable	Daily
Series 2009 - B	06/04/09	10/01/41	$57,500,000	8.55%	B of A	Goldman	Variable	Daily
2010 Refunding COPS	02/23/10	03/01/20	$3,775,000	0.56%	N/A	N/A	Fixed	Fixed
2016 COPS	09/01/16	03/01/46	$116,745,000	17.37%	N/A	N/A	Fixed	Fixed
2010 Build America Taxable Bond	12/16/10	05/01/40	$175,000,000	26.03%	N/A	N/A	Fixed	Fixed
Series 2016	10/12/16	02/01/46	$103,400,000	15.38%	N/A	N/A	Fixed	Fixed
Total			$672,220,000	100.00%				

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IRVINE RANCH WATER DISTRICT

SUMMARY OF FIXED & VARIABLE RATE DEBT

October-18

ITN
Daily
Weekly

GENERAL BOND INFORMATION

VARIABLE RATE ISSUES	Issue Date	Maturity Date	Principal Payment Date	Payment Date	Original Par Amount	Remaining Principal
SERIES 1993	05/19/93	04/01/33	APR 1 (2014)	5th Bus. Day	$38,300,000	$29,900,000
SERIES 2008-A Refunding	04/24/08	07/01/35	JUL 1	5th Bus. Day	$60,215,000	$48,000,000
SERIES 2011-A-1 Refunding	04/15/11	10/01/37	Oct 1	1st Bus. Day	$60,545,000	$48,240,000
SERIES 2011-A-2 Refunding	04/15/11	10/01/37	Oct 1	1st Bus. Day	$40,370,000	$32,160,000
SERIES 2009 - A	06/04/09	10/01/41	Oct 1	1st Bus. Day	$75,000,000	$57,500,000
SERIES 2009 - B	06/04/09	10/01/41	Oct 1	1st Bus. Day	$75,000,000	$57,500,000
					$349,430,000	**$273,300,000**
FIXED RATE ISSUES						
2010 REFUNDING COPS	02/23/10	03/01/20	Mar -1	MAR/SEPT	$85,145,000	$3,775,000
2010 GO Build America Taxable Bonds	12/16/10	05/01/40	MAY (2025)	MAY/NOV	$175,000,000	$175,000,000
2016 COPS	09/01/16	03/01/46	Mar - 1	MAR/SEPT	$116,745,000	$116,745,000
SERIES 2016	10/12/16	02/01/46	Feb - 1	FEB/AUG	$103,400,000	$103,400,000
					$480,290,000	**$398,920,000**
					$829,720,000	**$672,220,000**

LETTER OF CREDIT INFORMATION

Issue	Letter of Credit	Reimbursment Agreement Date	L/C Exp. Date	MOODYS	S&P	FITCH	LOC Stated Amount	LOC Fee	Annual LOC Cost
SERIES 1993	US BANK	05/07/15	12/15/21	Aa3/VMIG1	AA-/A-1+	N/R	$30,303,036	0.3300%	$100,000
SERIES 2008-A Refunding	SUMITOMO	04/01/11	07/21/21	A1/P-1	A/A-1	A/F1	$48,710,137	0.3150%	$153,437
SERIES 2011-A-1 Refunding	N/A	N/A	N/A	Aa1/VMIG1	A-1+	AAA/F1+	N/A	N/A	N/A
SERIES 2011-A-2 Refunding	N/A	N/A	N/A	Aa1/VMIG1	A-1+	AAA/F1+	N/A	N/A	N/A
SERIES 2009 - A	US BANK	04/01/11	12/15/21	Aa2/VMIG 1	AA-/A-1+	AA/F1+	$58,142,740	0.3300%	$191,871
SERIES 2009 - B	B of A	04/01/11	07/15/19	A1/VMIG 1	A/A-1	A1/F1+	$58,142,740	0.4000%	$232,571
SUB-TOTAL VARIABLE RATE DEBT							**$195,298,652**	**0.3471%** (Wt. Avg)	**$677,879**
2010 REFUNDING COPS	N/A	N/A	N/A	Aa1	AAA	AAA	N/A	N/A	N/A
2010 GO Build America Taxable Bonds	N/A	N/A	N/A	Aa1	AAA	NR	N/A	N/A	N/A
2016 COPS	N/A	N/A	N/A	NR	AAA	AAA	N/A	N/A	N/A
SERIES 2016	N/A	N/A	N/A	NR	AAA	AAA	N/A	N/A	N/A
SUB-TOTAL FIXED RATE DEBT									
TOTAL- FIXED & VARIABLE RATE DEBT									

TRUSTEE INFORMATION

Issue	Rmkt Agent	Reset	Rmkt Fees	Annual Cost	Trustee
SERIES 1993	BAML	DAILY	0.10%	$29,900	BANK OF NY
SERIES 2008-A Refunding	BAML	WED	0.07%	$33,600	BANK OF NY
SERIES 2011-A-1 Refunding	Goldman	WED	0.13%	$60,300	BANK OF NY
SERIES 2011-A-2 Refunding	Morgan S.	WED	0.13%	$40,200	BANK OF NY
SERIES 2009 - A	US Bank	DAILY	0.07%	$40,250	US BANK
SERIES 2009 - B	Goldman	DAILY	0.10%	$57,500	US BANK
			0.10% (Wt. Avg)	**$261,750**	
2010 REFUNDING COPS	N/A	N/A	N/A	N/A	BANK OF NY
2010 GO Build America Taxable Bonds	N/A	N/A	N/A	N/A	US BANK
2016 COPS	N/A	N/A	N/A	N/A	US BANK
SERIES 2016	N/A	N/A	N/A	N/A	BANK OF NY

Remarketing Agents

Goldman	105,740,000	39%
Morgan Stanley	32,160,000	12%
BAML	77,900,000	29%
US Bank	57,500,000	21%
	273,300,000	

GO VS COP's

GO:	551,700,000	82%
COPS:	120,520,000	18%
Total	672,220,000	

LOC Banks

SUMITOMO	48,000,000
BANK OF AMERICA	57,500,000
US BANK	87,400,000
	192,900,000

Breakdown Between Variable & Fixed Rate Mode

Daily Issues	144,900,000	22%
Weekly Issues	48,000,000	7%
ITN Issues	80,400,000	12%
Sub-Total	273,300,000	
Fixed Rate Issues	$398,920,000	59%
Sub-Total - Fixed	398,920,000	
TOTAL DEBT FIXED & VAR.	672,220,000	100%

vrdsum.xlsx
10/25/2018

Exhibit "D"

IRVINE RANCH WATER DISTRICT
SUMMARY OF DEBT RATES
Oct-18

Rmkt Agent	GOLDMAN	GOLDMAN	MORGAN STANLEY	MERRILL LYNCH		US BANK
Mode	DAILY	WEEKLY	WEEKLY	DAILY	WEEKLY	DAILY
Bond Issue	2009 - B	2011 A-1	2011 A-2	1993	2008-A	2009-A
Par Amount	57,500,000	48,240,000	32,160,000	29,900,000	48,000,000	57,500,000
Bank	BOFA	(SIFMA -1)	(SIFMA -1)	US BANK	Sumitomo	US BANK
Reset		Wednesday	Wednesday		Wednesday	
10/1/2018	1.27%	1.55%	1.55%	1.22%	1.41%	1.33%
10/2/2018	1.22%	1.55%	1.55%	1.22%	1.41%	1.30%
10/3/2018	1.21%	1.55%	1.55%	1.20%	1.41%	1.24%
10/4/2018	1.18%	1.52%	1.52%	1.22%	1.38%	1.19%
10/5/2018	1.18%	1.52%	1.52%	1.20%	1.38%	1.19%
10/6/2018	1.18%	1.52%	1.52%	1.20%	1.38%	1.19%
10/7/2018	1.18%	1.52%	1.52%	1.20%	1.38%	1.19%
10/8/2018	1.18%	1.52%	1.52%	1.20%	1.38%	1.19%
10/9/2018	1.20%	1.52%	1.52%	1.20%	1.38%	1.18%
10/10/2018	1.21%	1.52%	1.52%	1.20%	1.38%	1.18%
10/11/2018	1.20%	1.52%	1.52%	1.21%	1.32%	1.18%
10/12/2018	1.22%	1.52%	1.52%	1.22%	1.32%	1.18%
10/13/2018	1.22%	1.52%	1.52%	1.22%	1.32%	1.18%
10/14/2018	1.22%	1.52%	1.52%	1.22%	1.32%	1.18%
10/15/2018	1.25%	1.52%	1.52%	1.21%	1.32%	1.18%
10/16/2018	1.20%	1.52%	1.52%	1.20%	1.32%	1.18%
10/17/2018	1.20%	1.52%	1.52%	1.22%	1.32%	1.18%
10/18/2018	1.22%	1.56%	1.56%	1.20%	1.33%	1.18%
10/19/2018	1.22%	1.56%	1.56%	1.19%	1.33%	1.18%
10/20/2018	1.22%	1.56%	1.56%	1.19%	1.33%	1.18%
10/21/2018	1.22%	1.56%	1.56%	1.19%	1.33%	1.18%
10/22/2018	1.20%	1.56%	1.56%	1.17%	1.33%	1.19%
10/23/2018	1.18%	1.56%	1.56%	1.17%	1.33%	1.18%
10/24/2018	1.18%	1.56%	1.56%	1.19%	1.33%	1.18%
10/25/2018	1.19%	1.59%	1.59%	1.19%	1.33%	1.17%
10/26/2018	1.19%	1.59%	1.59%	1.19%	1.33%	1.18%
Avg Interest Rates	1.20%	1.55%	1.55%	1.20%	1.35%	1.19%
Rmkt Fee	0.10%	0.13%	0.13%	0.10%	0.07%	0.07%
LOC Fee	0.40%			0.33%	0.32%	0.41%
All-In Rate	**1.70%**	**1.67%**	**1.67%**	**1.63%**	**1.73%**	**1.68%**
Par Amount	105,740,000		32,160,000	77,900,000		57,500,000

Interest Rate Mode	Percent of Total Variable Rate Debt		Par Outstanding	Weighted All-In Average Rate		Base Rate Average
Daily	53.02%		144,900,000	1.68%		1.20%
Weekly	46.98%		128,400,000	1.69%		1.47%
	100.00%	$	**273,300,000**	1.69%		1.33%
Fixed						
COPS 2010	0.95%		3,775,000	3.82%		
COPS 2016	29.27%		116,745,000	2.90%		
BABS 2010	43.87%		175,000,000	4.45%	(1)	
SERIES 2016	25.92%		103,400,000	3.32%		
	100.00%	$	**398,920,000**	3.70%		
All-In Debt Rate Including $130 Million Notional Amount of Swaps						**3.54%**

(1) Rate adjusted up from 4.35% as a result of sequestration reducing BAB's subsidy by 6.2%

November 6, 2018
Prepared by: J. Davis / T. Fournier
Submitted by: R. Jacobson / C. Clary
Approved by: Paul A. Cook

FINANCE AND PERSONNEL COMMITTEE

QUARTERLY DEFERRED COMPENSATION PLAN AND FUND REVIEW

SUMMARY:

The following is submitted for the Committee's review and consideration:

- A Summary of the Deferred Compensation Program and Distribution of Assets as of September 30, 2018, as outlined in Exhibit "A"; and
- Mutual Fund Performance Review as of September 30, 2018, as outlined in Exhibit "B".

BACKGROUND:

Overview of the Deferred Compensation Assets:

As of September 30, 2018, the District's Section 457(b) and 401(a) Plans (collectively, the "Plans") assets totaled $61,782,405 which represented a $2,957,204 increase from the quarter ending June 30, 2018 and a $6,884,833 increase for the one-year period ending September 30, 2018. The changes in Plan assets over these two periods are summarized as follows:

	For the One-Year Period Ending September 30, 2018	*For the Quarter Ending September 30, 2018*
Beginning Balance	$54,897,571	$58,825,201
Employee Contributions	2,522,523	607,756
District Contributions	958,327	265,249
Transfers to/from Other Plans	436,193	111,665
Distributions	(2,561,571)	(222,884)
Loan Distributions[(1)]	(297,543)	(45,621)
Loan Repayments	242,819	72,513
Net Investment Gain (Loss)	5,584,086	2,168,527
Ending Balance – September 30, 2018	$61,782,405	$61,782,405
Change in Assets for the Period	$6,884,833	$2,957,204

(1) Number of loans outstanding: 63

Review of Investment Options:

The District's deferred compensation policy states that any investment option performing "Below Benchmark" for four consecutive quarters or seven out of the trailing 12 quarters, has "Failed" the Long-Term Rolling Analysis (LTRA) and the investment option is to be replaced. For the quarter ending September 30, 2018, all the funds in the Plan passed the LTRA. The Advised Assets Group Performance Review as of September 30, 2018 is attached as Exhibit "B".

FISCAL IMPACTS:

As of September 30, 2018, the District's Plan assets totaled $61,782,405, which represented a $2,957,204 increase from the quarter ending June 30, 2018 and a $6,884,833 increase for the one-year period ending September 30, 2018.

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.

RECOMMENDATION:

Receive and file.

LIST OF EXHIBITS:

Exhibit "A" – Summary of the Deferred Compensation Plan and Distribution of Assets
Exhibit "B" – Mutual Fund Performance Review

EXHIBIT "A"
IRVINE RANCH WATER DISTRICT
SUMMARY OF DEFERRED COMPENSATION PROGRAM
September 30, 2018

Deferred Compensation IRS Section 457 (Employee Contributions) Money Purchase Pension Plan & Executive Plan - IRS Section 401 (a) (District Contributions)			
	457	**401 (a)**	**GRAND TOTAL**
Assets	**$47,235,473**	**$14,546,932**	**$61,782,405**
Change From Prior Quarter	$2,233,802	$723,402	$2,957,204
Change From Prior Year (9/2017)	$5,050,963	$1,833,870	$6,884,833
Quarterly Contributions	**$607,756**	**$265,249**	**$873,005**
Change From Prior Quarter	*($23,576)*	$4,797	

	For the One Year Period Ending September 30, 2018	For the Quarter Ending September 30, 2018
Beginning Balance	$54,897,571	$58,825,201
Employee Contributions	2,522,523	607,756
District Contributions	958,327	265,249
Transfers to/from other plans	436,193	111,665
Distributions	(2,561,571)	(222,884)
Loan Distributions[1]	(297,543)	(45,621)
Loan Repayment	242,819	72,513
Net Investment Gain (Loss)	5,584,086	2,168,527
Ending Balance - September 30, 2018	$61,782,405	$61,782,405
Change in assets for the period	$6,884,833	$2,957,204

[1] Number of loans outstanding as of 9/30/18 : 63

Employee Participation	
Full-time Permanent Employees	365
Permanent Employees Participating	322
Percent Participation	88%

IRVINE RANCH WATER DISTRICT
SUMMARY OF DEFERRED COMPENSATION PROGRAM
DISTRIBUTION OF ASSETS

September 30, 2018

	Fund	Assets	Percent of Assets	Change from previous quarter
	PROFILE FUNDS			
AGG	Aggressive Profile Fund	7,129,263	11.5%	-0.1%
MOD	Moderate Profile Fund	6,237,078	10.1%	-0.3%
CON	Conservative Profile Fund	4,683,277	7.6%	0.1%
	Sub Total	**18,049,619**	**29.2%**	**-0.3%**
	INTERNATIONAL FUND			
RERGX	American Funds EuroPacific Gr R6	1,973,608	3.2%	0.0%
VTIAX	Vanguard Total Intl Stock Index Admiral	1,269,172	2.1%	-0.2%
	Sub Total	**3,242,780**	**5.3%**	**-0.2%**
	SMALL CAP FUNDS			
HRSIX	Hood River Small-Cap Growth Retirement	3,039,631	4.9%	0.3%
MVSSX	Victory Integrity Small Cap Value R6	1,472,758	2.4%	-0.1%
VSMAX	Vanguard Small Cap Index	1,523,824	2.5%	0.0%
	Sub Total	**6,036,214**	**9.8%**	**0.2%**
	MEDIUM CAP FUNDS			
HFMVX	Hartford MidCap R6	2,164,034	3.5%	0.1%
WFPRX	Wells Fargo Spec Md Cp Val R6	2,307,324	3.7%	0.0%
VIMAX	Vanguard Mid-Cap Index Fund	1,697,387	2.7%	0.0%
	Sub Total	**6,168,745**	**9.9%**	**0.1%**
	LARGE CAP FUNDS			
RGAGX	American Funds Growth Fund of Amer R6	5,542,201	9.0%	0.2%
VINIX	Vanguard Institutional Index	6,731,306	10.9%	0.3%
DHLYX	Diamond Hill Large-Cap Fund	2,410,398	3.9%	0.0%
	Sub Total	**14,683,904**	**23.8%**	**0.5%**
	BOND FUND			
MWTSX	Metropolitan West Total Return Bond Plan	3,064,670	5.0%	-0.2%
	Sub Total	**3,064,670**	**5.0%**	**-0.2%**
	STABLE VALUE FUND			
	Putnam Stable Value	7,458,991	12.1%	-0.3%
	Sub Total	**7,458,991**	**12.1%**	**-0.3%**
	TARGET DATE FUND			
VTWNX	Vanguard Target Retirement 2020 Inv	60,325	0.1%	0.1%
VTTVX	Vanguard Target Retirement 2025 Inv	38,110	0.1%	0.1%
VTTHX	Vanguard Target Retirement 2035 Inv	5,114	0.0%	0.0%
VFORX	Vanguard Target Retirement 2040 Inv	7,978	0.0%	0.0%
VTIVX	Vanguard Target Retirement 2045 Inv	11,321	0.0%	0.0%
VFFVX	Vanguard Target Retirement 2055 Inv	13,344	0.0%	0.0%
VTTSX	Vanguard Target Retirement 2060 Inv	2,287	0.0%	0.0%
	Sub Total	**138,480**	**0.2%**	**0.2%**
	OTHER			
	Ameritrade Brokerage	2,939,004	4.8%	0.0%
	Total Assets	**$61,782,405**	**100%**	
	LOAN BALANCE OUTSTANDING	**$807,505**		

GREAT-WEST FINANCIAL™

FUND PERFORMANCE REVIEW

Irvine Ranch Water District - 98453-01/02/F1

Reporting Period Ending September 30, 2018

AM96134-0117

GREAT-WEST FINANCIAL™

IMPORTANT DISCLOSURES:

The Fund Performance Review is compiled at the request of the Plan fiduciary based on the specific criteria specified by the Plan fiduciary. It is designed as a high level analytical tool to aide plan fiduciaries in carrying out their fiduciary responsibilities. Great-West is not providing impartial investment advice in a fiduciary capacity to the plan with respect to the Fund Performance Review. The Plan fiduciaries are solely responsible for the selection and monitoring of the Plan's investment options and for determining the reasonableness of all plan fees and expenses. Great-West and its affiliates receive investment management and other fees and revenue from any Great-West or Putnam investment options included in the Fund Performance Review. In addition, Great-West and its affiliates may receive revenue sharing type payments in relation to the investment options provided on the Fund Performance Review. Please contact your Empower Retirement representative for more information. Plan Sponsors may wish to review the enclosed material with their investment adviser, consultant or broker, if necessary, prior to making final investment decisions.

Risks associated with the investment options can vary significantly and the relative risks of investment categories may change under certain economic conditions. The investment return and principal value of an investment will fluctuate so that an investor's shares, when redeemed, may be more or less than their original cost. *Current performance may be lower or higher than performance data shown due to market activity. Past performance is not a guarantee of future results.*

Representatives of Empower Retirement do not offer or provide investment, fiduciary, financial, legal or tax advice or act in a fiduciary capacity for any client unless explicitly described in writing. Please consult with your investment advisor, attorney and/or tax advisor as needed. Any discussion of these matters included or related to this document or other educational information is provided for informational purposes only. Such discussion does not purport to be complete or to cover every situation. Current tax and ERISA law are subject to interpretation and legislative change. The appropriateness of any product may vary depending on the particular set of facts and circumstances. You should consult with and rely on your own financial, legal and tax advisers.

FUND PERFORMANCE REVIEW: OVERVIEW

OBJECTIVE: * To quantify historical fund performance relative to peer group benchmarks.

FUNDAMENTALS: * Provides long-term and risk-adjusted performance data.
* Comparison against peer group of similar funds as determined by *Morningstar, Inc.*

SOURCE: * Statistics are primarily derived from an independent third-party, Morningstar, Inc. using Morningstar® Direct℠

SCOPE: * The Fund Performance Review is designed as a high level analytical tool to aide plan sponsors in carrying out their fiduciary responsibilities; it is not intended as investment advice.

Performance Summary: Irvine Ranch Water District

period ended 9/30/2018

	Morningstar Category	Ticker Symbol	Fund Name	Overall Rating: Composite %'s Overall	Composite %'s Return	Composite %'s Sharpe	Overall Morningstar Rating		Long-Term Rolling Analysis: Consecutive Quarters Below	# of Quarters Below out of trailing 12	
Intl	Foreign Large Growth	RERGX	American Funds Europacific Growth R6	63.9	64.3	63.5	4	Above	0	0 out of 12	Pass
Small-Cap	Small Growth	HRSIX	Hood River Small-Cap Growth Retirement	84.4	88.3	80.5	5	Above	0	0 out of 12	Pass
	Small Value	MVSSX	Victory Integrity Small-Cap Value R6	52.3	65.7	39.0	3	Above	0	0 out of 12	Pass
Mid-Cap	Mid-Cap Growth	HFMVX	Hartford MidCap R6	74.8	73.7	76.0	3	Above	0	0 out of 12	Pass
	Mid-Cap Value	WFPRX	Wells Fargo Special Mid Cap Value R6	72.5	70.0	75.0	4	Above	0	0 out of 12	Pass
Large-Cap	Large Growth	RGAGX	American Funds Growth Fund of Amer R6	70.5	57.0	84.0	3	Above	0	0 out of 12	Pass
	Large Value	DHLYX	Diamond Hill Large Cap Y	77.4	85.3	69.5	4	Above	0	0 out of 12	Pass
Asst All/Other	Target-Date Retirement	VTINX	Vanguard Target Retirement Income Inv	80.0	65.0	95.0	4	Above	0	0 out of 12	N/A
	Target-Date 2020	VTWNX	Vanguard Target Retirement 2020 Inv	86.9	84.3	89.5	5	Above	0	0 out of 12	N/A
	Target-Date 2025	VTTVX	Vanguard Target Retirement 2025 Inv	82.2	75.3	89.0	4	Above	0	0 out of 12	N/A
	Target-Date 2030	VTHRX	Vanguard Target Retirement 2030 Inv	78.9	73.3	84.5	4	Above	0	0 out of 12	N/A
	Target-Date 2035	VTTHX	Vanguard Target Retirement 2035 Inv	74.6	68.7	80.5	4	Above	0	0 out of 12	N/A
	Target-Date 2040	VFORX	Vanguard Target Retirement 2040 Inv	77.9	78.3	77.5	4	Above	0	0 out of 12	N/A
	Target-Date 2045	VTIVX	Vanguard Target Retirement 2045 Inv	78.1	75.7	80.5	4	Above	0	0 out of 12	N/A
	Target-Date 2050	VFIFX	Vanguard Target Retirement 2050 Inv	78.2	76.3	80.0	4	Above	0	0 out of 12	N/A
	Target-Date 2055	VFFVX	Vanguard Target Retirement 2055 Inv	73.5	68.5	78.5	4	Above	0	0 out of 12	N/A
	Target-Date 2060+	VTTSX	Vanguard Target Retirement 2060 Inv	64.0	57.0	71.0	3	Above	0	0 out of 12	N/A
Bond	Intermediate-Term Bond	MWTSX	Metropolitan West Total Return Bd Plan	64.1	67.7	60.5	3	Above	0	0 out of 12	Pass
Index Funds	Foreign Large Blend	VTIAX	Vanguard Total Intl Stock Index Admiral (Idx)	70.3	67.7	73.0	3	N/A	N/A	0 out of 12	Pass
	Small Blend	VSMAX	Vanguard Small Cap Index Adm (Idx)	84.3	78.0	90.5	4	N/A	N/A	0 out of 12	Pass
	Mid-Cap Blend	VIMAX	Vanguard Mid Cap Index Admiral (Idx)	75.5	75.0	76.0	4	N/A	N/A	0 out of 12	Pass
	Large Blend	VINIX	Vanguard Institutional Index I (Idx)	90.1	87.7	92.5	5	N/A	N/A	0 out of 12	Pass

Data Source: Morningstar® Direct[SM]

Please refer to the Appendix page for additional disclosures.

Return Analysis: Irvine Ranch Water District

period ended 9/30/2018

Category	Fund Name	3rd Qtr 2018 Return	3rd Qtr 2018 Percentile	Performance vs. Benchmark (Annualized Returns and Return Percentiles %) 1 Year Return	1 Year Percentile	3 Year Return	3 Year Percentile	5 Year Return	5 Year Percentile	10 Year Return	10 Year Percentile	Return Since Inception	Incept. Date
Intl	Foreign Large Growth Peer Group	0.18	50	3.39	50	9.56	50	5.52	50	6.36	50		
	American Funds Europacific Growth R6	-0.84	30	1.47	27	9.93	54	6.20	70	6.83	69	9.49	5/1/2009
Small-Cap	Small Growth Peer Group	6.93	50	23.92	50	17.97	50	11.92	50	12.62	50		
	Hood River Small-Cap Growth Retirement	11.67	93	25.86	58	21.00	82	15.30	93	15.08	90	24.31	3/3/2017
	Small Value Peer Group	1.20	50	7.88	50	13.61	50	9.12	50	10.08	50		
	Victory Integrity Small-Cap Value R6	1.20	50	8.11	53	13.39	44	9.44	59	11.93	94	14.83	6/1/2012
Mid-Cap	Mid-Cap Growth Peer Group	7.17	50	20.37	50	15.77	50	11.80	50	12.13	50		
	Hartford MidCap R6	4.58	17	20.76	53	17.05	65	14.07	86	12.86	70	13.14	11/7/2014
	Mid-Cap Value Peer Group	3.11	50	7.92	50	12.05	50	9.24	50	10.33	50		
	Wells Fargo Special Mid Cap Value R6	3.09	48	4.95	17	11.78	45	10.44	78	11.85	87	11.46	6/28/2013
Large-Cap	Large Growth Peer Group	7.60	50	23.63	50	18.33	50	14.61	50	12.77	50		
	American Funds Growth Fund of Amer R6	5.05	10	22.70	43	19.41	68	14.91	54	12.72	49	16.08	5/1/2009
	Large Value Peer Group	5.55	50	10.15	50	13.37	50	10.22	50	9.71	50		
	Diamond Hill Large Cap Y	7.64	92	10.67	55	15.29	84	11.74	87	10.87	85	14.24	12/30/2011
Asst All/Other	Target-Date Retirement Peer Group	1.40	50	2.92	50	5.19	50	3.91	50	5.19	50		
	Vanguard Target Retirement Income Inv	1.33	44	3.31	65	5.36	55	4.52	71	5.67	69	5.19	10/27/2003
	Target-Date 2020 Peer Group	2.06	50	4.71	50	7.67	50	5.90	50	6.99	50		
	Vanguard Target Retirement 2020 Inv	2.36	81	5.87	87	8.68	83	6.92	89	7.56	81	6.33	6/7/2006
	Target-Date 2025 Peer Group	2.37	50	5.83	50	8.88	50	6.77	50	7.64	50		
	Vanguard Target Retirement 2025 Inv	2.76	80	6.79	84	9.71	81	7.56	84	7.98	61	6.88	10/27/2003
	Target-Date 2030 Peer Group	2.80	50	6.93	50	10.04	50	7.37	50	7.89	50		
	Vanguard Target Retirement 2030 Inv	3.09	77	7.65	72	10.66	75	8.13	77	8.36	68	6.78	6/7/2006
	Target-Date 2035 Peer Group	3.13	50	7.93	50	11.10	50	8.08	50	8.51	50		
	Vanguard Target Retirement 2035 Inv	3.47	82	8.51	68	11.61	71	8.69	76	8.78	59	7.58	10/27/2003
	Target-Date 2040 Peer Group	3.39	50	8.55	50	11.66	50	8.36	50	8.56	50		
	Vanguard Target Retirement 2040 Inv	3.79	83	9.37	72	12.54	78	9.17	81	9.14	76	7.28	6/7/2006
	Target-Date 2045 Peer Group	3.50	50	9.10	50	12.24	50	8.72	50	8.89	50		
	Vanguard Target Retirement 2045 Inv	4.03	88	9.85	78	12.91	80	9.39	78	9.24	69	8.10	10/27/2003
	Target-Date 2050 Peer Group	3.57	50	9.25	50	12.24	50	8.72	50	8.80	50		
	Vanguard Target Retirement 2050 Inv	4.02	80	9.84	72	12.90	77	9.38	79	9.24	73	7.40	6/7/2006
	Target-Date 2055 Peer Group	3.57	50	9.41	50	12.47	50	8.92	50	9.78	50		
	Vanguard Target Retirement 2055 Inv	3.99	78	9.79	66	12.89	70	9.34	67	N/A	N/A	11.08	8/18/2010
	Target-Date 2060+ Peer Group	3.67	50	9.74	50	12.84	50	9.18	50	9.94	50		
	Vanguard Target Retirement 2060 Inv	4.00	71	9.81	54	12.89	52	9.35	62	N/A	N/A	10.90	1/19/2012
Bond	Intermediate-Term Bond Peer Group	0.10	50	-1.24	50	1.50	50	2.15	50	4.27	50		
	Metropolitan West Total Return Bd Plan	0.12	54	-0.81	73	1.45	47	2.34	63	5.66	93	3.31	7/29/2011
Index Funds	Vanguard Total Intl Stock Index Admiral (Idx)	0.53	43	1.61	52	9.95	81	4.47	65	5.17	57	5.12	11/29/2010
	Vanguard Small Cap Index Adm (Idx)	4.77	86	16.70	86	16.34	66	11.48	81	12.36	87	9.64	11/13/2000
	Vanguard Mid Cap Index Admiral (Idx)	4.67	69	13.42	58	13.78	55	11.66	83	12.42	87	10.24	11/12/2001
	Vanguard Institutional Index I (Idx)	7.70	79	17.86	83	17.27	89	13.92	91	11.96	83	10.04	7/31/1990

A Percentile Ranking of 100% represents the highest performance whereas 0% represents the lowest.

Current performance may be lower or higher than performance data shown.

Performance data quoted represents past performance and is not a guarantee or prediction of future results. The investment return and principal value of an investment will fluctuate so that, when redeemed shares/units may be worth more or less than their original cost. For performance data current to the most recent month-end, please visit www.empower-retirement.com/participant. Total return performance shown above represents that of the underlying fund and does not include a deduction for any applicable annuity contract of administrative fees/expenses. Performance numbers shown above would be less after applicable fee/expenses are deducted.

Data Source: Morningstar® Direct℠

Please refer to the Appendix page for additional disclosures

Sharpe Ratio and Expense Analysis: Irvine Ranch Water District

period ended 9/30/2018

	Fund Name	Sharpe Ratios and Percentiles % 3 Yr Ratio	3 Yr %	5 Yr Ratio	5 Yr %	Standard Deviation 3 Yr	5 Yr	Expense Ratio	Expense Percentile %	Manager Tenure (yrs)	Fund Size $MM
Intl	Foreign Large Growth Peer Group	0.84	50	0.50	50	10.48	10.66	1.06	50		
	American Funds Europacific Growth R6	0.87	53	0.58	74	10.48	10.36	0.49	97	27	156,554
Small-Cap	Small Growth Peer Group	1.30	50	0.86	50	12.85	13.55	1.14	50		
	Hood River Small-Cap Growth Retirement	1.41	70	1.08	91	13.63	13.56	1.00	68	16	547
	Small Value Peer Group	0.96	50	0.69	50	13.21	12.92	1.16	50		
	Victory Integrity Small-Cap Value R6	0.89	31	0.68	47	14.24	13.75	0.96	74	15	2,473
Mid-Cap	Mid-Cap Growth Peer Group	1.36	50	1.01	50	10.68	11.16	1.08	50		
	Hartford MidCap R6	1.43	66	1.20	86	10.81	11.06	0.76	89	9	13,051
	Mid-Cap Value Peer Group	1.07	50	0.84	50	10.39	10.41	1.01	50		
	Wells Fargo Special Mid Cap Value R6	1.15	65	1.02	85	9.22	9.67	0.75	84	10	8,579
Large-Cap	Large Growth Peer Group	1.54	50	1.26	50	10.67	10.88	0.95	50		
	American Funds Growth Fund of Amer R6	1.72	87	1.38	81	10.14	10.13	0.33	97	25	193,701
	Large Value Peer Group	1.25	50	0.98	50	9.67	9.91	0.90	50		
	Diamond Hill Large Cap Y	1.34	68	1.05	71	10.34	10.56	0.55	90	16	6,303
Asst All/Other	Target-Date Retirement Peer Group	1.23	50	0.99	50	3.52	3.67	0.68	50		
	Vanguard Target Retirement Income Inv	1.43	92	1.23	98	3.03	3.18	0.13	97	6	16,613
	Target-Date 2020 Peer Group	1.31	50	0.99	50	5.09	5.48	0.71	50		
	Vanguard Target Retirement 2020 Inv	1.45	89	1.13	90	5.18	5.59	0.13	97	6	33,114
	Target-Date 2025 Peer Group	1.34	50	1.00	50	5.87	6.31	0.68	50		
	Vanguard Target Retirement 2025 Inv	1.45	89	1.10	89	5.87	6.30	0.14	97	6	41,860
	Target-Date 2030 Peer Group	1.34	50	0.97	50	6.58	7.02	0.75	50		
	Vanguard Target Retirement 2030 Inv	1.45	85	1.08	84	6.52	6.99	0.14	97	6	35,913
	Target-Date 2035 Peer Group	1.35	50	0.98	50	7.26	7.77	0.71	50		
	Vanguard Target Retirement 2035 Inv	1.43	81	1.05	80	7.22	7.72	0.14	97	6	34,522
	Target-Date 2040 Peer Group	1.35	50	0.96	50	7.78	8.20	0.75	50		
	Vanguard Target Retirement 2040 Inv	1.43	80	1.02	75	7.87	8.39	0.15	97	6	26,445
	Target-Date 2045 Peer Group	1.35	50	0.97	50	8.13	8.54	0.72	50		
	Vanguard Target Retirement 2045 Inv	1.44	83	1.04	78	8.07	8.51	0.15	96	6	24,330
	Target-Date 2050 Peer Group	1.35	50	0.96	50	8.17	8.58	0.76	50		
	Vanguard Target Retirement 2050 Inv	1.44	81	1.04	79	8.05	8.50	0.15	97	6	16,804
	Target-Date 2055 Peer Group	1.36	50	0.99	50	8.29	8.65	0.73	50		
	Vanguard Target Retirement 2055 Inv	1.44	82	1.03	75	8.04	8.49	0.15	96	6	8,011
	Target-Date 2060+ Peer Group	1.40	50	0.99	50	8.25	8.67	0.73	50		
	Vanguard Target Retirement 2060 Inv	1.43	62	1.03	80	8.07	8.50	0.15	96	6	3,240
Bond	Intermediate-Term Bond Peer Group	0.23	50	0.60	50	2.61	2.64	0.67	50		
	Metropolitan West Total Return Bd Plan	0.23	50	0.73	71	2.37	2.39	0.37	89	22	71,578
Index Funds	Vanguard Total Intl Stock Index Admiral (Idx)	0.89	82	0.41	64	10.26	10.79	0.11	95	10	359,568
	Vanguard Small Cap Index Adm (Idx)	1.32	90	0.95	91	11.33	11.68	0.05	98	3	95,352
	Vanguard Mid Cap Index Admiral (Idx)	1.30	62	1.11	90	9.63	9.94	0.05	97	20	102,760
	Vanguard Institutional Index I (Idx)	1.69	92	1.36	93	9.18	9.55	0.04	98	18	235,208

A Percentile Ranking of 100% represents the highest performance whereas 0% represents the lowest.
Expense refers to the Prospectus Net Expense Ratio

Data Source: Morningstar® Direct℠
Please refer to the Appendix page for additional disclosures

Annual Returns and Statistics: Irvine Ranch Water District

period ended 9/30/2018

		Calendar Year Returns					Modern Portfolio Theory Statistics (3 year)			Portfolio Construction		
	Fund Name	2017	2016	2015	2014	2013	Alpha	Beta	R2	Turnover Ratio	Number of Holdings	% in top 10 holdings
Intl	Foreign Large Growth Peer Group	31.24	-1.70	0.40	-3.50	20.15						
	American Funds Europacific Growth R6	31.17	1.01	-0.48	-2.29	20.58	-0.07	0.94	91	29	424	20%
Small-Cap	Small Growth Peer Group	21.94	10.91	-2.09	3.56	41.20						
	Hood River Small-Cap Growth Retirement	20.78	13.50	0.80	8.56	43.94	N/A	N/A	N/A	102	91	24%
	Small Value Peer Group	9.26	26.04	-6.20	4.39	36.14						
	Victory Integrity Small-Cap Value R6	12.59	24.52	-6.49	7.50	41.21	-2.68	1.02	95	70	132	12%
Mid-Cap	Mid-Cap Growth Peer Group	24.78	5.57	0.16	7.86	35.76						
	Hartford MidCap R6	24.42	11.87	1.75	11.18	39.59	0.79	1.07	91	30	106	19%
	Mid-Cap Value Peer Group	12.94	17.72	-4.58	10.42	34.41						
	Wells Fargo Special Mid Cap Value R6	11.27	21.68	-2.65	12.12	39.13	-0.91	0.93	91	46	67	25%
Large-Cap	Large Growth Peer Group	28.77	2.88	4.62	10.60	34.58						
	American Funds Growth Fund of Amer R6	26.53	8.82	5.70	9.63	34.29	2.23	0.84	89	25	382	31%
	Large Value Peer Group	16.20	14.54	-3.53	11.01	31.90						
	Diamond Hill Large Cap Y	20.42	14.74	-0.74	10.89	36.87	0.92	1.06	92	18	52	33%
Asst All/Other	Target-Date Retirement Peer Group	8.77	5.25	-1.14	4.42	5.55						
	Vanguard Target Retirement Income Inv	8.47	5.25	-0.17	5.54	5.87	0.02	0.77	96	8	6	100%
	Target-Date 2020 Peer Group	12.71	6.43	-1.03	5.53	13.56						
	Vanguard Target Retirement 2020 Inv	14.08	6.95	-0.68	7.11	15.85	0.03	0.93	98	9	6	100%
	Target-Date 2025 Peer Group	14.91	7.01	-1.11	5.79	17.10						
	Vanguard Target Retirement 2025 Inv	15.94	7.48	-0.85	7.17	18.14	0.03	1.06	98	10	5	100%
	Target-Date 2030 Peer Group	16.81	7.42	-1.19	5.89	18.87						
	Vanguard Target Retirement 2030 Inv	17.52	7.85	-1.03	7.17	20.49	0.06	0.89	99	9	5	100%
	Target-Date 2035 Peer Group	18.53	7.96	-1.21	6.08	21.55						
	Vanguard Target Retirement 2035 Inv	19.12	8.26	-1.26	7.24	22.82	-0.04	0.99	99	9	5	100%
	Target-Date 2040 Peer Group	19.58	8.14	-1.41	6.09	22.17						
	Vanguard Target Retirement 2040 Inv	20.71	8.73	-1.59	7.15	24.37	-0.05	0.91	99	8	5	100%
	Target-Date 2045 Peer Group	20.41	8.37	-1.38	6.17	23.26						
	Vanguard Target Retirement 2045 Inv	21.42	8.87	-1.57	7.16	24.37	0.00	0.93	99	8	5	100%
	Target-Date 2050 Peer Group	20.68	8.43	-1.42	6.14	23.28						
	Vanguard Target Retirement 2050 Inv	21.39	8.85	-1.58	7.18	24.34	0.02	0.93	99	6	5	100%
	Target-Date 2055 Peer Group	20.86	8.44	-1.42	6.37	23.82						
	Vanguard Target Retirement 2055 Inv	21.38	8.88	-1.72	7.19	24.33	0.01	0.93	99	5	5	100%
	Target-Date 2060+ Peer Group	21.11	8.52	-1.00	6.07	24.35						
	Vanguard Target Retirement 2060 Inv	21.36	8.84	-1.68	7.16	24.35	-0.02	0.93	99	4	5	100%
Bond	Intermediate-Term Bond Peer Group	3.73	2.98	0.10	5.58	-1.65						
	Metropolitan West Total Return Bd Plan	3.49	2.56	0.25	6.16	0.45	0.18	0.89	99	291	2049	32%
Index Funds	Vanguard Total Intl Stock Index Admiral (Idx)	27.55	4.67	-4.26	-4.17	15.14	0.54	0.93	98	12	6283	8%
	Vanguard Small Cap Index Adm (Idx)	16.24	18.30	-3.64	7.50	37.81	1.52	0.91	99	15	1418	3%
	Vanguard Mid Cap Index Admiral (Idx)	19.25	11.22	-1.34	13.76	35.15	-1.14	0.99	99	14	363	7%
	Vanguard Institutional Index I (Idx)	21.79	11.93	1.37	13.65	32.35	-0.03	1.00	100	5	511	22%

Current performance may be lower or higher than performance data shown.Performance data quoted represents past performance and is not a guarantee or prediction of future results
The investment return and principal value of an investment will fluctuate so that, when redeemed, shares/units may be worth more or less than their original cost.
Total return performance shown above represents that of the underlying fund and does not include a deduction for any applicable annuity contract of administrative fees/expenses.
Performance numbers shown above would be less after applicable fee/expenses are deducted.

Data Source: Morningstar® Direct[SM]
Please refer to the Appendix page for additional disclosures

Index Performance

period ending 9/30/2018

	Index	Total Return 1 Year	Total Return Annlzd 3 Year	Total Return Annlzd 5 Year	Total Return Annlzd 10 Year	Annual Return 2017	Annual Return 2016	Annual Return 2015	Annual Return 2014	Annual Return 2013
International	MSCI EMF ID	-3.13	9.78	1.20	2.91	34.35	8.58	-16.96	-4.63	-4.98
	MSCI Eafe Ndtr_D	2.74	9.23	4.42	5.38	25.03	1.00	-0.81	-4.90	22.78
	MSCI World Ndtr_D	11.24	13.54	9.28	8.56	22.40	7.51	-0.87	4.94	26.68
Small-Cap	Russell 2000 Growth	21.06	17.98	12.14	12.65	22.17	11.32	-1.38	5.60	43.30
	Russell 2000	15.24	17.12	11.07	11.11	14.65	21.31	-4.41	4.89	38.82
	Russell 2000 Value	9.33	16.12	9.91	9.52	7.84	31.74	-7.47	4.22	34.52
Mid-Cap	Russell Midcap Growth	21.10	16.65	13.00	13.46	25.27	7.33	-0.20	11.90	35.74
	Standard & Poor's Midcap 400	14.21	15.68	11.91	12.49	16.24	20.74	-2.18	9.77	33.50
	Russell Midcap Value	8.81	13.09	10.72	11.29	13.34	20.00	-4.78	14.75	33.46
Large-Cap	Russell 1000 Growth	26.30	20.55	16.58	14.31	30.21	7.08	5.67	13.05	33.48
	Standard & Poor's 500 TR	17.91	17.31	13.95	11.97	21.83	11.96	1.38	13.69	32.39
	Russell 1000 Value	9.45	13.55	10.72	9.79	13.66	17.34	-3.83	13.45	32.53
Bond	BBgBarc US Aggregate Bond	-1.22	1.31	2.16	3.77	3.54	2.65	0.55	5.97	-2.02
	BBgBarc US Capital Credit	-1.10	2.98	3.40	5.94	6.18	5.63	-0.77	7.53	-2.01
	BBgBarc US Mortgage-Backed	-0.92	0.98	2.02	3.33	2.47	1.67	1.51	6.08	-1.41
	BBgBarc US Government Bond	-1.57	0.26	1.34	2.66	2.30	1.05	0.86	4.92	-2.60
	BBgBarc US 1-3 Year Government	-0.01	0.38	0.57	1.20	0.45	0.87	0.57	0.64	0.37

MSCI EMF ID	A capitalization-weighted index of stocks from 26 emerging markets that only includes issues that may be traded by foreign investors. The reported returns reflect equities priced in US dollars and do not include the effects of reinvested dividends.
MSCI EAFE Ndtr_D	Widely accepted as a benchmark for international stock performance, the EAFE Index is an aggregate of 21 individual country indexes that collectively represent many of the major markets of the world.
MSCI World Ndtr_D	Includes all 23 MSCI developed market countries. Ndtr_D indexes are calculated daily and take into account actual dividends reinvested daily before withholding taxes, but exclude special tax credits declared by companies.
Russell 2000 Growth	Market-weighted total return index that measures the performance of companies within the Russell 2000 Index having higher price-to-book ratios and higher forecasted growth values.
Russell 2000	Consists of the smallest 2000 companies in the Russell 3000 Index, representing approximately 7% of the Russell 3000 total market capitalization.
Russell 2000 Value	Market-weighted total return index that measures the performance of companies within the Russell 2000 Index having lower price-to-book ratios and lower forecasted growth values.
Russell Mid Cap Growth	Market-weighted total return index that measures the performance of companies within the Russell Midcap Index having higher price-to-book ratios and higher forecasted growth values.
Standard & Poor's Midcap 400	Includes approximately 10% of the capitalization of U.S. equity securities. These are comprised of stocks in the middle capitalization range.
Russell Mid Cap Value	Market-weighted total return index that measures the performance of companies within the Russell Midcap Index having lower price-to-book ratios and lower forecasted growth values.
Russell 1000 Growth	Market-weighted total return index that measures the performance of companies within the Russell 1000 Index having higher price-to-book ratios and higher forecasted growth values.
Standard & Poor's 500	A market capitalization-weighted index of 500 widely held stocks often used as a proxy for the stock market. It measures the movement of the largest issues. Standard and Poor's chooses the member companies for the 500 based on market size, liquidity and industry group representation.
Russell 1000 Value	Market-weighted total return index that measures the performance of companies within the Russell 1000 Index having lower price-to-book ratios and lower forecasted growth values.
BBgBarc US Aggregate Bond	Composed of the Bloomberg Barclays Govt/Credit Index, the Mortgage-Backed Securities Index, and the Asset-Backed Securities Index.
BBgBarc US Capital Credit	Listed for corporate bond-general and high-quality funds. This index tracks the returns of all publicly issued, fixed-rate, nonconvertible, dollar-denominated, SEC-registered, investment-grade corporate debt.
BBgBarc US Mortgage-Backed	Includes 15- and 30-year fixed-rate securities backed by mortgage pools of the Government National Mortgage Association (GNMA).
BBgBarc US Government Bond	Listed for government-bond general and Treasury funds because it tracks the returns of U.S. Treasuries, agency bonds, and one- to three-year U.S. government obligations. This index is effective for tracking portfolios holding non-mortgage government securities.
BBgBarc US 1-3 Year Governme	Comprised of both the Treasury Bond index (all public obligations of the U.S. Treasury, excluding flower bonds and foreign-targeted issues) and the Agency Bond Index (all publicly issued debt of U.S. Government agencies and quasi-federal corporations and corporate-debt guaranteed by the U.S. Government).

A benchmark index is not actively managed, does not have a defined investment objective and does not incur fees or expenses. Therefore, performance of a fund will generally be less than its benchmark index. You cannot invest directly in a benchmark index.

Data Source: Morningstar® Direct℠
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The date in a target date fund's name is the approximate date when investors plan to start withdrawing their money (generally assumed at age 65). The principal value of the fund(s) is not guaranteed at any time, including at the time of the target date and/or withdrawal.

It is possible to lose money by investing in a money market fund. Although the fund seeks to preserve the value of your investment at $1 per share, it cannot guarantee it will do so. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.

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APPENDIX - GLOSSARY

12b-1 Fee The maximum annual charge deducted from fund assets to pay for distribution and marketing costs. Although usually set on a percentage basis, this amount will occasionally be a flat figure.

Actively managed A fund attempts to add portfolio value through such active investment techniques as sector allocation (top-down) and/or security selection (bottom-up).

Aggressive Growth (Objective) Funds that seek high growth of capital. Investments may include smaller companies, companies in newly-emerging industries or in

Alpha is the coefficient that measures the portion of an investment's return arising from non-market or unsystematic risk. In actively managed portfolio. Alpha is considered to be the value added by the manager through sector or security selection. A negative alpha would indicate that active management had produced less-than-market returns.

Annual Returns Total returns calculated on a calendar -year basis. The annual return for a fund will be the same as its trailing 12-month total return only at year-end

Annualized Returns Returns for periods longer than one year are expressed as "annualized returns." This is equivalent to the compound rate of return which, over a certain period of time, would produce a fund's total return over that same period.

Asset Allocation (Objective) Funds that seek high total return by investing in a mix of equities, fixed-income securities and money market instruments.

Barclays Capital Aggregate Index Composed of the Barclays Capital Govt/Credit Index, the Mortgage-Backed Securities Index, and the Asset-Backed Securities Index. The returns published for the index are total returns, which include reinvestment of dividends.

Barclays Capital Government Bond Index Listed for government-bond general and Treasury funds. Because it tracks the returns of U.S. Treasuries, agency bonds, and one- to three-year U.S. government obligations, this index is effective for tracking portfolios holding non-mortgage government securities. The returns published for the index are total returns, which include reinvestment of dividends.

Basis Point One-hundredth of a percentage point. For example, 50 basis points equals .50%.

Beta also known as market or systematic risk, beta is the coefficient that measures an investment's volatility relative to "the market" (the S & P 500 Index has a beta of 1.00) as a whole. Portfolios with a beta greater than 1.00 will move higher or lower than the market as a whole, while those with betas of less than 1.00 will move less than the market.

Bond funds Contrary to individual bonds, which offer a guaranteed rate of return, bond funds are variable funds and their returns may rise or fall depending on market conditions. Funds with 70% or more of their assets invested in bonds are classified as Bond Funds. Bond funds are divided into two main groups: Taxable Bond and Municipal Bond. Taxable Bond Fund categories include the following: Long-Term Government, Intermediate-Term Government, Short-Term Government, Long-Term Bond, Intermediate-Term Bond, Short-Term Bond, Ultrashort-Bond, International- Bond, High-Yield Bond, Emerging-Markets Bond and Multisector Bond.

Capital Appreciation The market rise in share value of a company as it experiences growth in earnings and/or assets. By extension, funds will experience capital appreciation as the underlying securities in their portfolios appreciate in value.

Capitalization The total market value of all stock issued by a company. Funds are frequently categorized by the market capitalization of the stocks in their portfolios; i.e., "small cap" generally refers to companies valued by the market at less than $1 billion, "Mid-cap" to companies valued between $1 billion and $5 billion, and "Large-cap" to companies valued at more than $5 billion.

Corporate Bond--General (Objective) Funds that seek income by investing in fixed-income securities. Funds with this objective may hold a variety of issues, including but not limited to government bonds, high-quality corporates, mortgages, asset-backeds, bank loans and junk bonds.

Corporate Bond--High Yield (Objective) Funds that seek income by generally investing 65% or more of their assets in bonds rated below BBB. The price of these issues is generally affected more by the condition of the issuing company (similar to a stock) than by the interest-rate fluctuation that usually causes bond prices to move up and down.

Diversification The investment practice of spreading assets in a portfolio among a number of different companies, industries, sectors and/or instruments. Under Modern Portfolio Theory, the practice of diversification may assist an investor in reducing overall portfolio risk and evening out portfolio returns.

Domestic equity funds are placed in a category based on the style and size of the stocks they typically own. The style and size parameters are based on the divisions used in the investment style box: Value, Blend, or Growth style and Small, Medium, or Large median market capitalization.

Duration A measure of the sensitivity of the price of a fixed-income security to a change in interest rates. Duration is expressed as a number of years. Duration is a measure of interest rate risk. The larger the duration number, the greater the interest rate risk or reward for bond prices.

Equity-Income (Objective) Funds that are expected to pursue current income by investing at least 65% of their assets in dividend-paying equity securities.

Excess Returns The percentage of fund assets paid for operating and administrative expenses, as well as management fees. Fund expenses are reflected in a Fund's NAV.

Expense Ratio The percentage of fund assets paid for operating expenses and management fees, including 12b-1 fees, administrative fees, and all other asset-based costs incurred by the fund, except brokerage costs. Fund expenses are reflected in the fund's NAV. Sales charges are not included in the expense ratio.

Foreign Stock Category An international fund having no more than 10% of stocks invested in the United States.

Fund of Funds A fund that specializes in buying shares in other mutual funds rather than individual securities. Quite often this type of fund is not discernible from its name alone, but rather through prospectus wording (i.e.: the fund's charter).

Government Bond--General (Objective) Offerings that pursue income by investing in a combination of mortgage-backed securities, Treasuries, and agency securities.

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Growth (Objective) Funds that pursue capital appreciation by investing primarily in equity securities. Current income, if considered at all, is a secondary concern.

Growth and Income (Objective) Growth of capital and current income are near-equal objectives for these funds. Investments are typically selected for both appreciation potential and dividend-paying ability.

Index Fund A fund that tracks a particular index and attempts to match returns. While an index typically has a much larger portfolio than a mutual fund, the fund's management may study the index's movements to develop a representative sampling, and match sectors proportionately.

Information Ratio Is an alternative to the Sharpe Ratio for measuring the risk-adjusted performance of a portfolio. It is calculated by subtracting the benchmark (usually an index) from the return of the portfolio as a whole, then dividing by the tracking error (standard deviation of the difference between portfolio returns and the returns of the index). The higher the Information Ratio, the better the more consistent a manager is.

International Equity Funds with 40% or more of their equity holdings in foreign stocks (on average over three years) are placed in the international equity class. These categories include Europe, Japan, International Hybrid, Latin America, Diversified Pacific, Pacific ex. Japan, Specialty Precious Metals, Diversified Emerging Markets, World Stock, and Foreign Stock. Foreign investments involve special risks, including currency fluctuations and political developments.

APPENDIX - GLOSSARY (CONT.)

GREAT-WEST FINANCIAL

Life Cycle These funds are geared toward investors of a certain age or with a specific time horizon for investing. Typically they are grouped together in sets (i.e. conservative, moderate, and aggressive portfolios).

Management Fees The management fee is the percentage deducted from fund assets to pay an advisor or subadvisor. Often, as the fund's net assets grow, the percentage deducted for management fees decreases. For example, a particular fund may report a management fee of 0.40% on the first $500 million in assets, 0.35% on all assets between $500 million and $1 billion, and 0.30% on assets in excess of $1 billion. Thus, if the fund contains $1.5 billion in total net assets, the advisor scales back its management fees accordingly. Alternatively, the fund may compute the fee as a flat percentage of average net assets. The management fee might also come in the form of a group fee (G), a performance fee (P), or a gross income fee (I). Note: The management fee is just one (albeit a major) component of a fund's costs. The overall expense ratio is the most useful number for investors. Actual fees are also noted in this section.

Morningstar Category identifies funds based on their actual investment styles as measured by their underlying portfolio holdings (portfolio statistics and compositions over the past three years). If the fund is new and has no portfolio, we estimate where it will fall before assigning a more permanent category. When necessary, we may change a category assignment based on current information.

MSCI EAFE Ndtr_D Listed for foreign stock funds (EAFE refers to Europe, Australasia, and Far East). Widely accepted as a benchmark for international stock performance, the EAFE Index is an aggregate of 21 individual country indexes that collectively represent many of the major markets of the world. Ndtr_D indexes are calculated daily and take into account actual dividends reinvested daily before withholding taxes, but exclude special tax credits declared by companies. In addition, Ndtr_D indexes subtract withholding taxes retained at the source, for foreigners who do not benefit from a double taxation treaty. The returns published for the index are total returns, which include reinvestment of dividends.

MSCI World Ndtr_D Includes all 23 MSCI developed market countries. Ndtr_D indexes are calculated daily and take into account actual dividends reinvested daily before withholding taxes, but exclude special tax credits declared by companies. In addition, Ndtr_D indexes subtract withholding taxes retained at the source, for foreigners who do not benefit from a double taxation treaty.

Mutual fund An investment option that pools money from many shareholders and invests it in a group of stocks, bonds, or other securities. Also known as an open-end investment management company, mutual funds are securities required to be registered with the SEC.

NAV Stands for net asset value, which is the fund's share price. Funds compute this value by dividing the total net assets by the total number of shares.

Net Assets The month-end net assets of the mutual fund, recorded in millions of dollars. Net-asset figures are useful in gauging a fund's size, agility, and popularity. They help determine whether a small company fund, for example, can remain in its investment-objective category if its asset base reaches an ungainly size.

Prospectus A fund's formal written statement, generally issued on an annual basis. In this statement the fund sets forth its proposed purposes and goals, and other facts (e.g.: history and investment objective) that an investor should know in order to make an informed decision.

Prospectus Objective Indicates a particular fund's investment goals, based on the wording in a fund's prospectus.

R-squared (R2) measures the degree to which movement in one variable is related to the movement in another variable. Portfolios with a high R-squared will react similarly to various market conditions. By combining investments with low correlations, an investor can reduce the overall risk within a portfolio.

Risk Basically there are four types of risk: 1) inflation risk means your money may not earn enough in the long run because as prices go up the value of your money goes down; 2) market risk means you could lose money because the price of a stock may go down; 3) credit risk means a company or organization that borrowed your money may not be able to pay it back; and 4) interest rate risk means you could lose money because as interest rates go up the value of bond investments goes down.

Russell 1000 Consists of the 1000 largest companies within the Russell 3000 index. Also known as the Market-Oriented Index, because it represents the group of stocks from which most active money managers choose. The returns published for the index are total returns, which include reinvestment of dividends.

Russell 1000 Growth Market-capitalization weighted index of those firms in the Russell 1000 with higher price-to-book ratios and higher forecasted growth values. The Russell 1000 includes the largest 1000 firms in the Russell 3000, which represents approximately 98% of the investable US equity market.

Russell 1000 Value Market-capitalization weighted index of those firms in the Russell 1000 with lower price-to-book ratios and lower forecasted growth values. The Russell 1000 includes the largest 1000 firms in the Russell 3000, which represents approximately 98% of the investable US equity market.

Russell 2000 Consists of the smallest 2000 companies in the Russell 3000 Index, representing approximately 7% of the Russell 3000 total market capitalization. The returns published for the index are total returns, which include reinvestment of dividends.

Russell 2000 Growth Market-weighted total return index that measures the performance of companies within the Russell 2000 Index having higher price-to-book ratios and higher forecasted growth values. The Russell 2000 Index includes the 2000 firms from the Russell 3000 Index with the smallest market capitalizations. The Russell 3000 Index represents 98% of the of the investable US equity market.

Russell 2000 Value Market-weighted total return index that measures the performance of companies within the Russell 2000 Index having lower price-to-book ratios and lower forecasted growth values. The Russell 2000 Index includes the 2000 firms from the Russell 3000 Index with the smallest market capitalizations. The Russell 3000 Index represents 98% of the of the investable US equity market.

Share Classes Shares of the same fund that offer different shareholder rights and obligations, such as different fee and load charges. Common share classes are A (front-end load), B (deferred fees), C (no sales charge and a relatively high annual 12b-1 fee, such as 1.00%). Multi-class funds hold the same investment portfolio for all classes, and differ only in their surrounding fee structure.

Sharpe Ratio measures the risk-adjusted performance of a portfolio. It is calculated by subtracting the risk-free rate of return (i.e., the return on treasury bills) from the return of the portfolio as a whole, then dividing by the standard deviation of the returns. The higher the Sharpe Ratio, the better the risk-adjusted performance of the portfolio.

Sortino Ratio is similar to the Sharpe Ratio, except that it uses downside deviation for the denominator instead of standard deviation. This alternative to the Sharpe Ratio provides a risk-adjusted measure of a security or fund's performance without penalizing it for upward price movements.

Standard Deviation A statistical measurement of dispersion about an average, which, for a mutual fund, depicts how widely the returns varied over a certain period of time. Investors use the standard deviation of historical performance to try to predict the range of returns that are most likely for a given fund. When a fund has a high standard deviation, the predicted range of performance is wide, implying greater volatility.

Tax-deferred earnings You don't have to pay taxes on any earnings in your defined contribution plan until you withdraw your money. The money in a defined contribution plan can grow faster than with other types of savings plans, because the earnings you accumulate, if any, are also tax-deferred.

Turnover Ratio A measure of the percentage of holdings that have been "turned over" -- replaced with other holdings -- within a portfolio during the course of a year.

Variable funds Investments that fluctuate with market conditions. Unlike guaranteed investments, such as bonds or CDs, variable funds don't guarantee a specific rate of return. They do offer potential for higher earnings in return for higher degree of market risk.

World Stock Category An international fund having more than 10% of stocks invested in the US. Also known as global funds. Foreign Investments involve special risks, including currency fluctuations and political developments.

November 6, 2018 *BD*
Prepared by: J. Davis / T. Fournier
Submitted by: R. Jacobson / C. Clary
Approved by: Paul A. Cook

FINANCE AND PERSONNEL COMMITTEE

REAL ESTATE QUARTERLY PERFORMANCE – SEPTEMBER 2018

SUMMARY:

Staff will provide the Committee with an update on the financial performance of the District's real estate investments and other revenue generating properties for the quarter ended September 30, 2018.

BACKGROUND:

For the quarter ended September 30, 2018, the net operating income (NOI) for the District's residential and commercial real estate investment properties was $2.7 million, which represents a 14.73% return for the period. Including the Serrano Summit/Lennar promissory note earning a rate of 4.00%, the weighted average return of the District's real estate investment portfolio is 9.05%. Land lease income from the Strawberry Farms Golf Course and lease revenue from the District's five cell sites were $145,651 and $50,105 respectively. A report detailing the NOI and returns for the District's real estate investment properties, golf course and cell sites is attached as Exhibit "A".

Residential Investment Properties:

For the quarter ended September 30, 2018, the NOI for the Sycamore Canyon Apartments was approximately $2.1 million, which was favorable to budget by $38,500, due to higher than anticipated security deposit retention and lower than expected vacancies. The District's limited partnership investment in the Wood Canyon Villa property earned a preferred return of 9.00% providing income of $136,110 for the quarter. The net return for Wood Canyon was 8.55%.

Commercial Investment Properties:

The NOI for the quarter ended September 30, 2018 at the Irvine Market Place (230 Commerce) property was $155,664, which was unfavorable to budget by $11,297, due to higher than anticipated utility expenses. Staff completed lease renewal negotiations with Guaranteed Rate for suite 200 (5,158 sf). The lease extension is for three-years at an average rate of $2.52/sf, which includes a $0.05 premium for the building top, freeway facing signage. The suite is in excellent condition and the renewal was negotiated with no additional tenant improvements. The building is 100% leased with the next two leases due to expire in May/June 2019.

For the quarter ended September 30, 2018, the NOI for the Sand Canyon Professional Center medical office property was $192,052, which was in line with budget. The property is currently 100% occupied.

The NOI for the Waterworks Way Business Park property for the quarter ended September 30, 2018 was $125,572, which was unfavorable to budget by $9,733 due to higher than anticipated expenses for utilities, plumbing repairs, and maintenance. During the quarter, a five-year lease commencing on January 1, 2019 was executed with BrainStorm, LLC. BrainStorm provides educational programs focused on Science, Technology, Engineering, and Math (STEM) for grades K-12. Classes are held at a studio located in Irvine and at various school sites in Orange County. Tenant improvements (TI) consist of new carpet, paint, and installation of a wall in one existing large office. The effective rate over the term is $1.52/sf before TI's and $1.45/sf after TI's. Staff is in lease negotiations with a tenant for the final available unit at the property, which would be scheduled to commence on December 1, 2018.

Strawberry Farms Golf Course and Cell Site Leases:

Land lease income for Strawberry Farms Golf Course for the quarter ended September 30, 2018 was $145,651, which was in line with budget. This compares with income of $154,861 for the same period last year, representing a 5.95% decrease for the period. Lease revenue from the District's five cell sites was $50,105, which was in line with the budget.

FISCAL IMPACTS:

For the quarter ended September 30, 2018, the District's commercial and residential real estate investments provided NOI of approximately $2.7 million. Strawberry Farms Golf Course lease revenue and District cell site revenue were $145,651 and $50,105, respectively. The Serrano Summit/Lennar Homes promissory note earned interest of $816,000 for the quarter ended September 30, 2018.

ENVIRONMENTAL COMPLIANCE:

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

RECOMMENDATION:

Receive and file.

LIST OF EXHIBITS:

Exhibit "A" – Real Estate Performance Report

Exhibit "A"

Irvine Ranch Water District
Real Estate Investment Performance Report - Investment
as of September 30, 2018

INCOME PROPERTIES			FY 2018-19					FY 2018-19 RATE OF RETURN		3 Year Average Rate of Return	5 Year Average Rate of Return
Property Description	Capital Investment	Investment Inception	Jul-18	Aug-18	Sep-18	FY Q1	FY 2018-19 TOTAL	FY Q1	Average Fiscal YTD	FY 16/17 - 18/19	FY 14/15 - 18/19
Sycamore Canyon Apartments	$ 43,550,810	Dec-92	$ 673,328	$ 706,820	$ 690,487	$ 2,070,635	$ 2,070,635	19.02%	19.02%	18.67%	18.04%
Wood Canyon Villa Apartments	$ 6,000,000	Jun-91	$ 45,863	$ 45,863	$ 44,384	$ 136,110	$ 136,110	8.55%	8.55%	8.56%	8.55%
Irvine Market Place Office	$ 5,739,845	Jul-03	$ 48,620	$ 49,297	$ 57,747	$ 155,664	$ 155,664	10.85%	10.85%	7.72%	7.23%
Waterworks Way Business Park	$ 8,630,577	Nov-08	$ 43,282	$ 40,553	$ 41,737	$ 125,572	$ 125,572	5.82%	5.82%	5.45%	5.05%
Sand Canyon Professional Center	$ 8,648,594	Jul-12	$ 64,717	$ 61,005	$ 66,330	$ 192,052	$ 192,052	8.88%	8.88%	8.80%	8.60%
TOTAL - INCOME PROPERTIES	$ 72,569,826		$ 875,810	$ 903,538	$ 900,685	$ 2,680,033	$ 2,680,033	14.73%	14.73%	14.22%	13.73%

OTHER REAL ESTATE INVESTMNET			FY 2018-2019					PROMISSORY NOTE RATE OF RETURN	
Property Description	Original Cost	Investment Inception	Jul-18	Aug-18	Sep-18	FY Q1	FY 2018-19 TOTAL	FY Q1	Average Fiscal YTD
Serrano Summit - Promissory Note	$ 81,600,000	Sep-17	$ 272,000	$ 272,000	$ 272,000	$ 816,000	$ 816,000	4.00%	4.00%
TOTAL - REAL ESTATE INVESTMENTS	$ 154,169,826		Weighted Average Rate of Return					9.05%	9.05%

RE PERFORMANCE RPT September 2018 xlsx

Irvine Ranch Water District
Real Estate Investment Performance Report - Investment
Strawberry Farms Golf Course & Cell Site
as of September 30, 2018

		2018-19 NET INCOME				
Property Description	**Capital Investment**	**Jul-18**	**Aug-18**	**Sep-18**	**FY Q1**	**NET INCOME 2018-2019**
Strawberry Farms Golf Course	**N/A**	**$ 44,585**	**$ 49,650**	**$ 51,416**	**$ 145,651**	**$ 145,651**
Change From Prior Year Period:						**$ (9,210)** **-5.95%**
Cellular Sites		**$ 22,873**	**$ 13,616**	**$ 13,616**	**$ 50,105**	**$ 50,105**
Change From Prior Year Period:						**$ 7,432** **17.42%**

November 6, 2018
Prepared by: D. Kanoff/A. Shinbashi
Submitted by: R. Jacobson/C. Clary
Approved by: Paul A. Cook

FINANCE AND PERSONNEL COMMITTEE

QUARTERLY RISK MANAGEMENT REPORTING

SUMMARY:

Staff will provide the Committee with a report on the insurance and claim expenses incurred by the District through first quarter ending September 30, 2018.

BACKGROUND:

A comparison of the District's actual versus budget insurance expenses for the first quarter of FY 2018-19 and FY 2017-18 is attached as Exhibit "A" and summarized as follows:

- Insurance premiums total $215,866 and are $738 over budget;
- Third-party claims administration expenses total $1,565 and are $5,935 under budget;
- Legal expenses total $38,240 and are $23,240 over budget; and,
- Claim payments totaled $134,376. After CSAC-EIA final reimbursement for the 4100 MacArthur claim, the net claim payments total $2,876.

The register of closed general liability claims, including current fiscal year and prior period claim expenses is attached as Exhibit "B".

FISCAL IMPACTS:

Fiscal impacts are outlined above.

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.

RECOMMENDATION:

Receive and file.

LIST OF EXHIBITS:

Exhibit "A" – Insurance and Claims Summary
Exhibit "B" – FY 2018-19 Register of Closed General Liability Claims

Exhibit "A"

Irvine Ranch Water District
Insurance and Claims Summary
Period Ending September 30, 2018

PREMIUM	Actual FY 18/19	Budget FY 18/19	Variance	% Variance	Prior FY 17/18
Crime	6,994	1,175	(5,819)	-495%	1,166
General Liability	142,548	134,328	(8,220)	-6%	125,430
Pollution	4,563	4,575	12	0%	4,563
Property	61,761	75,050	13,289	18%	71,493
Total	215,866	215,128	(738)		202,652

CATEGORY	Open FY 18/19	Closed FY 18/19	Total FY 18/19	Budget FY 18/19	Variance	Prior FY 17/18
Claim Administration		1,565	1,565	7,500	5,935	646
Legal	32,536	5,704	38,240	15,000	(23,240)	3,160
Property		134,376	134,376	32,500	(101,876)	195,000
Total FY 18/19	32,536	141,645	174,181	55,000	(119,181)	198,806

ACTIVITY	FY 2017/18	FY 2018/19
Beginning Open Claim	8	4
New Claims	27	7
Closed Claims	-31	-9
Current Open Claims	4	2

Exhibit "B"

Register of Closed General Liability Claims as of September 30, 2018

Closed Claims Fiscal Year 2018-2019

CLAIM TYPE	CLAIMANT	Claim Administration	Legal	Property	Grand Total
4100 MacArthur	Steven Craig	145	1,804		1,949
	Makar Properties, Llc			131,500	131,500
Single Event	R. Trinh	51			51
	Priya Navkar	119			119
	Pelican Heights HOA		560		560
	Parviz Ardeshirpour			178	178
	2550 Elden Avenue, Costa Mesa			405	405
	Viking Billing Service			2,293	2,293
Copper Pipes/Pinhole Leaks	Lisa & Shawn Williams		3,340		3,340
Annual Administrative Fee	Annual Administrative Fee	1,250			1,250
Grand Total		1,565	5,704	134,376	141,645

Closed Claims From Prior Years

CLAIM TYPE	CLAIMANT	Claim Administration	CSAC-EIA Reimbursement	Legal	Property	Vehicle	Business Interruption	Grand Total
4100 MacArthur	AT&T				6,904			6,904
	C. Matheson					12,424		12,424
	D. Sanner				2,603	16,242		18,845
	George Hills Company, Inc.	8,653						8,653
	Makar Properties, Llc				236,586			236,586
	Real Estate Dev Assoc LLC				14,333			14,333
	Steven Craig	45,999		52,628	2,509,576	44,044		2,652,247
Reimbursement	4100 MacArthur (Over $100K)		(2,855,713)					(2,855,713)
Single Event	1100 Scholarship HOA	187						187
	Apex Energetics				750			750
	B. Beltran				768			768
	B. Zangger				1,020			1,020
	Gonzales v. IRWD			4,077				4,077
	H. Rawls				948			948
	J. Blount				404			404
	Montbury HOA				0			0
	R. Tolliver				1,500			1,500
	R. Trinh	257						257
	R. West				500			500
	S. Daneshmand				707			707
	The Irvine Company Llc				8,296			8,296
	USAA for Marc & Stacey Thomas	826			6,093			6,919
	W. Zhang				497			497
	Julia O'Brien	162						162
	Charles Elfsten				347			347
	Takayuki Hayashi					1,010		1,010
	Ronald Williams					1,000		1,000
	Wonderland Brands California, LLC						1,950	1,950
	Lisa Benjamin				1,330			1,330
	Priya Navkar	154						154
	Pelican Heights HOA			1,500				1,500
	Patrick O-Connell					615		615
	Edward Bisbines				883			883
Slip and Fall	Lipman v. IRWD			5,691				5,691
Third Party Administration	George Hills Company, Inc.	1,250						1,250
Copper Pipes/Pinhole Leaks	Lisa & Shawn Williams	31,277		184,537				215,814
Grand Total		88,765	(2,855,713)	248,433	2,794,045	75,335	1,950	352,815

November 6, 2018
Prepared by: M. Marcacci / E. Akiyoshi / C. Smithson
Submitted by: K. Burton / C. Clary
Approved by: Paul A. Cook

FINANCE AND PERSONNEL COMMITTEE

REPLACEMENT RESERVE PLANNING UPDATE

SUMMARY:

IRWD utilizes various planning tools, such as its Replacement Planning Model (RPM) and Replacement Fund Balance Model to assist in the financial planning for setting future rates. Staff recommends that the District update its 2001 Replacement Reserve Policy used to ensure adequate cash reserves are available in its Replacement Fund to pay for future infrastructure. In support of this recommendation, staff will present information to the Finance and Personnel Committee over a two-month period:

- November: Staff will present updated RPM and Replacement Fund Balance Models and discuss how the updated costs impact cash Replacement Fund balances; and
- December: Staff will present a recommendation to update the existing Board-approved 2001 Replacement Reserve Policy.

BACKGROUND:

Two separate models will be reviewed with the Committee at the November meeting. The RPM model results are incorporated into the Replacement Fund Balance Model to assist in evaluating IRWD's replacement reserve needs used in recommending the contribution of future water and sewer rates. At the November Committee meeting, staff will review these two models with the Committee.

RPM Update:

During the past 18 months, the District has been working with Kayuga Solution, an asset management consultant, to update the 2010 RPM model. The model was originally developed in 1996 and updated with added infrastructure since 2010 adjusted for 2018 dollars. The replacement value of IRWD's water and sewer infrastructure has increased from $7.3 billion in 2010 to $9.2 billion in 2018 utilizing a 100-year projection horizon. The 2010 model assumed traditional replacement of all infrastructure on a by-facility basis with minimal refurbishment. Staff has reviewed that approach and updated the model consistent with IRWD's infrastructure maintenance approach, which is on a more continuous basis. The model utilizes Continuous Refurbishment, a hybrid approach of refurbishment, repair, and periodic replacement as needed. The updated 2018 model reflects a cumulative cost of $7.1 billion.

Replacement Fund Balance Model Update:

The Replacement Fund Balance Model is updated by staff annually to assist in managing the cash replacement fund balance and ensure sufficient cash is available to fund future infrastructure replacements. This year, the model incorporates the updated costs from the RPM.

Revenues such as real estate net income, one percent property tax revenue, the monthly service fee replacement component paid by customers, and interest income increase the cash balance. Expenses such as replacement capital, including the District share for OCSD and debt service, reduce the cash balance. The baseline model assumes the one percent property tax revenues through 2040. Bond sales are included when required to maintain sufficient cash balances. The first year of anticipated replacement fund bond sale is year 2058. The model provides for sensitivity scenarios related to the one percent property tax revenue.

Staff will provide the Committee with a presentation to review the updated model.

Next Steps:

The Replacement Reserve Policy was last updated in 2001. It identified policy with respect to use and maintenance of the District Replacement Fund. Categories covered include:

- Capital Facilities
- Self-Insurance
- Variable Rate Hedge
- System Refurbishments
- Environmental Compliance
- Rate Stabilization

The policy established target funding criteria along with targeted fund balances. At the December Committee meeting, based on input from the Committee in November on the assumptions, staff will present alternatives and a recommendation to update the existing Board-approved Replacement Reserve Policy.

FISCAL IMPACTS:

The updated Replacement Reserve Policy results will be incorporated into the upcoming Fiscal Year 2019-20 budget as applicable.

ENVIRONMENTAL COMPLIANCE:

This item is statutorily exempt from the California Environmental Quality Act (CEQA).

RECOMMENDATION:

That the Committee provide feedback on the costs and assumptions used in the Replacement Planning and Replacement Fund Balance Models.

LIST OF EXHIBITS:

None.

November 6, 2018
Prepared by: C. Smithson / D. Pardee
Submitted by: C. Clary
Approved by: Paul A. Cook P. Cook

FINANCE AND PERSONNEL COMMITTEE

FISCAL YEAR 2018-19 OPERATING AND NON-OPERATING
FINANCIAL HIGHLIGHTS THROUGH SEPTEMBER 30, 2018

SUMMARY:

Staff has prepared an analysis of the unaudited operating statements through the first quarter Fiscal Year (FY) 2018-19, as follows:

- Actual to budget comparison of operating expenses for the consolidated District, attached as Exhibit "A";
- Actual to budget comparison of revenues and expenses for the water, sewer, recycled water, and conservation/natural treatment system (NTS), attached as Exhibit "B"; and
- Actual to budget comparison of non-operating revenues and expenses for the consolidated District, attached as Exhibit "C".

As of the September 30, 2018, overall net expenses totaled $40.4 million versus a budget of $41.7 million. Significant variances greater than $0.25 million are discussed below.

Based on system revenues and expenses shown on Exhibit "B", net operating revenue is over budget by $3.5 million and expenses were under budget by $0.3 million, resulting in a positive net operating position of $3.8 million through September 30, 2018.

As shown on Exhibit "C", actual net non-operating revenues and expenses were $16.0 million versus a budget of $13.8 million.

Significant variances greater than $0.25 million are discussed below.

BACKGROUND:

Overall Operating Expenses:

Overall net operating expenses were under budget by $1.3 million or 3.0%. Exhibit "A" is a summary of actual to budget expenses by major category. Noteworthy variances to budget include:

- Regular labor was under budget by $0.5 million (6.2%). This was primarily due to twenty-eight unfilled positions at the end of September 2018.
- Employee benefits were under budget by $0.3 million (7.1%), again, primarily due to twenty-eight unfilled positions at the end of September 2018 and workers compensation paid claims was below budget by $0.1 million as well.

- Electricity exceeded budget by $0.5 million (11.0%). The potable and recycled electrical expense was higher than expected. This is due to a price rate increase in June and a change in the Southern California Edison Base Interruptible Program that reduced the incentive credits for limiting electrical usage during peak hours ($0.4 million).
- Repairs and Maintenance – IRWD was below budget by $0.4 million (18.4%). This was due to landscape maintenance falling below budget for the Natural Treatment Systems and the recycling facilities due to timing differences.
- The cost of water exceeded budget by $0.3 million (2.0%). This is summarized below:

  Treated System – Sales exceeded budget by 306 acre feet (AF) (2.1%) and total demand exceeded budget by 137 AF (0.8%). Imported water was over budget by 1,241 AF while groundwater came in 1,046 AF under budget. Cost Impact: expenses are $0.6 million over budget.

  Untreated System – Sales were below budget by 257 AF. Demand for supplemental water was below budget by 161 AF, and native water usage exceeded budget by 443 AF. Cost Impact: expenses were under budget by $0.1 million.

  Recycled Water System – Sales exceeded budget by 1,514 AF. Increased pumping and the use of stored water from recycled reservoirs reduced supplemental demands. Cost Impact: Expenses are $0.2 million less than budget.

A more thorough discussion of the water system follows:

For the treated potable system, sales exceeded budget by 306 AF. Total variance was offset with imported water while groundwater was 1,046 AF under budget. The Baker Water Treatment Plant was 57 AF under budget. The potable system exceeded budget by $0.6 million.

	Treated					
	Acre Feet			**Millions**		
	Actual	**Budget**	**Variance**	**Actual**	**Budget**	**Variance**
Imported/ Supplemental	2,979	1,738	(1,241)	$3.5	$2.0	($1.5)
Pumped	12,064	13,110	1,046	5.6	6.3	0.7
Baker	1,751	1,808	57	1.4	1.6	0.2
Total	16,793	16,656	(137)	10.5	9.9	(0.6)
Process Waste	(330)	(408)	(78)			
System Loss	(1,446)	(1,537)	(91)			
Sales/Cost of Sales	*15,017*	*14,711*	*(306)*	$10.5	$9.9	($0.6)

For the untreated non-potable system, sales were under budget by 257 AF. Imported purchases and native water met untreated demands. The untreated system was $0.1 million under budget.

	Non-Potable (untreated)					
	Acre Feet			Millions		
	Actual	Budget	Variance	Actual	Budget	Variance
Imported/ Supplemental	1,765	2,241	475	$1.4	$1.7	$0.3
Native	443	-	(443)	0.1	-	(0.1)
Native Trsf to Rcycld	(137)		137	(0.1)	-	0.1
Imported Trsf to Rcycld	(1,328)	(1,489)	(161)	(1.2)	(1.4)	(0.2)
Total	743	752	9	0.2	0.3	0.1
System Loss	(282)	(34)	248			
Sales/Cost of Sales	*461*	*717*	*257*	$0.2	$0.3	$0.1

The recycled water system exceeded sales by 1,514 AF. Increased demand was met with produced / storage water (1,327 AF) and increased pumped water (251 AF) reducing the total additional demand for supplemental water (77 AF) and costs were under budget by $0.2 million.

	Recycled					
	Acre Feet			Millions		
	Actual	Budget	Variance	Actual	Budget	Variance
Imported/ Supplemental	1,566	1,489	(77)	$1.3	$1.5	$0.2
Pumped	1,610	1,359	(251)	0.6	0.6	0.0
Produced/ Storage	8,751	7,424	(1,327)	-	-	0.0
Total	11,927	10,272	(1,655)	1.9	2.1	0.2
Process Waste	(242)	(204)	38			
System Loss	(285)	(182)	103			
Sales/Cost of Sales	*11,400*	*9,886*	*(1,514)*	$1.9	$2.1	$0.2

Summary of System Actual to Budget Performance:

Exhibit "B" shows a detailed comparison of actual to budgeted revenue and expenses by system for FY 2018-19. Expenses are summarized into direct, indirect, general plant, marsh, natural treatment system, and conservation which are funded by over-allocation revenues.

The net operating income variance for the consolidated District (all systems) exceeded budget by $3.8 million. Net revenues were over budget by $3.5 million (9.7%) and total expenses were under budget by $0.3 million (0.9%). Variances by system are explained below.

Potable and Untreated Water System:

The net operating income variance to budget for the water system exceeded budget by $1.2 million. Net revenues exceeded budget by $1.8 million (10.0%) and total expenses were over budget by $0.6 million (3.2%).

Commodity revenue exceeded budget by $1.4 million (treated and untreated) with residential and landscape demands exceeding budget, including more sales in the over allocation tiers while public authority revenue fell well below budget. Fixed service revenue was over budget by $0.5 million.

Direct expenses exceeded budget by $0.8 million (5.1%). This variance is primarily due to the cost of water coming in over budget by $0.7 million. Imported water exceeded budget and this was partially offset by unbudgeted native water and reduced groundwater. Key variances associated with the cost of water are as follows with the explanations consistent with the variances described above:

Potable and Untreated Variances (in millions)	Imported/ Native	Clear and Process Wells	Baker WTP	Total
Water	($1.4)	$0.6	$0.2	($0.6)
Labor and G&A	-	(0.2)	0.2	-
Electricity	-	-	(0.1)	(0.1)
Chemicals	-	-	-	-
Other	-	0.1	-	0.1
Baker Reimbursement	-	-	(0.1)	(0.1)
Total Cost of Water	($1.4)	$0.5	$0.2	($0.7)

Indirect expenses, which include customer records and collections and allocated general and administration (G & A) were under budget by $0.2 million.

Sewer System:

The net operating income variance for the sewer system was positive by $0.2 million. Net revenues fell below budget by $0.1 million (0.7%) and total expenses were below budget by $0.3 million (3.6%).

Direct expenses were below budget by $0.2 million (3.6%).

Recycled Water System:

The net operating income variance to budget for the recycled water system was positive by $0.9 million. Net revenue exceeded budget by $1.1 million (14.7%) and total expenses exceeded budget by $0.2 million (2.3%).

Commodity revenue for recycled water sales exceeded budget by $1.0 million (17.5%) due to recycled sales exceeding budget by 1,514 AF through the first quarter. Landscape sales account for all of the variance due to the warm, dry quarter.

Direct expenses matched the budget.

Indirect expenses, which include customer records and collections and allocated general and administration (G & A) exceeded budget by $0.1 million.

Conservation/NTS:

The net operating income variance to budget for conservation and NTS was positive by $1.5 million. Over allocation and water banking revenue exceeded budget by $0.7 million (25.4%). Over allocation expense fell below budget by $0.8 million. Over-allocation revenue exceeded budget due to the blend of sales both between potable and recycled in the inefficient and wasteful tiers. Expenses were below budget due to unbudgeted Palo Verde Irrigation fallowing receipts of $0.5 million.

Summary of Non-Operating Actual-to-Budget Expense:

Exhibit "C" provides a detailed comparison of actual to budget for FY 2018-19 and significant variances greater than $0.25 million are discussed below.

Non-Operating Income/Expenses:

The net non-operating income variance to budget was positive by $2.2 million. Revenues exceeded budget by $1.7 million and expenses were below budget by $0.5 million.
Key variances greater than $0.25 million are as follows:

	Variance (millions)
Property Tax Revenue is higher due to higher assessed values.	$1.2
Interest expense was over budget due to higher than anticipated rate of returns.	0.4
Connection fees were under budget due to the unpredictable nature of this revenue source. This is a timing issue.	(1.0)
Other income was above budget due to higher than anticipated grant revenue.	1.0
Interest expense was under budget due to slightly lower than expected variable rates and a reduction of the 2010 Build America Bonds sequestration.	0.7
Other expenses were over budget because the remaining net book value prior to the remodel of Initial Disinfectant Facility for the Dyer Road Well Field was written off.	(.04)
Other variances under $0.25 million.	0.4
Total	$2.2

FISCAL IMPACTS:

Fiscal impacts are outlined above and included in the attached exhibits.

ENVIRONMENTAL COMPLIANCE:

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

RECOMMENDATION:

Receive and file.

LIST OF EXHIBITS:

Exhibit "A" – Consolidated Operating Actual to Budget Expense
Exhibit "B" – Actual to Budget Revenues and Expenses by System
Exhibit "C" – Consolidated Non-Operating Actual to Budget

Exhibit A

Irvine Ranch Water District

Consol Operating Actual to Budget Expense (A vs B)

Period Ending September 30, 2018

(in thousands)

Expense Group	Expense Name	Actual 3/31/18	Budget 3/31/18	Budget (Over)/Under	%
Salaries & Benefits	Regular Labor	$7,873	$8,396	$522	6.2%
	Overtime Labor	583	534	(48)	(9.0%)
	Contract Labor	519	491	(28)	(5.6%)
	Employee Benefits	4,028	4,334	307	7.1%
Salaries & Benefits Total		**$13,003**	**$13,756**	**$753**	**5.5%**
Purchased Water & Utilities	Water	12,694	12,442	(252)	(2.0%)
	Electricity	4,859	4,379	(480)	(11.0%)
	Fuel	134	137	4	2.6%
	Telecommunication	158	157	(1)	(0.6%)
	Other Utilities	38	45	7	15.2%
Purchased Water & Utilities Total		**$17,883**	**$17,161**	**($722)**	**(4.2%)**
Materials & Supplies	Chemicals	815	836	20	2.4%
	Operating Supplies	517	385	(132)	(34.2%)
	Printing	38	81	42	52.5%
	Postage	149	130	(19)	(14.5%)
	Permits, Licenses and Fees	165	406	241	59.4%
	Office Supplies	31	23	(7)	(30.3%)
	Duplicating Equipment	45	44	(2)	(4.4%)
	Equipment Rental	21	18	(3)	(16.2%)
Materials & Supplies Total		**$1,781**	**$1,922**	**$141**	**7.4%**
Professional Services	Rep & Maint OCSD & Others	3,402	3,426	24	0.7%
	Rep & Maint IRWD	1,944	2,382	439	18.4%
	Insurance	340	257	(83)	(32.5%)
	Legal Fees	249	481	232	48.2%
	Engineering Fees	191	209	18	8.7%
	Accounting Fees	25	37	12	31.9%
	Data Processing	513	539	25	4.7%
	Personnel Training	292	332	40	11.9%
	Personnel Physicals	9	10	1	12.8%
	Other Professional Fees	1,256	1,342	86	6.4%
	Directors' Fees	39	42	3	7.1%
Professional Services Total		**$8,260**	**$9,057**	**$796**	**8.8%**
Other	Mileage Reimbursement	30	39	8	22.0%
	Collection Fees	0	0	0	8.9%
	Election Expense	36	55	19	34.1%
	Safety	36	31	(5)	(17.0%)
	Alarm and Patrol Services	187	188	1	0.3%
	Biosolids Disposals	6	5	(1)	(19.4%)
	Commuter Program	49	39	(10)	(26.7%)
	Computer Backup Storage	5	3	(2)	(58.0%)
	Contract Meter Reading	237	347	111	31.9%
	Other	29	32	4	11.0%
	Conservation	69	300	231	76.9%
Other Total		**$684**	**$1,039**	**$355**	**34.1%**
Grand Total		**$41,611**	**$42,934**	**$1,323**	**3.1%**
Less: Reimbursement from Baker Partners		(1,174)	(1,231)	(57)	4.6%
Grand Total		**$ 40,437**	**$ 41,703**	**$ 1,266**	**3.0%**

Exhibit B

IRVINE RANCH WATER DISTRICT

CONSOLIDATED ACTUAL TO BUDGET REVENUES AND EXPENSES

PERIOD ENDED SEPTEMBER 30, 2018

(in thousands)

	Water			Sewer			Recycled			NTS & Conservation			
FY 2018-19	**Actual**	**Budget**	**Variance**	**Actual**	**Budget**	**Variance**	**Actual**	**Budget**	**Variance**	**Actual**	**Budget**	**Variance**	**Total Var.**
Revenues:													
Commodity Revenues	$ 12,918	$ 11,507	$ 1,411	$ -	$ -	$ -	$ 6,686	$ 5,690	$ 996	$ -	$ -	$ -	$ 2,407
Service Revenues	9,102	8,580	522	12,880	12,973	(93)	1,772	1,709	63	-	-	-	492
Over Allocation Revenues			-			-			-	3,425	2,731	694	694
Total Revenues	22,020	20,087	1,933	12,880	12,973	(93)	8,458	7,399	1,059	3,425	2,731	694	3,593
Contribution to Enhancement and Replacement Capital Funds	(2,214)	(2,087)	(127)	(4,819)	(4,854)	35	(231)	(223)	(8)			-	(100)
Net Revenues	$ 19,806	$ 18,000	$ 1,806	$ 8,061	$ 8,119	$ (58)	$ 8,227	$ 7,176	$ 1,051	$ 3,425	$ 2,731	$ 694	$ 3,493
Expenses:													
Cost of Water	$ 13,929	$ 13,219	$ (710)	$ -	$ -	$ -	$ 4,379	$ 4,185	$ (194)	$ -	$ -	$ -	$ (904)
Operations	3,019	2,903	(116)	2,154	2,127	(27)	1,219	1,411	192	-	-	-	49
Water Banking	-	-	-	-	-	-	-	-	-	137	262	125	125
OCSD - O&M	-	-	-	3,175	3,401	226	-	-	-	-	-	-	226
Total Direct	16,948	16,122	(826)	5,329	5,528	199	5,598	5,596	(2)	137	262	125	(504)
Customer Records and Collections	935	1,103	168	330	331	1	165	165	-	-	-	-	169
General & Admin Expense	1,959	1,995	36	1,984	2,053	69	974	825	(149)	-	-	-	(44)
Total Indirect	2,894	3,098	204	2,314	2,384	70	1,139	990	(149)	-	-	-	125
General Plant	128	128	-	183	183	-	134	134	-	38	38	-	-
Marsh/NTS/Conservation										1,849	2,567	718	718
Total Expenses	$ 19,970	$ 19,348	$ (622)	$ 7,826	$ 8,095	$ 269	$ 6,871	$ 6,720	$ (151)	$ 2,024	$ 2,867	$ 843	$ 339
Net Operating Income	$ (164)	$ (1,348)	$ 1,184	$ 235	$ 24	$ 211	$ 1,356	$ 456	$ 900	$ 1,401	$ (136)	$ 1,537	$ 3,832

RECONCILIATION OF EXHIBIT "B" AND EXHIBIT "A"	Act	Bgt	Var
Total Water, Sewer and Recycled Expenses - Sch B	$ 36,692	$ 37,031	$ 339
Capital & Other Expenses (including G&A)	3,017	3,887	870
Baker Reimb.	1,174	1,231	57
General Plant	(445)	(445)	0
Total Consolidated Operating Expense - Sch A	$ 40,437	$ 41,703	$ 1,266

Exhibit C

IRVINE RANCH WATER DISTRICT

CONSOLIDATED NON-OPERATING ACTUAL TO BUDGET EXPENSES

Period Ending September 30, 2018

(in thousands)

Non-operating Revenues:	**Actual 9/30/18**	**Budget 9/30/18**	**Budget Variance**
Property Taxes	$ 10,979	$ 9,789	$ 1,190
Investment Income	1,457	1,095	362
Connection Fees	3,987	5,000	(1,013)
Real Estate Income	4,438	4,250	188
Other Income	3,012	2,000	1,012
Total Revenues	$ 23,873	$ 22,134	$ 1,739
Non-operating Expenses:			
Interest Expense	$ 5,885	$ 6,573	$ 688
Real Estate Expense	1,101	1,292	191
Other Expenses	889	500	(389)
Total Expenses	$ 7,875	$ 8,365	$ 490
Net Revenues & Expenses	$ 15,998	$ 13,769	$ 2,229

November 6, 2018
Prepared and
Submitted by: K. Swan KS
Approved by: Paul A. Cook P. Cook.

FINANCE AND PERSONNEL COMMITTEE

ANNUAL BOARD OF DIRECTORS' FEES

SUMMARY:

The Finance and Personnel Committee annually reviews the Board of Directors' compensation and recommends to the Board to either accept or deny a fee increase for the new calendar year. Pursuant to the District's Ordinance No. 1989-1 and enacted under Section 20202 et seq. of the California Water Code, the Board's meeting compensation increases on January 1 of each year, however, said increase may not exceed an amount equal to five (5%) percent, and no compensation for more than a total of ten (10) days in any calendar month.

BACKGROUND:

The last Board of Directors' compensation increase was effective in January 2017. The current compensation for the Board of Directors is $273 per meeting, not to exceed ten (10) meetings per month. In accordance with Section 20202 et seq. of the California Water Code, the Board's meeting compensation increases on January 1 of each year by five (5%) percent. If the Board accepts the increase, the resulting per meeting fee will be $287 (rounded to the nearest dollar). Provided as Exhibit "A" is a survey of the Director Fees for other local water districts.

FISCAL IMPACTS:

A 5% increase has a nominal impact on the operating budget if accepted by the Board.

ENVIRONMENTAL COMPLIANCE:

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

RECOMMENDATION:

That the Board either accept or decline the five (5%) percent compensation increase for calendar year 2018.

LIST OF EXHIBITS:

Exhibit "A" – Survey of Director Fees

EXHIBIT “A”

BOARD OF DIRECTORS PER DIEM SURVEY
(as of October 31, 2018)

AGENCY	PER DIEM MEETING	EFFECTIVE DATE	MAXIMUM MEETINGS PER MONTH
El Toro Water District	$219.00	March 2018	10
Irvine Ranch Water District	$273.00	January 2017	10
Mesa Water District	$264.00	July 2017	10
Moulton Niguel Water District	$220.00	September 2016	10
Municipal Water of Orange County	$296.99	January 2018	10
Orange County Water District	$288.00	April 2018	10
Santa Margarita Water District	$210.00	February 2009	10
South Coast Water District	$190.00	January 2006	10
Yorba Linda Water District	$150.00	January 2003	10

November 6, 2018
Prepared by: E. Lin
Submitted by: C. Clary
Approved by: Paul A. Cook

FINANCE AND PERSONNEL COMMITTEE

FY 2017-18 COMPREHENSIVE ANNUAL FINANCIAL REPORT

SUMMARY:

The District's auditor, Davis Farr LLP has completed its annual audit of the District's financial statements for the Fiscal Year (FY) ended June 30, 2018. As stated in its report, Davis Farr concluded that in all material aspects, the statements fairly present the District's financial position as of June 30, 2018 and conform with generally accepted accounting principles.

A draft of the Comprehensive Annual Financial Report (CAFR), including the Introductory Section, audited financial statements, accompanying auditor's report, Management's Discussion and Analysis, and Statistical Section is attached as Exhibit "A". The draft is being presented for review and comment by the Committee.

BACKGROUND:

At the Committee meeting, Davis Farr will present its required Auditor Communication pursuant to Statement on Auditing Standards 114 *The Auditor's Communication with Those Charged with Governance.* This letter, attached as Exhibit "B", reflects the auditor's understanding of key management assumptions and practices and indicates that there were no disagreements with management during the scope of the audit. The auditors have also provided a *Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with Government Auditing Standards*, attached as Exhibit "C", which states that the audit did not identify any material weakness deficiencies in internal control. In addition, the report states that the result of the audit disclosed no instances of noncompliance or other matters that were required to be reported under government auditing standards.

The IRWD Comprehensive Annual Financial Report:

The FY 2017-18 CAFR is being prepared for the fifteenth consecutive year by the District. All of IRWD's previous CAFRs have won awards from the Government Finance Officers Association (GFOA), which encourages state and local governments to prepare and publish expanded financial reports in conformity with generally accepted accounting principles (GAAP) and provides awards to recognize contributions to the practice of government finance that exemplify outstanding financial management. The awards stress practical, documented work that offers leadership to the profession and promotes improved public finance.

Staff plans to present the FY 2017-18 CAFR to the IRWD Board at its December 10, 2018, meeting. Staff will continue to produce an enhanced electronic version with key references hyperlinked throughout the document. The CAFR will be made available on the IRWD website.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

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

RECOMMENDATION:

Receive and file.

LIST OF EXHIBITS:

Exhibit "A" – Draft FY 2017-18 Comprehensive Annual Financial Report
Exhibit "B" – SAS 114 Auditor's Communication with Those Charged with Governance from Davis Farr LLP
Exhibit "C" – Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with Government Auditing Standards from Davis Farr LLP

Exhibit "A"

50 Years of Recycled Water

Irvine Ranch Water District
Irvine, California

COMPREHENSIVE ANNUAL FINANCIAL REPORT

For Fiscal Year Ended June 30, 2018

Irvine Ranch WATER DISTRICT

DRAFT

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Comprehensive Annual Financial Report

For fiscal year ended June 30, 2018

Irvine Ranch Water District
Irvine, California

Board of Directors
Douglas J. Reinhart, President
Steven E. LaMar, Vice President

Mary Aileen Matheis
Peer A. Swan
John B. Withers

General Manager
Paul A. Cook

Prepared by:
Irvine Ranch Water District
Finance Department

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Table of Contents

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Introductory Section

Irvine Ranch Water District
Fiscal Year Ended June 30, 2018

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IRWD

December 10, 2018

To The Board of Directors,
Irvine Ranch Water District:

Management of the Irvine Ranch Water District (IRWD or the District) has prepared a Comprehensive Annual Financial Report of IRWD for the fiscal year ended June 30, 2018. This document, which contains a complete set of basic financial statements, is presented in conformity with generally accepted accounting principles (GAAP) and audited in accordance with generally accepted government auditing standards by a firm of licensed certified public accountants. State law requires that all special-purpose local governments publish these basic financial statements within six months of the close of the agency's fiscal year.

This report contains management's representations concerning the finances of the District. Management assumes full responsibility for the completeness and reliability of the information contained in this report. To provide a reasonable, rather than absolute, basis for making these representations, IRWD management has established a comprehensive framework of internal controls. These controls are designed to protect the District's assets from loss, theft, or misuse, and to ensure sufficiently reliable information for the preparation of the District's basic financial statements in conformity with GAAP. Because the cost of internal control should not exceed anticipated benefits, the objective is to provide reasonable, rather than absolute, assurance that the basic financial statements are free of any material misstatements. As management, we assert that this financial report is complete and reliable in all material respects.

The District's basic financial statements have been audited by Davis Farr LLP, a firm of licensed certified public accountants. The goal of the independent audit was to provide reasonable assurance that the basic financial statements of the District for the fiscal year ended June 30, 2018 were free of material misstatements. The independent audit involved examining, on a test basis, evidence supporting the amounts and disclosures in the basic financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. The independent auditor rendered an unmodified opinion that the District's basic financial statements for the fiscal year ended June 30, 2018 are fairly presented in conformity with GAAP. The independent auditor's report is presented as the first component of the financial section of this report.

A profile of the District is presented in this Introductory Section. In the Financial Section, Management's Discussion and Analysis (MD&A) immediately follows the independent auditor's report and provides an overview and analysis of the basic financial statements. This letter of transmittal and introduction is designed to complement the MD&A and should be read in conjunction with it.

Profile of Irvine Ranch Water District

Overview

Irvine Ranch Water District was established in 1961 as a California Water District under the provisions of the California Water Code. As a special district, IRWD focuses on four primary services - providing potable water, collecting sewage, producing and distributing recycled and other non-potable water, and implementing urban runoff source control and treatment programs.

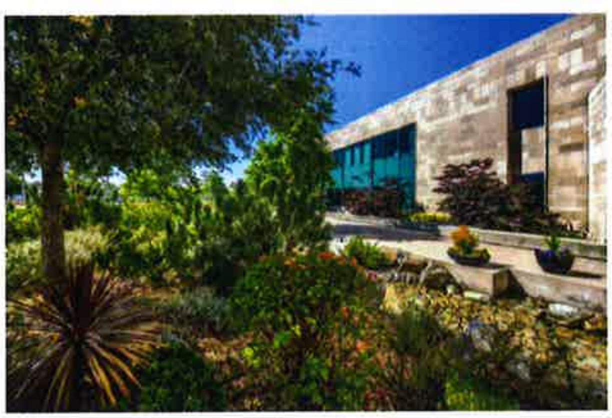
IRWD is an independent public agency governed by a five-member, publicly elected Board of Directors. The members of the Board each have varied professional backgrounds, coupled with an average tenure for the Board members of approximately 24 years. The District is a leader in developing and implementing resource management initiatives such as water recycling, urban runoff and water conservation. The District is a pioneer in financial management practices such as variable rate debt financing and long-term infrastructure replacement program development and funding.

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 top of the foothills of eastern Orange County, the District's region is semi-arid with a mild climate and an average annual rainfall of approximately 12 inches. The total estimated daytime population served is in excess of 500,000 includes approximately 114,000 water and 109,000 sewer service and recycled water connections. The number of service connections has increased by approximately 19% over the last ten years.

The District provides its core services to its customers by focusing on the following areas:

- *Operational Reliability* – having multiple sources of water supply and various sewage treatment alternatives to ensure reliable services.
- *Organizational Strength* – having professional staff work in close collaboration with the Board of Directors striving to exceed the expectations of our customers.
- *Long-Term Financial Planning* – ensuring sufficient funds are available to construct, operate, and replace facilities, while maintaining competitive rates now and in the future.

People



Sand Canyon Headquarters Building

The District employs approximately 367 staff who are responsible for daily operations and implementing strategic objectives and policies set forth by the Board. The District actively promotes the training and education of employees to increase effectiveness and retention. The average tenure of District employees is approximately 12 years.

Services

The District is functionally organized into four core service areas:

Drinking or "Potable" Water System

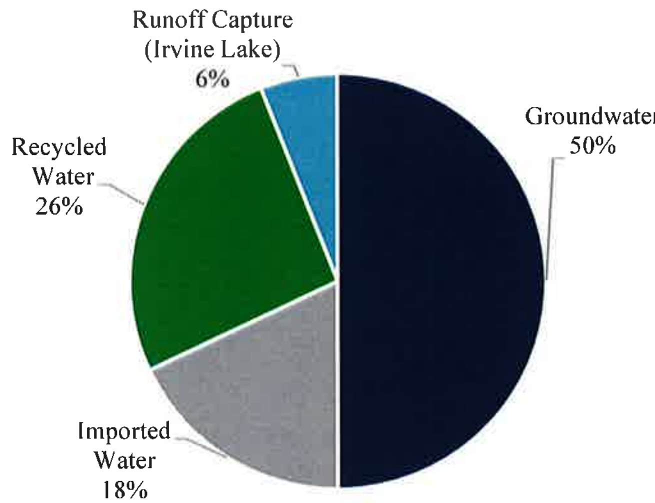
For many years, the District received virtually all of its drinking water from imported sources. To minimize this dependence on imported water, in the early 1980's, the District developed a series of local wells known as the Dyer Road Wellfield to access high quality groundwater from the Orange County Groundwater Basin, managed by the Orange County Water District (OCWD).

The District also operates and treats numerous groundwater wells. In Fiscal Year (FY) 2017-18, local groundwater accounted for 50% of its total water supply.

Groundwater currently is significantly less expensive, more reliable, and less energy intensive than imported water that is transported over hundreds of miles into Southern California and subsequently treated.

The District purchased 18% of its water supply in FY 2017-18 from the Municipal Water District of Orange County (MWDOC), the region's wholesale water supplier. This water is imported from both the Colorado River, which is transported approximately 240 miles through deserts and over mountain ranges to Southern California, and from the Delta, from which water is transported approximately 400 miles from Northern California.

Water Sources
Fiscal Year 2017-18



Recycled and Non-Potable Water Systems

The District treats sewage to provide water for irrigation, commercial, industrial and agricultural purposes which further reduces its reliance on the more expensive imported water and increases its system reliability. Sewage from the community is collected and recycled to California State Water Resources Control Board Title 22 standards at the Michelson Water Recycling Plant and the Los Alisos Water Recycling Plant, which have the combined capacity to produce nearly 33.5 million gallons of tertiary recycled water per day of which the District currently produces and utilizes approximately 21 million gallons per day.

Once treated, the recycled water is distributed throughout the service area and in FY 2017-18 accounted for approximately 26% of the District's total water supply. Approximately 85% of all business and community landscaped areas (parks, school grounds, golf courses, street medians, etc.) in the District's service area are irrigated with recycled water. The District also provides recycled water for various industrial and commercial uses. IRWD's goal is to recycle its sewage flows whereby recycled water will represent 25% to 30% of its total water supply after the District is fully developed.

The District operates a non-potable system which includes 5 wells, 5 open reservoirs and 12 tanks that store water for non-potable uses, including a majority ownership in the Irvine Lake, a 25,000 acre-feet reservoir. In total, the District has approximately 4,500 acre feet of active recycled water storage capacity.

Sewage Collection and Treatment System

The District has an extensive network of gravity sewers, force mains, sewage lift stations, and siphons that convey sewage to two District-owned water recycling plants or the Orange County Sanitation District. In FY 2017-18, the District treated approximately 75% of its sewage while the remainder of the sewage collected by the District was diverted to the Orange County Sanitation District treatment facilities. The District plans to expand its treatment capacity when necessary to serve its growing population. This expansion is discussed in more detail in the *Major Initiatives* section of this document.

Urban Runoff Source Control and Treatment System

IRWD is statutorily authorized to control and treat urban runoff, and conducts various projects and programs as part of an effort to protect water quality in the San Diego Creek watershed. In the 1990s, the District constructed wetlands at the San Joaquin Marsh where natural biological processes remove a substantial pollutant load from San Diego Creek dry weather flow before it reaches environmentally sensitive Upper Newport Bay State Ecological Reserve. The District operates a regional urban runoff treatment network known as the Natural Treatment System (NTS). As of June 30, 2018, the NTS consists of 35 constructed wetland treatment sites located throughout the San Diego Creek Watershed and one outside of the IRWD service area with several more currently under construction. In addition, IRWD has recently added an urban runoff diversion facility along Peters Canyon Wash, which pumps runoff resulting from selenium-rich high groundwater into OCSD's sewers, eventually flowing to OCWD's groundwater replenishment system.

San Joaquin Marsh

Infrastructure Assets

The District builds and maintains significant capital infrastructure in order to provide superior service to its customers. The table below provides key information relating to its water and sewer system assets from 2009 to 2018.

Infrastucture Assets

	2009	2018
Potable System		
Miles of Water Line	1,134	1,905
Number of Storage Tanks	37	36
Maximum Storage Capacity (acre feet)	456	456
Number of Pumping Stations	42	38
Number of Wells	24	27
Well Production Capacity (cfs)	117	118
Water Banking Storage Capacity (acre feet)	50,000	126,000
Potable Treatment Plants	3	5
Non-Potable and Recycled Systems		
Miles of Recycled Line	400	555
Number of Storage Tanks	11	12
Number of Open Reservoirs	4	5
Maximum Storage Capacity (acre feet)	23,703	24,155
Number of Pumping Plants	19	19
Number of Wells	5	5
Well Production Capacity (cfs)	9.8	9.8
Sewer System		
Miles of Sewer Line	901	1,123
Number of Lift Stations	19	23
Treatment Plants	2	2
Treatment Capacity (mgd) (Tertiary)	23.5	33.5
Sewage Flows to Michelson Plant	65%	65%
Sewage Flows to Los Alisos Plant	15%	11%
Sewage Flows to Orange County Sanitation District	20%	24%

1 acre foot = 325,900 gallons

cfs = cubic feet per second

mgd = millions gallons per day

2018 Accomplishments

The District has a Strategic Planning Process where the Board annually adopts goals and annual target activities. The approved Target Activities are associated with sixteen goals for the District to accomplish within the next five years. Major accomplishments achieved in FY 2017-18 are:

1. Obtained Proposition 1 Water Storage Investment Program grant of at least $67.5 million from the California Water Commission for the Kern Fan Groundwater Storage Project.
2. Completed the sale of IRWD's Serrano Summit property for $136 million. Utilized partial proceeds from the sale of the property to lower IRWD's Lake Forest customers onto the same rates as customers in the Irvine Ranch rate area. In FY 2016-17, the average residential bill for the Lake Forest customers was reduced by over 12%.
3. Made significant progress on the construction of the $200 million Michelson Water Recycling Plant Biosolids & Energy Recovery Facilities capital project for the handling of solids, which will cost effectively provide resource recovery of solids and gas for IRWD.
4. Continued to promote water use efficiency and long term conservation measures leading District's customers to have one of the lowest residential gallons per capita per day (gpcd) rates in California. In 2017-18, IRWD's residential water use (indoors and outdoors) averaged 67 gpcd, which was 34% lower than the statewide average of 102 gpcd.
5. Converted University of California, Irvine (UCI) Cooling Towers and other projects to recycled water.
6. Commissioned energy storage installations at key facilities to enhance energy system reliability and provide energy cost savings.
7. Implemented the first phase of the Asset Management System to enhance predictive and planned maintenance.
8. Fully funded IRWD employee pension plan, including the Pension Plan Trust which contains funds adequate to cover the District's CalPERS projected liability.
9. IRWD was recognized as one of the nation's best and brightest in water recycling with an "Excellence in Action" award for California's first dual plumbed hotel.

Tesla Battery Station

Future Goals

The District has the following Board adopted goals for IRWD to accomplish within the next five years, along with Target Activities that are typically accomplished within 12 to 18 months:

1. Optimize and protect local water supply utilization: develop and implement projects to increase IRWD's access to local groundwater and stormwater capture.
2. Evaluate and invest in projects and programs that will enhance future long-term water supply reliability: pursue projects and supply arrangements to enhance water supply reliability, including

increased water banking and water recycling. Provide additional water storage opportunities for regional water supply reliability.

3. Develop water banking recharge, storage, and extraction capacity for IRWD and water banking partners, and store water as it becomes available: continue development of IRWD water banking facilities in Kern County.
4. Develop water recycling facilities and applications for optimal benefit: identify new opportunities for IRWD to utilize recycled water locally.
5. Maximize resource recovery from fully functional biosolids and other resource recovery facilities: complete construction and start-up of IRWD's Biosolids and Energy Recovery Facilities.
6. Improve energy service reliability, manage demands, and control costs: implement cost-effective battery storage and solar power installations.
7. Maximize watershed protection: control and treat urban runoff while preventing sewer spills.
8. Ensure financial and rate stability: ensure adequate funding for future infrastructure replacement needs, continue to provide low rates for IRWD customers, maintain strong financials through solid debt coverage, liquidity balances, mixed debt profile, and pension plan obligation funding of at least 90 percent.
9. Identify, assess and implement new technologies and systems to improve operating efficiency: implement new systems such as Enterprise Asset Management while protecting existing and future systems through advanced cybersecurity measures.
10. Enhance customer communications: redesign the IRWD customer bills and strategically extend community outreach.
11. Maximize water use efficiency in the community: explore future opportunities for increased water use efficiency and expand database for improved analytics.
12. Recruit, develop and retain a highly skilled, motivated, and educated work force: develop employee skills while ensuring appropriate employee compensation.
13. Guide and lead local, state and federal policies and legislation: actively engage in issues of key interest to IRWD including water use efficiency, water rate structures, and others.
14. Engage and shape policies and regulations put forth by local, state and federal agencies: influence regulations to align with best practices for recycled water use and other applications.
15. Increase collaboration with other agencies and entities through leadership and innovation: engage at a high-level in industry associations, regional water agencies, and development of opportunities of mutual benefit for IRWD and partners.
16. Implement opportunities that enhance safety, security, and emergency preparedness throughout the District: protect the health and safety of IRWD employees and facilities.

Water Use Efficiency

The District continues to be a leader in the innovation and implementation of water use measures that promote the most efficient use of water, both on a per capita and per acre basis.

The District's budget-based tiered rate structure, implemented in 1991, was carefully designed to promote the efficient use of water by providing customers pricing signals related to over-use of water in a financially sustainable way. This structure, which the District updated in 2015, is recognized as a model for other agencies to emulate.

In 2016, Governor Brown issued an Executive Order calling for Californians to build on the actions taken during the recent statewide drought, and to "Make Conservation a Way of Life in California". In response, legislation requiring statewide long-term water use efficiency passed in 2018. IRWD has a

long history of implementing cost-effective water efficiency programs. The District's customers have one of the lowest residential gallons per capita per day (gpcd) rates in California.
The District's Water Use Efficiency Plan provides a comprehensive strategy that includes environmental considerations and addresses the considerable financial benefits of water use efficiency for the District and its customers. Specifically, the Plan addresses:

- Increasing water demands and the impact to the District's unit cost of water, which would increase if the District needed to purchase more expensive imported water.
- Reducing urban runoff (typically the result of "over-watering") which minimizes water quality degradation from fertilizers, pesticides and animal waste in creeks, rivers and the ocean.
- Reducing water demands which reduces energy demand and related costs needed to convey water.
- Reducing water use indoors which results in reduced sewage generation and attendant treatment costs and capital costs for additional infrastructure.

The basic tenets of the Water Use Efficiency Plan include local, state and national policy development and leadership, rate structure improvements, focused customer interface, extensive education and outreach, technology advances, and the development of financial incentives. The Board is regularly updated on the effectiveness of the Plan and funding needs.

During the past fiscal year, the District provided financial incentives to residential and business customers to install water efficient devices such as high efficiency clothes washers, toilets, irrigation equipment, and conversions from high water use turf landscape to water-efficient landscapes. Due to the investments made by the District to diversify its resources, expand the use of recycled water and improve water use efficiency, IRWD provides reliable, high quality water to its customers in a cost effective manner.

The District has also led the use of recycled water beginning in the late 1960s and presently serves over 5,400 sites, with more than 25,000 acre feet of recycled water sold in FY 2017-18 representing 26% of the District's total water supply. The use of recycled water reduced the District's need to import more expensive potable supplies.

Legislative and Regulatory Affairs

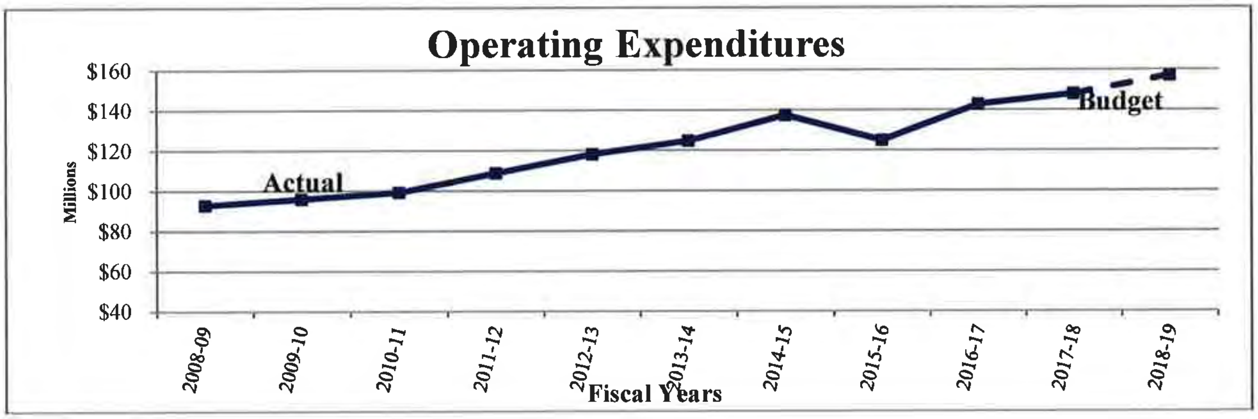
The District actively monitors and works to influence local, state and federal legislation, policies and regulatory actions that could affect IRWD's operations, existing and future facilities and strategic planning efforts. The Board of Directors is frequently engaged in, and takes active positions on, relevant pending legislation and regulatory actions. The District continues to engage proactively in policy discussions surrounding water use efficiency, recycled water, and water rates in California. The District and its Board of Directors also participate in state and regional trade associations including the Association of California Water Agencies, the California Association of Sewer Agencies, the Water Reuse Association and the California Special District Association.

Financial Plan

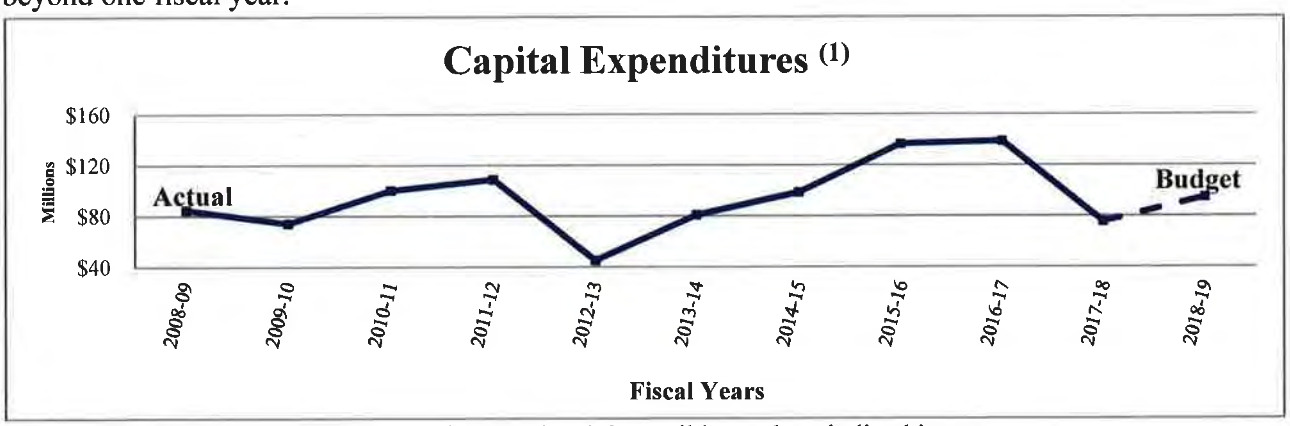
Each year, the Board approves an annual operating budget. The goal of the District's operating budget process is to appropriately fund the resources required to provide excellent service to IRWD customers as cost-efficiently as possible. The graph below shows the actual operating expenditures through FY 2017-18, as well as the Board approved operating budget for FY 2018-19. Increases reflect costs associated with customer growth within the District, as well as an increase in overall operating expenses.

Increases have been kept to a minimum by aggressively pursuing reductions in expenses to offset uncontrollable expenses, such as pass-through rate increases from outside agencies.

The approved FY 2018-19 budget increased to $157.1 million from $148.7 million in FY 2017-18, or 5.7%. Primary reasons were increases in labor and associated benefits from additional positions necessary to support new or planned operating facilities and salary increases, increases in the cost of water due to rate increases from outside agencies, higher operating and maintenance costs associated with additional facilities coming on line and increased expenditures for general legal support.



The Board also approves an annual capital budget based on new, enhancement and replacement infrastructure needs. Below are the actual capital expenditures through FY 2017-18. The reduced spending in 2012-13 and 2017-18 from prior years represents the District's completion of several projects including the MWRP Upgrade Project, the Baker Water Plant, and the subsequent design phase for the MWRP Biosolids and Energy Recovery Facilities, which began construction in FY 2013-14. For FY 2018-19, the Board approved capital budget was $94.8 million. Many capital budget projects extend beyond one fiscal year.



(1) Actual capital expenditures excluding overhead, intangibles and capitalized interest.

User Rates & Charges

User rates and charges are primarily used for funding the District's operation and maintenance expenses. The District separates the cost of constructing water and sewer infrastructure from the cost of daily operations and maintenance. User rates, as discussed below, are billed to customers on a monthly basis, and include a component for the inevitable replacement of existing infrastructure. The District sets replacement monies aside in advance to help stabilize rates and avoid significant potential future rate impacts. In 2015, the District completed a detailed cost of service study which confirmed that user rates billed to customers are based on actual costs to provide the services.

The District allocates capital costs within its service area through the use of water and sewer improvement districts, for which general obligation bond authorization is obtained and used as needed to fund new capital projects. Ad valorem property tax rates are set annually by the District, as are connection fees paid by property developers and landowners. Generally, the District's policy is to allocate the cost of new infrastructure evenly between the developers/landowners and the ultimate property owners who utilize the water and sewer infrastructure.

Water Rates

The District's rate structure for water use is separated into a commodity charge component and a fixed service charge component. The commodity charge reflects the cost of the District's water supplies while the fixed service charge funds the fixed operational and maintenance expenses of the District. For FY 2017-18, the District's water fixed service charge was $10.30 per month. The District has a long history of planning for the inevitable replacement of capital infrastructure, and sets monies aside into enhancement and replacement funds for this purpose. In FY 2017-18, the monthly fixed service charge includes a user enhancement and replacement component of $0.70 and $2.10, respectively, per month, intended to fund current and future replacement and refurbishment costs that provide reliability and redundancy to the District's infrastructure.

The District has a four-tiered rate structure that promotes water use efficiency. A basic use allocation is established for each customer account that provides a reasonable amount of water for the customer's needs based on factors such as the number of occupants, type or classification of use, size of the irrigated area, evapotranspiration rate for the billing period and other consistently applied criteria. The chart below illustrates the four-tier structure that reflects the increased cost associated with usage in the higher tiers.

FY 2017-18 Residential Rate Structure – Potable Water (Commodity Charge)

Tier	Percent of Estimated Customer Need	Cost per ccf
Low Volume	0 – 40%	$1.36
Base Rate	41 – 100%	$1.70
Inefficient	101 – 140%	$4.09
Wasteful	141% +	$12.06

One ccf (100 cubic feet) = 748 gallons

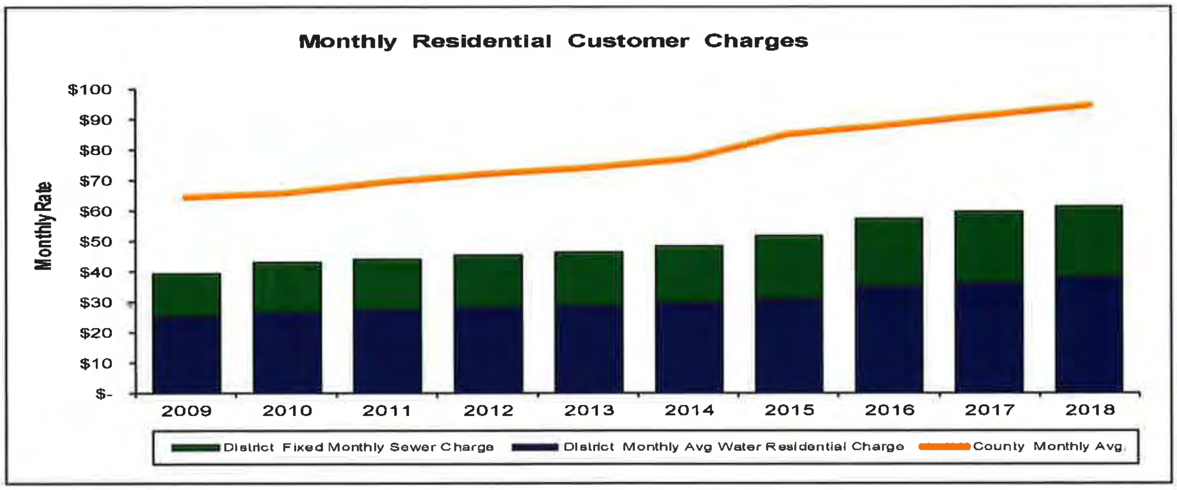
As of June 2018, approximately 76% of the District's customers were within the first two tiers and approximately 90% of customers fell within the District's first three tiers. IRWD residential bills are consistently among the lowest in Orange County. The District is working hard to get all customers within the first two tiers.

Sewer Rates

The District's sewer rates are also among the lowest in Orange County, with a fixed monthly service charge of $25.75 in FY 2017-18 for a typical residential customer covering the collection and treatment of sewage. This monthly service charge includes a user enhancement and replacement component of $0.82 and $9.31, respectively, per month, which is intended to fund current and future capital costs to replace, refurbish and upgrade the existing system. The monthly service fee of $9.31 includes $3.00 to fund the replacement portion of the MWRP Biosolids and Energy Recovery Facilities discussed in more detail under *Major Initiatives – Expanded Water Recycling Options and System Reliability.*

Historic Rate Trends

The following chart reflects the annual "base rate" charge for an average customer's water and sewer service through FY 2017-18. The District has raised rates in each of the last several years due largely to increased costs from outside agencies or wholesale supplies and increased fixed service costs for both water and sewer, including funding for future infrastructure replacement.



Factors Affecting Financial Condition

The information presented in the Financial Section is perhaps best understood in the context of the economic environment in which the District operates, as discussed below.

State and Local Economy

Orange County is the third most populous county in California with over 3.1 million residents and a varied economy in which no single industry is considered dominant. With a location central to Orange County, the District's service area is the home to numerous corporate headquarters such as Allergan Inc., Oakley, Blizzard Entertainment and Edwards Life Sciences. The District is also home to various educational institutions, including University of California Irvine, Concordia University, two community colleges, and other colleges and universities with satellite campuses. The total estimated daytime population served is in excess of 500,000.

During FY 2017-18, the District continued to expand its operating facilities to accommodate approximately 7,300 new water and sewer service connections constructed within District boundaries. There remains less than 20% of future development, including the Northern Sphere area of Irvine, Lake Forest and property from two de-commissioned military bases. Requirements for these areas have been included in the planning and facilities included in the capital budget.
The assessed value of land within the District's service area has grown significantly in the last decade from $35.3 billion in 2009 to more than $61.8 billion in 2018, demonstrating the strength of the local economy.

The State of California's financial condition has historically impacted local governments such as cities, counties and special districts. In 1992, special districts were subjected to legislation that shifted substantial amounts of property tax revenue to the State. In FY 2009-10, the State borrowed approximately $2 million from the District which was repaid in June 2013. Under Proposition 1A, the State can only exercise its borrowing right one more time prior to 2019.

Long-Term Conservation

In 2015, the State Water Resources Control Board mandated that the District achieve a 16% reduction from its 2013 base usage. As customers decreased their consumption, there was a corresponding decrease in District revenues. The District is well positioned to sustain the reduction in revenues and meet conservation targets with minimal impact on net revenues due to its rate structure which effectively splits costs into variable and fixed rate components. Decreased consumption is offset by a decrease in related variable costs while the fixed rate component covered the fixed operating and maintenance costs.

In response to legislation requiring statewide long-term water use efficiency passed in 2018 - "Make Conservation a Way of Life in California", the District does not expect to see any net revenue shortfall to cover expenses.

Financial Planning & Budgeting

Short-Term

The Board of Directors approves operating and capital budgets annually and allocates required funding accordingly. The General Manager has limited discretion to transfer capital between activities and Board approval is required for any overall increase or substantial changes. Throughout the fiscal year, actual expenditures are compared to budget. Variances between budget and actual results are analyzed and evaluated to ensure the District's financial goals and objectives are being met.

The budget process is further supported by the District's long-term financial models, enabling the Board to make informed decisions on setting rates and charges that ensure the long-term stability of the District. Funding needs are assessed using these financial planning models.

Long-Term

Meeting the goals of reliable, cost effective long-term water and sewer service requires substantial planning for both capital improvements and changing operating conditions. The District's capital program anticipates the need to update, expand or provide redundancy as well as refurbish and replace existing facilities as they reach the end of their useful life. District staff identifies future infrastructure requirements well in advance of needs to ensure the necessary funding for those projects is available. Capital projects are funded through a combination of connection fees, property taxes and user rates.

The District has a long history of planning for the enhancement and replacement of aging water and sewer infrastructure. Recognizing that infrastructure replacement is both inevitable and costly, the District established infrastructure Enhancement and Replacement Funds to provide funding for updating, expanding, creating redundancy, as well as replacing and refurbishing various components of the water and sewer systems. The objective of the funds is to help moderate the financial impact on future user rates attributable to expenditures associated with enhancing and replacing capital facilities. For FY 2017-18, the combined water and sewer user enhancement/replacement fees were $12.93 per month.

Over time, the District has evolved from a newly developing area to becoming a fully developed area. While many of the projects slated for construction will provide additional capacity for ultimate demands, the focus of the District is transitioning from building new infrastructure projects to ongoing operations and maintenance activities, as well as upgrading and replacing existing infrastructure. Connection fees paid by developers, which generated $32.7 million for new capital in FY 2017-18 will decline as the District nears build-out. The District utilizes a sophisticated financial model to factor in such variables as future development, construction costs, growth rates, inflation, redevelopment and other criteria in order to project rate setting for funding future capital needs.

In 2013, the District completed a strategic review of its existing current capital funding plan which resulted in a master consolidation plan that combined certain improvement districts in order to maintain the future financial viability of each area. The master plan allocates funding responsibility for capital improvements to the areas which will benefit from those respective facilities and separates areas on the basis of projected timing of development. Diversification of the District's water supply and sewage treatment options are also major objectives of the District's master plan. Those objectives are discussed in further detail in the *Major Initiatives* section of this introduction.

The District's approach to infrastructure replacement and funding reflects industry best practice and illustrates the District's commitment to financial stability and protection of its customers from significant future rate increases.

Pension Funding

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 and, in 2013, established a Pension Benefits Trust to substantially fund its PERS unfunded liability. The Pension Benefits Trust provides the District with an additional funding option to PERS that allows for investment by a professional fund management team selected and monitored by the District. The Pension Benefits Trust holds the funding contributions for the District pending future remittance to the PERS pension trust fund which will pay all retiree benefit payments to employees associated with the plan. Future contributions will be transferred from the Pension Benefits Trust to PERS at the District's discretion.

Investment policy and asset allocation decisions relating to the Pension Benefits Trust are made by a Retirement Board consisting of two members from the IRWD Board of Directors and the District's General Manager. In FY 2013, the District made an initial $35.0 million contribution to the Pension Benefits Trust, and since then has made additional annual contributions ranging from $1.9 million to $12.8 million. As of June 30, 2018, the fair market value of the assets in the Pension Benefits Trust was approximately $73.1 million. These assets are in an irrevocable trust and may only be used to pay for the pension liability.

The following schedule shows the recent history of pension plan assets and liabilities including the trust assets:

Fiscal Year	Total Pension Liability	Total Pension Assets	Total Pension Assets as a Percentage of the Total Pension Liability
06/30/16	$227,796	$225,874	99.2%
06/30/17	238,009	226,901	95.3%
06/30/18	264,399	263,819	99.8%

Cash Management Policies and Practices

The District is regulated by State law (primarily California Government Code Section 53600, et seq.) as to the types of fixed-income securities in which it can invest cash assets. In addition, the Board of Directors annually adopts an investment policy that is generally more restrictive than the State codes. The District's standard practice is to maintain an appropriate balance between safety, liquidity and yield of investments while meeting required expenditures in conformance with all applicable State laws, the District's investment policy, and prudent cash management principles.

For FY 2017-18, the District's fixed-income investment portfolio consisted primarily of short-term securities with a portfolio average maturity of approximately 12 months. These securities included U.S. government agency notes and the State-managed Local Agency Investment Fund. The average annual return on all of the District's cash investments in FY 2017-18 was approximately 1.20%. Including real estate investments, the weighted average rate of return was 3.43% for the same period.

At June 30, 2018, the District's cash and investments totaled approximately $373.2 million. Cash balances are allocated to various funds including the Replacement Fund, New Capital Fund, Debt Service Fund and others.

Real Property Investments

As a means to match its long-term responsibility to replace water and sewer facilities when they reach the end of their useful lives with long-term funding investments, the District obtained legislative authority from the State to invest a portion of its capital facilities Replacement Fund in real property located in Orange County.

As of June 30, 2018, the District owns or has an interest in six properties with an approximate market value of $221.4 million. The District's income-producing real estate investments have a weighted average return (on original cost) for FY 2017-18 of 14.1%. Net revenues of $3.4 million generated in FY 2017-18 from the District's real estate investments are retained within the Replacement Fund. The net revenues include $8.9 million in one-time expenses related to the sale of the Serrano Summit property on September 1, 2017.

Debt Management Policies and Practices

The District strives to minimize the cost of its long-term debt. In 1984, the District obtained State legislation that allowed for the use of variable rate debt to help achieve this goal. The Board minimizes its exposure to interest rate risk by utilizing both fixed and variable rate debt and has leveraged opportunities provided by the low interest rate environment in recent years. The District maintains a healthy balance between fixed and variable rate debt. As of June 30, 2018, the District's debt portfolio included fixed rate debt at 59.0%, synthetically fixed (hedged) variable rate debt at 28.0% and unhedged variable rate debt at 13.0%, resulting in an average all-in cost of debt of approximately 3.56% for the year.

In FY 2016-17, the Board of Directors adopted a Debt Management Policy Statement (Debt Policy). Debt Policy objectives formalize previous District guidelines related to timing and amount of future debt issuance, allowable debt types and structures and spending requirements of bond proceeds. The Debt

Policy also addresses underwriter selection and allowable methods of sale, continuing disclosure requirements, financial advisor and credit rating agency relationships and other key debt-related topics.

As of June 30, 2018, there were eight outstanding GO bond issues consisting of $282.6 million in variable rate mode and $278.4 million in fixed rate mode (excluding any unamortized premium or discount). As of June 30, 2018, the District also had two outstanding COPs issues with a balance of $120.5 million in fixed rate mode. The District has secured direct pay letters of credit to enhance certain issues of its variable rate debt.

The GO bond issues are secured by the District's ability to levy ad valorem property taxes to pay debt service. Although the District has elected to use a combination of ad valorem property taxes and other legally available funds to pay debt service, the legal authority exists to fully fund GO bond debt service through such ad valorem taxes. In addition to the ad valorem tax pledge, certain GO bond issues are also secured by the net revenues of the District.

The COPs issues are secured by the net revenues of the overall District.

The District is required under some of its debt covenants to collect revenues sufficient to provide net revenues equal to 125% (1.25 times) of senior debt service coverage during the fiscal year. As of June 30, 2018, the District had 460% (4.6 times) senior debt service coverage.

Prior to FY 2003-04, all of the District's outstanding debt was in a variable rate mode and the Board of Directors took certain actions to manage and mitigate the interest rate risk. The Board adopted a policy to maintain a target amount of investment assets equal to at least 75% of the District's outstanding unhedged variable rate debt. In addition, the District began an interest rate swap program under which $130 million notional amount of LIBOR-based fixed payer swaps were executed. These interest rate swaps have allowed the District to limit the interest rate risk exposure on approximately $194 million (or 69.0%) of its remaining variable rate debt to approximately 4.01% (assuming a historical ratio for the tax-exempt SIFMA Index versus taxable 1-month LIBOR of 67%).

In FY 2010-11, the District issued $175 million of general obligation fixed rate debt utilizing the taxable Build America Bond (BABs) program. BABs, created under the American Recovery and Reinvestment Act, are taxable bonds with subsidy payments made by the Treasury Department to issuers equaling 35% of the interest costs. In FY 2017-18, Federal subsidy payments were cut by 6.6% under Congressionally mandated sequestration. As a result of the reduced subsidy payments, the net interest rate for the District's BABs issue increased from 4.30% to 4.46%.

Risk Management

The District utilizes a combination of self-insurance and third-party liability insurance to minimize loss exposures from property claims, 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. Various control techniques used to minimize loss include, but are 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 continuation plan.

The District engages an outside firm annually to evaluate the District's network security. The objective of the security assessment is to identify risks and vulnerabilities from the Internet or local wireless networks and make recommendations for remediation wherever appropriate. The assessment includes tests, scans, and surveys to identify vulnerabilities and configuration issues. In addition, staff will be engaging a firm to complete a comprehensive cybersecurity risk assessment. The assessment will identify the overall state of the District's cybersecurity posture and ability to respond to potential threats and events. The annual external network security and cybersecurity assessments and ongoing staff education and awareness are just a few of the ongoing efforts by the District to safeguard information.

Major Initiatives

The District's major initiatives during FY 2017-18 include continuing programs to secure water supplies, as well as expanding sewage treatment capacity and diverting sewage flows, water education programs, and the continuing implementation of the Water Use Efficiency Plan.

Water Supply Reliability

Groundwater Program

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 IRWD's portion of the Orange County Ground Water Basin, additional local groundwater production, and to have enough capacity to meet demands during outage conditions. Currently, the District has the ability to produce approximately 45,000 – 50,000 acre feet per year (AFY) of potable groundwater and 4,000 – 5,000 AFY of non-potable groundwater.

Water Banking

In addition to developing its local groundwater and recycled water systems, the District is further improving its water supply reliability by developing and operating 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 IRWD Water Bank). The IRWD's Water Bank is situated on groundwater recharge lands that overlie the regional Kern County groundwater basin. The purpose of the IRWD 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. The IRWD Water Bank enhances the District's ability to respond to drought conditions and potential water supply interruptions and enables 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 permits 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. An additional 50,000 acre feet of storage will be available in the future as part of the Stockdale Integrated Banking Project.

The District has constructed groundwater recharge ponds and related facilities at its Water Bank that are necessary to divert water from an adjacent canal into the ponds. Groundwater wells have been constructed on the Strand Ranch and Stockdale West properties. The District, in partnership with Rosedale and others, has also constructed additional wells that will increase the ability to recover water from the Water Bank during peak summer demand periods. The District has secured water from a number of sources for recharge at the IRWD Water Bank.

The District has entered into agreements with Metropolitan Water District of Southern California (MWD) which allows it to transfer water from the IRWD Water Bank into the District's service area. The District recovered and delivered approximately 1,000 acre feet from the Water Bank in FY 2015-16.

Since 2010, the District has delivered a total of approximately 61,000 acre feet of water to the IRWD Water Bank through its water supply partnerships. The District has returned its partner's share of the water and holds approximately 34,800 acre feet of water in storage for future use. The District is currently pursuing additional potential water supply opportunities for diversion into the IRWD Water Bank.

Kern Fan Groundwater Storage Project

The Kern Fan Groundwater Storage Project 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 (SWP) during wet hydrologic periods. The project is a joint venture between IRWD and Rosedale-Rio Bravo Water Storage District. The stored water would be extracted when needed to provide ecosystem, emergency supply and water supply benefits. IRWD's share of the Kern Fan Project would be used in conjunction with the Strand Ranch and Stockdale Integrated Banking Projects to meet IRWD's contingency storage needs at build-out. IRWD's goal for contingency storage is to secure supplies adequate to backfill the loss of imported supplies for three years in a row. The Kern Fan Project, along with the Strand Ranch and Stockdale West Projects, will allow IRWD to meet this goal.

In August 2017, IRWD and Rosedale-Rio Bravo Water Storage District jointly submitted a grant application to the California Water Commission (CWC) for the proposed Kern Fan Project. The application sought Proposition 1 funds available from the CWC through the Water Storage Investment Program (WSIP). In July 2018, the CWC awarded $67.5 million to the Kern Fan Project.

Water Rights

The District also owns property with rights to State Water Project water which can be stored in the IRWD Water Bank. The water is available as a result of the District's acquisition of property located within the Dudley Ridge Water District, including the rights to use approximately 1,750 acre feet of Table A State Water Project water allocated to Dudley Ridge. The District can store its Table A water in the IRWD Water Bank with half of the water being available for future use in the District's service area. The acquisition also includes certain participation rights in the Kern Water Bank allowing the District to store up to approximately 9,500 acre feet of water.

As of June 30, 2018, the District has purchased agricultural land (PVID Properties) in Riverside County, California. IRWD's PVID Properties are located within Palo Verde Irrigation District (PVID), which has first priority rights on the Colorado River. Approximately 969 acres of the land are included in a Metropolitan Water District of Southern California (MWD) and 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). In the near term, the District has leased the PVID Properties to tenant farmers for agricultural uses.

Syphon Recycled Water Seasonal Storage Facility

Syphon Reservoir, located in the northern portion of Irvine, is a sixty-year-old untreated water storage reservoir historically used for agricultural purposes. The District purchased Syphon Reservoir in January 2010, and in 2015 completed the process of converting the reservoir into a recycled water seasonal storage facility. Seasonal storage reservoirs allow the District to store excess recycled water produced in the winter months for use in higher demand summer months. This will increase water reliability by reducing the District's dependency on imported water from MWD used to supplement the recycled water system.

In 2013, the District completed a feasibility study to increase storage capacity in Syphon Reservoir from its current capacity of 450 acre feet to 5,000 acre feet. Additional storage capacity could allow the District to utilize more of the recycled water it produces. An expansion of Syphon Reservoir to 5,000 acre feet would allow for recycling 100% of the sewage flows tributary to MWRP and could reduce the District's need to supplement the recycled water system with imported water in dry years. In early 2018 IRWD hired Environmental, Public Relations, and other consulting firms to assist with public outreach, engineering review, and environmental documentation. The District also continues evaluating funding alternatives for the reservoir expansion.

Expanded Water Recycling Options, Resource Recovery and System Reliability

The District is continuing its program to increase the reliability of the sewage system by diversifying treatment options and increasing the reliability of critical sewage collections facilities. The goals of the program are to collect sewage in the most cost effective method available, create a high quality and reliable recycled water supply for irrigation and commercial uses and minimize environmental impacts and risks. Sewage collected throughout the District is treated at three locations: The Michelson Water Recycling Plant (MWRP), the Los Alisos Water Recycling Plant (LAWRP) and at the Orange County Sanitation District (OCSD). The District owns and operates the MWRP and LAWRP, and owns capacity in the OCSD facilities.

The most recent example of expanded water recycling reliability is a major capacity expansion of the MWRP from 18 million gallons per day (mgd) to 28 mgd, completed in 2014. The two plants operated by the District currently have capacities of 28 (MWRP) and 7.5 (LAWRP) mgd, with a collective capacity of 35.5 mgd. Expanding existing infrastructure for sewage treatment has four primary benefits including:

- Increased recycled water production and utilization,
- Decreased exposure to third party treatment costs and operational constraints,
- Decreased dependencies on imported water supplies, and
- Lower total cost.

Biosolids and Energy Recovery Facilities Project

In addition to the projects identified above, the District evaluated alternative approaches to recover the solids generated by its water recycling facilities. The evaluation of alternative approaches for handling MWRP solids, currently conveyed to Fountain Valley for treatment by OCSD, included consideration of many factors such as costs and potential community impacts.

As a result, in FY 2013-14, the District began construction of new capital facilities at the MWRP to thicken, digest, dewater, and dry biosolids to allow safe reuse of pellets as either fertilizer or e-fuel, reducing the District's overall treatment costs. The dryer is sized to accept solids from LAWRP.

The biosolids treatment process also allows for the conversion of biogas into electricity thereby further reducing the District's dependency and costs from its third party electricity and natural gas providers. The construction of the MWRP Biosolids and Energy Recovery Facilities is anticipated to be completed in 2019 at an estimated project cost in excess of $200 million.

Community Education and Outreach

The District's commitment to community education and outreach recognizes the significant impact lifelong water education can have on a community. Irvine Ranch Water District sponsors community events, workshops, water efficiency programs, demonstration gardens and multi-media outreach to further enhance our mission to foster an appreciation for water and the environment.

IRWD Learning Center at the San Joaquin Marsh Campus

Community water education and awareness of water use efficiency can begin at a young age. The District provides innovative water education programs to students in its service area through a unique partnership with the Discovery Science Foundation. These exceptional programs are available to all kindergarten through middle school students in any public, private or home school in the District's service area and meet all California curriculum content standards while bringing water education to life for the next generation of community leaders.

The District's San Joaquin Marsh Campus, which houses the IRWD Learning Center and Visitors Center, embodies the District's dedication to lifelong water education. The campus provides a wide variety of educational venues and teaching opportunities using the District's Natural Treatment System, the Butterfly Garden, and San Diego Creek. The Learning Center is a dedicated facility for water education, featuring two state-of-the-art classrooms and a patio that can be used for outdoor learning.

Throughout the year, the Learning Center houses not only the District's education programs but also its resident tours, community events, and programs run by the District's Marsh partner, Sea & Sage Audubon. The Visitors Center at the historic Irvine Ranch Marsh House provides informative self-guided tours of the District's environmental and water use efficiency efforts and is open to the public seven days a week.

Irvine Ranch Water District is active in the community as well, promoting water education through water use efficiency, water quality and recycled water workshops; resident tours, community functions, science fair participation, poster contests and educational events such as the Children's Water Festival. Customized in-class lectures for high school and college classes and educational tours for community organizations are offered throughout the year.

The District has responded to the abatement of statewide drought conditions by moving from urgency-based water efficiency outreach efforts to the development of a new water efficiency outreach program that communicates the value of water, sustains current levels of water savings, and seeks additional permanent water savings among customer groups that have been traditionally difficult to reach. The new program builds on the success of drought outreach efforts, which effectively increased awareness and participation in District conservation programs and resulted in IRWD's success in meeting its previous state-mandated drinking water conservation targets.

Demonstration Gardens Offer Ideas for Drought-Tolerant Landscapes

To support these efforts, the District continues to offer targeted workshops that teach customers about water efficient landscaping and efficient irrigation techniques. The district offers rebates on items such as high-efficiency rotating spray nozzles, rain barrels, clothes washers and toilets.

IRWD water efficiency websites (*rightscapenow.com* and *rightscaperesources.com*) offer self-guided landscape design and interactive demonstration resources as well as inspirational garden galleries and customized plant lists. The IRWD WaterStar Business Recognition Program provides incentives to local businesses to increase their efficiency and recognizes them for their efforts. The District's Get Smart water-energy program is a partnership with Southern California Edison and the Southern California Gas Company that addresses the water-energy nexus by offering customers free smart home technology — such as Wi-Fi sprinkler controllers and Nest thermostats — to help them use water and energy efficiently.

The District's drought-tolerant demonstration gardens display a palette of more than 80 different drought-friendly plants, along with other practical information for customers to use when redesigning their home landscapes for water efficiency.

Awards and Acknowledgments

The Government Finance Officers Association (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Irvine Ranch Water District for its comprehensive annual financial report (CAFR) for the fiscal years ended June 30, 2004 through June 30, 2017. In order to be awarded a Certificate of Achievement, IRWD was required to publish an easily readable and efficiently organized CAFR that satisfied both GAAP and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year. We believe that our current CAFR continues to meet the Certificate of Achievement Program's requirements and will be submitting it to the GFOA to determine its eligibility for another certificate.

Staff would like to acknowledge the IRWD Board of Directors for their support and for maintaining the highest standards of professionalism in the management of the District's operations and finances. We would also like to thank the dedicated employees of the District for their commitment to providing high quality service to the District's customers. The preparation of this report would not have been possible without the efficient and dedicated service of the entire Finance Department staff. We also wish to express our appreciation to all staff that assisted and contributed to the preparation of this report.

Respectfully submitted,

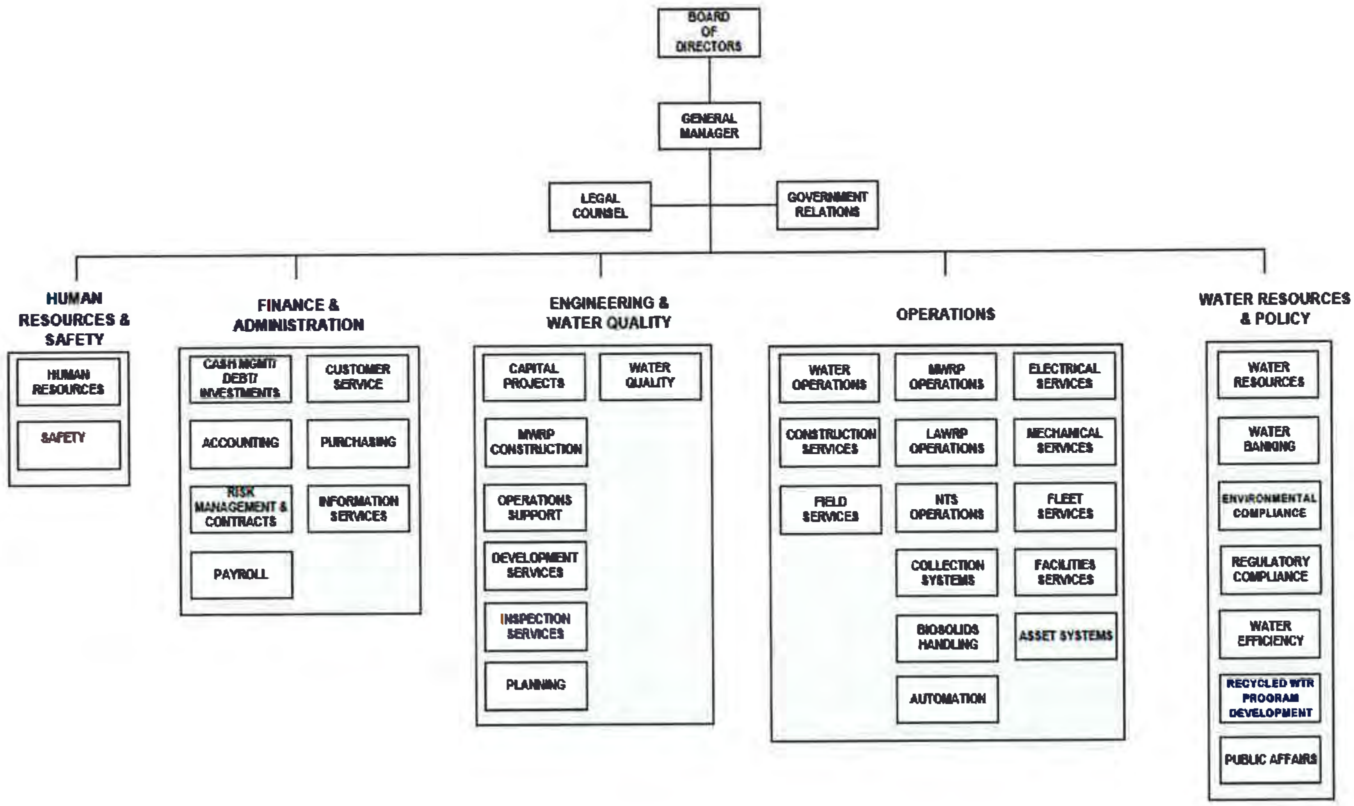
Paul A. Cook
General Manager

Cheryl L. Clary
Executive Director of Finance & Administration

Irvine Ranch Water District
List of Principal Officials

Board of Directors	
President and Director	Douglas J. Reinhart
Vice President and Director	Steven E. LaMar
Director	Mary Aileen Matheis
Director	Peer A. Swan
Director	John B. Withers
Executive Management	
General Manager	Paul A. Cook
Executive Director of Finance & Administration	Cheryl L. Clary
Executive Director of Operations	Wendy L. Chambers
Executive Director of Engineering & Water Quality	Kevin L. Burton
Executive Director of Water Resources & Policy	Paul A. Weghorst
Director of Human Resources	Jenny L. Roney
Director of Water Resources	Fiona M. Sanchez
Director of Public Affairs	Beth M. Beeman
Director of Administrative Services	Tony J. Mossbarger
Director of Treasury and Risk Management	Robert C. Jacobson
Director of Water Operations	Thomas S. Roberts
Director of Recycling Operations	Jose Zepeda
Director of Maintenance	Kenneth W. Drake

Irvine Ranch Water District
Organizational Chart
(By Function)
Fiscal Year 2017-18



Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Irvine Ranch Water District

California

For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended

June 30, 2017

Christopher P. Morrill

Executive Director/CEO

Financial Section

Irvine Ranch Water District
Fiscal Year Ended June 30, 2018

Davis Farr
CERTIFIED PUBLIC ACCOUNTANTS

Davis Farr LLP
2301 Dupont Drive | Suite 200 | Irvine, CA 92612
Main: 949.474.2020 | Fax: 949.263.5520

Board of Directors
Irvine Ranch Water District
Irvine, California

Independent Auditors' Report

Report on the Financial Statements

We have audited the accompanying financial statements of Irvine Ranch Water District (the District), as of and for the year ended June 30, 2018, and the related notes to the financial statements, which collectively comprise the District's financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards,* issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Board of Directors
Irvine Ranch Water District
Page Two

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Irvine Ranch Water District, as of June 30, 2018, and the respective change in financial position and cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matter

As described further in notes 6 and 18 to the financial statements, during the year ended June 30, 2018, the District implemented Governmental Accounting Standards Board (GASB) Statement No. 89, Implementation Guide No. 2017-1, GASB Statements No. 75. The financial statements for the year ended June 30, 2018 reflect certain prior period adjustments as descried further in note 18 to the financial statements. Our opinion is not modified with respect to these matters.

Report on Summarized Comparative Information

We have previously audited the District's 2017 financial statements, and we expressed an unmodified audit opinion on those audited financial statements in our report dated November 22, 2017. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2017 is consistent, in all material respects, with the audited financial statements from which it has been derived.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that *management's discussion and analysis, schedule of changes in net pension liability and related ratios, schedule of contributions – defined benefit pension plan, schedule of changes in the OPEB liability and related ratios, and schedule of contributions – OPEB* be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the District's basic financial statements.

The *introductory section* and the *statistical section* are presented for purposes of additional analysis and are not a required part of the basic financial statements. The *introductory section* and the *statistical section* have not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on it.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated November xx, 2018, on our consideration of the District's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the District's internal control over financial reporting and compliance.

Irvine, California
November xx, 2018

MANAGEMENT'S DISCUSSION AND ANALYSIS

The following discussion and analysis of the financial performance of the Irvine Ranch Water District (District) provides an overview of the District's financial activities for the fiscal year ended June 30, 2018. This section should be read in conjunction with the basic financial statements and notes to the basic financial statements, which follow this analysis.

Financial Highlights:

- Total assets and deferred outflows of resources exceed total liabilities and deferred inflows of resources by $1,840.9 million (net position), consisting of $1,155.5 million in net investment in capital assets, $289.5 million restricted for water services and $395.9 million restricted for sewer services. This is an increase of $68.9 million or 3.9 percent over the prior fiscal year net position of $1,772.0 million.
- Total assets are $2,688.2 million, an increase of $104.8 million or 4.1 percent over the prior fiscal year. The District recorded $73.1 million pension benefits trust investments in the current fiscal year as required by the new pension accounting implementation guide.
- Total deferred outflows of resources are $41.7 million, a decrease of $19.9 million or 32.3 percent over the prior fiscal year. This is due primarily to a $12.0 million decrease in pension contributions over the prior year. The Board approved a one-time additional contribution of $11.0 million to the Pension Benefits Trust in February 2017. The decrease is also due to a $9.3 million decrease in the accumulated fair value of interest rate swaps.
- Total deferred inflows of resources increased $1.2 million or 33.3 percent over the prior year due primarily to recording of a change of the OPEB's actuarial assumption.
- Total debt is $737.7 million, a decrease of $25.2 million or 3.3 percent over the prior fiscal year. This was due primarily to $22.6 million principal maturities and $2.6 million premium amortization in the current fiscal year.
- During 2017, the District contributed $1.9 million to the Irvine Ranch Water District Post-Employment Benefits Trust (Pension Benefits Trust) in order to reduce its unfunded pension liability. The Pension Benefits Trust was established in June 2013 to assist in funding the District's CalPERS unfunded liability. As of June 30, 2018, the District's total pension assets (including the CalPERS and Pension Benefits Trust assets) as a percentage of the total pension liability is 99.8 percent. For more detail, see Note 13 of the Notes to the Basic Financial Statements.
- Total revenues are $254.5 million, an increase of $22.1 million or 9.5 percent over the prior fiscal year. Operating revenues were higher by $12.1 million or 8.1 percent due to increased customer sales and Board approved rate increases. Non-operating revenues increased $10.0 million or 12.0 percent due to $5.9 million of higher property tax receipts, $3.3 million real estate income, and $3.0 million of pension benefits trust income. The increase was partially offset by a $6.0 million decrease in the fair value of real estate investments relating to a smaller increase than the prior year.
- Total expenses are $238.0 million, an increase of $28.1 million or 13.4 percent over the prior fiscal year. This is due primarily to an increase of $13.0 million in the water services, $8.9 million in the real estate expense as well as $7.2 million in higher interest expense associated with higher interest rate on the District's variable rate debt and lower capitalized interest associated with capital projects in the current year due to implementation of a new accounting standard.

- Capital contributions are $60.6 million, an increase of $18.7 million or 44.6 percent over the prior fiscal year due primarily to a high number of projects that were completed and donated from developers to the District as well as higher connection fees paid by developers.

More detailed analysis about the overall District's financial position and operations is provided in the following sections.

Overview of the Financial Statements:
The basic financial statements of the District consist of the financial statements (the Statement of Net Position, the Statement of Revenues, Expenses, and Changes in Net Position, and the Statement of Cash Flows) and notes to the basic financial statements. The basic financial statements are prepared using the accrual basis of accounting. This report also contains other supplementary information in additional to the basic financial statements.

Statement of Net Position depicts the District's financial position at June 30, the end of the District's fiscal year. The statement of net position shows all financial assets and liabilities of the District. Net position represents the District's residual interest after liabilities and deferred inflows of resources are deducted from assets and deferred outflows of resources. Net position is displayed in two components: net investment in capital assets and restricted for water and sewer services.

Statement of Revenues, Expenses and Changes in Net Position provides information on the District's operations and can be used to determine whether the District has recovered all of its costs through operating and non-operating revenues.

Statement of Cash Flows provides information on the District's cash receipts, cash payments and changes in cash resulting from operations, investments and financing activities.

Notes to the Basic Financial Statements provide additional information essential to a full understanding of the data provided in the basic financial statements.

The **Other Information** includes *required supplementary information* concerning the District's progress in funding its obligations to provide pension and other post-employment benefits to its employees.

Financial Analysis of the District:
The following condensed schedules contain summary financial information extracted from the basic financial statements to assist general readers in evaluating the District's overall financial position and results of operations as described in this Management's Discussion and Analysis (MD&A). Increases or decreases in these schedules can be used as performance indicators to assess whether the District's overall financial position has improved or deteriorated. Other external factors such as changes in economic conditions, customer growth, and legislative mandates should also be considered as part of this analysis.

Financial Position Summary:

The Statement of Net Position reflects the District's financial position as of June 30. The statement includes assets, deferred outflow of resources, liabilities, and deferred inflows of resources. The net position represents the District's net worth including, but not limited to, capital contributions and net investment in capital assets. A condensed summary of the District's total net position at June 30 is set forth below:

Table 1 - Summary of Net Position (in millions)

			Increase/(Decrease)	
	2018	2017	Amount	Percentage
Assets				
Current assets	$418.3	$379.0	$39.3	10.4%
Capital assets, net	1,890.8	1,848.3	42.5	2.3%
Other noncurrent assets	379.1	356.1	23.0	6.5%
Total assets	2,688.2	2,583.4	104.8	4.1%
Deferred Outflows of Resources	41.7	61.6	(19.9)	-32.3%
Liabilities				
Current liabilities	52.5	78.5	(26.0)	-33.1%
Long-term liabilities	831.7	790.9	40.8	5.2%
Total liabilities	884.2	869.4	14.8	1.7%
Deferred Inflows of Resources	4.8	3.6	1.2	33.3%
Net Position				
Net investment in capital assets	1,155.5	1,087.9	67.6	6.2%
Restricted for water services	289.5	264.3	25.2	9.5%
Restricted for sewer services	395.9	419.8	(23.9)	-5.7%
Total net position	**$1,840.9**	**$1,772.0**	**$68.9**	**3.9%**

As shown in Table 1, the District's total assets increased $104.8 million or 4.1 percent. The increase was primarily due to the addition of $73.1 million for pension benefits trust investments as required by the new pension accounting guidance. The Pension Benefits Trust assets were netted with the total pension liability in the prior fiscal year and new accounting guidance does not permit Pension Benefits Trust assets to be netted against the pension liability. In addition, during the year, the District sold the Serrano Summit property for $54.4 million in cash with the balance reflected as a note receivable. The net result was a reduction in real estate investments of $47.6 million. Capital assets also increased $42.5 million. Net cash increased by $18.8 million. In addition, the District had an increase of $18.0 million in cash deposits held by OCSD based on the agreements between two agencies.

The District's deferred outflows of resources decreased $19.9 million or 32.3 percent. This was due primarily to a decrease of $12.0 million in pension contributions to the Pension Benefits Trust over the prior fiscal year. In addition, there was a $9.3 million reduction in the accumulated fair value of swaps from the prior fiscal year.

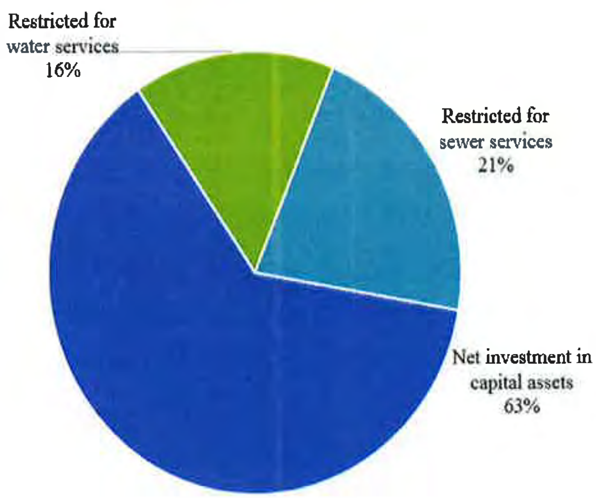
The District's total liabilities increased $14.8 million or 1.7 percent from $869.4 million in the prior fiscal year to $884.2 million in the current fiscal year. This was due primarily to an increase of $55.6 million in the District's net pension liability as a result of the implementation of new pension accounting guidance as discussed above. Also, the District's OPEB liability increased $10.8 million as a result of the implementation of new OPEB accounting standard effective June

30, 2018. These were partially offset by $22.6 million in principal payments of the District's debts, an accounts payable decrease of $16.8 million primarily relating to cash payments made during the current fiscal year to the District's third party sewer service provider (Orange County Sanitation District) and various other capital project vendors and a $9.3 million reduction in interest rate swap liability as discussed above.

The District's deferred inflows of resources increased $1.2 million or 33.3 percent from $3.6 million in the prior fiscal year to $4.8 million in the current fiscal year. This was due primarily to a $1.2 million change in the OPEB discount rate assumption from 2.85 percent in the prior fiscal year to 3.58 percent in the current fiscal year.

Net position at end of the current fiscal year increased from $1,772.0 million in the prior fiscal year to $1,840.9 million in the current fiscal year, an increase of $68.9 million or 3.9 percent in the District's overall financial condition. Net position consists of net investment in capital assets and restricted net positions.

Net Position at June 30, 2018



Net investment in capital assets reflects capital assets, net of accumulated depreciation/amortization and liabilities (such as debt) attributable to the acquisition, construction, or improvement of those assets. Net investment in capital assets was $1,155.5 million or 63.0 percent of total net position, an increase of $67.6 million or 6.2 percent from the prior fiscal year. The change in net position was primarily due to an increase of $42.5 million in net capital assets. Several major District capital projects contributed to the increase, including the MWRP Biosolids and Energy Recovery Facilities, which will reduce the District's overall sewage treatment costs as well as provide other resource recovery benefits.

In addition, the District spent $12.4 million in the Irvine Lake Pipeline Conversion Pipes and Reservoir projects associated with providing recycled water to customers. These projects account for approximately 46.2 percent of the increase in net investment in capital assets. The increase was partially offset by $22.6 million debt principal payments and $2.6 million amortization of premiums in the current fiscal year.

Restricted net position for water services was $289.5 million or 16.0 percent of total net position. Restricted net position for sewer services was $395.9 million or 21.0 percent of total net position. Restricted net positions are externally restricted by legislation which imposes legally enforceable requirements that District assets be used only for the specific purposes for which it was formed.

Activities and Changes in Net Position:

The Statement of Revenues, Expenses, and Changes in Net Position summarizes the District's operations during the current fiscal year. A Summary of the District's changes in net position for the fiscal years ended June 30, is included in Table 2 below:

Table 2 - Revenues, Expenses and Changes in Net Position (in millions)

	2018	2017	Increase/(Decrease) Amount	Increase/(Decrease) Percentage
Operating revenues				
Water sales and service charges	$84.6	$77.2	$7.4	9.6%
Sewer sales and service charges	76.8	72.1	4.7	6.5%
Total operating revenues	161.4	149.3	12.1	8.1%
Non-operating revenues				
Property taxes	57.2	51.3	5.9	11.5%
Interest income	4.1	2.8	1.3	46.4%
Increase (decrease) in fair value of investments	(1.6)	(1.6)	0.0	0.0%
Real estate income	16.7	13.4	3.3	24.6%
Increase (decrease) in fair value of real estate investments	4.1	10.1	(6.0)	-59.4%
Pension benefits trust interest and dividends income	3.0	0.0	3.0	100.0%
Increase (decrease) in fair value of pension benefits trust investments	2.2	0.0	2.2	100.0%
Other income	7.4	7.1	0.3	4.2%
Total non-operating revenues	93.1	83.1	10.0	12.0%
Total revenues	254.5	232.4	22.1	9.5%
Operating expenses				
Water services expenses	84.2	71.2	13.0	18.3%
Sewer services expenses	50.4	51.8	(1.4)	-2.7%
Depreciation	63.9	61.8	2.1	3.4%
Total operating expenses	198.5	184.8	13.7	7.4%
Non-operating expenses				
Interest expense	26.0	18.8	7.2	38.3%
Real estate expense	13.3	4.4	8.9	202.3%
Other expense	0.2	1.9	(1.7)	-89.5%
Total non-operating expenses	39.5	25.1	14.4	57.4%
Total expenses	238.0	209.9	28.1	13.4%
Income/(loss) before capital contributions	16.5	22.5	(6.0)	-26.7%
Capital contributions	60.6	41.9	18.7	44.6%
Change in Net Position	77.1	64.4	12.7	19.7%
Beginning Net Position	1,772.0	1,578.3	193.7	12.3%
Prior period adjustments [1]	(8.2)	129.3	(137.5)	-106.3%
Ending Net Position	**$1,840.9**	**$1,772.0**	**$68.9**	**3.9%**

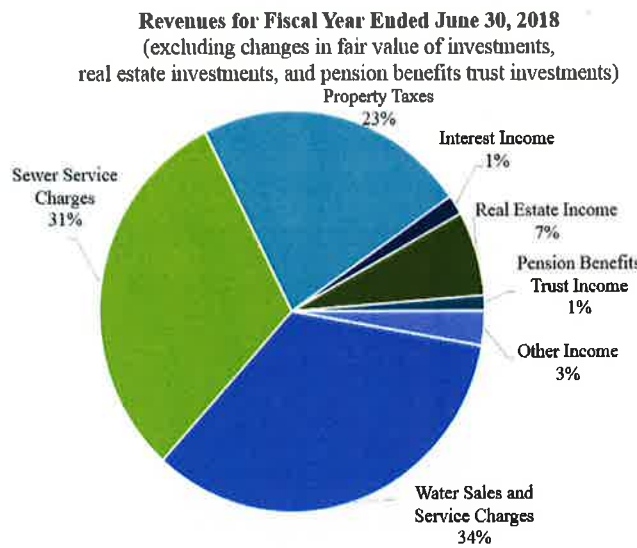
[1] These include two prior period adjustments. In 2017, the prior period adjustment relates to the reclassification of certain assets from capital assets to real estate investments. In 2018, the prior period adjustment relates to the implementation of the new pension implementation guide and new OPEB accounting standards. Additional information on the restatement of net position can be found in Note 18 of the Notes to the Basic Financial Statements.

Revenues:

As shown in Table 2, the District's operating revenues total $161.4 million or 63.4 percent of total revenues. Water sales contributed $84.6 million or 52.4 percent to total operating revenues and sewer sales contribute $76.8 million or 47.6 percent to total operating revenues. Operating revenues increased by $12.1 million or 8.1 percent from the prior fiscal year. Overall, approximately 68 percent of the operating revenue increase is attributed to increased customer sales due to the warmer drier weather and a Board approved commodity rate increase. The remaining increase in operating revenue is due to customer growth in the District's service areas due to increased construction activity. The chart below illustrates the sources of revenue for the fiscal year ended June 30, 2018.

Non-operating revenues total $93.1 million and account for 36.6 percent of total revenue for the fiscal year ended June 30, 2018. This is an increase of $10.0 million or 12.0 percent from $83.1 million in the prior fiscal year due primarily to:

- An increase of $5.9 million in 1 percent and general property tax revenue associated with higher assessed valuations in the District's service area.
- An increase of $3.3 million in real estate income.
- An increase of $3.0 million in pension benefits trust income from investment earnings.
- An increase of $2.2 million in changes in fair value of pension benefits trust investments.
- A decrease of $6.0 million in changes in the fair value of real estate investments relating to a smaller increase than the prior year.



Expenses:

As shown in Table 2, operating expenses total $198.5 million, of which $134.6 million relates to the cost of providing water and sewer services to the District's customers. Water service operating costs are 99.5 percent and 92.2 percent of revenues in fiscal years 2018 and 2017, respectively. Sewer service operating costs are 65.6 percent and 71.8 percent of revenues in fiscal years 2018 and 2017, respectively. Water and sewer operating expenses, excluding depreciation, increased by $11.6 million or 9.4 percent over the prior fiscal year.

Water expenses totaled $84.2 million, an increase of $13.0 million or 18.3 percent primarily due to:

- An increase of $6.8 million in direct and indirect labor, benefits mainly associated with pension costs resulting from implementation of new pension accounting guidance, professional services and supplies for treated and untreated water treatment and systems maintenance.

- An increase of $3.6 million in the operating costs of the Baker Water Treatment Plant from $2.9 million in the prior fiscal year to $6.5 million in the current fiscal year. The Baker Plant started up Jan 2017 so the prior fiscal year only included one half year.
- An increase of $1.3 million in the water conservation community outreach and education programs due to continuing efforts to educate customers to conserve water.
- An increase of $0.6 million relating to an increase in imported water due to higher customer sales.
- An increase of $0.6 million in expensed water projects relating to the District's capital program.
- Other net increases of $0.1 million.

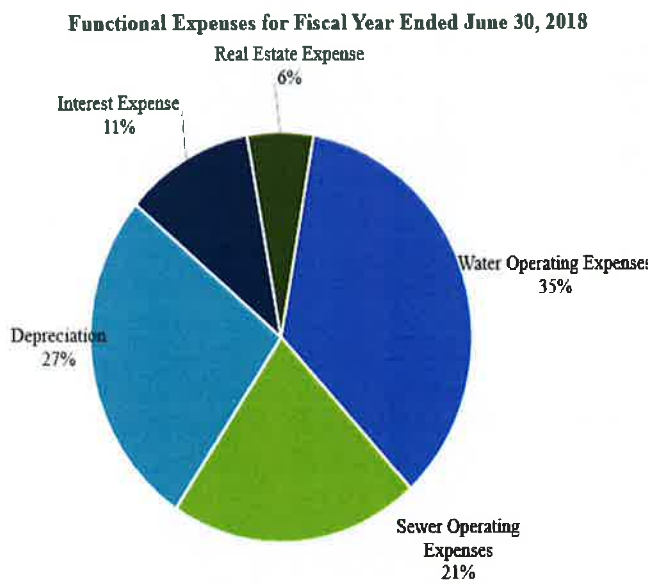
Sewer service expenses totaled $50.4 million, a decrease of $1.4 million or 2.7 percent over the prior fiscal year. The decrease is due primarily to:

- A decrease of $6.2 million in the cost of handling, treatment, and disposal of sewage solids residuals sent to the District's third party provider (Orange County Sanitation District) due to lower flows than the prior year attributable to less rainfall.
- An increase of $3.3 million in labor, benefits, and professional services for sewage treatment and recycled system maintenance.
- An increase of $1.3 million in electricity costs relating primarily to sewage treatment.
- Other net increases of $0.2 million.

Depreciation expense totaled $63.9 million, an increase of $2.1 million or 3.4 percent over the prior fiscal year. The increase is the result of the completion of several capital projects. During the fiscal year ended June 30, 2018, $65.0 million of assets were placed in service.

Non-operating expenses totaled $39.5 million, an increase of $14.4 million or 57.4 percent primarily due to:

- An increase of $8.9 million in real estate expense for the sale of the Serrano Summit real estate property.
- An increase of $7.2 million in interest expense as a result of higher interest rate on the District's variable rate debt and lower capitalized interest associated with capital projects in the current year due to implementation of a new accounting standard.
- A decrease of $1.7 in other non-operating expenses associated with the costs of debt issuance in the prior year.



Capital Contributions:
Capital contributions totaled $60.6 million, an increase of $18.7 million or 44.6 percent over $41.9 million in the prior fiscal year. Donated facilities from developers increased from $12.6 million in the prior fiscal year to $21.6 million in the current fiscal year. The $9.0 million increase was due to a high number of projects that were completed and donated to the District. The District also received $32.7 million of connection fees from developers, an increase of $7.1 million from the prior year and $6.3 million of grants / contributions from federal, state, and local agencies during the current fiscal year.

Capital Assets:
The District's investment in capital assets consists of the following as of June 30:

Table 3 - Capital Assets, Net of Depreciation (in millions)

			Increase/(Decrease)	
	2018	**2017**	**Amount**	**Percentage**
Water assets	$1,090.3	$1,049.9	$40.4	3.8%
Sewer assets	1,229.2	1,207.2	22.0	1.8%
Less: accumulated depreciation	(868.1)	(807.5)	(60.6)	7.5%
Land and water rights	125.3	123.8	1.5	1.2%
Construction in progress	314.1	274.9	39.2	14.3%
Total	$1,890.8	$1,848.3	$42.5	2.3%

Capital assets, net of depreciation increased $42.5 million or 2.3% from $1,848.3 million in the prior fiscal year to $1,890.8 million in the current fiscal year. Total projects transferred from Construction in Progress to Capital Assets and depreciated during the fiscal year ended June 30, 2018 were $65.0 million. In addition, the District's proportionate share of the Orange County Sanitation District's jointly funded capital sewer assets increased $3.2 million. The District's accumulated depreciation increased by $60.6 million for depreciation expense in the current fiscal year. Construction in Progress added $104.2 million during the current fiscal year. The following is a list of the top 10 capital projects expenditures that accounted for 42.5 percent of total Construction in Progress additions incurred in the current fiscal year (in millions):

Project Description	**Amount**
MWRP Biosolids and Energy Recovery Facilities	$18.8
ILP North Conversion Pipes	7.9
ILP North Conversion Reservoir	4.5
Meter and Main Pipelines	3.0
Improvement District 153 Tract Projects	2.0
Newport Coast Sewer Lift Station	1.8
Wells 11 and 15 Surge Tank Replacement	1.7
FPS2 Pipeline Manifold Replacement	1.6
Initial Disinfection Facility Sodium Hypochlorite Storage	1.5
Riverside, Ca. Land Purchase assocated with Water Rights	1.5
Total	**$44.3**

Additional information on the District's capital assets can be found in Note 5 of the Notes to the Basic Financial Statements.

Debt Administration:

As shown below in Table 4, as of June 30, 2018, the District had total debt outstanding of $737.7 million, a decrease of $25.2 million or 3.3 percent from $762.9 million in the prior fiscal year.

Table 4 - Outstanding Debt (including current portions) (in millions)

			Increase/(Decrease)	
	2018	**2017**	**Amount**	**Percentage**
General obligation bonds	$586.5	$608.1	($21.6)	-3.6%
Certificates of participation	150.3	153.6	(3.3)	-2.1%
Notes payable	0.9	1.2	(0.3)	-25.0%
Total	$737.7	$762.9	($25.2)	-3.3%

During the current fiscal year, the decreases in the District's total debt were primarily due to $22.6 million principal maturities and $2.6 million premium amortization in the current fiscal year. The District's rated debt obligations have received the following ratings from the three major rating agencies:

Fitch Ratings:	AAA
Moody's:	Aa1
Standard and Poor's:	AAA

Additional information on the District's long-term debt can be found in Note 9 of the Notes to the Basic Financial Statements.

Contacting the District's Financial Management:

This financial report is designed to provide our citizens, taxpayers, customers, investors and creditors with a general review of the District's finances and to show the District's accountability for the money it receives. If you have questions about this report or need additional financial information, contact the Executive Director of Finance and Administration at the Irvine Ranch Water District, 15600 Sand Canyon Avenue, Irvine, California 92618-7500.

Irvine Ranch Water District

Statement of Net Position

June 30, 2018

(with comparative data as of June 30, 2017)

(amounts expressed in thousands)

	2018	2017
ASSETS		
Current Assets:		
Cash and Investments (note 2)	$ 373,191	$ 354,350
Receivables:		
Customer accounts receivable	8,635	8,460
Interest receivable	1,058	840
Notes receivable, current portion	15	14
Due from other agencies (note 8)	18,048	-
Other receivables	7,532	7,069
Total receivables	35,288	16,383
Other Current Assets:		
Inventories (note 4)	7,836	7,086
Prepaid items and deposits	2,024	1,200
Total other current assets	9,860	8,286
Total current assets	418,339	379,019
Noncurrent Assets:		
Capital Assets (note 5):		
Water assets	1,090,254	1,049,943
Sewer assets	1,229,232	1,207,169
Subtotal	2,319,486	2,257,112
Less accumulated depreciation	(868,178)	(807,517)
Total capital assets being depreciated, net	1,451,308	1,449,595
Land and water rights	125,316	123,811
Construction in progress	314,134	274,898
Total capital assets, net	1,890,758	1,848,304
Other Noncurrent Assets:		
Investments-swap collateral (note 2)	-	2,439
Notes receivable, net of current portion	58	70
Real estate investments (note 7)	305,980	353,585
Pension benefits trust investments (notes 2 & 13)	73,106	-
Total other noncurrent assets	379,144	356,094
Total noncurrent assets	2,269,902	2,204,398
TOTAL ASSETS	2,688,241	2,583,417
DEFERRED OUTFLOWS OF RESOURCES		
Deferred refunding charges	2,422	2,580
Accumulated decrease in fair value of swap agreements (note 3)	18,107	27,425
Pension contributions (note 13)	6,173	18,231
Pension actuarial changes (note 13)	14,331	13,413
OPEB contributions (note 14)	670	-
TOTAL DEFERRED OUTFLOWS OF RESOURCES	41,703	61,649

See accompanying notes to the basic financial statements.

Irvine Ranch Water District

Statement of Net Position

June 30, 2018

(with comparative data as of June 30, 2017)

(amounts expressed in thousands)

(Continued)

	2018	2017
LIABILITIES		
Current Liabilities:		
Account payable and accrued expenses	23,460	40,289
Customer deposits and advance payments	3,433	3,114
Accrued interest:		
General obligation bonds	3,909	3,862
Other accrued interest payable	2,856	3,088
Current portion of long-term liabilities:		
General obligation bonds (note 9)	11,824	21,624
Certificates of participation (note 9)	3,531	3,351
Notes payable (note 9)	263	262
Other long term liabilities (note 9)	2,180	1,712
Unearned revenue (note 10)	565	565
Claims liability (note 17)	448	675
Total current liabilities	52,469	78,542
Long-Term Liabilities:		
General obligation bonds, net of current portion (note 9)	574,669	586,494
Certificates of participation, net of current portion (note 9)	146,744	150,275
Notes payable, net of current portion (note 9)	684	947
Other long-term liabilities (note 9)	3,366	3,527
Unearned revenue, net of current portion (note 10)	5,957	6,522
Claims liability, net of current portion (note 17)	946	751
Net pension liability (note 13)	66,681	11,108
OPEB liability (note 14)	14,578	3,819
Swap liability (note 3)	18,106	27,425
Total long-term liabilities	831,731	790,868
TOTAL LIABILITIES	884,200	869,410
DEFERRED INFLOWS OF RESOURCES		
Pension actuarial changes (note 13)	3,584	3,642
OPEB actuarial changes (note 14)	1,207	-
TOTAL DEFERRED INFLOWS OF RESOURCES	4,791	3,642
NET POSITION (note 12)		
Net investment in capital assets	1,155,465	1,087,931
Restricted for water services	289,540	264,301
Restricted for sewer services	395,948	419,782
TOTAL NET POSITION	$ 1,840,953	$ 1,772,014

See accompanying notes to the basic financial statements.

Irvine Ranch Water District

Statement of Revenues, Expenses and Changes in Net Position
For the Fiscal Year Ended June 30, 2018
(with comparative data for the Fiscal Year Ended June 30, 2017)
(amounts expressed in thousands)

	2018	2017
OPERATING REVENUES		
Water sales and service charges	$ 84,575	$ 77,252
Sewer sales and service charges	76,789	72,054
Total operating revenues	161,364	149,306
OPERATING EXPENSES		
Water:		
Water services	63,671	55,296
General and administrative	20,554	15,906
Sewer:		
Sewer services	38,115	42,752
General and administrative	12,332	9,059
Depreciation	63,877	61,841
Total operating expenses	198,549	184,854
Operating income (loss)	(37,185)	(35,548)
NONOPERATING REVENUES (EXPENSES)		
Property taxes	57,247	51,321
Interest income	4,133	2,843
Increase (decrease) in fair value of investments	(1,571)	(1,624)
Real estate income (note 7)	16,689	13,434
Increase (decrease) in fair value of real estate investments (note 7)	4,091	10,084
Pension benefits trust interest and dividends income	3,003	-
Increase (decrease) in fair value of pension benefits trust investments	2,173	-
Other income	7,504	7,117
Interest expense	(26,034)	(18,784)
Real estate expense (note 7)	(13,284)	(4,358)
Pension benefits trust expense	(51)	-
Other expenses	(174)	(1,997)
Total nonoperating revenues (expenses)	53,726	58,036
Income (loss) before capital contributions	16,541	22,488
CAPITAL CONTRIBUTIONS		
Donated facilities	21,593	12,599
Connection fees	32,674	25,563
Other	6,321	3,751
Total capital contributions	60,588	41,913
Increase (decrease) in net position	77,129	64,401
NET POSITION AT BEGINNING OF YEAR	1,772,014	1,578,311
Prior period adjustments (note 18)	(8,190)	129,302
NET POSITION AT END OF YEAR	$ 1,840,953	$ 1,772,014

See accompanying notes to the basic financial statements.

Irvine Ranch Water District
Statement of Cash Flows
For the Fiscal Year Ended June 30, 2018
(with comparative data for the Fiscal Year Ended June 30, 2017)
(amounts expressed in thousands)

	2018	2017
CASH FLOWS FROM OPERATING ACTIVITIES:		
Cash received from customers and users	$ 142,432	$ 156,305
Cash paid to suppliers of goods and services	(86,669)	(67,463)
Cash paid for employees services	(53,966)	(61,650)
Net cash provided by (used for) operating activities	1,797	27,192
CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES:		
Property tax receipts	57,247	51,321
Net cash provided by noncapital financing	57,247	51,321
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:		
Acquisition and construction of capital assets	(84,760)	(175,475)
Proceeds from disposition of capital assets	-	116
Proceeds of long-term debt	-	279,041
Payment for early redemption	-	(48,059)
Principal payments on long-term liabilities	(22,480)	(14,225)
Interest and issuance costs on long term liabilities	(28,722)	(29,449)
Developer connection fees and related receipts	38,995	29,314
Net cash provided by (used for) capital and related financing activities	(96,967)	41,263
CASH FLOWS FROM INVESTING ACTIVITIES:		
Investment earnings	6,867	2,505
Investment earnings in real estate	53,842	9,076
Proceeds from sale or maturity of investments	78,901	185,734
Purchases of investments	(130,102)	(305,311)
Collections on notes receivable	11	84
Net cash provided by (used for) investing activities	9,519	(107,912)
Net increase (decrease) in cash and cash equivalents	(28,404)	11,864
CASH AND CASH EQUIVALENTS AT BEGINNING OF YEAR	70,381	58,517
CASH AND CASH EQUIVALENTS AT END OF YEAR	$ 41,977	$ 70,381

See accompanying notes to the basic financial statements.

Irvine Ranch Water District
Statement of Cash Flows
For the Fiscal Year Ended June 30, 2018
(with comparative data for the Fiscal Year Ended June 30, 2017)
(amounts expressed in thousands)
(Continued)

	2018	2017
Reconciliation of cash and cash equivalents to amounts reported on the Statement of Net Position:		
Cash and investments	$ 373,191	$ 354,350
Pnesion benefits trust investments	73,106	-
Investments - swap collateral	-	2,439
Subtotal	446,297	356,789
Less long-term investments	(404,320)	(286,408)
Cash and cash equivalents at end of year	$ 41,977	$ 70,381
Reconciliation of operating income to net cash provided by (used for) operating activities:		
Operating income (loss)	$ (37,185)	$ (35,548)
Adjustments to reconcile operating income to net cash provided by (used for) operating activities:		
Other nonoperating income	7,504	7,117
Other nonoperating expenses	(174)	(1,997)
(Gain) loss on disposition of capital assets	1,287	140
Depreciation and amortization	63,871	61,841
(Increase) decrease in customer receivables	(175)	(405)
(Increase) decrease in installment sale receivable	-	8,562
(Increase) decrease in other receivables	(463)	1,580
(Increase) decrease in inventories	(750)	(3,889)
(Increase) decrease due from other agencies	(18,048)	-
(Increase) decrease in prepaid expenses and other assets	(824)	(10,908)
(Increase) decrease in deferred outflows	11,070	(24,371)
Increase (decrease) in accounts payable and accrued expenses	(16,829)	18,130
Increase (decrease) in customer deposits and advance payments	319	(1,977)
Increase (decrease) in compensated absences	210	256
Increase (decrease) in claims payable	(32)	264
Increase (decrease) in unearned revenue	(565)	(761)
Increase (decrease) in net OPEB obligation	(808)	740
Increase (decrease) in net pension liability	(7,760)	9,185
Increase (decrease) in deferred inflows	1,149	(767)
Net cash provided by (used for) operating activities	$ 1,797	$ 27,192
Noncash investing, capital and financing activities:		
Contributions of capital assets from developers	$ 21,593	$ 12,599
Unrealized gain (loss) on investments	-	8,460
Note receivable from sale of real estate	81,600	-
Total noncash investing, capital and financing activities	$ 103,193	$ 21,059

See accompanying notes to the basic financial statements.

(1) Summary of Significant Accounting Policies

(a) Reporting Entity

The Irvine Ranch Water District (District) was formed in 1961 as a special district under Division 13 of the California Water Code (the Act). The District provides potable and recycled water service as well as sewage collection, treatment, and disposal to users within its boundaries.

The District is divided geographically into eight water and ten sewer improvement districts (IDs), as well as several planning areas (PAs) that function as informal improvement districts. Each improvement district is a sub-fund of the District and their primary purpose is to allocate costs and funding on an equitable basis for the construction of water, sewer, and recycled water infrastructure. Most improvement districts have authority to issue general obligation bonds to finance the construction of capital facilities that were identified and valued in a Plan of Works specific to the improvement district. Each improvement district with authority to issue general obligation bonds also has the authority to levy and collect connection fees and ad valorem taxes on the land within its legal boundaries sufficient to meet its general obligation bond indebtedness.

Connection fees which are paid by developers and property taxes which are paid by property owners vary by improvement district based upon, among other considerations, total capital costs, ratio of developed to undeveloped land, and development densities; however, water and sewer user fees are uniform throughout the District. Los Alisos had a separate user rate structure for water charges until July 1, 2017 when they were merged onto the District's uniform rates.

Description of the Reporting Entity

The financial statements of the District include the financial activities of the following sub-fund improvement districts and planning areas:

111/222	Area Excluded from IDs
112/212	Former El Toro Marine Base
113/213	Former Tustin Marine Base
125/225	Developed/Underlay
240	Newport Coast/Newport Ridge
252	Santiago Hills
153/253	Irvine Business District /Spectrum /Shady Canyon/Laguna Laurel/East Orange
154	Santiago Canyon(s)
256	Orange Park Acres
185/285	Los Alisos Area
188/288	Portola Hills Commercial
110/210	Overall District Boundary

(1) Summary of Significant Accounting Policies (Continued)

(a) Reporting Entity (Continued)

Blended Component Units - Blended component units although legally separate entities, are, in substance, part of the District's operations since they have the same governing board. The District has both financial accountability and operational responsibility for the blended component units. The District has the following blended component units:

The Irvine Ranch Water District Water Service Corporation – In January 1997, the District formed a 501(c)(4) corporation for the purpose of financing and acquiring water, sewer and other public improvements. The Corporation was created to effect the merger of the Santa Ana Heights Water Company and the issuance of the 2002 Certificates of Participation, 2008 Refunding Certificates of Participation, 2010 Refunding Certificates of Participation, and 2016 Certificates of Participation. The Corporation's bylaws mandate that the members of the District's Board of Directors shall constitute the Corporation's five-member Board of Directors. The Irvine Ranch Water District Water Service Corporation does not issue separate financial statements.

Bardeen Partners, Inc. – In March 1991, the District formed a 501(c)(4) corporation for the purpose of accounting for the financial data and transactions for certain District real estate investments, including the investments in Wood Canyon Villas, Sycamore Canyon Apartments, and Irvine Technology Center. Bardeen Partners is governed by a Board of Directors consisting of the five members of the District's Board of Directors. Bardeen Partners does not issue separate financial statements.

Irvine Ranch Water District Improvement Corporation – In August 1986, the District formed a 501(c)(4) corporation for the purpose of financing water, sewer and other public improvements. The Corporation's only transactions are related to the debt service payments on the 1986 Certificates of Participation which were refunded by the Irvine Ranch Water District Service Corporation Certificates of Refunding Series 2010. The Corporation is governed by the five members of the Board of Directors of the District. The District accounts for the Corporation's activities in several Improvement Districts. The Irvine Ranch Water District Improvement Corporation does not issue separate financial statements. There is no current activity for the Corporation.

(1) Summary of Significant Accounting Policies (Continued)

(b) Basic Financial Statements

The basic financial statements are comprised of the Statement of Net Position, the Statement of Revenues, Expenses and Changes in Net Position, the Statement of Cash Flows, and the Notes to the Basic Financial Statements.

(c) Measurement Focus, Basis of Accounting and Financial Statement Presentation

The District's financial activities are accounted for as an enterprise fund (proprietary fund type). A fund is an accounting entity with a self-balancing set of accounts established to record the financial position and results of operations of a specific governmental activity.

The activities of enterprise funds closely resemble those of ongoing businesses in which the purpose is to conserve and add to basic resources while meeting operating expenses from current revenues. Enterprise funds account for operations that provide services on a continuous basis and are substantially financed by revenues derived from user charges. The enterprise fund utilizes the accrual basis of accounting. Revenues are recognized when earned and expenses are recognized as they are incurred. Internal activity has been eliminated in the accompanying basic financial statements.

The District distinguishes operating revenues and expenses from non-operating items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with water and sewer operations. The principal operating revenues of the District are charges to customers for sales and services. Operating expenses include cost of sales and services, general and administrative expenses and depreciation of capital assets. All revenues and expenses not meeting this definition are reported as non-operating revenues and expenses.

Capital contributions consist of contributed capital assets, connection fees, grants and other charges that are legally restricted for capital expenditures by state law or by the Board action that established those charges.

(1) Summary of Significant Accounting Policies (Continued)

(c) Measurement Focus, Basis of Accounting and Financial Statement Presentation (Continued)

Net position of the District is classified into two components: (1) net investment in capital assets and (2) restricted net position. These classifications are defined as follows:

Net Investment in capital assets – This component of net position consists of capital assets, net of accumulated depreciation reduced by the outstanding balances of notes or borrowing(s) that are attributable to the acquisition of the asset, construction, or improvement of those assets. If there are significant unspent related debt proceeds at year-end, the portion of the debt attributable to the unspent proceeds are not included in the calculation of net investment in capital assets.

Restricted net position – This component of net position consists of constraints placed on net position use through external constraints imposed by creditors (such as through debt covenants), grantors, contributors, or laws or regulations of other governments or constraints imposed by law through constitutional provisions or enabling legislation.

When both restricted and unrestricted resources are available for use, the District uses unrestricted resources first, and then restricted resources as they are needed. For capital expenditures, legally available restricted bond proceeds are used first, then other restricted resources, and then unrestricted resources are used if needed.

(d) Property Taxes

The District is authorized under the Act to levy taxes on all taxable property (lands only) within its boundaries for the purposes of paying certain of its debt obligations, subject to certain limitations in the Act, the Revenue and Taxation Code and the California Constitution. The District also receives a portion of the County's 1% ad valorem property taxes from certain lands within its boundaries. Property tax revenue is recognized in the fiscal year in which the taxes are levied.

The property tax calendar is as follows:

Lien date:	January 1
Levy date:	July 1
Due date:	First installment – November 1
	Second installment – February 1
Delinquent date:	First installment – December 10
	Second installment – April 10

The assessment, levy and collection of property taxes are the responsibility of the County of Orange, and are remitted to the District periodically.

(1) Summary of Significant Accounting Policies (Continued)

(e) Cash and Cash Equivalents

For the purposes of the statement of cash flows, cash equivalents are defined as short-term, highly liquid investments that are both readily convertible to known amounts of cash or so near to their maturity that they present insignificant risk of changes in value because of changes in interest rates, and have an original maturity date of 12 months or less.

(f) District Investments

Investments are reported in the accompanying Statement of Net Position at fair value, except for certain investment contracts that are reported at cost because they are not transferable and they have terms not affected by changes in market interest rates.

Changes in fair value that occur during the fiscal year are recognized as increase (decrease) in fair value of investments reported for that fiscal year. Interest income includes interest earnings on the District's investments.

(g) Pension Benefits Trust Investments

Investments of the Pension Benefits Trust are reported in the accompanying Statement of Net Position at fair value.

Changes in fair value that occur during the fiscal year are recognized as increase (decrease) in fair value of investments reported for that fiscal year. Interest income is recorded on the accrual basis. Dividends are recorded on the payment date.

(h) Real Estate Investments

Real estate investments consist of a wholly-owned apartment complex, three commercial office properties and one entitled land property. The District is also a party to a real estate limited partnership in which the District has a 50% or less ownership interest and does not exercise control. All real estate investments are reported at fair value. Changes in fair value that occur during the fiscal year are recognized as increase (decrease) in fair value of real estate investments reported for that fiscal year.

(i) Fair Value Measurements

Certain assets and liabilities are required to be reported at fair value. The fair value framework provides a hierarchy that prioritizes the inputs to valuation techniques used to measure fair value.

(1) Summary of Significant Accounting Policies (Continued)

(i) Fair Value Measurements (Continued)

The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). The three levels of fair value hierarchy are described as follows:

Level 1 - Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets.

Level 2 - Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly and fair value is determined through the use of models or other valuation methodologies including:

- Quoted prices for similar assets or liabilities in active markets;
- Quoted prices for identical or similar assets or liabilities in markets that are inactive;
- Inputs other than quoted prices that are observable for the asset or liability;
- Inputs that are derived principally from or corroborated by observable market data by correlation or other means.

Level 3 - Inputs to the valuation methodology are unobservable and significant to the fair value measurement. These unobservable inputs reflect the District's own assumptions about the inputs market participants would use in pricing the asset or liability (including assumptions about risk). These unobservable inputs are developed based on the best information available in the circumstances and may include the District's own data.

(j) Inventory and Prepaid Items

Water inventory related to water stored in its banking facilities in Kern County is stated at its purchase cost using the first in, first out method. The District's warehouse materials and supplies are valued using the average cost method. Inventory is recorded when purchased, and expensed at the time the inventory is consumed. Certain payments to vendors reflect costs applicable to future accounting periods and are recorded as prepaid items.

(1) Summary of Significant Accounting Policies (Continued)

(k) Capital Assets and Depreciation

Capital assets are valued at cost where historical records are available and at an estimated historical cost where no historical records exist. Donated assets are valued at their estimated acquisition value on the date received. The District capitalizes all assets with a historical cost of at least $2,500 and a useful life of at least three years. The cost of normal maintenance and repairs that do not add to the value of the assets or materially extend asset lives are not capitalized.

Depreciation is computed utilizing the straight-line method over the following estimated useful lives:

Buildings and Structures	3 to 100 years
Transmissions and Distributions	10 to 75 years
Machinery and Equipment	3 to 50 years

(l) Compensated Absences

The District's policy permits employees to accumulate earned but unused vacation and sick leave benefits up to certain limits. Earned vacations pay to a maximum of 320 hours (or more with written approval of the General Manager). Sick leave hours accrue at the rate of one day per month and employees may elect to receive cash for accumulated sick leave for up to 96 hours in excess of the first 80 hours accumulated. Fifty percent of accumulated sick leave up to a maximum of 960 hours may be paid upon termination of employment. All accumulated vacation and vested sick leave pay is recorded as expense at the time the benefit is earned.

(m) Pensions

For purposes of measuring the net pension liability, deferred outflows and inflows of resources relating to pensions and pension expense, information about the fiduciary net position of the District's California Public Employees' Retirement System (CalPERS) plan (Plan) and additions to/deductions from the Plan's fiduciary net position have been determined on the same basis as they are reported by CalPERS. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

(1) Summary of Significant Accounting Policies (Continued)

(m) Pensions (Continued)

GASB requires that the reported results must pertain to liability and asset information within certain defined timeframes. For this report, the following timeframes are used:

Valuation Date (VD)	June 30, 2016
Measurement Date (MD)	June 30, 2017
Measurement Period (MP)	July 1, 2016 to June 30, 2017

(n) Other Post-Employment Benefits (OPEB)

The OPEB liability, deferred outflows and inflows of resources relating to OPEB and OPEB expense have been determined by an independent actuary. Benefit payments are recognized when currently due and payable in accordance with the benefit terms.

GASB requires that the reported results pertain to liability and asset information within certain defined timeframes. For this report, the following timeframes are used:

Valuation Date (VD)	June 30, 2016
Measurement Date (MD)	June 30, 2017
Measurement Period (MP)	July 1, 2016 to June 30, 2017

(o) Deferred Outflows/Inflows of Resources

In addition to assets, the Statement of Net Position reports a separate section for deferred outflows of resources. This separate financial statement element, deferred outflows of resources, represents a consumption of net position that applies to a future period(s) and so will not be recognized as an outflow of resources (expense/expenditure) until then. The District has the following items that qualify for reporting in this category:

- Deferred refunding charges
- Accumulated decrease in fair value of swap agreements
- Employer contributions subsequent to measurement date for pension and OPEB
- Deferred actuarial amounts related to pension

In addition to liabilities, the Statement of Net Position reports a separate section for deferred inflows of resources. This separate financial statement element, deferred inflows of resources, represents an acquisition of net position that applies to a future period(s) and so will not be recognized as an inflow of resources (revenue) until that time. The District has the following items that qualify for reporting in this category:

- Deferred actuarial amounts related to pension and OPEB

(1) Summary of Significant Accounting Policies (Continued)

(p) Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

(q) Comparative Financial Statements and Reclassifications

The information included in the accompanying financial statements for the prior year has been presented for comparison purposes only and does not represent a complete presentation in accordance with generally accepted accounting principles. Certain amounts presented in the prior year financial statements have been reclassified in order to be consistent with the current year's presentation.

(2) Cash and Investments

Cash and investments as of June 30, 2018 are classified in the accompanying financial statements as follows (in thousands):

District Cash and investments	$373,191
Pension Benefits Trust Investments	73,093
Total Cash and Investments	$446,284

Cash and investments as of June 30, 2018 consist of the following (in thousands):

District Cash and Investments:	
Cash on hand	$3
Deposits with financial institutions	(3,463)
Investments	376,651
Total District Cash and Investments	373,191
Pension Benefits Trust Cash and Investments	
Equities - mutual funds	49,385
Fixed income bonds - mutual funds	23,697
Money market - mutual funds	11
Total Pension Benefits Trust Cash and Investments	73,093
Total Cash and Investments	$446,284

(2) Cash and Investments (Continued)

The following table identifies the investment types that are authorized for the District by the California Government Code, the California Water Code, and the District's investment policy, whichever is most restrictive. The table also identifies certain provisions that address interest rate risk and concentration of credit risk.

Authorized Investment Type	Maximum Maturity[(1)]	Maximum Percentage of Portfolio	Maximum Investment in One Issuer
Local Agency Bonds	5 years	None	None
U.S. Treasury Obligations	5 years	None	None
U.S. Agency Securities	5 years	None	None
Bankers Acceptances	180 days	40%	30%
Commercial Paper	270 days	25%	10%
Negotiable Certificates of Deposit	5 years	30%	None
Repurchase Agreements	1 year	None	None
Reverse Repurchase Agreements	92 days	20% of base value	None
Medium-Term Notes	5 years	30%	None
Money Market Mutual Funds	N/A	20%	10%
Mortgage Pass-Through Securities	5 years	20%	None
Orange County Treasury Pool	N/A	None	None
Local Agency Investment Fund (LAIF)	N/A	None	None
Real Estate Investments	N/A	30%[(2)]	None

(1) Maximum maturity unless express authority has been granted otherwise by the Board of Directors pursuant to the California Government Code Section 53601.

(2) 30% of Replacement Fund, as authorized by the California Water Code.

(2) Cash and Investments (Continued)

Pension Benefits Trust (The Trust) Authorized Investment Strategy
The Trust's investment policy authorizes investment of Trust assets in financial instruments in three broad categories: equity, fixed income, and real estate. These financial instruments can include, but are not limited to, corporate bonds, commercial paper, U.S. government securities, common and preferred stock, real estate investment trusts, and mutual funds. Investments may include derivatives, options and futures as portfolio protection strategies. The following is a summary of the Trust's investment policy.

The Trust is governed by a Retirement Board (the Board) which consists of two IRWD Board members and the General Manager. The Board shall designate one or more investment advisors to manage the assets under their supervision subject to the laws of the State of California and Investment Guidelines established by the Board. The long-term asset allocation policy including the minimum-maximum asset allocation range for each asset class is as follows:

Asset Classes	Minimum	Maximum
Cash	0%	30%
Public Equity: Domestic & International	30%	80%
Private Equity	0%	5%
Fixed Income	10%	40%
Real Estate	0%	10%

The asset allocation policy will be pursued by the Trust on a long-term basis and may be revised if necessary due to market conditions. The Board will monitor the current asset allocation policy against the long-term allocation and rebalance as it deems necessary.

Cash equivalent reserves shall consist of cash instruments having a quality rating of A-1, P-1 or higher, as established by Moody's or Standard & Poor's. Bankers' acceptances, certificates of deposit and savings accounts must be made of United States banks or financial institutions or United States branches of foreign banks, which are federally insured with unrestricted capital of at least $50 million. Short-term corporate obligations must be rated A or better by Moody's or by Standard & Poor's.

(2) Cash and Investments (Continued)

Pension Benefits Trust Authorized Investment Strategy (Continued)
Equity investments are restricted to high quality, readily marketable securities of corporations that are actively traded on a major exchange. Not more than 5% of the total stock portfolio valued at market may be invested in the common stock of any one corporation. Ownership of the shares of one company shall not exceed 2% of those outstanding. Not more than 25% of stock valued at market may be held in any one industry category. The overall non-U.S. equity allocation should include a diverse global mix of at least 10 countries. The emerging markets exposure as defined by Morgan Stanley Capital International Inc. should be limited to 35% of the non-U.S. portion of the portfolio.

Fixed income securities of any one issuer shall not exceed 5% of the total bond portfolio, at time of purchase. The 5% limitation does not apply to issues of the U.S. Treasury or other Federal Agencies. The overall rating of the fixed income assets shall be at least "A", according to one of the three rating agencies (Fitch, Moody's or Standard & Poor's). In cases where the yield spread adequately compensates for additional risk, securities where two of the three rating agencies (Fitch, Moody's or Standard & Poor's) have assigned ratings of Baa3 or BBB- ratings, can be purchased up to a maximum of 20% of total market value of fixed income securities.

Custodial Credit Risk
Custodial credit risk for *deposits* is the risk that, in the event of the failure of a depository financial institution, a government will not be able to recover its deposits or will not be able to recover collateral securities that are in the possession of an outside party. The custodial credit risk for *investments* is the risk that, in the event of the failure of the counterparty (e.g., broker-dealer) to a transaction, a government will not be able to recover the value of its investment or collateral securities that are in the possession of another party. The California Government Code requires that a financial institution secure deposits made by state or local governmental units by pledging securities in an undivided collateral pool held by a depository regulated under state law (unless so waived by the governmental unit). The market value of the pledged securities in the collateral pool must equal at least 110% of the total amount deposited by the public agencies. California law also allows financial institutions to secure public agency deposits by pledging first trust deed mortgage notes having a value of 150% of the secured public deposits.

(2) Cash and Investments (Continued)

Disclosures Relating to Interest Rate Risk

Interest rate risk is the risk that changes in market interest rates will adversely affect the fair value of an investment. Generally, the longer the maturity of an investment, the greater the sensitivity of its fair value to changes in market interest rates. One of the ways that the District manages its exposure to interest rate risk is by purchasing a combination of shorter term and longer term investments and by timing cash flows from maturities so that a portion of the portfolio is maturing or coming near to maturity as necessary to provide the cash flow and liquidity needed for District operations.

Information about the sensitivity of the fair values of the District's and Pension Benefits Trust's investments to market interest rate fluctuations is provided by the following table that shows the distribution of the investments by maturity (in thousands):

		Remaining Maturity			
Investment Type	Amount	12 Months Or Less	13 to 36 Months	37 Months Or More	Not Applicable
Federal Agency Securities	$332,234	$159,254	$172,980	$0	$0
Local Agency Investment Fund	44,417	44,417	-	-	-
Total District Investments	376,651	203,671	172,980	-	-
Mutual Funds - Equities	49,385	-	-	-	49,385
Mutual Funds - Fixed Income Bonds	23,697	595	3,057	18,676	1,369
Mutual Funds - Money Market	11	11	-	-	-
Total Pension Benefits Trust Investments	73,093	606	3,057	18,676	50,754
Total	$449,744	$204,277	$176,037	$18,676	$50,754

(2) Cash and Investments (Continued)

Disclosures Relating to Credit Risk
Generally, credit risk is the risk that an issuer of an investment will not fulfill its obligation to the holder of the investment. This is measured by the assignment of a rating by a nationally recognized statistical rating organization. Presented below is the actual rating as of year-end for each investment type (in thousands):

District Cash and Investments:

		Rating as of Year End		
Investment Type	Amount	AAA	Between AA- and AA+	Not Rated
Federal Agency Securities	$332,234	$30,396	$301,838	$0
Local Agency Investment Fund	44,417	-	-	44,417
Total	$376,651	$30,396	$301,838	$44,417

Pension Benefits Trust Investments:

Investment Type	Amount
Mutual Funds - Equities	$49,385 (1)
Mutual Funds - Fixed Income Bonds	23,697 (2)
Mutual Funds - Money Market	11 (3)
Total	$73,093

(1) Equity Mutual Funds as of 6/30/2018 include four "index funds" and are each comprised of diversified portfolios of equity securities. Credit ratings are not provided for Equity Mutual Funds.

(2) Fixed Income Mutual Funds are comprised of four diversified portfolios of fixed income securities. As of 6/30/2018, 57.62% of the holdings were rated A-AAA, 39.06% of the holdings were rated B-BBB, and 3.32% of the holdings were rated below B or Not Rated.

(3) The Money Market Mutual Fund is not rated.

The District is a voluntary participant in the Local Agency Investment Fund (LAIF) that is regulated by the California Government Code under the oversight of the Treasurer of the State of California. The fair value of the District's investment in this pool is reported in the accompanying financial statements at amounts based upon the District's pro-rata share of the fair value provided by LAIF for the entire LAIF portfolio (in relation to the amortized cost of that portfolio). The balance available for withdrawal is based on the accounting records maintained by LAIF, which are recorded on an amortized cost basis.

(2) **Cash and Investments (Continued)**

Concentration of Credit Risk

The investment policy of the District contains no limitations on the amount that can be invested in any one issuer beyond that stipulated by the California Government Code. Investments in any one issuer (other than U.S. Treasury securities, mutual funds, and external investment pools) that represent 5% or more of total District investments are as follows (in thousands):

Issuer	Investment Type	Amount
FHLB	Federal Agency Securities	$104,508
FNMA	Federal Agency Securities	84,271
FFCB	Federal Agency Securities	74,190
FHLMC	Federal Agency Securities	69,265
	Total	$332,234

Disclosures Relating to Fair Value Measurements

The District categorizes its fair value investments within the fair value hierarchy established by generally accepted accounting principles. The District has the following fair value measurements as of June 30, 2018 (in thousands):

District Cash and Investments:

Investment Type	Amount	Fair Value Measurements Level 2
Federal Agency Securities	$332,234	$332,234
Local Agency Investment Fund	44,417 [1]	-
Total	$376,651	$332,234

[1] Local Agency Investment Fund is not subject to the fair value measurements classification.

Pension Benefits Trust Cash and Investments:

Investment Type	Amount	Fair Value Measurements Level 1
Mutual Funds - Equities	$49,385	$49,385
Mutual Funds - Fixed Income Bonds	23,697	23,697
Mutual Funds - Money Market	11	11
Total	$73,093	$73,093

(3) Interest Rate Swap Agreements

In September 2003, the District's Board of Directors approved a policy regarding the use of interest rate swap transactions. The policy provides that interest rate swap transactions will be designed to enhance the relationship between risk and return with respect to an investment or a program of investments entered into by the District; and/or to reduce the amount or duration of payment, rate, spread, or similar risk; and/or result in a lower cost of borrowing when used in combination with bonds or other indebtedness of the District. Pursuant to the policy, the Board of Directors authorizes general parameters for interest rate swap transactions while the Finance and Personnel Committee structures specific transactions within the Board-authorized parameters. The Treasurer, with the concurrence of the Chairman of the Finance and Personnel Committee, is authorized to enter into interest rate swap transactions that are within all authorized parameters.

The International Swaps and Derivatives Association, Inc. (ISDA) Master Agreement, including the schedule and credit support annex, is used as the form of contract with interest rate swap counterparties. The District is compliant with all Dodd-Frank Protocol provisions implemented during FY 2012-13 regarding swap advisor representation and transparency.

All outstanding interest rate swaps are pay-fixed, receive variable swaps ("fixed payer swaps"). As of June 30, 2018, the notional amount and fair value balance of the District's interest rate swaps is \$130.0 million and \$(18.1) million, respectively. For the year ended June 30, 2018, the increase in fair market value of the fixed payer interest rate swaps was \$9.3 million.

The fair value of the swap agreements at June 30, 2018 is calculated using a zero-coupon method (Level 2 inputs). This method calculates the future net settlement payments required by the swaps, assuming, for the LIBOR fixed payer swaps, that the current LIBOR forward rates implied by the LIBOR yield curves correctly anticipate future LIBOR spot interest rates. These payments are discounted using the spot rates implied by the current yield curves for hypothetical zero-coupon bonds due on the date of each future net settlement of the swaps.

The District's fixed payer swaps were executed in 2004, and became effective in 2006 and 2007. The purpose of the fixed payer swaps was to hedge a portion of the interest rate risk exposure associated with the District's 100% variable rate debt structure at the time the swaps were executed. The interest rate swap notional amounts and maturities are not specifically related to a particular District debt issue, however are considered a hedge of a pooled portion of the District's variable rate debt exposure. The following table displays the objective and terms of the District's interest rate swaps outstanding at June 30, 2018, along with the credit rating of the associated counterparty.

(3) Interest Rate Swap Agreements (Continued)

Current Year Active Interest Rate Swaps (in thousands):

Type	Objective	Notional Amount	Effective Date	Maturity Date	Terms	Counterparty Rating
Fixed Payer	Hedge of changes in cash flows on pool of variable rate debt issues	$20,000	6/04/06	6/04/19	Pay 6.200%; receive 1-Mo. LIBOR	Aa3/A+/AA-
Fixed Payer	Hedge of changes in cash flows on pool of variable rate debt issues	20,000	6/04/06	6/04/19	Pay 6.200%; receive 1-Mo. LIBOR	A1/A+/A+
Fixed Payer	Hedge of changes in cash flows on pool of variable rate debt issues	30,000	6/17/06	6/17/19	Pay 6.140%; receive 1-Mo. LIBOR	A1/A+/A+
Fixed Payer	Hedge of changes in cash flows on pool of variable rate debt issues	30,000	3/10/07	3/10/29	Pay 5.687%; receive 1-Mo. LIBOR	Aa3/A+/AA-
Fixed Payer	Hedge of changes in cash flows on pool of variable rate debt issues	30,000	3/10/07	3/10/29	Pay 5.687%; receive 1-Mo. LIBOR	A1/A+/A+

The ISDA agreements for the above referenced interest rate swaps include a provision that the counterparties shall be required to post collateral should the mark-to-market value of the total interest rate swap portfolio with the respective counterparty, including any current outstanding swap accruals, exceed a threshold of ($15.0) million. The amount of the collateral posted shall be the amount of the mark-to-market value and outstanding swap accrual amounts in excess of ($15.0) million. As of June 30, 2018, the mark-to-market value of the total interest rate swaps with Citibank N.A. and Bank of America, N.A. as counterparties did not exceed the threshold amount.

(3) Interest Rate Swap Agreements (Continued)

Credit risk: The District is exposed to credit risk on interest rate swaps. To minimize its exposure to loss related to credit risk, the District's policy requires that the Finance and Personnel Committee evaluate and approve the counterparty creditworthiness of each counterparty prior to executing an ISDA Agreement, and all current swap agreements include collateral posting provisions. These terms require full collateralization of the fair value of interest rate swaps in asset positions (net of the effect of applicable netting arrangements) should the counterparty's credit rating fall below BBB+ as issued by Fitch Ratings and Standard & Poor's or Baa1 as issued by Moody's Investors Service. Collateral posted is to be in the form of U.S. Treasuries, or other approved securities, held by a third-party custodian.

The District has executed interest rate swap transactions with two counterparties. Their ratings are A1/A+/A+ (62% of net exposure to credit risk) and Aa3/A+/AA- (38% of net exposure to credit risk) as of June 30, 2018.

Interest rate risk: The District is exposed to interest rate risk on its interest rate swaps. On its fixed payer swaps, as LIBOR's swap index decreases, the District's net payment on the swap increases. Alternatively, on its fixed payer swaps, as LIBOR's swap index increases, the District's net payment on the swap decreases.

Basis risk: The District is exposed to basis risk on its fixed payer swaps because the variable-rate payments received by the District on these swaps are based on a rate or index other than interest rates the District pays on its variable-rate debt, which is remarketed daily or weekly.

Termination risk: The District or its counterparties may terminate an interest rate swap if the other party fails to perform under the terms of the contract. If at the time of termination, an interest rate swap is in a liability position, the District would be liable to the counterparty for a payment equal to the liability, subject to netting arrangements.

Collateral requirements: All of the District's interest rate swaps include provisions that require the District to post collateral in the event its credit rating falls below A as issued by Fitch Ratings and Standard & Poor's or A2 as issued by Moody's Investors Service.

The collateral posted is to be in the form of U.S. Treasuries or other approved securities in the amount of the fair value of interest rate swaps in liability positions net of the effect of applicable netting arrangements. If the District does not post collateral, the swaps may be terminated by the counterparty. The District's credit rating is Aa1/AAA/AAA; therefore, no collateral has been posted at June 30, 2018.

(4) Inventories

Inventories consist of available water in storage and materials and supplies in the District's warehouse facilities. As of June 30, 2018, the District had 29,861.0 acre-feet of banked water in various water bank facilities at a cost of $0.9 million. The District did not have any purchased water stored in the Irvine Lake at June 30, 2018. Inventories at June 30, 2018 consisted of the following (in thousands):

Water in storage	$860
Materials and supplies	6,976
Total	$7,836

(5) Capital Assets

Capital asset activity for the year ended June 30, 2018 is as follows (in thousands):

	Balance June 30, 2017	Additions	Deletions	Balance June 30, 2018
Capital assets:				
Land leasehold	$4,860	$0	$0	$4,860
Buildings and structures	735,756	4,049	(362)	739,443
Transmissions and distributions	1,238,430	60,497	(2,344)	1,296,583
Machinery and equipment	278,066	2,325	(1,791)	278,600
Sub-total	2,257,112	66,871	(4,497)	2,319,486
Less: Accumulated depreciation:				
Land leasehold	(1,165)	(97)	-	(1,262)
Buildings and structures	(272,482)	(17,149)	361	(289,270)
Transmissions and distributions	(394,593)	(33,777)	1,076	(427,294)
Machinery and equipment	(139,277)	(12,854)	1,779	(150,352)
Sub-total	(807,517)	(63,877)	3,216	(868,178)
Total depreciable capital assets, net	1,449,595	2,994	(1,281)	1,451,308
Capital assets, non-depreciable:				
Land and water rights	123,811	1,505	-	125,316
Construction in progress	274,898	104,214	(64,978)	314,134
Total capital assets, net	$1,848,304	$108,713	($66,259)	$1,890,758

(6) Capitalized Amounts

Certain administrative and general expenses relating to assets under construction are charged to construction-in-progress until the assets are ready for their intended use. The amount of administrative and general expenses capitalized to construction-in-progress for the fiscal year ended June 30, 2018 was $10.3 million. Effective June 30, 2018, the District implemented the GASB Statement No. 89, *Accounting for Interest Cost Incurred before the End of a Construction Period.* This Statement requires that interest cost incurred before the end of a construction period be recognized as expense in the period in which the cost is incurred for financial statements prepared using the economic resources measurement focus. As a result, interest cost incurred for the fiscal year ended June 30, 2018 is not included in the historical cost of a capital asset.

(7) Real Estate Investments

Real estate investments as of June 30, 2018 consist of the following (in thousands):

Real estate investments at fair value	$221,394
Real estate loan receivable	81,600
Real estate- other assets at cost	2,986
Total	$305,980

The District has the following fair value measurements for the real estate investments (Level 3 inputs) (in thousands):

	Balance June 30, 2017	Increase (decrease) in Fair Value	Purchases / (Sales)	Balance June 30, 2018
Wood Canyon Villas, L.P.	$28,934	$1,736	$0	$30,670
Sycamore Canyon Apartments	147,508	(2,508)	-	145,000
230 Commerce Office Property	9,572	1,928	-	11,500
Waterworks Way Business Park	7,803	1,197	-	9,000
Sand Canyon Professional Center	10,820	180	-	11,000
Sand Canyon General Office	12,617	1,558	49	14,224
Lake Forest Serrano Summit	136,000	-	(136,000)	-
Total	$353,254	$4,091	($135,951)	$221,394

Net real estate income as of June 30, 2018 is as follows (in thousands):

Real estate income	$16,689
Increase (decrease) in fair value of real estate investments	4,091
Real estate expense	(13,284)
Net real estate income	$7,496

(7) Real Estate Investments (Continued)

Included in real estate investments are two apartment properties, three commercial office buildings and one entitled land property. The District, through Bardeen Partners, Inc., is the sole limited partner in Wood Canyon Villas, L.P. (Wood Canyon), and the sole owner of both Sycamore Canyon Apartments and a commercial office building (230 Commerce). Separate from Bardeen Partners, Inc., the District is the sole owner of two other commercial office buildings (Waterworks Way Business Park and Sand Canyon Professional Center) and one entitled land property Sand Canyon General Office. In addition, the District has a $81.6 million loan receivable from the sale of the Serrano Summit property due on or before September 1, 2019 .

The construction of Wood Canyon Villas, a 230-unit apartment property, was completed in 1993. The property is located in Orange County, California, and was 98% occupied at June 30, 2018. The Wood Canyon partnership agreement provides the District with a 9% cumulative preferred return on its unrecovered contribution accounts, as defined in the agreement ($6.0 million contribution). The property's fair value and the District's partnership interest was determined using an appraisal valuation in 2018.

In 1992, the District acquired a 450-unit apartment property (original cost, $34.1 million) in Orange County, California known as Sycamore Canyon Apartments. The property was 98% occupied at June 30, 2018. The Sycamore Canyon Apartments completed a renovation project in 2007 for a total cost of $9.6 million. The property's fair value was determined using an appraisal valuation in 2018.

In 2003, the District completed construction of the 41,000 square foot for-lease 230 Commerce professional office building located in Irvine, California. Land and construction costs for the project totaled $5.6 million and the building was 100% occupied as of June 30, 2018. The property's fair value was determined using an appraisal valuation in 2018.

In November 2008, the District completed construction of a 37,200 square foot for-lease R&D office building located in Irvine, California known as the Waterworks Way Business Park. Construction of the building was a specific facilities requirement of the purchase agreement for land acquired for an adjacent District water treatment facility. Land and construction costs for the office project totaled $9.0 million. As of June 30, 2018, the building was 89% occupied. The property's fair value was determined using an appraisal valuation in 2018.

In April 2012, the District completed construction of a 16,350 square foot for-lease medical office building located in Irvine, California known as the Sand Canyon Professional Center. Land and construction costs for the project totaled $8.4 million and the building was 100% occupied as of June 30, 2018. The property's fair value was determined using an appraisal valuation in 2018.

(7) Real Estate Investments (Continued)

The District has an entitled 5.8 acre general office site located in Irvine, California at the Sand Canyon Professional Center. Land and related entitlement costs totaled $5.0 million as of June 30, 2018. The property's fair value was determined using an appraisal valuation in 2018.

On September 1, 2017, the District entered into a loan agreement with Lennar Homes of California, Inc. for a principal amount of $81.6 million from the sale of IRWD's Serrano Summit property located in Lake Forest. The loan bears a 4.0% per annum interest rate. The entire outstanding principal balance and all accrued unpaid interest will be paid in a single lump sum on or before September 1, 2019. The loan is secured by the Serrano Summit property. The balance of the loan was stated at cost as of June 30, 2018.

(8) Orange County Sanitation District (OCSD)

The District, with OCSD, negotiated an agreement as of July 1, 1985, which has been amended from time to time. The District agreed to annually fund payment of the District's proportionate share of OCSD's joint capital outlay revolving fund (CORF) budget requirements and certain capital improvements, calculated on an annual flow basis using the four highest months of actual flows, during the term of the agreement.

The capital assets associated with this agreement are co-owned by the two agencies and provide an operational benefit to both agencies. During the current fiscal year, the District's proportionate share of OCSD's jointly funded capital assets increased $3.2 million which is included in capital assets in the District's basic financial statements.

In May 2018, the District and OCSD agreed to extend the agreement, providing for treatment and disposal by OCSD of District solids and the temporary lease of capacity in OCSD's solids treatment and disposal facilities through December 31, 2021. The capacity lease for the fiscal year ended June 30, 2018, estimated at $1.2 million, is included in Sewer Services as an operating expense.

As of June 30, 2018, the District had a net receivable of $18.0 million from OCSD relating to cash deposits for future obligations as required by agreement between the two agencies. This is reflected as a due from other agencies in the District's basic financial statements.

(9) Long-Term Liabilities

Long-term liability activity for the year ended June 30, 2018 is as follows (in thousands):

	Balance June 30, 2017	Additions	Deletions	Balance June 30, 2018	Due within One Year	Due in more than one Year
General Obligation Bonds:						
1993 C Consolidated	$31,500	$0	($1,600)	$29,900	$1,600	$28,300
1995 Consolidated	9,900	-	(9,900)	-	-	-
2008A Refunding	51,000	-	(1,500)	49,500	1,500	48,000
2009A Consolidated	62,500	-	(2,500)	60,000	2,500	57,500
2009B Consolidated	62,500	-	(2,500)	60,000	2,500	57,500
2010B BABS	175,000	-	-	175,000	-	175,000
2011A-1 Refunding	51,540	-	(1,620)	49,920	1,680	48,240
2011A-2 Refunding	34,360	-	(1,080)	33,280	1,120	32,160
2016 Consolidated	103,400	-	-	103,400	-	103,400
Unamortized Premium	26,418	-	(925)	25,493	924	24,569
Sub-total	**608,118**	-	**(21,625)**	**586,493**	**11,824**	**574,669**
Certificates of Participation:						
2010 Refunding Certificates	5,390	-	(1,615)	3,775	1,795	1,980
2016 Certificates	116,745	-	-	116,745	-	116,745
Unamortized Premium	31,491	-	(1,736)	29,755	1,736	28,019
Sub-total	**153,626**	-	**(3,351)**	**150,275**	**3,531**	**146,744**
Notes Payable	1,209	-	(262)	947	263	684
Other Long-Term Liabilities:						
Compensated Absences	4,016	4,379	(4,169)	4,226	1,690	2,536
Other Long-Term Liabilities	1,223	2,933	(2,836)	1,320	490	830
Sub-total	5,239	7,312	(7,005)	5,546	2,180	3,366
Total Long-Term Liabilities	**$768,192**	**$7,312**	**($32,243)**	**$743,261**	**$17,798**	**$725,463**

(9) Long-Term Liabilities (Continued)

The following schedule summarizes the major terms of outstanding long-term debt (in thousands):

	Date of Issue	Original Issue	Revenue Sources	Final Maturity Date	Interest Rates
General Obligation Bonds:					
1993 Consolidated	May 1, 1993	$38,300	(1)(3)	April 1, 2033	Variable
1995 Consolidated	December 1, 1995	40,000	(1)(3)	July 1, 2017	Variable
2008A Refunding	April 1, 2008	60,215	(1)(3)	July 1, 2035	Variable
2009A Consolidated	June 4, 2009	75,000	(1)(3)	October 1, 2041	Variable
2009B Consolidated	June 4, 2009	75,000	(1)(3)	October 1, 2041	Variable
2010B BABS	December 16, 2010	175,000	(1)(2)(3)	May 1, 2040	6.60%
2011A-1 Refunding	April 15, 2011	60,545	(1)(2)(3)	October 1, 2037	Variable
2011A-2 Refunding	April 15, 2011	40,370	(1)(2)(3)	October 1, 2037	Variable
2016 Consolidated	October 12, 2016	103,400	(1)(2)(3)	Febrary 1, 2046	5.00% - 5.25%
Certificates of Participation:					
2010 Certificates	February 23, 2010	85,145	(2)	March 1, 2020	3.80%
2016 Certificates	September 1, 2016	116,745	(2)	March 1, 2046	5.00%

(1) Ad valorem assessments or, in lieu of assessments, in the District's discretion, charges for water or sewer service.

(2) Available water, sewer, and recycled water revenues.

(3) Proceeds from the sale of property.

(9) Long-Term Liabilities (Continued)

The annual debt service requirements for the General Obligation Bonds, including principal and interest payments (based on variable interest rates at June 30, 2018 ranging from 0.97% to 1.27% and the fixed rate for the 2010B BABs issue and 2016 Consolidated issue) are as follows (in thousands):

Fiscal Year	Principal	Interest	Hedging Instruments, Net	BAB Federal Subsidy	Total
2019	$10,900	$19,942	$5,760	($3,805)	$32,797
2020	11,100	19,824	2,501	(3,805)	29,620
2021	11,300	19,704	2,501	(3,805)	29,700
2022	14,155	19,582	2,501	(3,805)	32,433
2023	14,365	19,345	2,501	(3,805)	32,406
2024-2028	90,765	83,330	12,505	(18,630)	167,970
2029-2033	115,675	73,590	2,501	(16,854)	174,912
2034-2038	169,575	53,623	-	(12,081)	211,117
2039-2043	102,955	15,553	-	(1,823)	116,685
2044-2046	20,210	2,158	-	-	22,368
Subtotal	561,000	326,651	30,770	(68,413)	850,008
Plus: Unamortized premium	25,493	-	-	-	25,493
Total	$586,493	$326,651	$30,770	($68,413)	$875,501

The above table incorporates the net receipts/payments of the hedging instruments that are associated with the variable rate debt issue(s). The amounts assume that current interest rates on variable rate bonds and the current reference rates of the hedging instruments will remain the same for their term. As these rates vary, interest payments on variable rate bonds and net receipts/payments on the hedging instruments will vary. Additionally, the above table includes the most recent BABs subsidy reduction of 6.2% under the Congressionally-mandated sequestration which began in FY 2012-13. Refer to Note 3 for additional information regarding the hedging instruments associated with the debt of the District.

(9) Long-Term Liabilities (Continued)

Certificates of Participation

In February 2010, the Irvine Ranch Water District Service Corporation issued $85.1 million of Certificates of Participation Refunding Series 2010 (the Series 2010 Certificates) to refinance the cost of certain capital improvements by refunding the outstanding principal amount of the Certificates of Participation Series 1986 and Series 2008. In September 2016, the Irvine Ranch Water District Service Corporation issued $116.7 million of Certificates of Participation Series 2016 (the Series 2016 Certificates) to finance the cost of certain capital improvements and to refund a portion of the outstanding Series 2010 Certificates.

The annual debt service requirements for the Certificates of Participation, including principal and interest payments, are as follows (in thousands):

Fiscal Year	Principal	Interest	Total
2019	$1,795	$6,026	$7,821
2020	1,980	5,936	7,916
2021	3,420	5,837	9,257
2022	3,675	5,666	9,341
2023	3,940	5,483	9,423
2024-2028	24,505	24,148	48,653
2029-2033	29,335	17,094	46,429
2034-2038	16,185	11,428	27,613
2039-2043	20,645	6,957	27,602
2044-2046	15,040	1,529	16,569
Subtotal	120,520	90,104	210,624
Plus: Unamortized premium	29,755	-	29,755
Total	$150,275	$90,104	$240,379

Notes Payable

The District has one outstanding loan from the State of California to fund reclaimed water projects. The balance on the 2000 loan was $0.4 million at June 30, 2018. The annual interest rate is 0.00%; however, the loan agreement required the District to prepay interest of $0.6 million, which is amortized over the life of the loan. The loan is payable annually in fixed installments of $0.2 million through 2020.

The District also has one outstanding loan, which was assumed as a result of its consolidation with the Santiago County Water District. The original loan amount was $1.3 million. The loan is payable semi-annually with interest at 2.32%. The loan matures in July 2025. The balance of the loan at June 30, 2018 was $0.6 million.

(9) Long-Term Liabilities (Continued)

Notes Payable (Continued)
Amounts required to amortize notes payable at June 30, 2018 are as follows (in thousands):

Fiscal Year	Principal	Interest	Total
2019	$263	$45	$308
2020	265	43	308
2021	72	9	81
2022	74	8	82
2023	76	6	82
2024-2026	197	7	204
Total	$947	$118	$1,065

(10) Unearned Revenue

Unearned revenue at June 30, 2018 consisted of the following (in thousands):

Unearned revenue, current portion	$ 565
Unearned revenue, net of current portion	5,957
Total	$ 6,522

On November 10, 2008, the Board approved the South Orange County – Irvine Ranch Water District Interconnection Projects Participation Agreement (Agreement). The Agreement was effective on November 2008 between the District, City of San Clemente (CSC), Laguna Beach County Water District (LBCWD), Moulton Niguel Water District (MNWD), Santa Margarita Water District (SMWD), South Coast Water District (SCWD), Municipal Water District of Orange County (MWDOC), and Orange County Water District (OCWD). The purpose of the Agreement is to allow the South County water agencies (CSC, LBCWD, MNWD, SMWD, and SCWD) to reserve capacity in the District system and reimburse the District for various new intertie facilities which provide that up to 25 cfs of water supply per month may be made available during a water supply disruption. The total cost of the agreement was paid in full by each party in the fiscal year ended June 30, 2009. The amount of unearned revenue related to the South County Water Agencies is amortized over 20 years, the term of the Agreement. The amount of amortization for the fiscal year ended June 30, 2018 was $0.5 million.

(11) Letters of Credit

The District has letters of credit securing the payment of principal and interest on certain General Obligation Bonds. The letters of credit are issued in favor of the trustees and enable the trustees to make drawings against the letters of credit for payment of principal and interest amounts.

The terms of the letters of credit, as of June 30, 2018 are summarized as follows (in thousands):

Letter of Credit	Trustee	Amount	Expiration Date
Bank of America:			
2009 Series B Consolidated	U.S. Bank	$ 60,671	July 15, 2019
Sumitomo Mitsui:			
2008 Series A Refunding	Bank of New York Mellon	50,232	July 21, 2021
U.S. Bank:			
1993 Consolidated	Bank of New York Mellon	30,303	November 7, 2018
2009 Series A Consolidated	U.S. Bank	60,671	December 22, 2020

(12) Net Position

Net position at June 30, 2018 consisted of the following (in thousands):

Net investment in capital assets:	
Property, plant and equipment, net	$1,890,758
Less:	
Outstanding debt issued to construct capital assets:	
General obligation bonds	(586,493)
Certificates of participation	(150,275)
Notes payable	(947)
Deferred refunding charges	2,422
Total net investment in capital assets	1,155,465
Restricted net position:	
Restricted for water services	289,540
Restricted for sewer services	395,948
Total restricted net position	685,488
Total net position	$1,840,953

(13) Defined Benefit Pension Plan

Plan Descriptions
All qualified employees are eligible to participate in the District's agent multiple-employer public employee defined benefit pension plan which is administrated by the California Public Employees' Retirement System (CalPERS). CalPERS acts as a common investment and administrative agent for participating public entities within the State of California. Benefit provisions and all other requirements are established by State statute and the District's Board of Directors. CalPERS issues publicly available reports that include a full description of the pension plans regarding benefit provisions, assumptions and membership information that can be found on the CalPERS website at www.calpers.ca.gov.

Benefits Provided
CalPERS provides service retirement and disability benefits, annual cost of living adjustments and death benefits to plan members, who must be public employees and beneficiaries. Benefits are based on years of credited service, equal to one year of full time employment. The Plan's provisions and benefits in effect at June 30, 2018, are summarized as follows:

	Hire Date		
	Prior to October 1, 2012	**October 1, 2012 to December 31, 2012**	**On or after January 1, 2013**
Benefit Formula	2.5% @ 55	2.0% @ 60	2.0% @ 62
Benefit Vesting Schedule	5 Years of Service	5 Years of Service	5 Years of Service
Benefit Payments	Monthly for Life	Monthly for Life	Monthly for Life
Minimum Retirement Age	50	50	52
Monthly Benefits, as a % of eligible compensation	2.0% to 2.5%	1.092% to 2.418%	1.0% to 2.5%
Required Employee Contribution Rate	8.00%	7.00%	5.25%
Required Employer Normal Cost Rate	7.081%	7.081%	7.081%

In addition, the District made $3.8 million unfunded liability contribution during the current fiscal year.

Employees Covered
As of June 30, 2016, the following employees were covered by the benefit terms for the Plan:

Active Employees	359
Inactive Employees or Beneficiaries Currently Receiving Benefits	267
Inactive Employees Entitled to But not Yet Receiving Benefits	180
Total	806

(13) Defined Benefit Pension Plan (Continued)

Contributions

Section 20814(c) of the California Public Employees' Retirement Law (PERL) requires that the employer contribution rates for all public employers be determined on an annual basis by the actuary and shall be 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 necessary to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. The employer is required to contribute the difference between the actuarially determined rate and the contribution rate of employees. Employer contribution rates may change if plan contracts are amended. Payments made by the employer to satisfy contribution requirements that are identified by the pension plan terms as plan member contribution requirements are classified as plan member contributions.

Actuarial Methods and Assumptions Used to Determine Total Pension Liability

As of June 30, 2018, the total pension liability was determined using the following actuarial methods and assumptions:

Actuarial Cost Method	Entry Age Normal
Actuarial Assumptions:	
Discount Rate	7.15%
Inflation	2.75%
Salary Increases	Varies by Entry Age and Service
Mortality Rate Table [1]	Derived using CalPERS' Membership Data for all Funds
Post Retirement Benefit Increase	Contract COLA up to 2.75%

[1] The mortality table used was developed based on CalPERS' specific data. The table includes 20 years of mortality improvements using Society of Actuaries Scale BB.

All other actuarial assumptions used in the June 30, 2016 valuation were based on the results of an actuarial experience study for the period from 1997 to 2011, including updates to salary increase, mortality and retirement rates. The Experience Study report can be obtained at the CalPERS' website under Forms and Publications.

(13) Defined Benefit Pension Plan (Continued)

Change in Assumptions

In the fiscal year 2018, the discount rate reduced from 7.65 percent to 7.15 percent.

Discount Rate

The discount rate used to measure the total pension liability was 7.15 percent. To determine whether the municipal bond rate should be used in the calculation of a discount rate for each plan, CalPERS stress tested plans that would most likely result in a discount rate that would be different from the actuarially assumed discount rate. Based on the testing, none of the tested plans run out of assets. Therefore, the current 7.15 percent discount rate is appropriate and the use of the municipal bond rate calculation is not deemed necessary. The long-term expected discount rate of 7.15 percent is applied to all plans in the Public Employees Retirement Fund (PERF). The cash flows used in the testing were developed assuming that both members and employers will make their required contributions on time and as scheduled in all future years. The stress test results are presented in a detailed report called "GASB Crossover Testing Report" that can be obtained at the CalPERS' website under the GASB 68 section.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class.

In determining the long-term expected rate of return, staff took into account both short-term and long-term market return expectations as well as the expected pension fund (PERF) cash flows. Taking into account historical returns of all the Public Employees Retirement Funds' asset classes (which includes the agent plan and two cost-sharing plans or PERF A, B, and C funds), expected compound (geometric) returns were calculated over the short-term (first 10 years) and the long-term (11-60 years) using a building-block approach. Using the expected nominal returns for both short-term and long-term, the present value of benefits was calculated for each PERF fund. The expected rate of return was set by calculating the single equivalent expected return that arrived at the same present value of benefits for cash flows as the one calculated using both short-term and long-term returns. The expected rate of return was then set equal to the single equivalent rate calculated above and rounded down to the nearest one quarter of one percent.

(13) Defined Benefit Pension Plan (Continued)

Discount Rate (Continued)
The table below reflects CalPERS long-term expected real rate of return by asset class. The rate of return was calculated using the capital market assumptions applied to determine the discount rate and asset allocation. The target allocation shown was adopted by the CalPERS Board effective on July 1, 2014.

Asset Class	Current Target Allocation	Real Return Years 1 – 10 [1]	Real Return Years 11+ [2]
Global Equity	47.0%	4.90%	5.38%
Global Fixed Income	19.0%	0.80%	2.27%
Inflation Sensitive	6.0%	0.60%	1.39%
Private Equity	12.0%	6.60%	6.63%
Real Estate	11.0%	2.80%	5.21%
Infrastructure and Forestland	3.0%	3.90%	5.36%
Liquidity	2.0%	(0.40%)	(0.90%)
Total	100%		

[1] An expected inflation of 2.5% used for this period
[2] An expected inflation of 3.0% used for this period

Pension Plan Fiduciary Net Position
The plan fiduciary net position (assets) disclosed in the GASB 68 accounting valuation report may differ from the plan assets reported in the funding actuarial valuation report due to several reasons. First, CalPERS must keep reserves for deficiencies and fiduciary self-insurance. These amounts are excluded for rate setting purposes in the funding actuarial valuation report while required to be included for GASB reporting purposes. In addition, differences may result from early CAFR closing and final reconciled reserves.

(13) Defined Benefit Pension Plan (Continued)

Changes in the Net Pension Liability

The changes in the net pension liability for the Plan were as follows (in thousands):

	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability/(Asset) (c) = (a) - (b)
Balance at June 30, 2017	$238,009	$179,769	$58,240
Changes Recognized for the Period:			
Service Cost	$4,825	$0	$4,825
Interest	17,806	-	17,806
Changes of Assumptions	15,182	-	15,182
Difference between Expected and Actual Experience	(1,702)	-	(1,702)
Contributions – Employer	-	5,450	(5,450)
Contributions – Employees	-	2,280	(2,280)
Net Investment Income	-	20,205	(20,205)
Benefit Payments, Including Refunds of Employee Contributions	(9,721)	(9,721)	-
Administrative Expense	-	(265)	265
Net Change	26,390	17,949	8,441
Balance at June 30, 2018	$264,399	$197,718	$66,681

Sensitivity of the Net Pension Liability to Changes in the Discount Rate

The following presents the net pension liability of the Plan (in thousands), calculated using the discount rate of 7.15 percent, 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 percent) or 1 percentage-point higher (8.15 percent) than the current rate:

	Discount Rate - 1% (6.15%)	Current Discount Rate (7.15%)	Discount Rate + 1% (8.15%)
Plan's Net Pension Liability	$103,624	$66,681	$36,188

(13) Defined Benefit Pension Plan (Continued)

Subsequent Events
There were no subsequent events that would materially affect the results presented in this disclosure.

Recognition of Gains and Losses
Under GASB 68, gains and losses related to changes in total pension liability and fiduciary net position are recognized in pension expense systematically over time.

The first amortized amounts are recognized in pension expense for the year the gain or loss occurs. The remaining amounts are categorized as deferred outflows and deferred inflows of resources related to pensions and are to be recognized in future pension expense.

The amortization period differs depending on the source of the gain or loss:

Net Difference between Projected and Actual Earnings on Pension Plan Investments	5 year straight-line amortization
All Other Amounts	Straight-line amortization over the expected average remaining service lifetime (EARSL) of all members that are provided with benefits (active, inactive, and retired) as of the beginning of the measurement period

The EARSL for the Plan for the fiscal year ended June 30, 2018 was 4.5 years, which was obtained by dividing the total service years of 3,590 (the sum of remaining service lifetimes of the active employees) by 806 (the total number of participants: active, inactive, and retired). Inactive employees and retirees have remaining service lifetimes equal to 0. Total future service is based on the members' probability of decrementing (leaving employment) due to an event other than receiving a cash refund.

(13) Defined Benefit Pension Plan (Continued)

Pension Expense and Deferred Outflows and Deferred Inflows of Resources Related to Pensions

For the fiscal year ended June 30, 2018, the District recognized pension expense of $9.5 million. At June 30, 2018, the District reported deferred outflows and deferred inflows of resources related to pensions from the following sources (in thousands):

	Deferred Outflows of Resources	Deferred Inflows of Resources
Pension Contributions made Subsequent to the Measurement Date	$6,173	$0
Differences between Expected and Actual Experiences	160	2,336
Changes in Assumptions	11,809	1,248
Net Difference between Projected and Actual Earnings on Pension Plan Investments	2,362	-
Total	$20,504	$3,584

$6.2 million reported as deferred outflows of resources related to employer contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the fiscal year ending June 30, 2019. $10.7 million net of deferred outflows of resources and deferred inflows of resources related to pensions will be recognized as pension expense as follows (in thousands):

Fiscal Year	Deferred Outflows / (Inflows) of Resources
2019	$1,596
2020	5,271
2021	3,880
Total	$10,747

(13) Defined Benefit Pension Plan (Continued)

Funding of CalPERS Plan and 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 and in 2013, established a Pension Benefits Trust to substantially fund its PERS unfunded liability. The Pension Benefits Trust provides the District with an alternative to PERS that allows for investment by a professional fund management team selected and monitored by the District. The Pension Benefits Trust holds the funding contributions for the District pending future remittance to the CalPERS pension trust fund which will pay all retiree benefit payments to employees associated with the plan. Future contributions will be transferred from the Pension Benefits Trust to CalPERS at the District's discretion.

During the current fiscal year, the District contributed an additional $1.9 million to the Pension Benefits Trust. As of June 30, 2018, the total value of the assets in the Pension Benefits Trust was approximately $73.1 million.

The following schedule shows the District's total pension liability, CalPERS assets, Pension Benefits Trust assets, and the relationship of the total pension liability (in thousands).

Fiscal Year [1]	Total Pension Liability	CalPERS Assets	Net Pension Liability/ (Asset)	Pension Benefits Trust Assets	CalPERS Assets as a Percentage of the Total Pension Liability	Pension Benefits Trust Assets as a Percentage of the Total Pension Liability	Total Pension Assets as a Percentage of the Total Pension Liability
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%

[1] As of the measurement date June 30, 2015, 2016, and 2017 respectively.

(14) Other Post-Employment Benefits

Plan Descriptions
The District administers three other post-employment benefits (OPEB) plans which are subject to changes based on the discretion of the Board:

- **PEMHCA:** The District provides an agent multiple-employer defined benefit healthcare plan to retirees through the California Public Employee Retirement System (CalPERS) under the California Public Employees Medical and Hospital Care Act (PEMHCA), commonly referred to as PERS Health. Employees are eligible for this lifetime benefit if they retire from the District and are eligible to begin drawing a PERS pension. Participation in PEMHCA is financed in part by the District through a contribution of $133 per month per participating retiree.

- **RHCAP**: The District also administers a single-employer defined benefit Retiree Health Costs Assistance Program (RHCAP), which provides medical benefits to covered employees and their eligible dependents. The duration of the benefit is based on employees' years of service as follows: 12 months of benefits for employees with 3-7 years of service; 24 months of benefits for employees with 8-9 years of services; 36 months of benefits for employees with 10-14 years of service; 48 months of benefits for employees with 15-19 years of service; and 60 months of benefits for employees with at least 20 years of service. Employees are eligible for this benefit if they retire from the District on or after age 55 with at least three years of service. The District reimburses retirees for eligible healthcare costs of up to $160 per month (for retirees with at least three years of service at the District), to a maximum of $600 per month after 25 years of service.

- **Retiree Death Benefit Only Plan**: The District administers a single-employer defined benefit plan. Employees hired on or before December 31, 2008 and who retire from the District on or after age 55 with at least 10 years of service at the District are eligible for term life insurance with a face amount equal to 100% of their final annual salary at the time of retirement. Employees hired after December 31, 2008 are not currently eligible for this plan.

(14) Other Post-Employment Benefits (Continued)

Employees Covered
As of the June 30, 2017 actuarial valuation, the following employees were covered by the benefit terms under each Plan:

	PEMHCA	RHCAP	Retiree Death Benefit Only	Total
Inactive Employees or Beneficiaries Currently Receiving Benefits	85	52	-	137
Inactive Employees Entitled to But not Yet Receiving Benefits	176	-	166	342
Active Employees	330	330	165	825
Total	591	382	331	1,304

Contributions
The contributions for the District's various other post-employment benefits are based on pay-as-you-go financing requirements.

For the fiscal year ended June 30, 2018, the District's cash contributions were $0.5 million and estimated implied subsidy was $0.2 million resulting in total payments of $0.7 million. The following shows contributions by each OPEB plan (in thousands):

	PEMHCA	RHCAP	Retiree Death Benefit Only	Total
Cash Contributions	$144	$306	$20	$470
Estimated Implied Subsidy	199	-	-	199
Total	$343	$306	$20	$669

(14) Other Post-Employment Benefits (Continued)

Actuarial Methods and Assumptions Used to Determine Total OPEB Liability
The District's OPEB liability was measured as of June 30, 2017 and the total OPEB liability used to calculated the OPEB liability was determined by an actuarial valuation dated June 30, 2016 that was rolled forward to determine the June 30, 2017 total OPEB liability, based on the following actuarial methods and assumptions:

	PEMHCA	RHCAP	Retiree Death Benefit Only
Actuarial Method	Entry Age Normal		
Actuarial Assumptions:			
Contribution Policy	Pay-as-you-go		
Discount Rate	3.581% at June 30, 2017 and 2.85% at June 30, 2016 Bond Buyer 20-Bond Index		
Inflation	2.75% per Annum		
Mortality, Disability, Termination, Retirement	CalPERS 1997-2011 Experience Study		
Mortality Improvement	Mortality projected fully generational with Scale MP-2016		
Trend	Non-Medicare – 6.25% for 2018, decreasing 0.5% Medicare – 6.45% for 2018, decreasing to 4.75% for 2021 and later	Not Applicable	
Minimum Increase	4.25% Increase per Year	Not Applicable	
Participation for Future Retirees	Medical Coverage: 100% if eligible for RHCAP. Otherwise, 50% if currently in District's medical plan, 0% if	100% Participate	

Change in Assumptions
For the fiscal year ended June 30, 2017 measurement period, the discount rate increased from 2.85 percent to 3.581 percent.

Discount Rate
The discount rate used to measure the total OPEB liability was 3.581 percent which was based on the Bond Buyer 20-Bond G.O. Index.

(14) Other Post-Employment Benefits (Continued)

Changes in the OPEB Liability
The changes in the OPEB liability were as follows (in thousands):

	PEMHCA	RHCAP	Retiree Death Benefit Only	Total
Balance at June 30, 2017	$10,473	$3,293	$1,620	$15,386
Changes Recognized for the Period:				
Service Cost	549	161	32	742
Interest	310	94	47	451
Changes in Assumptions	(1,173)	(136)	(92)	(1,401)
Benefit Payments and Refunds	(304)	(286)	(10)	(600)
Net Change	(618)	(167)	(23)	(808)
Balance at June 30, 2018	$9,855	$3,126	$1,597	$14,578

Sensitivity of the OPEB Liability to Changes in the Discount Rate
The following presents the OPEB liability (in thousands), calculated using a discount rate that is one percentage point lower or one percentage higher than the current rate for the measurement period ended June 30, 2017.

OPEB Liability	Discount Rate - 1% (2.581%)	Current Discount Rate (3.581%)	Discount Rate + 1% (4.581%)
PEMHCA	$11,514	$9,855	$8,541
RHCAP	3,314	3,126	2,949
Retiree Death Benefit Only	1,725	1,597	1,484
Total	$16,553	$14,578	$12,974

(14) Other Post-Employment Benefits (Continued)

Sensitivity of OPEB Liability to Changes in the Healthcare Trend Rates

The following presents the OPEB liability (in thousands), calculated using health care cost trend rates that are one percentage point lower or one percentage higher than the current rate for the measurement period ended June 30, 2017.

OPEB Liability	Healthcare Trend Rates -1%	Curent Healthcare Trend Rates	Healthcare Trend Rates +1%
PEMHCA	$8,314	$9,855	$11,848
RHCAP	3,126	3,126	3,126
Retiree Death Benefit Only	1,597	1,597	1,597
Total	$13,037	$14,578	$16,571

Subsequent Events

There were no subsequent events that would materially affect the results presented in this disclosure.

Amortization of Deferred Inflows of Resources

Gains and losses related to changes in total OPEB liability is recognized in OPEB expense systematically over time.

The first amortized amounts are recognized in OPEB expense for the fiscal year the gain or loss occurs. The remaining amounts are categorized as deferred inflows of resources related to OPEB and are to be recognized in future OPEB expense. The amortization period for the deferred inflows of resources was 8.4 years for PEMHCA, 9.1 years for RHCAP, and 5 years for Retiree Death Benefit Only. The amortization period differs depending on the source of the gain or loss. Straight line amortization over the expected average remaining service lifetime (EARSL) of all members that are provided with benefits (active and retired) as of the beginning of the measurement period is used for each Plan.

(14) Other Post-Employment Benefits (Continued)

OPEB Expense and Deferred Outflows and Deferred Inflows of Resources Related to OPEB

For the fiscal year ended June 30, 2018, the District recognized OPEB expense of $1.0 million which consisted of $0.7 million for PEMHCA, $0.2 million for Retiree Health Costs Reimbursement and $0.1 million for Retiree Death Benefit Only. At June 30, 2018, the District reported deferred outflows and deferred inflows of resources related to OPEB from the following sources (in thousands):

	PEMHCA	RHCAP	Retiree Death Benefit Only	Total
Deferred Outflows of Resources:				
OPEB Contributions made Subsequent to the Measurement Date	$343	$306	$20	$669
Deferred Inflows of Resources:				
Changes in Assumptions	$1,014	$121	$72	$1,207

$0.7 million reported as deferred outflows of resources related to employer contributions subsequent to the measurement date will be recognized as a reduction of the OPEB liability in the fiscal year ending June 30, 2019. $1.2 million deferred inflows of resources related to OPEB will be recognized as OPEB expense as follows (in thousands):

Fiscal Year	PEMHCA	RHCAP	Benefit Only	Total
2019	$140	$15	$18	$173
2020	140	15	18	173
2021	140	15	18	173
2022	140	15	18	173
2023	140	15	-	155
Thereafter	314	46	-	360
Total	$1,014	$121	$72	$1,207

(15) Deferred Compensation Plans

Retirement for Part Time Employees

The District provides pension benefits for all of its part-time employees through a defined contribution plan, in lieu of providing social security benefits. In a defined contribution plan, benefits depend solely on amounts contributed to the plan plus investment earnings. The plan is administered as part of the District's Section 457 plan. All part-time and seasonal employees are eligible to participate from the date of employment. Federal legislation requires contributions of at least 7.5% to a retirement plan. For the year ended June 30, 2018, the District's payroll covered by the plan was $198,303. The District made no employee contributions. Employees contributed $14,870 (7.5% of current covered payroll) for the year ended June 30, 2018.

Deferred Compensation

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 (Plan) whereby they can voluntarily contribute a portion of their earnings into a tax-deferred fund administered by the District and invested through a third party provider. Pursuant to the Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA), 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 2018 is $18,500.

Effective January 1, 2008, for employees with one year or more of services, the District provides 100% matching up to an annual maximum of 3% of the employee's base salary after one year of service. Such employer contribution amounts are deposited into a money purchase plan pursuant to Section 401(a) of the Internal Revenue Code. Effective July 1, 2015, Managers, Supervisors, and Confidential employees who have completed two years of regular, full-time service with the District, are eligible for an additional District contribution. Beginning with the first month following an employee's second anniversary date, the District will deposit to the employee's 401 (a) Plan account on a per-pay period basis an amount equal to 1% of the employee's base salary. During the fiscal year ended June 30, 2018, the District contributed $947,104 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 basic financial statements of the District.

(16) Commitments and Contingencies

Legal Actions
The District is a defendant in various legal actions arising out of the conduct of the District's operations. Management believes that, based on current knowledge, the outcome of these matters will not have a material adverse effect on the District's financial position.

(17) Risk Management

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 for which the District carries commercial insurance.

Property, Boiler and Machinery insurance is provided by the California State Association of Counties Excess Insurance Authority (CSAC-EIA). Property insurance includes flood insurance for all properties, and earthquake insurance for the District's real estate investment properties. General and excess liability coverage and workers compensation insurance are provided through participation in the CSAC-EIA. Pollution and legal liability coverage for the Irvine Desalter Project is provided by a policy with Illinois Union Insurance Company.

Liabilities are reported when it is probable that a loss has occurred and the amount of the loss can be reasonably estimated. Liabilities include an amount for claims that have been incurred but not reported (IBNRs). The result of the process to estimate the claims liability is not an exact amount as it depends on many complex factors, such as inflation, changes in legal doctrines, and damage awards. Accordingly, claims are reevaluated periodically to consider the effects of inflation, recent claim settlement trends (including frequency and amount of payouts), and other economic and social factors. The estimate of the claims liability also includes amounts for incremental claim adjustment expenses related to specific claims and other claim adjustment expenses regardless of whether allocated to specific claims. Estimated recoveries, for example from salvage or subrogation, are another component of the claims liability estimate. Excess coverage insurance policies cover individual general liability claims in excess of $100,000, property claims in excess of $25,000 and workers compensation claims in excess of $125,000. Settlements have not exceeded excess coverage for each of the past three fiscal years.

Changes in the reported liability resulted from the following (in thousands):

Fiscal Year	Liability Beginning of Year	Claims and Changes in Estimates	Claim Payments	Liability End of Year	Due within One Year	Due in more than One Year
2017	$1,162	$285	($21)	$1,426	$675	$751
2018	$1,426	$157	($189)	$1,394	$448	$946

(18) Restatement of Net Position

During the fiscal year ended June 30, 2018, the District recorded the following prior period adjustments (in thousands):

Net position at beginning of year	$ 1,772,014
Prior period adjustments:	
GASB Implementation Guide No. 2017-1 net pension liability	(63,333)
GASB Implementation Guide No. 2017-1 Pension Benefits Trust Assets	66,110
GASB Statement No. 75 OPEB	(10,967)
Total prior period adjustments	(8,190)
Net position at beginning of year, as restated	$ 1,763,824

The District implemented GASB Implementation Guide No. 2017-1 for accounting and reporting of net pension liability and Pension Benefits Trust. The objective of this Implementation Guide is to provide guidance that clarifies, explains, or elaborates on GASB Statements. The Implementation Guide requires the assets in the irrevocable Pension Benefits Trust to be reported as assets of the District. In addition, the balances and activities of the Pension Benefits Trust are not considered part of the pension plan and cannot offset the net pension liability for financial statement reporting. The requirements of this Implementation Guide are effective for reporting periods beginning after June 15, 2017.

In addition, the District implement GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*. The primary objective of this Statement is to improve accounting and financial reporting by state and local governments for postemployment benefits other than pensions (other postemployment benefits or OPEB). This Statement replaces the requirements of Statements No. 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions*, as amended, and No. 57, *OPEB Measurements by Agent Employers and Agent Multiple-Employer Plans*, for OPEB. This Statement is effective for fiscal years beginning after June 15, 2017.

Irvine Ranch Water District
Required Supplementary Information
For the Fiscal Year Ended June 30, 2018

(1) Defined Benefit Pension Plan – California Public Employees' Retirement System

(a) Schedule of Changes in the Net Pension Liability and Related Ratio (in thousands) [1]

	Measurement Date: June 30,			
	2017	2016	2015	2014
Total Pension Liability				
Service Cost	$4,825	$4,066	$4,005	$3,942
Interest	17,806	17,092	16,343	15,436
Changes of Assumptions	15,182	-	(4,127)	-
Difference between Expected and Actual Experience	(1,702)	(1,856)	530	-
Benefit Payments, Including Refunds of Employee Contributions	(9,721)	(9,089)	(8,365)	(7,631)
Net Change in Total Pension Liability	26,390	10,213	8,386	11,747
Total Pension Liability – Beginning	238,009	227,796	219,410	207,663
Total Pension Liability – Ending (a)	$264,399	$238,009	$227,796	$219,410
Plan Fiduciary Net Position				
Contributions – Employer	$5,450	$4,926	$4,524	$4,330
Contributions – Employees	2,280	2,519	2,170	2,712
Net Investment Income	20,205	946	4,049	26,787
Benefit Payments, Including Refunds of Employee Contributions	(9,721)	(9,089)	(8,365)	(7,632)
Administrative Expense	(265)	(110)	(208)	-
Net Change in Fiduciary Net Position	17,949	(808)	2,170	26,197
Plan Fiduciary Net Position – Beginning	179,769	180,577	178,407	152,210
Plan Fiduciary Net Position – Ending (b)	$197,718	$179,769	$180,577	$178,407
Plan Net Pension Liability – Ending (a) - (b)	$66,681	$58,240	$47,219	$41,003
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	74.78%	75.53%	79.27%	81.31%
Covered Payroll	$30,823	$28,802	$27,596	$26,264
Plan Net Pension Liability as a Percentage of Covered Payroll	216.33%	202.21%	171.11%	156.12%

[1] Historical information is required only for measurement periods from which GASB 68 is applicable. Fiscal Year 2015 was the first year of GASB 68 implementation.

(1) Defined Benefit Pension Plan – California Public Employees' Retirement System (Continued)

(a) Schedule of Changes in the Net Pension Liability and Related Ratio (in thousands) (Continued)

Notes to Schedule of Changes in the Net Pension Liability and Related Ratio
Benefit Changes: The figures above do not include any liability impact that may have resulted from plan changes which occurred after June 30, 2016. This applies for voluntary benefit changes as well as any offers of Two Years Additional Service Credit.

Changes of Assumptions: In 2017, the discount rate reduced from 7.65 percent to 7.15 percent. In 2016, there were no changes. In 2015, the discount rate was changed from 7.5 percent (net of administrative expense) to 7.65 percent (without a reduction for pension plan administration expense.) In 2014, the discount rate was 7.5 percent.

(b) Schedule of Contributions (in thousands) [1]

	Fiscal Year Ended June 30			
	2018	2017	2016	2015
Actuarially Determined Contribution	$6,173	$5,450	$4,926	$4,524
Contributions in Relation to the Actuarially Determined Contribution	(6,173)	(5,450)	(4,926)	(4,524)
Contribution Deficiency (Excess)	$0	$0	$0	$0
Covered Payroll	$30,556	$30,823	$28,802	$27,596
Contributions as a Percentage of Covered Payroll	20.20%	17.68%	17.10%	16.39%

[1] Historical information is required only for measurement periods from which GASB 68 is applicable. Fiscal Year 2015 was the first year of GASB 68 implementation.

(1) Defined Benefit Pension Plan – California Public Employees' Retirement System (Continued)

(b) Schedule of Contributions (in thousands) (Continued)

Notes to Schedule of Contributions
The actuarial methods and assumptions used to set the actuarially determined contributions for the fiscal year ended June 30, 2018 were from the June 30, 2015 public agency valuations.

Actuarial Cost Method	Entry Age Normal
Amortization Method/Period	Level Percent of Payroll
Asset Valuation Method	Market value of Assets
Inflation	2.75%
Salary Increases	Varies by Entry Age and Service
Payroll Growth	3.00%
Investment Rate of Return	7.50% Net of Pension Plan Investment and Administrative Expenses; includes Inflation
Retirement Age	The probabilities of Retirement are based on the 2014 CalPERS Experience Study for the period from 1997 to 2011.
Mortality	The probabilities of mortality are based on the 2014 CalPERS Experience Study for the period from 1997 to 2011. Pre-retirement and Post-retirement mortality rates include 20 years of projected mortality improvement using Scale BB published by the Society of Actuaries.

(2) Other Post-Employment Benefits

(a) Schedule of Changes in the OPEB Liability and Related Ratio (in thousands)[1]

PEMHCA	
Measurement Date: June 30	2017
Service Cost	$549
Interest	310
Changes of Assumptions	(1,173)
Benefit Payments Including Refunds	(304)
Net Change in Total OPEB Liability	(618)
Total OPEB Liability – Beginning	10,473
Total OPEB Liability – Ending	$9,855
Covered Payroll	$30,823
OPEB Liability as a Percentage of Covered Payroll	31.97%

(2) Other Post-Employment Benefits (Continued)

(a) Schedule of Changes in the OPEB Liability and Related Ratio (in thousands)[1] (Continued)

RHCAP	
Measurement Date: June 30	2017
Service Cost	$161
Interest	94
Changes of Assumptions	(136)
Benefit Payments Including Refunds	(286)
Net Change in Total OPEB Liability	(167)
Total OPEB Liability – Beginning	3,293
Total OPEB Liability – Ending	$3,126
Covered Payroll	$30,823
OPEB Liability as a Percentage of Covered Payroll	10.14%

Retiree Death Benefit Only	
Measurement Date: June 30	2017
Service Cost	$32
Interest	47
Changes of Assumptions	(92)
Benefit Payments Including Refunds	(10)
Net Change in Total OPEB Liability	(23)
Total OPEB Liability – Beginning	1,620
Total OPEB Liability – Ending	$1,597
Covered Payroll	$16,028
OPEB Liability as a Percentage of Covered Payroll	9.96%

[1] Historical information is required only for measurement periods from which GASB 75 is applicable. Fiscal Year 2018 was the first year of GASB 75 implementation.

Notes to Schedule of Changes in the OPEB Liability and Related Ratio
Changes of Assumptions: In 2017, the discount rate increased from 2.85 percent to 3.581 percent.

Irvine Ranch Water District

Required Supplementary Information
For the Fiscal Year Ended June 30, 2018
(Continued)

(2) Other Post-Employment Benefits (Continued)

(b) Schedule of Contributions (in thousands) [1]

PEMHCA	
Fiscal Year Ended June 30	2018
Contributions	$343
Covered Payroll	$33,389
Contributions as a Percentage of Covered Payroll	1.03%

RHCAP	
Fiscal Year Ended June 30	2018
Contributions	$306
Covered Payroll	$33,389
Contributions as a Percentage of Covered Payroll	0.92%

Retiree Death Benefit Only	
Fiscal Year Ended June 30	2018
Contributions	20
Covered Payroll	$17,524
Contributions as a Percentage of Covered Payroll	0.11%

[1] Historical information is required only for measurement periods from which GASB 75 is applicable. Fiscal Year 2018 was the first year of GASB 75 implementation.

Statistical Section

Irvine Ranch Water District
Fiscal Year Ended June 30, 2018

This section of the Irvine Ranch Water District's Comprehensive Annual Financial Report presents detailed information as a context for understanding what the information in the financial statements, note disclosures, and required supplementary information says about the District's overall financial health.

<u>Financial Trends Schedules</u> – These schedules contain trend information to help the reader understand how the District's financial performance and well-being have changed over time.

Net Position
Changes in Net Position

<u>Revenue Capacity Schedules</u> – These schedules contain information to help the reader assess the factors affecting the District's ability to generate its property and sales taxes.

Water Sold by Type of Customer
Water Rates
Largest Water Customers
Sewer Rates
Largest Sewer Customers
Ad Valorem Property Tax Rates

<u>Debt Capacity Schedules</u> – These schedules present information to help the reader assess the affordability of the District's current levels of outstanding debt and the District's ability to issue additional debt in the future.

Assessed Valuation and Estimated Actual Value of Taxable Property and 1% Property Tax Revenue
Direct and Overlapping Property Tax Rates
Principal Property Taxpayers
Property Tax Collections/Delinquency
Outstanding Debt by Type
Outstanding General Obligation Bonds by Improvement District
Ratio of General Obligation Debt to Assessed Values
Ratio of Annual Debt Service Expenditures to Total General Expenditures
Debt Service Coverage

Demographic and Economic Information – These schedules offer demographic and economic indicators to help the reader understand the environment within which the District's financial activities take place and to help make comparisons over time and with other governments.

Principal Employers
Demographic and Economic Statistics

Operating Information – These schedules contain information about the District's operations and resources to help the reader understand how the District's financial information relates to the services the District provides and the activities it performs.

Operating Indicators by Function – Water and Sewer Service Connections
Operating Indicators by Function – New Service Connections
Operating Indicators by Function – Average Monthly Usage
Source of Supply and Demand in Acre Feet
Capital Asset Statistics
Full-Time Employees

Irvine Ranch Water District

Net Position

For the Past Ten Fiscal Years

(in millions)

	Fiscal Year				
	2009	2010	2011	2012	2013 (1)
Assets					
Current & other assets	$1,224.1	$1,172.3	$1,300.0	$1,167.0	$1,128.2
Capital assets	1,423.1	1,396.6	1,430.3	1,508.8	1,506.1
Total assets	2,647.2	2,568.9	2,730.3	2,675.8	2,634.3
Deferred Outflows of Resources	0.0	37.4	32.7	53.0	47.3
Liabilities					
Current and other liabilities	99.4	67.3	97.7	99.0	672.7
Long-term liabilities	1,190.8	1,204.3	1,323.7	1,281.8	647.7
Total liabilities	1,290.2	1,271.6	1,421.4	1,380.8	1,320.4
Deferred Inflows of Resources	0.0	0.0	0.0	0.0	0.0
Net Position					
Net investment in capital assets	994.3	929.5	900.6	943.1	918.1
Restricted for water services	271.7	249.8	213.6	179.3	185.4
Restricted for sewer services	91.0	155.4	227.4	225.6	257.7
Total net position	$1,357.0	$1,334.7	$1,341.6	$1,348.0	$1,361.2

Irvine Ranch Water District

Net Position
For the Past Ten Fiscal Years

(in millions)
(Continued)

	Fiscal Year				
	2014 (1)	2015 (2)	2016 (3)	2017 (4)	2018 (5)
Assets					
Current & other assets	$462.7	$332.9	$456.6	$735.1	$797.4
Capital assets	1,567.5	1,647.4	1,731.6	1,848.3	1,890.8
Total assets	2,030.2	1,980.3	2,188.2	2,583.4	2,688.2
Deferred Outflows of Resources	37.7	43.3	49.7	61.6	41.7
Liabilities					
Current and other liabilities	54.9	51.5	65.4	78.5	52.5
Long-term liabilities	623.4	602.8	589.8	790.9	831.7
Total liabilities	678.3	654.3	655.2	869.4	884.2
Deferred Inflows of Resources	0.0	14.6	4.4	3.6	4.8
Net Position					
Net investment in capital assets	981.3	1,074.6	1,178.5	1,087.9	1,155.5
Restricted for water services	165.1	148.6	221.5	264.3	289.5
Restricted for sewer services	243.2	131.5	178.3	419.8	395.9
Total net position	$1,389.6	$1,354.7	$1,578.3	$1,772.0	$1,840.9

Source: IRWD Basic Financial Statements

Notes:

(1) The District implemented GASB Statement No. 65 for the fiscal year ended June 30, 2014 and restated the financial statements for the fiscal year ended June 30, 2013.

(2) The District implemented GASB Statement Nos. 68 and 71 for the fiscal year ended June 30, 2015. The District did not restate the prior years' financial statements because the data for the prior years was not readily available.

(3) The District implemented GASB Statement No. 72 for the fiscal year ended June 30, 2016. The District did not restate the prior years' financial statements because the data for the prior years was not readily available.

(4) The prior period adjustment for the fiscal year ended June 30, 2017 was related to the reclassification of certain assets from capital assets to real estate investments. The District did not restate the prior years' financial statements because the data for the prior years was not readily available.

(5) The Districted implemented GASB Implmentation Guide No. 2017-1 and GASB Statement No. 75 for the fiscal year ended June 30, 2018. The District did not restate the prior years' financial statements because the data for the prior years was not readily available.

Irvine Ranch Water District

Changes in Net Position
For the Past Ten Fiscal Years
(in thousands)

	Fiscal Year				
	2009	2010	2011	2012	2013
Operating Revenues					
Water sales and service charges	$50,940	$51,268	$54,796	$57,558	$62,565
Sewer sales and service charges	41,157	45,344	45,375	49,234	53,085
Total operating revenues	92,097	96,612	100,171	106,792	115,650
Operating Expenses					
Water					
Water services	42,273	43,591	45,961	44,883	51,163
General and administrative	12,536	13,349	12,327	12,305	14,619
Sewer					
Sewer services	28,696	30,992	33,382	33,086	38,189
General and administrative	7,712	6,651	6,569	7,792	8,048
Depreciation	34,699	39,444	43,592	41,378	47,539
Total operating expenses	125,916	134,027	141,831	139,444	159,558
Operating income (loss)	(33,819)	(37,415)	(41,660)	(32,652)	(43,908)
Nonoperating Revenues (Expenses)					
Property taxes	36,240	38,392	38,679	38,062	41,068
Investment income	4,365	2,191	2,599	3,132	224
Increase (decrease) in fair value of investments	9,837	(7,782)	(20,172)	(23,586)	(29,180)
JPA investment income	57,676	55,726	53,708	51,530	49,178
Real estate income	10,792	9,701	9,719	11,039	10,789
Increase (decrease) in fair value of real estate investments	0	0	0	0	0
Pension benefits trust interest and dividents income	0	0	0	0	0
Increase (decrease) in fair value of pension benefits trust investments	0	0	0	0	0
Other income	9,918	10,706	7,987	6,141	8,323
Interest expense	(6,061)	(9,962)	(14,174)	(16,924)	(16,770)
JPA interest expense	(54,686)	(51,530)	(41,264)	(39,603)	(28,884)
Real estate expense	(5,698)	(6,186)	(6,004)	(6,016)	(6,047)
Pension benefits trust expense	0	0	0	0	0
Other expenses	(1,535)	(1,286)	(989)	(10,713)	(6,110)
Total nonoperating revenue (expenses)	60,848	39,970	30,089	13,062	22,591
Income (loss) before capital contributions	27,029	2,555	(11,571)	(19,590)	(21,317)
Contributed capital assets	32,517	17,963	18,506	25,948	34,535
Increase (decrease) in net position	59,546	20,518	6,935	6,358	13,218
Net position at beginning of year	1,278,703	1,357,046	1,334,666	1,341,601	1,347,959
Prior period adjustments	18,797	(42,898)	0	0	0
Net position at end of year	$1,357,046	$1,334,666	$1,341,601	$1,347,959	$1,361,177

Irvine Ranch Water District
Changes in Net Position
For the Past Ten Fiscal Years
(in thousands)

(Continued)

	Fiscal Year				
	2014	2015 [1]	2016 [2]	2017 [3]	2018 [4]
Operating Revenues					
Water sales and service charges	$66,321	$70,110	$76,692	$77,252	$84,575
Sewer sales and service charges	58,109	62,808	67,682	72,054	76,789
Total operating revenues	124,430	132,918	144,374	149,306	161,364
Operating Expenses					
Water					
Water services	57,624	57,978	57,499	55,296	63,671
General and administrative	13,660	9,319	11,827	15,906	20,554
Sewer					
Sewer services	37,715	54,575	40,413	42,752	38,115
General and administrative	8,612	5,826	7,625	9,059	12,332
Depreciation	46,809	51,015	58,330	61,841	63,877
Total operating expenses	164,420	178,713	175,694	184,854	198,549
Operating income (loss)	(39,990)	(45,795)	(31,320)	(35,548)	(37,185)
Nonoperating Revenues (Expenses)					
Property taxes	42,751	42,431	46,303	51,321	57,247
Investment income	1,079	1,214	1,249	2,843	4,133
Increase (decrease) in fair value of investments	(16,177)	(28)	(32)	(1,624)	(1,571)
JPA investment income	29,522	0	0	0	0
Real estate income	11,899	12,518	13,056	13,434	16,689
Increase (decrease) in fair value of real estate investments	0	0	5,597	10,084	4,091
Pension benefits trust interest and dividents income	0	0	0	0	3,003
Increase (decrease) in fair value of pension benefits trust investments	0	0	0	0	2,173
Other income	10,974	7,899	7,837	7,117	7,504
Interest expense	(15,836)	(13,903)	(15,415)	(18,784)	(26,034)
JPA interest expense	(17,166)	0	0	0	0
Real estate expense	(6,139)	(6,251)	(4,363)	(4,358)	(13,284)
Pension benefits trust expense	0	0	0	0	(51)
Other expenses	(7,163)	(9,752)	(2,800)	(1,997)	(174)
Total nonoperating revenue (expenses)	33,744	34,128	51,432	58,036	53,726
Income (loss) before capital contributions	(6,246)	(11,667)	20,112	22,488	16,541
Contributed capital assets	34,684	42,540	53,278	41,913	60,588
Increase (decrease) in net position	28,438	30,873	73,390	64,401	77,129
Net position at beginning of year	1,361,177	1,389,615	1,354,663	1,578,311	1,772,014
Prior period adjustments	0	(65,825)	150,258	129,302	(8,190)
Net position at end of year	$1,389,615	$1,354,663	$1,578,311	$1,772,014	$1,840,953

Source: IRWD Basic Financial Statements

Notes:

[1] The District implemented GASB Statement Nos. 68 and 71 for the fiscal year ended June 30, 2015 The District did not restate the prior years' financial statements because the data for the prior years was not readily available.

[2] The District implemented GASB Statement No 72 for the fiscal years ended June 30, 2016 and 2017 The District did not restate the prior years' financial statements because the data for the prior years was not readily available

[3] The prior period adjustment for the fiscal year ended June 30, 2017 was related to the reclassification of certain assets from capital assets to real estate investments The District did not restate the prior years' financial statements because the data for the prior years was not readily available.

[4] The Districted implemented GASB Implmentation Guide No. 2017-1 and GASB Statement No. 75 for the fiscal year ended June 30, 2018 The District did not restate the prior years' financial statements because the data for the prior years was not readily available.

Irvine Ranch Water District

Water Sold By Type of Customer (in Acre Feet)
For the Past Ten Fiscal Years

	Fiscal Year									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Residential	34,189	31,721	31,127	32,262	33,166	34,068	32,375	28,573	30,384	32,848
Commercial	8,382	7,586	7,632	8,021	8,353	8,803	8,391	8,377	8,179	8,769
Industrial	5,009	4,711	4,733	4,713	4,783	4,891	6,233	5,118	5,084	4,923
Public Authority	2,571	2,293	2,305	2,373	2,458	2,458	2,583	2,234	2,282	2,193
Construction & Temporary	133	127	174	275	378	739	863	1,230	874	1,292
Landscape	5,789	4,712	4,252	4,741	5,316	5,671	5,327	3,843	4,126	4,740
Agricultural	7,015	5,234	3,208	2,433	2,749	3,277	2,547	2,216	1,856	1,839
Landscape/Agricultural	24,415	20,951	20,147	25,011	28,259	30,021	32,139	26,386	26,374	29,736
Total	87,503	77,335	73,578	79,829	85,462	89,928	90,458	77,977	79,159	86,340

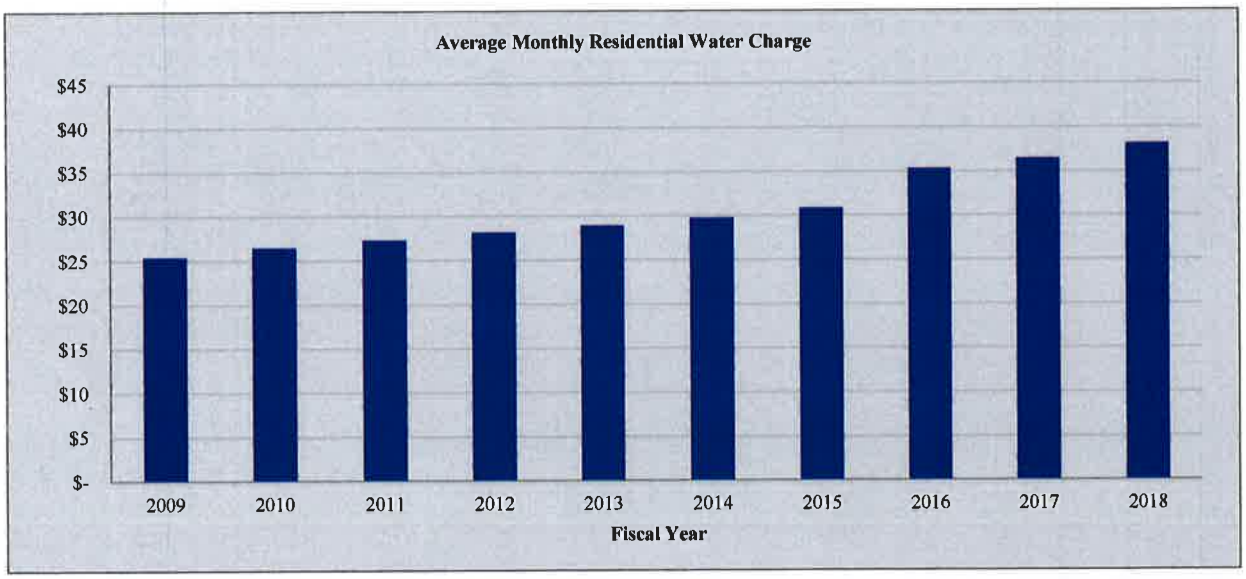
Source: Irvine Ranch Water District

Irvine Ranch Water District

Water Rates [1]

For the Past Ten Fiscal Years

Fiscal Year	Fixed Service Charge	Commodity Rate (per ccf)	Average Monthly Residential Charge
2009	$7.50	$1.07	$25.48
2010	$7.75	$1.15	$26.53
2011	$8.00	$1.21	$27.38
2012	$8.75	$1.22	$28.23
2013	$9.30	$1.24	$28.98
2014	$9.85	$1.27	$29.83
2015	$10.50	$1.34	$30.94
2016	$10.30	$1.62	$35.38
2017	$10.30	$1.65	$36.48
2018	$10.30	$1.70	$38.18



Source: Irvine Ranch Water District

Note:

[1] The water charge to the average residential customer is based upon an average of 18 ccf per month. The first 8 ccf are at the District's low volume rate, which is $0.34 less than the commodity base rate. The fixed monthly service charge includes components to add enhancement and replacement funds to assist with the District's aging infrastructure.

Irvine Ranch Water District

Largest Water Customers

Current Year and Nine Years Ago

Customer Name	2018 Total Sales	2018 Rank	2018 Percentage of Water Sales Revenues	2009 Total Sales	2009 Rank	2009 Percentage of Water Sales Revenues
TIC-Irvine Apartment Communities	$6,941,912	1	8.21%	$3,200,751	1	6.28%
University of California - Irvine	1,349,006	2	1.60%	1,477,661	4	2.90%
Jazz Semiconductor	1,070,982	3	1.27%	586,595	6	1.15%
B Braun Medical Inc	902,753	4	1.07%	469,950	9	0.92%
City of Irvine	364,571	5	0.43%	1,735,005	3	3.41%
ERP Operating LP	291,458	6	0.34%			
Woodbridge Village Association	285,304	7	0.34%	476,952	8	0.94%
Allergan Sales, LLC	238,503	8	0.28%			
Maruchan Inc	236,661	9	0.28%			
City of Lake Forest	230,548	10	0.27%			
The Irvine Company - Agricultural Division				1,948,689	2	3.83%
The Irvine Company - Spectrum Office				703,300	5	1.38%
Irvine Unified School District				479,843	7	0.94%
Hines Nurseries				420,649	10	0.83%
Total	$11,911,698		14.08%	$11,499,395		22.58%

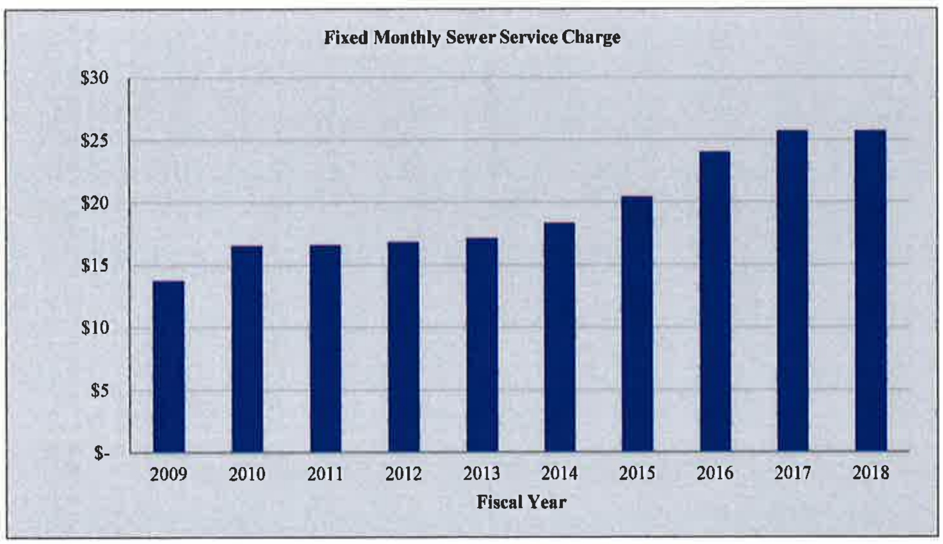
Source: Irvine Ranch Water District

Irvine Ranch Water District

Sewer Rates[1]

For the Past Ten Fiscal Years

Fiscal Year	Fixed Monthly Service Charge
2009	$13.80
2010	$16.60
2011	$16.65
2012	$16.90
2013	$17.20
2014	$18.40
2015	$20.50
2016	$24.05
2017	$25.75
2018	$25.75



Source: Irvine Ranch Water District

Note:

[1] The fixed monthly service charge includes components to add enhancement and replacement funds to assist with the District's aging infrastructure.

Irvine Ranch Water District

Largest Sewer Customers

Current Year and Nine Years Ago

	2018			2009		
Customer Name	Total Sales	Rank	Percentage of Sewer Sales Revenues	Total Sales	Rank	Percentage of Sewer Sales Revenues
TIC Irvine Apartment Communities	$12,046,675	1	15.69%	$2,754,312	1	6.92%
City of Irvine	2,264,093	2	2.95%			
University of California - Irvine	2,182,470	3	2.84%	743,210	2	1.87%
B Braun Medical Inc	976,674	4	1.27%	301,580	3	0.76%
Irvine Unified School District	681,078	5	0.89%			
Royal Carpet Mills	419,277	6	0.55%	221,558	5	0.56%
ERP Operating LP	354,232	7	0.46%	154,375	8	0.39%
Woodbridge Village Assn	336,918	8	0.44%			
Allergan Sales, LLC	335,874	9	0.44%	209,657	6	0.53%
Orange County Produce	332,402	10	0.43%			
Maruchan, Inc				233,899	4	0.59%
The Irvine Company - Spectrum Office				178,523	7	0.45%
Airport Complex				127,453	9	0.32%
Oakley Technical Center				106,046	10	0.27%
Total	$19,929,693		25.95%	$5,030,613		12.66%

Source: Irvine Ranch Water District

Irvine Ranch Water District

Ad Valorem Property Tax Rates [2]
For the Past Ten Fiscal Years

	Fiscal Year									
ID	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
112	N/A	$0.07920	$0.07920	$0.03168	$0.03168	$0.03168	$0.03000	$0.03000	$0.03000	$0.03000
113 [1]	$0.01920	0.01980	0.01980	0.05940	0.05940	0.05940	0.03000	0.03000	0.04000	0.04000
120	0.01298	0.01311	0.00001	N/A	N/A	N/A	N/A	N/A	N/A	N/A
121	0.00001	0.00001	0.01311	0.01311	0.01311	0.01311	N/A	N/A	N/A	N/A
125	N/A	N/A	N/A	N/A	N/A	N/A	0.01300	0.01300	0.01300	0.01300
130	0.00500	0.00680	0.00680	0.00680	0.00680	0.00680	N/A	N/A	N/A	N/A
135	0.00842	0.00842	0.00842	0.00421	0.00421	0.00421	N/A	N/A	N/A	N/A
140	0.00001	0.00001	0.00001	0.01000	0.01000	0.01000	N/A	N/A	N/A	N/A
150	0.00780	0.00990	0.00990	0.01980	0.01980	0.01980	N/A	N/A	N/A	N/A
153	N/A	N/A	N/A	N/A	N/A	N/A	0.00001	0.00001	0.00001	0.02000
160	0.01648	0.01758	0.00001	N/A	N/A	N/A	N/A	N/A	N/A	N/A
161	0.00001	0.00001	0.01758	0.01758	0.01758	0.01758	N/A	N/A	N/A	N/A
182	0.01300	0.01350	0.01350	0.02700	0.02700	0.02700	N/A	N/A	N/A	N/A
184	0.00001	0.00001	0.00001	0.01350	0.01350	0.01350	N/A	N/A	N/A	N/A
185	N/A	N/A	N/A	N/A	N/A	N/A	0.00001	0.00001	0.00001	0.02300
186	0.02700	0.03191	0.03191	0.04787	0.04787	0.04787	N/A	N/A	N/A	N/A
188	0.02700	0.03590	0.03590	0.21540	0.21540	0.21540	0.21540	0.21540	0.21540	0.07350
190	0.00500	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
210	0.00001	0.00001	0.00001	N/A	N/A	N/A	N/A	N/A	N/A	N/A
212	N/A	0.12420	0.12420	0.07452	0.07452	0.07452	0.04500	0.04500	0.04500	0.04500
213 [1]	0.14093	0.14533	0.14533	0.08720	0.08720	0.08720	0 .03800	0 .03800	0.05900	0.05900
220	0.01400	0.01800	0.00001	N/A	N/A	N/A	N/A	N/A	N/A	N/A
221	0.00001	0.00001	0.01800	0.01700	0.01700	0.01700	N/A	N/A	N/A	N/A
225	N/A	N/A	N/A	N/A	N/A	N/A	0.01500	0.01500	0.01500	0.01500
230	0.02000	0.02200	0.02200	0.02200	0.02200	0.02200	N/A	N/A	N/A	N/A
235	0.00532	0.00532	0.00532	0.00266	0.00266	0.00266	N/A	N/A	N/A	N/A
240	0.02699	0.03140	0.03140	0.02140	0.02140	0.02140	0.01500	0.01500	0.01500	0.01500
250	0.03200	0.03600	0.03600	0.03600	0.03600	0.03600	N/A	N/A	N/A	N/A
252	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	N/A	N/A	N/A	N/A
253	N/A	N/A	N/A	N/A	N/A	N/A	0.00001	0.00001	0.00001	0.02100
260	0.02330	0.02830	0.00001	N/A	N/A	N/A	N/A	N/A	N/A	N/A
261	0.00001	0.00001	0.02830	0.02830	0.02830	0.02830	N/A	N/A	N/A	N/A
282	0.01400	0.01890	0.01890	0.01890	0.01890	0.01890	N/A	N/A	N/A	N/A
284	0.02699	0.03239	0.03239	0.03239	0.03239	0.03239	N/A	N/A	N/A	N/A
285	N/A	N/A	N/A	N/A	N/A	N/A	0.00001	0.00001	0.00001	0.03050
286	N/A	N/A	0.00001	0.00201	0.00201	0.00201	N/A	N/A	N/A	N/A
288	N/A	N/A	0.00001	0.01000	0.01000	0.01000	0.01000	0.01000	0.01000	0.01000
290	0.02000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Source: Irvine Ranch Water District

Notes:

[1] Improvement Districts 113 and 213 encompass the former Tustin Marine Base.

[2] The ad valorem property tax rates for the consolidated improvement district are effective July 1, 2014.

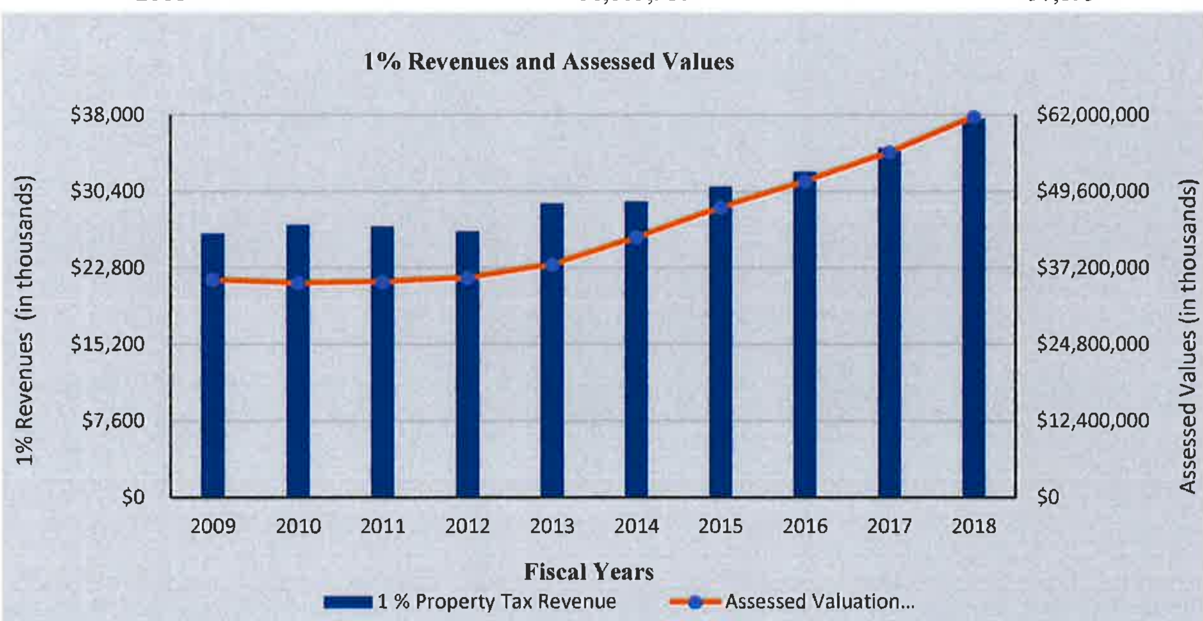
Irvine Ranch Water District

Assessed Valuation and Estimated Actual Value of Taxable Property and 1% Property Tax Revenue

For the Past Ten Fiscal Years

(in thousands)

Fiscal Year	Assessed Valuation (Land only) [1]	1 % Property Tax Revenue
2009	$35,298,830	$26,283
2010	34,818,153	27,150 [2]
2011	35,008,276	26,989
2012	35,661,242	26,478
2013	37,809,660	29,265
2014	42,205,844	29,445
2015	47,059,437	30,924
2016	51,340,888	32,427
2017	56,028,731	34,761
2018	61,803,980	37,693



Source: Orange County Auditor-Controller and Orange County Tax Collector.

Notes:

[1] Estimated market values for the land-only Assessed Values are not available.

[2] Of this amount, the State of California borrowed $2.0 million,which was repaid in June 2013.

In 1978, the voters of the State of California passed Proposition 13 which limited property taxes to a total maximum rate of 1% based upon the assessed value of the property being taxed. Each year, the assessed value of property may be increased by an "inflation factor' (limited to a maximum increase of 2%). With few exceptions, property is only reassessed at the time that it is sold to a new owner. At that point, the new assessed value is reassassed at the purchase price of the property sold.

Irvine Ranch Water District

Direct and Overlapping Property Tax Rates
Fiscal Year Ended June 30, 2018

Direct Rate:	
Irvine Ranch Water District I.D. No. 112	$0.03000
Irvine Ranch Water District I.D. No. 113	0.04000
Irvine Ranch Water District I.D. No. 125	0.01300
Irvine Ranch Water District I.D. No. 153	0.02000
Irvine Ranch Water District I.D. No. 185	0.02300
Irvine Ranch Water District I.D. No. 188	0.07350
Irvine Ranch Water District I.D. No. 212	0.04500
Irvine Ranch Water District I.D. No. 213	0.05900
Irvine Ranch Water District I.D. No. 225	0.01500
Irvine Ranch Water District I.D. No. 240	0.01500
Irvine Ranch Water District I.D. No. 252	0.00001
Irvine Ranch Water District I.D. No. 253	0.02100
Irvine Ranch Water District I.D. No. 285	0.03050
Irvine Ranch Water District I.D. No. 288	0.01000
Overlapping Rates:	
School Districts:	
Coast Community College District	0.03145
Rancho Santiago Community College District	0.03013
Rancho Santiago Community College District SFID 1	0.02075
Irvine Unified School District SFID No. 1	0.02714
Laguna Beach Unified School District	0.01287
Newport Mesa Unified School District	0.01788
Saddleback Valley Unified School District	0.02365
Santa Ana Unified School District	0.06327
Tustin Unified School District SFID 2002-1	0.02292
Tustin Unified School District SFID 2008-1	0.03187
Tustin Unified School District SFID 2012-1	0.01394

Source: California Municipal Statistics, Inc.

Irvine Ranch Water District

Principal Property Taxpayers

Fiscal Year Ended June 30, 2018

Property Owner's Name	Type of Business	Assessed Valuation of Property, including Land & Improvements	Percentage of Total City Taxable Assessed Value
The Irvine Company	Developer/Real Estate	$4,169,973,278	6.34%
KB Homes Coastal Inc	Homebuilder	981,006,478	1.49%
Irvine Apartment Communities	Real Estate	713,713,395	1.09%
Allergan	Pharmaceutical (R&D/Marketing)	490,561,192	0.75%
Heritage Hills Irvine LLC	Homebuilder	480,000,000	0.73%
Heritage Fields El Toro	Real Estate Developer	459,440,903	0.70%
B Braun Medical Inc.	Bio-Medical Manufacturing	407,815,684	0.62%
Jamboree Center LLC	Developer/Real Estate	394,196,721	0.60%
Park Place Michelson LLC	Real Estate	351,879,010	0.54%
LBA IV-PPI LLC	Real Estate Investment and Management	304,062,616	0.46%
		$8,752,649,277	**13.32%**

Source: City of Irvine Comprehensive Annual Financial Report (Fiscal Year Ended June 30, 2017)
Data was not yet available for FY2017/18 from the City of Irvine.
The City of Irvine is only a part of the IRWD service area.

Irvine Ranch Water District

Property Tax Collections/Delinquency
For the Past Ten Fiscal Years

Fiscal	Levied During Fiscal Year		Collected During Fiscal Year		Percentage Collected		Amount of Levy Collected in Subsequent Periods	
Year	1 Percent [1]	General [2]	1 Percent	General [3]	1 Percent	General	1 Percent	General
2009	$25,486,200	$11,694,868	$25,910,366	$9,873,983	101.66%	84.43%	$477,134	$281,774
2010	24,166,600	10,503,249	23,636,793	10,802,992	97.81%	102.85%	1,493,752	634,095
2011	26,493,900	10,323,198	25,892,653	11,180,391	97.73%	108.30%	1,153,265	753,309
2012	26,749,900	10,558,510	25,953,788	11,716,056	97.02%	110.96%	733,450	118,691
2013	26,749,900	10,733,998	29,265,283	11,802,915	109.40%	109.96%	989,396	438,947
2014	26,749,900	11,374,556	27,606,048	12,463,175	103.20%	109.57%	1,148,873	988,796
2015	29,000,000	9,203,641	28,668,756	9,585,904	98.86%	104.15%	2,275,461	4,888
2016	31,900,000	11,133,538	31,115,506	10,879,713	97.54%	97.72%	1,192,700	884,301
2017	33,500,000	11,679,081	33,318,168	12,822,313	99.46%	109.79%	1,230,854	1,443,272
2018	35,000,000	13,964,731	35,977,694	15,482,916	102.79%	110.87%	1,542,713	1,635,416
Total	$285,796,400	$111,169,370	$287,345,055	$116,610,358			$12,237,598	$7,183,489

Source: County of Orange Tax Ledger
Notes:
(1) The estimated levy for one percent revenue is generated internally and it is based on prior year receipts and developer growth projections.
(2) The estimated levy for G.O. tax receipts is based on the county's assessed value projection multiplied by the tax rate assessed within each improvement district.
(3) The General column for Collected tax receipts includes an unbudgeted utility tax revenue from improvement districts 190/290 that adds approximately $400K per year.

Irvine Ranch Water District

Outstanding Debt by Type (1)

For the Past Ten Fiscal Years

Fiscal Year	Total Service Connections (2)	General Obligation Bonds (3)	GO Debt per Connection	Certificates of Participation	COPS Debt per Connection
2009	186,856	$415,699,000	$2,225	$103,100,000	$552
2010	188,275	399,152,800	2,120	92,005,200	489
2011	191,474	562,051,000	2,935	88,043,000	460
2012	193,293	548,549,000	2,838	83,616,000	433
2013	196,596	534,343,000	2,718	78,698,000	400
2014	200,559	515,900,000	2,572	73,565,000	367
2015	203,762	503,800,000	2,472	67,293,000	330
2016	209,267	491,200,000	2,347	60,387,000	289
2017	215,573	608,118,000	2,821	153,626,000	713
2018	222,918	586,493,000	2,631	150,275,000	674

Irvine Ranch Water District

Outstanding Debt by Type [1]
For the Past Ten Fiscal Years
(Continued)

Fiscal Year	JPA Revenue Bonds	JPA Debt per Connection	Notes Payable	Notes Payable per Connection	Total Debt	Total Debt per Connection
2009	$698,566,000	$3,739	$5,007,000	$27	$1,222,372,000	$6,542
2010	690,263,700	3,666	4,553,000	24	1,185,974,700	6,299
2011	676,415,000	3,533	2,747,000	14	1,329,256,000	6,942
2012	638,521,000	3,303	2,494,000	13	1,273,180,000	6,587
2013	610,568,000	3,106	2,240,000	11	1,225,849,000	6,235
2014	0	0	1,984,000	10	591,449,000	2,949
2015	0	0	1,728,000	8	572,821,000	2,811
2016	0	0	1,469,000	7	553,056,000	2,643
2017	0	0	1,209,000	6	762,953,000	3,539
2018	0	0	947,000	4	737,715,000	3,309

Source: Irvine Ranch Water District

Notes:

(1) More detail about the District's long-term liabilities can be found at Note 9 to the Basic Financial Statements.

(2) Per Capita income information for the Irvine Ranch Water District is not readily available. Accordingly, the District presents this schedule by total service connections.

(3) Includes unamortized discount / deferred loss on refunding for the fiscal year 2005 through the fiscal year 2013.

Irvine Ranch Water District

Outstanding General Obligation Bonds by Improvement District
As of June 30, 2018

Improvement District	General Obligation Bonds Authorized	General Obligation Bonds Issued	Remaining Unissued General Obligation Bonds Authorized	Amount Outstanding as of June 30, 2018
112	$28,512,300	$8,111,000	$20,401,300	$7,567,000
113	25,769,500	16,300,000	9,469,500	14,597,000
125	735,246,000	429,729,000	305,517,000	187,049,000
153	237,300,000	7,601,000	229,699,000	7,601,000
154	4,839,000	0	4,839,000	0
185	13,500,000	1,493,000	12,007,000	1,493,000
188	8,174,000	4,590,000	3,584,000	1,597,000
Total	$1,053,340,800	$467,824,000	$585,516,800	$219,904,000
210	$2,000,000	$2,000,000	$0	$0
212	108,711,800	26,013,000	82,698,800	24,558,000
213	87,647,500	28,565,000	59,082,500	24,288,000
225	856,643,000	493,304,000	363,339,000	260,260,000
240	117,273,000	49,722,000	67,551,000	17,921,000
253	122,283,000	11,877,000	110,406,000	11,877,000
285	21,300,000	1,809,000	19,491,000	1,809,000
288	8,977,000	443,000	8,534,000	383,000
Total	$1,324,835,300	$613,733,000	$711,102,300	$341,096,000
	$2,378,176,100	$1,081,557,000	$1,296,619,100	$561,000,000

Source: Irvine Ranch Water District

Irvine Ranch Water District

Ratio of General Obligation Debt to Assessed Values [1]

for the Past Ten Fiscal Years

Fiscal Year	Assessed Valuation	General Obligation Debt Outstanding	General Obligation Debt to Assessed Valuation
	Improvement District 112		
2009	$500,354,220	$2,745,000	0.00548611
2010	521,318,307	2,745,000	0.00526550
2011	539,618,060	5,745,000	0.01064642
2012	504,820,526	5,745,000	0.01138028
2013	511,871,892	5,653,500	0.01104476
2014	780,606,904	5,562,000	0.00712523
2015	1,333,029,836	5,470,000	0.00410343
2016	1,850,638,433	5,378,000	0.00290602
2017	2,077,681,111	7,658,000	0.00368584
2018	2,795,881,726	7,567,000	0.002706481
	Improvement District 113		
2009	$609,156,504	$4,505,375	0.00739609
2010	651,917,180	4,505,375	0.00691096
2011	553,458,157	9,770,000	0.01765264
2012	536,369,090	15,794,500	0.02944707
2013	562,239,093	15,541,750	0.02764260
2014	674,596,339	14,150,000	0.02097551
2015	827,524,085	13,900,000	0.01679709
2016	885,391,548	13,638,000	0.01540335
2017	1,031,821,023	14,870,000	0.01441141
2018	1,143,798,184	14,597,000	0.012761867
	Improvement District 125		
2009	n/a	n/a	n/a
2010	n/a	n/a	n/a
2011	n/a	n/a	n/a
2012	n/a	n/a	n/a
2013	n/a	n/a	n/a
2014	$29,578,638,615	$192,075,000	0.00649371
2015	32,752,414,757	187,604,000	0.00572794
2016	35,506,392,050	182,932,000	0.00515209
2017	38,802,873,378	194,719,000	0.00501816
2018	42,983,731,609	187,049,000	0.00435162

Fiscal Year	Assessed Valuation	General Obligation Debt Outstanding	General Obligation Debt to Assessed Valuation
	Improvement District 212		
2009	$500,354,220	$7,305,000	0.01459966
2010	521,318,307	7,305,000	0.01401255
2011	539,618,060	15,705,000	0.02910392
2012	504,820,526	15,705,000	0.03111007
2013	511,871,892	15,461,500	0.03020580
2014	780,606,904	15,218,000	0.01949509
2015	1,333,029,836	14,974,000	0.01123306
2016	1,850,638,433	14,731,000	0.00795996
2017	2,077,681,111	24,801,000	0.01193687
2018	2,795,881,726	24,558,000	0.008783633
	Improvement District 213		
2009	$609,156,504	$17,544,775	0.02880175
2010	651,917,180	17,544,775	0.02691258
2011	553,458,157	17,283,000	0.03122729
2012	536,369,090	23,418,645	0.04366144
2013	562,239,093	22,828,480	0.04060280
2014	674,596,339	22,074,000	0.03272179
2015	827,524,085	21,488,000	0.02596662
2016	885,391,548	20,839,000	0.02353648
2017	1,031,821,023	24,950,000	0.02418055
2018	1,143,798,184	24,288,000	0.02123452
	Improvement District 225		
2009	n/a	n/a	n/a
2010	n/a	n/a	n/a
2011	n/a	n/a	n/a
2012	n/a	n/a	n/a
2013	n/a	n/a	n/a
2014	$24,757,488,949	$240,995,000	0.00973423
2015	27,557,606,802	235,865,000	0.00855898
2016	29,945,134,379	230,535,000	0.00769858
2017	32,838,922,602	268,655,000	0.00818099
2018	36,549,538,031	260,260,000	0.00712075

Irvine Ranch Water District

Ratio of General Obligation Debt to Assessed Values [1]
for the Past Ten Fiscal Years
(continued)

Improvement District 240

Fiscal Year	Assessed Valuation	General Obligation Debt Outstanding	General Obligation Debt to Assessed Valuation
2009	$4,936,249,533	$32,326,608	0.00654882
2010	4,871,225,527	30,885,287	0.00634035
2011	4,903,741,743	29,527,697	0.00602146
2012	4,973,007,663	28,081,173	0.00564672
2013	5,343,804,951	26,441,526	0.00494807
2014	5,609,174,229	24,078,000	0.00429261
2015	6,031,968,996	22,767,000	0.00377439
2016	6,449,202,772	21,431,000	0.00332305
2017	7,000,292,817	21,271,000	0.00303859
2018	7,667,626,922	17,921,000	0.00233723

Improvement District 153

Fiscal Year	Assessed Valuation	General Obligation Debt Outstanding	General Obligation Debt to Assessed Valuation
2009	$36,903,662	n/a	n/a
2010	36,997,523	n/a	n/a
2011	7,971,152	n/a	n/a
2012	8,114,060	n/a	n/a
2013	8,475,848	n/a	n/a
2014	8,687,744	n/a	n/a
2015	666,622,225	n/a	n/a
2016	1,287,363,937	n/a	n/a
2017	2,893,148,966	$7,601,000	0.00262724
2018	4,097,566,306	$7,601,000	0.00185500

Improvement District 253

Fiscal Year	Assessed Valuation	General Obligation Debt Outstanding	General Obligation Debt to Assessed Valuation
2009	$36,903,662	n/a	n/a
2010	36,997,523	n/a	n/a
2011	7,971,152	n/a	n/a
2012	8,114,060	n/a	n/a
2013	8,475,848	n/a	n/a
2014	228,692,347	n/a	n/a
2015	666,622,225	n/a	n/a
2016	1,287,363,937	n/a	n/a
2017	2,893,148,966	$11,877,000	0.00410522
2018	4,097,566,306	$11,877,000	0.00289855

Improvement District 154

Fiscal Year	Assessed Valuation	General Obligation Debt Outstanding	General Obligation Debt to Assessed Valuation
2009	$10,209,169	n/a	n/a
2010	8,831,144	n/a	n/a
2011	8,904,175	n/a	n/a
2012	9,127,678	n/a	n/a
2013	9,334,512	n/a	n/a
2014	9,111,103	n/a	n/a
2015	9,289,351	n/a	n/a
2016	9,266,433	n/a	n/a
2017	9,376,883	n/a	n/a
2018	9,529,712	n/a	n/a

Irvine Ranch Water District

Ratio of General Obligation Debt to Assessed Values [1]
for the Past Ten Fiscal Years
(continued)

Fiscal Year	Assessed Valuation	General Obligation Debt Outstanding	General Obligation Debt to Assessed Valuation	Fiscal Year	Assessed Valuation	General Obligation Debt Outstanding	General Obligation Debt to Assessed Valuation
	Improvement District 185				**Improvement District 285**		
2009	n/a	n/a	n/a	**2009**	n/a	n/a	n/a
2010	n/a	n/a	n/a	**2010**	n/a	n/a	n/a
2011	n/a	n/a	n/a	**2011**	n/a	n/a	n/a
2012	n/a	n/a	n/a	**2012**	n/a	n/a	n/a
2013	n/a	n/a	n/a	**2013**	n/a	n/a	n/a
2014	$85,119,097	n/a	n/a	**2014**	$85,119,097	n/a	n/a
2015	209,634,682	n/a	n/a	**2015**	209,634,682	n/a	n/a
2016	586,316,903	n/a	n/a	**2016**	586,316,903	n/a	n/a
2017	836,640,799	$1,493,000	0.00178452	**2017**	836,640,799	$1,809,000	0.00216222
2018	1,209,166,559	1,493,000	0.00123473	**2018**	1,209,166,559	1,809,000	0.00149607
	Improvement District 188				**Improvement District 288**		
2009	$12,806,315	$1,235,205	0.09645280	**2009**	$12,806,315	$300,000	0.02342594
2010	14,613,156	1,050,082	0.07185867	**2010**	14,613,156	300,000	0.02052945
2011	13,887,854	2,155,702	0.15522211	**2011**	13,887,854	300,000	0.02160161
2012	14,165,606	1,942,809	0.13714973	**2012**	14,165,606	300,000	0.02117806
2013	14,448,912	1,714,661	0.11867060	**2013**	14,448,912	290,000	0.02007072
2014	14,446,476	1,468,000	0.10161648	**2014**	14,446,476	280,000	0.01938189
2015	14,735,113	1,462,000	0.09921879	**2015**	14,735,113	270,000	0.01832358
2016	185,851,827	1,456,000	0.00783420	**2016**	185,851,827	260,000	0.00139896
2017	196,953,990	1,603,000	0.00813896	**2017**	196,953,990	393,000	0.00199539
2018	212,742,385	1,597,000	0.00750673	**2018**	212,742,385	383,000	0.00180030

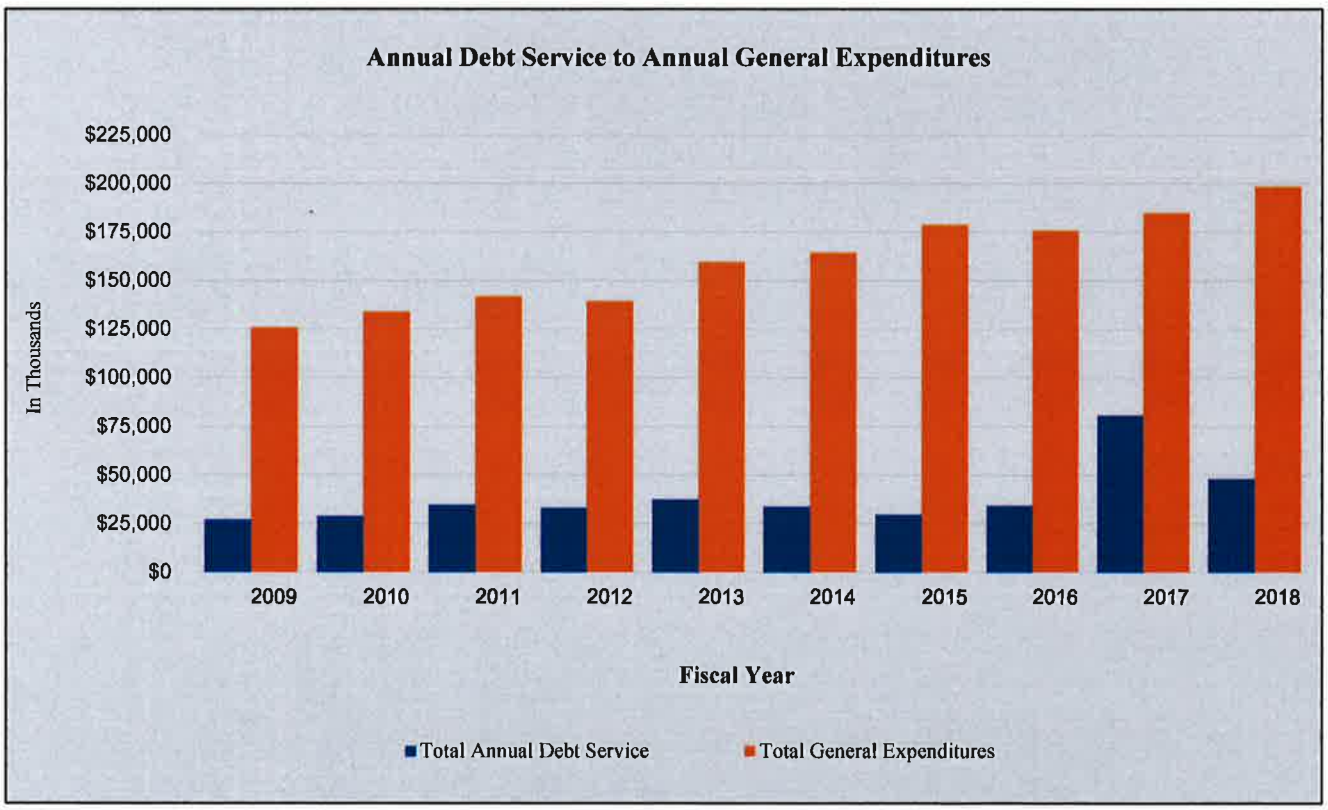
Source: Irvine Ranch Water District

Note:
[1] In December 2013, the District consolidated water ID's 120, 121, 130, 140, 150, 160, 161, 182, 184, and 186 into ID 125 and sewer ID's 220, 221, 230, 250, 260, 261, 282, 284, and 286 into ID 225.

Irvine Ranch Water District

Ratio of Annual Debt Service Expenditures to Total General Expenditures
For the Past Ten Fiscal Years
(in thousands)

Fiscal Year	Total Annual Debt Service	Total General Expenditures	Ratio of Total Annual Debt Service to Total General Expenditures
2009	$27,326	$125,916	21.7%
2010	29,044	134,027	21.7%
2011	34,842	141,831	24.6%
2012	33,437	139,444	24.0%
2013	37,734	159,558	23.6%
2014	34,009	164,420	20.7%
2015	29,921	178,713	16.7%
2016	34,560	175,694	19.7%
2017	81,029	184,854	43.8%
2018	48,349	198,549	24.4%



Source: Irvine Ranch Water District

Irvine Ranch Water District
Debt Service Coverage (in thousands)
For the Past Ten Fiscal Years

	Fiscal Year				
	2009	2010	2011	2012	2013
Revenues					
Water sales and service charges	$50,940	$51,268	$54,796	$57,558	$62,565
Sewer sales and service charges	41,157	45,344	45,375	49,234	53,085
Developer Connection fees	4,535	5,818	10,572	9,030	17,314
Net real estate income	7,010	5,624	5,649	6,736	6,566
Interest income	4,365	2,191	2,599	1,739	1,549
Net earnings on JPA	2,990	4,196	12,444	11,927	20,294
Available 1% property tax revenue	17,007	19,346	22,396	23,165	25,796
Other	9,918	10,706	7,987	6,141	8,323
Total Revenues	137,922	144,493	161,818	165,530	195,492
Expenses					
Water supply services	42,273	43,591	45,961	44,883	51,163
Sewer services	28,696	30,992	33,382	33,086	38,189
Administrative and general	20,248	20,000	18,896	20,097	22,667
Pension and OPEB Expense	0	0	0	0	0
Other	1,535	1,286	989	10,713	6,110
Total Expenses	92,752	95,869	99,228	108,779	118,129
Net Revenues	**$45,170**	**$48,624**	**$62,590**	**$56,751**	**$77,363**
Applicable *Ad Valorem* Assessments Available for GO Double-Barrel Bonds	$0	$0	$0	$5,823	$5,838
Parity Obligations					
Certificates of Participation	$2,798	$3,119	$7,680	$8,016	$8,388
1997 State Loan #3	227	0	226	226	226
Series 2010B Bonds	0	0	4,080	7,533	7,519
Series 2011-A Index Tender Notes	0	0	35	2,284	2,306
2016 General Obligation	0	0	0	0	0
Total Parity Obligations Debt Service	3,025	3,119	12,021	18,059	18,439
Remaining Revenues	$42,145	$45,505	$50,569	$44,515	$64,762
Parity Obligation Coverage	**14.9 x**	**15.6 x**	**5.2 x**	**3.5 x**	**4.5 x**
Subordinate Obligations					
Fixed Payer Swap Payments	$5,694	$7,391	$7,734	$7,734	$7,452
State Loans and SCWD Debt	481	381	253	308	308
Total Subordinate Obligations	6,175	7,772	7,987	8,042	7,760
Remaining Revenues	$35,970	$37,733	$42,582	$36,473	$57,002
Non-Double-Barrel GO Bonds					
Revenues Pledged to Non-Double-Barrel GO Bonds					
1% Property tax revenues (Pledged to Secured Bonds)	$9,276	$7,804	$4,593	$3,313	$3,470
Pro-rata Share *Ad valorem* Assessments for Non-Double-Barrel GO Bonds	9,959	11,244	11,690	5,761	5,965
Sub-total Pledged Revenues	55,205	56,781	58,865	45,547	66,437
Additional Funds Available for Non-Double-Barrel GO Bonds					
Remaining 1% Property Tax Revenues	15,454	19,346	22,396	23,165	25,796
Additional Net Revenues	20,516	18,387	20,186	13,308	25,248
Total with Additional Pledged Revenues	$55,205	$56,781	$58,865	$45,547	$66,437
Debt Service					
Non-Double-Barrel GO Bond Debt Service	$19,235	$21,179	$16,899	$16,899	$17,129
GO Bond Coverage	2.9 x	2.7 x	3.5 x	2.7 x	3.9 x
Remaining Revenues	$35,970	$35,602	$41,966	$28,648	$49,308
Total Debt Coverage	2.3 x	2.1 x	2.1 x	1.7 x	2.1 x

Irvine Ranch Water District
Debt Service Coverage (in thousands)
For the Past Ten Fiscal Years
(Continued)

	Fiscal Year				
	2014	2015	2016	2017	2018
Revenues					
Water sales and service charges	$66,321	$70,110	$76,692	$77,252	$84,575
Sewer sales and service charges	58,109	62,808	67,682	72,054	76,789
Developer Connection fees	22,429	29,183	32,109	25,563	32,674
Net real estate income	7,760	8,191	8,693	9,076	3,405
Interest income	1,671	1,515	1,585	3,210	4,133
Net earnings on JPA	12,356	0	0	0	0
Available 1% property tax revenue	28,532	29,770	31,645	34,247	29,649
Other	10,974	7,899	7,836	7,117	7,504
Total Revenues	208,152	209,476	226,242	228,519	238,729
Expenses					
Water supply services	57,624	57,978	57,499	55,296	63,671
Sewer services	37,715	54,575	40,413	42,752	38,115
Administrative and general	17,487	16,012	19,909	22,664	22,390
Pension and OPEB Expense	4,785	2,237	2,831	5,146	10,496
Other	7,163	9,752	2,800	1,997	174
Total Expenses	124,774	140,554	123,452	127,855	134,846
Net Revenues	**$83,378**	**$68,922**	**$102,790**	**$100,664**	**$103,883**
Applicable *Ad Valorem* Assessments Available for GO Double-Barrel Bonds	$6,409	$4,839	$6,036	$8,605	$10,499
Parity Obligations					
Certificates of Participation	$8,753	$9,098	$9,487	$11,675	$7,722
1997 State Loan #3	227	227	227	194	194
Series 2010B Bonds	7,825	7,829	7,823	7,813	7,807
Series 2011-A Index Tender Notes	2,360	2,455	2,927	2,967	3,675
2016 General Obligation	0	0	0	1,605	5,301
Total Parity Obligations Debt Service	19,165	19,609	20,464	24,254	24,699
Remaining Revenues	$70,622	$54,152	$88,362	$85,015	$89,683
Parity Obligation Coverage	**4.7 x**	**3.8 x**	**5.3 x**	**4.5 x**	**4.6 x**
Subordinate Obligations					
Fixed Payer Swap Payments	$7,475	$7,734	$7,712	$6,798	$5,739
State Loans and SCWD Debt	308	308	308	133	122
Total Subordinate Obligations	7,783	8,042	8,020	6,931	5,861
Remaining Revenues	$62,839	$46,110	$80,342	$78,084	$83,822
Non-Double-Barrel GO Bonds					
Revenues Pledged to Non-Double-Barrel GO Bonds					
1% Property tax revenues (Pledged to Secured Bonds)	$3,013	$3,358	$3,226	$3,128	$10,834
Pro-rata Share *Ad valorem* Assessments for Non-Double-Barrel GO Bonds	4,797	4,463	5,396	5,341	6,265
Sub-total Pledged Revenues	70,649	53,931	88,964	86,553	100,921
Additional Funds Available for Non-Double-Barrel GO Bonds					
Remaining 1% Property Tax Revenues	28,532	29,770	31,645	34,247	29,649
Additional Net Revenues	34,307	16,340	48,697	43,837	54,173
Total with Additional Pledged Revenues	$70,649	$53,931	$88,964	$86,553	$100,921
Debt Service					
Non-Double-Barrel GO Bond Debt Service	$10,968	$12,840	$11,173	$12,385	$20,843
GO Bond Coverage	6.4 x	4.2 x	8.0 x	7.0 x	4.8 x
Remaining Revenues	$59,681	$41,091	$77,791	$74,168	$80,078
Total Debt Coverage	2.6 x	2.0 x	3.0 x	2.7 x	2.6 x

Source: Irvine Ranch Water District

Irvine Ranch Water District

Principal Employers

Fiscal Year Ended June 30, 2018

Name of Company	Number of Employees	Products	Percentage of Employment
University of California, Irvine	21,700	Educational	8.41%
Irvine Unified School District	3,024	Educational	1.17%
Edwards Lifesciences LLC	2,987	Surgical Appliances and Supplies	1.16%
Blizzard Entertainment Inc.	2,724	Technology	1.06%
Broadcom	2,604	Technology	1.01%
Glidewell Laboratories	1,960	Dental Appliances	0.76%
Parker Hannifin Corporation	1,800	Aircraft Parts	0.70%
Nationstar Mortgage LLC	1,556	Mortgage	0.60%
B Braun Medical	1,370	Bio-Medical Manufacturing	0.00%
Western Digital	1,300	Technology	0.50%
			15.37%

Source: City of Irvine Comprehensive Annual Financial Report (Fiscal Year Ended June 30, 2017)
Data was not yet available for FY2017/18 from the City of Irvine.
The City of Irvine is only a part of the IRWD service area.

Irvine Ranch Water District

Demographic & Economic Statistics
For the Past Ten Fiscal Years

Fiscal Year Ended	IRWD Population	City of Irvine Population	City of Irvine Median Family Income	Total Personal Income	County of Orange Unemploy-ment Rate
2009	330,000	212,541	$91,101	$8,723,320	8.3%
2010	331,500	217,686	94,903	8,090,372	9.5%
2011	330,000	219,156	93,258	8,484,794	9.2%
2012	334,000	223,729	90,939	8,886,628	7.9%
2013	340,000	231,117	92,599	8,174,011	6.1%
2014	370,000	242,651	92,663	9,595,168	5.0%
2015	370,000	250,384	90,585	10,595,508	4.2%
2016	390,000	258,386	91,999	10,946,242	3.6%
2017	390,000	267,086	92,278	12,840,224	3.2%
2018	390,000	267,086	N/A (1)	N/A (1)	2.6%

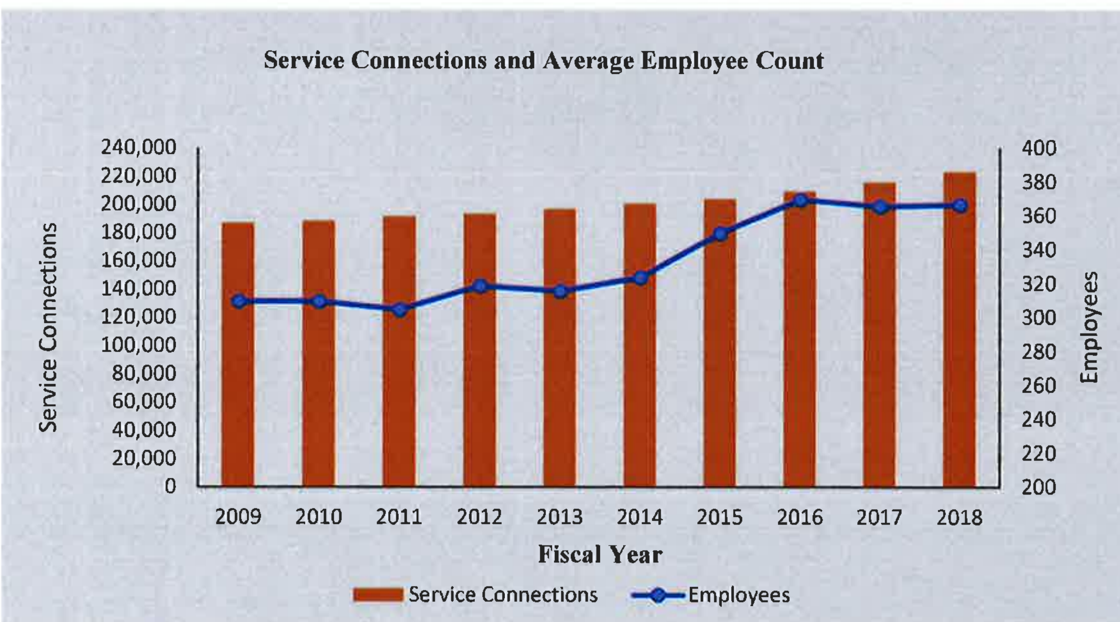
Source: City of Irvine Comprehensive Annual Financial Report (Fiscal Year Ended June 30, 2017) and County of Orange website
Data for the entire Irvine Ranch Water District service area is not readily available.
The City of Irvine is only a part of the IRWD service area.

Note:

(1) Median Family Income and Total Personal Income for FY 2018 has not yet been published by the City of Irvine.

Irvine Ranch Water District
Operating Indicators by Function
Water and Sewer Service Connections
For the Past Ten Fiscal Years

Fiscal Year	Water	Sewer & Recycled Water	Total Service Connections	Average Employee Population	Service Connections per Employee
2009	96,311	90,545	186,856	310	603
2010	97,023	91,252	188,275	310	607
2011	98,637	92,837	191,474	305	628
2012	99,465	93,828	193,293	319	606
2013	101,108	95,488	196,596	316	622
2014	103,077	97,482	200,559	324	619
2015	104,678	99,084	203,762	350	582
2016	107,402	101,865	209,267	370	566
2017	110,520	105,053	215,573	366	589
2018	114,164	108,754	222,918	367	607



Source: Irvine Ranch Water District

Irvine Ranch Water District

Operating Indicators by Function
New Service Connections
For the Past Ten Fiscal Years

	Fiscal Year									
	2009	2010	2011	2012	2013	2014	2015	2016 [1]	2017	2018
Water										
Residential	552	631	1,469	862	1,520	1,848	1,727	2,513	2,928	3,355
Commercial/Industrial/ Public Authority	149	19	98	18	27	40	(126)	82	88	133
Fire Protection	86	43	40	37	55	50	29	107	83	99
Construction & Temporary	(60)	(6)	39	3	31	36	4	3	14	43
Landscape Irrigation	13	33	(21)	(89)	8	(4)	(30)	19	5	13
Agricultural	(13)	(8)	(11)	(3)	2	(1)	(3)	0	0	1
Total Water	727	712	1,614	828	1,643	1,969	1,601	2,724	3,118	3,644
Sewer										
Residential	527	613	1,462	861	1,521	1,829	1,727	2,501	2,894	3,340
Commercial/Industrial/ Public Authority	156	21	37	21	29	41	(232)	88	84	137
Landscape Irrigation	84	63	85	102	112	127	113	0	0	0
Agricultural	3	10	1	7	(2)	(3)	(6)	0	0	0
Total Sewer	770	707	1,585	991	1,660	1,994	1,602	2,589	2,978	3,477
Recycled Water										
Residential	0	0	0	0	0	0	0	6	33	14
Commercial/Industrial/ Public Authority	0	0	0	0	0	0	0	8	9	14
Construction & Temporary	0	0	0	0	0	0	0	13	8	(5)
Landscape Irrigation	0	0	0	0	0	0	0	162	161	199
Agricultural	0	0	0	0	0	0	0	3	(1)	2
Total Recycled Water	0	0	0	0	0	0	0	192	210	224
Total	1,497	1,419	3,199	1,819	3,303	3,963	3,203	5,505	6,306	7,345

Source: Irvine Ranch Water District

Note:

[1] New connection data for Recycled Water connections was not available prior to the fiscal year 2016.

Irvine Ranch Water District
Operating Indicators by Function
Average Monthly Usage (in CCF)
For the Past Ten Fiscal Years

	Fiscal Year									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Water										
Residential	10	10	9	9	9	9	12	11	11	12
Commercial	63	57	56	61	63	66	57	60	57	61
Industrial	211	200	201	201	204	192	267	222	232	213
Public Authority	347	300	295	296	306	305	378	287	260	260
Construction & Temporary	39	52	79	106	181	241	398	285	148	172
Treated - Landscape Irrigation	116	95	85	94	105	182	110	74	82	95
Treated - Agricultural	1,116	663	925	835	733	575	646	327	402	403
Untreated - Agricultural	7,495	6,925	4,714	4,768	5,799	6,314	8,504	8,047	6,315	6,274
Total	9,397	8,302	6,364	6,370	7,400	7,884	10,372	9,313	7,507	7,490
Recycled water										
Landscape Irrigation	182	152	134	152	169	182	192	186	170	195
Agricultural	2,418	1,874	2,247	3,768	4,145	3,882	4,992	3,891	3,197	3,292
Total	2,600	2,026	2,381	3,920	4,314	4,064	5,184	4,077	3,367	3,487

Source: Irvine Ranch Water District

Irvine Ranch Water District

Source of Supply and Water Deliveries / Sales in Acre Feet

For the Past Ten Fiscal Years

Source of Supply

(in Acre Feet)

Fiscal Year	Local	Imported	Recycled	Total Supply
2009	45,537	29,965	22,676	98,178
2010	45,980	24,744	20,912	91,636
2011	41,274 (3)	30,260	21,030	92,564
2012	39,409	26,155	20,602	86,166
2013	49,967 (4)	20,151	22,983	93,101
2014	55,015 (4)	22,508	21,038	98,561
2015	54,057	18,628	22,866	95,551
2016	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

Water Deliveries / Sales

(in Acre Feet)

Fiscal Year	Potable and Untreated	Recycled	Total Demand
2009	63,431	26,258	89,689
2010	56,634	22,830	79,464 (5)
2011	53,642	22,250	75,892
2012	54,818	25,011	79,829
2013	57,203	28,259	85,462 (6)
2014	59,907	30,021	89,928 (6)
2015	58,319	32,139	90,458 (6)
2016	51,098	26,879	77,977 (7)
2017	51,299	27,860	79,159
2018	55,137	31,750	86,887

Source: Irvine Ranch Water District

Notes:
(1) The OPA well went down in FY 2008 and was rebuilt, coming online in FY 2011.
(2) The MWRP capacity was expanded and production increased in FY 2008 with total capacity identified in FY 2012.
(3) IDP wells went down in FY 2011 and will come back on line in FY 2015.
(4) Wells 21 & 22 came on line during FY 2013 and was at full capacity in FY 2014.
(5) Significant rainfall in December produced a much lower overall demand.
(6) Extremely dry conditions led to a considerable increase in demands.
(7) State mandated reduction in usage resulted in a significant decrease in overall demand.

Irvine Ranch Water District
Capital Asset Statistics
For the Past Ten Fiscal Years

		Fiscal Year									
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Potable System											
Miles of Water Line	(1)	1,134	1,169	1,460	1,490	1,516	1,597	1,622	1,760	1,810	1,905
Number of Storage Tanks	(3)	37	37	37	37	36	36	36	36	36	36
Maximum Storage Capacity (Acre Feet)		456	456	456	456	456	456	456	456	456	456
Number of Pumping Stations		43	43	43	43	37	38	39	39	39	39
Number of Wells		24	24	24	24	26	26	27	27	27	27
Well Production Capacity (cfs)		117	117	117	117	124	124	128	128	118	118
Water Banking Storage (Acre Feet)		50,000	107,600	109,600	109,600	109,600	109,600	109,600	126,000	126,000	126,000
Potable Treatment Plants		2	2	2	2	3	3	3	3	4	4
Non-Potable and Recycled Systems											
Miles of Recycled Line	(1)	400	407	468	478	488	503	509	525	540	555
Number of Storage Tanks	(2)	11	11	11	11	12	12	12	12	11	12
Number of Open Reservoirs	(2)	4	4	4	4	5	5	5	5	5	5
Maximum Storage Capacity (Acre Feet)	(4)	23,703	23,703	23,703	23,703	24,155	24,155	24,155	24,155	24,155	24,155
Number of Pumping Plants		19	19	19	19	20	19	20	20	20	19
Number of Wells	(5)	5	5	5	5	5	5	5	5	5	5
Well Production Capacity (cfs)		9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8
Sewer System											
Miles of Sewer Line		901	940	950	962	971	1,009	1,019	1,070	1,081	1,123
Number of Lift Stations	(6)	19	18	18	16	14	14	14	14	23	23
Treatment Plants		2	2	2	2	2	2	2	2	2	2
Treatment Capacity (mgd) (Tertiary)		23.5	23.5	23.5	23.5	23.5	33.5	33.5	33.5	33.5	33.5

Source: Irvine Ranch Water District

Notes:

(1) Miles of Line include laterals.

(2) IRWD began reporting storage tanks and open reservoirs separately in 2006. Previously for purposes of these statistics, both have been combined under "storage tanks".

(3) Total number of tanks excludes IRWD's storage capacity with East Orange County Water District. However, this capacity is accounted for in the maximum storage capacity estimate (456 AF).

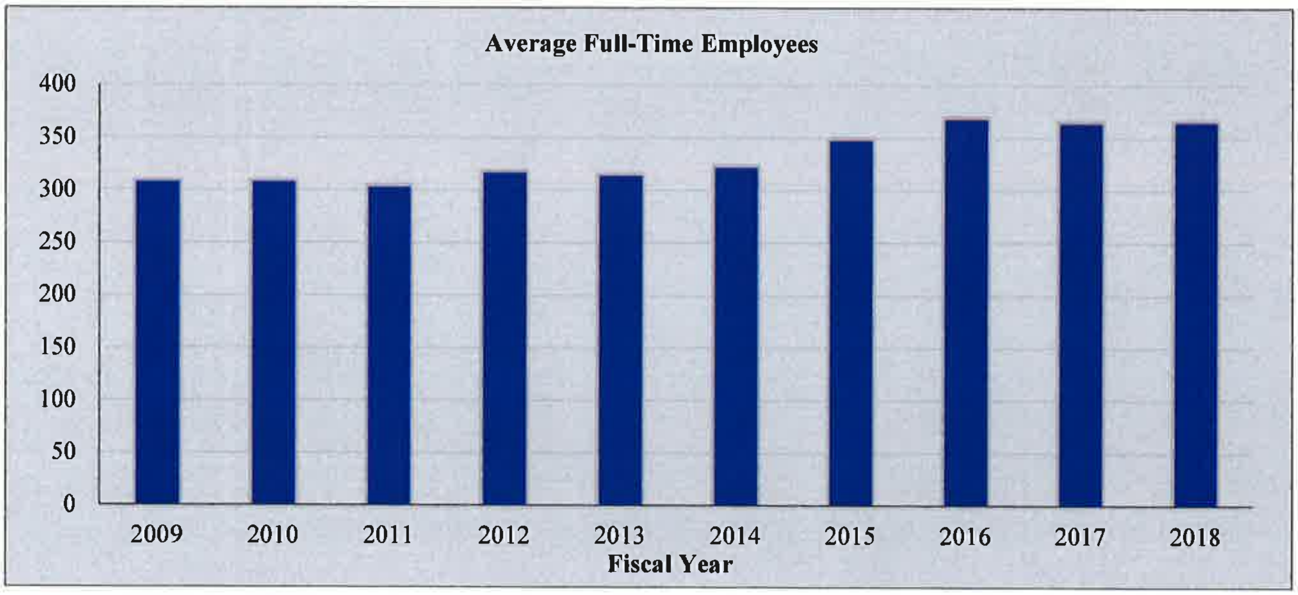
(4) Excludes Serrano Water District's capacity in Irvine Lake, which equals 25% of total capacity.

(5) Accounts for active production wells only (Excludes SGU Injection Well).

(6) Excludes lift stations serving individual IRWD facilities.

Irvine Ranch Water District
Full-Time Employees
For the Past Ten Fiscal Years

	Fiscal Year									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Average Full-Time Employees	310	310	305	319	316	324	350	370	366	367



Source: Irvine Ranch Water District

Exhibit "B"

DavisFarr
CERTIFIED PUBLIC ACCOUNTANTS

Davis Farr LLP
2301 Dupont Drive | Suite 200 | Irvine, CA 92612
Main: 949.474.2020 | Fax: 949.263.5520

Board of Directors
Irvine Ranch Water District
Irvine, California

Communication with Those Charged with Governance at the Conclusion of the Audit

We have audited the financial statements of Irvine Ranch Water District (the "District") for the year ended June 30, 2018. Professional standards require that we provide you with information about our responsibilities under generally accepted auditing standards and *Government Auditing Standards*, as well as certain information related to the planned scope and timing of our audit. We have communicated such information in our letter to you dated June 18, 2018. Professional standards also require that we communicate to you the following information related to our audit.

Significant Audit Findings

Qualitative Aspects of Accounting Practices

Management is responsible for the selection and use of appropriate accounting policies. The significant accounting policies used by Irvine Ranch Water District are described in Note 1 to the financial statements. As described in Note 18 to the financial statements, the District implemented Governmental Accounting Standards Board (GASB) Statement No. 75 related to Other Post Employment Benefit (OPEB) obligations and GASB Implementation Guide 2017-1 related to reporting of the net pension liability and Pension Benefit Trust. The cumulative effect of the Implementation of GASB Statement No. 75 and Implementation Guide 2017-1 as of the beginning of the year is described further in Note 18 to the financial statements. Also, as described in Note 6 to the financial statements, the District implemented GASB 89 related to capitalized interest costs. We noted no transactions entered into by Irvine Ranch Water District during the year for which there is a lack of authoritative guidance or consensus. All significant transactions have been recognized in the financial statements in the proper period.

Accounting estimates are an integral part of the financial statements prepared by management and are based on management's knowledge and experience about past and current events and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the financial statements and because of the possibility that future events affecting them may differ significantly from those expected.

Examples of significant judgments and estimates reflected in the District's financial statements include:

- Judgments concerning which capital project expenditures should be capitalized and depreciated versus expensed in the financial statements and judgments concerning which projects should be placed in service.
- Judgements regarding the fair value of real estate investments.
- Judgments regarding the fair value of interest rate swap agreements.
- Judgements involving the estimated net pension liability

- Judgements involving the estimated OPEB liablity

Difficulties Encountered in Performing the Audit

We encountered no significant difficulties in dealing with management in performing and completing our audit.

Corrected and Uncorrected Misstatements

Professional standards require us to accumulate all known and likely misstatements identified during the audit, other than those that are clearly trivial, and communicate them to the appropriate level of management. An immaterial adjustment to reclassify a project from Construction in Process to in service was not recorded. Management has determined that the effect is immaterial, both individually and in the aggregate, to the financial statement taken as a whole.

Disagreements with Management

For purposes of this letter, a disagreement with management is a financial accounting, reporting, or auditing matter, whether or not resolved to our satisfaction, that could be significant to the financial statements or the auditor's report. We are pleased to report that no such disagreements arose during the course of our audit.

Management Representations

We have requested certain representations from management that are included in the management representation letter dated November xx, 2018.

Management Consultations with Other Independent Accountants

In some cases, management may decide to consult with other accountants about auditing and accounting matters, similar to obtaining a "second opinion" on certain situations. If a consultation involves application of an accounting principle to Irvine Ranch Water District's financial statements or a determination of the type of auditor's opinion that may be expressed on those statements, our professional standards require the consulting accountant to check with us to determine that the consultant has all the relevant facts. To our knowledge, there were no such consultations with other accountants.

Other Audit Findings or Issues

We generally discuss a variety of matters, including the application of accounting principles and auditing standards, with management each year prior to retention as Irvine Ranch Water District's auditors. However, these discussions occurred in the normal course of our professional relationship and our responses were not a condition to our retention.

Other Matters

We applied certain limited procedures to *Management's Discussion and Analysis*, *Schedule of Changes in the Net Pension Liability and Related Ratio*, *Schedule of Contributions – Defined Benefit Pension Plan*, *Schedule of Changes in the OPEB Liability and Related Ratio*, *Schedule of Contributions – OPEB*, which are required supplementary information (RSI) that supplements the basic financial statements. Our procedures consisted of inquiries of management regarding the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We did not audit the RSI and do not express an opinion or provide any assurance on the RSI.

We were not engaged to report on the Introduction and Statistical Section, which accompany the financial statements but are not RSI. We did not audit or perform other procedures on this other information and we do not express an opinion or provide any assurance on it.

Restriction on Use

This information is intended solely for the use of Board of Directors and management of Irvine Ranch Water District and is not intended to be, and should not be, used by anyone other than these specified parties.

Irvine, California
November xx, 2018

DavisFarr
CERTIFIED PUBLIC ACCOUNTANTS

Davis Farr LLP
2301 Dupont Drive | Suite 200 | Irvine, CA 92612
Main: 949.474.2020 | Fax: 949.263.5520

Finance Personnel Committee
Irvine Ranch Water District
Irvine, California

Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance With *Government Auditing Standards*

Independent Auditor's Report

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States the financial statements of Irvine Ranch Water District (the "District") as of and for the year ended June 30, 2018, and the related notes to the financial statements, which collectively comprise the District's basic financial statements, and have issued our report thereon dated November XX, 2018.

Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered the District's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the District's internal control. Accordingly, we do not express an opinion on the effectiveness of the District's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the District's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Irvine, California
November xx, 2018

November 6, 2018
Prepared by: T. Mossbarger
Submitted by: C. Clary
Approved by: Paul A. Cook

FINANCE AND PERSONNEL COMMITTEE

BUSINESS INTELLIGENCE CLOUD DISASTER RECOVERY IMPLEMENTATION AND REPORTING CONSULTANT SERVICES VARIANCE APPROVAL

SUMMARY:

The District's Oracle Business Intelligence (BI) Cloud Disaster Recovery Implementation and Reporting project was started in October 2017. BI is an Oracle module used for analyzing data and presenting information to enhance decision making. The project provides for a backup Cloud Disaster Recovery (DR) environment for BI in the event of a system failure. The scope of the project included several initial user operational reports to be developed. The District entered into a professional services agreement with Dilytics to assist with the implementation. A variance is needed to the professional services agreement for development of additional reports. Staff recommends that the Board authorize the General Manager to execute a variance to the agreement with Dilytics; Variance No. 4 in the amount of $426,000 and approve a budget increase in the amount of $246,000 each to project 10345 and 10347, for a total of $492,000.

BACKGROUND:

In September 2018, the Board authorized the General Manager to execute a professional services agreement in the amount of $241,000 with Dilytics for the Oracle BI Cloud Disaster Recovery Implementation and Reporting. Staff determined that in addition to the Oracle Financial and Project Management Cloud DR environment, a separate BI Cloud DR environment was needed. A cloud solution is more secure in the event of a system failure or natural disaster as the previous DR environment was located at the Operations Center. The Oracle BI Cloud DR Implementation was successfully completed in June 2018.

In order to maximize the benefits from the Oracle Financial Upgrade Project, staff identified opportunities for additional reporting that are not part of the standard Oracle reports. Initial reporting requirements were identified during meetings with staff from various departments and are approximately 65% complete.

Subsequent to the identification of initial reporting requirements and training which provided an improved understanding by staff of the capabilities of the Oracle System, staff and Dilytics met with key IRWD stakeholders to review additional requirements for use of BI enhanced analytical reporting, including dashboards and automation of certain reporting currently performed manually. A dashboard is a data visualization tool that displays the identified metrics and key performance indicators (KPIs) for an enterprise on a single screen. Several rounds of meetings were held to identify requirements and Dilytics provided proof of concept dashboards for review. A variance is needed to the professional services agreement with Dilytics to develop common BI Dashboards and to develop additional HR, Payroll, Finance, and Water Use Efficiency reports that will replace time consuming, labor intensive reporting done manually.

The following is a summary of the variances for this professional services agreement:

Variance No. 1 in the amount of $32,640 for additional project management reports under the Director of Administrative Services' signature authority on March 20, 2018.

Variance No. 2 in the amount of $39,680, for additional financial reports and installation of a BI development environment under the Executive Director of Finance and Administration's signature authority on April 5, 2018.

Variance No. 3 in the amount of $17,920, for additional accounts receivable reports and mapping modifications under the General Manager's signature authority on August 22, 2018.

Variance No. 4 in the amount of $426,000, for development of common BI dashboards, additional Human Resources, Payroll, Finance, and Water Use Efficiency Reports, and other reports as well as travel and expenses. The variance is attached in Exhibit "A".

FISCAL IMPACTS:

The BI Cloud Implementation and Reporting, Projects 10345 and 10347, are included in the FY 2018-19 Capital Budget. A budget increase of $492,000 is needed to fund additional staff labor and reports associated with Variances No. 2, No. 3, and Variance No. 4.

Project No.	Current Budget	Addition <Reduction>	Total Budget
10345	$155,000	$246,000	$401,000
10347	$155,000	$246,000	$401,000
Total	$310,000	$492,000	$802,000

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.

RECOMMENDATION:

That the Board authorize the General Manager to execute a variance to the agreement with Dilytics for Variance No. 4 in the amount of $426,000 for the BI Cloud DR Implementation and Reporting agreement and approve a budget increase in the amount of $246,000 each to project 10345 and 10347, for a total of $492,000.

LIST OF EXHIBITS:

Exhibit "A" – Variance No. 4 for development of common BI dashboards, additional Human Resources, Payroll, Finance, and Water Use Efficiency Reports, and other reports as well as travel and expenses

Exhibit "A"

IRVINE RANCH WATER DISTRICT
PROFESSIONAL SERVICES VARIANCE

Project Title: Oracle Business Intelligence Software Services

Project No.: 10345/10347 Date: 9-25-2018
Purchase Order No.: 603739 Variance No.: 4

Originator: [X] IRWD [ ] ENGINEER/CONSULTANT [ ] Other (Explain)______

Description of Variance (*attach any back-up material*):
DiLytics will deliver additional Business Intelligence dashboards, reports and correct mappings of data from EBS to BI per attached scope of work.

Engineering & Management Cost Impact:

Classification	Manhours	Billing Rate	Labor $	Direct Costs	Subcon. $	Total $
Develop Common BI Dashboard Items.			151,680			151,680
Develop Additional HR, Payroll, Finance, and Water Use Efficiency Reports & Correct Mappings			209,320			209,320
Develop Additional Reports			40,000			40,000
Travel and Expenses				25,000		25,000
					Total $ =	426,000

Schedule Impact:

Task No.	Task Description	Original Schedule	Schedule Variance	New Schedule

Required Approval Determination:

Total Original Contract $ 241,000 Previous Variances $ 90,240 This Variance $ 426,000 Total Sum of Variances $ 516,240 New Contract Amount $ 757,240 Percentage of Total Variances to Original Contract 214 %	[ ] Director: Cumulative total of Variances less than or equal to $50,000. [ ] Executive Director: Cumulative total of Variances less than or equal to $75,000. [ ] General Manager: Cumulative total of Variances less than or equal to $100,000. [X] Board: Cumulative total of Variances greater than $100,000.

ENGINEER/CONSULTANT: DiLytics, Inc
Company Name

Shyam Panda 9-25-2018
Project Engineer/Manager Date

Engineer's/Consultant's Management Date

IRVINE RANCH WATER DISTRICT

9-25-2018
Department Director Date

General Manager/Board Date

IRVINE RANCH WATER DISTRICT

PROFESSIONAL SERVICES VARIANCE REGISTER

Project Title: Oracle Business Intelligence Software Services

Project No.: 10345/10347 Project Manager: Mohit Saini

Variance No.	Description	Dates		Variance Amount
		Initiated	Approved	
1	Additional BI reports and correction of existing reports and data validation.	3-20-2018	3/20/2018	$32,640
2	Additional BI reports and correction of existing reports and data validation	4-05-2018	4/05/2018	$39,680
3	Additional BI reports and mapping of data from EBS to BI.	8-22-2018	8/22-2018	$17,920
4	Dashboards, reports, and mapping corrections	9-25-2018		$426,000

S No	Ref No	Requirements Description	Owner	Estimated Fee
		Common Dashboard Items		
1	NA	Total Expenditures for the year - Operating Budget - Show anything above 90% E.g. Training	By Department	$ 8,320
2	NA	Overtime Hours in last Pay Period/ Fiscal/Calendar Year to Date	By Department	$ 12,160
3	NA	Standby Hours in last Pay Period/ Fiscal/calendar Year to Date	By Department	$ 13,440
4	NA	Vacation and Sick Hours accrued/taken calendar YTD Vacation/sick hours taken beyond accrued	By Department	$ 23,680
5	NA	Count of Employees who haven't taken personal holiday	By Department	$ 10,240
6	NA	Employee Turnover - Voluntary/Involuntary	By Department	$ 12,160
7	NA	Vacancies - Fulltime Regular	By Department	$ 15,360
8	NA	Temporary Labor	By Department	$ 14,080
9	NA	Leave of Absence - Categorize by paid/unpaid/Short Term/Long Term disability	By Department	$ 16,640
10	NA	Amount left against a PO/Project		$ 7,040
11	NA	Purchasing vendor analysis/utilization(PO number and amount YTD)	By Department	$ 8,960
12	NA	General Ledger Fund Balances	Cash Accounts by type of Cash. Dashboard item for Finance only.	$ 9,600
		Dashboard Items SubTotal		**$ 151,680**
		New BI Reports		
13	53	IRWD Census 0516 Hartford Marketing	HR	$ 24,320
14	48	Marta's HR Census report needs to be rebuilt (To be rebuilt in discussion with current HR folks)	HR	$ 6,400
15	59	Revisit BI Security by Roles and Responsibilities	IS	$ 12,800
16	103	Configure Domain Mappings for HR Module and validate data for OOTB Dashboards	HR/Payroll	$ 24,960
17	106	Employee Home address along with benefit details	HR	$ 640
18	108	Ticket on Oracle Utilities Analytics (OUBI) - Dashboards---> Oubi reports for IRWD ----> Month-end GL Detailed Report	Finance	$ 3,200
19	109	Create new ODI managed servers in UAT	IS	$ 12,800
20	NA	Accrued balance compared to account budget.	Water Use Efficiency	$ 11,520
21	NA	State Controller's Report	Payroll	$ 17,280
22	NA	Costing Report/ Element Detail Report - W2/Element Hours Report - These 3 are different flavors of same report	Payroll	$ 18,560
23	52	Create a new report which will capture any changes to employees like change in title, promotions, transfers. EBS - Workers Organization Movement	HR	$ 19,200
24	NA	Employee Turnover By Longevity Ratio	HR	$ 13,440
25	NA	Personnel Comparison By Department(10,20,30…)	HR	$ 17,920
26	99	Position Dimension is not part of the load plan.	Daniel/HR	$ 1,280
27	NA	3 medium complexity report items - one each for Finance, HR and Payroll	Finance/HR	$ 25,000
		Additional Reports (10% Contigency)		$ 40,000
		BI Reports SubTotal		**$ 249,320**
		Travel		
28	NA	Travel and Expenses		**$ 25,000**
		Total		**$ 426,000**

November 6, 2018
Prepared by: T. Mossbarger
Submitted by: C. Clary
Approved by: Paul A. Cook P.C.

FINANCE AND PERSONNEL COMMITTEE

ANNUAL MICROSOFT ENTERPRISE AGREEMENT SOFTWARE MAINTENANCE RENEWAL

SUMMARY:

The Microsoft Enterprise Agreement Software Maintenance, which provides upgrades and maintenance for all of the Microsoft software used by the District, expires November 30, 2018. This agreement provides discounted pricing for software maintenance and licenses to state and local government entities. Staff recommends renewal of the Microsoft Enterprise Agreement for a three-year period effective December 1, 2018 and through November 30, 2021, in the amount of $510,000.

BACKGROUND:

The District participates in the Microsoft Enterprise Agreement for state and local governments, providing for software upgrades and maintenance for all Microsoft software used by the District. The agreement provides discounted pricing for software maintenance on existing licenses as well as new licenses. The District uses Microsoft Windows Desktop operating system, Microsoft Office (Word, Excel, PowerPoint, Access, Visio, Project, and Outlook), Microsoft SQL Data Base, and Microsoft Server operating system software. The agreement covers all versions of the Microsoft software products purchased and allows the District to upgrade to new versions as they become available.

In addition to the software maintenance, the agreement provides on-line training for a majority of the software products, as well as training class vouchers for technical training provided by Microsoft certified training partners. Additionally, the agreement provides for use of Microsoft Office software by staff on their home computers through the Home Use Program. Employees are able to download this software for a nominal fee and install it for personal use as well.

Staff recommends renewal of the Microsoft Enterprise Agreement for the period beginning December 1, 2018 and ending November 30, 2021. The renewal amount for this period is $510,000.

FISCAL IMPACTS:

The amount for FY 2018-19 based on the renewal of the Microsoft Enterprise Agreement Software Maintenance agreement is approximately $170,000 per year and $510,000 for the three-year term. The $170,000 is included in the approved FY 2018-19 operating budget.

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.

RECOMMENDATION:

That the Board approve the renewal of the Microsoft Enterprise Agreement beginning December 1, 2018 for a total commitment of $510,000.

LIST OF EXHIBITS:

None.

November 6, 2018
Prepared and
submitted by: C. Compton
Approved by: Paul A. Cook

FINANCE AND PERSONNEL COMMITTEE

REVISIONS TO THE DISTRICT'S CONFLICT OF INTEREST CODE

SUMMARY:

Staff and legal counsel have reviewed the District's Conflict of Interest Code and identified a need for changes that appropriately designates those persons that make or participate in the making of decisions at IRWD, as defined by the Fair Political Practices Commission (FPPC), and should be filing "Statements of Economic Interests" (i.e. FPPC Form 700) each year. Staff recommends that that the Board adopt a resolution rescinding Resolution No. 2015-30 and adopt a revised Conflict of Interest Code.

BACKGROUND:

The Political Reform Act requires that every local agency review its Conflict of Interest Code biennially and submit a notice to its code reviewing body that specifies if the code is accurate or if the code must be amended. The code reviewing body for California special districts is the board of supervisors for the county in which the special district is located. For IRWD, the code reviewing body is the Orange County Board of Supervisors.

In compliance with the Political Reform Act, staff has reviewed the District's Conflict of Interest Code. Staff has identified a need for changes to the Conflict of Interest Code so that the code appropriately designates those persons that make or participate in the making of decisions at IRWD, as defined by the FPPC, and should be filing FPPC Form 700. The needed updates to the code include adding new positions, deleting positions that do not make or participate in the making of government decisions, revising titles of existing positions, and revising the definitions of the disclosure categories.

Staff recommends that the Board adopt a resolution rescinding Resolution No. 2015-30 and adopt a revised Conflict of Interest Code. The proposed resolution is attached as Exhibit "A". A redline of the changes proposed to IRWD's Conflict of Interest Code is attached as Exhibit "B".

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

RECOMMENDATION:

That the Board adopt the following resolution by title:

RESOLUTION NO. 2018 -

RESOLUTION OF THE BOARD OF DIRECTORS OF
IRVINE RANCH WATER DISTRICT RESCINDING RESOLUTION NO. 2015-30 AND
ADOPT A REVISED CONFLICT OF INTEREST CODE FOR THE DISTRICT

LIST OF EXHIBITS:

Exhibit "A" - Proposed Resolution Rescinding Resolution No. 2015-30 and Adopting a Revised Conflict of Interest Code

Exhibit "B" - Redline of IRWD's Conflict of Interest Code, as Proposed to be Amended

EXHIBIT "A"

RESOLUTION NO. 2018 -

RESOLUTION OF THE BOARD OF DIRECTORS OF
IRVINE RANCH WATER DISTRICT RESCINDING RESOLUTION NO. 2015-30 AND
ADOPTING A REVISED CONFLICT OF INTEREST CODE FOR THE DISTRICT

In accordance with the provisions of Section 18730 of the regulations of the Fair Political Practices Commission ("FPPC"), contained in California Administrative Code Title 2, Section 18109, et seq., the Board of Directors of the Irvine Ranch Water District has adopted and amended from time to time a Conflict of Interest Code; and

The District's Conflict of Interest Code contains the list of designated persons who must disclose certain categories of economic interests under the code. Additionally, the Conflict of Interest Code defines the types of economic interests that must be reported by designated person in the various reporting categories specified the Conflict of Interest Code; and

The Political Reform Act requires that every local agency review its conflict of interest code biennially and update it, if necessary. The District has reviewed its Conflict of Interest Code biennially to determine if an update is needed; and

By adoption of Resolution No. 2015-30 on December 14, 2015, this Board revised and readopted the District's current Conflict of Interest Code; and

The District's Conflict of Interest Code now needs to be updated so that the code appropriately designates those persons that make or participate in the making of decisions at IRWD, as defined by FPPC, and should be filing "Statements of Economic Interests" (i.e. FPPC Form 700). The revisions to the code include adding new positions, deleting positions that do not make or participate in the making of government decisions, revising titles of existing positions, and revising the disclosure categories;

NOW, THEREFORE, the Board of Directors of the Irvine Ranch Water District DOES HEREBY RESOLVE, DETERMINE AND ORDER AS FOLLOWS:

Section 1. Resolution No. 2015-30 is rescinded in its entirety, effective upon approval of the "Conflict of Interest Code for the Irvine Ranch Water District," which is included in Appendix "A" of this resolution, by the Orange County Board of Supervisors.

Section 2. The District Secretary is hereby authorized to file Appendix "A" and the other required documentation with the Orange County Board of Supervisors to request approval of the District's Conflict of Interest Code, as proposed to be amended.

ADOPTED, SIGNED and APPROVED this 12th day of November, 2018.

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:
LEWIS BRISBOIS BISGAARD & SMITH LLP

Legal Counsel

CONFLICT OF INTEREST CODE
FOR
THE IRVINE RANCH WATER DISTRICT

The Political Reform Act (Government Code Section 81000, et seq.) requires state and local government agencies to adopt and promulgate conflict of interest codes. The Fair Political Practices Commission ("FPPC") has adopted a regulation (2 California Code of Regulations Section 18730) that contains the terms of a standard conflict of interest code, which can be incorporated by reference in an agency's code. After public notice and hearing, the standard code may be amended by the FPPC to conform to amendments in the Political Reform Act. Therefore, the terms of 2 California Code of Regulations Section 18730 and any amendments to it duly adopted by the FPPC are hereby incorporated by reference. This regulation and Appendix "A-1" and "A-2", designating positions and establishing disclosure categories, shall constitute the conflict of interest code of the Irvine Ranch Water District ("District").

Individuals holding designated positions shall file their statements of economic interests with the District Secretary, which will make the statements available for public inspection and reproduction (Gov. Code Sec. 81008). Upon receipt of the statements for the members of the Board of Directors and the General Manager, the District Secretary shall make and retain copies and forward the originals to the Clerk of the Board for the Orange County Board of Supervisors. All other statements will be retained by the District Secretary.

APPENDIX "A-1"

DESIGNATED PERSONS FOR DISCLOSURE PURPOSES
PURSUANT TO THE CONFLICT OF INTEREST CODE FOR IRVINE RANCH WATER DSITRICT

The persons occupying the following positions are "Designated Persons" because the positions they hold are positions within the District that involve the making of, or participate in the making of, District decisions which may foreseeably have a material financial effect on financial interests pursuant to the Political Reform Act, Government Code Section 87302, et seq. [1]

Pursuant to Government Code Section 87302, an investment, business position, interest in real property, or source of income held by the Designated Person is reportable if he or she by virtue of his or her positon with the District makes or participates in the making of any decision that may foreseeably affect the business entity in which the investment or business position is held, the interest in real property, or the income or source of income.

District personnel "make a governmental decision" when he or she, acting within the authority of his or her office or position, authorizes or directs any action, votes, appoints a person, obligates or commits the District to any course of action, or enters into any contractual agreement on behalf of the District.

District personnel "participate in a governmental decision" when he or she, acting within the authority of his or her position, provides information, an opinion, or a recommendation for the purpose of affecting the decision without significant intervening substantive review.

Designated Persons must disclose the economic interests defined in the disclosure categories defined in Appendix "A-2"of this code, using the Form 700 schedules listed in the table below:

Designated Persons	**Disclosure Categories**	**Schedules Associated**
Group I Assistant District Secretary Controller District Secretary Executive Director of Engineering & Water Quality Executive Director of Finance Executive Director of Operations Executive Director of Water Policy General Legal Counsel General Manager	1-A, 2 and 3	All

[1] The persons holding the following positions are "public officials who manage public investments" within the meaning of that term as used in Government Code Section 87200 and are required to make full disclosure of all economic interests as required in Form 700: members of the Board of Directors, General Manager, Executive Director of Finance, Controller, Treasurer, and Treasury Manager.

Government Relations Officer Members, Board of Directors Treasurer/Director of Risk Management Treasury Analyst Treasury Manager		
Group II Manager of Risk & Contracts Administration Manager of Strategic Planning and Analysis Principal Engineer	1-B, 6, and 7	All
Group III Applications Manager Asset Systems Manager Automation Manager Collection Systems Manager Construction Inspection Manager Construction Services Manager Customer Service Manager Director of Administrative Services Director of Human Resources Director of Maintenance Operations Director of Public Affairs Director of Recycling Operations Director of Water Resources Director of Water Operations Director of Water Quality & Regulatory Compliance Electrical Instrumentation Manager Facilities/Fleet Manager Field Services Manager Human Resources Manager Mechanical Services Manager Natural Resources Manager Networking & Cybersecurity Manager Operations Manager Public Affairs Manager Purchasing Manager Regulatory Compliance Manager Recycled Water Development Manager Safety Manager Water Resources Manager Water Efficiency Manager Water Quality Manager User Support Manager	6 and 7	A-1, A-2, C, D and E
Group IV Administrative Assistant Assistant Engineer Associate Engineer Automation Supervisor Chief Plant Operator	6	D, E

Collection Systems Supervisor Construction Inspection Supervisor Construction Inspector I, II, III Cross Connection Supervisor Electrical Supervisor Energy Analyst Engineer Environmental Compliance Specialist Executive Assistant Facilities Services Supervisors Field Services Supervisor Fleet Supervisor Instrumentation Supervisor Landscape Contracts Administrator Management Analyst Mechanical Services Supervisor Operations Supervisor Source Control Program Administrator Recycled Water Project Specialist Senior Construction Inspector Senior Engineer Senior Human Resources Analyst Water Maintenance Supervisor Water Resources Planner Water Use Efficiency Analyst Water Use Efficiency Supervisor		
Group VI Engineering Consultants [2]	1-B, 4 and 5	All
Group V Financial Consultants[2]	4 and 5	A-1, A-2, C, D and E

[2] Consultants are included in the list of DESIGNATED PERSONS and must disclose pursuant to the disclosure categories specified, subject to the following limitation: The General Manager may determine in writing that a particular consultant, although a "designated person," is hired to perform a range of duties that is limited in scope and thus that particular consultant is not required to fully comply with the disclosure requirements described in the Code. Such written determination must include a description of the consultant's duties and, based upon that description, a statement of the extent of disclosure requirements. The General Manager's determination is a public record and must be retained for public inspection in the same manner and location as this Conflict of Interest Code.

APPENDIX "A-2"

ECONOMIC INTERESTS THAT MUST BE REPORTED
PURSUANT TO CONFLICT OF INTEREST CODE

Category 1-A: **Reportable Interests in real property** within Orange County, California and within 2 miles of District owned property outside of Orange County, California.

Category 1-B: **Reportable Interests in real property** within the District or within 2 miles from the jurisdictional boundaries of the District.

Category 2: **Reportable Interests in Suppliers**

Investments in or income, loans, gifts or travel payments from sources or business entities that could foreseeably (a) initiate an application, claim, appeal or request for action by IRWD; (b) bid on or enter into a written contract with IRWD; (c) seek a permit, license, variance or other entitlement from IRWD; (d) be subject to any inspection or regulatory action by IRWD; or (e) that manufacture, distribute, lease, retail, or sell items which are, which have been, or foreseeably could be utilized or procured by IRWD, including, but not limited to, any of the following:

1. Office equipment and supplies
2. Computer hardware and software
3. Printing, reproduction or photographic equipment or supplies
4. Periodicals, books, newspapers
5. Chemicals
6. Petroleum products
7. Motor vehicles and specialty vehicles, parts and supplies
8. Construction and maintenance equipment and supplies
9. Safety equipment and supplies
10. Food supplies
11. Water quality equipment and supplies
12. Cathodic protection equipment and supplies
13. Educational equipment and supplies
14. Medical supplies and informational materials
15. Landscape supplies
16. Pipes, valves, fittings, pumps, meters and similar items

Category 3: **Reportable Interests in Contractors/Consultants**

Investments in or income, loans, gifts or travel payments from sources or business entities which could foreseeably (a) initiate an application, claim, appeal or request for action by IRWD; (b) seek a permit, license, variance or other entitlement from IRWD; (c) be subject to any inspection or regulatory action by IRWD; or (d) bid for, contract or subcontract for, or consult in, the performance of work or services which are, which have been or which foreseeably could be utilized or procured by IRWD, including, but not limited to, work or services related to any of the following:

1. Public utilities
2. Financial audit and accounting services
3. Insurance services
4. Construction and maintenance services
5. Transportation and lodging services
6. Security services
7. Banking, savings and loan services
8. Food services
9. Communication services
10. Water quality testing
11. Cathodic protection services
12. Engineering, architectural and construction inspection services
13. Employment and temporary help services
14. Educational and medical services
15. Landscape and topographical services
16. Equipment rentals or servicing
17. Real estate, appraisal and investment services
18. Consulting services in: legal, energy and power, soils testing, water treatment, data processing, computers, labor relations, employee training, advertising, design, audio visual, movie production, planning, water pricing and demand, economics, desalting, or environmental analysis
19. Printing and reproduction services

Category 4: **Reportable Consultants/Contractors Interests in Suppliers**

Investments in or income, loans, gifts or travel payments from sources or business entities that manufacture, distribute, lease, retail, or sell items which are or which foreseeably could be recommended or suggested by you in your capacity as a consultant to IRWD, including, but not limited to, the items listed under Category 2.

Category 5: **Reportable Consultants/Contractors Interests in Third-Party Consultants/Contractors**

Investments in or income, loans, gifts or travel payments from sources or business entities or business entities which bid for, contract or subcontract for, or consult in, the performance of work or services which are or which foreseeably could be recommended or suggested by you in your capacity as a consultant to IRWD, including, but not limited to, the items listed under Category 3.

Category 6: **Reportable Loans, Gifts and Travel Payments**

Loans, gifts and travel payments from sources or business entities that could foreseeably:

1. Initiate an application, claim, appeal or request for action by the IRWD division the employee works in;
2. Bid on or enter into a written contract with that would be evaluated, processed or managed by the IRWD division the employee works in;
3. Seek a permit, license, variance or other entitlement from the IRWD division the employee works in;
4. Be subject to any inspection or regulatory action by the IRWD division the employee works in;
5. Business entities which That manufacture, distribute, lease, retail, or sell items which are, which have been, or which foreseeably could be utilized or procured by IRWD department the employee works in, including, but not limited to, the items listed under Category 2
6. Bid for, contract or subcontract for, or consult in, the performance of work or services which are, which have been or which foreseeably could be utilized or procured by IRWD department the employee works in, including, but not limited to, the items listed under Category 3.

Category 7: **Reportable Investments in and Income**

Investments in and income from sources or business entities that could foreseeably:

1. Initiate an application, claim, appeal or request for action by the IRWD division the employee works in;
2. Bid on or enter into a written contract with that would be evaluated, processed or managed by the IRWD division the employee works in;
3. Seek a permit, license, variance or other entitlement from the IRWD division the employee works in;
4. Be subject to any inspection or regulatory action by the IRWD division the employee works in;

5. That manufacture, distribute, lease, retail, or sell items which are, which have been, or which foreseeably could be utilized or procured by IRWD department the employee works in, including, but not limited to, the items listed under Category 2
6. Bid for, contract or subcontract for, or consult in, the performance of work or services which are, which have been or which foreseeably could be utilized or procured by IRWD department the employee works in, including, but not limited to, the items listed under Category 3.

EXHIBIT "B"

CONFLICT OF INTEREST CODE
FOR
THE IRVINE RANCH WATER DISTRICT

The Political Reform Act (Government Code Section 81000, et seq.) requires state and local government agencies to adopt and promulgate conflict of interest codes. The Fair Political Practices Commission ("FPPC") has adopted a regulation (2 California Code of Regulations Section 18730) that contains the terms of a standard conflict of interest code, which can be incorporated by reference in an agency's code. After public notice and hearing, the standard code may be amended by the FPPC to conform to amendments in the Political Reform Act. Therefore, the terms of 2 California Code of Regulations Section 18730 and any amendments to it duly adopted by the FPPC are hereby incorporated by reference. This regulation and Appendix "A-1" and "A-2", designating positions and establishing disclosure categories, shall constitute the conflict of interest code of the Irvine Ranch Water District ("District").

Individuals holding designated positions shall file their statements of economic interests with the District Secretary, which will make the statements available for public inspection and reproduction (Gov. Code Sec. 81008). Upon receipt of the statements for the members of the Board of Directors and the General Manager, the District Secretary shall make and retain copies and forward the originals to the Clerk of the Board for the Orange County Board of Supervisors. All other statements will be retained by the District Secretary.

APPENDIX "A-1"

DESIGNATED PERSONS FOR DISCLOSURE PURPOSES
PURSUANT TO THE CONFLICT OF INTEREST CODE FOR IRVINE RANCH WATER DSITRICT

The persons occupying the following positions are ~~designated persons and~~ "Designated Persons" because the positions they hold are positions within the District that involve the making of, or participate in the making of, District decisions which may foreseeably have a material financial effect on financial interests pursuant to the Political Reform Act, Government Code Section 87302, et seq.[1]

Pursuant to Government Code Section 87302, an investment, business position, interest in real property, or source of income held by the Designated Person is reportable if he or she by virtue of his or her positon with the District makes or participates in the making of any decision that may foreseeably affect the business entity in which the investment or business position is held, the interest in real property, or the income or source of income.

District personnel "make a governmental decision" when he or she, acting within the authority of his or her office or position, authorizes or directs any action, votes, appoints a person, obligates or commits the District to any course of action, or enters into any contractual agreement on behalf of the District.

District personnel "participate in a governmental decision" when he or she, acting within the authority of his or her position, provides information, an opinion, or a recommendation for the purpose of affecting the decision without significant intervening substantive review.

Designated Persons must disclose the economic interests defined in the disclosure categories defined in Appendix "A-2~~,~~" of this code, using the Form 700 schedules listed in the table below:

Designated Persons	**Disclosure Categories**	**Schedules Associated**
Group I Assistant District Secretary ~~Secretary of District~~ ~~Assistant General Manager~~ ~~Assistant Treasurer~~ Controller District Secretary Executive Director of Engineering & Water Quality Executive Director of Finance	1-A, 2 and 3	All

[1] The persons holding the following positions are "public officials who manage public investments" within the meaning of that term as used in Government Code Section 87200 and are required to make full disclosure of all economic interests as required in Form 700: members of the Board of Directors, General Manager, ~~Assistant General Manager,~~ Executive Director of Finance, Controller, Treasurer, ~~Assistant Treasurer~~ and Treasury Manager.

Executive Director of Operations Executive Director of Water Policy General Legal Counsel General Manager Government Relations Officer Members, Board of Directors Treasurer/Director of Risk Management Treasury Analyst Treasury Manager		
Group II Manager of Risk & Contracts Administration Manager of Strategic Planning and Analysis Principal Engineer	1-B, 6, and 7	All
Group ~~II~~ III ~~Assistant Director Maintenance~~ ~~Assistant Director of Recycling Operations~~ ~~Assistant Director of Water Operations~~ Applications Manager Asset Systems Manager Automation Manager Collection Systems Manager Construction Inspection Manager Construction Services Manager Customer Service Manager Director of Administrative Services Director of Human Resources Director of Maintenance Operations Director of Public Affairs Director of Recycling Operations Director of Water Resources Director of Water Operations Director of Water Quality & Regulatory Compliance Electrical ~~and Automation~~ Instrumentation Manager Facilities/~~&~~Fleet Manager ~~Manager of Contracts Administration and Risk~~ ~~Principal Engineer~~ Field Services Manager Human Resources Manager Mechanical Services Manager Natural Resources Manager Networking & Cybersecurity Manager Operations Manager Public Affairs Manager Purchasing Manager Regulatory Compliance Manager Recycled Water Development Manager Safety Manager ~~Senior Engineer~~ Water Resources Manager Water Efficiency Manager ~~Maintenance & Reliability Manager~~	~~2 and 3~~ 6 and 7	A-1, A-2, C, D and E

Water Quality Manager User Support Manager		
Group ~~III~~ IV ~~Accounting Manger~~ Administrative Assistant ~~Analyst~~ ~~Application Manager~~ ~~Assistant Controller~~ Assistant Engineer Associate Engineer Automation Supervisor ~~Programmer~~ ~~Applications Analyst~~ ~~Buyer~~ Chief Plant Operator ~~Collections Systems Manager~~ ~~Construction Services and Field Services Manager~~ ~~Construction Inspection Manager~~ Collection Systems Supervisor Construction Inspection Supervisor Construction Inspector I, II, III Cross Connection Supervisor ~~Customer Service Supervisor~~ ~~District Safety and Security Manager~~ ~~Electrical and Instrumentation Designer~~ Electrical Supervisor Energy Analyst ~~and Water Resource Planner~~ Engineer Environmental Compliance Specialist ~~Engineering Technician II, III~~ Executive Assistant Facilities Services Supervisors Field Services Supervisor Fleet Supervisor ~~GIS Supervisor~~ ~~Government Relations Manager~~ ~~Human Resources Manager~~ Instrumentation Supervisor ~~Laboratory Supervisor~~ Landscape Contracts Administrator ~~Material Control Clerk I, III~~ Management Analyst Mechanical ~~Maintenance~~ Services Supervisor ~~Operations Coordinator~~ ~~Operations Manager~~ Operations Supervisor ~~Principal Analyst~~ ~~Public Affairs Manager~~ ~~Purchasing Cordinator~~ ~~Recycled Water Development Manager~~ Source Control Program Administrator Recycled Water Project Specialist ~~Recycled Water Supervisor~~ ~~Recycled Water Systems Specialist~~ ~~Regulatory Compliance Manager~~	6	D, E

~~Right-of-Way and Real Property Manager~~ ~~Safety and Security Manager~~ ~~Senior Analyst~~ ~~Senior Applications Analyst~~ ~~Senior Applications Developer~~ ~~Senior Buyer~~ Senior Construction Inspector ~~Senior Database Administrator~~ Senior Engineer Senior Human Resources Analyst ~~Senior Water Use Efficiency Specialist~~ ~~Senior Network Administrator~~ ~~Senior Programmer and Analyst~~ ~~Senior Purchasing Coordinator~~ ~~Senior Recycled Water Systems Specialist~~ ~~Senior Vehicle and Equipment Maintenance Mechanic~~ ~~Senior Water Use Efficiency Specialist~~ ~~Supervising Wetlands and Wildlife Biologist~~ Water Maintenance Supervisor ~~Water Resources Manager~~ Water Resources Planner Water Use Efficiency Analyst ~~Water Use Efficiency Specialist~~ Water Use Efficiency Supervisor		
Group VI Engineering Consultants [2] ~~Special Legal Counsel[2]~~	1-B, 4 and 5	All
Group V Financial Consultants[2]	4 and 5	A-1, A-2, C, D and E

[2] Consultants are included in the list of DESIGNATED PERSONS and must disclose pursuant to the disclosure categories specified, subject to the following limitation: The General Manager may determine in writing that a particular consultant, although a "designated person," is hired to perform a range of duties that is limited in scope and thus that particular consultant is not required to fully comply with the disclosure requirements described in the Code. Such written determination must include a description of the consultant's duties and, based upon that description, a statement of the extent of disclosure requirements. The General Manager's determination is a public record and must be retained for public inspection in the same manner and location as this Conflict of Interest Code.

APPENDIX "A-2"

ECONOMIC INTERESTS THAT MUST BE REPORTED
PURSUANT TO CONFLICT OF INTEREST CODE

Category 1-A: **Reportable Interests in real property** within Orange County, California and within 2 miles of District owned property outside of Orange County, California.

Category 1-B: **Reportable Interests in real property** within the District or within 2 miles from the jurisdictional boundaries of the District.

Category 2: **Reportable Interests in Suppliers**

Investments in or income, ~~(including~~ loans, gifts or travel payments~~)~~ from sources or business entities that could foreseeably (a) initiate an application, claim, appeal or request for action by IRWD; (b) bid on or enter into a written contract with IRWD; (c) seek a permit, license, variance or other entitlement from IRWD; (d) be subject to any inspection or regulatory action by IRWD; or (e) ~~which~~ that manufacture, distribute, lease, retail, or sell items which are, ~~or~~ which have been, or ~~which~~ foreseeably could be utilized or procured by IRWD, including, but not limited to, any of the following:

1. Office equipment and supplies
2. Computer hardware and software
3. Printing, reproduction or photographic equipment or supplies
4. Periodicals, books, newspapers
5. Chemicals
6. Petroleum products
7. Motor vehicles and specialty vehicles, parts and supplies
8. Construction and maintenance equipment and supplies
9. Safety equipment and supplies
10. Food supplies
11. Water quality equipment and supplies
12. Cathodic protection equipment and supplies
13. Educational equipment and supplies
14. Medical supplies and informational materials
15. Landscape supplies
16. Pipes, valves, fittings, pumps, meters and similar items

Category 3: **Reportable Interests in Contractors/Consultants**

Investments in or income, ~~(including~~ loans, gifts or travel payments~~)~~ from sources or business entities which could foreseeably (a) initiate an application, claim, appeal or request for action by IRWD; (b) seek a permit, license, variance or other entitlement from IRWD; (c) be subject to any inspection or regulatory action by IRWD; or (d) bid for, ~~which~~ contract or subcontract for, or consult in, the performance of work or services which are, ~~or~~ which have been or which foreseeably could be utilized or procured by IRWD, including, but not limited to, work or services related to any of the following:

1. Public utilities
2. Financial audit and accounting services
3. Insurance services
4. Construction and maintenance services
5. Transportation and lodging services
6. Security services
7. Banking, savings and loan services
8. Food services
9. Communication services
10. Water quality testing
11. Cathodic protection services
12. Engineering, architectural and construction inspection services
13. Employment and temporary help services
14. Educational and medical services
15. Landscape and topographical services
16. Equipment rentals or servicing
17. Real estate, appraisal and investment services
18. Consulting services in: legal, energy and power, soils testing, water treatment, data processing, computers, labor relations, employee training, advertising, design, audio visual, movie production, planning, water pricing and demand, economics, desalting, or environmental analysis
19. Printing and reproduction services

Category 4: **Reportable Consultants/Contractors Interests in Suppliers**

Investments in or income, ~~(including~~ loans, gifts or travel payments~~)~~ from sources or business entities ~~which~~ that manufacture, distribute, lease, retail, or sell items which are or which foreseeably could be recommended or suggested by you in your capacity as a consultant to IRWD, including, but not limited to, the items listed under Category 2.

Category 5: **Reportable Consultants/Contractors Interests in Third-Party Consultants/Contractors**

Investments in or income, ~~(including~~ loans, gifts or travel payments~~)~~ from sources or business entities or business entities which bid for, contract or subcontract for, or consult in, the performance of work or services which are or which foreseeably could be recommended or suggested by you in your capacity as a consultant to IRWD, including, but not limited to, the items listed under Category 3.

Category 6: **Reportable Loans, Gifts and Travel Payments**

Loans, ~~Gifts~~ gifts and travel payments from sources or business entities that could foreseeably:

~~(A) business entities which manufacture, distribute, lease, retail, or sell items which are, or which have been or foreseeably could be, utilized or procured by IRWD, including, but not limited to, the items listed under Category 2, and~~

~~(B) business entities which contract or subcontract for, or consult in, the performance of work of services which are, or which have been or foreseeably could be, utilized or procured by IRWD, including, but not limited to, the items listed under Category 3.~~

1. Initiate an application, claim, appeal or request for action by the IRWD division the employee works in;
2. Bid on or enter into a written contract with that would be evaluated, processed or managed by the IRWD division the employee works in;
3. Seek a permit, license, variance or other entitlement from the IRWD division the employee works in;
4. Be subject to any inspection or regulatory action by the IRWD division the employee works in;
5. Business entities which That manufacture, distribute, lease, retail, or sell items which are, which have been, or which foreseeably could be utilized or procured by IRWD department the employee works in, including, but not limited to, the items listed under Category 2
6. Bid for, contract or subcontract for, or consult in, the performance of work or services which are, which have been or which foreseeably could be utilized or procured by IRWD department the employee works in, including, but not limited to, the items listed under Category 3.

Category 7: **Reportable Investments in and Income**

Investments in and income from sources or business entities that could foreseeably:

1. Initiate an application, claim, appeal or request for action by the IRWD division the employee works in;
2. Bid on or enter into a written contract with that would be evaluated, processed or managed by the IRWD division the employee works in;
3. Seek a permit, license, variance or other entitlement from the IRWD division the employee works in;
4. Be subject to any inspection or regulatory action by the IRWD division the employee works in;
5. That manufacture, distribute, lease, retail, or sell items which are, which have been, or which foreseeably could be utilized or procured by IRWD department the employee works in, including, but not limited to, the items listed under Category 2
6. Bid for, contract or subcontract for, or consult in, the performance of work or services which are, which have been or which foreseeably could be utilized or procured by IRWD department the employee works in, including, but not limited to, the items listed under Category 3.